# TABLE OF CONTENTS

1. **INTRODUCTION** ........................................................................................................................... 10
2. **GETTING TO KNOW YOUR VEHICLE** .................................................................................. 13
3. **GETTING TO KNOW YOUR INSTRUMENT PANEL** ............................................................... 96
4. **SAFETY** ......................................................................................................................................... 125
5. **STARTING AND OPERATING** .................................................................................................. 192
6. **IN CASE OF EMERGENCY** ......................................................................................................... 313
7. **SERVICING AND MAINTENANCE** ........................................................................................... 346
8. **TECHNICAL SPECIFICATIONS** .................................................................................................. 402
9. **MULTIMEDIA** ............................................................................................................................... 416
10. **CUSTOMER ASSISTANCE** ......................................................................................................... 466
11. **INDEX** .............................................................................................................................................. 481
INTRODUCTION
INTRODUCTION ....................................................10
IMPORTANT NOTICE.............................................11
HOW TO USE THIS MANUAL ...............................11
   Essential Information ..................................11
   Symbols ........................................................12
WARNINGS AND CAUTIONS ...............................12
VAN CONVERSIONS/CAMPERS   .......................12
VEHICLE MODIFICATIONS/ALTERATIONS ......12
GETTING TO KNOW YOUR VEHICLE
KEYS ......................................................................13
   Key Fob.........................................................13
IGNITIONLESS SWITCH ..................................16
   Keyless Enter-N-Go — Ignition ..............16
REMOTE START — IF EQUIPPED (GASOLINE) .....18
   How To Use Remote Start..........................18
   Remote Start Abort Message.................18
   To Enter Remote Start Mode ...............19
   To Exit Remote Start Mode Without Driving The
     Vehicle ..........................................................19
   To Exit Remote Start Mode And Drive The
     Vehicle ..........................................................19
   Remote Start Comfort Systems — If Equipped
     19
REMOTE START— IF EQUIPPED (DIESEL)...........19
   How To Use Remote Start.................20
   Remote Start Abort Message.............20
   To Enter Remote Start Mode .............21
   To Exit Remote Start Mode Without Driving The
     Vehicle ..........................................................21
   To Exit Remote Start Mode And Drive The
     Vehicle ..........................................................21
   Remote Start Comfort Systems — If Equipped
     21
SENTRY KEY ..........................................................21
   Key Programming ..................................22
   Replacement Keys ...................................22
VEHICLE SECURITY ALARM ..............................22
   To Arm The System...............................23
   To Disarm The System .........................23
   Rearming Of The System.....................23
   Security System Manual Override ..........23
DOORS ..................................................................23
   Manual Door Locks.........................23
   Power Door Locks — If Equipped ........24
   Power Side Steps — If Equipped ..........25
   Keyless Enter-N-Go — Passive Entry .....25
   Automatic Door Locks — If Equipped ......27
   Child-Protection Door Lock ..................27
DRIVER MEMORY SETTINGS — IF EQUIPPED 28
   Programming The Memory Feature.........28
   Linking And Unlinking The Remote Keyless
     Entry Key Fob To Memory .................29
   Memory Position Recall.....................29
SEATS ....................................................................30
   Manual Front Seat Adjustment ...........30
   Manual Rear Seat Adjustment ............31
   Power Driver Seat Adjustment — If Equipped.31
   Heated Seats — If Equipped .........33
   Ventilated Seats — If Equipped .........34
HEAD RESTRAINTS ............................................35
   Front Head Restraints ....................35
   Rear Head Restraint Adjustment .........36
   Rear Head Restraint Removal ..........37
STEERING WHEEL ............................................37
   Tilt Steering Column ..........................37
   Heated Steering Wheel — If Equipped .....38
DRIVER ADJUSTABLE PEDALS — IF EQUIPPED 38
MIRRORS ..............................................................39
   Inside Day/Night Mirror — If Equipped ....39
   Automatic Dimming Mirror — If Equipped .40
   Automatic Dimming Mirror With Rear View
     Camera Display — If Equipped ..........40
   Outside Mirrors .................................40
   Driver's Outside Automatic Dimming Mirror — If
     Equipped .............................................41
   Power Mirrors — If Equipped ..............41
   Power Convex Mirror Switch — If Equipped41
   Trailer Towing Mirrors — If Equipped .....42
   Heated Mirrors — If Equipped ..........43
   Tilt Side Mirrors In Reverse — If Equipped.43
   Power Folding Outside Mirrors For Standard
     And Trailer Tow — If Equipped ..........43
   Illuminated Vanity Mirror — If Equipped....44
EXTERIOR LIGHTS ...............................................45
Multifunction Lever........................................45
Headlight Switch...........................................45
Daytime Running Lights (DRLs) — If Equipped 45
High/Low Beam Switch .................................45
Automatic High Beam Headlamp Control — If
Equipped ......................................................46
Flash-To-Pass .............................................46
Automatic Headlights — If Equipped ............47
Directional LED Headlamp System — If
Equipped .....................................................47
Parking Lights And Panel Lights ..............47
Headlights On With Wipers (Available With
Automatic Headlights Only).........................47
Headlight Delay ............................................47
Lights-On Reminder ..................................47
>>> CONDITION: {Market='Latin America' or
Market=Brazil} >>>.....................................48
Fog Lights — If Equipped ..............................48
<<< CONDITION END <<<...........................48
INTERIOR LIGHTS ................................................50
Courtesy Lights ..........................................50
Illuminated Entry .......................................51
WINDSHIELD WIPERS AND WASHERS .........51
Windshield Wipers .....................................51
Rain Sensing Wipers — If Equipped ..........52
CLIMATE CONTROLS ........................................53
Automatic Climate Control Overview .........54
Climate Control Functions ...........................61
Automatic Temperature Control (ATC) ......61
Operating Tips .........................................62
WINDOWS ......................................................63
Power Windows .........................................63
Wind Buffeting .........................................65
>>> CONDITION: {Market='Latin America'} >>>..
65
POWER SUNROOF — IF EQUIPPED .........65
Single Pane Power Sunroof — If Equipped 65
<<< CONDITION END <<< .............................68
HOOD ..........................................................68
To Open The Hood ................................68
To Close The Hood ................................68
TAILGATE .......................................................68
Opening ...................................................68
Closing ...................................................69
Bed Step — If Equipped .........................69
INTERNAL EQUIPMENT ........................................70
Storage ....................................................70
Cupholders .................................................76
Electrical Power Outlets .........................76
Power Inverter — If Equipped .................78
Wireless Charging Pad — If Equipped ........79
Overhead Sunglass Storage ......................80
PICKUP BOX ..................................................80
Cargo Camera — If Equipped .................81
RAMBOX — IF EQUIPPED ...............................83
RamBox Integrated Box Side Storage Bins 83
RamBox Safety Warning .........................84
Bed Divider — If Equipped .......................85
Bed Rail Tie-Down System — If Equipped . 87
SLIDE-IN CAMPERS ........................................88
Camper Applications ...............................88
EASY-OFF TAILGATE ............................88
Disconnecting The Rear Camera And Remote
Keyless Entry ........................................89
Removing The Tailgate .........................89
Locking Tailgate ........................................90
TRI-FOLD TONNEAU COVER — IF EQUIPPED ....90
Tri-Fold Tonneau Cover Removal .............90
Tri-Fold Tonneau Cover Installation .........93
Tri-Fold Tonneau Cover Cleaning .............95
GETTING TO KNOW YOUR INSTRUMENT PANEL
BASE / MIDLINE INSTRUMENT CLUSTER........96
Base / Midline Instrument Cluster
Descriptions ..............................................96
PREMIUM INSTRUMENT CLUSTER ...............98
Premium Instrument Cluster Descriptions 98
PREMIUM INSTRUMENT CLUSTER — DIESEL
ENGINE .....................................................100
Premium Instrument Cluster Descriptions —
Diesel Engine ......................................100
INSTRUMENT CLUSTER DISPLAY .......... 101
Instrument Cluster Display Controls......101
Oil Life Reset ........................................103
Display Menu Items ......................... 103
Diesel Particulate Filter (DPF) Messages 110
Battery Saver On/Battery Saver Mode
Message — Electrical Load Reduction Actions
— If Equipped ............................... 112
WARNING LIGHTS AND MESSAGES ........ 113
Red Warning Lights ...................... 113
Yellow Warning Lights ................... 116
Yellow Indicator Lights ................. 120
Green Indicator Lights ................. 122
White Indicator Lights ............... 123
Blue Indicator Lights ................ 124
ONBOARD DIAGNOSTIC SYSTEM — OBD II . 124
Onboard Diagnostic System (OBD II)
Cybersecurity ...................................... 124
SAFETY
SAFETY FEATURES .......................... 125
Anti-Lock Brake System (ABS) ............ 125
Electronic Brake Control (EBC) System ...126
AUXILIARY DRIVING SYSTEMS ........... 134
Blind Spot Monitoring (BSM) — If Equipped ...
Forward Collision Warning (FCW) With
Mitigation — If Equipped ............. 141
Tire Pressure Monitoring System (TPMS) ..... 143
OCCUPANT RESTRAINT SYSTEMS ........... 151
Occupant Restraint Systems Features 151
Important Safety Precautions ......... 151
Seat Belt Systems ..................... 152
Supplemental Restraint Systems (SRS)...161
Child Restraints ......................... 170
Transporting Pets ..................... 188
SAFETY TIPS ..................................... 188
Transporting Passengers .......... 188
Exhaust Gas ............................... 189
Safety Checks You Should Make Inside The
Vehicle ..................................... 189
Periodic Safety Checks You Should Make
Outside The Vehicle .................. 191
STARTING AND OPERATING
STARTING THE ENGINE — GASOLINE ENGINE 192
Automatic Transmission ................. 192
Tip Start Feature ........................... 192
Keyless Enter-N-Go — Ignition ........... 193
Normal Starting Using ENGINE START/STOP
Button ........................................... 193
Cold Weather Operation (Below –22 °F Or
–30 °C) ........................................ 194
After Starting .................................. 194
STARTING THE ENGINE — DIESEL ENGINE . 194
Automatic Transmission ................. 195
Keyless Enter-N-Go — Ignition ........... 195
Extreme Cold Weather ................. 197
Normal Starting Procedure — Engine Manifold
Air Temperature Above 66 °F (19 °C)........ 197
Starting Procedure — Engine Manifold Air
Temperature 0 °F To 66 °F (~18 °C to 19 °C). 198
Starting Procedure — Engine Manifold Air
Temperature Below 0 °F (~18 °C)............. 199
Starting Fluids ............................. 200
NORMAL OPERATION — DIESEL ENGINE ..... 200
Cold Weather Precautions ............. 201
Engine Idling ............................... 202
Stopping The Engine ................. 203
Idle Shutdown ............................... 203
Operating Precautions ................. 203
Cooling System Tips — Automatic Transmission
204
ENGINE BLOCK HEATER — IF EQUIPPED ...... 205
ENGINE BREAK-IN RECOMMENDATIONS —
GASOLINE ENGINE ............................ 205
ENGINE BREAK-IN RECOMMENDATIONS — DIESSEL
ENGINE ........................................ 205
PARKING BRAKE ............................. 206
DIESEL EXHAUST BRAKE (ENGINE BRAKING) 207
AUTOMATIC TRANSMISSION ........................................208
Ignition Park Interlock ...........................................209
Brake/Transmission Shift Interlock System ..........209
Eight-Speed Automatic Transmission ..........210
Six-Speed Automatic Transmission — If Equipped ..................................................214
ACTIVE NOISE CANCELLATION ...............................220
FOUR-WHEEL DRIVE OPERATION — IF EQUIPPED 221
Four-Position Electronically Shifted Transfer Case — If Equipped ................................221
Manually Shifted Transfer Case — If Equipped 224
AIR SUSPENSION SYSTEM — IF EQUIPPED.... 227
Description.........................................................227
Air Suspension Modes.................................227
Instrument Cluster Display Messages....228
Operation.........................................................228
AXLE Locker SYSTEM — POWER WAGON MODELS ONLY (IF EQUIPPED) ........ 229
STABILIZER/SWAY BAR SYSTEM — POWER WAGON ONLY ............................230
SAFE OFF-ROAD DRIVING — POWER WAGON ONLY .........................................................231
Off-Road Driving Tips And Vehicle Characteristics .........................................................231
Driving In Snow, Mud And Sand .................233
Crossing Obstacles (Rocks And Other High Points) ..........................................................233
Hill Climbing..........................................................235
Driving Through Water..............................................236
Airing Down For Off-Road Driving ....................238
Vehicle Recovery....................................................238
After Driving Off-Road..........................................240
LIMITED-SLIP DIFFERENTIAL ....................... 241
WINCH USAGE — POWER WAGON ONLY (IF EQUIPPED) .........................................................241
Things To Know Before Using Your Winch241
Understanding The Features Of Your Winch..242
Winch Accessories ..................................................243
Operating Your Winch .............................................243
Rigging Techniques ...............................................249
FUEL SAVER TECHNOLOGY — IF EQUIPPED ...250
SPEED CONTROL ....................................................250
To Activate..........................................................250
To Set A Desired Speed .........................................251
To Vary The Speed Setting .....................................251
To Accelerate For Passing .....................................252
To Resume Speed ..................................................252
To Deactivate........................................................252
ADAPTIVE CRUISE CONTROL (ACC) — IF EQUIPPED 252
Adaptive Cruise Control (ACC) Operation........254
Activating Adaptive Cruise Control (ACC) ........254
To Activate/Deactivate .............................................255
To Set A Desired ACC Speed .........................255
To Cancel ............................................................256
To Turn Off ..........................................................256
To Resume ............................................................256
To Vary The Speed Setting .....................................257
Setting The Following Distance In ACC ...........258
Overtake Aid.........................................................259
ACC Operation At Stop ............................................260
Adaptive Cruise Control (ACC) Menu ...........260
Display Warnings And Maintenance ............261
Precautions While Driving With ACC ............262
Normal (Fixed Speed) Cruise Control Mode ... 264
PARKSENSE REAR PARK ASSIST — IF EQUIPPED 266
ParkSense Sensors ..................................................267
ParkSense Warning Display .................................267
ParkSense Display ..................................................267
Enabling And Disabling ParkSense ............269
Service The ParkSense Rear Park Assist System .........................................................269
Cleaning The ParkSense System ....................270
ParkSense System Usage Precautions ...270
PARKSENSE FRONT AND REAR PARK ASSIST ........................................271
   ParkSense Sensors .......................................................271
   ParkSense Warning Display ...........................................272
   ParkSense Display .......................................................272
   Enabling And Disabling Front And/or Rear
   ParkSense .....................................................................274
   Service The ParkSense Front/Rear Park Assist
   System ........................................................................274
   Cleaning The ParkSense System .................................275
   ParkSense System Usage Precautions ............................275
LANESENSE — IF EQUIPPED ..............................................276
   LaneSense Operation ......................................................276
   Turning LaneSense On Or Off ..................................277
   LaneSense Warning Message ................................277
   Changing LaneSense Status ......................................279
>>> CONDITION: {Market='Latin America' or
   Market=Brazil} >>> PARKVIEW REAR BACK UP
CAMERA — IF EQUIPPED <<< CONDITION END
<<< .............................................................................279
   AUX Camera — If Equipped ........................................281
SURROUND VIEW CAMERA SYSTEM — IF
EQUIPPED ..................................................................282
   AUX Camera — If Equipped ........................................288
ENGINE RUNAWAY ..........................................................288
REFueling THE VEHICLE — GASOLINE ENGINE ................................288
   Loose Fuel Filler Cap Message ......................................290
REFueling THE VEHICLE — DIESEL ENGINE ..............................290

VEHICLE LOADING ...............................................................291
   Gross Vehicle Weight Rating (GVWR) ..................291
   Payload .....................................................................291
   Gross Axle Weight Rating (GAWR) .....................291
   Tire Size .....................................................................291
   Rim Size .....................................................................291
   Inflation Pressure ......................................................291
   Curb Weight ..............................................................291
   Loading ....................................................................291
   TRAILER TOWING ........................................................292
   Common Towing Definitions ..................................292
   Trailer Hitch Type and Maximum Trailer Weight
   295
   Trailer Towing Weights (Maximum Trailer
   Weight Ratings) .........................................................296
   Trailer And Tongue Weight ..................................296
   Towing Requirements .............................................297
   Towing Tips ...............................................................303
SNOWPLOW .................................................................304
   2500 Models ............................................................304
RECREATIONAL TOWING (BEHIND MOTORHOME,
ETC.) ........................................................................306
   Towing This Vehicle Behind Another Vehicle ..
   306
   Recreational Towing — Two-Wheel Drive
   Models .................................................................307
   Recreational Towing — Four-Wheel Drive
   Models .................................................................307

DRIVING TIPS .................................................................310
   Driving On Slippery Surfaces .........................310
   Driving Through Water ................................310
   Off-Road Driving Tips ........................................311

IN CASE OF EMERGENCY
HAZARD WARNING FLASHERS ...........................................313
BULB REPLACEMENT .......................................................313
   Replacement Bulbs .................................................313
   Replacing Exterior Bulbs ..................................315
FUSES ..........................................................................319
   Power Distribution Center ................................320
JACKING AND TIRE CHANGING ........................................328
   Jack Location ..........................................................329
   Removal Of Jack And Tools ............................329
   Removing The Spare Tire ..................................331
   Preparations For Jacking ..................................332
   Jacking Instructions ..............................................332
   To Stow The Flat Or Spare ..................................335
   Reinstalling The Jack And Tools ..................336
   Hub Caps — If Equipped .......................................337
JUMP STARTING ...............................................................338
   Preparations For Jump Start ..............................338
   Jump Starting Procedure ..................................339
MANUAL PARK RELEASE — 8–SPEED
TRANSMISSION ...............................................................340
IF YOUR ENGINE OVERHEATS ........................................341
FREEING A STUCK VEHICLE ............................................342
FUEL REQUIREMENTS — GASOLINE ENGINE 403
6.4L Engine .................................................403
>>> CONDITION: {((Market=Brazil or Market='Latin America'))} >>>..................404
Methanol .................................................404
<<< CONDITION END <<<.........................404
>>> CONDITION: {((Market=Brazil or Market='Latin America'))} >>>..................404
Ethanol .................................................404
<<< CONDITION END <<<.........................404
Reformulated Gasoline .........................404
Materials Added To Fuel .......................405
Do Not Use E-85 In Non-Flex Fuel Vehicles .... 405
CNG And LP Fuel System Modifications...405
MMT In Gasoline........................................405
Carbon Monoxide Warnings .....................406
FUEL REQUIREMENTS — DIESEL ENGINE 406
Fuel Specifications ...................................408
Biodiesel Fuel Requirements ..................408
FLUID CAPACITIES — GASOLINE ENGINE 409
FLUID CAPACITIES — DIESEL ENGINE 410
FLUIDS AND LUBRICANTS — GASOLINE ENGINE 411
Engine ....................................................411
Chassis ..................................................413
FLUIDS AND LUBRICANTS — DIESEL ENGINE 414
Engine ....................................................414
Chassis ..................................................415
MULTIMEDIA
UCONNECT SYSTEMS .................................416
CYBERSECURITY ......................................416
UCONNECT SETTINGS ...............................417
Uconnect 4/4C/4C NAV Settings ...............417
Uconnect 4C NAV With 12-inch Display
Settings ..................................................438
STEERING WHEEL AUDIO CONTROLS — IF
EQUIPPED ..............................................456
Radio Operation .......................................456
Media Mode .............................................456
IPOD®/USB/MP3 CONTROL — IF EQUIPPED .... 457
RADIO OPERATION AND MOBILE PHONES 458
VOICE RECOGNITION QUICK TIPS ............458
Introducing Uconnect ..............................458
Get Started ............................................459
Basic Voice Commands .........................459
Radio .....................................................460
Media .....................................................460
Phone ....................................................460
Voice Text Reply — If Equipped ...............461
Climate (4C/4C NAV) .................................462
Navigation (4C NAV) .................................462
Siri® Eyes Free — If Equipped ..................463
Using Do Not Disturb ...............................463
Android Auto™ — If Equipped .................463
Apple CarPlay® — If Equipped ................464
Additional Information .........................464
CUSTOMER ASSISTANCE

IF YOU NEED ASSISTANCE ................. 466
ARGENTINA ........................................... 466
AUSTRALIA ............................................ 466
AUSTRIA .............................................. 467
BALANCE OF THE CARIBBEAN .......... 467
BELGIUM ............................................. 467
BRAZIL .................................................. 468
BOLIVIA ............................................... 468
BRAZIL .................................................. 468
BULGARIA .......................................... 468
CHILE ..................................................... 468
CHINA ................................................... 468
COLOMBIA ......................................... 468
COSTA RICA ........................................... 468
CROATIA ................................................ 468
CZECH REPUBLIC ............................. 469
DENMARK ............................................. 469
DOMINICAN REPUBLIC .................. 469
ECUADOR .............................................. 469
EL SALVADOR ..................................... 469
ESTONIA ............................................. 469
FINLAND ............................................. 470
FRANCE .............................................. 470
GERMANY ............................................ 470
GREECE .............................................. 471
GUATEMALA ....................................... 471
HONDURAS ......................................... 471
HUNGARY ............................................ 471
INDIA .................................................. 471
IRELAND ............................................. 472
ITALY ................................................... 472
LATVIA ............................................... 472
LITHUANIA ......................................... 472
LUXEMBURG ...................................... 473
NETHERLANDS .................................. 473
NEW ZEALAND .................................... 473
NORWAY ............................................. 473
PANAMA .............................................. 473
PARAGUAY ......................................... 473
PERU ..................................................... 474
POLAND .............................................. 474
PORTUGAL .......................................... 474
PUERTO RICO AND U.S. VIRGIN ISLANDS 474
REUNION ............................................. 474
ROMANIA ............................................. 474
RUSSIA ............................................... 475
SERBIA ................................................ 475
SLOVAKIA ........................................... 475
SLOVENIA .......................................... 475
SOUTH AFRICA .................................... 476
SPAIN ............................................... 476
SWEDEN ............................................. 476
SWITZERLAND .................................... 477
TAIWAN .............................................. 477
TURKEY .............................................. 477
UKRAINE ............................................ 477
UNITED KINGDOM ............................. 477
URUGUAY ............................................ 478
VENEZUELA ....................................... 478
Dear Customer, congratulations on selecting your new vehicle. Be assured that it represents precision workmanship, distinctive styling, and high quality.

This is a specialized utility vehicle. It can go places and perform tasks that are not intended for conventional passenger vehicles. It handles and maneuvers differently from many passenger vehicles both on-road and off-road, so take time to become familiar with your vehicle. If equipped, the two-wheel drive version of this vehicle was designed for on-road use only. It is not intended for off-road driving or use in other severe conditions suited for a four-wheel drive vehicle. Before you start to drive this vehicle, read the Owner’s Manual. Be sure you are familiar with all vehicle controls, particularly those used for braking, steering, transmission, and transfer case shifting. Learn how your vehicle handles on different road surfaces. Your driving skills will improve with experience. When driving off-road, or working the vehicle, don’t overload the vehicle or expect the vehicle to overcome the natural laws of physics. Always observe state, provincial, and local laws wherever you drive. As with other vehicles of this type, failure to operate this vehicle correctly may result in loss of control or a collision. Refer to the “Driving Tips” in “Starting and Operating” for further information.

This Owner’s Manual has been prepared with the assistance of service and engineering specialists to acquaint you with the operation and maintenance of your vehicle. It is supplemented by Warranty Information, and customer-oriented documents. Within this information, you will find a description of the services that FCA offers to its customers, the vehicle’s warranty coverage, and the details of the terms and conditions for maintaining its validity. Please take the time to read all of these publications carefully before driving your vehicle for the first time. Following the instructions, recommendations, tips, and important warnings in this manual will help assure safe and enjoyable operation of your vehicle.

This Owner’s Manual describes all versions of this vehicle. Options and equipment dedicated to specific markets or versions are not expressly indicated in the text. Therefore, you should only consider the information which is related to the trim level, engine, and version that you have purchased. Any content introduced throughout the Owner’s Information, that may or may not be applicable to your vehicle, will be identified with the wording “If Equipped”. All data contained in this publication are intended to help you use your vehicle in the best possible way. FCA aims at a constant improvement of the vehicles produced. For this reason, it reserves the right to make changes to the model described for technical and/or commercial reasons. For further information, contact an authorized dealer.

When it comes to service, remember that authorized dealers know your vehicle best, have factory-trained technicians and genuine parts.
MOPAR® parts, and care about your satisfaction.

IMPORTANT NOTICE

ALL MATERIAL CONTAINED IN THIS PUBLICATION IS BASED ON THE LATEST INFORMATION AVAILABLE AT TIME OF PUBLICATION APPROVAL. THE RIGHT IS RESERVED TO PUBLISH REVISIONS AT ANY TIME.

This Owner's Manual has been prepared with the assistance of service and engineering specialists to acquaint you with the operation and maintenance of your new vehicle. It is supplemented by a Warranty Information and various customer-oriented documents. You are urged to read these publications carefully. Following the instructions and recommendations in this Owner's Manual will help assure safe and enjoyable operation of your vehicle.

After you have read the Owner's Manual, it should be stored in the vehicle for convenient reference and remain with the vehicle when sold.

The manufacturer reserves the right to make changes in design and specifications, and/or to make additions to or improvements in its products without imposing any obligations upon itself to install them on products previously manufactured.

The Owner's Manual illustrates and describes the features that are standard or available as extra cost options. Therefore, some of the equipment and accessories in this publication may not appear on your vehicle.

NOTE:
Be sure to read the Owner's Manual first before driving your vehicle and before attaching or installing parts/accessories or making other modifications to the vehicle.

In view of the many replacement parts and accessories from various manufacturers available on the market, the manufacturer cannot be certain that the driving safety of your vehicle will not be impaired by the attachment or installation of such parts. Even if such parts are officially approved (for example, by a general operating permit for the part or by constructing the part in an officially approved design), or if an individual operating permit was issued for the vehicle after the attachment or installation of such parts, it cannot be implicitly assumed that the driving safety of your vehicle is unimpaired. Therefore, neither experts nor official agencies are liable. The manufacturer only assumes responsibility when parts, which are expressly authorized or recommended by the manufacturer, are attached or installed at an authorized dealer. The same applies when modifications to the original condition are subsequently made on the manufacturer's vehicles.

Your warranties do not cover any part that the manufacturer did not supply. Nor do they cover the cost of any repairs or adjustments that might be caused or needed because of the installation or use of non-manufacturer parts, components, equipment, materials, or additives. Nor do your warranties cover the costs of repairing damage or conditions caused by any changes to your vehicle that do not comply with the manufacturer's specifications.

HOW TO USE THIS MANUAL

Essential Information
Consult the Table of Contents to determine which section contains the information you desire.

Since the specification of your vehicle depends on the items of equipment ordered, certain
descriptions and illustrations may differ from your vehicle's equipment. The detailed Index at the back of this Owner's Manual contains a complete listing of all subjects.

Symbols
Some vehicle components have colored labels whose symbols indicate precautions to be observed when using this component. Refer to “Warning Lights and Messages” in “Getting To Know Your Instrument Panel” for further information on the symbols used in your vehicle.

WARNINGS AND CAUTIONS
This Owner’s Manual contains WARNINGS against operating procedures that could result in a collision, bodily injury and/or death. It also contains CAUTIONS against procedures that could result in damage to your vehicle. If you do not read this entire Owner’s Manual, you may miss important information. Observe all Warnings and Cautions.

VAN CONVERSIONS/CAMPERS
The New Vehicle Limited Warranty does not apply to body modifications or special equipment installed by van conversion/camper manufacturers/body builders. U.S. residents refer to the Warranty Information, Section 2.1.C. Canadian residents refer to the “What Is Not Covered” section of the Warranty Information. Such equipment includes video monitors, VCRs, heaters, stoves, refrigerators, etc. For warranty coverage and service on these items, contact the applicable manufacturer. Operating instructions for the special equipment installed by the conversion/camper manufacturer should also be supplied with your vehicle. If these instructions are missing, please contact an authorized dealer for assistance in obtaining replacement documents from the applicable manufacturer.

For information on the Body Builder’s Guide refer to www.rambodybuilder.com. This website contains dimensional and technical specifications for your vehicle. It is intended for Second Stage Manufacturer's technical support. For service issues, contact an authorized dealer.

VEHICLE MODIFICATIONS/ALTERATIONS

WARNING!
Any modifications or alterations to this vehicle could seriously affect its roadworthiness and safety and may lead to a collision resulting in serious injury or death.
GETTING TO KNOW YOUR VEHICLE

KEYS

Key Fob

Your vehicle uses a keyless ignition system. The ignition system consists of a key fob and a START/STOP push button ignition system. The Remote Keyless Entry (RKE) system consists of a key fob and Keyless Enter-N-Go feature.

NOTE:
The key fob may not be found if it is located next to a mobile phone, laptop or other electronic device; these devices may block the key fob’s wireless signal.

>>> CONDITION: {Market=Brazil or Market='Latin America'} >>>
The key fob allows you to lock or unlock all doors, tailgate, and the RamBox (if equipped), as well as release the tailgate from distances up to approximately 66 ft (20 m). The key fob does not need to be pointed at the vehicle to activate the system.

<<< CONDITION END <<<

In case the ignition switch does not change with the push of a button, the key fob may have a low or fully depleted battery. A low key fob battery can be verified by referring to the instrument cluster, which will display directions to follow. In a situation where the battery is low or fully depleted, a back up method can be used to operate the ignition switch. Put the nose side of the key fob (side opposite of the emergency key) against the START/STOP ignition button and push to operate the ignition switch.

To Unlock The Doors And Tailgate

Push and release the unlock button on the key fob once to unlock the driver’s door. Push the unlock button twice within five seconds to unlock all doors, the tailgate and the RamBox (if equipped). The turn signal lights will flash to acknowledge the unlock signal. The illuminated entry system will also turn on.

NOTE:
All doors can be programmed to unlock on the first push of the unlock button. Refer to “Ucon-
To Lock The Doors And Tailgate
Push and release the lock button on the key fob to lock all doors, the tailgate, and the RamBox (if equipped). The turn signal lights will flash and the horn will chirp to acknowledge the signal.

Sound Horn With Remote Key Lock — If Equipped
This feature will cause the horn to chirp when the doors are locked with the key fob. This feature can be turned on or turned off through the Uconnect settings.

NOTE:
Pushing the lock button on the key fob while you are in the vehicle will activate the vehicle security alarm system. Opening a door with the vehicle security alarm system activated will cause the alarm to sound. Push the unlock button to deactivate the vehicle security alarm system.

Refer to “Vehicle Security Alarm” in this chapter for further information.

Replacing The Battery In The Key Fob With Remote Control
The replacement battery model is one CR2450 battery.

NOTE:
- >>> CONDITION: {Market=Brazil or Market='Latin America'} >>>
  Perchlorate Material — special handling may apply.
  <<< CONDITION END <<<
- Do not touch the battery terminals that are on the back housing or the printed circuit board.

1. Remove the emergency key by pushing and holding the release button located on the side of the key fob while pulling the emergency key out with your other hand.

2. Slightly remove the emergency key from the key fob, approximately 10 mm. The blade of the emergency key should just become visible.
3. Holding the key fob with the button side facing down, use the emergency key to pry up the battery cover until the cover releases from the key fob housing.

**NOTE:**
When replacing the battery, ensure the (+) sign on the battery is facing upward. Avoid touching the new battery with your fingers. Skin oils may cause battery deterioration. If you touch a battery, clean it with rubbing alcohol.

4. Remove the battery by using the emergency key to pry the battery out of its housing.

5. Replace the battery by pushing the new battery down on an angle toward the top edge of the opening. Then, push down on the remainder of the battery to lock into place.

6. To assemble the key fob case, line up the top edge of the back cover with the top of the fob, and press the edges into the interlocking hinges until all edges snap together with no large visual gaps.

**NOTE:**
The key fob battery should only be replaced by qualified technicians. If the battery requires replacement, see an authorized dealer.

**Alternative Back Cover Removal Method:**
The back cover of the key fob can also be removed by inserting the emergency key into the left or right side open slots, and twisting to pop off the cover.
NOTE:
The key fob battery should only be replaced by qualified technicians. If the battery requires replacement, see an authorized dealer.

Programming Additional Key Fobs
Programming the key fob may be performed by an authorized dealer.

NOTE:
Once a key fob is programmed to a vehicle, it cannot be repurposed and reprogrammed to another vehicle.

**IGNITION SWITCH**

**Keyless Enter-N-Go — Ignition**

This feature allows the driver to operate the ignition switch with the push of a button as long as the Remote Keyless Entry key fob is in the passenger compartment.

The Keyless Push Button Ignition has four operating positions; three of which are labeled and will illuminate when in position. The three positions are OFF, ACC, and ON/RUN. The fourth position is START. During START, RUN will illuminate.

**NOTE:**
In case the ignition switch does not change with the push of a button, the key fob may have a low or depleted battery. In this situation, a back up method can be used to operate the ignition switch. Put the nose side (side opposite of the emergency key) of the key fob against the START/STOP ignition button, with your foot applied on the brake pedal, and push to operate the ignition switch.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 — OFF</td>
<td>The engine is stopped.</td>
</tr>
<tr>
<td>2 — ACC</td>
<td>The engine is running.</td>
</tr>
<tr>
<td>3 — ON/RUN</td>
<td>Some electrical devices (e.g. Central locking, alarm, etc.) are still available.</td>
</tr>
</tbody>
</table>
ACC  
- Engine is not started.  
- Some electrical devices are available.

RUN  
- Driving position.  
- All the electrical devices are available.

START  
- The engine will start.

**WARNING!**
- When exiting the vehicle, always remove the key fob from the vehicle and lock your vehicle.  
- Never leave children alone in a vehicle, or with access to an unlocked vehicle.  
- Allowing children to be in a vehicle unattended is dangerous for a number of reasons. A child or others could be seriously or fatally injured. Children should be warned not to touch the parking brake, brake pedal or the gear selector.

**WARNING! (Continued)**
- Do not leave the key fob in or near the vehicle, or in a location accessible to children, and do not leave the ignition of a vehicle equipped with Keyless Enter-N-Go in the ON/RUN mode. A child could operate power windows, other controls, or move the vehicle.  
- Do not leave children or animals inside parked vehicles in hot weather. Interior heat build-up may cause serious injury or death.

**CAUTION!**
An unlocked vehicle is an invitation for thieves. Always remove key fob from the vehicle and lock all doors when leaving the vehicle unattended.

The engine only runs in the ON/RUN ignition position or from a remote start request. In case the ignition switch does not change with the push of a button, the key fob may have a low or depleted battery. In this situation, a back up method can be used to operate the ignition switch. Put the nose side (side opposite of the emergency key) of the key fob against the START/STOP ignition button and push to operate the ignition switch.

>>> CONDITION: [Market=Brazil or Market='Latin America'] >>>

**Back Up Starting Method**

<<< CONDITION END <<<

**NOTE:**
The key fob may not be able to be detected by the vehicle’s Keyless Enter-N-Go system if it is located next to a mobile phone, laptop or other electronic device; these devices may block the key fob's wireless signal and prevent the Keyless Enter-N-Go system from starting the vehicle.

Refer to "Starting The Engine" in "Starting And Operating" for further information.
REMOTE START — IF EQUIPPED (GASOLINE)

This system uses the key fob to start the engine conveniently from outside the vehicle while still maintaining security. The system has a range of approximately 300 ft (91 m).

NOTE:
Obstructions between the vehicle and the key fob may reduce this range.

How To Use Remote Start
All of the following conditions must be met before the engine will remote start:
- Gear selector in PARK
- Doors closed
- Hood closed
- Hazard switch off
- Brake switch inactive (brake pedal not pushed)
- Battery at an acceptable charge level
- Fuel meets minimum requirement
- System not disabled from previous remote start event
- Vehicle security alarm not active
- Malfunction Indicator Light is not illuminated

Remote Start Abort Message
The following messages will display in the instrument cluster display if the vehicle fails to remote start or exits remote start prematurely:
- Remote Start Cancelled — Door Open
- Remote Start Cancelled — Hood Open
- Remote Start Cancelled — Fuel Low
- Remote Start Cancelled — System Fault
- Remote Start Disabled — Start Vehicle to Reset

WARNING!
- Do not start or run an engine in a closed garage or confined area. Exhaust gas contains Carbon Monoxide (CO) which is odorless and colorless. Carbon Monoxide is poisonous and can cause serious injury or death when inhaled.
- Keep key fobs away from children. Operation of the Remote Start System, windows, door locks or other controls could cause serious injury or death.
The instrument cluster display message stays active until the ignition is placed in the ON/RUN position.

**To Enter Remote Start Mode**

Push and release the Remote Start button on the key fob twice within five seconds. The parking lights will flash, vehicle doors will lock, and the horn will chirp twice (if programmed). Once the vehicle has started, the engine will run for 15 minutes.

**NOTE:**
- If your power door locks were unlocked, Remote Start will automatically lock the doors.
- If an engine fault is present or fuel level is low, the vehicle will start and then shut down in 10 seconds.
- The park lamps will turn on and remain on during Remote Start mode.
- For security, power window and power sunroof operation (if equipped) are disabled when the vehicle is in the Remote Start mode.
- The engine can be started two consecutive times (two 15 minute cycles) with the key fob. However, the ignition must be placed in the ON/RUN position before you can repeat the start sequence for a third cycle.

**To Exit Remote Start Mode Without Driving The Vehicle**

Push and release the remote start button one time or allow the engine to run for the entire 15 minute cycle.

**NOTE:**
To avoid unintentional shutdowns, the system will disable for two seconds after receiving a valid Remote Start request.

**To Exit Remote Start Mode And Drive The Vehicle**

Before the end of the 15 minute cycle, push and release the unlock button on the key fob to unlock the doors and disarm the vehicle security alarm system (if equipped). Then, prior to the end of the 15 minute cycle, place the ignition in the ON/RUN position.

**Remote Start Comfort Systems — If Equipped**

When remote start is activated, the heated steering wheel, and driver heated seat features will automatically turn on in cold weather. In warm weather, the driver vented seat feature will automatically turn on when the remote start is activated. These features will stay on through the duration of remote start or until the ignition switch is placed in the ON/RUN position.

**NOTE:**
The Remote Start Comfort system can be activated and deactivated through the Uconnect System under “Auto-On Comfort And Remote Start”. Refer to “Uconnect Settings” in “Multimedia” for further information on Remote Start Comfort System operation.

**REMOTE START — IF EQUIPPED (DIESEL)**

This system uses the key fob to start the engine conveniently from outside the vehicle while still maintaining...
security. The system has a range of approximately 300 ft (91 m).

NOTE:
- Obstructions between the vehicle and the key fob may reduce this range.
- The Remote Start system will wait for the “Wait To Start” Indicator Light to extinguish before cranking the engine. This allows time for the intake heater to preheat the incoming air, and is normal operation in cold weather. Refer to “Warning Lights And Messages” in “Getting To Know Your Instrument Panel” for more information.

How To Use Remote Start

All of the following conditions must be met before the engine will remote start:
- Transmission in PARK
- Doors closed
- Hood closed
- Hazard switch off
- Brake switch inactive (brake pedal not pushed)
- Battery at an acceptable charge level
- Fuel meets minimum requirement
- Water In Fuel Indicator Light is not illuminated
- Wait To Start Light Indicator Light is not illuminated
- Malfunction Indicator Light is not illuminated

Remote Start Abort Message

The following messages will display in the instrument cluster display if the vehicle fails to remote start or exits remote start prematurely:
- Remote Start Aborted — Door Open
- Remote Start Aborted — Hood Open
- Remote Start Aborted — Fuel Low
- Remote Start Aborted — System Fault

The instrument cluster display message is stored until the ignition is placed in the ON/RUN position.

WARNING!

- Do not start or run an engine in a closed garage or confined area. Exhaust gas contains Carbon Monoxide (CO) which is odorless and colorless. Carbon Monoxide is poisonous and can cause serious injury or death when inhaled.
- Keep key fobs away from children. Operation of the Remote Start System, windows, door locks or other controls could cause serious injury or death.
To Enter Remote Start Mode
Push and release the Remote Start button on the key fob twice, within five seconds. The parking lights will flash and the horn will chirp twice (if programmed). In cold ambient temperature conditions, the diesel vehicle may delay crank up to 30 seconds for the Intake Air Heater. Once the vehicle has started, the engine will run for 15 minutes.

NOTE:
- Crank may be delayed up to 75 seconds for intake air heater operation at high altitudes, and/or extreme cold.
- The park lamps will turn on and remain on during Remote Start mode.
- For security, power window and power sunroof operation (if equipped) are disabled when the vehicle is in the Remote Start mode.
- Additional features, such as windshield wipers, will also not be available while the vehicle is in the Remote Start mode.
- The engine can be started two consecutive times (two 15 minute cycles) with the key fob. However, the ignition switch must be placed in the ON/RUN position before you can repeat the start sequence for a third cycle.

To Exit Remote Start Mode Without Driving The Vehicle
Push and release the Remote Start button one time or allow the engine to run for the entire 15 minute cycle.

NOTE:
To avoid unintentional shut downs, the system will disable for two seconds after receiving a valid Remote Start request.

To Exit Remote Start Mode And Drive The Vehicle
To exit Remote Start Mode and drive the vehicle before the end of the 15 minute cycle, push and release the unlock button on the key fob to unlock the door and disarm the vehicle security alarm system (if equipped). Then, prior to the end of the 15 minute cycle, place the ignition in the ON/RUN position.

NOTE:
The ignition switch must be in the ON/RUN position in order to drive the vehicle.

Remote Start Comfort Systems — If Equipped
When remote start is activated, the heated steering wheel, and driver heated seat features will automatically turn on in cold weather. In warm weather, the driver vented seat feature will automatically turn on when the remote start is activated. These features will stay on through the duration of remote start or until the ignition switch is placed in the ON/RUN position.

NOTE:
The Remote Start Comfort system can be activated and deactivated through the Uconnect System under “Auto-On Comfort And Remote Start”. Refer to “Uconnect Settings” in “Multimedia” for further information on Remote Start Comfort System operation.

SENTRY KEY
The Sentry Key Immobilizer system prevents unauthorized vehicle operation by disabling the
engine. The system does not need to be armed or activated. Operation is automatic, regardless of whether the vehicle is locked or unlocked. The system uses a key fob, keyless push button ignition and a Radio Frequency (RF) receiver to prevent unauthorized vehicle operation. Therefore, only key fobs that are programmed to the vehicle can be used to start and operate the vehicle. The system cannot reprogram a key fob obtained from another vehicle.

After placing the ignition switch in the ON/RUN position, the vehicle security light will turn on for three seconds for a bulb check. If the light remains on after the bulb check, it indicates that there is a problem with the electronics. In addition, if the light begins to flash after the bulb check, it indicates that someone attempted to start the engine with an invalid key fob. In the event that a valid key fob is used to start the engine but there is an issue with the vehicle electronics, the engine will start and shut off after two seconds.

If the vehicle security light turns on during normal vehicle operation (vehicle running for longer than 10 seconds), it indicates that there is a fault in the electronics. Should this occur, have the vehicle serviced as soon as possible by an authorized dealer.

**CAUTION!**

The Sentry Key Immobilizer system is not compatible with some aftermarket remote starting systems. Use of these systems may result in vehicle starting problems and loss of security protection.

All of the key fobs provided with your new vehicle have been programmed to the vehicle electronics.

**Key Programming**

Programming key fobs may be performed at an authorized dealer.

**Replacement Keys**

**NOTE:** Only key fobs that are programmed to the vehicle electronics can be used to start and operate the vehicle. Once a key fob is programmed to a vehicle, it cannot be programmed to any other vehicle.

**NOTE:** Duplication of key fobs may be performed at an authorized dealer. This procedure consists of programming a blank key fob to the vehicle electronics. A blank key fob is one that has never been programmed.

When having the Sentry Key Immobilizer System serviced, bring all vehicle keys with you to an authorized dealer.

**VEHICLE SECURITY ALARM**

The vehicle security alarm monitors the vehicle doors, tailgate, and ignition for unauthorized operation. When the vehicle security alarm is activated, interior switches for door locks are disabled. The system will turn the horn off after 29 seconds, 5 seconds between cycles, up to 8...
cycles if the trigger remains active and then the vehicle security alarm will rearm itself.

**To Arm The System**

Follow these steps to arm the vehicle security alarm:

1. Remove the key from the ignition system. Refer to “Starting The Engine” in “Starting And Operating” for further information.
   - Make sure the vehicle ignition system is OFF.
2. Perform one of the following methods to lock the vehicle:
   - Push the lock button on the interior power door lock switch with the driver and/or passenger door open.
   - Push the lock button on the exterior Passive Entry Door Handle with a valid key fob available in the same exterior zone. Refer to "Keyless Enter-N-Go — Passive Entry" in "Doors" in this chapter for further information.
   - Push the lock button on the key fob.
3. If any doors are open, close them.

The vehicle security alarm will set when you use the power door locks, or use the key fob to lock the doors. After all the doors are locked and closed, the vehicle security light, in the instrument panel cluster, will flash rapidly for about 16 seconds to indicate that the alarm is being set. After the alarm is set, the vehicle security light will flash at a slower rate to indicate that the system is armed.

**To Disarm The System**

The vehicle security alarm can be disarmed using any of the following methods:

1. Push the unlock button on the key fob.
2. Grasp the Passive Entry Door Handle with a valid key fob within 5 ft (1.5 m) of the Passive Entry door handle (if equipped). Refer to "Keyless Enter-N-Go — Passive Entry" in "Doors" in this chapter for further information.
3. Cycle the ignition out of the OFF position.

The vehicle security alarm is designed to protect your vehicle. However, you can create conditions where the system will give you a false alarm. If one of the previously described arming sequences has occurred, the vehicle security alarm will arm regardless of whether you are in the vehicle or not. If you remain in the vehicle and open a door, the alarm will sound. If this occurs, disarm the vehicle security alarm.

If the vehicle security alarm is armed and the battery becomes disconnected, the vehicle security alarm will remain armed when the battery is reconnected; the exterior lights will flash, and the horn will sound. If this occurs, disarm the vehicle security alarm.

**Rearming Of The System**

If something triggers the alarm, and no action is taken to disarm it, the vehicle security alarm will turn the horn off after 29 seconds, 5 seconds between cycles, up to 8 cycles if the trigger remains active and then the vehicle security alarm will rearm itself.

**Security System Manual Override**

The vehicle security alarm will not arm/disarm if you lock/unlock the doors using the manual door lock.

**DOORS**

**Manual Door Locks**

Front and rear doors may be locked by moving the lock knob down. The lock knobs will unlock
when the interior handle is used to open the doors.

**Door Lock Knob**

Front doors may be opened with the inside door handle without lifting the lock knob. Doors locked before closing will remain locked when closed. The emergency key will unlock the driver door lock on your vehicle.

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**WARNING!**

- Do not leave children or animals inside parked vehicles in hot weather. Interior heat build-up may cause serious injury or death.

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**WARNING! (Continued)**

- For personal security and safety in the event of an collision, lock the vehicle doors as you drive as well as when you park and leave the vehicle.
- Before exiting a vehicle, always shift the automatic transmission into PARK, apply the parking brake, turn the vehicle OFF, remove the key fobs from vehicle, and lock all doors. and lock your vehicle.
- Never leave children alone in a vehicle, or with access to an unlocked vehicle. Leaving children in a vehicle unattended is dangerous for a number of reasons. A child or others could be seriously or fatally injured. Children should be warned not to touch the parking brake, brake pedal or the gear selector.
- Allowing children to be in a vehicle unattended is dangerous for a number of reasons. A child or others could be seriously or fatally injured. Children should be warned not to touch the parking brake, brake pedal or the gear selector.

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**WARNING! (Continued)**

- Do not leave the key fob in or near the vehicle, or in a location accessible to children, and do not leave the ignition of a vehicle equipped with Keyless Enter-N-Go in the ACC or ON/RUN mode. A child could operate power windows, other controls, or move the vehicle.

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**Power Door Locks — If Equipped**

The power door lock switches are on each front door trim panel. Use these switches to lock or unlock the doors.

**NOTE:**

The key fob may not be able to be detected by the vehicle Keyless Enter-N-Go system if it is located next to a mobile phone, laptop or other electronic device; these devices may block the
key fob’s wireless signal and prevent the Keyless Enter-N-Go system from starting the vehicle.

**Power Door Lock Switches**

While the ignition is in the ACC or ON/RUN position, if you push the power door lock switch, and any front door is open, the power locks will not operate. This prevents you from accidentally locking your key fob in the vehicle. Removing the key fob or closing the door will allow the locks to operate. A chime will sound if the key fob is inside the vehicle and a door is open, as a reminder to remove the key fob.

**Power Side Steps — If Equipped**

The Power Side Steps will extend a step for easier entry and exit of the vehicle.

When configured for “Auto” mode, under “Safety And Driving Assistance” within Uconnect settings, the Power Side Steps will deploy when either the driver’s or passenger’s side door is opened, or when the deploy setting is activated through the touchscreen. When configured for “Store” mode, the steps will stay in their position but can also be deployed manually through the “controls” menu within the radio touchscreen.

If the vehicle speed exceeds 5 mph (8 km/h), or if the retract setting is selected in the touchscreen, the steps will retract.

Refer to “Uconnect Settings” in “Multimedia” for additional information.

**Keyless Enter-N-Go — Passive Entry**

The Passive Entry system is an enhancement to the vehicle’s Remote Keyless Entry system and a feature of Keyless Enter-N-Go. This feature allows you to lock and unlock the vehicle’s door(s) without having to push the key fob lock or unlock buttons.

**NOTE:**

- Passive Entry may be programmed on/off. Refer to “Uconnect Settings” in “Multimedia” for further information.
- If wearing gloves on your hands, or if it has been raining/snowing on the Passive Entry door handle, the unlock sensitivity can be affected, resulting in a slower response time.
- If the vehicle is unlocked by Passive Entry and no door is opened within 60 seconds, the vehicle will re-lock and if equipped will arm the security alarm.
- The vehicle security alarm can be armed/disarmed by pushing the Passive Entry key fob lock/unlock buttons (if equipped).
- The key fob may not be able to be detected by the vehicle Passive Entry system if it is located next to a mobile phone, laptop or other electronic device; these devices may block the key fob’s wireless signal and prevent the Passive Entry door handle from locking/unlocking the vehicle.
To Unlock From The Driver's Side:
With a valid Passive Entry key fob within 5 ft (1.5 m) of the driver door handle, grab the front driver door handle to unlock the driver's door automatically. The interior door panel lock knob will raise when the door is unlocked.

NOTE:
If "Unlock All Doors 1st Press" is programmed, all doors will unlock when you grab hold of the front driver's door handle. To select between "Unlock Driver Door 1st Press" and "Unlock All Doors 1st Press," refer to "Uconnect Settings" in "Multimedia" for further information.

To Unlock From The Passenger Side:
With a valid Passive Entry key fob within 5 ft (1.5 m) of the passenger door handle, grab the front passenger door handle to unlock all doors automatically. The interior door panel lock knob will raise when the door is unlocked.

NOTE:
All doors will unlock when the front passenger door handle is grabbed regardless of the driver's door unlock preference setting ("Unlock Driver Door 1st Press" or "Unlock All Doors 1st Press").

Preventing Inadvertent Locking Of Passive Entry Key Fob In Vehicle:
To minimize the possibility of unintentionally locking a Passive Entry key fob inside your vehicle, the Passive Entry system is equipped with an automatic door unlock feature which will function if the ignition switch is in the OFF position.

If one of the vehicle doors is open and the door panel switch is used to lock the vehicle, once all open doors have been closed the vehicle checks the inside and outside of the vehicle for any valid Passive Entry key fobs. If one of the vehicle's Passive Entry key fobs is detected inside the vehicle, and no other valid Passive Entry key fobs are detected outside the vehicle, the Passive Entry System automatically unlocks all vehicle doors and chirps the horn three times (on the third attempt ALL doors will lock and the Passive Entry key fob can be locked in the vehicle).

To Lock The Vehicle's Doors:
With one of the vehicle’s Passive Entry key fobs within 5 ft (1.5 m) of the driver or passenger front door handles, push the door handle lock button to lock all doors.

Push The Door Handle Button To Lock
Do NOT grab the door handle when pushing the door handle lock button. This could unlock the door(s).
Do NOT Grab The Door Handle When Locking

NOTE:

- After pushing the door handle lock button, you must wait two seconds before you can lock or unlock the doors, using either Passive Entry door handle. This is done to allow you to check if the vehicle is locked by pulling the door handle, without the vehicle reacting and unlocking.

- The Passive Entry system depends on a key fob that is not fully discharged of its coin battery capacity.

- When the key fob battery is low, the instrument cluster will display a message indicating that the key fob battery is low. Refer to “Keys” in this chapter for further information.

The vehicle doors can also be locked by using the key fob lock button or the lock button located on the vehicle’s interior door panel.

**Automatic Door Locks — If Equipped**

The auto door lock feature default condition is enabled. When enabled, the door locks will lock automatically when the vehicle’s speed exceeds 15 mph (24 km/h). The auto door lock feature can be enabled or disabled by an authorized dealer per written request of the customer. Please see an authorized dealer for service.

**Automatic Doors Unlock — If Equipped**

This feature unlocks all of the doors of the vehicle when either front door is opened. This will occur only after the vehicle has been shifted into the PARK position after the vehicle has been driven (shifted out of PARK and all doors closed).

**Automatic Doors Unlock Programming — If Equipped**

The Automatic Doors Unlock feature can be enabled or disabled as follows:

- For vehicles not equipped with a touchscreen radio, refer to “Instrument Cluster Display” in “Getting To Know Your Instrument Panel” for further information.

- For vehicles equipped with a touchscreen radio, refer to “Uconnect Settings” in “Multimedia” for further information.

NOTE:

Use the Auto Unlock Doors feature in accordance with local laws.

**Child-Protection Door Lock**

To provide a safer environment for children riding in the rear seat, the rear doors (if equipped) of your vehicle have the Child-Protection Door Lock system.

To use the system, open each rear door, use a flat blade screwdriver (or emergency key) and rotate the dial to engage and disengage the Child-Protection locks. When the system on a door is engaged, that door can only be opened by using the outside door handle even if the inside door lock is in the unlocked position.
NOTE:
- After setting the Child-Protection Door Lock system, always test the door from the inside to make certain it is in the desired position.
- For emergency exit with the system engaged, move the door lock switch to the unlock position, roll down the window, and open the door with the outside door handle.

WARNING!
Avoid trapping anyone in the vehicle in a collision. Remember that the rear doors cannot be opened from the inside door handle when the Child Protection Door Locks are engaged.

NOTE:
- If equipped with power convex mirrors, these mirror positions will not set as part of a memory profile. Refer to “Mirrors” in this chapter for further information.
- Your vehicle is equipped with two key fobs, one key fob can be linked to memory position 1 and the other key fob can be linked to memory position 2.

**DRIVER MEMORY SETTINGS — IF EQUIPPED**
Your key fob can be programmed to recall the same positions when the unlock button is pushed. This feature allows the driver to store up to two different memory profiles for easy recall through a memory switch. Each memory profile contains desired position settings for the following features:
- Driver seat position
- Easy Entry/Exit seat (if equipped)
- Side mirrors
- Adjustable pedals (if equipped)
- A set of desired radio station presets

**Programming The Memory Feature**
To create a new memory profile, perform the following:

1. Place the vehicle’s ignition in the ON/RUN position (do not start the engine).
2. Adjust all memory profile settings to desired preferences (i.e., driver’s seat, outside mirrors, adjustable pedals (if equipped), and radio station presets).
3. Push and release the set (S) button on the memory switch.

The driver memory settings buttons are located on the driver door, next to the door handle.
4. Within five seconds, push and release either of the memory buttons (1) or (2). The instrument cluster display will show which memory position has been set.

**NOTE:**
Memory profiles can be set without the vehicle in PARK.

**Linking And Unlinking The Remote Keyless Entry Key Fob To Memory**
Your key fob can be programmed to recall one of two pre-programmed memory profiles by pushing the unlock button on the key fob.

**NOTE:**
Before programming your key fob you must select the “Personal Settings Linked to Key Fob” feature through the Uconnect Settings. Refer to “Uconnect Settings” in “Multimedia” for further information.

To program your key fob, perform the following:

1. Place the vehicle’s ignition in the OFF position.
2. Select a desired memory profile 1 or 2.

**NOTE:**
If a memory profile has not already been set, refer to “Programming The Memory Feature” in this section for instructions on how to set a memory profile.

3. Once the profile has been recalled, push and release the set (S) button on the memory switch.
4. Push and release button (1) or (2) accordingly. “Memory Profile Set” (1 or 2) will display in the instrument cluster.
5. Push and release the lock button on the key fob within 10 seconds.

**NOTE:**
Your key fob can be unlinked to your memory settings by pushing the set (S) button, and within 10 seconds, pushing the unlock button on the key fob.

**Memory Position Recall**

**NOTE:**
The vehicle speed must be lower than 5 mph (8 km/h) to recall memory positions. If a recall is attempted when the vehicle speed is greater than 5 mph (8 km/h), a message will be displayed in the instrument cluster display.

**Driver One Memory Position Recall**
- To recall the memory settings for driver one using the memory buttons on the door panel, push memory button (1).
- To recall the memory settings for driver one using the key fob, push the unlock button on the key fob linked to memory position 1.

**Driver Two Memory Position Recall**
- To recall the memory setting for driver two using the memory buttons on the door panel, push memory button (2).
- To recall the memory settings for driver two using the key fob, push the unlock button on the key fob linked to memory position 2.

A recall can be cancelled by pushing any of the memory buttons during a recall (S, 1, or 2). When a recall is canceled, the driver’s seat and the adjustable pedals (if equipped) stop moving. A delay of one second will occur before another recall can be selected.
SEATS

Seats are a part of the Occupant Restraint System of the vehicle.

WARNING!

- It is dangerous to ride in a cargo area, inside or outside of a vehicle. In a collision, people riding in these areas are more likely to be seriously injured or killed.
- Do not allow people to ride in any area of your vehicle that is not equipped with seats and seat belts. In a collision, people riding in these areas are more likely to be seriously injured or killed.
- Be sure everyone in your vehicle is in a seat and using a seat belt properly.

Manual Front Seat Adjustment

Manual Front Seat Forward/Rearward Adjustment

Both front seats are adjustable forward or rearward. The manual seat adjustment handle is located under the seat cushion at the front edge of each seat.

WARNING!

- Adjusting a seat while driving may be dangerous. Moving a seat while driving could result in loss of control which could cause a collision and serious injury or death.

Manual Front Seat Recline Adjustment

The recline lever is located on the outboard side of the seat. To recline the seat, lean forward slightly, lift the lever, lean back to the desired position and release the lever. To return the seatback to its normal upright position, lean forward and lift the lever. Release the lever once the seat back is in the upright position.

Manual Recline Lever

(Continued)
40-20-40 Front Bench Seat — If Equipped

The seat is divided into three segments. The outboard seat portions are each 40% of the total width of the seat. On some models, the back of the center portion (20%) easily folds down to provide an armrest/center storage compartment.

Manual Rear Seat Adjustment

<table>
<thead>
<tr>
<th>WARNING!</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not pile luggage or cargo higher than the top of the seatback. This could impair visibility or become a dangerous projectile in a sudden stop or collision.</td>
</tr>
</tbody>
</table>

Reclining Rear Seats — If Equipped

The recliner handle is located on the outside of the seat cushion. To adjust the seatback, lift upward on the handle, lean back on the seatback and when you reach the desired position, release the handle.

<table>
<thead>
<tr>
<th>WARNING!</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not ride with the seatback reclined so that the shoulder belt is no longer resting against your chest. In a collision you could slide under the seat belt, which could result in serious injury or death.</td>
</tr>
</tbody>
</table>

Power Driver Seat Adjustment — If Equipped

Some models may be equipped with an eight-way power driver's seat. The power seat switches are located on the outboard side of the driver's seat cushion. There are two power seat switches that are used to control the movement of the seat cushion and the seatback.

<table>
<thead>
<tr>
<th>Power Seat Switches</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 — Power Seat Switch</td>
</tr>
<tr>
<td>2 — Power Seatback Switch</td>
</tr>
</tbody>
</table>

Adjusting The Seat Forward Or Rearward

The seat can be adjusted both forward and rearward. Push the seat switch forward or rearward. The seat will move in the direction of
the switch. Release the switch when the desired position has been reached.

**Adjusting The Seat Up Or Down**
The height of the seats can be adjusted up or down. Pull upward or push downward on the seat switch, the seat will move in the direction of the switch. Release the switch when the desired position has been reached.

**Tilting The Seat Up Or Down**
The angle of the seat cushion can be adjusted in four directions. Pull upward or push downward on the front or rear of the seat switch, the front or rear of the seat cushion will move in the direction of the switch. Release the switch when the desired position is reached.

**Reclining The Seatback**
The angle of the seatback can be adjusted forward or rearward. Push the seatback switch forward or rearward, the seat will move in the direction of the switch. Release the switch when the desired position is reached.

---

**WARNING!**
- Adjusting a seat while driving may be dangerous. Moving a seat while driving could result in loss of control which could cause a collision and serious injury or death.
- Seats should be adjusted before fastening the seat belts and while the vehicle is parked. Serious injury or death could result from a poorly adjusted seat belt.
- Do not ride with the seatback reclined so that the shoulder belt is no longer resting against your chest. In a collision you could slide under the seat belt, which could result in serious injury or death.

---

**Power Lumbar — If Equipped**
Vehicles equipped with power driver or passenger seats may also be equipped with power lumbar. The power lumbar switch is located on the outboard side of the power seat. Push the switch forward to increase the lumbar support. Push the switch rearward to decrease the lumbar support.

---

**Lumbar Control Switch**

---

**CAUTION!**
Do not place any article under a power seat or impede its ability to move as it may cause damage to the seat controls. Seat travel may become limited if movement is stopped by an obstruction in the seat’s path.
Easy Entry/Exit Seat
This feature provides automatic driver’s seat positioning to enhance driver mobility when entering and exiting the vehicle.

The distance the driver’s seat moves depends on where you have the driver’s seat positioned when you place the ignition in the OFF position.

- When you place the ignition in the OFF position, the driver’s seat will move about 2.4 inches (60 mm) rearward if the driver’s seat position is greater than or equal to 2.7 inches (67.7 mm) forward of the rear stop. The seat will return to its previously set position when you place the ignition into the ACC or RUN position.

- When you place the ignition in the OFF position, the driver’s seat will move to a position 0.3 inches (7.7 mm) forward of the rear stop if the driver’s seat position is between 0.9 inches and 2.7 inches (22.7 mm and 67.7 mm) forward of the rear stop. The seat will return to its previously set position when you place the ignition to the ACC or RUN position.

- The Easy Entry/Easy Exit feature is disabled when the driver’s seat position is less than 0.9 inches (22.7 mm) forward of the rear stop. At this position, there is no benefit to the driver by moving the seat for Easy Exit or Easy Entry.

When enabled in Uconnect Settings, Easy Entry and Easy Exit positions are stored in each memory setting profile. Refer to “Driver Memory Settings — If Equipped” in this chapter for further information.

NOTE:
The Easy Entry/Exit feature is not enabled when the vehicle is delivered from the factory. The Easy Entry/Exit feature is enabled (or later disabled) through the programmable features in the Uconnect system. Refer to “Uconnect Settings” in “Multimedia” for further information.

Heated Seats — If Equipped
On some models, the front and rear seats may be equipped with heaters located in the seat cushions and seat backs.

WARNING!

- Persons who are unable to feel pain to the skin because of advanced age, chronic illness, diabetes, spinal cord injury, medication, alcohol use, exhaustion or other physical condition must exercise care when using the seat heater. It may cause burns even at low temperatures, especially if used for long periods of time.

- Do not place anything on the seat or seatback that insulates against heat, such as a blanket or cushion. This may cause the seat heater to overheat. Sitting in a seat that has been overheated could cause serious burns due to the increased surface temperature of the seat.
Front Heated Seats
The heated seats control buttons are located on the center instrument panel below the touchscreen, and are also located within the climate or controls screen of the touchscreen.

NOTE:
If the vehicle is equipped with a 12-inch radio, there will only be control buttons through the touchscreen.

- Push the heated seat button once to turn the HI setting on.
- Push the heated seat button a second time to turn the MED setting on.
- Push the heated seat button a third time to turn the LO setting on.
- Push the heated seat button a fourth time to turn the heating elements off.

NOTE:
- The engine must be running for the heated seats to operate.
- The level of heat selected will stay on until the operator changes it.

Vehicles Equipped With Remote Start
On models that are equipped with remote start, the driver’s seat can be programmed to come on during a remote start. This feature can be programmed through the Uconnect system. Refer to “Uconnect Settings” in “Multimedia” for further information.

Rear Heated Seats
On some models, the two outboard rear seats are equipped with heated seats. The heated seat switches for these seats are located on the rear of the center console.

- Push the heated seat button once to turn the HI setting on.
- Push the heated seat button a second time to turn the MED setting on.
- Push the heated seat button a third time to turn the LO setting on.
- Push the heated seat button a fourth time to turn the heating elements off.

NOTE:
- The level of heat selected will stay on until the operator changes it.
- Once a heat setting is selected, heat will be felt within two to five minutes.
- The engine must be running for the heated seats to operate.

Ventilated Seats — If Equipped
Front Ventilated Seats
Located in the seat cushion are small fans that draw the air from the passenger compartment and move air through fine perforations in the
seat cover to help keep the driver and front passenger cooler in higher ambient temperatures. The fans operate at three speeds, HI, MED and LO.

The front ventilated seats control buttons are located on the center instrument panel below the touchscreen, and are also located within the climate or controls screen of the touchscreen.

**NOTE:**
If the vehicle is equipped with a 12-inch radio, there will only be control buttons through the touchscreen.

- Press the ventilated seat button once to choose HI.
- Press the ventilated seat button a second time to choose MED.
- Press the ventilated seat button a third time to choose LO.
- Press the ventilated seat button a fourth time to turn the ventilation off.

**NOTE:**
The engine must be running for the ventilated seats to operate.

**Vehicles Equipped With Remote Start**
On models that are equipped with remote start, the driver’s seat can be programmed to come on during a remote start.

This feature can be programmed through the Uconnect system. Refer to “Uconnect Settings” in “Multimedia” for further information.

**HEAD RESTRAINTS**
Head restraints are designed to reduce the risk of injury by restricting head movement in the event of a rear impact. Head restraints should be adjusted so that the top of the head restraint is located above the top of your ear.

**NOTE:**
Do not reverse the head restraints (making the rear of the head restraint face forward) in an attempt to gain additional clearance to the back of your head.

**Front Head Restraints**

**Four-Way Head Restraints — If Equipped**
Your vehicle may be equipped with front four-way driver and passenger head restraints.

To raise the head restraint, pull upward on the head restraint. To lower the head restraint, push the adjustment button, located at the base of the head restraint, and push downward on the head restraint.

To adjust the head restraint forward, pull the top of the head restraint toward the front of the vehicle as desired and release. To adjust the head restraint rearward, pull the top of the head restraint toward the rear of the vehicle as desired and release.
restraint to the forward most position and release. The head restraint will return to the rear most position.

**NOTE:**
If your vehicle is equipped with a front bench seat, the center head restraint is not adjustable or removable.

**Two-Way Head Restraints — If Equipped**
Your vehicle may be equipped with front two-way driver and passenger head restraints. To raise the head restraint, pull upward on the head restraint. To lower the head restraint, push the adjustment button, located at the base of head restraint, and push downward on the head restraint.

**WARNING!**
- All occupants, including the driver, should not operate a vehicle or sit in a vehicle’s seat until the head restraints are placed in their proper positions in order to minimize the risk of neck injury in the event of a crash.

**Rear Head Restraint Adjustment**
The rear seats are equipped with adjustable and removable head restraints. To raise the head restraint, pull upward on the head restraint. To lower the head restraint, push the adjustment button located on the base of the
head restraint and push downward on the head restraint.

**Rear Head Restraint Removal**
To remove the head restraint, push the adjustment button and the release button while pulling upward on the whole assembly. To reinstall the head restraint, put the head restraint posts into the holes and adjust it to the appropriate height.

**NOTE:**
To remove outboard restraints, the rear seat bottom must be folded up.

**WARNING!**
- A loose head restraint thrown forward in a collision or hard stop could cause serious injury or death to occupants of the vehicle. Always securely stow removed head restraints in a location outside the occupant compartment.
- ALL the head restraints MUST be reinstalled in the vehicle to properly protect the occupants. Follow the re-installation instructions above prior to operating the vehicle or occupying a seat.

**STORM Steering Wheel**

**Tilt Steering Column**
This feature allows you to tilt the steering column upward or downward. The tilt lever is located on the steering column, below the multifunction lever.

Pull the lever toward the steering wheel to unlock the steering column. With one hand firmly on the steering wheel, move the steering column up or down, as desired. Release the lever to lock the steering column firmly in place.

**NOTE:**
- The rear center head restraint (Crew Cab) has only one adjustment position that is used to aid in the routing of a tether. Refer to “Occupant Restraint Systems” in “Safety” for further information.
- Do not reposition the head restraint 180 degrees to the incorrect position in an attempt to gain additional clearance to the back of the head.

**Release/Adjustment Buttons**
1 — Release Button
2 — Adjustment Button
38 GETTING TO KNOW YOUR VEHICLE

WARNING!

Do not adjust the steering column while driving. Adjusting the steering column while driving or driving with the steering column unlocked, could cause the driver to lose control of the vehicle. Failure to follow this warning may result in serious injury or death.

Heated Steering Wheel — If Equipped

The steering wheel contains a heating element that helps warm your hands in cold weather. The heated steering wheel has only one temperature setting. Once the heated steering wheel has been turned on, it will stay on until the operator turns it off. The heated steering wheel may not turn on when it is already warm. The heated steering wheel control button is located on the center instrument panel below the touchscreen, as well as within the climate or controls screen of the touchscreen.

- Press the heated steering wheel button \( \frac{\text{\(\text{Heated Steering Wheel — If Equipped}\)}}{\text{\(\text{Heated Steering Wheel — If Equipped}\)}} \) once to turn the heating element on.
- Press the heated steering wheel button \( \frac{\text{\(\text{Heated Steering Wheel — If Equipped}\)}}{\text{\(\text{Heated Steering Wheel — If Equipped}\)}} \) a second time to turn the heating element off.

NOTE:
The engine must be running for the heated steering wheel to operate.

Vehicles Equipped With Remote Start

On models that are equipped with remote start, the heated steering wheel can be programmed to come on during a remote start. This feature can be programmed through the Uconnect system. Refer to “Uconnect Settings” in “Multimedia” for further information.

WARNING!

- Do not place anything on the steering wheel that insulates against heat, such as a blanket or steering wheel covers of any type and material. This may cause the steering wheel heater to overheat.

Driver Adjustable Pedals — If Equipped

The adjustable pedals system is designed to allow a greater range of driver comfort for steering wheel tilt and seat position. This feature allows the brake and accelerator pedals to move toward or away from the driver to provide improved position with the steering wheel.

The adjustable pedal switch is located to the left side of the steering column.

WARNING! (Continued)

- Do not place anything on the steering wheel that insulates against heat, such as a blanket or steering wheel covers of any type and material. This may cause the steering wheel heater to overheat.
Adjustable Pedals Switch

The pedals can be adjusted with the ignition OFF.

The pedals cannot be adjusted when the vehicle is in REVERSE or when the Speed Control System is on. The following messages will appear on vehicles equipped with an instrument cluster display if the pedals are attempted to be adjusted when the system is locked out: “Adjustable Pedal Disabled — Cruise Control Engaged” or “Adjustable Pedal Disabled — Vehicle In Reverse”.

NOTE:

- Always adjust the pedals to a position that allows full pedal travel.
- Further small adjustments may be necessary to find the best possible seat/pedal position.
- For vehicles equipped with Driver Memory Settings, you can use your remote keyless entry key fob or the memory switch on the driver’s door trim panel to return the adjustable pedals to pre-programmed positions. Refer to “Driver Memory Settings — If Equipped” in this chapter for further information.

CAUTION!

Do not place any article under the adjustable pedals or impede its ability to move, as it may cause damage to the pedal controls. Pedal travel may become limited if movement is stopped by an obstruction in the adjustable pedal’s path.

MIRRORS

Inside Day/Night Mirror — If Equipped

The mirror head can be adjusted up, down, left, and right for various drivers. The mirror should be adjusted to center on the view through the rear window.

Headlight glare from vehicles behind you can be reduced by moving the small control under the mirror to the night position (toward the rear of the vehicle). The mirror should be adjusted while set in the day position (toward the windshield).
Adjusting Rearview Mirror

Automatic Dimming Mirror — If Equipped

The mirror head can be adjusted up, down, left, and right for various drivers. The mirror should be adjusted to center on the view through the rear window.

This mirror automatically adjusts for headlight glare from vehicles behind you.

NOTE:
The Automatic Dimming feature is disabled when the vehicle is in REVERSE to improve rear view viewing.

The Automatic Dimming feature can be turned on or off through the touchscreen.

CAUTION!
To avoid damage to the mirror during cleaning, never spray any cleaning solution directly onto the mirror. Apply the solution onto a clean cloth and wipe the mirror clean.

Automatic Dimming Mirror With Rear View Camera Display — If Equipped

A single ball joint mirror is provided in the vehicle. It is a twist on mirror that has a fixed position at the windshield. The mirror installs on the windshield button with a counterclockwise rotation and requires no tools for mounting. The mirror head can be adjusted up, down, left, and right for various drivers. The mirror should be adjusted to center on the view through the rear window.

This mirror automatically adjusts for headlight glare from vehicles behind you.

When the vehicle is placed into reverse gear, a video display illuminates to display the image generated by the rear view camera located on the tailgate handle. The auto dimming feature is also disabled to improve rear view viewing.

Outside Mirrors

To receive maximum benefit, adjust the outside mirrors to center on the adjacent lane of traffic.
with a slight overlap of the view obtained on the inside mirror.

**NOTE:**
If your vehicle is equipped with puddle lamps under the outside mirrors, they can be turned off through the Uconnect display. For further information, refer to “Uconnect Settings” in “Multimedia”.

**Driver’s Outside Automatic Dimming Mirror — If Equipped**
The driver’s outside mirror will automatically adjust for glare from vehicles behind you. This feature is controlled by the inside automatic dimming mirror and will automatically adjust for headlight glare when the inside mirror adjusts.

**Power Mirrors — If Equipped**
The controls for the power mirrors are located on the driver’s door trim panel.

<table>
<thead>
<tr>
<th>Power Mirror Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 — Left Mirror Selection</td>
</tr>
<tr>
<td>2 — Right Mirror Selection</td>
</tr>
<tr>
<td>3 — Mirror Direction Control</td>
</tr>
</tbody>
</table>

**WARNING!**
Vehicles and other objects seen in the passenger side convex mirror will look smaller and farther away than they really are. Relying too much on your passenger side convex mirror could cause you to collide with another vehicle or other object. Use your inside mirror when judging the size or distance of a vehicle seen in the passenger side convex mirror. Some vehicles will not have a convex passenger side mirror.

**Power Convex Mirror Switch — If Equipped**
The Power Convex Mirror Switch is located on the door trim panel, above the power mirror controls. The switch enables the movement of

Using the mirror control switch, push on any of the four arrows for the direction that you want the mirror to move.
the convex portion of both the driver and passenger outside mirrors.

Power Convex Mirror Switch
To adjust the convex portion of the outside mirrors, push the Power Convex Mirror Switch. Then, select the mirror you want to adjust by using the L (left) or R (right) buttons.

To return the control to the large mirror, push the Power Convex Mirror Switch a second time.

NOTE:
If the Power Convex Mirror Switch is not pushed a second time, the switch will automatically default back to the larger portion of the outside mirrors after a period of time.

Trailer Towing Mirrors — If Equipped
These mirrors are designed with an adjustable mirror head to provide a greater vision range when towing extra-wide loads. To change position inboard or outboard, the mirror head should be rotated (flipped in or out).

NOTE:
Fold the trailer towing mirrors rearward prior to entering an automated car wash.

A small blindspot mirror is located next to main mirror and can be adjusted separately.
Blindspot Mirror

Heated Mirrors — If Equipped
These mirrors are heated to melt frost or ice. This feature will be activated whenever you turn on the rear window defroster (if equipped).
Refer to “Climate Controls” in this chapter for further information.

Tilt Side Mirrors In Reverse — If Equipped
Tilt Side Mirrors In Reverse provides automatic outside mirror positioning which will aid the driver’s view of the ground rearward of the front doors. The outside mirrors will move slightly downward from the present position when the vehicle is shifted into REVERSE. The outside mirrors will then return to the original position when the vehicle is shifted out of the REVERSE position. Each stored memory setting will have an associated Tilt Side Mirrors In Reverse position.

NOTE:
The Tilt Side Mirrors In Reverse feature is not turned on when delivered from the factory.
This feature can be programmed through the Uconnect system. Refer to “Uconnect Settings” in “Multimedia” for further information.

Power Folding Outside Mirrors For Standard And Trailer Tow — If Equipped
If equipped with power folding mirrors, they can be electrically folded rearward and unfolded into the drive position.
The switch for the power folding mirrors is located between the power mirror switches L (left) and R (right). Push the switch once and the mirrors will fold in, push the switch a second time and the mirrors will return to the normal driving position.
If the mirror is manually folded after electrically cycled, a potential extra button push is required to get the mirrors back to the home position. If the mirror does not electrically fold, check for ice or dirt build up at the pivot area which can cause excessive drag.

Resetting The Power Folding Outside Mirrors
You may need to reset the power folding mirrors if the following occurs:
- The mirrors are accidentally blocked while folding.
- The mirrors are accidentally manually folded/unfolded.
- The mirrors come out of the unfolded position.
- The mirrors shake and vibrate at normal driving speeds.
To Reset The Power Folding Mirrors:

1. Using the power folding mirror switch, move the mirror to its normal driving (home) position.

2. Using the power folding mirror switch, move the mirror to the full retract position (this may require multiple button pushes). This resets them to their normal position.

**NOTE:**

- The power fold mirrors are designed to operate while the vehicle is stationary or traveling at moderate speeds. If you attempt to power fold the mirrors at high speeds they may not fully open or close. You should slow down to a moderate speed and complete the operation.

- When pushing the power fold button 10 or more times in one minute the system shuts down for one minute to protect the motors from overheating.

**Outside Mirrors Folding Feature**

All outside mirrors are designed to be able to be manually folded both forward and rearward to prevent damage.

**CAUTION!**

It is recommended to fold the mirrors into the full rearward position to resist damage when entering a car wash or a narrow location.

**Illuminated Vanity Mirror — If Equipped**

Illuminated vanity mirrors are located on each sun visor. To use the mirror, rotate the sun visor down and swing the mirror cover upward. The lights will turn on automatically. Closing the mirror cover turns off the light.

**“Slide-On-Rod” Features Of Sun Visor — If Equipped**

The sun visor “Slide-On-Rod” feature allows for additional flexibility in positioning the visor to block out the sun. To use the “Slide-On-Rod” feature, rotate the sun visor downward and unclip it. Pull the sun visor along the “Slide-On-Rod” until the sun visor is in the desired position.
EXTERIOR LIGHTS

Multifunction Lever
The multifunction lever is located on the left side of the steering column.

Headlight Switch
The headlight switch is located on the left side of the instrument panel. This switch controls the operation of the headlights, parking lights, automatic headlights (if equipped), instrument panel light dimming, cargo light/trailer spotter lights (if equipped), and fog lights (if equipped).

>>> CONDITION: ((Market='Latin America' or Market='Brazil')) >>>

Headlight Switch
Rotate the headlight switch clockwise to the first detent for parking light and instrument panel light operation. Rotate the headlight switch to the second detent for headlight, parking light, and instrument panel light operation.

<<< CONDITION END <<<

Daytime Running Lights (DRLs) — If Equipped
The headlights on your vehicle will illuminate when the engine is started and the transmission is in any gear except PARK. This provides a constant "lights on" condition until the ignition is placed in the OFF position. The lights illuminate at less than half of normal intensity. If the parking brake is applied, the Daytime Running Lights (DRLs) will turn off. Also, if a turn signal is activated, the DRL lamp on the same side of the vehicle may turn off for the duration of the turn signal activation. Once the turn signal is no longer active, the DRL lamp will illuminate.

NOTE:
If allowed by law in the country in which the vehicle was purchased, the Daytime Running Lights can be turned on and off using the Uconnect System, refer to “Uconnect Settings” in “Multimedia” for further information.

High/Low Beam Switch
Push the multifunction lever toward the instrument panel to switch the headlights to high beam. Pulling the multifunction lever back
toward the steering wheel will turn the low beams back on, or shut the high beams off.

**Automatic High Beam Headlamp Control — If Equipped**

The Automatic High Beam Headlamp Control system provides increased forward lighting at night by automating high beam control through the use of a digital camera mounted on the inside rearview mirror or forward facing camera. This camera detects vehicle specific light and automatically switches from high beams to low beams until the approaching vehicle is out of view.

**NOTE:**

- The Automatic High Beam Headlamp Control can be turned on or off by selecting “ON” under “Auto Dim High Beams” within your Uconnect settings, as well as turning the headlight switch to the AUTO position. Refer to “Uconnect Settings” in “Multimedia” for further information.

- Broken, muddy, or obstructed headlights and taillights of vehicles in the field of view will cause headlights to remain on longer (closer to the vehicle). Also, dirt, film, and other obstructions on the windshield or camera lens will cause the system to function improperly.

- To opt out of the Advanced Auto High Beam Sensitivity Control (default) and enter Reduced High Beam Sensitivity Control (not recommended), on vehicles equipped with mirror controlled automatic high beams and without the forward facing camera, toggle the high beam lever six full on/off cycles within 10 seconds of placing the ignition in the ON position. The system will return to the default setting when the ignition is OFF.

- If the windshield or Automatic High Beam Headlamp Control mirror is replaced, the mirror must be re-aimed to ensure proper performance. See a local authorized dealer.

**To Activate**

1. The Automatic High Beams are enabled through the Uconnect system. Refer to “Uconnect Settings” in “Multimedia” for further information.

2. Turn the headlight switch to the AUTO headlight position.

3. Push the multifunction lever away from you (toward front of vehicle) to engage the high beam mode.

**NOTE:**

The Automatic High Beams will not activate until the vehicle is at or above 12 mph (20 km/h).

**To Deactivate**

1. Pull the multifunction lever toward you (or rearward in vehicle) to manually deactivate the system (normal operation of low beams).

2. Push back on the multifunction lever to reactivate the system.

The Automatic High Beams can also be deactivated through the Uconnect system. Refer to “Uconnect Settings” in “Multimedia” for further information.

**Flash-To-Pass**

You can signal another vehicle with your headlights by lightly pulling the multifunction lever toward you. This will cause the high beam
headlights to turn on, and remain on, until the lever is released.

**Automatic Headlights — If Equipped**

This system automatically turns your headlights on or off based on ambient light levels. To turn the system on, turn the headlight switch to the extreme clockwise position aligning the indicator with the AUTO on the headlight switch. When the system is on, the Headlight Time Delay feature is also on. This means your headlights will stay on for up to 90 seconds after the ignition is placed in the OFF position. To turn the Automatic System off, turn the headlight switch counterclockwise to the O (off) position.

**NOTE:**
The engine must be running before the headlights will come on in the Automatic mode.

**Directional LED Headlamp System — If Equipped**

This is a system consisting of LED (low/high beam) headlights that incorporate dynamic cornering with 5-degree inboard/15-degree outboard swivel. The headlights continuously and automatically adapt to the driving conditions around bends or when cornering based on steering wheel angle.

The system directs the headlights to light up the road in the best way, taking into account the speed of the vehicle and the bend or corner angle, as well as the speed of the vehicle while the steering wheel is being turned.

The adaptive lights are automatically activated when the vehicle is traveling above approximately 5 mph (8 km/h). This system can be turned on/off through the Uconnect settings under “Steering Directed Lights”. Refer to “Uconnect Settings” in “Multimedia” for further information.

**Parking Lights And Panel Lights**

To turn on the parking lights and instrument panel lights, from the O (off) position, rotate the headlight switch clockwise to the first detent. To turn off the parking lights, rotate the headlight switch back to the O (off) position.

**Headlights On With Wipers (Available With Automatic Headlights Only)**

When this feature is active, the headlights will turn on approximately 10 seconds after the wipers are turned on if the headlight switch is placed in the AUTO position. In addition, the headlights will turn off when the wipers are turned off, if they were turned on by this feature.

**NOTE:**
This feature can be programmed through the Uconnect system. Refer to “Uconnect Settings” in “Multimedia” for further information.

**Headlight Delay**

To aid in your exit, your vehicle is equipped with a headlight delay that will leave the headlights on for up to 90 seconds. This delay is initiated when the ignition is turned off while the headlight switch is on, and then the headlight switch is cycled off. Headlight delay can be canceled by either turning the headlight switch on then off, or by placing the ignition in the ON/RUN position.

**NOTE:**
This feature can be programmed through the Uconnect system. Refer to “Uconnect Settings” in “Multimedia” for further information.

**Lights-On Reminder**

If the headlights, parking lights, or cargo lights are left on after the ignition is placed in the OFF position, a chime will sound and a message will
appear in the instrument cluster display when the driver’s door is opened.

>>> CONDITION: {Market='Latin America' or Market='Brazil')} >>>

Fog Lights — If Equipped
The fog light switch is built into the headlight switch.

Fog Light Switch Location

Front Fog Lights — If Equipped
To activate the front fog lights (if vehicle not equipped with rear fog lights), turn the headlight switch to any position other than O (off) and push the upper half of headlight switch. To turn off the front fog lights, either push the upper half of the fog light switch a second time or turn off the headlight switch.

Rear Fog Lights — If Equipped
To activate the rear fog lights, turn the headlight switch to any position other than O (off). Push the upper half of the headlight switch once for front fog lights, push the switch a second time for front and rear fog lights. Pushing the switch a third time will deactivate the rear fog lights, and a fourth time will deactivate the front fog lights. Turning the headlight switch off will also deactivate the fog lights. An indicator light in the instrument cluster illuminates when the fog lights are turned on.

NOTE:
The fog lights will operate when the low beam headlights or parking lights are on. However, selecting the high beam headlights will turn off the fog lights.

<<< CONDITION END <<<

Turn Signals
Move the multifunction lever up or down and the arrows on each side of the instrument cluster display will flash to show proper operation of the front and rear turn signal lights.

NOTE:
If either light remains on and does not flash, or there is a very fast flash rate, check for a defective outside light bulb. If an indicator fails to light when the lever is moved, it would suggest that the indicator bulb is defective.

Lane Change Assist — If Equipped
Tap the multifunction lever up or down once, without moving beyond the detent, and the turn signal (right or left) will flash three times then automatically turn off.

Cargo Lights/Trailer Spotter Lights With Bed Lights — If Equipped
The cargo light and bed lights (if equipped) and trailer spotter lights (if equipped) are turned on by pushing the cargo lights button located on the lower half of the headlight switch.

>>> CONDITION: {((Market='Latin America' or Market='Brazil'))} >>>
If the vehicle’s speed is 0 mph (0 km/h), these lights can also be turned on using the switch located just inside the pickup box, on the lower part of the bed light lens. A telltale will illuminate in the instrument cluster display when these lights are on. Pushing the switch a second time will turn the lights off.

The cargo light and bed lights (if equipped) will turn on for approximately 30 seconds when a key fob unlock button is pushed, as part of the Illuminated Entry feature.

Once the vehicle speed is greater than 0 mph (0 km/h), the cargo and bed lights (if equipped) will be switched off.

**Battery Saver**

To protect the life of your vehicle’s battery, load shedding is provided for both the interior and exterior lights.

If the ignition is OFF, the interior lights will automatically turn off when:
- Any door is left ajar for 10 minutes.
- The Dome Defeat button is pushed.
- The cargo, bed, and spotter lights are manually activated by either the headlight switch or the truck bed switch.

**NOTE:**

Battery saver mode is canceled if the ignition is ON.

If the headlights remain on while the ignition is placed in the OFF position, the exterior lights will automatically turn off after eight minutes. If the headlights are turned on and left on for eight minutes while the ignition is OFF, the exterior lights will automatically turn off.
NOTE:
The battery saver mode is canceled if the ignition is OFF and the headlamp switch is in the park lamp position. The parking lamps will remain on and drain the vehicle's battery.

<<< CONDITION END <<<

INTERIOR LIGHTS

Courtesy Lights
The courtesy, dome, cargo, and bed lights are turned on when any door is opened. The courtesy and dome lights are turned on when the Dome On button is pushed on the overhead console. Also, if your vehicle is equipped with Remote Keyless Entry, and the unlock button is pushed on the key fob, the courtesy, dome, cargo, and bed lights will turn on.

Courtesy/Reading Lights
The overhead console lights can also be operated individually as reading lights by pushing the corresponding buttons.

>>> CONDITION: {(Market=Brazil or Market='Latin America')} >>>

Front Courtesy/Reading Lights
1 — Driver’s Reading Light On/Off Button
2 — Dome Defeat Button
3 — Dome On Button
4 — Passenger’s Reading Light On/Off Button

<<< CONDITION END <<<

NOTE:
On vehicles equipped with an LED overhead console, if both the Dome On and Dome Defeat buttons are pushed, the Illuminated Entry with door ajar feature will be disabled, but the Dome Lights inside the vehicle will turn on.

Two types of Rear Courtesy/Reading Lights are available for your vehicle:

- Push button on/off
- Push lens on/off

NOTE:
The Rear Courtesy/Reading Lights will remain on until the switch is pushed a second time, so be sure they have been turned off before exiting the vehicle. If the interior lights are left on after
the ignition is turned off, they will automatically turn off after 10 minutes.

**Dimmer Control**
The dimmer controls are part of the headlight switch and are located on the left side of the instrument panel.

>>> CONDITION: ((Market='Latin America' or Market='Brazil')) >>>

With the parking lights or headlights on, rotating the right dimmer control upward will increase the brightness of the instrument panel lights.

Rotating the left dimmer control will adjust the interior and ambient light levels.

**NOTE:**
- The dimming of the touchscreen is programmable through the Uconnect system. Refer to “Uconnect Settings” in “Multimedia” for further details.
- The ambient lights are only active when the headlights or parking lights are on.

**Illuminated Entry**
The courtesy lights will turn on when you use the key fob to unlock the doors or open any door. This feature also turns on the puddle lamps located beneath the outside mirrors (if equipped).

The lights will fade to off after approximately 30 seconds, or they will immediately fade to off once the ignition switch is placed in the ON/RUN position from the OFF position.

The front courtesy overhead console and door courtesy lights will not turn off if the Dome On button on the overhead console is pushed.

The illuminated entry system will not operate if the Dome Defeat button on the overhead console is pushed.

**NOTE:**
If your vehicle is equipped with Illuminated Approach lights under the outside mirrors, they can also be turned off by pushing the Dome Defeat button.

**WINDSHIELD WIPERS AND WASHERS**

**Windshield Wipers**
The wipers and washers are operated by a switch in the multifunction lever, and can only be operated with the ignition in the ACC or ON/RUN position. Turn the end of the lever to select the desired wiper speed.
the lever upward to the second detent past the intermittent settings for high-speed wiper operation.

**Intermittent Wiper System**

The intermittent feature of this system was designed for use when weather conditions make a single wiping cycle, with a variable pause between cycles, desirable. For maximum delay between cycles, rotate the control knob upward to the first detent. The delay interval decreases as you rotate the knob until it enters the low continual speed position. The delay can be regulated from a maximum of about 18 seconds between cycles, to a cycle every one second. The delay intervals will double in duration when the vehicle speed is 10 mph (16 km/h) or less.

**Windshield Washers**

To use the windshield washer, push the washer knob, located on the end of the multifunction lever, inward to the second detent. Washer fluid will be sprayed and the wiper will operate for two to three cycles after the washer knob is released from this position. If the washer knob is depressed while in the delay range, the wiper will operate for several seconds after the washer knob is released. It will then resume the intermittent interval previously selected. If the washer knob is pushed while in the off position, the wiper will turn on and cycle approximately three times after the wash knob is released. To prevent freeze-up of your windshield washer system in cold weather, select a solution or mixture that meets or exceeds the temperature range of your climate. This rating information can be found on most washer fluid containers.

**Mist Feature**

When a single wipe to clear off road mist or spray from a passing vehicle is needed, push the washer knob, located on the end of the multifunction lever, inward to the first detent and release. The wipers will cycle one time and automatically shut off.

**NOTE:**

The mist feature does not activate the washer pump; therefore, no washer fluid will be sprayed on the windshield. The wash function must be used in order to spray the windshield with washer fluid.

**Rain Sensing Wipers — If Equipped**

This feature senses moisture on the windshield and automatically activates the wipers for the driver. The feature is especially useful for road splash or overspray from the windshield washers of the vehicle ahead. Rotate the end of the multifunction lever to one of five settings to activate this feature.

**NOTE:**

This feature can be programmed on/off through the Uconnect system. Refer to “Uconnect Settings” in “Multimedia” for further information.

The sensitivity of the system can be adjusted with the multifunction lever. Wiper delay position 1 is the least sensitive, and wiper delay position 5 is the most sensitive. Position 3
should be used for normal rain conditions. Positions 1 and 2 can be used if the driver desires less wiper sensitivity. Positions 4 and 5 can be used if the driver desires more sensitivity. Place the wiper switch in the O (off) position when not using the system.

**NOTE:**
- The Rain Sensing feature will not operate when the wiper switch is in the low or high-speed position.
- The Rain Sensing feature may not function properly when ice, or dried salt water is present on the windshield.
- Use of Rain-X or products containing wax or silicone may reduce Rain Sensing performance.

The Rain Sensing system has protection features for the wiper blades and arms, and will not operate under the following conditions:
- **Low Ambient Temperature** — When the ignition is first placed in the ON position, the Rain Sensing system will not operate until the wiper switch is moved, vehicle speed is greater than 0 mph (0 km/h), or the outside temperature is greater than 32°F (0°C).
- **Transmission In NEUTRAL Position** — When the ignition is ON, and the transmission is in the NEUTRAL position, the Rain Sensing system will not operate until the wiper switch is moved, vehicle speed is greater than 5 mph (8 km/h), or the gear selector is moved out of the NEUTRAL position.
- **Remote Start Mode Inhibit** — On vehicles equipped with Remote Starting system, Rain Sensing wipers are not operational when the vehicle is in the remote start mode. Once the operator is in the vehicle and has placed the ignition switch in the RUN position, Rain Sensing wiper operation can resume, if it has been selected, and no other inhibit conditions (mentioned previously) exist.

**CLIMATE CONTROLS**

The Climate Control system allows you to regulate the temperature, air flow, and direction of air circulating throughout the vehicle. The controls are located on the touchscreen (if
equipped), on the sides of the touchscreen, or on the instrument panel below the radio.

**Automatic Climate Control Overview**

![Uconnect 4/4C/4C NAV With 8.4-inch Display Automatic Temperature Controls](image)
NOTE: Icons and descriptions can vary based upon vehicle equipment.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
</table>
| ![MAX A/C](image) | **MAX A/C**  
Press and release the MAX A/C button on the touchscreen to change the current setting to the coldest output of air. The MAX A/C indicator illuminates when MAX A/C is on. Pressing the button again will cause the MAX A/C operation to exit.  
**NOTE:** The MAX A/C button is only available on the touchscreen. |
<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faceplate A/C Button</td>
<td><strong>A/C Button</strong>&lt;br&gt;Press and release the button on the touchscreen, or push and release the button on the faceplate, to change the current setting. The A/C indicator illuminates when A/C is on.</td>
</tr>
<tr>
<td>Touchscreen A/C Button</td>
<td><strong>Recirculation Button</strong>&lt;br&gt;Press and release this button to change the system between recirculation mode and outside air mode. The Recirculation indicator illuminates when Recirculation is on. Recirculation can be used when outside conditions such as smoke, odors, dust, or high humidity are present. Recirculation can be used in all modes. Recirculation may be unavailable (button on the touchscreen greyed out) if conditions exist that could create fogging on the inside of the windshield. The A/C can be deselected manually without disturbing the mode control selection. Continuous use of the Recirculation mode may make the inside air stuffy and window fogging may occur. Extended use of this mode is not recommended.</td>
</tr>
</tbody>
</table>
### AUTO
Set your desired temperature and press AUTO. AUTO will achieve and maintain your desired temperature by automatically adjusting the blower speed and air distribution. AUTO mode is highly recommended for efficiency. You can press and release this button on the touchscreen, or push the button on the faceplate, to turn AUTO on. The AUTO indicator illuminates when AUTO is on. Toggling this function will cause the system to switch between manual mode and automatic modes. Refer to “Automatic Operation” within this section for more information.

### Front Defrost Button
Press and release the Front Defrost button on the touchscreen, or push and release the button on the faceplate, to change the current airflow setting to Defrost mode. The Front Defrost indicator illuminates when Front Defrost is on. Air comes from the windshield and side window demist outlets. When the defrost button is selected, the blower level may increase. Use Defrost mode with maximum temperature settings for best windshield and side window defrosting and defogging. When toggling the front defrost mode button, the climate system will return to previous setting.

### Rear Defrost Button
Press and release the Rear Defrost button on the touchscreen, or push and release the button on the faceplate, to turn on the rear window defroster and the heated outside mirrors (if equipped). The Rear Defrost indicator illuminates when the rear window defroster is on. The rear window defroster automatically turns off after 15 minutes.
Faceplate Temperature Knobs

**Driver and Passenger Temperature Up and Down Buttons**
Provides the driver and passenger with independent temperature control. Push the red button (or rotate knob if equipped) on the faceplate or touchscreen, or press and slide the temperature bar towards the red arrow button on the touchscreen for warmer temperature settings. Push the blue button (or rotate knob if equipped) on the faceplate or touchscreen, or press and slide the temperature bar towards the blue arrow button on the touchscreen for cooler temperature settings.

**NOTE:**
- The numbers within the temperature display will only appear if the system is equipped with an automatic climate control system.
- Up and down buttons are only available on vehicles equipped with a 12-inch display.

SYNC

Press the SYNC button on the touchscreen to toggle the SYNC feature on/off. The SYNC indicator illuminates when SYNC is on. SYNC synchronizes the passenger temperature setting with the driver temperature setting. Changing the passenger’s temperature setting while in SYNC will automatically exit this feature.

**NOTE:**
The SYNC button is only available on the touchscreen.
## Blower Control
Blower Control regulates the amount of air forced through the climate system. There are seven blower speeds available. The speeds can be selected using either the blower control knob on the faceplate or the buttons on the touchscreen.

- **Faceplate:** The blower speed increases as you turn the blower control knob clockwise from the lowest blower setting. The blower speed decreases as you turn the blower control knob counterclockwise.
- **Touchscreen:** Use the small blower icon to reduce the blower setting and the large blower icon to increase the blower setting. Blower can also be selected by pressing the blower bar area between the icons.

**NOTE:**
On Uconnect 4C NAV With 12-inch display radios, pressing the blower control button below one turns the Climate Control system OFF.

## Mode Control
Mode Control regulates the airflow distribution. The airflow distribution outlets are: instrument panel outlets, floor outlets, defrost outlets, and demist outlets.

- **Faceplate:** Push the Mode Button to change the airflow distribution mode.
- **Touchscreen:** Press one of the “MODE” buttons to change the airflow distribution mode.

The Mode settings are as follows:

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faceplate Blower Knob</td>
<td>Blower Control</td>
</tr>
<tr>
<td>Touchscreen Blower Buttons</td>
<td>Mode Control</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrument Panel</td>
<td>FACE</td>
</tr>
<tr>
<td>Floor</td>
<td>FLOOR</td>
</tr>
<tr>
<td>Defrost</td>
<td>DEFROST</td>
</tr>
<tr>
<td>Demist</td>
<td>DEMIST</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
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<tbody>
<tr>
<td>WALL</td>
<td>WALL</td>
</tr>
<tr>
<td>FACE</td>
<td>FACE</td>
</tr>
<tr>
<td>FLOOR</td>
<td>FLOOR</td>
</tr>
<tr>
<td>DEFROST</td>
<td>DEFROST</td>
</tr>
<tr>
<td>DEMIST</td>
<td>DEMIST</td>
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<tr>
<td>WALL &amp; FLOOR</td>
<td>WALL &amp; FLOOR</td>
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<tr>
<td>WALL &amp; DEFROST</td>
<td>WALL &amp; DEFROST</td>
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<tr>
<td>WALL &amp; DEMIST</td>
<td>WALL &amp; DEMIST</td>
</tr>
<tr>
<td>WALL, FLOOR &amp; DEFROST</td>
<td>WALL, FLOOR &amp; DEFROST</td>
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<tr>
<td>FACE, FLOOR &amp; DEFROST</td>
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</tr>
<tr>
<td>Icon</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Panel Mode   | **Panel Mode**  
Air comes from the outlets in the instrument panel. Each of these outlets can be individually adjusted to direct the flow of air. The air vanes of the center outlets and outboard outlets can be moved up and down or side to side to regulate airflow direction. There is a shut off wheel located below the air vanes to shut off or adjust the amount of airflow from these outlets. |
| Bi-Level Mode| **Bi-Level Mode**  
Air comes from the instrument panel outlets and floor outlets. A slight amount of air is directed through the defrost and side window demister outlets.  
**NOTE:**  
Bi-Level mode is designed under comfort conditions to provide cooler air out of the panel outlets and warmer air from the floor outlets. |
| Floor Mode   | **Floor Mode**  
Air comes from the floor outlets. A slight amount of air is directed through the defrost and side window demister outlets. |
| Mix Mode     | **Mix Mode**  
Air is directed through the floor, defrost, and side window demister outlets. This setting works best in cold or snowy conditions that require extra heat to the windshield. This setting is good for maintaining comfort while reducing moisture on the windshield. |
| OFF          | **Climate Control OFF Button**  
Press and release this button to turn the Climate Control ON/OFF. |
Climate Control Functions

A/C (Air Conditioning)
The Air Conditioning (A/C) button allows the operator to manually activate or deactivate the air conditioning system. When the air conditioning system is turned on, cool dehumidified air will flow through the outlets into the cabin. For improved fuel economy, press the A/C button to turn off the air conditioning and manually adjust the blower and airflow mode settings. Also, make sure to select only Panel, Bi-Level, or Floor modes.

NOTE:
- For Manual Climate Controls, if the system is in Mix, Floor or Defrost Mode, the A/C can be turned off, but the A/C system shall remain active to prevent fogging of the windows.
- If fog or mist appears on the windshield or side glass, select Defrost mode, and increase blower speed if needed.
- If your air conditioning performance seems lower than expected, check the front of the A/C condenser (located in front of the radiator), for an accumulation of dirt or insects.

Clean with a gentle water spray from the front of the radiator and through the condenser.

MAX A/C
MAX A/C sets the control for maximum cooling performance.
Press and release to toggle between MAX A/C and the prior settings. The button illuminates when MAX A/C is on.
In MAX A/C, the blower level and mode position can be adjusted to desired user settings. Pressing other settings will cause the MAX A/C operation to switch to the selected setting and MAX A/C to exit.

Recirculation
In cold weather, use of Recirculation mode may lead to excessive window fogging. The Recirculation feature may be unavailable (button on the touchscreen greyed out) if conditions exist that could create fogging on the inside of the windshield.
On systems with Manual Climate Controls, if equipped, the Recirculation mode is not allowed in Defrost mode to improve window clearing operation. Recirculation is disabled automatically if this mode is selected.
Attempting to use Recirculation while in this mode causes the LED in the control button to blink and then turns off.

Automatic Temperature Control (ATC)

Automatic Operation
1. Push the AUTO button on the faceplate, or the AUTO button on the touchscreen on the Automatic Temperature Control (ATC) Panel.
2. Next, adjust the temperature you would like the system to maintain by adjusting the driver and passenger temperature control buttons. Once the desired temperature is displayed, the system will achieve and automatically maintain that comfort level.
3. When the system is set up for your comfort level, it is not necessary to change the settings. You will experience the greatest efficiency by simply allowing the system to function automatically.

NOTE:
- It is not necessary to move the temperature settings for cold or hot vehicles. The system automatically adjusts the temperature,
mode, and blower speed to provide comfort as quickly as possible.

- The temperature can be displayed in U.S. or Metric units by selecting the U.S./Metric customer-programmable feature. Refer to the “Uconnect Settings” in “Multimedia” for further information.

To provide you with maximum comfort in the Automatic mode during cold start-ups, the blower fan will remain on low until the engine warms up. The blower will increase in speed and transition into Auto mode.

Manual Operation Override
This system offers a full complement of manual override features. The AUTO symbol in the front ATC display will be turned off when the system is being used in the manual mode.

Operating Tips
NOTE:
Refer to the chart at the end of this section for suggested control settings for various weather conditions.

Summer Operation
The engine cooling system must be protected with a high-quality antifreeze coolant to provide proper corrosion protection and to protect against engine overheating. OAT coolant (conforming to MS.90032) is recommended.

Winter Operation
To ensure the best possible heater and defroster performance, make sure the engine cooling system is functioning properly and the proper amount, type, and concentration of coolant is used. Use of the Air Recirculation mode during Winter months is not recommended, because it may cause window fogging.

Vacation/Storage
Before you store your vehicle, or keep it out of service (i.e., vacation) for two weeks or more, run the air conditioning system at idle for about five minutes, in fresh air with the blower setting on high. This will ensure adequate system lubrication to minimize the possibility of compressor damage when the system is started again.

Window Fogging
Vehicle windows tend to fog on the inside in mild, rainy, and/or humid weather. To clear the windows, select Defrost or Mix mode and increase the front blower speed. Do not use the Recirculation mode without A/C for long periods, as fogging may occur.

CAUTION!
Failure to follow these cautions can cause damage to the heating elements:
- Use care when washing the inside of the rear window. Do not use abrasive window cleaners on the interior surface of the window. Use a soft cloth and a mild washing solution, wiping parallel to the heating elements. Labels can be peeled off after soaking with warm water.
- Do not use scrapers, sharp instruments, or abrasive window cleaners on the interior surface of the window.
- Keep all objects a safe distance from the window.

Outside Air Intake
Make sure the air intake, located directly in front of the windshield, is free of obstructions, such as leaves. Leaves collected in the air intake may reduce airflow, and if they enter the plenum, they could plug the water drains. In
Winter months, make sure the air intake is clear of ice, slush, and snow.

Cabin Air Filter
The climate control system filters out dust and pollen from the air. Contact an authorized dealer to service your cabin air filter, and to have it replaced when needed.

Operating Tips Chart

<table>
<thead>
<tr>
<th>WEATHER</th>
<th>CONTROL SETTINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hot Weather And Vehicle Interior Is Very Hot</td>
<td>Set the mode control to ( \wedge ) position, ( \wedge ) on, and blower on high. Roll down the windows for a minute to flush out the hot air. Adjust the controls as needed to achieve comfort.</td>
</tr>
<tr>
<td>Warm Weather</td>
<td>Turn ( \text{A/C} ) on and set the mode control to the ( \wedge ) position.</td>
</tr>
<tr>
<td>Cool Sunny</td>
<td>Operate in ( \wedge ) position.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WEATHER</th>
<th>CONTROL SETTINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cool &amp; Humid Conditions</td>
<td>Set the mode control to ( \wedge ) position and turn ( \text{A/C} ) on to keep windows clear.</td>
</tr>
<tr>
<td>Cold Weather</td>
<td>Set the mode control to the ( \wedge ) position. If windshield fogging starts to occur, move the control to the ( \wedge ) position.</td>
</tr>
</tbody>
</table>

**WINDOWS**

**Power Windows**

**Power Window Controls**

The power window controls located on the driver's door trim panel have up-down switches that give you fingertip control of all power windows. There is a single opening and closing switch on the front passenger door for passenger window control and on the rear doors for rear window control. The windows will operate when the ignition switch is placed in the ON/Run or ACC position, and for up to 10 minutes after the ignition is placed in the OFF position or until a front door is opened.
NOTE:
The Key Off Power Delay feature will allow the power windows to operate for up to 10 minutes after the ignition is placed in the OFF position. This feature is cancelled when either front door is opened.

Auto-Down
Both the driver and front passenger window switch have an Auto-Down feature. Push the window switch past the first detent, release, and the window will go down automatically. To cancel the Auto-Down movement, operate the switch in either the up or down direction and release the switch.

To stop the window from going all the way down during the Auto-Down operation, pull up on the switch briefly.

To open the window part way, push the switch to the first detent and release it when you want the window to stop.

WARNING!
Never leave children unattended in a vehicle. Do not leave the key fob in or near the vehicle or in a location accessible to children, and do not leave the ignition of a vehicle equipped with Keyless Enter-N-Go in the ACC or ON/RUN mode. Occupants, particularly unattended children, can become entrapped by the windows while operating the power window switches. Such entrapment may result in serious injury or death.

Auto-Up Feature With Anti-Pinch Protection — If Equipped
Pull the front driver’s or passenger’s side window switch fully upward to the second detent, release, and the window will go up automatically.

To stop the window from going all the way up during the Auto-Up operation, push down on the switch briefly.

To close the window part way, lift the window switch to the first detent and release when you want the window to stop.

NOTE:
If the window runs into any obstacle during the Auto-Closure, it will reverse direction and then go back down. Remove the obstacle and use the window switch again to close the window. Any impact due to rough road conditions may trigger the auto reverse function unexpectedly during auto closure. If this happens, pull the switch lightly to the first detent and hold to close the window manually.

WARNING!
There is no anti-pinch protection when the window is almost closed. Be sure to clear all objects from the window before closing.

Reset Auto-Up
Should the Auto-Up feature stop working, the window may need to be reset. To reset Auto-Up:

1. Make sure the door is fully closed.

2. Pull the window switch up to close the window completely and continue to hold the switch up for an additional two seconds after the window is closed.

3. Push the window switch down firmly to the second detent to open the window completely and continue to hold the switch down for an additional two seconds after the window is fully open.
**Window Lockout Switch**
The window lockout switch on the driver’s door allows you to disable the window control on the rear passenger doors. To disable the window controls on the rear passenger doors, push the window lock switch into the latched or down position. To enable the window controls, push the window lock switch again and return the switch to the released or up position.

**Power Sliding Rear Window — If Equipped**
The switch for the power sliding rear window is located on the overhead console.

**Power Sliding Rear Window Switch**
Push the rearward portion of the switch to open the window. Push the forward portion of the switch to close the window.

**Manual Sliding Rear Window — If Equipped**
A locking device in the center of the window helps to prevent entry from the rear of the vehicle. Squeeze the lock to release the window.

**Wind Buffeting**
Wind buffeting can be described as the perception of pressure on the ears or a helicopter-type sound in the ears. Your vehicle may exhibit wind buffeting with the windows down, or the sunroof (if equipped) in certain open or partially open positions. This is a normal occurrence and can be minimized. If the buffeting occurs with the rear windows open, open the front and rear windows together to minimize the buffeting. If the buffeting occurs with the sunroof open, adjust the sunroof opening to minimize the buffeting or open any window.

>>> CONDITION: {MARKET='LATIN AMERICA'} >>>

**POWER SUNROOF — IF EQUIPPED**

**Single Pane Power Sunroof — If Equipped**
The power sunroof switches are located on the overhead console between the courtesy/reading lights.

>>> CONDITION: {MARKET='Brazil', MARKET='Latin America'} >>>
Power Sunroof Switches
1 — Opening/Closing Sunroof
2 — Venting Sunroof

Opening Sunroof
Express
Push the switch rearward and release it within one-half second. The sunroof and sunshade will open automatically and stop when the full open position is reached. This is called “Express Open.” During Express Open operation, any other actuation of the sunroof switch will stop the sunroof.

Manual Mode
To open the sunroof, push and hold the switch rearward. The sunroof will move rearward and automatically stop at full open position. Any release of the switch will stop the movement. The sunroof and sunshade will remain in a partially opened condition until the sunroof switch is pushed again.

Closing Sunroof
Express
Push the switch forward and release it within one-half second and the sunroof will close automatically from any position. The sunroof will close fully and stop automatically. This is called “Express Close.” During Express Close operation, any other actuation of the switch will stop the sunroof.

WARNING!
- Never leave children unattended in a vehicle, or with access to an unlocked vehicle. Never leave the key fob in or near the vehicle, or in a location accessible to children. Do not leave the ignition of a vehicle equipped with Keyless Enter-N-Go in the ACC or ON/RUN mode. Occupants, particularly unattended children, can become entrapped by the power sunroof while operating the power sunroof switch. Such entrapment may result in serious injury or death.
- In a collision, there is a greater risk of being thrown from a vehicle with an open sunroof. You could also be seriously injured or killed. Always fasten your seat belt properly and make sure all passengers are also properly secured.
- Do not allow small children to operate the sunroof. Never allow your fingers, other body parts, or any object, to project through the sunroof opening. Injury may result.
**Manual Mode**

To close the sunroof, push and hold the switch forward. The sunroof will move forward and automatically stop at full closed position. Any release of the switch will stop the movement and the sunroof will remain in a partially closed condition until the sunroof switch is pushed again.

**Wind Buffeting**

Wind buffeting can be described as the perception of pressure on the ears or a helicopter-type sound in the ears. Your vehicle may exhibit wind buffeting with the windows down, or the sunroof (if equipped) in certain open or partially open positions. This is a normal occurrence and can be minimized. If the buffeting occurs with the rear windows open, then open the front and rear windows together to minimize the buffeting. If the buffeting occurs with the sunroof open, adjust the sunroof opening to minimize the buffeting or open any window.

**Sunshade Operation**

The sunshade can be opened manually. However, the sunshade will open automatically as the sunroof opens.

**NOTE:**
The sunshade cannot be closed if the sunroof is open.

**Pinch Protect Feature**

This feature will detect an obstruction in the closing of the sunroof during the Express Close operation. If an obstruction in the path of the sunroof is detected, the sunroof will automatically retract. Remove the obstruction if this occurs.

**NOTE:**
If three consecutive sunroof close attempts result in Pinch Protect reversals, Pinch Protect will disable and the sunroof must be closed in Manual Mode.

**Venting Sunroof — Express**

Push and release the Vent button within one half second and the sunroof will open to the vent position. This is called “Express Vent”, and it will occur regardless of sunroof position. During Express Vent operation, any other actuation of the switch will stop the sunroof.

**Sunroof Maintenance**

Use only a non-abrasive cleaner and a soft cloth to clean the glass panel. Periodically check for and clear out any debris that may have collected in the tracks.

**Ignition Off Operation**

The power sunroof switch will remain active for up to approximately 10 minutes after the ignition switch is placed in the OFF position. Opening either front door will cancel this feature.

**NOTE:**
Ignition Off time is programmable through the
Uconnect System. Refer to “Uconnect Settings” in “Multimedia” for further information.

**HOOD**

**To Open The Hood**

To open the hood, two latches must be released.

1. Pull the hood release lever located below the steering wheel at the base of the instrument panel.

2. Reach into the opening beneath the center of the hood and push the safety latch lever to the left to release it, before raising the hood.

**To Close The Hood**

Lower the hood to approximately 12 inches (30 cm) from the engine compartment and drop it. Make sure that the hood is completely closed.

**WARNING!**

Be sure the hood is fully latched before driving your vehicle. If the hood is not fully latched, it could open when the vehicle is in motion and block your vision. Failure to follow this warning could result in serious injury or death.

**TAILGATE**

**Opening**

The power tailgate may be opened by pushing the tailgate release pad located on the tailgate door. The tailgate damper strut will lower the tailgate to the open position (if equipped).

**Electronic Tailgate Release — If Equipped**

The key fob may be equipped with an electronic release feature for the tailgate, allowing hands-free tailgate opening. To activate, push and release the Tailgate Release button on the key fob twice within five seconds. The tailgate door will unlatch, and slowly lower into the open position.

If equipped, a button on the center overhead console inside the vehicle can be used to release the tailgate.
NOTE:
The Tri-Fold Tonneau Cover (if equipped) may prevent Electronic Tailgate Release if installed. The Tonneau Cover must be removed or folded up before releasing the tailgate. Refer to “Tri-Fold Tonneau Cover — If Equipped” in this chapter for further information.

Closing
To close the tailgate, push it upward until both sides are latched.

NOTE:
Pull back on the tailgate firmly after closing to ensure it is securely latched.

Bed Step — If Equipped
Your vehicle may be equipped with an extendable bed step on the driver’s side of the tailgate to provide easier entry and exit into the truck bed.

To extend the bed step, place your foot on the protruding foot tab located on the left edge of the bed step, and push rearward. A small amount of force will release the spring load, and extend the bed step out and away from the tailgate.

NOTE:
Once the spring load is overcome, the bed step will extend out quickly, so be sure to stand in a position that will avoid coming into contact with the step as it extends.

To stow the bed step back under the tailgate, push the bed step forward with your foot until the bed step is retracted by the spring load.
INTERNAL EQUIPMENT

Storage

Glove Compartment
The glove compartment is located on the passenger side of the instrument panel and features both an upper and lower storage area.

NOTE:
Not all vehicles are equipped with a door over the upper storage area.

If equipped with a covered upper glove compartment, push the release button to open. To open the lower glove compartment, pull the release handle.

Door Storage

Front Door Storage — If Equipped
Storage areas and bottle holders (driver’s side only) are located in the door trim panels.

Rear Door Storage — If Equipped
Storage compartments are located in both the driver and passenger rear door trim panels.
Rear Door Storage

Center Storage Compartment — If Equipped
The center storage compartment is located between the driver and passenger seats. The storage compartment provides an armrest and contains both an upper and lower storage area.

Pull on the upper handle on the front of the armrest to raise the cover. The upper storage area contains a USB power outlet located at the rear of the area that can be used to power small electrical devices, refer to “Electrical Power Outlets” in this section for further information. With the upper lid closed, pull on the lower handle to open the lower storage bin. The lower bin contains a power inverter outlet located in the forward portion of the lower bin. There is also a “fill line” located along the rear inside wall of the lower bin. Contents above the “fill line” may interfere with cupholder placement if equipped with a premium center console.

WARNING!
- This armrest is not a seat. Anyone seated on the armrest could be seriously injured during vehicle operation, or a collision. Only use the center seating position when the armrest is fully upright.
- In a collision, the latch may open if the total weight of the items stored exceeds about 10 lbs (4.5 kg). These items could be thrown about endangering occupants of the vehicle. Items stored should not exceed a total of 10 lbs (4.5 kg).

Forward Portion Of Lower Storage Bin

Premium Center Console — If Equipped
The premium center console is equipped with two front storage bins located in front of the center storage compartment. These storage bins may be equipped with tandem doors. Push the front bin to access the cupholders. Or push the rear bin to access the coinholder/small storage bin.

WARNING!
Do not operate this vehicle with a console compartment lid in the open position. Driving with the console compartment lid open may result in injury in a collision.
Center Console Tandem Doors— If Equipped

1 — Push Front Bin Access
2 — Push Rear Bin Access

Tandem Doors Open Position

1 — Front Bin Open
2 — Rear Bin Open

Push the release button at the front of the cupholder bin to slide tray rearward for access of front lower storage bin, or forward to access the rear lower storage bin with the center console lid in the open position.

Front Bench Seat Storage — If Equipped

If your vehicle is equipped with a front bench seat, storage can be found by folding down the center seat back. A console storage area and cupholders are available. With the seatback in the upright position, lifting the seat bottom also reveals a storage location.

Front Bench Seat Storage Location

There is a storage drawer located in the lower center of the instrument panel. It can be released by pushing the access button above it. The drawer is actuator assisted once the access button is pushed. Pull the drawer outward to the fully open position.
Storage Drawer

1 — Access Button
2 — Storage Drawer

Seatback Storage
Located in the back of both the driver and passenger front seats are pockets that can be used for storage.

Driver’s Side Seatback Storage

Second Row In-Floor Storage Bin — If Equipped
In-floor storage bins are located in front of the second row seats and can be used for extra storage. The storage bins have removable liners that can be easily removed for cleaning.

In-Floor Storage Bin And Latch
To open in-floor storage bin, remove the floor mat (if equipped), and lift upward on the handle of the latch and open the lid.
**NOTE:**
The front seat may have to be moved forward to fully open the lid.

### Storage Bin (Regular Cab)
The storage bin is located behind the front seats and runs the length of the cab.

### Fold Flat Load Floor — If Equipped
Crew Cab models with a 60/40 rear seat may be equipped with a folding load floor.

---

**WARNING!**
Do not operate the vehicle with loose items stored on the load floor. While driving or in an accident you may experience abrupt stopping, rapid acceleration, or sharp turns. Loose objects stored on the load floor may move around with force and strike occupants, resulting in serious or fatal injury.

---

### Unfolding The Load Floor/Crew Cab

1. Lift the 60/40 seat cushion(s) to the upward position.

2. Unfold both the legs using the straps.
3. Lift the front panel until the load floor unfolds into position.

4. Reverse the procedure to store the load floor.

Positioning The Load Floor For Storage Access Under The Seat
1. Lift the 60/40 seat cushion(s) to the upward position.
2. Unsnap the securing snap located at either side of the load floor.
3. Lift the load floor up to access storage under the load floor.

WARNING!
Do not drive with the load floor in the up position. When stopping fast or in an accident, the load floor could move to the down position causing serious injury.

Load Floor In Open Position

Load Floor Securing Straps/Crew Cab
4. Reverse the procedure to put the load floor back in the secured down position before you operate the vehicle.

Below Rear Seat Storage (Crew Cab)
The Crew Cab models provide additional storage under the rear seats. Lift the seats to access the storage compartment.
To open the storage compartments, unsnap the securing snap located at either side of the load floor and lift upward on the fold flat lid.

NOTE:
For more information on storage and the fold
flat floor, refer to “Fold Flat Load Floor” in this section.

Cupholders

Front Seat Cupholders
For vehicles equipped with a center console, two cupholders are located in front of the console storage bin.

NOTE:
If the vehicle is equipped with a premium center console with double (tandem) doors, push the front bin door to access the cupholders.

Vehicles Equipped With 40/20/40 Seats
The cupholders are located on the backside of the center portion of the front seat (20). Fold down the center section of the front seat to gain access to the cupholders.

Some vehicles may be equipped with a rear cupholder that consists of two cup wells for rear passenger convenience.

Rear Cup Wells

Electrical Power Outlets
The auxiliary 12 Volt (13 Amp) power outlet can provide power for in-cab accessories designed for use with the standard “cigar lighter” plug. The 12 Volt power outlets and 5 Volt (2.5 Amp) USB Port (Charge Only) have a cap attached to the outlet indicating “12V DC” together with either a key symbol, battery symbol, or USB symbol.

A key symbol indicates that the key must be in the ON/RUN or ACC position for the outlet to provide power. The battery symbol indicates
that the outlet is connected to the battery, and can provide power at all times.

CAUTION!

- Do not exceed the maximum power of 160 Watts (13 Amps) at 12 Volts. If the 160 Watts (13 Amps) power rating is exceeded, the fuse protecting the system will need to be replaced.
- Power outlets are designed for accessory plugs only. Do not insert any other object in the power outlets as this will damage the outlet and blow the fuse. Improper use of the power outlet can cause damage not covered by your New Vehicle Limited Warranty.

An auxiliary power outlet can be found in the tray on top of the center stack. This power outlet works when the ignition is in the ON/RUN, ACC, or OFF position.

Power Outlet Locations:
- F104 Fuse 20 A Yellow UCI Port/ USB Rear Center Console
- F90 Fuse 20 A Yellow Instrument Panel Power Outlet Battery Fed
- F91 Fuse 20 A Yellow Instrument Panel Power Outlet Ignition Fed

When the vehicle is turned off, be sure to unplug any equipment as to not drain the battery of the vehicle. All accessories connected to the outlet(s) should be removed or turned off when the vehicle is not in use to protect the battery against discharge.

WARNING!

To avoid serious injury or death:

- Only devices designed for use in this type of outlet should be inserted into any 12 Volt outlet.
- Do not touch with wet hands.
- Close the lid when not in use and while driving the vehicle.
- If this outlet is mishandled, it may cause an electric shock and failure.

CAUTION!

- Many accessories that can be plugged in draw power from the vehicle's battery, even when not in use (i.e., cellular phones, etc.). Eventually, if plugged in long enough, the vehicle's battery will discharge sufficiently to degrade battery life and/or prevent the engine from starting.
- Accessories that draw higher power (i.e., coolers, vacuum cleaners, lights, etc.), will discharge the battery even more quickly. Only use these intermittently and with greater caution.

(Continued)
Power Inverter — If Equipped

If equipped, a 115 Volt (400 Watts maximum) inverter may be located inside the center console toward the right hand side, just under the Wireless Charging Pad (if equipped). This inverter can power cellular phones, electronics and other low power devices requiring power up to 400 Watts. Certain high-end video game consoles exceed this power limit, as will most power tools.

There is also a second 115 Volt (400 Watts maximum) power inverter located on the rear of the center console. This inverter can power cellular phones, electronics and other low power devices requiring power up to 400 Watts. Certain high-end video game consoles exceed this power limit, as will most power tools.

All power inverters are designed with built-in overload protection. If the power rating of 400 Watts is exceeded, the power inverter shuts down. Once the electrical device has been removed from the outlet the inverter should reset.

NOTE:

400 Watts is the maximum for the inverter, not each outlet. If three outlets are in use, 400 Watts is shared amongst the devices plugged in.

If your vehicle is equipped with a Ram Box, a 115 Volt (400 Watts Maximum) inverter will be located inside the Ram Box. The inverter can be turned on by the Instrument Panel Power Inverter switch located to the left of the steering wheel. This inverter can power cellular phones, electronics and other low power devices requiring power up to 400 Watts. Certain high-end video game consoles exceed this power limit, as will most power tools.

CAUTION!

After the use of high power draw accessories, or long periods of the vehicle not being started (with accessories still plugged in), the vehicle must be driven a sufficient length of time to allow the generator to recharge the vehicle's battery.
If equipped, there may be a 115 Volt (400 Watts maximum) inverter located to the right of the center stack, just below the climate controls. This inverter can power cellular phones, electronics and other low power devices requiring power up to 400 Watts. Certain high-end video game consoles exceed this power limit, as will most power tools.

**WARNING!** (Continued)
- Do not insert any objects into the receptacles.
- Do not touch with wet hands.
- Close the lid when not in use.
- If this outlet is mishandled, it may cause an electric shock and failure.

Your vehicle may be equipped with a 15W 3A Qi wireless charging pad located inside of the center console. This charging pad is designed to wirelessly charge your Qi enabled mobile phone. Qi is a standard that uses magnetic...
induction to transfer power to your mobile device.

Your mobile phone must be designed for Qi wireless charging. If the phone is not equipped with Qi wireless charging functionality, an aftermarket sleeve or a specialized back plate can be purchased from your mobile phone provider or a local electronics retailer. Please see your phone’s owner’s manual for further information.

The wireless charging pad is equipped with an anti-slip mat, an adjustable cradle to hold your mobile phone in place and an LED indicator light.

**CAUTION!**

The key fob should not be placed on the charging pad or within 15 cm (150 mm) of it. Doing so can cause excessive heat buildup and damage to the fob. Placing the fob in close proximity of the charging pad blocks the fob from being detected by the vehicle and prevents the vehicle from starting.

---

**Overhead Sunglass Storage**

At the front of the overhead console, a compartment is provided for the storage of one pair of sunglasses.

From the closed position, push the door latch to open the compartment.

>>> CONDITION: (Market=Brazil or Market='Latin America') >>>

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**Pick Up Box Features**

1 — Cleats
2 — Upper Load Floor Indents
3 — Bulk Head Dividers
4 — Anchors

---

**NOTE:**

If you are installing a Toolbox, Ladder Rack or Headache Rack at the front of the Pickup Box,
you must use Mopar Box Reinforcement Brackets that are available from an authorized dealer.

You can carry wide building materials (sheets of plywood, etc.) by building a raised load floor. Place lumber across the box in the indentations provided above the wheel housings and in the bulkhead dividers to form the floor.

<table>
<thead>
<tr>
<th>WARNING! (Continued)</th>
</tr>
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<tbody>
<tr>
<td>• If you wish to carry more than 600 lbs (272 kg) of material suspended above the wheelhouse, supports must be installed to transfer the weight of the load to the pickup box floor or vehicle damage may result. The use of proper supports will permit loading up to the rated payload.</td>
</tr>
<tr>
<td>• Unrestrained cargo may be thrown forward in an accident causing serious or fatal injury.</td>
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There are stampings in the sheet metal on the inner side bulkheads of the box in front of and behind both wheel housings. Place wooden boards across the box from side to side to create separate load compartments in the pickup box.

There are four tie-down cleats bolted to the lower sides of the pickup box that can sustain loads up to 1000 lbs (450 kg) total.

Cargo Camera — If Equipped

Your vehicle may be equipped with the Cargo Camera that allows you to see an image of the inside of the pickup box. The image will be displayed in the Uconnect screen.

The Cargo Camera is located in the bottom center area of the Center High-Mounted Stoplamp (CHMSL).

A touchscreen button to indicate the current active camera image being displayed is made available whenever the Cargo Camera image is displayed.

A touchscreen button to switch the display to rear view camera image is made available whenever the Cargo Camera image is displayed.

A touchscreen button "X" to disable display of the camera image is made available when the vehicle is not in REVERSE gear.

A display timer is initiated when the Cargo Camera image is displayed. The image will continue to be displayed until the display timer exceeds 10 seconds and the vehicle speed is above 8 mph (13 km/h) or the touchscreen button "X" to disable display of the Cargo Camera image is pressed.

WARNING!

• The pickup box is intended for load carrying purposes only, not for passengers, who should sit in seats and use seat belts.

• Care should always be exercised when operating a vehicle with unrestrained cargo. Vehicle speeds may need to be reduced. Severe turns or rough roads may cause shifting or bouncing of the cargo that may result in vehicle damage. If wide building materials are to be frequently carried, the installation of a support is recommended. This will restrain the cargo and transfer the load to the pickup box floor.

(Continued)
Cargo Camera With Dynamic Centerline (Available With Surround View Camera Only) — If Equipped

The Dynamic Centerline feature provides an overlay on the Cargo Camera display screen that aligns to the center of the pickup box to aid in hooking up a fifth wheel camper or gooseneck trailer. The centerline auto aligns to the center of the pickup box, and can also be manually adjusted. The centerline will adjust in response to steering angle inputs, and will not obstruct the gooseneck receiver or an approaching trailer gooseneck in the camera feed.

Activation

The Dynamic Centerline feature can be activated through the Uconnect settings by pressing the Cargo Camera soft button, followed by the “Adjust Centerline” soft button on the touchscreen.

If the Dynamic Centerline feature is turned on, the overlay will display anytime the Cargo Camera image is displayed.

Adjusting Centerline

Follow the steps below to manually adjust the centerline:

1. Press the “Adjust Centerline” soft button located in the bottom right corner of the Cargo Camera display.
2. Use the arrows on the bottom left corner of the Cargo Camera display to adjust the centerline horizontally or vertically.
3. Once the desired position is achieved, press the “Accept” button to set the centerline to the newly specified position.

Deactivation

The Dynamic Centerline feature will automatically be deactivated whenever the Cargo Camera display is deactivated. It can also be manually deactivated through the Uconnect settings.

For further information, refer to “Surround View Camera System” in “Starting And Operating.”

NOTE:

- If the vehicle speed remains below 8 mph (13 km/h), the Cargo Camera image will be displayed continuously until the touchscreen button “X” to disable the display of the Cargo Camera image is pressed.
- The touchscreen button “X” to disable the display of the camera image is made available ONLY when the vehicle is not in reverse.
- If snow, ice, mud, or any foreign substance builds up on the camera lens, clean the lens, rinse with water, and dry with a soft cloth. Do not cover the lens.

Turning Cargo Camera On Or Off — With Uconnect 4C/4C NAV

1. Press the “Controls” button located on the bottom of the Uconnect display.
2. Press the “Cargo Camera” button to turn the Cargo Camera system on.

NOTE:

Once initiated by the “Cargo Camera” button, the Cargo Camera image will be displayed until the vehicle speed remains below 8 mph (13 km/h) and the 10 second timer runs out. The image may be deactivated by pressing the “X” soft button, placing the ignition in the OFF position, placing the gear selector in PARK, or pressing the image defeat “X” button. On deac-
ivation, the previous selected screen will appear.

RAMBOX — IF EQUIPPED

The RamBox system is an integrated pickup box storage and cargo management system consisting of up to three features:
- Integrated box side storage bins
- Cargo divider (if equipped)
- Bed rail tie-down system (if equipped)

There will also be a 115 Volt (400 Watt) power inverter located in the RamBox. Refer to “Internal Equipment” in this chapter for further information.

RamBox Integrated Box Side Storage Bins

Cargo storage bins are located on both sides of the pickup box. The cargo storage bins provide watertight, lockable, illuminated storage for up to 300 lbs (136 kg) of evenly distributed cargo.

NOTE:
RamBox will not open when the button is pushed if the RamBox is locked.

CAUTION!

Failure to follow the following items could cause damage to the vehicle:
- Assure that all cargo inside the storage bins is properly secured.
- Do not exceed cargo weight rating of 300 lbs (136 kg) for 2500 series vehicles per bin.

To open a storage bin with the RamBox unlocked, push and release the button located on the lid. The RamBox lid will open upward to allow hand access. Lift the lid to fully open.

CAUTION!

Leaving the lid open for extended periods of time could cause the vehicle battery to discharge. If the lid is required to stay open for extended periods of time, it is recommended that the bin lights be turned off manually using the on/off switch.

The interior of the RamBox will automatically illuminate when the lid is opened. In addition to the automatic illumination, there is a manual on/off switch located at the rear of each storage bin. Pushing the switch once will turn off the bin...
lights, pushing the switch again will turn the lights back on.

**RamBox Light Switch**

Cargo bins feature two removable drain plugs (to allow water to drain from bins). To remove plug, pull up on the edge. To install, push the plug downward into drain hole.

**NOTE:**
Provisions are provided in the bins for cargo dividers and shelf supports. These accessories (in addition to other RamBox accessories) are available from Mopar.

**Locking And Unlocking RamBox**

Push and release the lock or unlock button on the key fob to lock and unlock all doors, the tailgate and the RamBox (if equipped). Refer to “Keys” in this chapter for further details. The RamBox storage bins can be locked using the vehicle key. To lock and unlock the storage bin, insert the key into the keyhole on the push button and turn clockwise to lock or counterclockwise to unlock. Always return the key to the upright (vertical) position before removing the key from the push button.

**CAUTION!**

- Ensure cargo bin lids are closed and latched before moving or driving vehicle.
- Loads applied to the top of the bin lid should be minimized to prevent damage to the lid and latching/hinging mechanisms.
- Damage to the RamBox bin may occur due to heavy/sharp objects placed in bin that shift due to vehicle motion. In order to minimize potential for damage, secure all cargo to prevent movement and protect inside surfaces of bin from heavy/sharp objects with appropriate padding.

**RamBox Safety Warning**

Carefully follow these warnings to help prevent personal injury or damage to your vehicle:

**WARNING!**

- Always close the storage bin covers when your vehicle is unattended.
- Do not allow children to have access to the storage bins. Once in the storage bin, young children may not be able to escape. If trapped in the storage bin, children can die from suffocation or heat stroke.
- In an accident, serious injury could result if the storage bin covers are not properly latched.
- Do not drive the vehicle with the storage bin covers open.
- Keep the storage bin covers closed and latched while the vehicle is in motion.
- Do not use a storage bin latch as a tie down.
RamBox Storage Bin Cover Emergency Release Lever — If Equipped
As a security measure, a Storage Bin Cover Emergency Release is built into the storage bin cover latching mechanism.

NOTE:
In the event of an individual being locked inside the storage bin, the storage bin cover can be opened from inside of the bin by pulling on the glow-in-the-dark lever attached to the storage bin cover latching mechanism.

Bed Divider — If Equipped
The bed divider has two functional positions:
- Storage Position
- Divider Position

Storage Position
The storage position for the bed divider is at the front of the truck bed which maximizes the bed cargo area when not in use.
To install the bed divider into the storage position, perform the following:
1. Make sure the center handle is unlocked using the vehicle key and rotate the center handle vertically to release the divider side gates.
2. With the side gates open, position the divider fully forward in the bed against the front panel.
3. Rotate the side gates closed allowing the outboard ends to be positioned in front of the cargo tie down loops.
4. Rotate the center handle horizontally to secure the side gates in the closed position.

5. Lock the center handle using the vehicle key to secure the panel into place.

**Divider Position**

The divider position is intended for managing your cargo and assisting in keeping cargo from moving around the bed. There are 11 divider slots along the bed inner panels which allow for various positions to assist in managing your cargo.

To install the bed divider into a divider position, perform the following:

1. Make sure the center handle is unlocked using the vehicle key and rotate the center handle vertically to release the divider side gates.

2. With the side gates open, position the divider so the outboard ends align with the intended slots in the sides of the bed.

3. Rotate the side gates closed so that the outboard ends are secured into the intended slots of the bed.

4. Rotate the center handle horizontally to secure the side gates in the closed position.
5. Lock the center handle to secure the panel into place.

**Bed Rail Tie-Down System — If Equipped**

**CAUTION!**

The maximum load per cleat should not exceed 250 lbs (113 kg) and the angle of the load on each cleat should not exceed 45 degrees above horizontal, or damage to the cleat or cleat rail may occur.

**NOTE:**

This feature is only available for vehicles equipped with a RamBox.

There are two adjustable cleats on each side of the bed that can be used to assist in securing cargo.

---

Each cleat must be located and tightened down in one of the detents, along either rail, in order to keep cargo properly secure.

To move the cleat to any position on the rail, turn the nut counterclockwise several turns. Then pull out on the cleat and slide it to the detent nearest the desired location. Make sure the cleat is seated in the detent and tighten the nut.

---

**Cleat Removal (With Tonneau Cover)**

To remove the cleats from the utility rail, remove the end cap screw located in the center of the end cap, using a #T30 Torx head driver. Remove the end cap and slide the cleat off the end of the rail.
Cleat Removal (Without Tonneau Cover)
Remove the end cap by pushing upward on the release button located beneath the end cap while pulling the cap away from the rail. The cleat can now be removed by sliding it off the end of the rail.

End Cap Screw Location If Equipped With Tonneau Cover

End Cap Release Button If Not Equipped With Tonneau Cover

SLIDE-IN CAMPERS
Camper Applications
Certain truck models are not recommended for slide-in campers. To determine if your vehicle is excluded, please refer to the “Consumer Information Truck-Camper Loading” document at www.ramtrucks.com. For safety reasons, follow all instructions in this important document.

WARNING!
To avoid inhaling carbon monoxide, which is deadly, the exhaust system on vehicles equipped with “Cap or Slide-In Campers” should extend beyond the overhanging camper compartment and be free of leaks.

NOTE:
When a cap or pickup camper is installed on a vehicle, an alternate Center High-Mounted Stop Light (CHMSL) must be provided.

EASY-OFF TAILGATE
To simplify mounting of a camper unit with an overhang, the tailgate can be removed.

NOTE:
The electric connector at the bottom of the tail-
gate must be disconnected prior to removing the tailgate.

**Disconnecting The Rear Camera And Remote Keyless Entry**

1. Open the tailgate to access the rear camera or Remote Keyless Entry connector bracket located on the rear sill.

2. Remove the connector bracket from the sill by pushing inward in the locking tab.

3. Disconnect the chassis wiring harness, ensuring the connector bracket does not fall into the sill.

4. Connect the chassis plug and bracket (provided in the glove compartment) to the chassis wiring harness and insert the bracket back into the sill.

5. Connect the tailgate plug (provided in the glove compartment) to the tailgate wiring harness to ensure that the terminals do not corrode.

6. Tape the tailgate harness and bracket against the forward-facing surface of the tailgate. This will prevent damaging the connector and bracket when storing or reinstalling the tailgate.

**Removing The Tailgate**

1. Disconnect the wiring harness for the rear camera and or power locks (if equipped).

   **NOTE:** Refer to “Disconnecting The Rear Camera And Remote Keyless Entry” in this section.

2. Unlatch the tailgate and remove the support cables by releasing the lock tang from the pivot.

   **NOTE:** Make sure tailgate is supported when removing support cables.

3. Position the tailgate on a 45 degree angle.
4. Raise the right side of the tailgate until the right side pivot clears the hanger bracket.

5. Slide the entire tailgate to the right to free the left side pivot.

6. Remove the tailgate from the vehicle.

**NOTE:**
Do not carry the tailgate loose in the truck pickup box.

---

**Locking Tailgate**

The tailgate can be locked using the key fob lock button.

**TRI-FOLD TONNEAU COVER — IF EQUIPPED**

Your vehicle may be equipped with a Tri-Fold Tonneau Cover which consists of different features:

- Easy Tri-Fold cover
- Tonneau fore aft locator
- Crossbar inside bed locator
- Front and rear clamps
- Stowage strap
- Locking capability

**NOTE:**
The Tonneau Cover can be folded up and secured at the front of the box without removing it completely.

**Tri-Fold Tonneau Cover Removal**

To remove the Tonneau Cover, follow the next steps:

1. Open the tailgate to gain access to the rear pair of Tonneau Cover clamps located on the underside of the cover (left and right side).

![Clamped Position](image)

**WARNING!**

To avoid inhaling carbon monoxide, which is deadly, the exhaust system on vehicles equipped with “Cap or Slide-In Campers” should extend beyond the overhanging camper compartment and be free of leaks.

2. Pull both clamp handles down to release the Tonneau Cover’s rear panel.

**NOTE:**
If clamp wire is damaged replace immediately.
3. From the released position, send the clamps to the Stowed Position by pushing from the yellow bumper up. Listen for a “clicking” sound to confirm the clamp has been properly stowed.

4. Fold the rear panel up onto the center panel (intermediate position).

NOTE:
The vehicle cannot be driven when the Tonneau Cover is in this position.

5. Fold the rear and center panels up onto the front panel (Tri-Folded position).

CAUTION!
Make sure the Tonneau Cover clamp and clamp wire are in the proper stowed position. If the clamp and clamp wire are not properly stowed, damage to the Tonneau Cover material will result.

NOTE:
When folding the center and rear panels, the sections MUST be held together to avoid damage to the cover material.

Incorrect Folding — Will Cause Damage
92 GETTING TO KNOW YOUR VEHICLE

NOTE:
Fold the panels gently. It is not recommended to allow the panels to drop under their own weight.

6. Clip both stowage straps to prevent the Tonneau Cover panels from unfolding.

7. Once in the Tri-Folded position, pull both front clamp handles down to the Released Position.

8. From the Released Position, send the clamps to the Stowed Position by pushing from the yellow bumper up. Listen for a “clicking” sound to confirm the clamp has been properly stowed.

9. With two people, remove the Tonneau Cover.
NOTE:
Be sure the Tonneau Cover has been folded completely before removing.

**Tri-Fold Tonneau Cover Installation**
To install the Tonneau Cover follow the following steps:

1. Position the folded Tonneau Cover on the truck bed and push the cover forward against the front of the truck bed. The Tonneau Cover centers itself when placed on the vehicle.

NOTE:
Make sure to always push the Tonneau Cover all the way forward on the truck bed. Failure to do so might prevent proper clamp engagement, or interfere with the tailgate auto drop function (if equipped).

2. Pull down on the first set of clamp handles to release the clamps from the stowed position.

3. Push clamp wires up and under the flange of the box (or flange of the Ram Box rail, if equipped) to the semi clamped position.

NOTE:
Once clamped, be sure the clamps are not improperly attached to the truck bed flange.

4. Push clamp handles upward to the clamped position to properly engage the clamps.

5. Disengage the stowage straps.
6. Unfold the center and rear panels to the intermediate position.

**NOTE:**
When folding the center and rear panels, the sections **MUST** be held together to avoid damage to the cover material.

7. Completely unfold the Tonneau Cover.

8. Pull the rear clamp handles down into the released position.

9. Push clamp wires up and under the flange of box (or flange of Ram Box rail, if equipped) to the semi clamped position.

10. Push clamp handles upward to the clamped position to properly engage the clamps.
NOTE:
Once clamped, be sure the clamps are not partially clamped to the truck bed flange.

CAUTION!
It is the driver’s responsibility to ensure the Tonneau Cover is properly installed on the vehicle. Failure to follow this procedure can result in detachment of the Tonneau Cover from the vehicle and/or damage to the vehicle/Tonneau Cover.

The Tonneau Cover clamps can be locked when in the clamped position by placing a lock through the locking hole.

Tri-Fold Tonneau Cover Cleaning
For proper cleaning of the Tonneau Cover, use Mopar Whitewall & Vinyl Top Cleaner and Mopar Leather & Vinyl Conditioner/Protectant.
**GETTING TO KNOW YOUR INSTRUMENT PANEL**

**BASE / MIDLINE INSTRUMENT CLUSTER**

>>> CONDITION: {Market=Brazil or Market='Latin America'} >>>

**Base / Midline Instrument Cluster Descriptions**

1. **Tachometer**
   - Indicates the engine speed in revolutions per minute (RPM x 1000).

2. **Voltmeter**
   - When the vehicle is in the ON/RUN state, the gauge indicates the electrical system voltage. The pointer should stay within the normal range if the battery is charged. If the pointer has an extreme high or low reading and remains there during normal driving, the electrical system should be serviced.

3. **Instrument Cluster Display**
   - When the appropriate conditions exist, this display shows the instrument cluster display messages. Refer to “Instrument Cluster Display” in this section for further information.

<<< CONDITION END <<<
4. Oil Pressure Gauge
   - The pointer should always indicate the oil pressure when the engine is running. A continuous high or low reading under normal driving conditions may indicate a lubrication system malfunction. Immediate service should be obtained from an authorized dealer.

5. Speedometer

6. Fuel Gauge
   - The pointer shows the level of fuel in the fuel tank when the ignition is in the ON/RUN position.
   - The fuel pump symbol points to the side of the vehicle where the fuel door is located.

Refer to “Refueling The Vehicle — Gasoline Engine” in “Starting And Operating” for further information.

8. Temperature Gauge
   - The pointer shows engine coolant temperature. The pointer positioned within the normal range indicates that the engine cooling system is operating satisfactorily.
   - The pointer will likely indicate a higher temperature when driving in hot weather, up mountain grades, or when towing a trailer. It should not be allowed to exceed the upper limits of the normal operating range.

  WARNING!
  A hot engine cooling system is dangerous. You or others could be badly burned by steam or boiling coolant. You may want to call an authorized dealer for service if your vehicle overheats. If you decide to look under the hood yourself, refer to the warnings under “Cooling System Pressure Cap” in “Servicing And Maintenance” for further information.”

  CAUTION!
  Driving with a hot engine cooling system could damage your vehicle. If the temperature gauge reads “H,” pull over and stop the vehicle. Idle the vehicle with the air conditioner turned off until the pointer drops back into the normal range. If the pointer remains on the “H,” turn the engine off immediately and call an authorized dealer for service.
PREMIUM INSTRUMENT CLUSTER

>>> CONDITION: {Market=Brazil or Market='Latin America'} >>>

Premium Instrument Cluster Descriptions

1. Tachometer
   - Indicates the engine speed in revolutions per minute (RPM x 1000).

2. Instrument Cluster Display
   - When the appropriate conditions exist, this display shows the instrument cluster display messages. Refer to “Instrument Cluster Display” in this chapter for further information.

3. Speedometer
   - Indicates vehicle speed.

4. Fuel Gauge
   - The pointer shows the level of fuel in the fuel tank when the ignition is in the ON/RUN position.
   - The fuel pump symbol points to the side of the vehicle where the fuel door is located.

Refer to “Refueling The Vehicle — Gasoline Engine” in “Starting And Operating” for further information.
5. Temperature Gauge

- The pointer shows engine coolant temperature. The pointer positioned within the normal range indicates that the engine cooling system is operating satisfactorily.

- The pointer will likely indicate a higher temperature when driving in hot weather, up mountain grades, or when towing a trailer. It should not be allowed to exceed the upper limits of the normal operating range.

**WARNING!**

A hot engine cooling system is dangerous. You or others could be badly burned by steam or boiling coolant. You may want to call an authorized dealer for service if your vehicle overheats. If you decide to look under the hood yourself, refer to the warnings under “Cooling System Pressure Cap” in “Servicing And Maintenance” for further information.

**CAUTION!**

Driving with a hot engine cooling system could damage your vehicle. If the temperature gauge reads “H,” pull over and stop the vehicle. Idle the vehicle with the air conditioner turned off until the pointer drops back into the normal range. If the pointer remains on the “H,” turn the engine off immediately and call an authorized dealer for service.
1. **Tachometer**
   - Indicates the engine speed in revolutions per minute (RPM x 1000).

2. **Instrument Cluster Display**
   - When the appropriate conditions exist, this display shows the instrument cluster display messages. Refer to “Instrument Cluster Display” in “Getting To Know Your Instrument Panel” for further information.

3. **Speedometer**
   - Indicates vehicle speed.
4. Fuel Gauge

- The pointer shows the level of fuel in the fuel tank when the ignition switch is in the ON/RUN position.
- The fuel pump symbol points to the side of the vehicle where the fuel filler door is located.

Refer to “Refueling The Vehicle — Diesel Engine” in “Starting And Operating” for further information.

5. Engine Coolant Temperature

- This gauge shows the engine coolant temperature. The gauge pointer will likely show higher temperatures when driving in hot weather, up mountain grades, or in heavy stop and go traffic. If the red Warning Light turns on while driving, safely bring the vehicle to a stop, and turn off the engine. DO NOT operate the vehicle until the cause is corrected.

**WARNING!**

A hot engine cooling system is dangerous. You or others could be badly burned by steam or boiling coolant. You may want to call an authorized dealer for service if your vehicle overheats.

**CAUTION!**

Driving with a hot engine cooling system could damage your vehicle. If the temperature gauge reads greater “H,” pull over and stop the vehicle. Idle the vehicle with the air conditioner turned off until the pointer drops back into the normal range. If the pointer remains on the “h,” turn the engine off immediately and call an authorized dealer for service.

**INSTRUMENT CLUSTER DISPLAY**

Your vehicle will be equipped with an instrument cluster display, which offers useful information to the driver. With the ignition in the OFF mode, opening/closing of a door will activate the display for viewing, and display the total miles, or kilometers, in the odometer. Your instrument cluster display is designed to display important information about your vehicle’s systems and features. Using a driver interactive display located on the instrument panel, your instrument cluster display can show you how systems are working and give you warnings when they are not. The steering wheel mounted controls allow you to scroll through the main menus and submenus. You can access the specific information you want and make selections and adjustments.

**Instrument Cluster Display Controls**

The instrument cluster display features a driver interactive display that is located in the instrument cluster.
The instrument cluster display menu items may consist of the following:

- Speedometer
- Vehicle Info
- Driver Assist — If Equipped
- Fuel Economy
- Trip
- Trailer Tow
- Audio
- Stored Messages
- Screen Set Up
- Commercial Settings — If Equipped

The system allows the driver to select information by pushing the following instrument cluster display control buttons located on the left side of the steering wheel:

- **Up Arrow Button:**
  - Push and release the **up** arrow button to scroll upward through the main menu items, submenu screen, and vehicle settings.

- **Down Arrow Button:**
  - Push and release the **down** arrow button to scroll downward through the main menu items, submenu screen, and vehicle settings.

- **Right Arrow Button:**
  - Push and release the **right** arrow button to access/select the information screens or submenu screens of a main menu item. Push
and hold the right arrow button for two seconds to reset displayed/selected features that can be reset.

- **Left Arrow Button:**
  Push and release the **Left Arrow** button to access/select the information screens, submenu screens of a main menu item, or to return to the main menu.

**Oil Life Reset**

Your vehicle is equipped with an engine oil change indicator system. The “Oil Change Required” message will display in the instrument cluster display after a single chime has sounded, to indicate the next scheduled oil change interval. The engine oil change indicator system is mileage based.

**NOTE:**
Use the steering wheel instrument cluster display controls for the following procedure.

**Oil Life Reset Procedure**

1. Without pushing the brake pedal, push the ENGINE START/STOP button and place the ignition to the ON/RUN position (do not start the engine).
2. Push and release the down arrow button to scroll downward through the main menu to “Vehicle Info.”
3. Push and release the right arrow button to access the “Vehicle Info” screen, then scroll up or down to select “Oil Life.”
4. Push and release the right arrow button to select “Reset.”
5. Push and release the down arrow button to select “Yes,” then push and release the right arrow button to reset the Oil Life to 100%.
6. Push and release the up arrow button to exit the instrument cluster display screen.

**Secondary Method of Resetting Engine Oil Life**

1. Without pressing the brake pedal, push the ENGINE START/STOP button and place the ignition to the ON/RUN position (do not start the engine).
2. Fully press the accelerator pedal, slowly, three times within 10 seconds.
3. Without pushing the brake pedal, push the ENGINE START/STOP button once to return the ignition to the OFF/LOCK position.

**NOTE:**
If the indicator message illuminates when you start the vehicle, the oil change indicator system did not reset. If necessary, repeat this procedure.

**Display Menu Items**

Push and release the up or down arrow button until the desired selectable menu icon is highlighted in the instrument cluster display.

**Speedometer**

Push and release the up or down arrow button until the speedometer menu item is highlighted in the instrument cluster display. Push and
release the right arrow button to cycle the display between mph and km/h.

**Vehicle Info**

Push and release the up or down arrow button until the Vehicle Info menu item is highlighted in the instrument cluster display. Push and release the right arrow button to enter the submenus items of Vehicle Info. Follow the directional prompts to access or reset any of the following Vehicle Info submenu items:

- Tire Pressure
- Coolant Temperature — If Equipped
- Transmission Temperature — If Equipped
- Oil Temperature — If Equipped
- Oil Pressure
- Exhaust Brake — If Equipped
- Turbo Boost — If Equipped
- Oil Life
- Fuel Filter Life — If Equipped
- Battery Voltage
- Gauge Summary — If Equipped
- Engine Hours

**Driver Assist — If Equipped**

The Driver Assist menu displays the status of the ACC system.

Push and release the up or down arrow button until the Driver Assist menu is displayed in the instrument cluster display.

**Adaptive Cruise Control (ACC) Feature**

The instrument cluster display displays the current Adaptive Cruise Control (ACC) system settings. The information displayed depends on ACC system status.

Push the Adaptive Cruise Control (ACC) on/off button (located on the steering wheel) until one of the following displays in the instrument cluster display:

**Adaptive Cruise Control Off**

When ACC is deactivated, the display will read “Adaptive Cruise Control Off.”

**Adaptive Cruise Control Ready**

When ACC is activated but the vehicle speed setting has not been selected, the display will read “Adaptive Cruise Control Ready.”

Push the SET + or the SET- button (located on the steering wheel) and the following will display in the instrument cluster display:

**ACC SET**

When ACC is set, the set speed will display in the instrument cluster.
The ACC screen may display once again if any ACC activity occurs, which may include any of the following:
- Distance Setting Change
- System Cancel
- Driver Override
- System Off
- ACC Proximity Warning
- ACC Unavailable Warning

For further information, refer to “Adaptive Cruise Control (ACC) — If Equipped” in “Starting And Operating.”

**Fuel Economy**

Push and release the **up or down** arrow button until the Fuel Economy menu item is highlighted in the instrument cluster display. Push and release the **right** arrow button to enter the submenus: Average Fuel Economy Value, Range, and Current Fuel Economy. Average Fuel Economy value and range. Push and Hold the **right** arrow button to reset all information.
- Current Fuel Economy Gauge
- Average Fuel Economy Value
- Range To Empty
- Fuel Tank Levels — If Equipped

**Trip A/Trip B**

Push and release the **up or down** arrow button until the Trip menu item is highlighted in the instrument cluster display. Push and release the **right** arrow button to enter the submenus of Trip A and Trip B. The Trip A or Trip B information will display the following:
- Distance
- Average Fuel Economy
- Elapsed Time

Push and hold **right** arrow button to reset all information.

**Trailer Tow**

Push and release the **up or down** arrow button until the Trailer Tow menu item is highlighted in the instrument cluster display. Push and release the **right** arrow button and the next screen will display the following trailer trip information:
- Trip Distance (trailer specific): Push and hold the **right** arrow button to reset the distance.
- Trailer Brake
  - Output
  - Type
    - Gain
- Trailer Tire Pressure — If Equipped

**Audio**

Push and release the **up or down** arrow button until the Audio Menu icon/title is highlighted in the instrument cluster display. This menu will display the audio source information, including the Song name, Artist name, and audio source with an accompanying graphic.

**Phone Call Status**

When a call is incoming, a Phone Call Status pop-up will display on the screen. The pop-up will remain until the phone is answered or ignored.
NOTE:
The call status will temporarily replace the previous media source information displayed on the screen. When the pop-up is no longer displayed, the display will return to the last used screen.

Stored Messages
Push and release the up or down arrow button until the Messages Menu item is highlighted. This feature shows the number of stored warning messages. Push and release the right or left arrow buttons to cycle through stored messages.

Screen Setup Menu Item
Push and release the up or down arrow button until the Screen Setup menu item is highlighted in the instrument cluster display. Push and release the right arrow button to enter the Screen Setup submenu. The Screen Setup feature allows you to change what information is displayed in the instrument cluster as well as the location that information is displayed.

Current Gear
- Off (Default Setting)
- On

Odometer
- Unit Without Decimal (Default Setting)
- Unit With Decimal

Favorite Menu
- Speedometer
- Vehicle Info
- Driver Assist (Show/Hide) — If Equipped
- Fuel Economy (Show/Hide)
- Trip Info (Show/Hide)
- Trailer Tow (Show/Hide)
- Audio (Show/Hide)
- Messages
- Screen Setup
- Commercial Settings — If Equipped
NOTE:
Menus with (Show/Hide) can push the OK button to choose whether to show or hide this menu in the instrument cluster display.

Upper Left
- None
- Compass (Default Setting) — Premium Cluster
- Outside Temp (Default Setting) — Base Cluster
- Time
- Range To Empty
- Average MPG
- Current MPG
- Trip A Distance
- Trip B Distance
- Trailer Trip — If Equipped
- Trailer Brake — If Equipped
- Oil Pressure — If Equipped
- Coolant Temperature — If Equipped

Upper Center
- None
- Compass
- Outside Temp
- Time
- Range To Empty
- Average MPG
- Current MPG
- Trip A Distance
- Trip B Distance
- Trailer Trip
- Audio
- Speedometer (Default Setting)
- Menu Title
- Oil Temperature — If Equipped
- Battery Voltage — If Equipped
- Transmission Temperature — If Equipped
- Oil Life — If Equipped
- Exhaust Brake — If Equipped
- Turbo Boost — If Equipped
- Fuel Filter Life — If Equipped
108 GETTING TO KNOW YOUR INSTRUMENT PANEL

**Upper Right**
- Compass (Default Setting) — Base Cluster
- Outside Temp (Default Setting) — Premium Cluster
- Time
- Range To Empty
- Average MPG
- Current MPG
- Trip A Distance
- Trip B Distance
- Trailer Trip — If Equipped
- Trailer Brake — If Equipped
- Oil Pressure — If Equipped
- Coolant Temperature — If Equipped
- Oil Temperature — If Equipped
- Battery Voltage — If Equipped
- Transmission Temperature — If Equipped
- Oil Life — If Equipped
- Exhaust Brake — If Equipped
- Turbo Boost — If Equipped
- Fuel Filter Life — If Equipped

**Left Side — If Equipped**
- None
- Range
- Average MPG
- Menu Icon (Default Setting)
- Coolant Temperature
- Oil Temperature
- Transmission Temperature
- Oil Life
- Fuel Filter Life — If Equipped

**Right Side — If Equipped**
- None
- Range (Default Setting)
- Average MPG
- Menu Icon
- Coolant Temperature
- Oil Temperature
- Transmission Temperature
- Oil Life
- Fuel Filter Life — If Equipped
Lower Left — If Equipped
- None
- Compass
- Outside Temp
- Time
- Range To Empty
- Average MPG
- Current MPG
- Trip A Distance
- Trip B Distance
- Trailer Trip
- Trailer Brake
- Oil Pressure
- Coolant Temperature
- Oil Temperature
- Battery Voltage (Default Setting)
- Transmission Temperature
- Oil Life
- Exhaust Brake — If Equipped

- Turbo Boost — If Equipped
- Fuel Filter Life — If Equipped
Lower Right — If Equipped

- None
- Compass
- Outside Temp
- Time
- Range To Empty
- Average MPG
- Current MPG
- Trip A Distance
- Trip B Distance
- Trailer Trip
- Trailer Brake
- Oil Pressure (Default Setting)
- Coolant Temperature
- Oil Temperature
- Battery Voltage
- Transmission Temperature
- Oil Life
- Exhaust Brake — If Equipped
- Turbo Boost — If Equipped
- Fuel Filter Life — If Equipped

Restore Defaults

- Cancel (Default Setting)
- OK

Commercial Settings — If Equipped

Commercial Settings allows the driver to set and recall additional features when the transmission is in PARK.

Push and release the up and down button until Commercial Settings displays in the instrument cluster display.

Follow the prompts to enter the required PIN and enter the Commercial Settings submenu.

Commercial Settings allows you to access the following features:

- PTO — If Equipped
- Remote Ignition
- Idle Control
- Backup Alarm
- Commercial ParkSense — If Equipped
- Aux Switches
- PIN Setup

NOTE:

If the vehicle’s PIN is forgotten or not known, see an authorized dealer to have the PIN reset.

Diesel Particulate Filter (DPF) Messages

The Cummins diesel engine meets all diesel emissions standards, resulting in one of the lowest emitting diesel engines ever produced. To achieve these emissions standards, your vehicle is equipped with a state-of-the-art engine and exhaust system. These systems are seamlessly integrated into your vehicle and managed by the Powertrain Control Module (PCM). The PCM manages engine combustion to allow the exhaust system’s catalyst to trap
and burn Particulate Matter (PM) pollutants, with no input or interaction on your part.

**WARNING!**

A hot exhaust system can start a fire if you park over materials that can burn. Such materials might be grass or leaves coming into contact with your exhaust system. Do not park or operate your vehicle in areas where your exhaust system can contact anything that can burn.

Your vehicle has the ability to alert you to additional maintenance required on your vehicle or engine. The following messages may display in your instrument cluster display:

- **Perform Service** — Your vehicle will require emissions maintenance at a set interval. To help remind you when this maintenance is due, the instrument cluster display will display “Perform Service”. When the “Perform Service” message is displayed in the instrument cluster display it is necessary to have the emissions maintenance performed. Emissions maintenance may include replacing the Closed Crankcase Ventilation (CCV) filter element. The procedure for clearing and resetting the “Perform Service” indicator message is located in the appropriate Service Information.

- **Exhaust System — Regeneration Required Now** — “Exhaust Filter XX% Full Safely Drive at Highway Speeds to Remedy” will be displayed in the instrument cluster display if the exhaust particulate filter reaches 80% of its maximum storage capacity. Under conditions of exclusive short duration and low speed driving cycles, your Cummins diesel engine and exhaust after-treatment system may never reach the conditions required to remove the trapped PM. If this occurs, the “Exhaust Filter XX% Full Safely Drive at Highway Speeds to Remedy” message will be displayed in the instrument cluster display. If this message is displayed, you will hear one chime to assist in alerting you of this condition. By simply driving your vehicle at highway speeds for as little as 45 minutes, you can remedy the condition in the particulate filter system and allow your Cummins diesel engine and exhaust after-treatment system to remove the trapped PM and restore the system to normal operating condition.

- **Exhaust System — Regeneration In Process**

  - **Exhaust Filter XX% Full** — Indicates that the Diesel Particulate Filter (DPF) is self-cleaning. Maintain your current driving condition until regeneration is completed.

- **Exhaust System — Regeneration Completed**

  - This message indicates that the Diesel Particulate Filter (DPF) self-cleaning is completed. If this message is displayed, you will hear one chime to alert you of this condition.

- **Exhaust Service Required — See Dealer Now**

  - This message indicates regeneration has been disabled due to a system malfunction. At this point the engine Powertrain Control Module (PCM) will register a fault code, the instrument panel will display a MIL light.

- **Exhaust Filter Full — Power Reduced See Dealer** — This message indicates the PCM

**WARNING!**

A hot exhaust system can start a fire if you park over materials that can burn. Such materials might be grass or leaves coming into contact with your exhaust system. Do not park or operate your vehicle in areas where your exhaust system can contact anything that can burn.

**CAUTION!**

See an authorized dealer, as damage to the exhaust system could occur soon with continued operation.
has derated the engine to limit the likelihood of permanent damage to the after-treatment system. If this condition is not corrected and a dealer service is not performed, extensive exhaust after-treatment damage can occur. To correct this condition it will be necessary to have your vehicle serviced by your local authorized dealer.

**NOTE:**
Failing to follow the oil change indicator, changing your oil and resetting the oil change indicator by 0 miles remaining will prevent the diesel exhaust filter from performing it’s cleaning routine. This will shortly result in a Malfunction Indicator Light (MIL) and reduced engine power. Only an authorized dealer will be able to correct this condition.

### Battery Saver On/Battery Saver Mode Message — Electrical Load Reduction Actions — If Equipped

This vehicle is equipped with an Intelligent Battery Sensor (IBS) to perform additional monitoring of the electrical system and status of the vehicle battery.

In cases when the IBS detects charging system failure, or the vehicle battery conditions are deteriorating, electrical load reduction actions will take place to extend the driving time and distance of the vehicle. This is done by reducing power to or turning off non-essential electrical loads.

Load reduction is only active when the engine is running. It will display a message if there is a risk of battery depletion to the point where the vehicle may stall due to lack of electrical supply, or will not restart after the current drive cycle.

When load reduction is activated, the message “Battery Saver On Some Systems May Have Reduced Power” will appear in the instrument cluster.

This message indicates the vehicle battery has a low state of charge and continues to lose electrical charge at a rate that the charging system cannot sustain.

**NOTE:**
- The charging system is independent from load reduction. The charging system performs a diagnostic on the charging system continuously.
- If the Battery Charge Warning Light is on it may indicate a problem with the charging system. Refer to “Battery Charge Warning Light” in this chapter for further information.

The electrical loads that may be switched off (if equipped), and vehicle functions which can be affected by load reduction:

- Heated Seats/Vented Seats/Heated Wheel
- Rear Defroster And Heated Mirrors
- HVAC System
- 115 Volt AC Power Inverter System
- Audio and Telematics System

Loss of the battery charge may indicate one or more of the following conditions:

- The charging system cannot deliver enough electrical power to the vehicle system because the electrical loads are larger than...
the capability of charging system. The charging system is still functioning properly.

- Turning on all possible vehicle electrical loads (e.g. HVAC to max settings, exterior and interior lights, overloaded power outlets +12 Volts, 115 Volt AC, USB ports) during certain driving conditions (city driving, towing, frequent stopping).
- Installing options like additional lights, upfitter electrical accessories, audio systems, alarms and similar devices.
- Unusual driving cycles (short trips separated by long parking periods).
- The vehicle was parked for an extended period of time (weeks, months).
- The battery was recently replaced and was not charged completely.
- The battery was discharged by an electrical load left on when the vehicle was parked.
- The battery was used for an extended period with the engine not running to supply radio, lights, chargers, +12 Volts portable appliances like vacuum cleaners, game consoles and similar devices.

What to do when an electrical load reduction action message is present (“Battery Saver On” or “Battery Saver Mode”)

During a trip:
- Reduce power to unnecessary loads if possible:
  - Turn off redundant lights (interior or exterior).
  - Check what may be plugged in to power outlets +12 Volts, 115 Volt AC, USB ports.
  - Check HVAC settings (blower, temperature).
  - Check the audio settings (volume).

After a trip:
- Check if any aftermarket equipment was installed (additional lights, upfitter electrical accessories, audio systems, alarms) and review specifications if any (load and Ignition Off Draw currents).
- Evaluate the latest driving cycles (distance, driving time and parking time).
- The vehicle should have service performed if the message is still present during consecutive trips and the evaluation of the vehicle and driving pattern did not help to identify the cause.

WARNING LIGHTS AND MESSAGES

The warning/indicator lights will illuminate in the instrument panel together with a dedicated message and/or acoustic signal when applicable. These indications are indicative and precautionary and must not be considered as exhaustive. Always refer to the information in this chapter in the event of a failure indication. All active telltales will display first if applicable. The system check menu may appear different based upon equipment options and current vehicle status. Some telltales are optional and may not appear.

Red Warning Lights

Seat Belt Reminder Warning Light

This warning light indicates when the driver or passenger seat belt is unbuckled. When the ignition is first placed in the ON/RUN or ACC/ON/RUN position and if the driver’s seat belt is unbuckled, a chime will sound and the light will turn on. When driving, if the driver or front passenger seat belt remains unbuckled, the Seat Belt Reminder Light will flash or remain on
continuously and a chime will sound. Refer to “Occupant Restraint Systems” in “Safety” for further information.

**Air Bag Warning Light**

This warning light will illuminate to indicate a fault with the air bag, and will turn on for four to eight seconds as a bulb check when the ignition is placed in the ON/RUN or ACC/ON/RUN position. This light will illuminate with a single chime when a fault with the air bag has been detected, it will stay on until the fault is cleared. If the light is either not on during startup, stays on, or turns on while driving, have the system inspected at an authorized dealer as soon as possible.

>>> CONDITION: {Market=Brazil or Market="Latin America"} >>>

**Brake Warning Light**

This warning light monitors various brake functions, including brake fluid level and parking brake application. If the brake light turns on it may indicate that the parking brake is applied, that the brake fluid level is low, or that there is a problem with the anti-lock brake system.

If the light remains on when the parking brake has been disengaged, and the fluid level is at the full mark on the master cylinder reservoir, it indicates a possible brake hydraulic system malfunction or that a problem with the Brake Booster has been detected by the Anti-Lock Brake System (ABS) / Electronic Stability Control (ESC) system. In this case, the light will remain on until the condition has been corrected. If the problem is related to the brake booster, the ABS pump will run when applying the brake, and a brake pedal pulsation may be felt during each stop.

The dual brake system provides a reserve braking capacity in the event of a failure to a portion of the hydraulic system. A leak in either half of the dual brake system is indicated by the Brake Warning Light, which will turn on when the brake fluid level in the master cylinder has dropped below a specified level. The light will remain on until the cause is corrected.

**NOTE:**
The light may flash momentarily during sharp cornering maneuvers, which change fluid level conditions. The vehicle should have service performed, and the brake fluid level checked.

If brake failure is indicated, immediate repair is necessary.

**WARNING!**
Driving a vehicle with the red brake light on is dangerous. Part of the brake system may have failed. It will take longer to stop the vehicle. You could have a collision. Have the vehicle checked immediately.

Vehicles equipped with the Anti-Lock Brake System (ABS) are also equipped with Electronic Brake Force Distribution (EBD). In the event of an EBD failure, the Brake Warning Light will turn on along with the ABS Light. Immediate repair to the ABS system is required.

Operation of the Brake Warning Light can be checked by turning the ignition switch from the OFF position to the ON/RUN position. The light should illuminate for approximately four seconds. The light should then turn off unless the parking brake is applied or a brake fault is
detected. If the light does not illuminate, have the light inspected by an authorized dealer. The light also will turn on when the parking brake is applied with the ignition switch in the ON/RUN position.

**NOTE:**
This light shows only that the parking brake is applied. It does not show the degree of brake application.

<<< CONDITION END <<<

### Hood Open Warning Light
This warning light will illuminate when the hood is ajar/open and not fully closed.

**NOTE:**
If the vehicle is moving, there will also be a single chime.

### Vehicle Security Warning Light — If Equipped
This light will flash at a fast rate for approximately 15 seconds when the vehicle security alarm is arming, and then will flash slowly until the vehicle is disarmed.

#### Engine Coolant Temperature Warning Light
This warning light warns of an overheated engine condition. If the engine coolant temperature is too high, this indicator will illuminate and a single chime will sound. If the temperature reaches the upper limit, a continuous chime will sound for four minutes or until the engine is able to cool, whichever comes first.

If the light turns on while driving, safely pull over and stop the vehicle. If the Air Conditioning (A/C) system is on, turn it off. Also, shift the transmission into NEUTRAL and idle the vehicle. If the temperature reading does not return to normal, turn the engine off immediately and call for service.

Refer to “If Your Engine Overheats” in “In Case Of Emergency” for further information.

#### Battery Charge Warning Light
This warning light will illuminate when the battery is not charging properly. If it stays on while the engine is running, there may be a malfunction with the charging system. Contact an authorized dealer as soon as possible.

This indicates a possible problem with the electrical system or a related component.

#### Oil Pressure Warning Light
This warning light will illuminate to indicate low engine oil pressure. If the light turns on while driving, stop the vehicle, shut off the engine as soon as possible, and contact an authorized dealer. A chime will sound when this light turns on. Do not operate the vehicle until the cause is corrected. This light does not indicate how much oil is in the engine. The engine oil level must be checked under the hood.

#### Oil Temperature Warning Light
This warning light will illuminate to indicate the engine oil temperature is high. If the light turns on while driving, stop the vehicle and shut off the
engine as soon as possible. Wait for oil temperature to return to normal levels.

**Electronic Throttle Control (ETC) Warning Light**

This warning light will illuminate to indicate a problem with the Electronic Throttle Control (ETC) system. If a problem is detected while the vehicle is running, the light will either stay on or flash depending on the nature of the problem. Cycle the ignition when the vehicle is safely and completely stopped and the transmission is placed in the PARK position. The light should turn off. If the light remains on with the vehicle running, your vehicle will usually be drivable; however, see an authorized dealer for service as soon as possible.

**NOTE:**

This light may turn on if the accelerator and brake pedals are pressed at the same time.

If the light continues to flash when the vehicle is running, immediate service is required and you may experience reduced performance, an elevated/rough idle, or engine stall and your vehicle may require towing. The light will come on when the ignition is placed in the ON/RUN or ACC/ON/RUN position and remain on briefly as a bulb check. If the light does not come on during starting, have the system checked by an authorized dealer.

**Trailer Brake Disconnected Warning Light**

This warning light will illuminate when the Trailer Brake has been disconnected.

**Transmission Temperature Warning Light — If Equipped**

This warning light will illuminate to warn of a high transmission fluid temperature. This may occur with strenuous usage such as trailer towing. If this light turns on, stop the vehicle and run the engine at idle or slightly faster, with the transmission in PARK or NEUTRAL, until the light turns off. Once the light turns off, you may continue to drive normally.

**CAUTION!**

Continuous driving with the Transmission Temperature Warning Light illuminated will eventually cause severe transmission damage or transmission failure.

**Door Open Warning Light**

This indicator will illuminate when a door is ajar/open and not fully closed.

**NOTE:**

If the vehicle is moving there will also be a single chime.

**Yellow Warning Lights**

**Adaptive Cruise Control (ACC) Fault Warning Light — If Equipped**

This warning light will illuminate to indicate a fault in the ACC system. Contact a local authorized dealer for service. For further information, refer

**WARNING!**

If you continue operating the vehicle when the Transmission Temperature Warning Light is illuminated you could cause the fluid to boil over, come in contact with hot engine or exhaust components and cause a fire.
to “Adaptive Cruise Control (ACC)” in “Starting And Operating.”

Air Suspension Fault Warning Light — If Equipped

This light will illuminate when a fault is detected with the air suspension system.

Engine Check/Malfunction Indicator Warning Light (MIL)

The Engine Check/Malfunction Indicator Light (MIL) is a part of an Onboard Diagnostic System called OBD II that monitors engine and automatic transmission control systems. This warning light will illuminate when the ignition is in the ON/RUN position before engine start. If the bulb does not come on when turning the ignition switch from OFF to ON/RUN, have the condition checked promptly.

Certain conditions, such as a loose or missing gas cap, poor quality fuel, etc., may illuminate the light after engine start. The vehicle should be serviced if the light stays on through several typical driving styles. In most situations, the vehicle will drive normally and will not require towing.

When the engine is running, the MIL may flash to alert serious conditions that could lead to immediate loss of power or severe catalytic converter damage. The vehicle should be serviced by an authorized dealer as soon as possible if this occurs.

**WARNING!**

A malfunctioning catalytic converter, as referenced above, can reach higher temperatures than in normal operating conditions. This can cause a fire if you drive slowly or park over flammable substances such as dry plants, wood, cardboard, etc. This could result in death or serious injury to the driver, occupants or others.

**CAUTION!**

Prolonged driving with the Malfunction Indicator Light (MIL) on could cause damage to the vehicle control system. It also could affect fuel economy and driveability. If the MIL is flashing, severe catalytic converter damage and power loss will soon occur. Immediate service is required.

Electronic Stability Control (ESC) Active Warning Light — If Equipped

This warning light will indicate when the Electronic Stability Control system is Active. The “ESC Indicator Light” in the instrument cluster will come on when the ignition is placed in the ON/RUN or ACC/ON/RUN position, and when ESC is activated. It should go out with the engine running. If the “ESC Indicator Light” comes on continuously with the engine running, a malfunction has been detected in the ESC system. If this warning light remains on after several ignition cycles, and the vehicle has been driven several miles (km) at speeds greater than 30 mph (48 km/h), see an authorized dealer as soon as possible to have the problem diagnosed and corrected.

- The “ESC OFF Indicator Light” and the “ESC Indicator Light” come on momentarily each time the ignition is placed in the ON/RUN or ACC/ON/RUN position.
- The ESC system will make buzzing or clicking sounds when it is active. This is normal; the sounds will stop when ESC becomes inactive.
- This light will come on when the vehicle is in an ESC event.
Electronic Stability Control (ESC) OFF Warning Light — If Equipped

This warning light indicates the Electronic Stability Control (ESC) is off.

Each time the ignition is turned to ON/RUN or ACC/ON/RUN, the ESC system will be on, even if it was turned off previously.

Low Washer Fluid Warning Light — If Equipped

This warning light will illuminate when the windshield washer fluid is low. Refer to “Engine Compartment” in “Servicing And Maintenance” for further information.

Low Fuel Warning Light

When the fuel level reaches approximately 3.2 gal (12 L) this light will turn on, and remain on until fuel is added.

A single warning chime will sound with Low Fuel Warning.

Low Coolant Level Warning Light

This telltale will turn on to indicate the vehicle coolant level is low. Refer to “Dealer Service” in “Servicing And Maintenance” for further information.

Tire Pressure Monitoring System (TPMS) Warning Light

The warning light switches on and a message is displayed to indicate that the tire pressure is lower than the recommended value and/or that slow pressure loss is occurring. In these cases, optimal tire duration and fuel consumption may not be guaranteed.

Should one or more tires be in the condition mentioned above, the display will show the indications corresponding to each tire.

CAUTION!

Do not continue driving with one or more flat tires as handling may be compromised. Stop the vehicle, avoiding sharp braking and steering. If a tire puncture occurs, repair immediately using the dedicated tire repair kit and contact an authorized dealer as soon as possible.

Each tire, including the spare (if provided), should be checked monthly when cold and inflated to the inflation pressure recommended by the vehicle manufacturer on the vehicle placard or tire inflation pressure label. If your vehicle has tires of a different size than the size indicated on the vehicle placard or tire inflation pressure label, you should determine the proper tire inflation pressure for those tires.

As an added safety feature, your vehicle has been equipped with a Tire Pressure Monitoring System (TPMS) that illuminates a low tire pressure telltale when one or more of your tires is significantly under-inflated. Accordingly, when the low tire pressure telltale illuminates, you should stop and check your tires as soon as possible, and inflate them to the proper pressure. Driving on a significantly under-inflated tire causes the tire to overheat and can lead to tire failure. Under-inflation also reduces fuel efficiency and tire tread life, and may affect the vehicle’s handling and stopping ability.

Please note that the TPMS is not a substitute for proper tire maintenance, and it is the driver’s responsibility to maintain correct tire pressure, even if under-inflation has not reached the level
to trigger illumination of the TPMS low tire pressure telltale.

Your vehicle has also been equipped with a TPMS malfunction indicator to indicate when the system is not operating properly. The TPMS malfunction indicator is combined with the low tire pressure telltale. When the system detects a malfunction, the telltale will flash for approximately one minute and then remain continuously illuminated. This sequence will continue upon subsequent vehicle start-ups as long as the malfunction exists. When the malfunction indicator is illuminated, the system may not be able to detect or signal low tire pressure as intended. TPMS malfunctions may occur for a variety of reasons, including the installation of replacement or alternate tires or wheels on the vehicle that prevent the TPMS from functioning properly. Always check the TPMS malfunction telltale after replacing one or more tires or wheels on your vehicle to ensure that the replacement or alternate tires and wheels allow the TPMS to continue to function properly.

**CAUTION!**

The TPMS has been optimized for the original equipment tires and wheels. TPMS pressures and warning have been established for the tire size equipped on your vehicle. Undesirable system operation or sensor damage may result when using replacement equipment that is not of the same size, type, and/or style. Aftermarket wheels can cause sensor damage. Using aftermarket tire sealants may cause the Tire Pressure Monitoring System (TPMS) sensor to become inoperable. After using an aftermarket tire sealant it is recommended that you take your vehicle to an authorized dealer to have your sensor function checked.

**Anti-Lock Brake (ABS) Warning Light**

This warning light monitors the Anti-Lock Brake System (ABS). The light will turn on when the ignition is placed in the ON/RUN or ACC/ON/RUN position and may stay on for as long as four seconds.

If the ABS light remains on or turns on while driving, then the Anti-Lock portion of the brake system is not functioning and service is required as soon as possible. However, the conventional brake system will continue to operate normally, assuming the Brake Warning Light is not on.

If the ABS light does not turn on when the ignition is placed in the ON/RUN or ACC/ON/RUN position, have the brake system inspected by an authorized dealer.

**Rear Axle Locker Fault Indicator Light — If Equipped**

This warning light will illuminate to indicate when a rear axle locker fault has been detected.

**Service Forward Collision Warning (FCW) Light — If Equipped**

This warning light will illuminate to indicate a fault in the Forward Collision Warning System. Contact an authorized dealer for service.

Refer to "Forward Collision Warning (FCW)" in "Safety" for further information.

**Service 4WD Warning Light — If Equipped**

This warning light will illuminate to signal a fault with the 4WD system. If the light stays on or comes on during
driving, it means that the 4WD system is not functioning properly and that service is required. We recommend you drive to the nearest service center and have the vehicle serviced immediately.

**Speed Control Fault Warning Light**
This warning light will illuminate to indicate the Speed Control System is not functioning properly and service is required. Contact an authorized dealer.

**Sway Bar Fault Warning Light**
This light will illuminate when there is a fault in the sway bar disconnect system.

**Yellow Indicator Lights**
- **Forward Collision Warning OFF Indicator Light — If Equipped**
  This indicator light illuminates to indicate that Forward Collision Warning is off.
- **Rear Fog Indicator — If Equipped**
  This indicator light will illuminate when the rear fog lights are on. Refer to “Exterior Lights” in “Getting To Know Your Vehicle” for further information.

**Air Suspension Payload Protection Indicator Light — If Equipped**
This indicator light will illuminate to indicate that the maximum payload may have been exceeded or load leveling cannot be achieved at its current ride height. Protection Mode will automatically be selected in order to “protect” the air suspension system, air suspension adjustment is limited due to payload.

**TOW/HAUL Indicator Light**
This indicator light will illuminate when TOW/HAUL mode is selected.
Refer to “Trailer Towing” in “Starting And Operating” for further information.

**Cargo Light — If Equipped**
This indicator light will illuminate when the cargo light is activated by pushing the cargo light button on the headlight switch.

**Cold Ambient Derate Mode Indicator Light — If Equipped**
This indicator light will illuminate when a derate (engine power reduction) is activated for protection of the turbocharger in cold ambient temperatures. For further information, refer to “Instrument Cluster Display” in “Getting To Know Your Instrument Panel”.

**Diesel Exhaust Brake Indicator Light — If Equipped**
This indicator light will illuminate when the Diesel Exhaust Brake has been activated, and is in full strength mode. Refer to “Diesel Exhaust Brake (Engine Braking)” in “Starting And Operating” for further information.

**Sway Bar Indicator Light — If Equipped**
This indicator light will illuminate when the front sway bar is disconnected.

**Snowplow Mode Indicator Light — If Equipped**
This indicator light will illuminate when Snowplow Mode has been activated.

**Air Suspension Alternate Trailer Height Indicator Light— If Equipped**
This light will illuminate when the air suspension system is set to the Alternate Trailer Height setting.

**Air Suspension Bed Lowering Mode Indicator Light— If Equipped**
This light will illuminate when the Bed Lowering Mode procedure is complete.

**Air Suspension Ride Height Raising Indicator Light— If Equipped**
This light will blink and alert the driver that the vehicle is changing to a higher ride height.

**Air Suspension Ride Height Lowering Indicator Light— If Equipped**
This light will blink and alert the driver that the vehicle is changing to a lower ride height.

**Front And Rear Axle Lock Indicator Light**
This light indicates when the front, rear, or both axles have been locked. The telltale will display the lock icon on the front and rear axles to indicate the current lock status.

**Rear Axle Lock Indicator Light**
This light indicates when the rear axle lock has been activated.

**4WD Lock Indicator Light**
This light alerts the driver that the vehicle is in the four-wheel drive LOCK mode. The front and rear driveshafts are mechanically locked together,
forcing the front and rear wheels to rotate at the same speed.

Refer to “Four-Wheel Drive Operation” in “Starting And Operating” for further information on four-wheel drive operation and proper use.

4WD Low Indicator Light — If Equipped

This light alerts the driver that the vehicle is in the four-wheel drive LOW mode. The front and rear driveshafts are mechanically locked together forcing the front and rear wheels to rotate at the same speed. Low range provides a greater gear reduction ratio to provide increased torque at the wheels.

Refer to “Four-Wheel Drive Operation — If Equipped” in “Starting And Operating” for further information on four-wheel drive operation and proper use.

4WD High Indicator Light — If Equipped

This light alerts the driver that the vehicle is in the four-wheel drive HIGH mode. The front and rear driveshafts are mechanically locked together forcing the front and rear wheels to rotate at the same speed.

NEUTRAL Indicator Light — If Equipped

This light alerts the driver that the NEUTRAL 4WD power transfer case is in the NEUTRAL mode and the front and rear driveshafts are disengaged from the powertrain.

Wait To Start Light — If Equipped

This indicator light will illuminate for approximately two seconds when the ignition is turned to the RUN position. Its duration may be longer based on colder operating conditions. Vehicle will not initiate start until telltale is no longer displayed. Refer to “Starting The Engine - Diesel Engine” in “Starting And Operating” for further information.

NOTE:
The “Wait To Start” telltale may not illuminate if the intake manifold temperature is warm enough.

Water In Fuel Indicator Light — If Equipped

The “Water In Fuel Indicator Light” will illuminate when there is water detected in the fuel filter. If this light remains on, DO NOT start the vehicle before you drain the water from the fuel filter to prevent engine damage. Refer to the “Draining Fuel/Water Separator Filter” section in “Dealer Service” in “Servicing And Maintenance” for further information.

Green Indicator Lights

Adaptive Cruise Control (ACC) Set With Target Light — If Equipped

This will display when the ACC is set and a target vehicle is detected. Refer to “Adaptive Cruise Control (ACC) — If
Getting to Know Your Instrument Panel

Equipped” in “Starting And Operating” for further information.

Adaptive Cruise Control (ACC) Set With No Target Detected Indicator Light — If Equipped
This light will turn on when the Adaptive Cruise Control is SET and there is no target vehicle detected. Refer to “Adaptive Cruise Control (ACC) — If Equipped” in “Starting And Operating” for further information.

ECO Mode Indicator Light
This light will turn on when ECO Mode is active.

Park/Headlight On Indicator Light
This indicator light will illuminate when the park lights or headlights are turned on. Refer to “Exterior Lights” in “Getting To Know Your Vehicle” for further information.

Front Fog Indicator Light — If Equipped
This indicator light will illuminate when the front fog lights are on. Refer to “Exterior Lights” in “Getting To Know Your Vehicle” for further information.

Turn Signal Indicator Lights
When the left or right turn signal is activated, the turn signal indicator will flash independently and the corresponding exterior turn signal lamps will flash. Turn signals can be activated when the multifunction lever is moved down (left) or up (right).

NOTE:
1. A continuous chime will sound if the vehicle is driven more than 1 mile (1.6 km) with either turn signal on.
2. Check for an inoperative outside light bulb if either indicator flashes at a rapid rate.
3. If equipped with fog lamps, the fog lamp on the side of the activated turn signal will also illuminate to provide additional light when turning.

Cruise Control Set Indicator Light — If Equipped
This indicator light will illuminate when the cruise control is set to the desired speed. Refer to “Speed Control” in “Starting And Operating” for further information.

White Indicator Lights

Adaptive Cruise Control (ACC) Ready Light — If Equipped
This light will illuminate when the vehicle equipped with Adaptive Cruise Control (ACC) has been turned on but not set. Refer to “Adaptive Cruise Control (ACC) — If Equipped” in “Starting And Operating” for further information.

Cruise Control Ready Indicator
This indicator light will illuminate when the cruise control is ready, but not set. Refer to “Speed Control” in “Starting And Operating” for further information.

Hill Descent Control (HDC) Indicator Light — If Equipped
This indicator shows when the Hill Descent Control (HDC) feature is turned on. The lamp will be on solid when HDC is armed. HDC can only be armed when the transfer case is in the “4WD LOW” position and the vehicle speed is less
then 20 mph (32 km/h). If these conditions are not met while attempting to use the HDC feature, the HDC indicator light will flash on/off.

**Blue Indicator Lights**

**High Beam Indicator Light**

This indicator light will illuminate to indicate that the high beam headlights are on. With the low beams activated, push the multifunction lever forward (toward the front of the vehicle) to turn on the high beams. Pull the multifunction lever rearward (toward the rear of the vehicle) to turn off the high beams. If the high beams are off, pull the lever toward you for a temporary high beam on, “flash to pass” scenario.

**ONBOARD DIAGNOSTIC SYSTEM — OBD II**

Your vehicle is equipped with a sophisticated Onboard Diagnostic system called OBD II. This system monitors the performance of the emissions, engine, and transmission control systems. When these systems are operating properly, your vehicle will provide excellent performance and fuel economy, as well as engine emissions well within current government regulations.

If any of these systems require service, the OBD II system will turn on the Malfunction Indicator Light (MIL). It will also store diagnostic codes and other information to assist your service technician in making repairs. Although your vehicle will usually be drivable and not need towing, see an authorized dealer for service as soon as possible.

**CAUTION!**

- Prolonged driving with the MIL on could cause further damage to the emission control system. It could also affect fuel economy and driveability. The vehicle must be serviced before any emissions tests can be performed.
- If the MIL is flashing while the vehicle is running, severe catalytic converter damage and power loss will soon occur. Immediate service is required.

**Onboard Diagnostic System (OBD II) Cybersecurity**

Your vehicle is required to have an Onboard Diagnostic system (OBD II) and a connection port to allow access to information related to the performance of your emissions controls. Authorized service technicians may need to access this information to assist with the diagnosis and service of your vehicle and emissions system.

**WARNING!**

- ONLY an authorized service technician should connect equipment to the OBD II connection port in order to read the VIN, diagnose, or service your vehicle.
- If unauthorized equipment is connected to the OBD II connection port, such as a driver-behavior tracking device, it may:
  - Be possible that vehicle systems, including safety related systems, could be impaired or a loss of vehicle control could occur that may result in an accident involving serious injury or death.
  - Access, or allow others to access, information stored in your vehicle systems, including personal information.

For further information, refer to “Cybersecurity” in “Multimedia”.
SAFETY

SAFETY FEATURES

Anti-Lock Brake System (ABS)
The Anti-Lock Brake System (ABS) provides increased vehicle stability and brake performance under most braking conditions. The system automatically prevents wheel lock, and enhances vehicle control during braking. The ABS performs a self-check cycle to ensure that the ABS is working properly each time the vehicle is started and driven. During this self-check, you may hear a slight clicking sound as well as some related motor noises. ABS is activated during braking when the system detects one or more wheels begin to lock. Road conditions such as ice, snow, gravel, bumps, railroad tracks, loose debris, or panic stops may increase the likelihood of ABS activation(s).

You also may experience the following when ABS activates:

- The ABS motor noise (it may continue to run for a short time after the stop)
- The clicking sound of solenoid valves
- Brake pedal pulsations
- A slight drop of the brake pedal at the end of the stop

These are all normal characteristics of ABS.

WARNING!

- The ABS contains sophisticated electronic equipment that may be susceptible to interference caused by improperly installed or high output radio transmitting equipment. This interference can cause possible loss of anti-lock braking capability. Installation of such equipment should be performed by qualified professionals.

ABS is designed to function with the Original Equipment Manufacturer (OEM) tires.
Modification may result in degraded ABS performance.

**Anti-Lock Brake Warning Light**
The yellow “Anti-Lock Brake Warning Light” will turn on when the ignition is placed in the ON/RUN mode and may stay on for as long as four seconds.

If the “Anti-Lock Brake Warning Light” remains on or comes on while driving, it indicates that the anti-lock portion of the brake system is not functioning and that service is required. However, the conventional brake system will continue to operate normally if the “Anti-Lock Brake Warning Light” is on.

If the “Anti-Lock Brake Warning Light” is on, the brake system should be serviced as soon as possible to restore the benefits of anti-lock brakes. If the “Anti-Lock Brake Warning Light” does not come on when the ignition is placed in the ON/RUN mode, have the light repaired as soon as possible.

**Electronic Brake Control (EBC) System**
Your vehicle is equipped with an advanced Electronic Brake Control (EBC) system. This system includes Electronic Brake Force Distribution (EBD), Anti-Lock Brake System (ABS), Brake Assist System (BAS), Hill Start Assist (HSA), Traction Control System (TCS), Electronic Stability Control (ESC), and Electronic Roll Mitigation (ERM). These systems work together to enhance both vehicle stability and control in various driving conditions.

Your vehicle may also be equipped with Trailer Sway Control (TSC) and Hill Descent Control (HDC).

**Brake Assist System (BAS)**
The Brake Assist System (BAS) is designed to optimize the vehicle’s braking capability during emergency braking maneuvers. The system detects an emergency braking situation by sensing the rate and amount of brake application, and then applies optimum pressure to the brakes. This can help reduce braking distances. The BAS complements the Anti-Lock Brake System (ABS). Applying the brakes very quickly results in the best BAS assistance. To receive the benefit of the system, you must apply continuous braking pressure during the stopping sequence, (do not “pump” the brakes). Do not reduce brake pedal pressure unless braking is no longer desired. Once the brake pedal is released, the BAS is deactivated.

**WARNING!**
The Brake Assist System (BAS) cannot prevent the natural laws of physics from acting on the vehicle, nor can it increase the traction afforded by prevailing road conditions. BAS cannot prevent collisions, including those resulting from excessive speed in turns, driving on very slippery surfaces, or hydroplaning. The capabilities of a BAS-equipped vehicle must never be exploited in a reckless or dangerous manner, which could jeopardize the user’s safety or the safety of others.

**Brake System Warning Light**
The red “Brake System Warning Light” will turn on when the ignition is placed in the ON/RUN mode and may stay on for as long as four seconds.

If the “Brake System Warning Light” remains on or comes on while driving, it indicates that the brake system is not functioning properly and that immediate service is required. If the “Brake System Warning Light” does not come on when
the ignition is placed in the ON/RUN mode, have the light repaired as soon as possible.

**Electronic Brake Force Distribution (EBD)**
The Electronic Brake Force Distribution (EBD) function manages the distribution of the braking torque between the front and rear axles by limiting braking pressure to the rear axle. This is done to prevent overslip of the rear wheels to avoid vehicle instability, and to prevent the rear axle from entering ABS before the front axle.

**Electronic Roll Mitigation (ERM)**
This system anticipates the potential for wheel lift by monitoring the driver’s steering wheel input and the speed of the vehicle. When Electronic Roll Mitigation (ERM) determines that the rate of change of the steering wheel angle and vehicle’s speed are sufficient to potentially cause wheel lift, it then applies the appropriate brake and may also reduce engine power to lessen the chance that wheel lift will occur. ERM can only reduce the chance of wheel lift occurring during severe or evasive driving maneuvers; it cannot prevent wheel lift due to other factors, such as road conditions, leaving the roadway, or striking objects or other vehicles.

**NOTE:**
ERM is disabled anytime the ESC is in “Full Off” mode (if equipped). Refer to “Electronic Stability Control (ESC)” in this section for a complete explanation of the available ESC modes.

**WARNING!**
Many factors, such as vehicle loading, road conditions and driving conditions, influence the chance that wheel lift or rollover may occur. ERM cannot prevent all wheel lift or roll overs, especially those that involve leaving the roadway or striking objects or other vehicles. The capabilities of an ERM-equipped vehicle must never be exploited in a reckless or dangerous manner which could jeopardize the user’s safety or the safety of others.

**Electronic Stability Control (ESC)**
The Electronic Stability Control (ESC) system enhances directional control and stability of the vehicle under various driving conditions. ESC corrects for oversteering or understeering of the vehicle by applying the brake of the appropriate wheel(s) to assist in counteracting the oversteer or understeer condition. Engine power may also be reduced to help the vehicle maintain the desired path.

ESC uses sensors in the vehicle to determine the vehicle path intended by the driver and compares it to the actual path of the vehicle. When the actual path does not match the intended path, ESC applies the brake of the appropriate wheel to assist in counteracting the oversteer or understeer condition.

- Oversteer — when the vehicle is turning more than appropriate for the steering wheel position.
- Understeer — when the vehicle is turning less than appropriate for the steering wheel position.

The “ESC Activation/Malfunction Indicator Light” located in the instrument cluster will start to flash as soon as the ESC system becomes active. The “ESC Activation/Malfunction Indicator Light” also flashes when the TCS is active. If the “ESC Activation/Malfunction Indicator Light” begins to flash during acceleration, ease up on the accelerator and apply as little throttle as possible. Be sure to...
adapt your speed and driving to the prevailing road conditions.

**WARNING!**

- Electronic Stability Control (ESC) cannot prevent the natural laws of physics from acting on the vehicle, nor can it increase the traction afforded by prevailing road conditions. ESC cannot prevent accidents, including those resulting from excess speed in turns, driving on very slippery surfaces, or hydroplaning. ESC also cannot prevent accidents resulting from loss of vehicle control due to inappropriate driver input for the conditions. Only a safe, attentive, and skillful driver can prevent accidents. The capabilities of an ESC equipped vehicle must never be exploited in a reckless or dangerous manner which could jeopardize the user's safety or the safety of others.

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**WARNING! (Continued)**

- Vehicle modifications, or failure to properly maintain your vehicle, may change the handling characteristics of your vehicle, and may negatively affect the performance of the ESC system. Changes to the steering system, suspension, braking system, tire type and size or wheel size may adversely affect ESC performance. Improperly inflated and unevenly worn tires may also degrade ESC performance. Any vehicle modification or poor vehicle maintenance that reduces the effectiveness of the ESC system can increase the risk of loss of vehicle control, vehicle rollover, personal injury and death.

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**ESC Operating Modes**

**NOTE:**
Depending upon model and mode of operation, the ESC system may have multiple operating modes.

**ESC On**
This is the normal operating mode for the ESC. Whenever the vehicle is started, the ESC system will be in this mode. This mode should be used for most driving conditions. Alternate ESC modes should only be used for specific reasons as noted in the following paragraphs.

**Partial Off**
The “Partial Off” mode is intended for times when a more spirited driving experience is desired. This mode may modify Traction Control System (TCS) and ESC thresholds for activation, which allows for more wheel spin than normally allowed. This mode may be useful if the vehicle becomes stuck.

To enter the “Partial Off” mode, momentarily push the “ESC OFF” switch and the “ESC OFF Indicator Light” will illuminate. To turn the ESC on again, momentarily push the “ESC OFF” switch and the “ESC OFF Indicator Light” will turn off.
NOTE:
For vehicles with multiple partial ESC modes, a momentary button push will toggle the ESC mode. Multiple momentary button pushes may be required to return to ESC on.

**WARNING!**
- When in “Partial Off” mode, the TCS functionality of ESC, (except for the limited slip feature described in the TCS section), has been disabled and the “ESC Off Indicator Light” will be illuminated. When in “Partial Off” mode, the engine power reduction feature of TCS is disabled, and the enhanced vehicle stability offered by the ESC system is reduced.
- Trailer Sway Control (TSC) is disabled when the ESC system is in the “Partial Off” mode.

**Full Off — If Equipped**
This mode is intended for off-highway or off-road use only and should not be used on any public roadways. In this mode, TCS and ESC features are turned off. To enter the “Full Off” mode, push and hold the “ESC OFF” switch for five seconds while the vehicle is stopped with the engine running. After five seconds, a chime will sound, the “ESC OFF Indicator Light” will illuminate, and the “ESC OFF” message will display in the instrument cluster. To turn ESC on again, momentarily push the “ESC OFF” switch.

**NOTE:**
System may switch from ESC “Full Off” to “Partial Off” mode when vehicle exceeds a predetermined speed. When the vehicle speed slows below the predetermined speed the system will return to ESC “Full Off”.

ESC modes may also be affected by drive modes (if equipped.)

**WARNING!**
- In the ESC “Full Off” mode, the engine torque reduction and stability features are disabled. Therefore, enhanced vehicle stability offered by the ESC system is unavailable. In an emergency evasive maneuver, the ESC system will not engage to assist in maintaining stability. ESC “Full Off” mode is intended for off-highway or off-road use only.

*WARNING!* (Continued)
- The Electronic Stability Control (ESC) cannot prevent the natural laws of physics from acting on the vehicle, nor can it increase the traction afforded by prevailing road conditions. ESC cannot prevent all accidents, including those resulting from excessive speed in turns, driving on very slippery surfaces, or hydroplaning. ESC also cannot prevent collisions.

**ESC Activation/Malfunction Indicator Light And ESC OFF Indicator Light**
- The “ESC Activation/Malfunction Indicator Light” in the instrument cluster will come on when the ignition is turned to the ON mode. It should go out with the engine running. If the “ESC Activation/Malfunction Indicator Light” comes on continuously with the engine running, a malfunction has been detected in the ESC system. If this light remains on after several ignition cycles, and the vehicle has been driven several miles (kilometers) at speeds greater than 30 mph (48 km/h), see an authorized
dealer as soon as possible to have the problem diagnosed and corrected.

The “ESC Activation/Malfunction Indicator Light” (located in the instrument cluster) starts to flash as soon as the tires lose traction and the ESC system becomes active. The “ESC Activation/Malfunction Indicator Light” also flashes when TCS is active. If the “ESC Activation/Malfunction Indicator Light” begins to flash during acceleration, ease up on the accelerator and apply as little throttle as possible. Be sure to adapt your speed and driving to the prevailing road conditions.

**NOTE:**

- The “ESC Activation/Malfunction Indicator Light” and the “ESC OFF Indicator Light” come on momentarily each time the ignition is placed in the ON position.
- Each time the ignition is placed in the ON position, the ESC system will be on even if it was turned off previously.
- The ESC system will make buzzing or clicking sounds when it is active. This is normal; the sounds will stop when ESC becomes inactive following the maneuver that caused the ESC activation.

The “ESC OFF Indicator Light” indicates the customer has elected to have the Electronic Stability Control (ESC) in a reduced mode.

**Hill Descent Control (HDC) — If Equipped**

Hill Descent Control (HDC) is intended for low speed off road driving while in 4L Range. HDC maintains vehicle speed while descending hills during various driving situations. HDC controls vehicle speed by actively controlling the brakes.

**HDC Has Three States:**

1. Off (feature is not enabled and will not activate).
2. Enabled (feature is enabled and ready but activation conditions are not met, or driver is actively overriding with brake or throttle application).
3. Active (feature is enabled and actively controlling vehicle speed).

**Enabling HDC**

HDC is enabled by pushing the HDC switch, but the following conditions must also be met to enable HDC:

- The driveline is in 4L Range.
- The vehicle speed is below 5 mph (8 km/h).
- The parking brake is released.
- The driver door is closed.

**Activating HDC**

Once HDC is enabled, it will activate automatically if driven down a grade of sufficient magnitude. The set speed for HDC is selectable by the driver, and can be adjusted by using the gear shift +/- . The following summarizes the HDC set speeds:
HDC Target Set Speeds

- **P** = No set speed. HDC may be enabled but will not activate.
- **R** = 0.6 mph (1 km/h)
- **N** = 1.2 mph (2 km/h)
- **D** = 0.6 mph (1 km/h)
- **1st** = 0.6 mph (1 km/h)
- **2nd** = 1.2 mph (2 km/h)
- **3rd** = 1.8 mph (3 km/h)
- **4th** = 2.5 mph (4 km/h)
- **5th** = 3.1 mph (5 km/h)
- **6th** = 3.7 mph (6 km/h)
- **7th** = 4.3 mph (7 km/h)
- **8th** = 5.0 mph (8 km/h)
- **9th** = 5.6 mph (9 km/h) – If Equipped

**NOTE:**
During HDC, the +/- shifter input is used for HDC target speed selection, but will not affect the gear chosen by the transmission. When actively controlling HDC, the transmission will shift appropriately for the driver-selected set speed and corresponding driving conditions.

**Driver Override**
The driver may override HDC activation with throttle or brake application at any time.

**Deactivating HDC**
HDC will be deactivated but remain available if any of the following conditions occur:
- Driver overrides HDC set speed with throttle or brake application.
- Vehicle speed exceeds 20 mph (32 km/h) but remains below 40 mph (64 km/h).
- Vehicle is on a downhill grade of insufficient magnitude, is on level ground, or is on an uphill grade.
- Vehicle is shifted to PARK.

**Disabling HDC**
HDC will be deactivated and disabled if any of the following conditions occur:
- The driver pushes the HDC switch.
- The driveline is shifted out of 4L Range.
- The parking brake is applied.
- The driver door opens.
- The vehicle is driven greater than 20 mph (32 km/h) for greater than 70 seconds.
- The vehicle is driven greater than 40 mph (64 km/h) (HDC exits immediately).
- HDC detects excessive brake temperature.

**Feedback To The Driver**
The instrument cluster has an HDC icon and the HDC switch has an LED icon, which offers feedback to the driver about the state HDC is in.
- The cluster icon and switch lamp will illuminate and remain on solid when HDC is enabled or activated. This is the normal operating condition for HDC.
- The cluster icon and switch lamp will flash for several seconds then extinguish when the
driver pushes the HDC switch but enable conditions are not met.

- The cluster icon and switch lamp will flash for several seconds, then extinguish when HDC disables due to excess speed.
- The cluster icon and switch lamp will flash when HDC deactivates due to overheated brakes. The flashing will stop and HDC will activate again once the brakes have cooled sufficiently.

**WARNING!**

HDC is only intended to assist the driver in controlling vehicle speed when descending hills. The driver must remain attentive to the driving conditions and is responsible for maintaining a safe vehicle speed.

**Hill Start Assist (HSA)**
The Hill Start Assist (HSA) system is designed to mitigate roll back from a complete stop while on an incline. If the driver releases the brake while stopped on an incline, HSA will continue to hold the brake pressure for a short period. If the driver does not apply the throttle before this time expires, the system will release brake pressure and the vehicle will roll down the hill as normal.

The following conditions must be met in order for HSA to activate:

- The feature must be enabled.
- The vehicle must be stopped.
- The park brake must be off.
- The driver door must be closed.
- The vehicle must be on a sufficient grade.
- The gear selection must match vehicle uphill direction (i.e., vehicle facing uphill is in forward gear; vehicle backing uphill is in REVERSE (R) gear).
- HSA will work in REVERSE (R) gear and all forward gears. The system will not activate if the transmission is in PARK (P) or NEUTRAL (N).

**WARNING!**

There may be situations where the Hill Start Assist (HSA) will not activate and slight rolling may occur, such as on minor hills or with a loaded vehicle, or while pulling a trailer. HSA is not a substitute for active driving involvement. It is always the driver’s responsibility to be attentive to distance to other vehicles, people, and objects, and most importantly brake operation to ensure safe operation of the vehicle under all road conditions. Your complete attention is always required while driving to maintain safe control of your vehicle. Failure to follow these warnings can result in a collision or serious personal injury.
Towing With HSA
HSA will also provide assistance to mitigate roll back while towing a trailer.

**WARNING!**

- If you use a trailer brake controller with your trailer, the trailer brakes may be activated and deactivated with the brake switch. If so, there may not be enough brake pressure to hold both the vehicle and the trailer on a hill when the brake pedal is released. In order to avoid rolling down an incline while resuming acceleration, manually activate the trailer brake or apply more vehicle brake pressure prior to releasing the brake pedal.
- HSA is not a parking brake. Always apply the parking brake fully when exiting your vehicle. Also, be certain to place the transmission in PARK (P).
- Failure to follow these warnings can result in a collision or serious personal injury.

**Disabling And Enabling HSA**

This feature can be turned on or turned off. To change the current setting, proceed as follows:

- If disabling Hill Start Assist (HSA) using your instrument cluster display, refer to “Instrument Cluster Display” in “Getting To Know Your Instrument Panel” for further information.
- If disabling HSA using Uconnect Settings, refer to “Uconnect Settings” in “Multimedia” for further information.

For vehicles not equipped with an instrument cluster display, perform the following steps:

1. Center the steering wheel (front wheels pointing straight forward).
2. Shift the transmission into PARK (P).
3. Apply the parking brake.
4. Start the engine.
5. Rotate the steering wheel slightly more than one-half turn to the left.
6. Push the “ESC OFF” button located in the lower switch bank below the climate control four times within 20 seconds. The “ESC Off Indicator Light” should turn on and turn off two times.
7. Rotate the steering wheel back to center and then an additional slightly more than one-half turn to the right.
8. Turn the ignition to the OFF mode and then back to ON. If the sequence was completed properly, the “ESC Off Indicator Light” will blink several times to confirm HSA is disabled.
9. Repeat these steps if you want to return this feature to its previous setting.

**Traction Control System (TCS)**

This system monitors the amount of wheel spin of each of the driven wheels. If wheel spin is detected, the Traction Control System (TCS) may apply brake pressure to the spinning wheel(s) and/or reduce engine power to provide enhanced acceleration and stability. A feature of the TCS, Brake Limited Differential (BLD), functions similar to a limited slip differential and controls the wheel spin across a driven axle. If one wheel on a driven axle is spinning faster than the other, the system will apply the brake of the spinning wheel. This will allow more...
engine power to be applied to the wheel that is not spinning. BLD may remain enabled even if TCS and ESC are in a reduced mode.

>>> CONDITION: {(Market=Brazil or Market='Latin America')} >>>

**Trailer Sway Control (TSC)**

Trailer Sway Control (TSC) uses sensors in the vehicle to recognize an excessively swaying trailer and will take the appropriate actions to attempt to stop the sway. TSC will become active automatically once an excessively swaying trailer is recognized.

**NOTE:**

TSC cannot stop all trailers from swaying. Always use caution when towing a trailer and follow the trailer tongue weight recommendations. Refer to “Trailer Towing” in “Starting And Operating” for further information.

When TSC is functioning, the “ESC Activation/ Malfunction Indicator Light” will flash, the engine power may be reduced and you may feel the brakes being applied to individual wheels to attempt to stop the trailer from swaying. TSC is disabled when the ESC system is in the “Partial Off” or “Full Off” modes.

<table>
<thead>
<tr>
<th>WARNING!</th>
</tr>
</thead>
<tbody>
<tr>
<td>If TSC activates while driving, slow the vehicle down, stop at the nearest safe location, and adjust the trailer load to eliminate trailer sway.</td>
</tr>
</tbody>
</table>

<<< CONDITION END <<<

**AUXILIARY DRIVING SYSTEMS**

**Blind Spot Monitoring (BSM) — If Equipped**

The Blind Spot Monitoring (BSM) system uses two radar-based sensors, located inside the taillights, to detect highway licensable vehicles (automobiles, trucks, motorcycles, etc.) that enter the blind spot zones from the rear/front/side of the vehicle.

When the vehicle is started, the BSM warning light will momentarily illuminate in both outside rearview mirrors to let the driver know that the system is operational. The BSM system sensors operate when the vehicle is in any forward gear or REVERSE (R), and enters standby mode when the vehicle is in PARK (P).

The BSM detection zone covers approximately one lane width on both sides of the vehicle 12 ft (3.8 m). The zone length starts at the outside rear view mirror and extends approximately 10 ft (3 m) beyond the rear bumper of the vehicle. The BSM system monitors the detection zones on both sides of the vehicle when the vehicle speed reaches approximately...
6 mph (10 km/h) or higher and will alert the driver of vehicles in these areas.

**NOTE:**

- The BSM system DOES NOT alert the driver about rapidly approaching vehicles that are outside the detection zones.
- The Blind Spot Monitoring (BSM) system may experience drop outs (blinking on and off) of the side mirror Warning Indicator lamps when a motorcycle or any small object remains at the side of the vehicle for extended periods of time (more than a couple of seconds).

The vehicle’s taillights, where the radar sensors are located, must remain free of snow, ice, and dirt/road contamination so that the BSM system can function properly. Do not block the taillights with foreign objects (bumper stickers, bicycle racks, etc.).

If the system detects degraded performance due to contamination or foreign objects, a message will warn you of a blocked sensor and the warning indicators in side view mirrors will be on. The warning indicators will remain illuminated until blockage clearing conditions are met. First clear the taillights around the sensors of the blockage. After removing the blockage, the following procedure can be used to reset the system:

- Cycle the ignition from ON to OFF and then back ON.

If the blockage message is still present after cycling the ignition and driving in traffic, check again for a blockage.

The BSM system notifies the driver of objects in the detection zones by illuminating the BSM warning light located in the outside mirrors, in addition to sounding an audible (chime) alert and reducing the radio volume. Refer to “Modes Of Operation” in this section for further information.

The BSM system monitors the detection zone from three different entry points (side, rear, front) while driving to see if an alert is necessary. The BSM system will issue an alert during these types of zone entries.

**Entering From The Side**

Vehicles that move into your adjacent lanes from either side of the vehicle.
### Side Monitoring

**Entering From The Rear**

Vehicles that come up from behind your vehicle on either side and enter the rear detection zone with a relative speed of less than 30 mph (48 km/h).

### Rear Monitoring

**Overtaking Traffic**

If you pass another vehicle slowly with a relative speed less than 15 mph (24 km/h) and the vehicle remains in the blind spot for approximately 1.5 seconds, the warning light will be illuminated. If the difference in speed between the two vehicles is greater than 15 mph (24 km/h), the warning light will not illuminate.

**Overtaking/Approaching**

The BSM system is designed not to issue an alert on stationary objects such as guardrails, posts, walls, foliage, berms, snow banks, car washes, etc. However, occasionally the system may alert on such objects. This is normal operation and your vehicle does not require service.

The BSM system will not alert you of objects that are traveling in the opposite direction of the vehicle in adjacent lanes.
The Rear Cross Path (RCP) feature is intended to aid the driver when backing out of parking spaces where their vision of oncoming vehicles may be blocked. Proceed slowly and cautiously out of the parking space until the rear end of the vehicle is exposed. The RCP system will then have a clear view of the cross traffic, and if an oncoming vehicle is detected, alert the driver.

**RCP Detection Zones**

RCP monitors the rear detection zones on both sides of the vehicle, for objects that are moving toward the side of the vehicle with a minimum speed of approximately 3 mph (5 km/h), to objects moving a maximum of approximately 20 mph (32 km/h), such as in parking lot situations.

**NOTE:**

In a parking lot situation, oncoming vehicles can be obscured by vehicles parked on either side.

If the sensors are blocked by other structures or vehicles, the system will not be able to alert the driver.

When RCP is on and the vehicle is in REVERSE (R), the driver is alerted using both the visual and audible alarms, including reducing the radio volume.

**WARNING!**

The Blind Spot Monitoring system is only an aid to help detect objects in the blind spot zones. The BSM system is not designed to detect pedestrians, bicyclists, or animals. Even if your vehicle is equipped with the BSM system, always check your vehicle’s mirrors, glance over your shoulder, and use your turn signal before changing lanes. Failure to do so can result in serious injury or death.

**Rear Cross Path (RCP)**

The Rear Cross Path (RCP) feature is intended to aid the driver when backing out of parking spaces where their vision of oncoming vehicles may be blocked. Proceed slowly and cautiously out of the parking space until the rear end of the vehicle is exposed. The RCP system will then have a clear view of the cross traffic, and if an oncoming vehicle is detected, alert the driver.

**WARNING!**

Rear Cross Path Detection (RCP) is not a back up aid system. It is intended to be used to help a driver detect an oncoming vehicle in a parking lot situation. Drivers must be careful when backing up, even when using RCP. Always check carefully behind your vehicle, look behind you, and be sure to check for pedestrians, animals, other vehicles, obstructions, and blind spots before backing up. Failure to do so can result in serious injury or death.

**Modes Of Operation**

Three selectable modes of operation are available in the Uconnect System. Refer to “Uconnect Settings” in “Multimedia” for further information.
Blind Spot Alert Lights Only
When operating in Blind Spot Alert mode, the BSM system will provide a visual alert in the appropriate side view mirror based on a detected object. However, when the system is operating in Rear Cross Path (RCP) mode, the system will respond with both visual and audible alerts when a detected object is present. Whenever an audible alert is requested, the radio is muted.

Blind Spot Alert Lights/Chime
When operating in Blind Spot Alert Lights/Chime mode, the BSM system will provide a visual alert in the appropriate side view mirror based on a detected object. If the turn signal is then activated, and it corresponds to an alert present on that side of the vehicle, an audible chime will also be sounded. Whenever a turn signal and detected object are present on the same side at the same time, both the visual and audible alerts will be issued. In addition to the audible alert the radio (if on) will also be muted.

NOTE:
Whenever an audible alert is requested by the BSM system, the radio is also muted.

When the system is in RCP, the system shall respond with both visual and audible alerts when a detected object is present. Whenever an audible alert is requested, the radio is also muted. Turn/hazard signal status is ignored; the RCP state always requests the chime.

Blind Spot Alert Off
When the BSM system is turned off there will be no visual or audible alerts from either the BSM or RCP systems.

NOTE:
The BSM system will store the current operating mode when the vehicle is shut off. Each time the vehicle is started the previously stored mode will be recalled and used.

Trailer Merge Assist — If Equipped

NOTE:
When Trailer Merge Assist is activated, Rear Cross Path is disabled.

NOTE:
When a trailer with an electric brake is connected to the vehicle, the Instrument Cluster display will provide a menu to allow a selection of the trailer type. There will be two options provided: Conventional and Goose/Fifth Wheel. Goose/Fifth Wheel Trailer is incompatible and when selected, the BSM system will disable until the trailer is disconnected. If the wrong option is selected, the system can be reset by either disconnecting and reconnecting the trailer harness connector or disabling then re-enabling the Blind Spot Monitoring System in the customer settings in the Uconnect. This will prompt the trailer selection menu again to allow for the correct selection.

Trailer Merge Assist is a function of the Blind Spot Monitoring (BSM) system that extends the blind spot zone to work while pulling a trailer. Trailer Merge Assist consists of three sub functions:
- Automatic Trailer Detection
- Trailer Length Detection
- Trailer Merge Warning
Blind Spot Zones With Trailer Merge Assist

1 — Vehicle
2 — Trailer

Automatic Trailer Detection
There are two modes of operation for the detection of the trailer length:

- **Automatic Mode** — When “Auto Mode” is selected, the system will use the blind spot sensors to automatically determine the presence and length of a trailer. The presence of a trailer will be detected using the blind spot radar within 90 seconds of forward movement of the vehicle. The vehicle must be moving above 6 mph (10 km/h) to activate the feature. Once the trailer has been detected, the system will default to the maximum blind spot zone until the length has been verified. You will see “Auto” in the instrument panel cluster.

- **Max Mode** — When “Max Mode” is selected, the system will default to the maximum blind spot zone regardless of what size trailer is attached.

**NOTE:**
Selected setting is stored when the ignition is placed in the OFF position. To change this setting, it must be selected through the Uconnect Settings. Refer to “Uconnect Settings” in “Multimedia” for further information.

Trailer Length Detection
Once the trailer presence has been established, the trailer length will be established (by making a 90 degree turn) and then the trailer length category (example 10-20 ft (3 m to 6 m)) will be displayed. This can take up to 30 seconds after completing the turn.

**NOTE:**
During the same ignition cycle, if the vehicle is at a standstill for a minimum of 90 seconds, a new “trailer detection request” is enabled by the system once the vehicle resumes motion.

Maximum length supported by the Trailer Merge Assist feature is 39.5 ft (12 m). Trailer length is considered the forward most portion of the trailer hitch to the rearward most portion of the body, bumper, or ramp of the trailer.

Maximum width supported by the Trailer Merge Assist feature is 8.5 ft (2.59 m). Trailer width is measured at the widest portion of the trailer and may include wheels, tires, finders, or rails.
NOTE:
Fifth wheel or gooseneck trailers are not supported by Trailer Merge Assist.

Trailer Length Detection
1 — Trailer Length
2 — Trailer Width
3 — Trailer Hitch

Trailer length will be identified and placed into one of the following categories:
- Trailer length up to 10 ft (3 m) — Blind spot zone will be adjusted to 10 ft (3 m) 10 ft 3 m.
- Trailer length between 10 ft to 20 ft (3 m to 6 m) — Blind spot zone will be adjusted to 20 ft (6 m) 20 ft 6 m.
- Trailer length between 20 ft to 30 ft (6 m to 9 m) — Blind spot zone will be adjusted to 30 ft (9 m) 30 ft 9 m.
- Trailer length between 30 ft and 39.5 ft (9 m to 12 m) — Blind spot zone will be adjusted to MAX distance  

NOTE:
Trailer length is determined within +/- 3 ft (1 m) of actual length. Trailers that are the same size as the category limit, 10/20/30 ft (3/6/9 m), could be subject to being placed in the category above or below the correct one.

Trailer Merge Warning
Trailer Merge Warning is the extension of the blind spot function to cover the length of the trailer, plus a safety margin, to warn the driver when there is a vehicle in the adjacent lane. The driver is alerted by the illumination of the BSM warning light located in the outside mirror on the side the other vehicle is detected. In addition, an audible (chime) alert will be heard and radio volume reduced. Refer to “Modes Of Operation” in this section for further information.

NOTE:
- The Trailer Merge Alert system DOES NOT alert the driver about rapidly approaching vehicles that are outside the detection zones.
- The Blind Spot Monitoring (BSM) system may experience drop outs (blinking on and off) of the side mirror warning indicator lamps when a motorcycle or any small object remains at the side of the vehicle for extended periods of time (more than a couple of seconds).
- Crowded areas such as parking lots, neighborhoods, etc. May lead to an increased amount of false alerts. This is normal operation.
The Forward Collision Warning (FCW) with Mitigation system provides the driver with audible warnings, visual warnings (within the instrument cluster display), and may apply a brake jerk to warn the driver when it detects a potential frontal collision. The warnings and limited braking are intended to provide the driver with enough time to react, avoid or mitigate the potential collision.

NOTE:
FCW monitors the information from the forward looking sensors as well as the Electronic Brake Control (EBC) system, to calculate the probability of a forward collision. When the system determines that a forward collision is probable, the driver will be provided with audible and visual warnings as well as a possible brake jerk warning.

If the driver does not take action based upon these progressive warnings, then the system will provide a limited level of active braking to help slow the vehicle and mitigate the potential forward collision. If the driver reacts to the warnings by braking and the system determines that the driver intends to avoid the collision by braking but has not applied sufficient brake force, the system will compensate and provide additional brake force as required.

If a FCW with Mitigation event begins at a speed below 32 mph (52 km/h), the system may provide the maximum braking possible to mitigate the potential forward collision. If the Forward Collision Warning with Mitigation event stops the vehicle completely, the system will hold the vehicle at standstill for two seconds and then release the brakes.

WARNING!

The Blind Spot Monitoring system is only an aid to help detect objects in the blind spot zones. The BSM system is not designed to detect pedestrians, bicyclists, or animals. Even if your vehicle is equipped with the BSM system, always check your vehicle’s mirrors, glance over your shoulder, and use your turn signal before changing lanes. Failure to do so can result in serious injury or death.

NOTE:

- The minimum speed for FCW activation is 3 mph (5 km/h).
- The FCW alerts may be triggered on objects other than vehicles such as guard rails or sign posts based on the course prediction.
This is expected and is a part of normal FCW activation and functionality.

- It is unsafe to test the FCW system. To prevent such misuse of the system, after four Active Braking events within a key cycle, the Active Braking portion of FCW will be deactivated until the next key cycle.

- The FCW system is intended for on-road use only. If the vehicle is taken off-road, the FCW system should be deactivated to prevent unnecessary warnings to the surroundings.

### WARNING!

Forward Collision Warning (FCW) is not intended to avoid a collision on its own, nor can FCW detect every type of potential collision. The driver has the responsibility to avoid a collision by controlling the vehicle via braking and steering. Failure to follow this warning could lead to serious injury or death.

### Turning FCW On or Off

>>> CONDITION: {Market=Brazil or Market='Latin America'} >>>

The default status of FCW is “on”; this allows the system to warn you of a possible collision with the vehicle in front of you.

<<< CONDITION END <<<

The FCW button is located in the Uconnect display in the control settings. Refer to “Uconnect Settings” in “Multimedia” for further information.

- To turn the FCW system on, press the forward collision button once.

- To turn the FCW system off, press the forward collision button once.

**NOTE:**

- When the FCW is “on”, this allows the system to warn the driver of a possible collision with the vehicle in front.

- When the FCW is “off”, this prevents the system from providing limited active braking, or additional brake support if the driver is not braking adequately in the event of a potential frontal collision.

- When FCW status is set to “Only Warning”, this prevents the system from providing limited active braking, or additional brake support if the driver is not braking adequately in the event of a potential frontal collision.

- When FCW status is set to “Warning and Braking”, this allows the system to warn the driver of a possible collision with the vehicle in front using audible/visual warnings and it applies autonomous braking.

- The FCW system state is defaulted to “Full On” from one ignition cycle to the next. If the system is turned off, it will reset to “Full On” when the vehicle is restarted.

### FCW Braking Status And Sensitivity

The FCW Sensitivity and Active Braking status are programmable through the Uconnect System. Refer to “Uconnect Settings” in “Multimedia” for further information.

- Far

  - When the sensitivity of FCW is set to the “Far” setting and the system status is “Only Warning”, this allows the system to
warn the driver of a possible more distant collision with the vehicle in front using audible/visual warnings.

- More cautious drivers that do not mind frequent warnings may prefer this setting.

- Medium
  - When the sensitivity of FCW is set to the “Medium” setting and the system status is “Only Warning”, this allows the system to warn the driver of a possible collision with the vehicle in front using audible/visual warnings.

- Near
  - When the sensitivity of FCW is set to the “Near” setting and the system status is “Only Warning”, this allows the system to warn the driver of a possible closer collision with the vehicle in front using audible/visual warnings.

  This setting provides less reaction time than the “Far” and “Medium” settings, which allows for a more dynamic driving experience.

  - More dynamic or aggressive drivers that want to avoid frequent warnings may prefer this setting.

**FCW Limited Warning**

If the instrument cluster displays “ACC/FCW Limited Functionality” or “ACC/FCW Limited Functionality Clean Front Windshield” momentarily, there may be a condition that limits FCW functionality. Although the vehicle is still driveable under normal conditions, the active braking may not be fully available. Once the condition that limited the system performance is no longer present, the system will return to its full performance state. If the problem persists, see an authorized dealer.

**Service FCW Warning**

If the system turns off, and the instrument cluster displays:

- ACC/FCW Unavailable Service Required
- Cruise/FCW Unavailable Service Required

This indicates there is an internal system fault. Although the vehicle is still drivable under normal conditions, have the system checked by an authorized dealer.

**Tire Pressure Monitoring System (TPMS)**

The Tire Pressure Monitoring System (TPMS) will warn the driver of a low tire pressure based on the vehicle recommended cold placard pressure.

**NOTE:**

The TPMS Warning Light will illuminate in the instrument cluster and a chime will sound when tire pressure is low in one or more of the four active road tires. In addition, the instrument cluster will display a graphic showing the pressure values of each tire with the low tire pressure values in a different color, or the Uconnect radio will display a TPMS message, when this occurs you must increase the tire pressure to the recommended cold placard pressure in order for the TPMS Warning Light to turn off.

The tire pressure will vary with temperature by about 1 psi (7 kPa) for every 12°F (6.5°C). This means that when the outside temperature decreases, the tire pressure will decrease. Tire pressure should always be set based on cold inflation tire pressure. This is defined as the tire pressure after the vehicle has not been driven...
SAFETY

for at least three hours, or driven less than 1 mile (1.6 km) after a three hour period. The cold tire inflation pressure must not exceed the maximum inflation pressure molded into the tire sidewall. Refer to “Tires” in “Servicing And Maintenance” for information on how to properly inflate the vehicle’s tires. The tire pressure will also increase as the vehicle is driven - this is normal and there should be no adjustment for this increased pressure.

The TPMS will warn the driver of a low tire pressure if the tire pressure falls below the low-pressure warning limit for any reason, including low temperature effects and natural pressure loss through the tire.

The TPMS will continue to warn the driver of low tire pressure as long as the condition exists, and will not turn off until the tire pressure is at or above the recommended cold placard pressure. Once the low TPMS Warning Light illuminates, you must increase the tire pressure to the recommended cold placard pressure in order for the TPMS Warning Light to turn off. The system will automatically update and the TPMS Warning Light will turn off once the system receives the updated tire pressures. The vehicle may need to be driven for up to 20 minutes above 15 mph (24 km/h) in order for the TPMS to receive this information.

NOTE:
When filling warm tires, the tire pressure may need to be increased up to an additional 4 psi (28 kPa) above the recommended cold placard pressure in order to turn the TPMS Warning Light off.

For example, your vehicle may have a recommended cold (parked for more than three hours) placard pressure of 30 psi (207 kPa). If the ambient temperature is 68°F (20 °C) and the measured tire pressure is 27 psi (186 kPa), a temperature drop to 20°F (-7 °C) will decrease the tire pressure to approximately 23 psi (158 kPa). This tire pressure is sufficiently low enough to turn on the TPMS Warning Light. Driving the vehicle may cause the tire pressure to rise to approximately 27 psi (186 kPa), but the TPMS Warning Light will still be on. In this situation, the TPMS Warning Light will turn off only after the tires are inflated to the vehicle’s recommended cold placard pressure value.

CAUTION!

- The TPMS has been optimized for the original equipment tires and wheels. TPMS pressures and warning have been established for the tire size equipped on your vehicle. Undesirable system operation or sensor damage may result when using replacement equipment that is not of the same size, type, and/or style. Aftermarket wheels can cause sensor damage.

- Using aftermarket tire sealants may cause the Tire Pressure Monitoring System (TPMS) sensor to become inoperable. After using an aftermarket tire sealant it is recommended that you take your vehicle to an authorized dealership to have your sensor function checked.

- After inspecting or adjusting the tire pressure always reinstall the valve stem cap. This will prevent moisture and dirt from entering the valve stem, which could damage the TPMS sensor.
NOTE:

- The TPMS is not intended to replace normal tire care and maintenance or to provide warning of a tire failure or condition.

- If your vehicle is not equipped with the Tire Fill Alert feature the TPMS should not be used as a tire pressure gauge while adjusting your tire pressure.

- Driving on a significantly under-inflated tire causes the tire to overheat and can lead to tire failure. Under-inflation also reduces fuel efficiency and tire tread life, and may affect the vehicle’s handling and stopping ability.

- The TPMS is not a substitute for proper tire maintenance, and it is the driver’s responsibility to maintain correct tire pressure using an accurate tire pressure gauge, even if under-inflation has not reached the level to trigger illumination of the TPMS Warning Light.

- Seasonal temperature changes will affect tire pressure, and the TPMS will monitor the actual tire pressure in the tire.

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Example: Tire Pressure Monitoring Display

The Tire Pressure Monitoring System (TPMS) uses wireless technology with wheel rim mounted electronic sensors to monitor tire pressure levels. Sensors, mounted to each wheel as part of the valve stem, transmit tire pressure readings to the receiver module.

**NOTE:**
It is particularly important for you to check the tire pressure in all of the tires on your vehicle monthly and to maintain the proper pressure.

The TPMS consists of the following components:

- Receiver module
- Four Tire Pressure Monitoring sensors
- Various Tire Pressure Monitoring System messages, which display in the instrument cluster
- Tire Pressure Monitoring System Warning Light

**Tire Pressure Monitoring Low Pressure Warnings**

The “Tire Pressure Monitoring System (TPMS) Warning Light” will illuminate in the instrument cluster and a chime will sound when tire pressure is low in one or more of the four active road tires. In addition, the instrument cluster will display a graphic showing the pressure values of each tire with the low tire pressure values in a
different color. An "Inflate to XX" message will also be displayed.

**Inflate Front to 39 PSI**

32  32

**Inflate Rear to 42 PSI**

32  32

**Tire Pressure Low Tire Pressure Display**

Should this occur, you should stop as soon as possible and inflate the tires with a low pressure condition (those in a different color in the instrument cluster graphic) to the vehicle’s recommended cold placard pressure inflation value as shown in the "Inflate to XX" message. Once the system receives the updated tire pressures, the system will automatically update, the graphic display in the instrument cluster will return to its original color, and the “Tire Pressure Monitoring System Warning Light” will turn off. The vehicle may need to be driven for up to 20 minutes above 15 mph (24 km/h) in order for the TPMS to receive this information.

**NOTE:**

When filling warm tires, the tire pressure may need to be increased up to an additional 4 psi (28 kPa) above the recommended cold placard pressure in order to turn the Tire Pressure Monitoring System Warning Light off.

**Service TPMS Warning**

If a system fault is detected, the “Tire Pressure Monitoring System (TPMS) Warning Light” will flash on and off for 75 seconds and then remain on solid. The system fault will also sound a chime. In addition, the instrument cluster will display a “SERVICE TPM SYSTEM” message for a minimum of five seconds and then display dashes (--) in place of the pressure value to indicate which sensor is not being received. If the ignition switch is cycled, this sequence will repeat, providing the system fault still exists. If the system fault no longer exists, the “Tire Pressure Monitoring System Warning Light” will no longer flash, and the pressure value will display in place of the dashes. A system fault can occur due to any of the following:

- Signal interference due to electronic devices or driving next to facilities emitting the same radio frequencies as the Tire Pressure Monitor (TPM) sensors
- Installing aftermarket window tinting that contains materials that may block radio wave signals
- Accumulation of snow or ice around the wheels or wheel housings
- Using tire chains on the vehicle
- Using wheels/tires not equipped with TPM sensors

A system fault may occur due to an incorrect TPM sensor location condition. When a system fault occurs due to an incorrect TPM sensor location, the “Tire Pressure Monitoring System (TPMS) Warning Light” will flash on and off for 75 seconds and then remain on solid. The system fault will also sound a chime. In addition, the instrument cluster will display a “Tire Pressure Temporarily Unavailable” message in place of the tire pressure display screen. If the ignition switch is cycled, this sequence will repeat, providing the system fault still exists. If the system fault no longer exists, the “Tire Pressure Monitoring System Warning Light” will no longer flash and the tire pressure
display screen will be displayed showing the tire pressure values the correct locations.

Vehicles With Non-Matching Full Size Spare Or Compact Spare

- The non-matching full size spare or compact spare tire does not have a TPM sensor. Therefore, the TPMS will not monitor the pressure in the non matching full size spare or compact spare tire.

- If you install the non-matching full size spare or compact spare tire in place of a road tire that has a pressure below the low-pressure warning limit, upon the next ignition switch cycle, the Tire Pressure Monitoring System (TPMS) Warning Light will flash on and off for 75 seconds and then remain on solid, and the instrument cluster will display a "SERVICE TPM SYSTEM" message for a minimum of five seconds and then display dashes (--) in place of the pressure value.

- For each subsequent ignition switch cycle, a chime will sound, the Tire Pressure Monitoring System (TPMS) Warning Light will flash on and off for 75 seconds and then remain on solid, and the instrument cluster will display a "SERVICE TPM SYSTEM" message for a minimum of five seconds and then display dashes (--) in place of the pressure value.

- Once you repair or replace the original road tire and reinstall it on the vehicle in place of the non-matching full size spare or compact spare, the TPMS will update automatically. In addition, the Tire Pressure Monitoring System (TPMS) Warning Light will turn off and the instrument cluster will display a new pressure value instead of dashes (--), as long as no tire pressure is below the low-pressure warning limit in any of the four active road tires. The vehicle may need to be driven for up to 20 minutes above 15 mph (24 km/h) in order for the TPMS to receive this information.

Trailer Tire Pressure Monitoring System (TTPMS)

The Trailer Tire Pressure Monitoring System (TTPMS) is a feature that displays the trailer tire pressure values and warns the driver of a low tire pressure event based on the drivers set target tire pressure value, through TTPMS settings found in the radio.

The TTPMS monitors the pressure of each tire and warns the driver through the instrument cluster, when either a low tire pressure condition falls below 25% of the drivers set pressure or if a system malfunction occurs. The instrument cluster will display the actual tire pressure or dashes for each of the trailer tires in the correct trailer position, based on trailer configuration. The TTPMS system can support up to 12 trailer tires per configured trailer on up to four configurable trailers. Refer to “Uconnect Settings” in “Multimedia” for further information.
Trailer Tire Pressure Sensor Pairing

In order to use this feature, the provided tire pressure sensors must be installed in the desired trailer tires and the sensors must be paired to the truck. If the target trailer requires more than the provided four sensors, additional sensors can be purchased at an authorized Ram dealership.

With the sensors installed and the trailer near or connected to your Ram truck, initiate the pairing process by entering the settings menu in the radio and select trailer. Refer to “Uconnect Settings” in “Multimedia” for further information. Select the desired trailer profile to pair to, open the “Tire Pressure” menu, and hit “Setup All Tires.”

**NOTE:**
The vehicle may not be driven until the pairing process is complete.

Follow the on screen prompts to select the number of axles (1 - 3), the number of trailer tires (2, 4, 6, 8, or 12), and the set trailer tire pressure. The range is selectable anywhere between 25-125 PSI (172-862 kPa).

Once PSI (kPa) is programmed, the pairing screen appears. Tire sensors must be paired in order shown. Starting with Tire 1, deflate tire by 5 PSI (34 kPa) and wait for a horn chirp. It may take up to three minutes for the chirp to occur, indicating that the sensor has paired. Repeat process on each tire, in order, until complete. Do not exit the pairing screen until process is complete. If pairing was unsuccessful, a double horn chirp will sound, and a prompt on the touchscreen will allow you to retry the procedure; “Retry” will only appear when setup fails. Each tire must be successfully paired during a single pairing process to receive the success screen.

**NOTE:**
If the pairing process times out after three minutes of no communication with a sensor, a double horn chirp will occur indicating the pairing has failed and a message will display on the radio indicating the process was unsuccessful. Under certain circumstances, the
double horn chirp may continue to happen every three minutes indicating the failed pairing. If this happens, the horn chirping may be canceled by cycling the ignition button off and then back to run position.

**Tire Pressure Monitoring Low Pressure Warnings**

When a tire pressure low in one or more of the active road tires is detected, the instrument cluster will display a message stating “Trailer Tire Pressure Low”. The instrument cluster will then display the TTPMS graphic showing the pressure values of each tire with the low tire pressure values in a different color.

Should this occur, you should stop as soon as possible and inflate the tires with a low pressure condition (those in a different color in the instrument cluster graphic) to the customer programmed target tire pressure value as shown at the top of the TTPMS instrument cluster graphic. Once the tire(s) are inflated, the system will automatically update the graphic display in the instrument cluster, returning to its original color. The vehicle may need to be driven for up to 10 minutes above 15 mph (24 km/h) in order for the TTPMS to receive the updated information.

**Service TTPMS Warning**

If a system fault is detected, the instrument cluster will display a “Trailer Tire Pressure System Service Required” message for a minimum of five seconds.

Once the system fault is corrected the "Trailer Tire Pressure System Service Required" message will no longer be displayed. The vehicle may need to be driven for up to 10 minutes above 15 mph (24 km/h) in order for the TTPMS to receive the trailer tire pressure information.

**Trailer Tire Pressure System Not Configured**

A “Trailer Tire Pressure System Not Configured” message will be displayed in the Instrument Cluster on the TTPM instrument cluster graphic when a trailer number is selected that has not had trailer tire pressure sensors paired. To correct this condition, see “Trailer Tire Pressure Sensor Pairing” in “Multimedia”.

**Trailer Sensors Detected Do Not Match Active Trailer**

The “Trailer Sensors Detected Do Not Match Active Trailer” message will be displayed in the Instrument Cluster when the trailer sensors being received by the TTPM module do not match the trailer sensors paired to the current trailer number selected. This message will be displayed when the sensors being received completely match the sensors paired to another trailer number configured in the TTPM module. To correct this condition, the correct trailer number must be selected in the radio. Refer to the “Uconnect Settings” in “Multimedia” for further information.

**Tire Fill Alert**

This feature notifies the user when the placard tire pressure is attained while inflating or deflating the tire.

The customer may choose to disable or enable the Tire Fill Alert feature through use of the customer settings in the radio.

**NOTE:**

- Only one tire can be filled at a time when using the Tire Fill Alert system.
- The Tire Fill Alert feature cannot be entered if an existing TPM system fault is set to “active” or if the system is in deactivation mode (if equipped).

The system will be activated when the Tire Pressure Monitoring (TPM) receiver module detects a change in tire pressure. The ignition
must be in the ON/RUN mode, with the transmission in PARK (P).

**NOTE:**
It is not required to have the engine running to enter Tire Fill Alert mode.

The hazard lamps will come on to confirm the vehicle is in Tire Fill Alert mode.

When Tire Fill Alert Mode is entered, the tire pressure display screen will be displayed in the instrument cluster.

**Operation:**
- The horn will chirp once to let the user know when to stop filling the tire, when it reaches recommended pressure.
- The horn will chirp three times if the tire is over filled and will continue to chirp every five seconds if the user continues to inflate the tire.
- The horn will chirp once again when enough air is let out to reach proper inflation level.
- The horn will also chirp three times if the tire is then under-inflated and will continue to chirp every five seconds if the user continues to deflate the tire.

### Selectable Tire Fill Alert (STFA)

The Selectable Tire Fill Alert (STFA) system is an optional feature that is included as part of the normal Tire Fill Alert system. The system is designed to allow the customer to select a pressure to inflate or deflate the vehicle's front and rear axle tires to and to provide feedback to the customer while inflating or deflating the vehicle's tires.

In the Selectable Tire Fill Alert customer settings menu in the radio, the customer will be able to select a pressure setting for both the front and rear axle tire pressures by scrolling through a pressure range from XX to 15 psi in 1 psi increments for each axle setting. XX = the vehicle’s cold placard pressure values for the front and rear axles as shown on the vehicle placard pressure label.

The customer may also store the pressure values chosen for each axle in the radio as a preset pressure. The customer will be allowed to store up to two sets of preset values in the radio for the front and rear axle pressure values. Once the customer selects the tire pressures for the front and rear axles that they want to inflate or deflate to, they can begin inflating or deflating one tire at a time.

**NOTE:**
The STFA system will only support inflating or deflating one tire at a time.

The system will be activated when the TPM receiver module detects a change in tire pressure. The ignition must be in the RUN mode, with the transmission in PARK (P).

The hazard lamps will come on to confirm the vehicle is in Tire Fill Alert mode.

When Tire Fill Alert Mode is entered, the tire pressure display screen will be displayed in the instrument cluster.

**Operation:**
- The horn will chirp once when the selected pressure is reached to let the user know when to stop inflating or deflating the tire.
- The horn will chirp three times if the tire is over inflated or over deflated and will continue to chirp every five seconds if the user continues to inflate or deflate the tire.
- The horn will chirp once again when enough air is added or removed to reach proper selected pressure level.
Occupant Restraint Systems

Some of the most important safety features in your vehicle are the restraint systems:

Occupant Restraint Systems Features

- Seat Belt Systems
- Supplemental Restraint Systems (SRS) Air Bags
- Child Restraints

Some of the safety features described in this section may be standard equipment on some models, or may be optional equipment on others. If you are not sure, ask an authorized dealer.

Important Safety Precautions

Please pay close attention to the information in this section. It tells you how to use your restraint system properly, to keep you and your passengers as safe as possible.

Here are some simple steps you can take to minimize the risk of harm from a deploying air bag:

1. Children 12 years old and under should always ride buckled up in the rear seat of a vehicle with a rear seat.

2. A child who is not big enough to wear the vehicle seat belt properly (Refer to “Child Restraints” in this section for further information) must be secured in the appropriate child restraint or belt-positioning booster seat in a rear seating position.

3. If a child from 2 to 12 years old (not in a rear-facing child restraint) must ride in the front passenger seat, move the seat as far back as possible and use the proper child restraint (Refer to “Child Restraints” in this section for further information).

4. Never allow children to slide the shoulder belt behind them or under their arm.
5. You should read the instructions provided with your child restraint to make sure that you are using it properly.

6. All occupants should always wear their lap and shoulder belts properly.

7. The driver and front passenger seats should be moved back as far as practical to allow the front air bags room to inflate.

8. Do not lean against the door or window. If your vehicle has side air bags, and deployment occurs, the side air bags will inflate forcefully into the space between occupants and the door and occupants could be injured.

9. If the air bag system in this vehicle needs to be modified to accommodate a disabled person, refer to the “Customer Assistance” section for customer service contact information.

>>> CONDITION: {Market=Brazil or Market='Latin America'} >>>

<<< CONDITION END <<<

Seat Belt Systems

Buckle up even though you are an excellent driver, even on short trips. Someone on the road may be a poor driver and could cause a collision that includes you. This can happen far away from home or on your own street.

Research has shown that seat belts save lives, and they can reduce the seriousness of injuries in a collision. Some of the worst injuries happen when people are thrown from the vehicle. Seat belts reduce the possibility of ejection and the risk of injury caused by striking the inside of the vehicle. Everyone in a motor vehicle should be belted at all times.

Enhanced Seat Belt Use Reminder System (BeltAlert)

Driver And Passenger BeltAlert — If Equipped

BeltAlert is a feature intended to remind the driver and outboard front seat passenger (if equipped with outboard front passenger seat BeltAlert) to buckle their seat belts. The BeltAlert feature is active whenever the ignition switch is in the START or ON/RUN position.

Initial Indication

If the driver is unbuckled when the ignition switch is first in the START or ON/RUN position,
a chime will signal for a few seconds. If the driver or outboard front seat passenger (if equipped with outboard front passenger seat BeltAlert) is unbuckled when the ignition switch is first in the START or ON/RUN position the Seat Belt Reminder Light will turn on and remain on until both outboard front seat belts are buckled. The outboard front passenger seat BeltAlert is not active when an outboard front passenger seat is unoccupied.

**BeltAlert Warning Sequence**
The BeltAlert warning sequence is activated when the vehicle is moving above a specified vehicle speed range and the driver or outboard front seat passenger is unbuckled (if equipped with outboard front passenger seat BeltAlert) (the outboard front passenger seat BeltAlert is not active when the outboard front passenger seat is unoccupied). The BeltAlert warning sequence starts by blinking the Seat Belt Reminder Light and sounding an intermittent chime. Once the BeltAlert warning sequence has completed, the Seat Belt Reminder Light will remain on until the seat belts are buckled. The BeltAlert warning sequence may repeat based on vehicle speed until the driver and occupied outboard front seat passenger seat belts are buckled. The driver should instruct all occupants to buckle their seat belts.

**Change Of Status**
If the driver or outboard front seat passenger (if equipped with outboard front passenger seat BeltAlert) unbuckles their seat belt while the vehicle is traveling, the BeltAlert warning sequence will begin until the seat belts are buckled again. The outboard front passenger seat BeltAlert is not active when the outboard front passenger seat is unoccupied. BeltAlert may be triggered when an animal or other items are placed on the outboard front passenger seat or when the seat is folded flat (if equipped). It is recommended that pets be restrained in the rear seat (if equipped) in pet harnesses or pet carriers that are secured by seat belts, and cargo is properly stowed.

>>> CONDITION: {Market=Brazil or Market='Latin America'} >>>

BeltAlert can be activated or deactivated by an authorized dealer. FCA does not recommend deactivating BeltAlert.

<<< CONDITION END <<<

**Lap/Shoulder Belts**
All seating positions except the Mega Cab and Crew Cab front center seating position have combination lap/shoulder belts. The seat belt webbing retractor will lock only during very sudden stops or collisions. This feature allows the shoulder part of the seat belt to move freely with you under normal conditions. However, in a collision the seat belt will lock and reduce your risk of striking the inside of the vehicle or being thrown out of the vehicle.
WARNING!

- Relying on the air bags alone could lead to more severe injuries in a collision. The air bags work with your seat belt to restrain you properly. In some collisions, the air bags won’t deploy at all. Always wear your seat belt even though you have air bags.

- In a collision, you and your passengers can suffer much greater injuries if you are not properly buckled up. You can strike the interior of your vehicle or other passengers, or you can be thrown out of the vehicle. Always be sure you and others in your vehicle are buckled up properly.

- It is dangerous to ride in a cargo area, inside or outside of a vehicle. In a collision, people riding in these areas are more likely to be seriously injured or killed.

- Do not allow people to ride in any area of your vehicle that is not equipped with seats and seat belts.

(WARNING! (Continued)

- Be sure everyone in your vehicle is in a seat and using a seat belt properly. Occupants, including the driver, should always wear their seat belts whether or not an air bag is also provided at their seating position to minimize the risk of severe injury or death in the event of a crash.

- Wearing your seat belt incorrectly could make your injuries in a collision much worse. You might suffer internal injuries, or you could even slide out of the seat belt. Follow these instructions to wear your seat belt safely and to keep your passengers safe, too.

- Two people should never be belted into a single seat belt. People belted together can crash into one another in a collision, hurting one another badly. Never use a lap/shoulder belt or a lap belt for more than one person, no matter what their size.

(WARNING! (Continued)

- A lap belt worn too high can increase the risk of injury in a collision. The seat belt forces won’t be at the strong hip and pelvic bones, but across your abdomen. Always wear the lap part of your seat belt as low as possible and keep it snug.

- A twisted seat belt may not protect you properly. In a collision, it could even cut into you. Be sure the seat belt is flat against your body, without twists. If you can’t straighten a seat belt in your vehicle, take it to an authorized dealer immediately and have it fixed.

- A seat belt that is buckled into the wrong buckle will not protect you properly. The lap portion could ride too high on your body, possibly causing internal injuries. Always buckle your seat belt into the buckle nearest you.

- A seat belt that is too loose will not protect you properly. In a sudden stop, you could move too far forward, increasing the possibility of injury. Wear your seat belt snugly.

(WARNING! (Continued)
Lap/Shoulder Belt Operating Instructions

1. Enter the vehicle and close the door. Sit back and adjust the seat.

2. The seat belt latch plate is above the back of the front seat, and next to your arm in the rear seat (for vehicles equipped with a rear seat). Grasp the latch plate and pull out the seat belt. Slide the latch plate up the webbing as far as necessary to allow the seat belt to go around your lap.

3. When the seat belt is long enough to fit, insert the latch plate into the buckle until you hear a “click.”

4. Position the lap belt so that it is snug and lies low across your hips, below your abdomen. To remove slack in the lap belt portion, pull up on the shoulder belt. To loosen the lap belt if it is too tight, tilt the latch plate and pull on the lap belt. A snug seat belt reduces the risk of sliding under the seat belt in a collision.

WARNING! (Continued)

- A seat belt that is worn under your arm is dangerous. Your body could strike the inside surfaces of the vehicle in a collision, increasing head and neck injury. A seat belt worn under the arm can cause internal injuries. Ribs aren’t as strong as shoulder bones. Wear the seat belt over your shoulder so that your strongest bones will take the force in a collision.

- A shoulder belt placed behind you will not protect you from injury during a collision. You are more likely to hit your head in a collision if you do not wear your shoulder belt. The lap and shoulder belt are meant to be used together.

- A frayed or torn seat belt could rip apart in a collision and leave you with no protection. Inspect the seat belt system periodically, checking for cuts, frays, or loose parts. Damaged parts must be replaced immediately. Do not disassemble or modify the seat belt system. Seat belt assemblies must be replaced after a collision.
Positioning The Lap Belt

5. Position the shoulder belt across the shoulder and chest with minimal, if any slack so that it is comfortable and not resting on your neck. The retractor will withdraw any slack in the shoulder belt.

6. To release the seat belt, push the red button on the buckle. The seat belt will automatically retract to its stowed position. If necessary, slide the latch plate down the webbing to allow the seat belt to retract fully.

Lap/Shoulder Belt Untwisting Procedure

Use the following procedure to untwist a twisted lap/shoulder belt.

1. Position the latch plate as close as possible to the anchor point.

2. At about 6 to 12 inches (15 to 30 cm) above the latch plate, grasp and twist the seat belt webbing 180 degrees to create a fold that begins immediately above the latch plate.

3. Slide the latch plate upward over the folded webbing. The folded webbing must enter the slot at the top of the latch plate.

4. Continue to slide the latch plate up until it clears the folded webbing and the seat belt is no longer twisted.

Adjustable Upper Shoulder Belt Anchorage

In the driver and outboard front passenger seats, the top of the shoulder belt can be adjusted upward or downward to position the seat belt away from your neck. Push or squeeze the anchorage button to release the anchorage, and move it up or down to the position that serves you best.

As a guide, if you are shorter than average, you will prefer the shoulder belt anchorage in a lower position, and if you are taller than average, you will prefer the shoulder belt anchorage in a higher position. After you release the anchorage button, try to move it up or down to make sure that it is locked in position.

NOTE:
The adjustable upper shoulder belt anchorage is equipped with an Easy Up feature. This feature allows the shoulder belt anchorage to be adjusted in the upward position without pushing or squeezing the release button. To...
verifies the shoulder belt anchorage is latched, pull downward on the shoulder belt anchorage until it is locked into position.

**WARNING!**

- Wearing your seat belt incorrectly could make your injuries in a collision much worse. You might suffer internal injuries, or you could even slide out of the seat belt. Follow these instructions to wear your seat belt safely and to keep your passengers safe, too.
- Position the shoulder belt across the shoulder and chest with minimal, if any, slack so that it is comfortable and not resting on your neck. The retractor will withdraw any slack in the shoulder belt.
- Misadjustment of the seat belt could reduce the effectiveness of the safety belt in a crash.
- Always make all seat belt height adjustments when the vehicle is stationary.

**First Row Center Seat Belt Operating Instructions (Regular Cab Only)**

The first row center seat belt (Regular Cab only) features a seat belt with a mini-latch plate and buckle, which allows the seat belt to detach from the lower anchor when the seat is folded. The latch plate and regular latch plate can then be stored out of the way in the seat for added convenience to open up utilization of the storage areas behind the front seats when the seat is not occupied.

1. Remove the mini-latch plate and regular latch plate from its stowed position on the seat.
2. Grasp the mini-latch plate and pull the seat belt over the seat.
3. Route the shoulder belt to the inside of the right head restraint.
4. When the seat belt is long enough to fit, insert the mini-latch plate into the mini-buckle until you hear a “click.”
5. Sit back in seat. Slide the regular latch plate up the webbing as far as necessary to allow the seat belt to go around your lap.
6. When the seat belt is long enough to fit, insert the latch plate into the buckle until you hear a “click.”

**Mini-Latch And Mini-Buckle Connected**
7. Position the lap belt so that it is snug and lies low across your hips, below your abdomen. To remove slack in the lap belt portion, pull up on the shoulder belt. To loosen the lap belt if it is too tight, pull on the lap belt. A snug seat belt reduces the risk of sliding under the seat belt in a collision.

8. Position the shoulder belt on your chest so that it is comfortable and not resting on your neck. The retractor will withdraw any slack in the seat belt.

9. To release the seat belt, push the red button on the buckle.

10. To disengage the mini-latch plate from the mini-buckle for storage, insert the regular latch plate into the center red slot on the mini-buckle. The seat belt will automatically retract to its stowed position. If necessary, slide the latch plate down the webbing to allow the seat belt to retract fully. Insert the mini-latch plate and regular latch plate into its stowed position.

**WARNING!**

- If the mini-latch plate and mini-buckle are not properly connected when the seat belt is used by an occupant, the seat belt will not be able to provide proper restraint and will increase the risk of injury in a collision.
- When reattaching the mini-latch plate and mini-buckle, ensure the seat belt webbing is not twisted. If the webbing is twisted, follow the preceding procedure to detach the mini-latch plate and mini-buckle, untwist the webbing, and reattach the mini-latch plate and mini-buckle.

First Row Center Lap Belt Operating Instructions — If Equipped

The center seating position for the Mega Cab and Crew Cab front seat has a lap belt only. To buckle the lap belt, slide the latch plate into the buckle until you hear a "click." To lengthen the lap belt, tilt the latch plate and pull.

To remove slack, pull the loose end of the webbing. Wear the lap belt snug against the hips. Sit back and upright in the seat, then adjust the seat belt as tightly as is comfortable.

Seat Belts And Pregnant Women

Seat belts must be worn by all occupants including pregnant women: the risk of injury in the event of an accident is reduced for the
mother and the unborn child if they are wearing a seat belt.
Position the lap belt snug and low below the abdomen and across the strong bones of the hips. Place the shoulder belt across the chest and away from the neck. Never place the shoulder belt behind the back or under the arm.

**Seat Belt Pretensioner**
The front outboard seat belt system is equipped with pretensioning devices that are designed to remove slack from the seat belt in the event of a collision. These devices may improve the performance of the seat belt by removing slack from the seat belt early in a collision. Pretensioners work for all size occupants, including those in child restraints.

**NOTE:**
These devices are not a substitute for proper seat belt placement by the occupant. The seat belt still must be worn snugly and positioned properly.

The pretensioners are triggered by the Occupant Restraint Controller (ORC). Like the air bags, the pretensioners are single use items. A deployed pretensioner or a deployed air bag must be replaced immediately.

**Energy Management Feature**
The front outboard seat belt system is equipped with an Energy Management feature that may help further reduce the risk of injury in the event of a collision. The seat belt system has a retractor assembly that is designed to release webbing in a controlled manner.

**Switchable Automatic Locking Retractors (ALR) — If Equipped**
The seat belts in the passenger seating positions may be equipped with a Switchable Automatic Locking Retractor (ALR) which is used to secure a child restraint system. For additional information, refer to “Installing Child Restraints Using The Vehicle Seat Belt” under the “Child Restraints” section of this manual.

The figure below illustrates the locking feature for each seating position.
only pull the seat belt webbing out far enough to comfortably wrap around the occupant’s mid-section so as to not activate the ALR. If the ALR is activated, you will hear a clicking sound as the seat belt retracts. Allow the webbing to retract completely in this case and then carefully pull out only the amount of webbing necessary to comfortably wrap around the occupant’s mid-section. Slide the latch plate into the buckle until you hear a “click.”

In Automatic Locking Mode, the shoulder belt is automatically pre-locked. The seat belt will still retract to remove any slack in the shoulder belt. Use the Automatic Locking Mode anytime a child restraint is installed in a seating position that has a seat belt with this feature. Children 12 years old and under should always be properly restrained in the rear seat of a vehicle with a rear seat.

HOW TO ENGAGE THE AUTOMATIC LOCKING MODE

1. Buckle the combination lap and shoulder belt.
2. Grasp the shoulder portion and pull downward until the entire seat belt is extracted.
3. Allow the seat belt to retract. As the seat belt retracts, you will hear a clicking sound. This indicates the seat belt is now in the Automatic Locking Mode.

HOW TO DISENGAGE THE AUTOMATIC LOCKING MODE

Unbuckle the combination lap/shoulder belt and allow it to retract completely to disengage the Automatic Locking Mode and activate the vehicle sensitive (emergency) locking mode.

WARNING!

- NEVER use a rearward facing child restraint on a seat protected by an ACTIVE AIRBAG in front of it, DEATH or SERIOUS INJURY to the CHILD can occur.

(Continued)
Supplemental Restraint Systems (SRS)

Some of the safety features described in this section may be standard equipment on some models, or may be optional equipment on others. If you are not sure, ask an authorized dealer.

The air bag system must be ready to protect you in a collision. The Occupant Restraint Controller (ORC) monitors the internal circuits and interconnecting wiring associated with the electrical Air Bag System Components. Your vehicle may be equipped with the following Air Bag System Components:

- Occupant Restraint Controller (ORC)
- Air Bag Warning Light
- Steering Wheel and Column
- Instrument Panel
- Knee Impact Bolsters
- Driver and Front Passenger Air Bags
- Seat Belt Buckle Switch
- Supplemental Side Air Bags
- Front and Side Impact Sensors — If Equipped
- Seat Belt Pretensioners
- Seat Track Position Sensors

**Air Bag Warning Light**

The Occupant Restraint Controller (ORC) monitors the readiness of the electronic parts of the air bag system whenever the ignition switch is in the START or ON/RUN position. If the ignition switch is in the OFF position or in the ACC position, the air bag system is not on and the air bags will not inflate.

The ORC contains a backup power supply system that may deploy the air bag system even if the battery loses power or it becomes disconnected prior to deployment.

The ORC turns on the Air Bag Warning Light in the instrument panel for approximately four to eight seconds for a self-check when the ignition switch is first in the ON/RUN position. After the self-check, the Air Bag Warning Light will turn off. If the ORC detects a malfunction in any part of the system, it turns on the Air Bag Warning Light, either momentarily or continuously. A single chime will sound to alert you if the light comes on again after initial startup.

The ORC also includes diagnostics that will illuminate the instrument panel Air Bag Warning Light if a malfunction is detected that could affect the air bag system. The diagnostics also record the nature of the malfunction. While the air bag system is designed to be maintenance free, if any of the following occurs, have an

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**WARNING! (Continued)**

- Do not use the Automatic Locking Mode to restrain occupants who are wearing the seat belt or children who are using booster seats. The locked mode is only used to install rear-facing or forward-facing child restraints that have a harness for restraining the child.
authorized dealer service the air bag system immediately.

- The Air Bag Warning Light does not come on during the four to eight seconds when the ignition switch is first in the ON/RUN position.

- The Air Bag Warning Light remains on after the four to eight-second interval.

- The Air Bag Warning Light comes on intermittently or remains on while driving.

**NOTE:**
If the speedometer, tachometer, or any engine related gauges are not working, the Occupant Restraint Controller (ORC) may also be disabled. In this condition the air bags may not be ready to inflate for your protection. Have an authorized dealer service the air bag system immediately.

### WARNING!

Ignoring the Air Bag Warning Light in your instrument panel could mean you won’t have the air bag system to protect you in a collision. If the light does not come on as a bulb check when the ignition is first turned on, stays on after you start the vehicle, or if it comes on as you drive, have an authorized dealer service the air bag system immediately.

#### Redundant Air Bag Warning Light

If a fault with the Air Bag Warning Light is detected, which could affect the Supplemental Restraint System (SRS), the Redundant Air Bag Warning Light will illuminate on the instrument panel. The Redundant Air Bag Warning Light will stay on until the fault is cleared. In addition, a single chime will sound to alert you that the Redundant Air Bag Warning Light has come on and a fault has been detected. If the Redundant Air Bag Warning Light comes on intermittently or remains on while driving have an authorized dealer service the vehicle immediately.

For additional information regarding the Redundant Air Bag Warning Light refer to “Getting To Know Your Instrument Panel” section of this manual.

#### Front Air Bags

This vehicle has front air bags and lap/shoulder belts for both the driver and front passenger. The front air bags are a supplement to the seat belt restraint systems. The driver front air bag is mounted in the center of the steering wheel. The passenger front air bag is mounted in the instrument panel, above the glove.
compartment. The words “SRS AIRBAG” or “AIRBAG” are embossed on the air bag covers.

Front Air Bag/Knee Bolster Locations
1 — Driver And Passenger Front Air Bags
2 — Driver And Passenger Knee Impact Bolsters

>>> CONDITION: {Market=Brazil or Market='Latin America'} >>>

Driver And Passenger Front Air Bag Features
The Advanced Front Air Bag system has multistage driver and front passenger air bags. This system provides output appropriate to the severity and type of collision as determined by the Occupant Restraint Controller (ORC), which may receive information from the front impact sensors (if equipped) or other system components.

The first stage inflator is triggered immediately during an impact that requires air bag deployment. A low energy output is used in less severe collisions. A higher energy output is used for more severe collisions.

This vehicle may be equipped with a driver and/or front passenger seat belt buckle switch that detects whether the driver or front passenger seat belt is buckled. The seat belt buckle switch may adjust the inflation rate of the Advanced Front Air Bags.

This vehicle may be equipped with driver and/or front passenger seat track position sensors that may adjust the inflation rate of the Advanced Front Air Bags based upon seat position.

WARNING!

- Being too close to the steering wheel or instrument panel during front air bag deployment could cause serious injury, including death. Air bags need room to inflate. Sit back, comfortably extending your arms to reach the steering wheel or instrument panel.

- Check all applicable legal requirements for the proper restraint of babies and children.

- Never install a rear-facing child restraint in the front seat of a vehicle. Only use a rear-facing child restraint in the rear seat. If the vehicle does not have a rear seat, do not transport a rear-facing child restraint in that vehicle.

- A deploying passenger front air bag can cause death or serious injury to a child 12 years or younger, including a child in a rear-facing child restraint.

>>> CONDITION: {Market='Latin America'} >>>

- Check all applicable legal requirements for the proper restraint of babies and children.

<<< CONDITION END <<<

<<< CONDITION END <<<
Front Air Bag Operation
Front Air Bags are designed to provide additional protection by supplementing the seat belts. Front air bags are not expected to reduce the risk of injury in rear, side, or rollover collisions. The front air bags will not deploy in all frontal collisions, including some that may produce substantial vehicle damage—for example, some pole collisions, truck underrides, and angle offset collisions. On the other hand, depending on the type and location of impact, front air bags may deploy in crashes with little vehicle front-end damage but that produce a severe initial deceleration. Because air bag sensors measure vehicle deceleration over time, vehicle speed and damage by themselves are not good indicators of whether or not an air bag should have deployed.

Seat belts are necessary for your protection in all collisions, and also are needed to help keep you in position, away from an inflating air bag. When the ORC detects a collision requiring the front air bags, it signals the inflator units. A large quantity of non-toxic gas is generated to inflate the front air bags. The steering wheel hub trim cover and the upper passenger side of the instrument panel separate and fold out of the way as the air bags inflate to their full size. The front air bags fully inflate in less time than it takes to blink your eyes. The front air bags then quickly deflate while helping to restrain the driver and front passenger.

Knee Impact Bolsters
The Knee Impact Bolsters help protect the knees of the driver and front passenger, and position the front occupants for improved interaction with the front air bags.

WARNING!
- Do not drill, cut, or tamper with the knee impact bolsters in any way.
- Do not mount any accessories to the knee impact bolsters such as alarm lights, stereos, citizen band radios, etc.

Supplemental Side Air Bags
Supplemental Seat-Mounted Side Air Bags (SABs) (if equipped)
Your vehicle may be equipped with Supplemental Seat-Mounted Side Air Bags (SABs). If your vehicle is equipped with Supplemental Seat-Mounted Side Air Bags (SABs), please refer to the information below. Supplemental Seat-Mounted Side Air Bags (SABs) are located in the outboard side of the
front seats. The SABs are marked with "SRS AIRBAG" or "AIRBAG" on a label or on the seat trim on the outboard side of the seats.

**Supplemental Seat-Mounted Side Air Bag Label**
The SABs (if equipped with SABs) may help to reduce the risk of occupant injury during certain side impacts, in addition to the injury reduction potential provided by the seat belts and body structure.

When the SAB deploys, it opens the seam on the outboard side of the seatback’s trim cover. The inflating SAB deploys through the seat seam into the space between the occupant and the door. The SAB moves at a very high speed and with such a high force that it could injure occupants if they are not seated properly, or if items are positioned in the area where the SAB inflates. Children are at an even greater risk of injury from a deploying air bag.

**WARNING!**
Do not use accessory seat covers or place objects between you and the Side Air Bags; the performance could be adversely affected and/or objects could be pushed into you, causing serious injury.

**Supplemental Side Air Bag Inflatable Curtains (SABICs) (if equipped)**
Your vehicle may be equipped with Supplemental Side Air Bag Inflatable Curtains (SABICs). If your vehicle is equipped with Supplemental Side Air Bag Inflatable Curtains (SABICs), please refer to the information below. Supplemental Side Air Bag Inflatable Curtains (SABICs) are located above the side windows. The trim covering the SABICs is labeled "SRS AIRBAG" or "AIRBAG."

**Supplemental Side Air Bag Inflatable Curtain (SABIC) Label Location**
SABICs (if equipped with SABICs) may help reduce the risk of head and other injuries to front and rear seat outboard occupants in certain side impacts, in addition to the injury reduction potential provided by the seat belts and body structure.

The SABIC deploys downward, covering the side windows. An inflating SABIC pushes the outside edge of the headliner out of the way and covers the window. The SABICs inflate with enough force to injure occupants if they are not belted and seated properly, or if items are positioned in the area where the SABICs inflate. Children are at an even greater risk of injury from a deploying air bag.
The SABICs (if equipped with SABICs) may help reduce the risk of partial or complete ejection of vehicle occupants through side windows in certain side impact events.

**WARNING!**

- Do not mount equipment, or stack luggage or other cargo up high enough to block the deployment of the SABICs. The trim covering above the side windows where the SABIC and its deployment path are located should remain free from any obstructions.
- In order for the SABICs to work as intended, do not install any accessory items in your vehicle which could alter the roof. Do not add an aftermarket sunroof to your vehicle. Do not add roof racks that require permanent attachments (bolts or screws) for installation on the vehicle roof. Do not drill into the roof of the vehicle for any reason.

### Side Impacts

The Side Air Bags are designed to activate in certain side impacts. The Occupant Restraint Controller (ORC) determines whether the deployment of the Side Air Bags in a particular impact event is appropriate, based on the severity and type of collision. The side impact sensors aid the ORC in determining the appropriate response to impact events. The system is calibrated to deploy the Side Air Bags on the impact side of the vehicle during impacts that require Side Air Bag occupant protection. In side impacts, the Side Air Bags deploy independently; a left side impact deploys the left Side Air Bags only and a right-side impact deploys the right Side Air Bags only. Vehicle damage by itself is not a good indicator of whether or not Side Air Bags should have deployed.

The Side Air Bags will not deploy in all side collisions, including some collisions at certain angles, or some side collisions that do not impact the area of the passenger compartment. The Side Air Bags may deploy during angled or offset frontal collisions where the front air bags deploy.

Side Air Bags are a supplement to the seat belt restraint system. Side Air Bags deploy in less time than it takes to blink your eyes.

**WARNING!**

- Occupants, including children, who are up against or very close to Side Air Bags can be seriously injured or killed. Occupants, including children, should never lean on or sleep against the door, side windows, or area where the side air bags inflate, even if they are in an infant or child restraint.
- Seat belts (and child restraints where appropriate) are necessary for your protection in all collisions. They also help keep you in position, away from an inflating Side Air Bag. To get the best protection from the Side Air Bags, occupants must wear their seat belts properly and sit upright with their backs against the seats. Children must be properly restrained in a child restraint or booster seat that is appropriate for the size of the child.

**WARNING!**

- Side Air Bags need room to inflate. Do not lean against the door or window. Sit upright in the center of the seat.

(Continued)
NOTE: Air bag covers may not be obvious in the interior trim, but they will open during air bag deployment.

Rollover Events
Side Air Bags and seat belt pretensioners are designed to activate in certain rollover events (if equipped with rollover sensing). The Occupant Restraint Controller (ORC) determines whether deployment in a particular rollover event is appropriate, based on the severity and type of collision. Vehicle damage by itself is not a good indicator of whether or not Side Air Bags and seat belt pretensioners should have deployed.

The Side Air Bags and seat belt pretensioners will not deploy in all rollover events. The rollover sensing system determines if a rollover event may be in progress and whether deployment is appropriate. In the event the vehicle experiences a rollover or near rollover event, and deployment is appropriate, the rollover sensing system will deploy the side air bags and seat belt pretensioners on both sides of the vehicle. The SABICs may help reduce the risk of partial or complete ejection of vehicle occupants through side windows in certain rollover or side impact events.

Air Bag System Components
NOTE: The Occupant Restraint Controller (ORC) monitors the internal circuits and interconnecting wiring associated with electrical Air Bag System Components listed below:

- Occupant Restraint Controller (ORC)
- Air Bag Warning Light
- Steering Wheel and Column
- Instrument Panel
- Knee Impact Bolsters
- Driver and Front Passenger Air Bags
- Seat Belt Buckle Switch
- Supplemental Side Air Bags
- Front and Side Impact Sensors — If Equipped
- Seat Belt Pretensioners
- Seat Track Position Sensors

WARNING! (Continued)
If A Deployment Occurs

The front air bags are designed to deflate immediately after deployment.

NOTE:
Front and/or side air bags will not deploy in all collisions. This does not mean something is wrong with the air bag system.

If you do have a collision which deploys the air bags, any or all of the following may occur:

- The air bag material may sometimes cause abrasions and/or skin reddening to the occupants as the air bags deploy and unfold. The abrasions are similar to friction rope burns or those you might get sliding along a carpet or gymnasium floor. They are not caused by contact with chemicals. They are not permanent and normally heal quickly. However, if you haven’t healed significantly within a few days, or if you have any blistering, see your doctor immediately.

- As the air bags deflate, you may see some smoke-like particles. The particles are a normal by-product of the process that generates the non-toxic gas used for air bag inflation. These airborne particles may irritate the skin, eyes, nose, or throat. If you have skin or eye irritation, rinse the area with cool water. For nose or throat irritation, move to fresh air. If the irritation continues, see your doctor. If these particles settle on your clothing, follow the garment manufacturer’s instructions for cleaning.

Do not drive your vehicle after the air bags have deployed. If you are involved in another collision, the air bags will not be in place to protect you.

NOTE:
- Air bag covers may not be obvious in the interior trim, but they will open during air bag deployment.
- After any collision, the vehicle should be taken to an authorized dealer immediately.

Enhanced Accident Response System

In the event of an impact, if the communication network remains intact, and the power remains intact, depending on the nature of the event, the Occupant Restraint Controller (ORC) will determine whether to have the Enhanced Accident Response System perform the following functions:

- Cut off fuel to the engine (if equipped)
- Cut off battery power to the electric motor (if equipped)
- Flash hazard lights as long as the battery has power
- Turn on the interior lights, which remain on as long as the battery has power or for 15 minutes from the intervention of the Enhanced Accident Response System
- Unlock the power door locks
Your vehicle may also be designed to perform any of these other functions in response to the Enhanced Accident Response System:

- Turn off the Fuel Filter Heater, Turn off the HVAC Blower Motor, Close the HVAC Circulation Door
- Cut off battery power to the:
  - Engine
  - Electric Motor (if equipped)
  - Electric power steering
  - Brake booster
  - Electric park brake
  - Automatic transmission gear selector
  - Horn
  - Front wiper
  - Headlamp washer pump

**NOTE:**
After an accident, remember to cycle the ignition to the STOP (OFF/LOCK) position and remove the key from the ignition switch to avoid draining the battery. Carefully check the vehicle for fuel leaks in the engine compartment and on the ground near the fuel tank before resetting the system and starting the engine. If there are no fuel leaks or damage to the vehicle electrical devices (e.g. headlights) after an accident, reset the system by following the procedure described below. If you have any doubt, contact an authorized dealer.

**Enhanced Accident Response System Reset Procedure**
In order to reset the Enhanced Accident Response System functions after an event, the ignition switch must be changed from ignition START or ON/RUN to ignition OFF. Carefully check the vehicle for fuel leaks in the engine compartment and on the ground near the engine compartment and fuel tank before resetting the system and starting the engine. If there are no fuel leaks or damage to the vehicle electrical devices (e.g. headlights) after an accident, reset the system by following the procedure described below. If you have any doubt, contact an authorized dealer.

**Maintaining Your Air Bag System**

**WARNING!**
- Modifications to any part of the air bag system could cause it to fail when you need it. You could be injured if the air bag system is not there to protect you. Do not modify the components or wiring, including adding any kind of badges or stickers to the steering wheel hub trim cover or the upper passenger side of the instrument panel. Do not modify the front bumper, vehicle body structure, or add aftermarket side steps or running boards.
- It is dangerous to try to repair any part of the air bag system yourself. Be sure to tell anyone who works on your vehicle that it has an air bag system.
Event Data Recorder (EDR)

This vehicle is equipped with an event data recorder (EDR). The main purpose of an EDR is to record, in certain crash or near crash-like situations, such as an air bag deployment or hitting a road obstacle, data that will assist in understanding how a vehicle’s systems performed. The EDR is designed to record data related to vehicle dynamics and safety systems for a short period of time, typically 30 seconds or less. The EDR in this vehicle is designed to record such data as:

- How various systems in your vehicle were operating;
- Whether or not the driver and passenger safety belts were buckled/fastened;
- How far (if at all) the driver was depressing the accelerator and/or brake pedal; and,
- How fast the vehicle was traveling.

These data can help provide a better understanding of the circumstances in which crashes and injuries occur.

NOTE:
EDR data are recorded by your vehicle only if a non-trivial crash situation occurs; no data are recorded by the EDR under normal driving conditions and no personal data (e.g., name, gender, age, and crash location) are recorded. However, other parties, such as law enforcement, could combine the EDR data with the type of personally identifying data routinely acquired during a crash investigation.

To read data recorded by an EDR, special equipment is required, and access to the vehicle or the EDR is needed. In addition to the vehicle manufacturer, other parties, such as law enforcement, that have the special equipment, can read the information if they have access to the vehicle or the EDR.

Child Restraints

Everyone in your vehicle needs to be buckled up at all times, including babies and children.

Children 12 years or younger should ride properly buckled up in a rear seat, if available. According to crash statistics, children are safer when properly restrained in the rear seats rather than in the front.

WARNING!
(Continued)
There are different sizes and types of restraints for children from newborn size to the child almost large enough for an adult safety belt. Always check the child seat Owner’s Manual to make sure you have the correct seat for your child. Carefully read and follow all the instructions and warnings in the child restraint Owner’s Manual and on all the labels attached to the child restraint.

Before buying any restraint system, make sure that it has a label certifying that it meets all applicable Safety Standards. You should also make sure that you can install it in the vehicle where you will use it.

- NEVER use a rearward facing child restraint on a seat protected by an ACTIVE AIRBAG in front of it, DEATH or SERIOUS INJURY to the CHILD can occur.
- Never install a rear-facing child restraint in the front seat of a vehicle. Only use a rear-facing child restraint in the rear seat. If the vehicle does not have a rear seat, do not transport a rear-facing child restraint in that vehicle.

- A deploying passenger front airbag can cause death or serious injury to a child 12 years or younger, including a child in a rear-facing child restraint.
- Check all applicable legal requirements for the proper restraint of babies and children.
- In a collision, an unrestrained child can become a projectile inside the vehicle. The force required to hold even an infant on your lap could become so great that you could not hold the child, no matter how strong you are. The child and others could be badly injured or killed. Any child riding in your vehicle should be in a proper restraint for the child’s size.
Summary Of Recommendations For Restraining Children In Vehicles

<table>
<thead>
<tr>
<th>Child Size, Height, Weight Or Age</th>
<th>Recommended Type Of Child Restraint</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infants and Toddlers (Children who are two years old or younger and who have not reached the height or weight limits of their child restraint)</td>
<td>Either an Infant Carrier or a Convertible Child Restraint, facing rearward in a rear seat of the vehicle</td>
</tr>
<tr>
<td>Small Children (Children who are at least two years old or who have outgrown the height or weight limit of their rear-facing child restraint)</td>
<td>Forward-Facing Child Restraint with a five-point Harness, facing forward in a rear seat of the vehicle</td>
</tr>
<tr>
<td>Larger Children (Children who have outgrown their forward-facing child restraint, but are too small to properly fit the vehicle’s seat belt)</td>
<td>Belt Positioning Booster Seat and the vehicle seat belt, seated in a rear seat of the vehicle</td>
</tr>
<tr>
<td>Children Too Large for Child Restraints (Children 12 years old or younger, who have outgrown the height or weight limit of their booster seat)</td>
<td>Vehicle Seat Belt, seated in a rear seat of the vehicle</td>
</tr>
</tbody>
</table>

Infant And Child Restraints

Safety experts recommend that children ride rear-facing in the vehicle until they are two years old or until they reach either the height or weight limit of their rear-facing child restraint. Two types of child restraints can be used rear-facing: infant carriers and convertible child seats.

The infant carrier is only used rear-facing in the vehicle. It is recommended for children from birth until they reach the weight or height limit of the infant carrier. Convertible child seats can be used either rear-facing or forward-facing in the vehicle. Convertible child seats often have a higher weight limit in the rear-facing direction than infant carriers do, so they can be used rear-facing by children who have outgrown their infant carrier but are still less than at least two years old. Children should remain rear-facing until they reach the highest weight or height allowed by their convertible child seat.

**WARNING!**

- Never place a rear-facing child restraint in front of an air bag. A deploying passenger front air bag can cause death or serious injury to a child 12 years or younger, including a child in a rear-facing child restraint.
Older Children And Child Restraints

Children who are two years old or who have outgrown their rear-facing convertible child seat can ride forward-facing in the vehicle.

Forward-facing child seats and convertible child seats used in the forward-facing direction are for children who are over two years old or who have outgrown the rear-facing weight or height limit of their rear-facing convertible child seat. Children should remain in a forward-facing child seat with a harness for as long as possible, up to the highest weight or height allowed by the child seat.

All children whose weight or height is above the forward-facing limit for the child seat should use a belt-positioning booster seat until the vehicle’s seat belts fit properly. If the child cannot sit with knees bent over the vehicle’s seat cushion while the child’s back is against the seatback, they should use a belt-positioning booster seat. The child and belt-positioning booster seat are held in the vehicle by the seat belt.
Children Too Large For Booster Seats

Children who are large enough to wear the shoulder belt comfortably, and whose legs are long enough to bend over the front of the seat when their back is against the seatback, should use the seat belt in a rear seat. Use this simple 5-step test to decide whether the child can use the vehicle’s seat belt alone:

1. Can the child sit all the way back against the back of the vehicle seat?
2. Do the child’s knees bend comfortably over the front of the vehicle seat – while the child is still sitting all the way back?
3. Does the shoulder belt cross the child’s shoulder between the neck and arm?
4. Is the lap part of the belt as low as possible, touching the child’s thighs and not the stomach?
5. Can the child stay seated like this for the whole trip?

If the answer to any of these questions was “no,” then the child still needs to use a booster seat in this vehicle. If the child is using the lap/shoulder belt, check seat belt fit periodically and make sure the seat belt buckle is latched. A child’s squirming or slouching can move the belt out of position. If the shoulder belt contacts the face or neck, move the child closer to the center of the vehicle, or use a booster seat to position the seat belt on the child correctly.

**WARNING!**

Never allow a child to put the shoulder belt under an arm or behind their back. In a crash, the shoulder belt will not protect a child properly, which may result in serious injury or death. A child must always wear both the lap and shoulder portions of the seat belt correctly.
Recommendations For Attaching Child Restraints

<table>
<thead>
<tr>
<th>Restraint Type</th>
<th>Combined Weight of the Child + Child Restraint</th>
<th>Use Any Attachment Method Shown With An “X” Below</th>
</tr>
</thead>
<tbody>
<tr>
<td>LATCH – Lower Anchors Only</td>
<td>Seat Belt Only</td>
<td>LATCH – Lower Anchors + Top Tether Anchor</td>
</tr>
<tr>
<td>Rear-Facing Child Restraint</td>
<td>Up to 65 lbs (29.5 kg)</td>
<td>X</td>
</tr>
<tr>
<td>Rear-Facing Child Restraint</td>
<td>More than 65 lbs (29.5 kg)</td>
<td>X</td>
</tr>
<tr>
<td>Forward-Facing Child Restraint</td>
<td>Up to 65 lbs (29.5 kg)</td>
<td>X</td>
</tr>
<tr>
<td>Forward-Facing Child Restraint</td>
<td>More than 65 lbs (29.5 kg)</td>
<td>X</td>
</tr>
</tbody>
</table>

Lower Anchors And Tethers For Children (LATCH) Restraint System

Your vehicle is equipped with the child restraint anchorage system called LATCH, which stands for Lower Anchors and Tethers for Children. The LATCH system has three vehicle anchor points for installing LATCH-equipped child seats. There are two lower anchorages located at the back of the seat cushion where it meets the seatback and one top tether anchorage located behind the seating position. These anchorages are used to install LATCH-equipped child seats without using the vehicle’s seat belts. Some seating positions may have a top tether anchorage but no lower anchorages. In these seating positions, the seat belt must be used with the top tether anchorage to install the child restraint. Please see the following table for more information.
LATCH Positions For Installing Child Restraints In This Vehicle

Regular Cab LATCH Positions
- Top Tether Anchorage Symbol

Mega Cab/Crew Cab 60/40 Split Bench LATCH Positions
- Top Tether Anchorage Symbol
- Lower Anchorage Symbol (2 Anchorages Per Seating Position)

Crew Cab Full Bench LATCH Positions
- Top Tether Anchorage Symbol
- Lower Anchorage Symbol (2 Anchorages Per Seating Position)

Frequently Asked Questions About Installing Child Restraints With LATCH

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the weight limit (child's weight + weight of the child restraint) for using the LATCH anchorage system to attach the child restraint?</td>
<td>65 lbs (29.5 kg)</td>
</tr>
<tr>
<td>Use the LATCH anchorage system until the combined weight of the child and the child restraint is 65 lbs (29.5 kg). Use the seat belt and tether anchor instead of the LATCH system once the combined weight is more than 65 lbs (29.5 kg).</td>
<td></td>
</tr>
</tbody>
</table>
### Frequently Asked Questions About Installing Child Restraints With LATCH

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can the LATCH anchorages and the seat belt be used together to attach a</td>
<td>No</td>
<td>Do not use the seat belt when you use the LATCH anchorage system to attach a rear-facing or forward-facing child restraint. Booster</td>
</tr>
<tr>
<td>rear-facing or forward-facing child restraint?</td>
<td></td>
<td>seats may be attached to the LATCH anchorages if allowed by the booster seat manufacturer. See your booster seat owner’s manual for</td>
</tr>
<tr>
<td></td>
<td></td>
<td>more information.</td>
</tr>
<tr>
<td>Can a child seat be installed in the center position using the inner</td>
<td>No – Crew Full</td>
<td>Regular Cab Front / Crew Cab with full bench rear seat: Use the seat belt and tether anchor to install a child seat in the center</td>
</tr>
<tr>
<td>LATCH lower anchorages from the outboard seating positions?</td>
<td>Bench N/A –</td>
<td>seating position.</td>
</tr>
<tr>
<td></td>
<td>Mega / Crew Split Bench / Regular Cab</td>
<td>Crew Cab with split bench rear seat / Mega Cab: Child restraints can be installed using the supplied lower anchorages for the center</td>
</tr>
<tr>
<td></td>
<td></td>
<td>seating position.</td>
</tr>
<tr>
<td>Can two child restraints be attached using a common lower LATCH</td>
<td>No</td>
<td>Never “share” a LATCH anchorage with two or more child restraints. If the center position does not have dedicated LATCH lower</td>
</tr>
<tr>
<td>anchorage?</td>
<td></td>
<td>anchorages, use the seat belt to install a child seat in the center position next to a child seat using the LATCH anchorages in an</td>
</tr>
<tr>
<td></td>
<td></td>
<td>outboard position.</td>
</tr>
<tr>
<td>Can the rear-facing child restraint touch the back of the front</td>
<td>Yes</td>
<td>The child seat may touch the back of the front passenger seat if the child restraint manufacturer also allows contact. See your</td>
</tr>
<tr>
<td>passenger seat?</td>
<td></td>
<td>child restraint owner’s manual for more information.</td>
</tr>
</tbody>
</table>

- SAFETY 177
Locating The LATCH Anchorages
The lower anchorages are round bars that are found at the rear of the seat cushion where it meets the seatback. They are just visible when you lean into the rear seat to install the child restraint. You will easily feel them if you run your finger along the gap between the seatback and seat cushion.

Locating The Upper Tether Anchorages
Regular Cab models have tether strap anchorages located behind each of the rear seats. Mega Cab and Crew Cab models have tether strap anchorages located behind the front center and right seats.

Frequently Asked Questions About Installing Child Restraints With LATCH

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can the rear head restraints be removed?</td>
<td>Yes</td>
</tr>
</tbody>
</table>

The head restraints can be removed in every rear seating position if they interfere with the installation of the child restraint. Refer to “Head Restraints” in “Getting To Know Your Vehicle” for further information.

Regular Cab Tether Anchorages (Behind Covers)
1 – Tether Strap Hook
2 – Tether Strap To Child Restraint
3 – Tether Anchor
LATCH-compatible child restraint systems will be equipped with a rigid bar or a flexible strap on each side. Each will have a hook or connector to attach to the lower anchorage and a way to tighten the connection to the anchorage. Forward-facing child restraints and some rear-facing child restraints will also be equipped with a tether strap. The tether strap will have a hook at the end to attach to the top tether anchorage and a way to tighten the strap after it is attached to the anchorage.

**Center Seat LATCH**

Regular Cab Or Crew Cab Full Bench Rear Seat: No Lower Center LATCH Anchorages Available

<table>
<thead>
<tr>
<th>WARNING!</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Do not install a child restraint in the center position using the LATCH system. This position is not approved for installing child seats using the LATCH attachments. You must use the seat belt and tether anchor to install a child seat in the center seating position.</td>
</tr>
<tr>
<td>• Never use the same lower anchorage to attach more than one child restraint. Please refer to “To Install A LATCH-Compatible Child Restraint” for typical installation instructions.</td>
</tr>
</tbody>
</table>

**Crew Cab Split Bench Rear Seat Or Mega Cab Rear Seat: Center LATCH Anchorages Available**

If a child restraint installed in the center position blocks the seat belt webbing or buckle for the outboard position, do not use that outboard position. If a child seat in the center position blocks the outboard LATCH anchors or seat belt, do not install a child seat in that outboard position.
Always follow the directions of the child restraint manufacturer when installing your child restraint. Not all child restraint systems will be installed as described here.

To Install A LATCH-Compatible Child Restraint

If the selected seating position has a Switchable Automatic Locking Retractor (ALR) seat belt, stow the seat belt, following the instructions below. See the section “Installing Child Restraints Using the Vehicle Seat Belt” to check what type of seat belt each seating position has.

1. Loosen the adjusters on the lower straps and on the tether strap of the child seat so that you can more easily attach the hooks or connectors to the vehicle anchorages.

2. Place the child seat between the lower anchorages for that seating position. If the second row seat can be reclined, you may recline the seat and/or raise the head restraint (if adjustable) to get a better fit. You may also move the front seat forward to allow more room for the child seat.

3. Attach the lower hooks or connectors of the child restraint to the lower anchorages in the selected seating position.

4. If the child restraint has a tether strap, connect it to the top tether anchorage. See the section “Installing Child Restraints Using the Top Tether Anchorage” for directions to attach a tether anchor.

5. Tighten all of the straps as you push the child restraint rearward and downward into the seat. Remove slack in the straps according to the child restraint manufacturer’s instructions.

6. Test that the child restraint is installed tightly by pulling back and forth on the child seat at the belt path. It should not move more than 1 inch (25.4 mm) in any direction.

How To Stow An Unused Switchable-ALR (ALR) Seat Belt:

When using the LATCH attaching system to install a child restraint, stow all ALR seat belts that are not being used by other occupants or being used to secure child restraints. An unused belt could injure a child if they play with it and accidentally lock the seat belt retractor. Before installing a child restraint using the LATCH system, buckle the seat belt behind the child restraint and out of the child’s reach. If the buckled seat belt interferes with the child restraint installation, instead of buckling it behind the child restraint, route the seat belt through the child restraint belt path and then buckle it. Do not lock the seat belt. Remind all children in the vehicle that the seat belts are not toys and that they should not play with them.

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When using the LATCH attaching system to install a child restraint, stow all ALR seat belts that are not being used by other occupants or being used to secure child restraints. An unused belt could injure a child if they play with it and accidentally lock the seat belt retractor. Before installing a child restraint using the LATCH system, buckle the seat belt behind the child restraint and out of the child’s reach. If the buckled seat belt interferes with the child restraint installation, instead of buckling it behind the child restraint, route the seat belt through the child restraint belt path and then buckle it. Do not lock the seat belt. Remind all children in the vehicle that the seat belts are not toys and that they should not play with them.
Installing Child Restraints Using The Vehicle Seat Belt

Child restraint systems are designed to be secured in vehicle seats by lap belts or the lap belt portion of a lap/shoulder belt.

**WARNING!**
- Child restraint anchorages are designed to withstand only those loads imposed by correctly-fitted child restraints. Under no circumstances are they to be used for adult seat belts, harnesses, or for attaching other items or equipment to the vehicle.
- Improper installation or failure to properly secure a child restraint can lead to failure of the restraint. The child could be badly injured or killed.
- Follow the child restraint manufacturer’s directions exactly when installing an infant or child restraint.

The seat belts in the passenger seating positions are equipped with either a Switchable Automatic Locking Retractor (ALR) or a cinching latch plate or both. Both types of seat belts are designed to keep the lap portion of the seat belt tight around the child restraint so that it is not necessary to use a locking clip. The ALR retractor can be “switched” into a locked mode by pulling all of the webbing out of the retractor and then letting the webbing retract back into the retractor. If it is locked, the ALR will make a clicking noise while the webbing is pulled back into the retractor. Refer to the “Automatic Locking Mode” description in “Switchable Automatic Locking Retractors (ALR)” under “Occupant Restraint Systems” for additional information on ALR. The cinching latch plate is designed to hold the lap portion of the seat belt tight when webbing is pulled tight and straight through a child restraint’s belt path. Please see the table below and the following sections for more information.

Lap/Shoulder Belt Systems For Installing Child Restraints In This Vehicle

**Regular Cab Automatic Locking Retractor (ALR) Locations**

**WARNING!** (Continued)

- Follow the child restraint manufacturer’s directions exactly when installing an infant or child restraint.

**ALR — Switchable Automatic Locking Retractor Top Tether Anchorage Symbol**

**Mega Cab/Crew Cab Automatic Locking Retractor**
### Frequently Asked Questions About Installing Child Restraints With Seat Belts

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the weight limit (child’s weight + weight of the child restraint) for using the Tether Anchor with the seat belt to attach a forward facing child restraint?</td>
<td>Weight limit of the Child Restraint</td>
<td>Always use the tether anchor when using the seat belt to install a forward facing child restraint, up to the recommended weight limit of the child restraint.</td>
</tr>
<tr>
<td>Can the rear-facing child restraint touch the back of the front passenger seat?</td>
<td>Yes</td>
<td>Contact between the front passenger seat and the child restraint is allowed, if the child restraint manufacturer also allows contact.</td>
</tr>
<tr>
<td>Can the rear head restraints be removed?</td>
<td>Yes</td>
<td>The head restraints can be removed in every rear seating position if they interfere with the installation of the child restraint. Refer to “Head Restraints” in “Getting To Know Your Vehicle” for further information.</td>
</tr>
</tbody>
</table>
Installing A Child Restraint With A Switchable Automatic Locking Retractor (ALR):

Child restraint systems are designed to be secured in vehicle seats by lap belts or the lap belt portion of a lap/shoulder belt.

**WARNING!**

- Improper installation or failure to properly secure a child restraint can lead to failure of the restraint. The child could be badly injured or killed.
- Follow the child restraint manufacturer’s directions exactly when installing an infant or child restraint.

1. For Mega and Crew Cab Models
   Place the child seat in the center of the seating position. If the second row seat can be reclined, you may recline the seat and/or raise the head restraint (if adjustable) to get a better fit. If the rear seat can be moved forward and rearward in the vehicle, you may wish to move it to its rear-most position to make room for the child seat. You may also move the front seat forward to allow more room for the child seat.

   - Pull enough of the seat belt webbing from the retractor to pass it through the belt path of the child restraint. Do not twist the belt webbing in the belt path.
   - Slide the latch plate into the buckle until you hear a “click.”

4. Pull on the webbing to make the lap portion tight against the child seat.

5. To lock the seat belt, pull down on the shoulder part of the belt until you have pulled all the seat belt webbing out of the retractor. Then, allow the webbing to retract back into the retractor. As the webbing retracts, you will hear a clicking sound. This means the seat belt is now in the Automatic Locking mode.

6. Try to pull the webbing out of the retractor. If it is locked, you should not be able to pull out any webbing. If the retractor is not locked, repeat step 5.

7. Finally, pull up on any excess webbing to tighten the lap portion around the child restraint while you push the child restraint rearward and downward into the vehicle seat.

### Frequently Asked Questions About Installing Child Restraints With Seat Belts

| Can the buckle stalk be twisted to tighten the seat belt against the belt path of the child restraint? | Yes – Cinching Latch Plate
No – ALR | In positions with cinching latch plates, the buckle stalk may be twisted up to 3 full turns. Do not twist the buckle stalk in a seating position with an ALR retractor. |

---

**WARNING!**

- Improper installation or failure to properly secure a child restraint can lead to failure of the restraint. The child could be badly injured or killed.
- Follow the child restraint manufacturer’s directions exactly when installing an infant or child restraint.
8. If the child restraint has a top tether strap and the seating position has a top tether anchorage, connect the tether strap to the anchorage and tighten the tether strap. See the section “Installing Child Restraints Using the Top Tether Anchorage” for directions to attach a tether anchor.

9. Test that the child restraint is installed tightly by pulling back and forth on the child seat at the belt path. It should not move more than 1 inch (25.4 mm) in any direction.

Any seat belt system will loosen with time, so check the belt occasionally, and pull it tight if necessary.

Installing A Child Restraint With A Cinching Latch Plate (CINCH) — If Equipped:
Child restraint systems are designed to be secured in vehicle seats by lap belts or the lap belt portion of a lap/shoulder belt.

**WARNING!**
- Improper installation or failure to properly secure a child restraint can lead to failure of the restraint. The child could be badly injured or killed.

(Continued)

**WARNING!**
- Follow the child restraint manufacturer’s directions exactly when installing an infant or child restraint.

1. Place the child seat in the center of the seating position. If the second row seat can be reclined, you may recline the seat and/or raise the head restraint (if adjustable) to get a better fit. If the rear seat can be moved forward and rearward in the vehicle, you may wish to move it to its rear-most position to make room for the child seat. You may also move the front seat forward to allow more room for the child seat.

2. Next, pull enough of the seat belt webbing from the retractor to pass it through the belt path of the child restraint. Do not twist the belt webbing in the belt path.

3. Slide the latch plate into the buckle until you hear a “click.”

4. Finally, pull up on any excess webbing to tighten the lap portion around the child restraint while you push the child restraint rearward and downward into the vehicle seat.

5. If the child restraint has a top tether strap and the seating position has a top tether anchorage, connect the tether strap to the anchorage and tighten the tether strap. See the section “Installing Child Restraints Using the Top Tether Anchorage” for directions to attach a tether anchor.

6. Test that the child restraint is installed tightly by pulling back and forth on the child seat at the belt path. It should not move more than 1 inch (25.4 mm) in any direction.

Any seat belt system will loosen with time, so check the belt occasionally, and pull it tight if necessary.

If the buckle or the cinching latch plate is too close to the belt path opening of the child restraint, you may have trouble tightening the seat belt. If this happens, disconnect the latch plate from the buckle and twist the short buckle-end belt up to three full turns to shorten it. Insert the latch plate into the buckle with the release button facing out, away from the child
restraint. Repeat steps 4 to 6, above, to complete the installation of the child restraint. If the belt still cannot be tightened after you shorten the buckle, disconnect the latch plate from the buckle, turn the buckle around one half turn, and insert the latch plate into the buckle again. If you still cannot make the child restraint installation tight, try a different seating position.

**Installing Child Restraints Using The Top Tether Anchorage**

**WARNING!**

Do not attach a tether strap for a rear-facing car seat to any location in front of the car seat, including the seat frame or a tether anchorage. Only attach the tether strap of a rear-facing car seat to the tether anchorage that is approved for that seating position, located behind the top of the vehicle seat. See the section “Lower Anchors and Tethers for Children (LATCH) Restraint System” for the location of approved tether anchorages in your vehicle.

1. Place the child restraint on the seat and adjust the tether strap so that it will reach over the seat back, under the head restraint and to the tether anchor directly behind the seat.

**Regular and Mega Cab Trucks:**

In the regular cab truck, the top tether anchorages are located behind the center and right passenger seats. In the mega cab truck, the top tether anchorages are located behind each rear seating position. There is a plastic cover over each anchorage. To attach the tether strap of the child restraint:

1. Place the child restraint on the seat and adjust the tether strap so that it will reach over the seat back, under the head restraint and to the tether anchor directly behind the seat.

**Regular Cab Tether Anchorages**

1 — Tether Strap Hook
2 — Tether Strap To Child Restraint
3 — Tether Anchor

2. Route the tether strap to provide the most direct path between the anchorage and the child seat. The tether strap should go between the head restraint posts underneath the head restraint. You may need to adjust the head restraint to the upward position to pass the tether strap
underneath the head restraint and between its posts.

3. Lift the cover (if so equipped), and attach the hook to the square opening in the sheet metal. Tighten the tether strap according to the child seat manufacturer’s instructions.

**Crew Cab Trucks:**

The top tether anchorages in this vehicle are tether strap loops located between the rear glass and the back of the rear seat. There is a tether strap loop located behind each seating position. Follow the steps below to attach the tether strap of the child restraint.

**Right Or Left Outboard Seats:**

1. Raise the head restraint and reach between the rear seat and rear glass to access the tether strap loop.

2. Place a child restraint on the seat and adjust the tether strap so that it will reach over the seat back, under the head restraint, through the tether strap loop behind the seat and over to the tether strap loop behind the center seat.

3. Pass the tether strap hook under the head restraint behind the child seat, through the tether strap loop behind the seat and over to the center tether strap loop.

**WARNING!**

Never place a rear-facing child restraint in front of an air bag. A deploying Passenger Front Air Bag can cause death or serious injury to a child 12 years or younger, including a child in a rear-facing child restraint.

>>> CONDITION: {Market="Latin America"}

Check all applicable legal requirements for the proper restraint of babies and children.

<<< CONDITION END >>>

**Tether Strap Loop With Center Head Restraint In Raised Position**

2. Place a child restraint on the seat and adjust the tether strap so that it will reach over the seat back, under the head restraint, through the tether strap loop behind the seat and over to the center tether strap loop.

3. Pass the tether strap hook under the head restraint behind the child seat, though the tether strap loop behind the seat and over to the center tether strap loop.
4. Attach the hook to the center tether strap loop (see diagram). Tighten the tether strap according to the child seat manufacturer’s instructions.

NOTE:
If there are child seats in both of the outboard (left and right) seating positions, the tether strap hooks of both child seats should be connected to the center tether strap loop. This is the correct way to tether two outboard child seats.

Center Seat:
1. Raise the head restraint and reach between the rear seat and rear glass to access the tether strap loop.

2. Place a child restraint on the seat and adjust the tether strap so that it will reach over the seat back, under the head restraint, through the tether strap loop behind the seat and over to the tether strap loop behind either the right or left outboard seat.

3. Pass the tether strap hook under the head restraint behind the child seat, though the tether strap loop behind the seat and over to the right or left outboard tether strap loop.

4. Attach the hook to the outboard tether strap loop (see diagram). Tighten the tether strap according to the child seat manufacturer’s instructions.
Installing Three Child Restraints:

1. Place a child restraint on each outboard rear seat. Route the tether straps following the directions for right and left seating positions, above.

2. Attach both hooks to the center tether strap loop, but do not tighten the straps yet.

3. Place a child restraint on the center rear seat. Route the tether strap following the directions for the center seating position, above.

4. Attach the hook to the outboard tether strap loop.

5. Tighten the tether straps according to the child seat manufacturer’s instructions, tightening the right and left tether straps before the center tether strap.

Transporting Pets

Air Bags deploying in the front seat could harm your pet. An unrestrained pet will be thrown about and possibly injured, or injure a passenger during panic braking or in a collision. Pets should be restrained in the rear seat (if equipped) in pet harnesses or pet carriers that are secured by seat belts.

SAFETY TIPS

Transporting Passengers

NEVER TRANSPORT PASSENGERS IN THE CARGO AREA.

WARNING!

- Do not leave children or animals inside parked vehicles in hot weather. Interior heat build-up may cause serious injury or death.

- It is extremely dangerous to ride in a cargo area, inside or outside of a vehicle. In a collision, people riding in these areas are more likely to be seriously injured or killed.

- Do not allow people to ride in any area of your vehicle that is not equipped with seats and seat belts.
### Safety Checks You Should Make Inside the Vehicle

#### Seat Belts

Inspect the seat belt system periodically, checking for cuts, frays, and loose parts. Damaged parts must be replaced immediately. Do not disassemble or modify the system. Front seat belt assemblies must be replaced after a collision. Rear seat belt assemblies must be replaced after a collision if they have been damaged (i.e., bent retractor, torn webbing, etc.). If there is any question regarding seat belt or retractor condition, replace the seat belt.

#### Air Bag Warning Light

The Air Bag warning light will turn on for four to eight seconds as a bulb check when the ignition switch is first turned to ON/RUN. If the light is either not on during starting, stays on, or turns on while driving, have the system inspected at an authorized dealer as soon as possible. After the bulb check, this light will illuminate with a single chime when a fault with the Air Bag System has been detected. It will stay on until the fault is removed. If the light comes on intermittently or remains on while

---

**WARNING!**

- Be sure everyone in your vehicle is in a seat and using a seat belt properly.

**EXHAUST GAS**

Exhaust gases can injure or kill. They contain carbon monoxide (CO), which is colorless and odorless. Breathing it can make you unconscious and can eventually poison you. To avoid breathing (CO), follow these safety tips:

- Do not run the engine in a closed garage or in confined areas any longer than needed to move your vehicle in or out of the area.
- If you are required to drive with the trunk/liftgate/rear doors open, make sure that all windows are closed and the climate control BLOWER switch is set at high speed. DO NOT use the recirculation mode.

The best protection against carbon monoxide entry into the vehicle body is a properly maintained engine exhaust system.

Whenever a change is noticed in the sound of the exhaust system, when exhaust fumes can be detected inside the vehicle, or when the underside or rear of the vehicle is damaged, have a competent mechanic inspect the complete exhaust system and adjacent body areas for broken, damaged, deteriorated, or mispositioned parts. Open seams or loose connections could permit exhaust fumes to seep into the passenger compartment. In addition, inspect the exhaust system each time the vehicle is raised for lubrication or oil change. Replace as required.
driving, have an authorized dealer service the vehicle immediately.
Refer to “Occupant Restraint Systems” in “Safety” for further information.

Defroster
Check operation by selecting the defrost mode and place the blower control on high speed. You should be able to feel the air directed against the windshield. See an authorized dealer for service if your defroster is inoperable.

Floor Mat Safety Information
Always use floor mats designed to fit your vehicle. Only use a floor mat that does not interfere with the operation of the accelerator, brake or clutch pedals. Only use a floor mat that is securely attached using the floor mat fasteners so it cannot slip out of position and interfere with the accelerator, brake or clutch pedals or impair safe operation of your vehicle in other ways.

**WARNING!**
An improperly attached, damaged, folded, or stacked floor mat, or damaged floor mat fasteners may cause your floor mat to interfere with the accelerator, brake, or clutch pedals and cause a loss of vehicle control. To prevent SERIOUS INJURY or DEATH:

- ALWAYS securely attach your floor mat using the floor mat fasteners. DO NOT install your floor mat upside down or turn your floor mat over. Lightly pull to confirm mat is secured using the floor mat fasteners on a regular basis.
- ALWAYS REMOVE THE EXISTING FLOOR MAT FROM THE VEHICLE before installing any other floor mat. NEVER install or stack an additional floor mat on top of an existing floor mat.

**WARNING! (Continued)**

- ONLY install floor mats designed to fit your vehicle. NEVER install a floor mat that cannot be properly attached and secured to your vehicle. If a floor mat needs to be replaced, only use a FCA approved floor mat for the specific make, model, and year of your vehicle.
- ONLY use the driver’s side floor mat on the driver’s side floor area. To check for interference, with the vehicle properly parked with the engine off, fully depress the accelerator, the brake, and the clutch pedal (if present) to check for interference. If your floor mat interferes with the operation of any pedal, or is not secure to the floor, remove the floor mat from the vehicle and place the floor mat in your trunk.
- ONLY use the passenger’s side floor mat on the passenger’s side floor area.
- ALWAYS make sure objects cannot fall or slide into the driver’s side floor area when the vehicle is moving. Objects can become trapped under accelerator, brake, or clutch pedals and could cause a loss of vehicle control.
Periodic Safety Checks You Should Make Outside The Vehicle

Tires
Examine tires for excessive tread wear and uneven wear patterns. Check for stones, nails, glass, or other objects lodged in the tread or sidewall. Inspect the tread for cuts and cracks. Inspect sidewalls for cuts, cracks, and bulges. Check the wheel bolts for tightness. Check the tires (including spare) for proper cold inflation pressure.

Lights
Have someone observe the operation of brake lights and exterior lights while you work the controls. Check turn signal and high beam indicator lights on the instrument panel.

Door Latches
Check for proper closing, latching, and locking.

Fluid Leaks
Check area under the vehicle after overnight parking for fuel, coolant, oil, or other fluid leaks. Also, if gasoline fumes are detected or if fuel, or brake fluid leaks are suspected, the cause should be located and corrected immediately.

WARNING! (Continued)
- NEVER place any objects under the floor mat (e.g., towels, keys, etc.). These objects could change the position of the floor mat and may cause interference with the accelerator, brake, or clutch pedals.
- If the vehicle carpet has been removed and re-installed, always properly attach carpet to the floor and check the floor mat fasteners are secure to the vehicle carpet. Fully depress each pedal to check for interference with the accelerator, brake, or clutch pedals then re-install the floor mats.
- It is recommended to only use mild soap and water to clean your floor mats. After cleaning, always check your floor mat has been properly installed and is secured to your vehicle using the floor mat fasteners by lightly pulling mat.

WARNING!
NEVER place any objects under the floor mat (e.g., towels, keys, etc.). These objects could change the position of the floor mat and may cause interference with the accelerator, brake, or clutch pedals.

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STARTING THE ENGINE — GASOLINE ENGINE

Before starting your vehicle, adjust your seat, adjust both inside and outside mirrors, and fasten your seat belt. The starter should not be operated for more than 10 second intervals. Waiting a few seconds between such intervals will protect the starter from overheating.

WARNING!

- When leaving the vehicle, always make sure the keyless ignition node is in the "OFF" mode, remove the key fob from the vehicle and lock the vehicle.
- Never leave children alone in a vehicle, or with access to an unlocked vehicle. Allowing children to be in a vehicle unattended is dangerous for a number of reasons. A child or others could be seriously or fatally injured. Children should be warned not to touch the parking brake, brake pedal or the gear selector.

Automatic Transmission

Start the engine with the transmission in the PARK position. Apply the brake before shifting into any driving range.

NOTE:

- This vehicle is equipped with a transmission shift interlocking system. The brake pedal must be pressed to shift out of PARK.
- If equipped with an 8-speed transmission, starting the vehicle in NEUTRAL is not possible unless the Manual Park Release has been activated. For the Manual Park Release operation refer to “Manual Park Release” in “In Case Of Emergency” for further information.

Tip Start Feature

Do not press the accelerator. Cycle the ignition switch briefly to the START position and release it. The starter motor will continue to run and will

(Continued)
automatically disengage when the engine is running.

**Keyless Enter-N-Go — Ignition**
This feature allows the driver to operate the ignition switch with the push of a button, as long as the Remote Start/Keyless Enter-N-Go key fob is in the passenger compartment.

**Normal Starting Using ENGINE START/STOP Button**

**To Turn On The Engine Using The ENGINE START/STOP Button**

1. The transmission must be in PARK.
2. Press and hold the brake pedal while pushing the ENGINE START/STOP button once.
3. The system takes over and attempts to start the vehicle. If the vehicle fails to start, the starter will disengage automatically after 10 seconds.
4. If you wish to stop the cranking of the engine prior to the engine starting, push the button again.

**NOTE:**
Normal starting of either a cold or a warm engine is obtained without pumping or pressing the accelerator pedal.

**To Turn Off The Engine Using ENGINE START/STOP Button**

1. Place the gear selector in PARK, then push and release the ENGINE START/STOP button.
2. The ignition will return to the OFF mode.
3. If the gear selector is not in PARK, the ENGINE START/STOP button must be held for two seconds or three short pushes in a row with the vehicle speed above 5 mph (8 km/h) before the engine will shut off. The ignition will remain in the ACC mode until the gear selector is in PARK and the button is pushed twice to the OFF mode.
4. If the gear selector is not in PARK and the ENGINE START/STOP button is pushed once with the vehicle speed above 5 mph (8 km/h), the instrument cluster will display a “Vehicle Not In Park” message and the engine will remain running. Never leave a vehicle out of the PARK position, or it could roll.

**NOTE:**
If the gear selector is not in PARK, and the ENGINE START/STOP button is pushed once with the vehicle speed below 5 mph (8 km/h), the engine will shut off and the ignition will remain in the ACC position. If vehicle speed drops below 1.2 mph (1.9 km/h), the vehicle may AutoPark.

**ENGINE START/STOP Button Functions — With Driver’s Foot OFF The Brake Pedal (In PARK Or NEUTRAL Position)**

The ENGINE START/STOP button operates similar to an ignition switch. It has three modes: OFF, ACC, and RUN. To change the ignition modes without starting the vehicle and use the accessories, follow these directions:

1. Start with the ignition in the OFF mode.
2. Push the ENGINE START/STOP button once to place the ignition to the ACC mode.
3. Push the ENGINE START/STOP button a second time to place the ignition to the RUN mode.
4. Push the ENGINE START/STOP button a third time to return the ignition to the OFF mode.

If Engine Fails To Start
If the engine fails to start after you have followed the “Normal Starting” procedure, it may be flooded. Push the accelerator pedal all the way to the floor and hold it there while the engine is cranking. This should clear any excess fuel in case the engine is flooded.

The starter motor will engage automatically, run for 10 seconds, and then disengage. Once this occurs, release the accelerator pedal and the brake pedal, wait 10 to 15 seconds, then repeat the “Normal Starting” procedure.

If the engine has been flooded, it may start to run, but not have enough power to continue running when the ignition button/key is released. If this occurs, continue cranking with the accelerator pedal pushed all the way to the floor. Release the accelerator pedal and the ignition button/key once the engine is running smoothly.

If the engine shows no sign of starting after a 10 second period of engine cranking with the accelerator pedal held to the floor, wait 10 to 15 seconds, then repeat the “Normal Starting” procedure.

Cold Weather Operation (Below –22 °F Or –30 °C)
To ensure reliable starting at these temperatures, use of an externally powered electric engine block heater (available from your authorized dealer) is recommended.

After Starting
The idle speed is controlled automatically, and it will decrease as the engine warms up.

STARTING THE ENGINE — DIESEL ENGINE
Before starting your vehicle, adjust your seat, adjust both inside and outside mirrors, and fasten your seat belts.

The starter should not be operated for more than 25-second intervals. Waiting a few

WARNING! (Continued)
- Do not attempt to push or tow your vehicle to get it started. Vehicles equipped with an automatic transmission cannot be started this way. Unburned fuel could enter the catalytic converter and once the engine has started, ignite and damage the converter and vehicle.
- If the vehicle has a discharged battery, booster cables may be used to obtain a start from a booster battery or the battery in another vehicle. This type of start can be dangerous if done improperly. Refer to “Jump Starting Procedure” in “In Case Of Emergency” for further information.

(Continued)
minutes between such intervals will protect the starter from overheating.

<table>
<thead>
<tr>
<th>WARNING!</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Do not leave children or animals inside parked vehicles in hot weather. Interior heat build up may cause serious injury or death.</td>
</tr>
<tr>
<td>● When leaving the vehicle, always make sure the keyless ignition node is in the “OFF” mode, remove the key fob from the vehicle and lock the vehicle.</td>
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<td>● Never leave children alone in a vehicle, or with access to an unlocked vehicle. Allowing children to be in a vehicle unattended is dangerous for a number of reasons. A child or others could be seriously or fatally injured. Children should be warned not to touch the parking brake, brake pedal or the gear selector.</td>
</tr>
<tr>
<td>● Do not leave the key fob in or near the vehicle, or in a location accessible to children, and do not leave the ignition of a vehicle equipped with Keyless Enter-N-Go in the ACC or ON/RUN mode. A child could operate power windows, other controls, or move the vehicle.</td>
</tr>
</tbody>
</table>

**Automatic Transmission**

Start the engine with the transmission in the NEUTRAL or PARK position. Apply the brake before shifting to any driving range.

**Tip Start Feature**

Do not press the accelerator. Place the ignition switch briefly in the START position and release it. The starter motor will continue to run and will automatically disengage when the engine is running.

**Keyless Enter-N-Go — Ignition**

This feature allows the driver to operate the ignition switch with the push of a button, as long as the Remote Start/Keyless Enter-N-Go key fob is in the passenger compartment.

**Normal Starting**

**Using The ENGINE START/STOP Button**

1. The transmission must be in PARK or NEUTRAL.

2. Press and hold the brake pedal while pushing the ENGINE START/STOP button once.

3. The system takes over and attempts to start the vehicle. If the vehicle fails to start, the starter will disengage automatically after 25 seconds.

4. If you wish to stop the cranking of the engine prior to the engine starting, remove your foot from the brake pedal and push the ENGINE START/STOP button again.

**NOTE:**

- Normal starting of either a cold or a warm engine is obtained without pumping or pressing the accelerator pedal.

- Under cold weather conditions, the engine may not immediately crank if the “Wait To Start” telltale is illuminated. This is normal operation. For vehicles equipped with Keyless Enter-N-Go, the vehicle will automatically crank when the “Wait To Start” time has elapsed. See the section “Starting Procedure — Engine Manifold Air Temperature 0°F to 66°F (-18° C to 19° C)” for more information.

**WARNING!**

- Do not leave children or animals inside parked vehicles in hot weather. Interior heat build up may cause serious injury or death.

- When leaving the vehicle, always make sure the keyless ignition node is in the “OFF” mode, remove the key fob from the vehicle and lock the vehicle.

- Never leave children alone in a vehicle, or with access to an unlocked vehicle. Allowing children to be in a vehicle unattended is dangerous for a number of reasons. A child or others could be seriously or fatally injured. Children should be warned not to touch the parking brake, brake pedal or the gear selector.

- Do not leave the key fob in or near the vehicle, or in a location accessible to children, and do not leave the ignition of a vehicle equipped with Keyless Enter-N-Go in the ACC or ON/RUN mode. A child could operate power windows, other controls, or move the vehicle.

- Never leave children alone in a vehicle, or with access to an unlocked vehicle. Allowing children to be in a vehicle unattended is dangerous for a number of reasons. A child or others could be seriously or fatally injured. Children should be warned not to touch the parking brake, brake pedal or the gear selector.

- Do not leave the key fob in or near the vehicle, or in a location accessible to children, and do not leave the ignition of a vehicle equipped with Keyless Enter-N-Go in the ACC or ON/RUN mode. A child could operate power windows, other controls, or move the vehicle.

- Never leave children alone in a vehicle, or with access to an unlocked vehicle. Allowing children to be in a vehicle unattended is dangerous for a number of reasons. A child or others could be seriously or fatally injured. Children should be warned not to touch the parking brake, brake pedal or the gear selector.

- Do not leave the key fob in or near the vehicle, or in a location accessible to children, and do not leave the ignition of a vehicle equipped with Keyless Enter-N-Go in the ACC or ON/RUN mode. A child could operate power windows, other controls, or move the vehicle.
To Turn Off The Engine Using ENGINE START/STOP Button

1. Place the gear selector in PARK, then push and release the ENGINE START/STOP button.

2. The ignition will return to the OFF mode.

3. If the gear selector is not in PARK and the ENGINE START/STOP button is pushed once, the instrument cluster will display a “Vehicle Not In Park” message and the engine will remain running. Never leave a vehicle out of the PARK position, or it could roll.

4. If the gear selector is in NEUTRAL, and the vehicle speed is below 5 mph (8 km/h), pushing the ENGINE START/STOP button once will turn the engine off. The ignition will remain in the ACC mode.

5. If the vehicle speed is above 5 mph (8 km/h), the ENGINE START/STOP button must be held for two seconds (or three short pushes in a row) to turn the engine off. The ignition will remain in the ACC mode (NOT the OFF mode) if the engine is turned off when the transmission is not in PARK.

NOTE:
If the ignition is left in the ACC or ON/RUN (engine not running) mode and the transmission is in PARK, the system will automatically time out after 30 minutes of inactivity and the ignition returns to the OFF mode.

ENGINE START/STOP Button Functions — With Driver’s Foot OFF The Brake Pedal (In PARK Or NEUTRAL Position)
The ENGINE START/STOP button operates similar to an ignition switch. It has three positions, OFF, ACC, RUN. To change the ignition switch positions without starting the vehicle and use the accessories, follow these steps:

1. Starting with the ignition in the OFF position:
2. Push the ENGINE START/STOP button once to change the ignition to the ACC position.
3. Push the ENGINE START/STOP button a second time to change the ignition to the RUN position.
4. Push the ENGINE START/STOP button a third time to return the ignition to the OFF position.

Keyless Enter-N-Go Starting Procedure — Engine Manifold Air Temperature 0° F To 66° F (–18° C to 19° C)

NOTE:
The temperature displayed in the instrument cluster does not necessarily reflect the engine manifold air temperature. Refer to “Instrument Cluster Display” in “Getting To Know Your Instrument Panel” for further information. When engine temperatures fall below 66°F (19°C) the “Wait To Start” telltale will remain on indicating the intake manifold heater system is active.

Follow the steps in the “Normal Starting” procedure except:

1. Pushing the engine start button with the driver’s foot on the brake will move the ignition from OFF or ACC to RUN, and will illuminate the “Wait To Start” telltale. The engine will not immediately crank, this is normal operation.
2. The “Wait To Start” telltale will remain on for a period of time that varies depending on the engine temperature.
3. While the "Wait to Start" telltale is on, the instrument cluster will additionally display a gauge or bar whose initial length represents the full "Wait to Start" time period. Its length will decrease until it disappears when the "Wait to Start" time has elapsed.

4. After the engine "Wait To Start" telltale goes off, the engine will automatically crank.

5. After engine start-up, check to see that there is oil pressure.

6. Release the parking brake and drive.

**NOTE:**
- Engine idle speed will automatically increase to 1,000 RPM and engage the Variable Geometry Turbocharger at low coolant temperatures to improve engine warm-up.
- The engine may not automatically crank after the engine "Wait To Start" telltale goes off if a door or the hood is ajar.
- If the engine stalls, or if the ignition switch is left ON for more than two minutes after the "Wait To Start" telltale goes out, reset the grid heaters by turning the ignition switch to the OFF position for at least five seconds and then back ON. Repeat steps 1 through 7 of "Keyless Enter-N-Go Starting Procedure – Engine Manifold Air Temperature Below 66°F (19°C)."

**Extreme Cold Weather**
The engine block heater is a resistance heater installed in the water jacket of the engine. It requires a 110–115 Volt AC electrical outlet with a grounded, three-wire extension cord. Its use is recommended for environments that routinely fall below -10°F (-23°C). It should be used when the vehicle has not been running overnight or longer periods and should be plugged in two hours prior to start. Its use is required for cold starts with temperatures under -20°F (-28°C).

**NOTE:**
The engine block heater cord is a factory installed option. If your vehicle is not equipped, heater cords are available from your authorized Mopar dealer.

- A 12 Volt heater built into the fuel filter housing aids in preventing fuel gelling. It is controlled by a built-in thermostat.
- A Diesel Pre-Heat system both improves engine starting and reduces the amount of white smoke generated by a warming engine.

**Normal Starting Procedure — Engine Manifold Air Temperature Above 66°F (19°C)**
Observe the instrument panel cluster lights when starting the engine.

1. Always apply the parking brake.
2. Shift into PARK for an automatic transmission.
3. Push the engine start button with the driver’s foot on the brake will move the ignition from OFF or ACC to RUN, and will illuminate the "Wait To Start" telltale.

<table>
<thead>
<tr>
<th>CAUTION!</th>
</tr>
</thead>
<tbody>
<tr>
<td>If the “Water in Fuel Indicator Light” remains on, DO NOT START the engine before you drain the water from the fuel filters to avoid engine damage. Refer to “Draining Fuel/Water Separator Filter” in “Servicing And Maintenance” for further information.</td>
</tr>
</tbody>
</table>

4. After the engine “Wait To Start” telltale goes off, the engine will automatically crank.

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<tr>
<th>CAUTION!</th>
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</thead>
<tbody>
<tr>
<td>Do not crank engine for more than 25 seconds at a time or starter motor damage may result. Turn the ignition switch to the OFF position and wait at least two minutes for the starter to cool before repeating start procedure.</td>
</tr>
</tbody>
</table>

5. After engine start-up, check to see that there is oil pressure.

6. Release the parking brake.

---

### Starting Procedure — Engine Manifold Air Temperature 0°F To 66°F (–18°C to 19°C)

**NOTE:**
The temperature displayed in the instrument cluster does not necessarily reflect the engine manifold air temperature. Refer to “Instrument Cluster Display” in “Getting To Know Your Instrument Panel” for further information. When engine temperatures fall below 66°F (19°C) the “Wait To Start Light” will remain on indicating the intake manifold heater system is active.

Follow the steps in the “Normal Starting” procedure except:

1. The “Wait To Start” telltale will remain on for a period of time that varies depending on the engine temperature.

2. While the "Wait To Start" telltale is on, the instrument cluster will additionally display a gauge or bar whose initial length represents the full "Wait To Start" time period. Its length will decrease until it disappears when the "Wait To Start" time has elapsed.

3. After the engine “Wait To Start” telltale goes off, the engine will automatically crank.

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**NOTE:**
- Engine idle speed will automatically increase to 1,000 RPM and engage the Variable
Geometry Turbocharger at low coolant temperatures to improve engine warm-up.

- Automatic equipped vehicles with optional Keyless Enter-N-Go, if the start button is pushed once while in PARK with the ignition OFF and driver’s foot on the brake pedal, the vehicle will automatically crank and start after the Wait to Start time has elapsed. If it is desired to abort the start process before it completes, the driver’s foot should be fully removed from the brake pedal prior to pushing the start button again in order for the ignition to move directly to OFF.

- If the engine stalls, or if the ignition switch is left ON for more than two minutes after the “Wait To Start” telltale goes out, reset the grid heaters by turning the ignition switch to the OFF position for at least five seconds and then back ON. Repeat steps 1 through 5 of “Starting Procedure — Engine Manifold Air Temperature Below 66 °F (19 °C).”

**Starting Procedure — Engine Manifold Air Temperature Below 0 °F (-18 °C)**

In extremely cold weather below 0 °F (-18 °C) it may be beneficial to cycle the manifold heaters twice before attempting to start the engine. This can be accomplished by turning the ignition OFF for at least five seconds and then back ON after the “Wait To Start” telltale has turned off, but before the engine is started. However, excessive cycling of the manifold heaters will result in damage to the heater elements or reduced battery voltage.

**NOTE:**

If multiple preheat cycles are used before starting, additional engine run time may be required to maintain battery state of charge at a satisfactory level.

1. If the engine stalls after the initial start, the ignition must be turned to the OFF position for at least five seconds and then to the ON position to recycle the manifold heaters.

**NOTE:**

Excessive white smoke and poor engine performance will result if manifold heaters are not recycled.

2. Heat generated by the manifold heaters dissipates rapidly in a cold engine. If more than two minutes pass between the time the “Wait To Start” telltale turns off and the engine is started, recycle the manifold heaters by placing the ignition switch in the OFF position for at least five seconds and then back ON.

3. If the vehicle is driven and vehicle speed exceeds 19 mph (31 km/h) before the manifold heater post-heat (after start) cycle is complete, the manifold heaters will shut off.

4. If the engine is started before the “Wait To Start” telltale turns off, the preheat cycle will turn off.

**NOTE:**

- Engine idle speed will automatically increase to 1,000 RPM and engage the Variable Geometry Turbocharger at low coolant temperatures to improve engine warm-up.

- When a diesel engine is allowed to run out of fuel or the fuel gels at low temperatures, air is pulled into the fuel system. If your engine has run out of fuel, refer to “Dealer Service/ Priming If The Engine Has Run Out Of Fuel” in
“Servicing And Maintenance” for further information.

- If the engine stalls, or if the ignition switch is left ON for more than two minutes after the “Wait To Start” telltale goes out, reset the grid heaters by turning the ignition switch to the OFF position for at least five seconds and then back ON. Repeat steps 1 through 5 of “Starting Procedure – Engine Manifold Air Temperature Below 66°F (19°C).”

**Starting Fluids**

### WARNING!

Starting fluids or flammable liquids must never be used in the Cummins diesel engine (see Warning label). Never pour diesel fuel, flammable liquid, starting fluids (ether) into the air cleaner canister, air intake piping, or turbocharger inlet in an attempt to start the vehicle. This could result in a flash fire and explosion causing serious personal injury and engine damage.

The engine is equipped with a glow plug preheating system. If the instructions in this manual are followed, the engine should start in all conditions and no type of starting fluid should be used.

### WARNING!

- Do not leave children or animals inside parked vehicles in hot weather. Interior heat build up may cause serious injury or death.
- When leaving the vehicle, always make sure the keyless ignition node is in the “OFF” mode, remove the key fob from the vehicle and lock the vehicle.
- Never leave children alone in a vehicle, or with access to an unlocked vehicle. Allowing children to be in a vehicle unattended is dangerous for a number of reasons. A child or others could be seriously or fatally injured. Children should be warned not to touch the parking brake, brake pedal or the gear selector.
- Do not leave the key fob in or near the vehicle, or in a location accessible to children, and do not leave the ignition of a vehicle equipped with Keyless Enter-N-Go in the ACC or ON/RUN mode. A child could operate power windows, other controls, or move the vehicle.

**NORMAL OPERATION — DIESEL ENGINE**

Observe the following when the engine is operating.

- All message center lights are off.
- Malfunction Indicator Light (MIL) is off.
- Engine oil pressure is above 10 psi (69 kPa) at idle.
- Voltmeter operation:

The voltmeter may show a gauge fluctuation at various engine temperatures. This cycling operation is caused by the post-heat cycle of the intake manifold heater system. The number of cycles and the length of the cycling operation is controlled by the engine control module. Post-heat operation can run for several minutes, and then the electrical system and voltmeter needle will stabilize.

The cycling action will cause temporary dimming of the headlamps, interior lamps, and also a noticeable reduction in blower motor speed.
Cold Weather Precautions
Operation in ambient temperature below 32°F (0°C) may require special considerations. The following information suggest these options:

**Fuel Operating Range**

**NOTE:**
- Use “Low Sulfur Diesel Fuels” ONLY.
- The fuel grade should be clearly marked on the pump at the fuel station.
- The engine requires the use of “Low Sulfur Diesel Fuel”. Use of incorrect fuel could result in engine and exhaust system damage. Refer to “Fuel Requirements” in “Technical Specifications” for further information.

**Engine Oil Usage**
Refer to “Dealer Service” in “Servicing And Maintenance” for the correct engine oil viscosity.

**Winter Front Cover Usage**
A winter front or cold weather cover is to be used in ambient temperatures below 32°F (0°C), especially during extended idle conditions. This cover is equipped with four flaps for managing total grille opening in varying ambient temperatures. If a winter front or cold weather cover is to be used, the flaps should be left in the full open position to allow air flow to the charge air cooler and automatic transmission oil cooler. When ambient temperatures drop below 0°F (-18°C) the four flaps need to be closed. A suitable cold weather cover is available from your Mopar dealer.

**Battery Blanket Usage**
A battery loses 60% of its cranking power as the battery temperature decreases to 0°F (-18°C). For the same decrease in temperature, the engine requires twice as much power to crank at the same RPM. The use of 120 Volts AC powered battery blankets will greatly increase starting capability at low temperatures. Suitable battery blankets are available from an authorized Mopar dealer.

**Engine Warm-Up**
Avoid full throttle operation when the engine is cold. When starting a cold engine, bring the engine up to operating speed slowly to allow the oil pressure to stabilize as the engine warms up.

**NOTE:**
High-speed, no-load running of a cold engine can result in excessive white smoke and poor engine performance. No-load engine speeds should be kept under 1,200 RPM during the warm-up period, especially in cold ambient temperature conditions.

Your vehicle is equipped with a turbo speed limiter, this feature limits the engine speed to 1,200 RPM when engine coolant temperatures are below 70°F (21°C). This feature is designed to protect the turbocharger from damage and will only operate in PARK or NEUTRAL.

If temperatures are below 32°F (0°C), operate the engine at moderate speeds for five minutes before full loads are applied.

**NOTE:**
If ambient temperatures are low and the coolant temperature is below 180°F (82°C),
the engine idle speed will slowly increase to 1,000 RPM after two minutes of idle, if the following conditions are met:

- Foot is off brake pedal and throttle pedal.
- Automatic transmission is in PARK.
- Vehicle speed is 0 mph (0 km/h).
- Applying the throttle will cancel fast idle.
- Operating the exhaust brake at idle will greatly improve warm up rate and will help keep the engine close to operating temperature during extended idle.

**Engine Idling**

Avoid prolonged idling, long periods of idling may be harmful to your engine because combustion chamber temperatures can drop so low that the fuel may not burn completely. Incomplete combustion allows carbon and varnish to form on piston rings, engine valves, and injector nozzles. Also, the unburned fuel can enter the crankcase, diluting the oil and causing rapid wear to the engine.

If the engine is allowed to idle or the truck is driven on low engine speed drive cycles for more than 2 hours, the system will automatically enter an emissions operating mode that will increase the engine idle speed to 900 RPM. While in this mode, which is designed to help maintain the diesel particulate filter, the engine idle speed will return to normal when the brake pedal is applied. A small change in engine tone or a slight change in engine performance while accelerating may also be noticeable at speeds below 20 mph (32 km/h). This operating mode may last for up to an hour of idle time, or around 20 minutes of driving time.

Your truck may have been ordered with an optional voltage monitoring idle up feature. If a load is placed on the electrical system while the truck is in PARK, this feature will attempt to maintain normal system voltage by automatically increasing engine idle speed. You may notice several consecutive increases in idle speed, up to a maximum of 1,450 RPM, as the system will attempt to utilize the smallest increase in idle speed necessary to maintain normal system voltage. The idle speed will return to normal when either the electrical load is removed, or when the brake pedal is applied.

**NOTE:**

For instrument cluster display messages related to the vehicle's exhaust system, refer to “Instrument Cluster Display” in “Getting To Know Your Instrument Panel” for further information.

**Idle-Up Feature — Automatic Transmission Only**

The driver-controlled high idle speed feature will help increase cylinder temperatures and provide additional cab heat, however, excessive idling may still cause the exhaust after-treatment system to not properly regenerate. Extended periods of idle time should be avoided.

The Idle-Up feature uses the speed control switches to increase engine idle speed and quickly warm the vehicle’s interior.

1. With the transmission in PARK, the parking brake applied, and the engine running, push the speed control switch to the ON position, then push the SET switch.

2. The engine RPM will go up to 1,100 RPM. To increase the RPM, push and hold the ACCEL/RESUME switch and the idle speed will increase to approximately 1,500 RPM. To decrease the RPM, push and hold the DECEL switch and the idle speed will decrease to approximately 1,100 RPM.
3. To cancel the Idle–Up feature, either push the CANCEL switch, push the ON/OFF switch, or press the brake pedal.

**Stopping The Engine**
Idle the engine a few minutes before routine shutdown. After full load operation, idle the engine three to five minutes before shutting it down. This idle period will allow the lubricating oil and coolant to carry excess heat away from the combustion chamber, bearings, internal components, and turbocharger. This is especially important for turbocharged, charge air-cooled engines.

Refer to the following chart for proper engine shutdown.

<table>
<thead>
<tr>
<th>Driving Condition</th>
<th>Load</th>
<th>Turbocharger Temperature</th>
<th>Idle Time (min.) Before Engine Shutdown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stop and Go</td>
<td>Empty</td>
<td>Cool</td>
<td>Less than One</td>
</tr>
<tr>
<td>Stop and Go</td>
<td>Medium</td>
<td>-</td>
<td>One</td>
</tr>
<tr>
<td>Highway Speeds</td>
<td>Medium</td>
<td>Warm</td>
<td>Two</td>
</tr>
<tr>
<td>City Traffic</td>
<td>Maximum GCWR</td>
<td>-</td>
<td>Three</td>
</tr>
<tr>
<td>Highway Speeds</td>
<td>Maximum GCWR</td>
<td>-</td>
<td>Four</td>
</tr>
<tr>
<td>Uphill Grade</td>
<td>Maximum GCWR</td>
<td>Hot</td>
<td>Five</td>
</tr>
</tbody>
</table>

**Idle Shutdown**
This feature can be enabled so that the truck will automatically shutdown when the truck has been idling for a set period of time when the engine is at operating temperature. Idle time can be set in 5 minute increments between 5 and 60 minutes. See an authorized dealer to enable this feature.

**NOTE:**
The idle shut down timer is disabled while the Power Take Off (PTO) is active.

**Operating Precautions**

**Avoid Overheating The Engine**
The temperature of the engine coolant (antifreeze) (a mixture of 50% ethylene-glycol and 50% water) must not exceed the normal range of the temperature gauge 240°F (116°C) with a 21 psi (145 kPa) coolant pressure cap. Usually the engine coolant (antifreeze) temperature indicated during operation will be to the left of center in the normal range of the gauge.
Avoid Low Coolant Temperature Operation
Continual operation at low engine coolant (antifreeze) temperature below the normal range on the gauge 140°F (60°C) can be harmful to the engine. Low engine coolant (antifreeze) temperature can cause incomplete combustion which allows carbon and varnish to form on piston rings and injector nozzles. Also, the unburned fuel can enter the crankcase, diluting the lubricating oil and causing rapid wear to the engine.

Cooling System Tips — Automatic Transmission
To reduce potential for engine and transmission overheating in high ambient temperature conditions, take the following actions:
- **City Driving** —
  When stopped, shift the transmission into NEUTRAL and increase engine idle speed.
- **Highway Driving** —
  Reduce your speed.
- **Up Steep Hills** —
  Select a lower transmission gear.
- **Air Conditioning** —
  Turn it off temporarily.

Do Not Operate The Engine With Low Oil Pressure
When the engine is at normal operating temperature, the minimum oil pressures required are:

<table>
<thead>
<tr>
<th>Condition</th>
<th>Oil Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Idle 700 to 800 RPM</td>
<td>10 psi (69 kPa)</td>
</tr>
<tr>
<td>Full speed and load</td>
<td>30 psi (207 kPa)</td>
</tr>
</tbody>
</table>

**CAUTION!**
If oil pressure falls to less than normal readings, shut the engine off immediately. Failure to do so could result in immediate and severe engine damage.

Do Not Operate The Engine With Failed Parts
All engine failures give some warning before the parts fail. Be on the alert for changes in performance, sounds, and visual evidence that the engine requires service. Some important clues are:
- Engine misfiring or vibrating severely.
- Sudden loss of power.
- Unusual engine noises.
- Fuel, oil or coolant leaks.
- Sudden change, outside the normal operating range, in the engine operating temperature.
- Excessive smoke.
- Oil pressure drop.
ENGINE BLOCK HEATER — IF EQUIPPED

The engine block heater warms the engine, and permits quicker starts in cold weather. Connect the cord to a standard 110-115 Volt AC electrical outlet with a grounded, three-wire extension cord.

The engine block heater cord is routed through the grille by the right front tow hook.

It includes a removable cap that is secured by a tethered strap. It also has a c-clip that is used for storage when not in use for the winter months. During winter months, remove the heater cord wiring assembly from itself on the c-clip.

The engine block heater must be plugged in at least one hour to have an adequate warming effect on the engine.

Block Heater Usage

For ambient temperatures below 0°F (-18°C), engine block heater usage is recommended.
For ambient temperatures below –20°F (-29°C), engine block heater usage is required.

ENGINE BREAK-IN RECOMMENDATIONS — GASOLINE ENGINE

A long break-in period is not required for the engine and drivetrain (transmission and axle) in your vehicle.

Drive moderately during the first 300 miles (500 km). After the initial 60 miles (100 km), speeds up to 50 or 55 mph (80 or 90 km/h) are desirable.

While cruising, brief full-throttle acceleration within the limits of local traffic laws contributes to a good break-in. Wide-open throttle acceleration in low gear can be detrimental and should be avoided.

The engine oil installed in the engine at the factory is a high-quality energy conserving type lubricant. Oil changes should be consistent with anticipated climate conditions under which vehicle operations will occur. For the recommended viscosity and quality grades, refer to “Fluids And Lubricants” in “Technical Specifications”.

WARNING!

Remember to disconnect the engine block heater cord before driving. Damage to the 110-115 Volt electrical cord could cause electrocution.

CAUTION!

Never use Non-Detergent Oil or Straight Mineral Oil in the engine or damage may result.

NOTE:
A new engine may consume some oil during its first few thousand miles (kilometers) of operation. This should be considered a normal part of the break-in and not interpreted as a problem. Please check your oil level with the engine oil indicator often during the break in period. Add oil as required.

ENGINE BREAK-IN RECOMMENDATIONS — DIESEL ENGINE

The Cummins turbocharged diesel engine does not require a break-in period due to its construction. Normal operation is allowed,
providing the following recommendations are followed:

- Warm up the engine before placing it under load.
- Do not operate the engine at idle for prolonged periods.
- Use the appropriate transmission gear to prevent engine lugging.
- Observe vehicle oil pressure and temperature indicators.
- Check the coolant and oil levels frequently.
- Vary throttle position at highway speeds when carrying or towing significant weight.

**NOTE:**
Light duty operation such as light trailer towing or no load operation will extend the time before the engine is at full efficiency. Reduced fuel economy and power may be seen at this time.

For additional vehicle break-in requirements, refer to “Trailer Towing” in “Starting And Operating” of the Owner’s Manual. Because of the construction of the Cummins turbocharged diesel engine, engine run-in is enhanced by loaded operating conditions which allow the engine parts to achieve final finish and fit during the first 6,000 miles (10,000 km).

**PARKING BRAKE**

Before leaving the vehicle, make sure that the parking brake is fully applied. Also, be certain to leave the transmission in PARK.

The foot operated parking brake is located below the lower left corner of the instrument panel. To apply the parking brake, firmly push the park brake pedal fully. To release the parking brake, pull the parking brake release handle.

**NOTE:**
- When the parking brake is applied and the transmission is placed in gear, the “Brake Warning Light” will flash. If vehicle speed is detected, a chime will sound to alert the driver. Fully release the parking brake before attempting to move the vehicle.
- This light only shows that the parking brake is applied. It does not show the degree of brake application.

When parking on a hill, it is important to turn the front wheels toward the curb on a downhill grade and away from the curb on an uphill grade. Apply the parking brake before placing the gear selector in PARK, otherwise the load on the transmission locking mechanism may make it difficult to move the gear selector out of PARK. The parking brake should always be applied whenever the driver is not in the vehicle.

**WARNING!**
- Never use the PARK position as a substitute for the parking brake. Always apply the parking brake fully when parked to guard against vehicle movement and possible injury or damage.

(Continued)
The purpose of the exhaust brake (engine braking) feature is to supply negative (braking) torque from the engine. Typically, the engine braking is used for, but not limited to, vehicle towing applications where vehicle braking can be achieved by the internal engine power, thereby sparing the mechanical brakes of the vehicle.

Benefits of the exhaust brake are:
- Vehicle driving control.
- Reduced brake fade.
- Longer brake life.
- Faster cab warm-up.

The exhaust brake feature will only function when the driver toggles it on by pushing the exhaust brake button until the "Exhaust Brake Indicator" is illuminated. Normal (Full Strength) exhaust brake mode is indicated by a yellow "Exhaust Brake Indicator".

Once the "Exhaust Brake Indicator" is illuminated and the vehicle is moving faster than 5 mph (8 km/h), the exhaust brake will automatically operate when the driver removes pressure from the accelerator pedal. Exhaust braking is most effective when the engine RPM is higher. The automatic transmission will downshift more aggressively in TOW/HAUL mode when the exhaust brake is enabled to increase brake performance.

If the Brake System Warning Light remains on with the parking brake released, a brake system malfunction is indicated. Have the brake system serviced by an authorized dealer immediately.

WARNING! (Continued)

- Never leave children alone in a vehicle, or with access to an unlocked vehicle. Leaving unattended children in a vehicle is dangerous for a number of reasons. A child or others could be seriously or fatally injured.
- Do not leave the key fob in or near the vehicle, or in a location accessible to children, and do not leave a vehicle equipped with Keyless Enter-N-Go in the ACC or ON/RUN mode. A child could operate power windows, other controls, or move the vehicle.
- Be sure the parking brake is fully disengaged before driving; failure to do so can lead to brake failure and a collision.
- Always fully apply the parking brake when leaving your vehicle or it may roll and cause damage or injury. Also, be certain to leave the transmission in PARK. Failure to do so may cause the vehicle to roll and cause damage or injury.

CAUTION!

- Never leave children alone in a vehicle, or with access to an unlocked vehicle. Leaving unattended children in a vehicle is dangerous for a number of reasons. A child or others could be seriously or fatally injured.
- Do not leave the key fob in or near the vehicle, or in a location accessible to children, and do not leave a vehicle equipped with Keyless Enter-N-Go in the ACC or ON/RUN mode. A child could operate power windows, other controls, or move the vehicle.
- Be sure the parking brake is fully disengaged before driving; failure to do so can lead to brake failure and a collision.
- Always fully apply the parking brake when leaving your vehicle or it may roll and cause damage or injury. Also, be certain to leave the transmission in PARK. Failure to do so may cause the vehicle to roll and cause damage or injury.

Exhaust Brake Switch

If the Brake System Warning Light remains on with the parking brake released, a brake system malfunction is indicated. Have the brake system serviced by an authorized dealer immediately.
WARNING!
Do not use the exhaust brake feature when driving in icy or slippery conditions as the increased engine braking can cause the rear wheels to slide and the vehicle to swing around with the possible loss of vehicle control, which may cause an accident possibly resulting in personal injury or death.

CAUTION!
Use of aftermarket exhaust brakes is not recommended and could lead to engine damage.

NOTE:
For optimum braking power it is recommended to use the exhaust brake while in TOW/HAUL mode.

The exhaust brake feature can also be used to reduce the engine warm up time. To use the exhaust brake as a warm-up device, the vehicle must be stopped or moving less than 5 mph (8 km/h), the “Exhaust Brake Indicator” must be on, and the coolant temperature must be below 180°F (82°C) and ambient temperature below 60°F (16°C).

Automatic Smart Exhaust Brake (Auto)
Automatic Smart Exhaust Brake (Auto) technology delivers smoother, less aggressive exhaust braking characteristics during downhill descents. Although it can apply full exhaust braking force if needed, Automatic Exhaust Brake may not apply obvious braking if the vehicle speed is not increasing. Automatic Exhaust Brake is intended to maintain vehicle speed, while Full Exhaust Brake is intended to reduce vehicle speed.

Automatic Exhaust Brake can be enabled by pushing the exhaust brake button again anytime after the normal Full Exhaust Brake has been turned on. The “Exhaust Brake Indicator” in the instrument cluster display will change from yellow to green when Automatic Exhaust Brake is enabled. Pushing the exhaust brake button again will toggle the exhaust brake mode to off.

AUTOMATIC TRANSMISSION

WARNING!
- Never use the PARK position as a substitute for the parking brake. Always apply the parking brake fully when exiting the vehicle to guard against vehicle movement and possible injury or damage.
- Your vehicle could move and injure you and others if it is not in PARK. Check by trying to move the transmission gear selector out of PARK with the brake pedal released. Make sure the transmission is in PARK before exiting the vehicle.
- The transmission may not engage PARK if the vehicle is moving. Always bring the vehicle to a complete stop before shifting to PARK, and verify that the transmission gear position indicator solidly indicates PARK (P) without blinking. Ensure that the vehicle is completely stopped, and the PARK position is properly indicated, before exiting the vehicle.

(Continued)
NOTE:
You must press and hold the brake pedal while shifting out of PARK.

Ignition Park Interlock
This vehicle is equipped with an Ignition Park Interlock which requires the transmission to be in PARK before the ignition can be turned to the OFF mode. This helps the driver avoid inadvertently leaving the vehicle without placing the transmission in PARK. This system also locks the transmission in PARK whenever the ignition is in the OFF mode.

NOTE:
The transmission is NOT locked in PARK when the ignition is in the ACC mode (even though the engine will be off). Ensure that the transmission is in PARK, and the ignition is OFF (not in ACC mode) before exiting the vehicle.

Brake/Transmission Shift Interlock System
This vehicle is equipped with a Brake/Transmission Shift Interlock System (BTSI) that
holds the transmission gear selector in PARK unless the brakes are applied. To shift the transmission out of PARK, the engine must be running and the brake pedal must be pressed. The brake pedal must also be pressed to shift from NEUTRAL into DRIVE or REVERSE when the vehicle is stopped or moving at low speeds.

**Eight-Speed Automatic Transmission**

The transmission is controlled using a rotary electronic gear selector located on the instrument panel. The transmission gear range (PRND) is displayed both above the gear selector and in the instrument cluster. To select a gear range, simply rotate the gear selector. You must press the brake pedal to shift the transmission out of PARK (or NEUTRAL, when the vehicle is stopped or moving at low speeds). To shift past multiple gear ranges at once (such as PARK to DRIVE), simply rotate the gear selector to the appropriate detent. Select the DRIVE range for normal driving.

**NOTE:**

In the event of a mismatch between the gear selector position and the actual transmission gear (for example, driver selects PARK while driving), the position indicator will blink continuously until the selector is returned to the proper position, or the requested shift can be completed.

The electronically-controlled transmission adapts its shift schedule based on driver inputs, along with environmental and road conditions. The transmission electronics are self-calibrating; therefore, the first few shifts on a new vehicle may be somewhat abrupt. This is a normal condition, and precision shifts will develop within a few hundred miles (kilometers).

Only shift from DRIVE to PARK or REVERSE when the accelerator pedal is released and the vehicle is stopped. Be sure to keep your foot on the brake pedal when shifting between these gears.

The transmission gear selector has only PARK, REVERSE, NEUTRAL, and DRIVE positions. Manual downshifts can be made using the Electronic Range Select (ERS) shift control. Pressing the GEAR - / GEAR + switches (on the steering wheel) while in the DRIVE position will select the highest available transmission gear, and will display that gear limit in the instrument cluster as 1, 2, 3, etc. Refer to “Electronic Range Select (ERS) Operation” in this section for further information. Some models will display both the selected gear limit, and the actual current gear, while in ERS mode.

**Electronic Transmission Gear Selector**

**Gear Ranges**

Do not depress the accelerator pedal when shifting from PARK or NEUTRAL into another gear range.

**NOTE:**

After selecting any gear range, wait a moment to allow the selected gear to engage before accelerating. This is especially important when the engine is cold.

**PARK (P)**

This range supplements the parking brake by locking the transmission. The engine can be
started in this range. Never attempt to use PARK while the vehicle is in motion. Apply the parking brake when exiting the vehicle in this range.

When parking on a level surface, you may shift the transmission into PARK first, and then apply the parking brake.

When parking on a hill, apply the parking brake before shifting the transmission to PARK. As an added precaution, turn the front wheels toward the curb on a downhill grade and away from the curb on an uphill grade.

**NOTE:**

On four-wheel drive vehicles be sure that the transfer case is in a drive position.

When exiting the vehicle, always:

- Apply the parking brake.
- Shift the transmission into PARK.
- Turn the engine off.
- Remove the key fob.

### WARNING!

- Never use the PARK position as a substitute for the parking brake. Always apply the parking brake fully when exiting the vehicle to guard against vehicle movement and possible injury or damage.
- Your vehicle could move and injure you and others if it is not in PARK. Check by trying to move the transmission gear selector out of PARK with the brake pedal released. Make sure the transmission is in PARK before exiting the vehicle.
- The transmission may not engage PARK if the vehicle is moving. Always bring the vehicle to a complete stop before shifting to PARK, and verify that the transmission gear position indicator solidly indicates PARK (P) without blinking. Ensure that the vehicle is completely stopped, and the PARK position is properly indicated, before exiting the vehicle.

**WARNING! (Continued)**

- It is dangerous to shift out of PARK or NEUTRAL if the engine speed is higher than idle speed. If your foot is not firmly pressing the brake pedal, the vehicle could accelerate quickly forward or in reverse. You could lose control of the vehicle and hit someone or something. Only shift into gear when the engine is idling normally and your foot is firmly pressing the brake pedal.
- Unintended movement of a vehicle could injure those in or near the vehicle. As with all vehicles, you should never exit a vehicle while the engine is running. Before exiting a vehicle, always come to a complete stop, then apply the parking brake, shift the transmission into PARK, and turn the ignition OFF. When the ignition is in the OFF mode, the transmission is locked in PARK, securing the vehicle against unwanted movement.
- When exiting the vehicle, always make sure the ignition is in the OFF mode, remove the key fob from the vehicle, and lock the vehicle.
The following indicators should be used to ensure that you have properly engaged the transmission into the PARK position:

- Look at the transmission gear position display and verify that it indicates the PARK position (P), and is not blinking.
- With brake pedal released, verify that the gear selector will not move out of PARK.

**REVERSE (R)**

This range is for moving the vehicle backward. Shift into REVERSE only after the vehicle has come to a complete stop.

**NEUTRAL (N)**

Use this range when the vehicle is standing for prolonged periods with the engine running. Apply the parking brake and shift the transmission into PARK if you must exit the vehicle.

**DRIVE (D)**

This range should be used for most city and highway driving. It provides the smoothest upshifts and downshifts, and the best fuel economy. The transmission automatically upshifts through all forward gears. The DRIVE position provides optimum driving characteristics under all normal operating conditions.

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**WARNING! (Continued)**

- Do not leave the key fob in or near the vehicle (or in a location accessible to children), and do not leave the ignition in the ACC or ON/RUN mode. A child could operate power windows, other controls, or move the vehicle.

- Never leave children alone in a vehicle, or with access to an unlocked vehicle. Allowing children to be in a vehicle unattended is dangerous for a number of reasons. A child or others could be seriously or fatally injured. Children should be warned not to touch the parking brake, brake pedal or the transmission gear selector.

- Do not leave the key fob in or near the vehicle (or in a location accessible to children), and do not leave the ignition in the ACC or ON/RUN mode. A child could operate power windows, other controls, or move the vehicle.

- Never leave children alone in a vehicle, or with access to an unlocked vehicle. Allowing children to be in a vehicle unattended is dangerous for a number of reasons. A child or others could be seriously or fatally injured. Children should be warned not to touch the parking brake, brake pedal or the transmission gear selector.

- Do not leave the key fob in or near the vehicle (or in a location accessible to children), and do not leave the ignition in the ACC or ON/RUN mode. A child could operate power windows, other controls, or move the vehicle.

**CAUTION!**

- Do not race the engine when shifting from PARK or NEUTRAL into another gear range, as this can damage the drivetrain.

**WARNING!**

- Before moving the transmission gear selector out of PARK, you must start the engine, and also press the brake pedal. Otherwise, damage to the gear selector could result.

- The following indicators should be used to ensure that you have properly engaged the transmission into the PARK position:
  - Look at the transmission gear position display and verify that it indicates the PARK position (P), and is not blinking.
  - With brake pedal released, verify that the gear selector will not move out of PARK.

- Before moving the transmission gear selector out of PARK, you must start the engine, and also press the brake pedal. Otherwise, damage to the gear selector could result.

**CAUTION!**

- Do not coast in NEUTRAL and never turn off the ignition to coast down a hill. These are unsafe practices that limit your response to changing traffic or road conditions. You might lose control of the vehicle and have a collision.

**WARNING!**

- Towing the vehicle, coasting, or driving for any other reason with the transmission in NEUTRAL can cause severe transmission damage. Refer to “Recreational Towing” in “Starting And Operating” and “Towing A Disabled Vehicle” in “In Case Of Emergency” for further information.

- Do not coast in NEUTRAL and never turn off the ignition to coast down a hill. These are unsafe practices that limit your response to changing traffic or road conditions. You might lose control of the vehicle and have a collision.

- Towing the vehicle, coasting, or driving for any other reason with the transmission in NEUTRAL can cause severe transmission damage. Refer to “Recreational Towing” in “Starting And Operating” and “Towing A Disabled Vehicle” in “In Case Of Emergency” for further information.
When frequent transmission shifting occurs (such as when operating the vehicle under heavy loading conditions, in hilly terrain, traveling into strong head winds, or while towing a heavy trailer), select TOW/HAUL mode or use the Electronic Range Select (ERS) shift control feature. Refer to "Electronic Range Select (ERS) Operation" in this section for further information to select a lower gear range. Under these conditions, using a lower gear range will improve performance and extend transmission life by reducing excessive shifting and heat buildup.

During extremely cold temperatures -22 °F (-30 °C) or below, transmission operation may be modified depending on engine and transmission temperature as well as vehicle speed. Normal operation will resume once the transmission temperature has risen to a suitable level.

Transmission Limp Home Mode
Transmission function is monitored electronically for abnormal conditions. If a condition is detected that could result in transmission damage, Transmission Limp Home Mode is activated. In this mode, the transmission may operate only in certain gears, or may not shift at all. Vehicle performance may be severely degraded and the engine may stall. In some situations, the transmission may not re-engage if the engine is turned off and restarted. The Malfunction Indicator Light (MIL) may be illuminated. A message in the instrument cluster will inform the driver of the more serious conditions, and indicate what actions may be necessary.

In the event of a momentary problem, the transmission can be reset to regain all forward gears by performing the following steps:

**NOTE:**
In cases where the instrument cluster message indicates the transmission may not re-engage after engine shutdown, perform this procedure only in a desired location (preferably, at an authorized dealer).

1. Stop the vehicle.
2. Shift the transmission into PARK, if possible. If not, shift the transmission to NEUTRAL.
3. Push and hold the ignition switch until the engine turns off.
4. Wait approximately 30 seconds.
5. Restart the engine.
6. Shift into the desired gear range. If the problem is no longer detected, the transmission will return to normal operation.

**NOTE:**
Even if the transmission can be reset, we recommend that you visit an authorized dealer at your earliest possible convenience. An authorized dealer has diagnostic equipment to assess the condition of your transmission.

If the transmission cannot be reset, authorized dealer service is required.

Electronic Range Select (ERS) Operation — Eight-Speed Transmission
The Electronic Range Select (ERS) shift control allows the driver to limit the highest available gear when the transmission is in DRIVE. For example, if you set the transmission gear limit to 4 (FOURTH gear), the transmission will not shift above FOURTH gear (except to prevent engine overspeed), but will shift through the lower gears normally.

You can switch between DRIVE and ERS mode at any vehicle speed. When the transmission
gear selector is in DRIVE, the transmission will operate automatically, shifting between all available gears. Tapping the GEAR - switch (on the steering wheel) will activate ERS mode, display the current gear in the instrument cluster, and set that gear as the top available gear. Once in ERS mode, tapping the GEAR - or GEAR + switch will change the top available gear.

To exit ERS mode, simply push and hold the GEAR + switch until the gear limit display disappears from the instrument cluster.

1 — GEAR + Switch
2 — GEAR - Switch

WARNING!
Do not downshift for additional engine braking on a slippery surface. The drive wheels could lose their grip and the vehicle could skid, causing a collision or personal injury.

When to Use TOW/HAUL Mode
When driving in hilly areas, towing a trailer, carrying a heavy load, etc., and frequent transmission shifting occurs, push the TOW/HAUL switch to activate TOW/HAUL mode. This will improve performance and reduce the potential for transmission overheating or failure due to excessive shifting.

WARNING!
Do not use the “TOW/HAUL” feature when driving in icy or slippery conditions. The increased engine braking can cause the rear wheels to slide, and the vehicle to swing around with the possible loss of vehicle control, which may cause an accident possibly resulting in personal injury or death.

Six-Speed Automatic Transmission — If Equipped
The transmission is controlled using a rotary electronic gear selector located on the instrument panel. The transmission gear range (PRND) is displayed both above the gear selector and in the instrument cluster. To select a gear range, simply rotate the gear selector. You must press the brake pedal to shift the
transmission out of PARK (or NEUTRAL, when the vehicle is stopped or moving at low speeds). To shift past multiple gear ranges at once (such as PARK to DRIVE), simply rotate the gear selector to the appropriate detent. Select the DRIVE range for normal driving.

NOTE:
In the event of a mismatch between the gear selector position and the actual transmission gear (for example, driver selects PARK while driving), the position indicator will blink continuously until the selector is returned to the proper position, or the requested shift can be completed.

The electronically-controlled transmission provides a precise shift schedule. The transmission electronics are self-calibrating; therefore, the first few shifts on a new vehicle may be somewhat abrupt. This is a normal condition, and precision shifts will develop within a few hundred miles (kilometers).

Only shift from DRIVE to PARK or REVERSE when the accelerator pedal is released and the vehicle is stopped. Be sure to keep your foot on the brake pedal when shifting between these gears.

The transmission gear selector has only PARK, REVERSE, NEUTRAL, and DRIVE positions. Manual downshifts can be made using the Electronic Range Select (ERS) shift control. Pressing the GEAR - / GEAR + switches (on the steering wheel) while in the DRIVE position will select the highest available transmission gear, and will display that gear limit in the instrument cluster as 1, 2, 3, etc. Refer to “Electronic Range Select (ERS) Operation” in this section for further information. Some models will display both the selected gear limit, and the actual current gear, while in ERS mode.

**Gear Ranges**

DO NOT race the engine when shifting from PARK or NEUTRAL into another gear range.

NOTE:
After selecting any gear range, wait a moment to allow the selected gear to engage before accelerating. This is especially important when the engine is cold.

**PARK (P)**

This range supplements the parking brake by locking the transmission. The engine can be started in this range. Never attempt to use PARK while the vehicle is in motion. Apply the parking brake when leaving the vehicle in this range.

When parking on a level surface, you may shift the transmission into PARK first, and then apply the parking brake.

When parking on a hill, apply the parking brake before shifting the transmission to PARK, otherwise the load on the transmission locking mechanism may make it difficult to move the gear selector out of PARK. As an added precaution, turn the front wheels toward the curb on a downhill grade and away from the curb on an uphill grade.

On four-wheel drive vehicles be sure that the transfer case is in a drive position.

When exiting a vehicle, always:
- Apply the parking brake.
- Shift the transmission into PARK.
- Turn the engine off.
- Remove the key fob.
WARNING!

- Never use the PARK position as a substitute for the parking brake. Always apply the parking brake fully when exiting the vehicle to guard against vehicle movement and possible injury or damage.

- Your vehicle could move and injure you and others if it is not in PARK. Check by trying to move the gear selector out of PARK with the brake pedal released. Make sure the transmission is in PARK before exiting the vehicle.

- It is dangerous to shift out of PARK or NEUTRAL if the engine speed is higher than idle speed. If your foot is not firmly pressing the brake pedal, the vehicle could accelerate quickly forward or in reverse. You could lose control of the vehicle and hit someone or something. Only shift into gear when the engine is idling normally and your foot is firmly pressing the brake pedal.

WARNING! (Continued)

- Unintended movement of a vehicle could injure those in or near the vehicle. As with all vehicles, you should never exit a vehicle while the engine is running. Before exiting a vehicle, always come to a complete stop, then apply the parking brake, shift the transmission into PARK, turn the engine OFF, and remove the key fob. When the ignition is in the LOCK/OFF (key removal) position (or, with Keyless Enter-N-Go, when the ignition is in the OFF mode), the transmission is locked in PARK, securing the vehicle against unwanted movement.

- When leaving the vehicle, always make sure the ignition is in the OFF mode, remove the key fob from the vehicle, and lock the vehicle.

- Never leave children alone in a vehicle, or with access to an unlocked vehicle. Allowing children to be in a vehicle unattended is dangerous for a number of reasons. A child or others could be seriously or fatally injured. Children should be warned not to touch the parking brake, brake pedal or the transmission gear selector.

WARNING! (Continued)

- Do not leave the key fob in or near the vehicle (or in a location accessible to children), and do not leave the ignition (in a vehicle equipped with Keyless Enter-N-Go) in the ACC or ON/RUN mode. A child could operate power windows, other controls, or move the vehicle.

CAUTION!

- Before moving the transmission gear selector out of PARK, you must turn the ignition to the ON/RUN mode, and also press the brake pedal. Otherwise, damage to the gear selector could result.

- DO NOT race the engine when shifting from PARK or NEUTRAL into another gear range, as this can damage the drivetrain.
The following indicators should be used to ensure that you have properly engaged the transmission into the PARK position:

- When shifting into PARK, pull the gear selector toward you and move it all the way counterclockwise until it stops.
- Release the gear selector and make sure it is fully seated in the PARK gate.
- Look at the transmission gear position display and verify that it indicates the PARK position (P).
- With brake pedal released, verify that the gear selector will not move out of PARK.

**REVERSE (R)**

This range is for moving the vehicle backward. Shift into REVERSE only after the vehicle has come to a complete stop.

**NEUTRAL (N)**

Use this range when the vehicle is standing for prolonged periods with the engine running. The engine may be started in this range. Apply the parking brake and shift the transmission into PARK if you must exit the vehicle.

**WARNING!**

Do not coast in NEUTRAL and never turn off the ignition to coast down a hill. These are unsafe practices that limit your response to changing traffic or road conditions. You might lose control of the vehicle and have a collision.

**CAUTION!**

Towing the vehicle, coasting, or driving for any other reason with the transmission in NEUTRAL can cause severe transmission damage. Refer to “Recreational Towing” in “Starting And Operating” and “Towing A Disabled Vehicle” in “What To Do In Emergencies” for further information.

**DRIVE (D)**

This range should be used for most city and highway driving. It provides the smoothest upshifts and downshifts, and the best fuel economy. The transmission automatically upshifts through underdrive first, second, and third gears, direct fourth gear and overdrive fifth and sixth gears. The DRIVE position provides optimum driving characteristics under all normal operating conditions.

When frequent transmission shifting occurs (such as when operating the vehicle under heavy loading conditions, in hilly terrain, traveling into strong head winds, or while towing a heavy trailer), use the Electronic Range Select (ERS) shift control (refer to “Electronic Range Select (ERS) Operation” in this section) to select a lower gear range. Under these conditions, using a lower gear range will improve performance and extend transmission life by reducing excessive shifting and heat buildup.

If the transmission temperature exceeds normal operating limits, the powertrain controller will modify the transmission shift schedule and expand the range of torque converter clutch engagement. This is done to prevent transmission damage due to overheating.

If the transmission becomes extremely hot or is in danger of overheating, the “Transmission Temperature Warning Light” may illuminate and the transmission may operate differently until the transmission cools down.
NOTE:
Use caution when operating a heavily loaded vehicle at low speeds (such as towing a trailer up a steep grade, or in stop-and-go traffic) during hot weather. In these conditions, torque converter slip can impose a significant additional heat load on the cooling system. Down-shifting the transmission to the lowest possible gear (when climbing a grade), or shifting to NEUTRAL (when stopped in heavy traffic) can help to reduce this excess heat generation.

During cold temperatures, transmission operation may be modified depending on engine and transmission temperature as well as vehicle speed. This feature improves warm up time of the engine and transmission to achieve maximum efficiency. Engagement of both the torque converter clutch and the top overdrive gear are inhibited until the transmission fluid is warm (see the “Note” under “Torque Converter Clutch” in this section). During extremely cold temperatures (-16°F [-27°C] or below), operation may briefly be limited to first and direct gears only. Normal operation will resume once the transmission temperature has risen to a suitable level.

Transmission Limp Home Mode
Transmission function is monitored electronically for abnormal conditions. If a condition is detected that could result in transmission damage, Transmission Limp Home Mode is activated. In this mode, the transmission remains in fourth gear regardless of which forward gear is selected. PARK, REVERSE, and NEUTRAL will continue to operate. The Malfunction Indicator Light (MIL) may be illuminated. Limp Home Mode allows the vehicle to be driven to an authorized dealer for service without damaging the transmission.

In the event of a momentary problem, the transmission can be reset to regain all forward gears by performing the following steps:
1. Stop the vehicle.
2. Shift the transmission into PARK.
3. Turn the ignition off.
4. Wait approximately 10 seconds.
5. Restart the engine.
6. Shift into the desired gear range. If the problem is no longer detected, the transmission will return to normal operation.

NOTE:
Even if the transmission can be reset, we recommend that you visit an authorized dealer at your earliest possible convenience. An authorized dealer has diagnostic equipment to determine if the problem could recur.

If the transmission cannot be reset, authorized dealer service is required.

Electronic Range Select (ERS) Operation — Six-Speed Transmission
The Electronic Range Select (ERS) shift control allows the driver to limit the highest available gear when the transmission is in DRIVE. For example, if you set the transmission gear limit to 4 (FOURTH gear), the transmission will not shift above FOURTH gear, but will shift through the lower gears normally.

You can switch between DRIVE and ERS mode at any vehicle speed. When the gear selector is in the DRIVE position, the transmission will operate automatically, shifting between all available gears. Tapping the ERS (-) switch will activate ERS mode, display the current gear in the instrument cluster, and set that gear as the
top available gear. Once in ERS mode, tapping the ERS (-) or (+) switch will change the top available gear.

Electronic Range Select

1 — GEAR + Switch
2 — GEAR – Switch

To exit ERS mode, simply push and hold the ERS (+) switch until the gear limit display disappears from the instrument cluster.

NOTE:
To select the proper gear position for maximum deceleration (engine braking), simply push and hold the ERS (-) switch. The transmission will shift to the range from which the vehicle can best be slowed down.

Transmission Gear Limit Display

<table>
<thead>
<tr>
<th>Actual Gear(s) Allowed</th>
<th>1-2</th>
<th>1-3</th>
<th>1-4</th>
<th>1-5</th>
<th>1-6</th>
<th>D</th>
</tr>
</thead>
</table>

CAUTION!
When using ERS for engine braking while descending steep grades, be careful not to overspeed the engine. Apply the brakes as needed to prevent engine overspeed.

Overdrive Operation
The automatic transmission includes an electronically controlled Overdrive (FIFTH and SIXTH gears). The transmission will automatically shift into Overdrive if the following conditions are present:

- The gear selector is in the DRIVE position.
- The transmission fluid has reached an adequate temperature.
- The engine coolant has reached an adequate temperature.
- The vehicle speed is sufficiently high.
- The driver is not heavily pressing the accelerator.

When To Use TOW/HAUL Mode
When driving in hilly areas, towing a trailer, carrying a heavy load, etc., and frequent transmission shifting occurs, push the TOW/HAUL switch to activate TOW/HAUL mode. This will improve performance and reduce the potential for transmission overheating or failure due to excessive shifting. When operating in TOW/HAUL mode, transmission upshifts are delayed, and the transmission will automatically downshift (for engine braking).
when the throttle is closed and/or during steady braking maneuvers.

**TOW/HAUL Switch**

The “TOW/HAUL Indicator Light” will illuminate in the instrument cluster to indicate that TOW/HAUL mode has been activated. Pushing the switch a second time restores normal operation. Normal operation is always the default at engine start-up. If TOW/HAUL mode is desired, the switch must be pushed each time the engine is started.

**Torque Converter Clutch**

A feature designed to improve fuel economy has been included in the automatic transmission on your vehicle. A clutch within the torque converter engages automatically at calibrated speeds. This may result in a slightly different feeling or response during normal operation in the upper gears. When the vehicle speed drops or during some accelerations, the clutch automatically disengages.

**NOTE:**

- The torque converter clutch will not engage, and the transmission will not shift to sixth gear, until the transmission fluid and engine coolant are warm [usually after 1 to 3 miles (2 to 5 km) of driving]. Because SIXTH gear is disabled, and the engine speed is higher when the torque converter clutch is not engaged, it may seem as if the transmission is not shifting properly when cold. This is normal. Using the Electronic Range Select (ERS) shift control, when the transmission is sufficiently warm, will demonstrate that the transmission is able to shift into and out of Overdrive.

- If the vehicle has not been driven for several days, the first few seconds of operation after shifting the transmission into gear may seem sluggish. This is due to the fluid partially draining from the torque converter into the transmission. This condition is normal and will not cause damage to the transmission. The torque converter will refill within five seconds after starting the engine.

**ACTIVE NOISE CANCELLATION**

Your vehicle is equipped with an Active Noise Cancellation System. This system is designed to address engine noise. The system relies on four microphones embedded in the headliner, which monitor exhaust and engine noise, and assists an onboard frequency generator, which creates counteracting sound waves in the audio
system’s speakers. This helps keep the vehicle quiet at idle and during drive.

**FOUR-WHEEL DRIVE OPERATION — IF EQUIPPED**

Four-wheel drive trucks are equipped with either a manually shifted transfer case or an electronically shifted transfer case. Refer to the operating instructions for your transfer case, located in this section for further information.

**Four-Position Electronically Shifted Transfer Case — If Equipped**

This is an electronic shift transfer case and is operated by the 4WD Control Switch (Transfer Case Switch), which is located on the instrument panel.

This electronically shifted transfer case provides four mode positions:
- Two-Wheel Drive High Range (2WD)
- Four-Wheel Drive High Range (4WD HIGH)
- Four-Wheel Drive Low Range (4WD LOW)
- N (NEUTRAL)

For additional information on the appropriate use of each transfer case mode position, see the information below:

**2WD**

Two-Wheel Drive High Range — This range is for normal street and highway driving on dry hard surfaced roads.

**4WD HIGH**

Four-Wheel Drive High Range — This range provides torque to the front driveshaft (engages four-wheel drive) which allows front and rear wheels to spin at the same speed. This provides additional traction for loose, slippery road surfaces only.

**4WD LOW**

Four-Wheel Drive Low Range — This range provides low speed four-wheel drive. It maximizes torque (increased torque over 4WD HIGH) to the front driveshaft; allowing front and rear wheels to rotate at the same speed. This range provides additional traction and maximum pulling power for loose, slippery road surfaces only. Do not exceed 25 mph (40 km/h) in this range.

**N (NEUTRAL)**

Neutral — This range disengages both the front and rear driveshafts from the powertrain. To be used for flat towing behind another vehicle. Refer to “Recreational Towing” in this section for further information.

**WARNING!**

- You or others could be injured or killed if you leave the vehicle unattended with the transfer case in the NEUTRAL (N) position without first fully engaging the parking brake. The transfer case NEUTRAL (N) position disengages both the front and rear driveshaft from the powertrain, and will allow the vehicle to roll, even if the transmission is in PARK. The parking brake should always be applied when the driver is not in the vehicle.

(Continued)
This electronically shifted transfer case is designed to be driven in the two-wheel drive position (2WD) for normal street and highway conditions on dry hard surfaced roads. Driving the vehicle in 2WD will have greater fuel economy benefits as the front axle is not engaged in 2WD.

When additional traction is required, the transfer case 4WD HIGH and 4WD LOW positions can be used to maximize torque to the front driveshaft, forcing the front and rear wheels to rotate at the same speed. This is accomplished by pushing the desired position on the 4WD control switch.

Refer to “Shifting Procedure” in this section for specific shifting instructions.

The 4WD HIGH and 4WD LOW positions are designed for loose, slippery road surfaces only. Driving in the 4WD HIGH and 4WD LOW positions on dry hard surfaced roads may cause increased tire wear and damage to the driveline components.

NOTE:
The transfer case NEUTRAL button is located in the center of the 4WD Control Switch and is pushed by using a ballpoint pen or similar object. The transfer case NEUTRAL position is to be used for recreational towing only. Refer to “Recreational Towing” in this section for further information.

Transfer Case Position Indicator Lights
The Transfer Case Position Indicator Lights (4WD and 4WD LOW) are located in the instrument cluster and indicate the current and desired transfer case selection. When you select a different transfer case position, the indicator lights will do the following:

If All Of The Following Shift Conditions Are Met:

1. The current position indicator light will turn OFF.
2. The selected position indicator light will flash until the transfer case completes the shift.
3. When the shift is complete, the indicator light for the selected position will stop flashing and remain ON.

If One Or More Of The Following Shift Conditions Are Not Met:

1. The indicator light for the current position will remain ON.
2. The newly selected position indicator light will continue to flash.
3. The transfer case will not shift.

NOTE:
Before retrying a selection, make certain that all the necessary requirements for selecting a new transfer case position have been met. To retry the selection, push the current position, wait
five seconds, and retry selection. To find the shift requirements, refer to the “Shifting Procedure” in this section for further information.

The “SVC 4WD Warning Light” monitors the electronic shift four-wheel drive system. If this light remains on after engine start up or illuminates during driving, it means that the four-wheel drive system is not functioning properly and that service is required.

**NOTE:**
Do not attempt to make a shift while only the front or rear wheels are spinning. This could cause damage to driveline components.

When operating your vehicle in 4WD LOW, the engine speed is approximately three times that of the 2WD or 4WD HIGH positions at a given road speed. Take care not to overspeed the engine and do not exceed 25 mph (40 km/h).

Proper operation of four-wheel drive vehicles depends on tires of equal size, type and circumference on each wheel. Any difference in tire size can cause damage to the drivetrain. Because four-wheel drive provides improved traction, there is a tendency to exceed safe turning and stopping speeds. Do not go faster than road conditions permit.

**Shifting Procedure**

**NOTE:**
- If any of the requirements to select a new transfer case position have not been met, the transfer case will not shift. The position indicator light for the previous position will remain ON and the newly selected position indicator light will continue to flash until all the requirements for the selected position have been met.

**NOTE:**
- If all the requirements to select a new transfer case position have been met, the current position indicator light will turn OFF, the selected position indicator light will flash until the transfer case completes the shift. When the shift is complete, the position indicator light for the selected position will stop flashing and remain ON.

**2WD To 4WD HIGH**

Push the desired position on the 4WD control switch to shift the transfer case. Shifts between 2WD and 4WD HIGH can be done with the vehicle stopped or in motion. With the vehicle in motion, the transfer case will engage/dissengage faster if you momentarily release the accelerator pedal after turning the control switch. If the vehicle is stopped, the ignition switch must be in the ON position with the engine either running or off. This shift cannot be completed if the ignition switch is in the ACC position.

**NOTE:**
The four-wheel drive system will not allow shifts between 2WD/4WD HIGH if the front and/or rear wheels are spinning (no traction). In this situation, the selected position indicator light will flash and the original position indicator light will remain ON. At this time, reduce speed and stop spinning the wheels to complete the shift.

**2WD Or 4WD HIGH To 4WD LOW**

**NOTE:**
When shifting into or out of 4WD LOW some gear noise may be heard. This noise is normal...
and is not detrimental to the vehicle or occupants.

Shifting can be performed with the vehicle rolling 2 to 3 mph (3 to 5 km/h) or completely stopped. You can use either of the following procedures:

**Preferred Procedure**

1. With the engine running, slow the vehicle to 2 to 3 mph (3 to 5 km/h).
2. Shift the transmission into NEUTRAL.
3. While still rolling, push the desired position on the transfer case control switch.
4. After the desired position indicator light is ON (not flashing), shift the transmission back into gear.

**Alternate Procedure**

1. Bring the vehicle to a complete stop.
2. With the ignition switch in the ON position and the engine running, shift the transmission into NEUTRAL.
3. Push the desired position on the transfer case control switch.
4. After the desired position indicator light is ON (not flashing), shift the transmission back into gear.

**NOTE:**
- If Steps 1 or 2 of either the Preferred or Alternate Procedure are not satisfied prior to attempting the shift, then the desired position indicator light will flash continuously while the original position indicator light is ON, until all requirements have been met.
- The ignition switch must be in the ON position for a shift to take place and for the position indicator lights to be operable. If the ignition switch is not in the ON position, the shift will not take place and no position indicator lights will be on or flashing.

**Manually Shifted Transfer Case — If Equipped**

The transfer case provides four mode positions:
- Two-Wheel Drive High Range (2H)
- Four-Wheel Drive Lock High Range (4H)
- Neutral (N)
- Four-Wheel Drive Low Range (4L)

For additional information on the appropriate use of each transfer case mode position, see the information below:

**2H**

Two-Wheel Drive High Range — This range is for normal street and highway driving on dry, hard surfaced roads.

**4H**

Four-Wheel Drive Lock High Range — This range locks the front and rear driveshafts together forcing the front and rear wheels to rotate at the same speed. Additional traction for loose, slippery road surfaces only.

**NEUTRAL (N)**

Neutral — This range disengages both the front and rear driveshafts from the powertrain. To be used for flat towing behind another vehicle. Refer to “Recreational Towing” in this chapter for further information.

**4L**

Four-Wheel Drive Low Range — This range locks the front and rear driveshafts together forcing the front and rear wheels to rotate at the same speed. Additional traction and maximum pulling power for loose, slippery road surfaces only. Do not exceed 25 mph (40 km/h).
This transfer case is intended to be driven in the 2H position for normal street and highway conditions such as dry, hard surfaced roads. When additional traction is required, the 4H and 4L positions can be used to lock the front and rear driveshafts together and force the front and rear wheels to rotate at the same speed. This is accomplished by simply moving the gear selector to the desired positions once the appropriate speed and gear requirements are met, refer to “Shifting Procedure – Manually Shifted Transfer Case” in this section for further information.

The 4H and 4L positions are intended for loose, slippery road surfaces only. Driving in the 4H and 4L positions on dry, hard surfaced roads may cause increased tire wear and damage to the driveline components.

The “Transfer Case Position Indicator Light” in the instrument cluster will alert the driver that the vehicle is in four-wheel drive and that the front and rear driveshafts are locked together. This light will illuminate when the transfer case is shifted into either the 4H or 4L position. There is no light for the 2H or NEUTRAL positions on some models.

When operating your vehicle in 4L, the engine speed is approximately three times that of the 2H or 4H positions at a given road speed. Take care not to overspeed the engine and do not exceed 25 mph (40 km/h).

Proper operation of four-wheel drive vehicles depends on tires of equal size, type and circumference on each wheel. Any difference will adversely affect shifting and can cause damage to the drivetrain.

NOTE:
Do not attempt to make a shift while only the front or rear wheels are spinning, as this can cause damage to driveline components.

Because four-wheel drive provides improved traction, there is a tendency to exceed safe turning and stopping speeds. Do not go faster than road conditions permit.

NOTE:
Delayed shifts out of four-wheel drive may be experienced due to uneven tire wear, low or uneven tire pressures, excessive vehicle loading, or cold temperatures.

You or others could be injured or killed if you leave the vehicle unattended with the transfer case in the NEUTRAL position without first fully engaging the parking brake. The transfer case NEUTRAL position disengages both the front and rear drive shafts from the powertrain and will allow the vehicle to roll, even if the transmission is in PARK. The parking brake should always be applied when the driver is not in the vehicle.

Two-Wheel Drive High Range (2H)
Two-Wheel Drive High Range — This range is for normal street and highway driving on dry hard surfaced roads.

Four-Wheel Drive High Range (4H)
Four-Wheel Drive High Range — This range locks the front and rear driveshafts together forcing the front and rear wheels to rotate at the same speed.
speed. Additional traction for loose, slippery road surfaces only.

Neutral (N)
Neutral — This range disengages the front and rear driveshafts from the powertrain. To be used for flat towing behind another vehicle. Refer to “Recreational Towing” in this chapter for further information.

Four-Wheel Drive Low Range (4L)
Four-Wheel Drive Low Range — This range locks the front and rear driveshafts together forcing the front and rear wheels to rotate at the same speed. Additional traction and maximum pulling power for loose, slippery road surfaces only. Do not exceed 25 mph (40 km/h).

Shifting Procedure — Manually Shifted Transfer Case

2H To 4H
Shifting between 2H and 4H can be made with the vehicle stopped or in motion. If the vehicle is in motion, shifts can be made at speeds up to 55 mph (88 km/h). With the vehicle in motion, the transfer case will engage/disengage faster if you momentarily release the accelerator pedal after completing the shift. Apply a constant force when shifting the transfer case lever.

2H Or 4H To 4L
NOTE:
When shifting into or out of 4L some gear noise may be heard. This noise is normal and is not detrimental to the vehicle or occupants.

With the vehicle rolling at 2 to 3 mph (3 to 5 km/h), shift the transmission into NEUTRAL. While the vehicle is coasting at 2 to 3 mph (3 to 5 km/h), shift the transfer case lever firmly to the desired position. Do not pause in transfer case NEUTRAL.

NOTE:
- Placing the transfer case in NEUTRAL may require shutting the engine off to avoid gear clash while completing the shift. If difficulty occurs, shift the transmission into NEUTRAL, hold your foot on the brake, and turn the engine off. Complete the range shift to the desired mode.
- Shifting into or out of 4L is possible with the vehicle completely stopped, however difficulty may occur due to the mating clutch teeth not being properly aligned. Several attempts may be required for clutch teeth alignment and shift completion to occur. The preferred method is with the vehicle rolling 2 to 3 mph (3 to 5 km/h). Avoid attempting to engage or disengage 4L with the vehicle moving faster than 2 to 3 mph (3 to 5 km/h).
- Do not attempt to shift into or out of 4L while the transmission is in gear.

Transfer Case Position Indicator Light
The “Transfer Case Position Indicator Light” in the instrument cluster is used to alert the driver
that the front axle is fully engaged and all four wheels are driving.

**AIR SUSPENSION SYSTEM — IF EQUIPPED**

**Description**

This air suspension system is a rear leveling ride height system. The main purpose of this system is to maintain the truck’s rear ride height level. There are two selectable heights that can be chosen based on your operating conditions. The system requires that the ignition be in ON/RUN position or the engine running with zero vehicle speed for all user requested changes and load leveling.

**Rear Leveling Ride Height Switch**

Normal Ride Height (NRH) – This is the standard position of the suspension and is meant for normal driving. It will automatically adjust to maintain the rear ride height as conditions change.

Alternate Trailer Height (ATH) – Lowers the vehicle approximately 1 inch (25 mm) for a level truck, to be used as required while trailer towing. It will automatically adjust to maintain the rear ride height as conditions change.

**Trailer Decoupling/Unloading** - The air suspension system will load level (lower/exhaust only) once after 12 minutes after the vehicle is turned off. This allows for easy removal of a trailer and/or load from the back of the truck by maintaining the ride height. After 12 minutes you will need to turn the ignition to the RUN position for the air suspension to re-level due to addition/removal of load in the vehicle. If the air suspension system is disabled using the settings menu (Tire Jack Mode, Transport Mode, Alignment Mode, or Bed Lowering Mode) the system will remain disabled when the vehicle is turned off. Reactivating the air suspension can be accomplished via the settings menu or driving the vehicle above 5 mph (8 km/h) for Tire Jack Mode or Alignment Mode and 16 mph (26 km/h) for Transport Mode and Bed Lowering Mode. Refer to “Trailer Towing” in “Starting And Operating” for further information.

**Ignition OFF Behavior**

For a predetermined amount of time after the ignition is off, the air suspension may adjust to maintain a proper appearance.

![Warning](image)

**WARNING!**

The air suspension system uses a high pressure volume of air to operate the system. To avoid personal injury or damage to the system, see your authorized dealer for service.

**Air Suspension Modes**

The air suspension system has multiple modes to protect the system in unique situations:

**Tire/Jack Mode**

To assist with changing a tire, the air suspension system has a feature which allows the automatic leveling to be disabled. This mode is intended to be enabled with engine running. Refer to “Instrument Cluster Display” in “Getting To Know Your Instrument Panel” or “Uconnect Settings” in “Multimedia” if equipped with a touch screen radio for further information.
NOTE: This mode is intended to be enabled with the engine running.

Transport Mode
For towing your vehicle with four wheels off the road, the air suspension system has a feature which will put the vehicle below Normal Ride Height (NRH) and disable the automatic load leveling system. This mode is intended to be enabled with engine running. Refer to “Instrument Cluster Display” in “Getting To Know Your Instrument Panel” or “Uconnect Settings” in “Understanding Your Instrument Panel” if equipped with a touch screen radio for further information.

NOTE: This mode is intended to be enabled with engine running.

Wheel Alignment Mode
Before performing a wheel alignment this mode must be enabled. Refer to “Instrument Cluster Display” in “Getting To Know Your Instrument Panel” or “Uconnect Settings” in “Multimedia” if equipped with a touch screen radio for further information.

NOTE: This mode is intended to be enabled with engine running.

Bed Lowering Mode
This setting is used to raise the front suspension and lower the rear suspension to allow the truck bed to be sprayed out. It enables easier loading/unloading of the truck and makes it easier to hook up trailers.

Protection Strategy
In order to “protect” the air suspension system, the vehicle will disable load leveling as required (suspension overloaded, battery charge low, etc.). Load leveling will automatically resume as soon as system operation requirements are met. See your authorized dealer if the system does not resume.

Instrument Cluster Display Messages
When the appropriate conditions exist, a message will appear in the instrument cluster display. Refer to “Instrument Cluster Display” in “Getting To Know Your Instrument Panel” for further information. An audible chime will be heard whenever a system error has been detected.

See an authorized dealer for system service if normal operation does not resume.

Operation
Pushing the Alternate Trailer Height (ATH) button once while at Normal Ride Height (NRH), will lower the vehicle to Alternate Trailer Height (ATH) and will illuminate the LED.

NOTE: The LED will continuously blink until vehicle Alternate Trailer Height (ATH) has been achieved and the LED will turn on.

Pushing the Alternate Trailer Height (ATH) again will raise the vehicle to Normal Ride Height (NRH).

NOTE: The LED will continuously blink until Normal Ride Height (NRH) has been achieved and the LED will turn off.

- Transport Mode – No indicator lamps will be illuminated. Transport Mode is disabled by driving the vehicle, or deselecting the mode via the interface.
- Tire/Jack Mode – No indicator lamps will be illuminated. Tire/Jack Mode is disabled by
driving the vehicle, or by deselecting the mode via the interface.

- Wheel Alignment Mode – No indicator lamps will be illuminated. Wheel Alignment Mode is disabled by driving the vehicle, or by deselecting the mode via the interface.

- Bed Lowering Mode – No indicator lamps will be illuminated. Bed Lowering Mode is disabled by driving the vehicle, or deselecting the mode via the interface.

**AXLE LOCKER SYSTEM — POWER WAGON MODELS ONLY (IF EQUIPPED)**

This vehicle is equipped with electronically locking front and rear differentials. These differentials, when engaged, mechanically lock together the axle shafts forcing the wheels to spin at an equal rate. This allows the vehicle to maintain its momentum and prevents it from becoming stuck. The locking front and rear differentials should only be engaged during low-speed, extreme off-road situations where one wheel is likely to not be in contact with the ground. It is not recommended to drive the vehicle with the differentials locked on pavement due to the reduced ability to turn and speed limitations.

The locking axles are controlled by the axle locker switch.

**Axle Lock Selector**

1 — FRONT & REAR LOCK – the front and rear axles are locked
2 — REAR LOCK – the rear axle is locked
3 — AXLE UNLOCK – the front and rear axles are unlocked

**CAUTION!**

- Do not lock the front or rear axle on hard surfaced roads. The ability to steer the vehicle is reduced and damage to the drivetrain may occur when the axles are locked on hard surfaced roads.

- Do not try to lock the rear axle if the vehicle is stuck and the tires are spinning. You can damage drivetrain components. Lock the rear axle before attempting situations or navigating terrain, which could possibly cause the vehicle to become stuck.

Under normal driving conditions, the switch should be left in the AXLE UNLOCK position.

**NOTE:**

Even when the axles are in the AXLE UNLOCK position, the limited slip differential in the rear axle still provides torque biasing capability for moderate low traction environments.

During the command to lock the axle, the indicator light will flash until the axle is locked. After the lock command has been successfully executed, the light will remain on solid.

To lock the rear axle, place the vehicle in 4L. Refer to “Four Wheel Drive Operation” in
“Starting And Operating” for further information. Push the REAR LOCK button while traveling less than 3 mph (5 km/h). The indicator light will remain on when the rear axle is locked.

**NOTE:**
Left to right wheel speed difference may be necessary to allow the axle to fully lock. If the indicator light is flashing after placing the switch in the REAR LOCK or FRONT & REAR LOCK position, drive the vehicle in a turn or on loose gravel to expedite the locking action.

### WARNING!
Do not use the locked axle position for normal driving. A locked front axle is intended for off-road driving only. Locking the front axle during on-road driving will reduce the steering ability. This could cause a collision and you may be seriously injured.

To lock the front axle; push the FRONT & REAR LOCK button while traveling less than 3 mph (5 km/h). The indicator light will be solid when the front axle is locked.

### NOTE:
The rear axle must be locked before the front axle will lock.

To unlock the front axle; push the REAR LOCK button. The FRONT & REAR LOCK indicator light will go out when the axle is unlocked.

### NOTE:
The axle lockers could be torque locked due to side to side loads on the axle. Driving slowly while turning the steering wheel from a left hand turn to a right hand turn or driving in REVERSE for a short distance may be required to release the torque lock and unlock the axles.

To unlock the rear axle; push the AXLE UNLOCK button. The REAR LOCK indicator light will go out when the rear axle is unlocked.

### STABILIZER/SWAY BAR SYSTEM — POWER WAGON ONLY
Your vehicle is equipped with an electronic disconnecting stabilizer/sway bar. This system allows greater front suspension travel in off-road situations.

Due to the use of taller springs, this vehicle has an increased ride height of approximately 1.9 inches (48.3 mm) in the front and 1.5 inches (38.1 mm) in the rear. A major advantage to increasing ride height is the positive effect it has on approach/departure and break over angles.

This system is controlled by the electronic control sway bar switch located below the instrument panel.

**SWAY BAR Disconnect Button**

Push the SWAY BAR switch to activate the system. Push the switch again to deactivate the system. The “Sway Bar Indicator Light” (located in the instrument cluster) will illuminate when the bar is disconnected. The “Sway Bar Indicator Light” will flash during activation transition, or when activation conditions are not met. The stabilizer/sway bar should remain in On-Road mode during normal driving conditions.

**WARNING!**
Do not use the locked axle position for normal driving. A locked front axle is intended for off-road driving only. Locking the front axle during on-road driving will reduce the steering ability. This could cause a collision and you may be seriously injured.
To disconnect the stabilizer/sway bar, shift to either 4HI or 4L and push the SWAY BAR switch to obtain the Off-Road position. Refer to “Four Wheel Drive Operation” in this chapter for further information. The “Sway Bar Indicator Light” will flash until the stabilizer/sway bar has been fully disconnected.

NOTE:
The stabilizer/sway bar may be torque locked due to left and right suspension height differences. This condition is due to driving surface differences or vehicle loading. In order for the Stabilizer/Sway Bar to disconnect/reconnect, the right and left halves of the bar must be aligned. This alignment may require that the vehicle be driven onto level ground or rocked from side to side.

To return to the On-Road mode; push the SWAY BAR switch again.

WARNING!
If the stabilizer/sway bar will not return to On-Road mode, vehicle stability is reduced. Do not attempt to drive the vehicle over 18 mph (29 km/h). Driving faster than 18 mph (29 km/h) may cause loss of control of the vehicle, which could result in serious injury or death. Contact your local service center for assistance.

WARNING!
Do not disconnect the stabilizer bar and drive on hard surfaced roads or at speeds above 18 mph (29 km/h), you may lose control of the vehicle, which could result in serious injury or death. The front stabilizer bar enhances vehicle stability and assists in maintaining control of the vehicle. The system monitors vehicle speed and will attempt to reconnect the stabilizer bar at speeds over 18 mph (29 km/h). This is indicated by a flashing off road light and solid on road light. Once vehicle speed is reduced below 14 mph (22 km/h), the system will attempt to return to the Off-Road mode.

To disconnect the stabilizer/sway bar, shift to either 4HI or 4L and push the SWAY BAR switch to obtain the Off-Road position. Refer to “Four Wheel Drive Operation” in this chapter for further information. The “Sway Bar Indicator Light” will flash until the stabilizer/sway bar has been fully disconnected.

SAFE OFF-ROAD DRIVING — POWER WAGON ONLY

Off-Road Driving Tips And Vehicle Characteristics
Your vehicle has excellent on and off-road capabilities. These off-road capabilities will allow you to explore those wilderness trails where few travel, providing a source of exciting and satisfying recreation. Before you venture out, you should contact your local governmental agency to determine the designated off-road vehicle (ORV) trails or recreation areas. You should always tread lightly and only use established roads, trails or ORV recreational areas.

Skid Plates And Underbody Protection
Steel skid plates protect the major driveline components of the truck including the fuel tank, transfer case and steering damper. In addition, this vehicle is equipped with boxed cross members and fore/aft rails. This additional protection allows the vehicle to be utilized in
severe off-road situations that would be considered impassable by a normal truck.

**Ramp Travel Index (RTI)**
The Ramp Travel Index (RTI) is the distance, in inches, that you can drive your vehicle with one wheel on a 20-degree ramp without lifting any other wheel off the ground. This distance up the ramp divided by the wheelbase of the vehicle and multiplied by 1,000 is the RTI. This vehicle has an RTI of 510, which means you can articulate one front wheel 26 inches (66 cm) in the air while the other three wheels remain in contact with the ground.

**Water Fording Characteristics**
Water fording characteristic is the vehicle's ability to cross a body of still water, where the powertrain and drivetrain are safe from water ingestion. This vehicle has high water fording characteristics with the ability to cross a pool of water, without stopping, 24 inches (60 cm) deep at a maximum speed of 10 mph (16 km/h) and a pool of water 30 inches (76 cm) deep at a maximum speed of 5 mph (8 km/h), both with an entrance ramp angle of 1.3 degrees. When to Use Low Range

When driving off-road, shift into 4L (Low Range) for additional traction or to improve handling and control on slippery or difficult terrain. Due to the vehicle's design, it is important to use low range in specific situations to ensure safe and successful off-road driving.

**Simultaneous Brake And Throttle Operation**
Many off-road driving conditions require the simultaneous use of the brake and throttle (two footed driving). When climbing rocks, logs, or other stepped objects, using light brake pressure with light throttle will keep the vehicle from jerking or lurching. This technique is also used when you need to stop and restart a vehicle on a steep incline.

**The Basics Of Off-Road Driving**
You will encounter many types of terrain driving off-road. You should be familiar with the terrain and area before proceeding. There are many types of surface conditions: hard packed dirt, gravel, rocks, grass, sand, mud, snow and ice. Every surface has a different effect on your vehicle's steering, handling and traction. Controlling your vehicle is one of the keys to successful off-road driving, so always keep a firm grip on the steering wheel and maintain a good driving posture. Avoid sudden accelerations, turns or braking. In most cases there are no road signs, posted speed limits or signal lights. Therefore you will need to use your own good judgment on what is safe and what isn’t. When on a trail you should always be looking ahead for surface obstacles and changes in terrain. The key is to plan your future driving route while remembering what you are currently driving over.

**WARNING!**
Always wear your seat belt and firmly tie down cargo. Unsecured cargo can become projectiles in an off-road situation.

**CAUTION!**
The door sill height is 25 inches (63.5 cm). Water may intrude into the interior of the vehicle at greater depths.

**CAUTION!**
Never park your vehicle over dry grass or other combustible materials. The heat from your vehicle exhaust system could cause a fire.
to the lower gearing, Low Range will allow the engine to operate in a higher power range. This will allow you to idle over obstacles and down hills, with improved control and less effort. Also, use 4L (Low Range) in rain, ice, snow, mud, sand, to get heavy loads rolling, improve traction, or whenever 4HI (High Range) traction will not do the job.

Driving In Snow, Mud And Sand

There is a drastic reduction in traction when driving in snow, mud or sand. The vehicle will be less responsive to steering, acceleration and braking inputs. Therefore you should accelerate slowly, leave greater stopping distances and avoid abrupt vehicle maneuvers. You want to keep a slow constant steady pace. The key is to maintain the vehicle's momentum.

- **Snow** – In heavy snow or for additional control and traction at slower speeds, shift the transmission to a low gear and shift the transfer case to 4L (Low Range) if necessary. Do not shift to a lower gear than necessary to maintain headway. Over-revving the engine can spin the wheels and traction will be lost. If you start to slow to a stop, try turning your steering wheel no more than a quarter turn quickly back and forth, while still applying throttle. This will allow the tires to get a fresh "bite" and help maintain your momentum.

<table>
<thead>
<tr>
<th>CAUTION!</th>
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<tr>
<td>On icy or slippery roads, do not downshift at high engine RPMs or vehicle speeds because engine braking may cause skidding and loss of control.</td>
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- **Mud** – Deep mud creates a great deal of suction around the tires and is very difficult to get through. You should use 4L (Low Range) with a gear low enough to maintain your momentum without shifting. If you start to slow to a stop, try turning your steering wheel no more than a quarter turn quickly back and forth for additional traction. Mud holes pose an increased threat of vehicle damage and getting stuck. They are normally full of debris from previous vehicles getting stuck. As a good practice before entering any mud hole, get out and determine how deep it is, if there are any hidden obstacles and if the vehicle can be safely recovered if stuck.

- **Sand** – Soft sand is very difficult to travel through with full tire pressure. When crossing soft sandy spots in a trail, maintain your vehicle's momentum and do not stop. The key to driving in soft sand using the appropriate tire pressure, accelerating slowly, avoiding abrupt maneuvers and maintaining the vehicle's momentum. If you are going to be driving on large soft sandy areas or dunes, reduce your tire pressure to a minimum of 15 psi (103 kPa) to allow for a greater tire surface area. Reduced tire pressure will drastically improve your traction and handling, while driving on the soft sand, but you must return the tires to normal air pressure before driving on pavement or other hard surfaces. Be sure you have a way to air the tires back up prior to reducing the pressure.

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<tr>
<td>Reduced tire pressures may cause tire unseating and total loss of air pressure. To reduce the risk of tire unseating, while at a reduced tire pressure, reduce your speed and avoid sharp turns or abrupt maneuvers.</td>
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Crossing Obstacles (Rocks And Other High Points)

While driving off road, you will encounter many types of terrain. These varying types of terrain bring different types of obstacles. Before proceeding review the path ahead to determine
the correct approach and your ability to safely recover the vehicle if something goes wrong. Keeping a firm grip on the steering wheel, bring the vehicle to a complete stop and then inch the vehicle forward until it makes contact with the object. Apply the throttle lightly while holding a light brake pressure and ease the vehicle up and over the object.

**WARNING!**

Crossing obstacles can cause abrupt steering system loading which could cause you to loose control of your vehicle.

**Using A Spotter**

There are many times where it is hard to see the obstacle or determine the correct path. Determining the correct path can be extremely difficult when you are confronting many obstacles. In these cases have someone guide you over, through, or around the obstacle. Have the person stand a safe distance in front of you where they can see the obstacle, watch your tires and undercarriage, and guide you through.

**Crossing Large Rocks**

When approaching large rocks, choose a path which ensures you drive over the largest with your tires. This will lift your undercarriage over the obstacle. The tread of the tire is tougher and thicker than the side wall and is designed to take the abuse. Always look ahead and make every effort to cross the large rocks with your tires.

**CAUTION!**

- Never attempt to straddle a rock that is large enough to strike your axles or undercarriage.
- Never attempt to drive over a rock which is large enough to contact the door sills.

**Crossing A Ravine, Gully, Ditch, Washout Or Rut**

When crossing a ravine, gully, ditch, washout or a large rut, the angled approach is the key to maintaining your vehicle's mobility. Approach these obstacles at a 45-degree angle and let each tire go through the obstacle independently. You need to use caution when crossing large obstacles with steep sides. Do not attempt to cross any large obstacle with steep sides at an angle great enough to put the vehicle at risk of a rollover. If you get caught in a rut, dig a small trench to the right or left at a 45-degree angle ahead of the front tires. Use the removed dirt to fill the rut ahead of the turnout you just created. You should now be able to drive out following the trench you just created at a 45-degree angle.

**WARNING!**

There is an increased risk of rollover when crossing an obstacle, at any angle, with steep sides.

**Crossing Logs**

To cross a log, approach it at a slight angle (approximately 10 to 15 degrees). This allows one front tire to be on top of the log while the other just starts to climb the log. While climbing the log, modulate your brake and accelerator to avoid spinning the log out from under your tires. Then ease the vehicle off the log using your brakes.

**CAUTION!**

Do not attempt to cross a log with a greater diameter than the running ground clearance or the vehicle will become high centered.
Getting High Centered

If you get hung up or high centered on an object, get out of the vehicle and try to determine what the vehicle is hung up on, where it is contacting the underbody and what is the best direction to recover the vehicle. Depending on what you are in contact with, jack the vehicle up and place a few rocks under the tires so the weight is off of the high point when you let the vehicle down. You can also try rocking the vehicle or winching the vehicle off the object.

You should always climb hills straight up and down. Never attempt to climb a hill on an angle.

- **Before Climbing A Steep Hill** – As you approach a hill consider its grade or steepness. Determine if it is too steep. Look to see what the traction is on the hill side trail. Is the trail straight up and down? What is on top and the other side? Are there ruts, rocks, branches or other obstacles on the path? Can you safely recover the vehicle if something goes wrong? If everything looks good and you feel confident, then change transmission into a lower gear, shift the transfer case into 4L (Low) and proceed with caution. You should use first gear and 4L (Low Range) for very steep hills.

- **Driving Up Hill** – Once you have determined your ability to proceed and have shifted into the appropriate gear, line your vehicle up for the straightest possible run. Accelerate with an easy constant throttle and apply more power as you start up the hill. Do not race forward into a steep grade, the abrupt change of grade could cause you to lose control. If the front end begins to bounce, ease off the throttle slightly to bring all four tires back on the ground. As you approach the crest of the hill ease off the throttle and slowly proceed over the top. If the wheels start to slip as you approach the crest of a hill, ease off the accelerator and maintain headway by turning the steering wheel no more than a quarter turn quickly back and forth. This will provide a fresh “bite” into the surface and will usually provide enough traction to complete the climb. If you do not make it to the top, place the vehicle in REVERSE and back straight down the grade using engine resistance along with the vehicle brakes.

Hill Climbing

Hill climbing requires good judgment and a good understanding of your abilities and your vehicle’s limitations. Hills can cause serious problems. Some are just too steep to climb and should not be attempted. You should always feel confident with the vehicle and your abilities.

- **Driving Down Hill** – Before driving down a steep hill you need to determine if it is too steep for a safe descent. What is the surface traction? Is the grade too steep to maintain a slow controlled descent? Are there obstacles? Is it a straight descent? Is there plenty of distance at the base of the hill to regain control if the vehicle descends too fast? If you feel confident in your ability to proceed...
then make sure you are in 4L (Low Range) with the transmission in first gear (manually select first gear on automatic transmissions) and proceed with caution. Allow engine braking to control the descent and apply your brakes if necessary, but do not allow the tires to lock.

**Driving Across An Incline** – If at all possible avoid driving across an incline. If it is necessary, know your vehicle's abilities. Driving across an incline places more weight on the downhill wheels, which increases the possibilities of a downhill slide or rollover. Make sure the surface has good traction with firm and stable soils. If possible transverse the incline at an angle heading slightly up or down.

**WARNING!**

Do not descend a steep grade in NEUTRAL. Use vehicle brakes in conjunction with engine braking. Descending a grade too fast could cause you to lose control and be seriously injured or killed.

- **If You Stall Or Begin To Lose Headway** – If you stall or begin to lose headway while climbing a steep hill, allow your vehicle to come to a stop and immediately apply the brake. Restart the engine and shift into REVERSE. Back slowly down the hill allowing the compression braking of the engine and transmission to help regulate your speed. If the brakes are required to control vehicle speed, apply them lightly and avoid locking or skidding the tires.

**WARNING!**

Driving across an incline increases the risk of a rollover, which may result in severe injury.

- **Driving Through Water**

  Extreme care should be taken crossing any type of water. Water crossings should be avoided if possible and only be attempted when necessary, in a safe responsible manner. You should only drive through areas which are designated and approved. You should tread lightly and avoid damage to the environment. You should know your vehicle's abilities and be able to recover it if something goes wrong. You should never stop or shut a vehicle off when crossing deep water unless you ingested water into the engine air intake. If the engine stalls do not attempt to restart it. Determine if it has ingested water first. The key to any crossing is low and slow. You want to use first gear in 4L (Low Range) and proceed very slowly with a constant slow speed (3-5 mph [5–8 km/h] maximum) and light throttle. Keep the vehicle moving; do not try to accelerate through the crossing. After crossing any water higher than the bottom of the axle differentials, you should...
inspect all of the vehicle fluids for signs of water ingestion.

**CAUTION!**

Water ingestion into the axles, transmission, transfer case, engine or vehicle interior can occur if you drive too fast or through too deep of water. Water can cause permanent damage to engine, driveline or other vehicle components and your brakes will be less effective once wet and/or muddy.

- **Before You Cross Any Type Of Water** – As you approach any type of water you need to determine if you can cross it safely and responsibly. If necessary, get out and walk through the water or probe it with a stick. You need to be sure of its depth, approach angle, current and bottom condition. Be careful of murky or muddy waters, check for hidden obstacles. Make sure you will not be intruding on any wildlife and you can recover the vehicle if necessary. The key to a safe crossing is the water depth, current and bottom conditions. On soft bottoms the vehicle will sink in, effectively increasing the water level on the vehicle. Be sure to consider this when determining the depth and the ability to safely cross.

- **Crossing Puddles, Pools, Flooded Areas Or Other Standing Water** – Puddles, pools, flooded or other standing water areas normally contain murky or muddy waters. These water types normally contain hidden obstacles and make it difficult to determine an accurate water depth, approach angle, and bottom condition. Murky or muddy water holes are where you want to hook up tow straps prior to entering. This makes for a faster, cleaner and easier vehicle recovery. If you are able to determine you can safely cross, than proceed using the low and slow method.

**CAUTION!**

Muddy waters can reduce the cooling system effectiveness by depositing debris onto the radiator.

- **Crossing Ditches, Streams, Shallow Rivers Or Other Flowing Water** – Flowing water can be extremely dangerous. Never attempt to cross a fast running stream or river even in shallow water. Fast moving water can easily push your vehicle downstream sweeping it out of control. Even in very shallow water, a high current can still wash the dirt out from around your tires putting you and your vehicle in jeopardy. There is still a high risk of personal injury and vehicle damage with slower water currents in depths greater than the vehicle's running ground clearance. You should never attempt to cross flowing water which is deeper than the vehicle's running ground clearance. Even the slowest current can push the heaviest vehicle downstream out of control if the water is deep enough to push on the large surface area of the vehicle's body. Before you proceed determine the speed of the current, the water's depth, approach angle, bottom condition and if there are any obstacles, then cross at an angle heading slightly upstream using the low and slow technique.

**WARNING!**

Never drive through fast moving deep water. It can push your vehicle downstream, sweeping it out of control. This could put you and your passengers at risk of injury or drowning.
Airing Down For Off-Road Driving

Running lower tire pressure off-road can improve your ride comfort and vehicle traction. Reducing the tire air pressure allows the tire to bulge slightly, improving its surface area for better flotation and ability to mold or form to the ground contour. Different terrain, tires, and vehicles require different tire pressure. Hard surfaces like rock and heavier vehicles require higher pressures than softer surfaces such as sand and lighter vehicles. You will need to experiment to determine what is right for your situation. It is easier and faster to let air out than it is to replace it so, start high and lower it as required. Remember you must return the tires to normal air pressure before driving on road or at highway conditions. Be sure you have a way to return the tires to their normal on road air pressure.

Vehicle Recovery

If you drive off-road, you may encounter a situation where you will need to recover your vehicle. Vehicle recovery should always be given consideration before attempting a questionable obstacle. You should never go off-road driving without the ability to recover your vehicle from a situation. Having another vehicle with you usually works best for most situations. The first thing to do is assess the situation. Why are you stuck? Are you hung up on something? Would it be easier to go forward or to go backward? Can you still move the vehicle? Is there an anchor point to winch to? Are you alone or do you have another vehicle to help? Is there high risk of vehicle damage during the recovery process? Answering these questions will help you determine the best method of recovery. If you can still move the vehicle slightly and the only issue is slick ground, then rock cycling your vehicle would be the first choice. If you have ample room, an additional vehicle and there is low risk of vehicle impingement on the surroundings, then using a tow strap to the vehicle tow hooks would be fast and easy. If the vehicle is severely hung up or in a situation where great care needs to be taken during the recovery, then nothing can do the job better than a winch. If you are severely hung up on something you should jack the vehicle up and stack something under the wheels to allow the vehicle to roll off the object without causing further damage. This should be tried before attempting any recovery method.

CAUTION!

Reduced tire pressure increases the risk of tire damage and may cause tire unseating with total loss of air pressure. To reduce the risk of tire unseating, while at a reduced tire pressure, drive at slower speeds and avoid sharp turns or abrupt maneuvers.

Rock Cycling Your Vehicle – Rock cycling your vehicle is one of the easiest, fastest and most commonly used methods. This simply involves shifting your vehicle from DRIVE to REVERSE, while applying throttle after each shift. During this process, for additional traction, try turning your steering wheel quickly left and right no more than a ¼ turn. If you are stuck in mud, sand, or snow try spinning your tires during this process to clean the debris from the tread and improve the traction. You want to create a rocking motion with the vehicle. This helps build vehicle momentum, which hopefully gets you out. Remember to ease off and on the accelerator before and after the shift. If after a few rock cycles your vehicle is not free, stop and try...
another method of recovery. Continuous rock cycling will only cause unnecessary damage to your vehicle and the environment.

**CAUTION!**

Damage can occur when spinning your tires at an excessive high speed. Do not spin your tires faster than an indicated 30 mph (48 km/h).

- **Using The Tow Hooks With A Tow Strap** – Tow straps are a quick and easy way to recover your vehicle from minor situations if you have a secondary vehicle which is not stuck. The tow hooks on your vehicle are designed to take the abusive force generated during vehicle recovery. Do not use the bumper or any other vehicle component as an attachment point. Using tow straps requires coordination between the two drivers. Good communication and line of sight are required for a safe recovery. First connect the tow strap to the correct attachment points on both vehicles. There should be a least 20 to 30 feet (6 to 9 meters) between the vehicles to allow for a safe recovery. If necessary, join two tow straps together using a 1 ½ inch hard wood dowel. This will keep the straps from becoming knotted and is safer than using a clevis pin if the strap breaks. Next have the tow vehicle backup, leaving two to three feet worth of slack in the strap. Then the tow vehicle, using light throttle, should accelerate tightening the strap providing the pulling force needed to free the vehicle. The vehicle being recovered should assist in the recovery, at the time of the snap, by slowly spinning the tires in the same direction as the pulling vehicle. After the vehicle becomes free, the driver of the previously stuck vehicle should signal they are free and should hit their brakes stopping both vehicles. The driver of the pulling vehicle should let off the throttle without using the brakes, once signaled by the other driver. This sequence is important to avoid having the recovered vehicle hit the pulling vehicle.

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**WARNING!**

Never use tow straps with end hooks or link two straps with a clevis pin. These heavy metal objects could become projectiles if a strap breaks, which could cause severe injury. Never leave more than 2 to 3 feet (0.60 to 1 meter) of slack in the strap. More slack than this greatly increases the risk of injury and vehicle damage. Always keep everyone at least 30 feet (9 meters) away from a strapping or winching situation.

- **Winching (Refer To “Winch Operation” For Additional Information)** – Winching is most commonly used in the following situations: there is no support vehicle available, a high controlled force is required to recover the vehicle, there is a high risk of environmental or vehicle damage, or where nothing else seems to work. A winch can deliver a high pulling force with a great deal of control. It allows you to walk the vehicle out of the situation in a slow controlled manner. This control works well for avoiding further vehicle damage. Once you decide it is time to use the winch look for a good anchor point. It needs
to be strong enough to hold more than the vehicle's weight and provide a direction of pull as straight as possible. Use block and tackle if necessary to improve the angle of pull or increase the winch's pulling force. If the anchor point is a tree use a strap around its base and hook the cable to the strap. If it is another vehicle, then place that vehicle in PARK and block the front tires. If you cannot find an anchor point within reach, try using your spare tire by burying it. Once you have determined an anchor point hook up the cable, ensuring there are a least five wraps of cable left on the drum, and place a floor mat or something else over the strung out cable. Placing something over the strung out cable helps keep the cable on the ground if it breaks. Next, place the vehicle in first gear and apply a very light throttle as you power the winch in. Be careful not to allow slack in the cable as you recover the vehicle. Do not try to guide the cable into the drum. If it starts to bunch up on one end, let it. You can re-spool the cable afterwards. Never use a winch cable as a tow strap and always stand back while winching.

WARNING!
Winch cables are under high tension when in use and can become a projectile if they fail. Never stand over or straddle the winch cable. Never jerk or overload the winch cable. Never stand in front of the vehicle while winching. Failure to follow these instructions can result in serious or fatal injury.

After Driving Off-Road
Off-road operation puts more stress on your vehicle than does most on-road driving. After going off-road, it is always a good idea to check for damage. That way you can get any problems taken care of right away and have your vehicle ready when you need it.

- Completely inspect the underbody of your vehicle. Check tires, body structure, steering, suspension, and exhaust system for damage.
- Inspect the radiator for mud and debris and clean as required.
- Check threaded fasteners for looseness, particularly on the chassis, drivetrain components, steering, and suspension. Retighten them, if required, and torque to the values specified in the Service Manual.
- Check for accumulations of plants or brush. These things could be a fire hazard. They might hide damage to fuel lines, brake hoses, axle pinion seals, and propeller shafts.
- After extended operation in mud, sand, water, or similar dirty conditions, have the radiator, fan, brake rotors, wheels, brake linings, and axle yokes inspected and cleaned as soon as possible.

WARNING!
Abrasive material in any part of the brakes may cause excessive wear or unpredictable braking. You might not have full braking power when you need it to prevent a collision. If you have been operating your vehicle in dirty conditions, get your brakes checked and cleaned as necessary.

- If you experience unusual vibration after driving in mud, slush or similar conditions, check the wheels for impacted material. Impacted material can cause a wheel imbal-
ance and freeing the wheels of it will correct
the situation.

LIMITED-SLIP DIFFERENTIAL

The limited-slip differential provides additional
traction on snow, ice, mud, sand and gravel,
particularly when there is a difference between
the traction characteristics of the surface under
the right and left rear wheels. During normal
driving and cornering, the limited-slip unit
performs similarly to a conventional differential.
On slippery surfaces, however, the limited-slip
differential delivers more of the driving effort to
the rear wheel having the better traction.
The limited-slip differential is especially helpful
during slippery driving conditions. With both
rear wheels on a slippery surface, a slight
application of the accelerator will supply
maximum traction. When starting with only one
rear wheel on an excessively slippery surface,
slight momentary application of the parking
brake may be necessary to gain maximum
traction.

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<tr>
<td>On vehicles equipped with a limited-slip differential never run the engine with one rear wheel off the ground since the vehicle may drive through the rear wheel remaining on the ground. You could lose control of the vehicle.</td>
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Care should be taken to avoid sudden accelerations when both rear wheels are on a slippery surface. This could cause both rear wheels to spin, and allow the vehicle to slide sideways on the crowned surface of a road or in a turn.

WINCH USAGE — POWER WAGON ONLY (IF EQUIPPED)

Things To Know Before Using Your Winch

General Winch Information

Your vehicle is equipped with an electric vehicle recovery winch. This winch uses the electrical power from the vehicle charging system to power a motor that winds the winch rope onto the winch drum via planetary gear reduction. By nature, a winch is capable of generating very high forces and should be used with care. Do not operate the winch without reading and understanding the complete winch owner's manual.

Tensioning The Winch Rope

The winch rope must be properly tensioned before use. Follow the instructions below to tension the rope:

1. Un-spool the rope leaving five wraps of rope on the winch drum.
2. Attach the hook to a suitable anchor point.
3. Apply at least 1,000 lbs (454 kg) of tension to the rope while winding the rope. Always use care to ensure the rope does not pile up on one side of the drum and is neatly wound onto the drum.

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<tr>
<td>Be certain the anchor will withstand the load required to tension the winch rope.</td>
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</table>
Low Voltage Interrupt

Your winch is equipped with a device that will interrupt winch function if the vehicle charging system voltage drops to a low level. The winch will not power-in or out for 30 seconds if this device is tripped. If the interrupt is tripped, the vehicle should be operated at high idle for a few minutes to allow the vehicle charging system to recover before continuing to winch.

Understanding The Features Of Your Winch

1. **Motor**: The winch motor is powered by the vehicle charging system.

2. **Remote Socket**: The remote socket (which will be located on the bumper assembly) allows the remote control to be attached to the control pack to allow the winch to function.

3. **Winch Drum With Integral Brake**: The winch drum allows the rope to be stored on the winch and transmits force to the rope. The winch is equipped with an integral brake that will stop rotation of the winch drum if the winch motor is stopped.

4. **Synthetic Rope**: The synthetic rope allows the winch to be connected to an anchor to provide a pulling force. This synthetic rope is highly flexible, lightweight, and it floats. The hawse fairlead acts as a guide for the synthetic rope and minimizes damage to the rope.

5. **Clutch Lever**: The clutch lever allows the winch drum to be disconnected from the winch motor to allow the rope to be pulled from the winch by hand.

6. **Remote Control**: The remote control provides the interface between the winch operator and the winch. The remote control provides the ability to power the winch in, out, and stop the winch. To operate the winch, the toggle switch is pressed down to power the winch in and up to power the winch out. The winch will stop if the switch is left in the neutral (center) position.

**CAUTION!**
The winch rope must spool on the winch drum in the direction indicated on the drum rotation decal on the winch.
Winch Accessories

The following accessories are necessary to attach the winch to anchors, change direction of pull, and for safe winching.

**Gloves:** It is extremely important to wear protective gloves while operating the winch or handling the winch rope. Avoid loose fitting clothes or anything that could become entangled in the rope and other moving parts.

**Snatch/Block Pulley:** Used properly, the multi-purpose snatch block allows you to (1) increase the winch's pulling power; and (2) change your pulling direction without damaging the winch rope. For proper use refer to “Rigging Techniques” in this section for further information.

**Clevis/D-Shackles:** The D-Shackle is a safe means of connecting the looped ends of cables, straps and snatch blocks. The shackle’s pin is threaded to allow easy removal.

**Tree Trunk Protector:** Typically made of tough, high-quality nylon, it provides the operator an attachment point for the winch rope to a wide variety of anchor points and objects, as well as protect living trees.

**Abrasion Sleeve:** The abrasion sleeve is provided with the synthetic rope and must be used with the synthetic rope at all times to protect the rope from potential abrasion wear. The sleeve has a loose fit so it can easily be positioned along the synthetic rope to protect from rough surfaces and sharp corners.

**Operating Your Winch**

**CAUTION!**

If not installed, the hook strap must be placed on the hook.

**WARNING!**

- Failure to observe any of these warnings regarding proper winch usage may result in severe injury.
  - Always use supplied hook strap to hold the hook when spooling wire rope in or out.
  - Never use as a hoist.
  - Never use to move persons.

- Never exceed winch or synthetic rope rated capacity.
- Always wear heavy leather gloves when handling the synthetic rope.
- Never touch synthetic rope or hook while in tension or under load.
- Never engage or disengage clutch if winch is under load, synthetic rope is in tension, or rope drum is moving.
- Always stand clear of synthetic rope and load and keep others away during winching.
- Always keep hands and clothing clear of the synthetic rope, hook and fairlead opening during operation and when spooling.
- Never wrap synthetic rope back onto itself. Always use a choker chain, wire choker rope or tree trunk protector on the anchor.
- Never attach a recovery strap to the winch hook to increase the length of a pull.
- Never attempt to tow a vehicle with the recovery strap attached directly to the winch hook.
General Information

Practice using your winch before you get stuck. Some key points to remember when using your winch are:

- Always take your time to assess the situation and plan your pull carefully.
- Always take your time when using a winch.
- Use the right equipment for the situation.
- Always wear leather gloves and do not allow the synthetic rope to slip through your hands when handling the rope.
- Only the operator should handle the synthetic rope and remote control.
- Think safety at all times.

Vehicle Recovery Using The Winch

CAUTION!

- Always know your winch: Take the time to fully read and understand the included Installation and Operations Guide, and Basic Guide to Winching Techniques, in order to understand your winch and the winching operation.
1. Inspect the winch, winch mount, and synthetic rope for damage. Do not use the winch if the mount is loose or rope shows excessive wear, frays, or damage.

2. Put on gloves.

3. Disengage the clutch to allow free spooling of the winch drum, rotate the clutch lever on the winch to disengage. Free spooling conserves battery power.

4. Free the winch hook and attach the hook strap. Free the winch hook from its anchor point. Attach the hook strap to the hook (if not attached).

5. Pull the wire to the anchor point. Pull out enough wire rope to reach your anchor point. To prevent losing the end, hold the hook strap while you work.

6. Secure to the anchor point. Once you have established your anchor point, secure the tree-trunk protector or choker-chain around the object.

**WARNING!**
- Never touch winch rope or hook while someone else is at the control switch or during winching operation.
- Never touch winch rope or hook while under tension or under load.
NOTE:
How to choose an anchor point: A secure anchor is critical to winching operations. An anchor must be strong enough to hold while winching. Natural anchors include trees, stumps and rocks. Hook the cable as low as possible. If no natural anchors are available when recovering another vehicle, your vehicle becomes the anchor point. In this case, be sure to put the transmission in NEUTRAL, apply the hand brake and block its wheels to prevent your vehicle from moving. Ideally, you'll want an anchor point that will enable you to pull straight in the direction the vehicle will move. This allows the synthetic rope to wind tightly and evenly onto the spooling drum. An anchor point as far away as possible will provide the winch with its greatest pulling power.

7. Attach the Clevis/D-shackle and Tree Trunk Protector. Attach the shackle to the two ends of the strap or chain and through the hook, being careful not to over tighten (tighten and back-off 1/2 turn).

CAUTION!
Always be certain the anchor you select will withstand the load.

NOTE:
How to choose an anchor point: A secure anchor is critical to winching operations. An anchor must be strong enough to hold while winching. Natural anchors include trees, stumps and rocks. Hook the cable as low as possible. If no natural anchors are available when recovering another vehicle, your vehicle becomes the anchor point. In this case, be sure to put the transmission in NEUTRAL, apply the hand brake and block its wheels to prevent your vehicle from moving. Ideally, you'll want an anchor point that will enable you to pull straight in the direction the vehicle will move. This allows the synthetic rope to wind tightly and evenly onto the spooling drum. An anchor point as far away as possible will provide the winch with its greatest pulling power.

7. Attach the Clevis/D-shackle and Tree Trunk Protector. Attach the shackle to the two ends of the strap or chain and through the hook, being careful not to over tighten (tighten and back-off 1/2 turn).

8. Lock the clutch. Lock the winch drum by rotating the clutch lever on the winch to engage.

9. Connect the remote control to the winch control box, located on the front bumper. Be careful not to let the remote control cord dangle in front of the winch. If you choose to control the winch from inside your vehicle, always pass the remote through a window to avoid pinching the cord in the door. Always disconnect the remote control when not in use.

10. Put synthetic rope under tension. Using the remote control switch, slowly wind the rope until no slack remains. Once the rope is
under tension, stand well clear of it and never step over it.

Pulling Synthetic Rope Under Tension

11. Check your anchor. Make sure all connections are secured and free of debris before continuing with the winching procedure.

12. Check synthetic rope. The rope should be neatly wound around the spooling drum. Improper winding can cause damage to the synthetic rope.

Heavy Blanket Over Rope

In certain situations you may decide to throw a heavy blanket or similar object over the rope. A heavy blanket can absorb energy should the synthetic rope break. Place it on the rope midway between the winch and the anchor point. Do this before the rope is put under tension. Do not approach or move the blanket once tension is applied. Do not allow it to get pulled into the fairlead. If it is necessary to move or remove the blanket, slack the tension on the rope first.

13. Establish "no people" zones: Make your intentions clear. Be sure that everyone in the immediate vicinity surrounding the winching operation is completely aware of your intentions before you pull. Declare where the spectators should not stand - never behind or in front of the vehicle and never near the synthetic rope or snatch block. Your situation may have other "no people" zones.

No People Zones
14. Begin winching. With the winching vehicles engine on and light tension already on the synthetic rope, begin winching slowly and steadily. Be sure that the rope is winding evenly and tightly around the spooling drum. For additional assistance, the winched vehicle can be slowly driven while being pulled by the winch. Continue pulling until the vehicle is on stable ground. If you are able to drive the vehicle, the winching operation is complete.

NOTE:

- Avoid overheating the winch motor. For extended winching, stop at reasonable intervals to allow the winch motor to cool down.
- What to look for under load: The synthetic rope must always spool onto the drum as indicated by the drum rotation decal on the winch. As you power-in, make sure the synthetic rope winds evenly and tightly on the drum. This prevents the outer rope wraps from drawing into the inner wraps, binding and damaging the synthetic rope. Avoid shock loads by using the control switch intermittently to take up rope slack. Shock loads can momentarily far exceed the winch and synthetic rope ratings. During side pulls the synthetic rope tends to stack up at one end of the drum. This stack can become large enough to cause serious damage to the winch. So, line up pulls as straight ahead as possible and stop winching if the synthetic rope comes close to the tie rods or mounting plate. To fix an uneven stack, spool out that section of the rope and reposition it to the opposite end of the drum, which will free up space for continued winching.

15. Secure vehicle. Once recovery of the vehicle is complete, be sure to secure the vehicle's brakes and shift the transmission to PARK. Release tension in the synthetic rope.

16. Disconnect the synthetic rope, and disconnect from the anchor.

17. Rewind the synthetic rope. The person handling the synthetic rope should walk the rope in and not let it slide through the hand, control the winch at all times.

WARNING!

To prevent serious injury, NEVER put your fingers inside the hook area as you are powering-in.
NOTE:
How to spool under no load: Arrange the remote control lead so it cannot be caught in the winch. Arrange the synthetic rope so it will not kink or tangle when spooled. Be sure any synthetic rope already on the spooling drum is wound tightly and evenly layered. Tighten and straighten the layer if necessary. Keep the synthetic rope under light tension and spool the rope back and onto the winch drum in even layers. Stop frequently to tighten and straighten the layers as necessary. Repeat this process until the winch hook is the same distance as the full length of the remote control from the winch. Pinch the hook between your thumb and forefinger and attach the hook strap. Hold the hook strap between the thumb and forefinger to keep tension on the synthetic rope. Walk the synthetic rope towards the fairlead, carefully spooling in the remaining rope. By pulsing the remote control switch.

18. Store the hook on the most outboard loop of the hawse fairlead.

19. Disconnect the remote control. Disconnect the remote control cord from the control box and store in a clean and dry place. Winching operations are now complete. Put the cap on the remote plug-in.

NOTE:
Always store the remote control in a protected, clean, dry area.

Rigging Techniques
Various winching situations will require application of other winching techniques. These could range from too little distance to achieve maximum pull using straight line rigging, simply increasing pulling power, or maintaining a straight-line pulling situation. You will have to assess what technique is correct for your situation. Think "safety" at all times.

How To Change The Pulling Direction

All winching operations should have a straight line from the winch to the object being pulled. This minimizes the synthetic rope collecting on one side of the drum affecting pulling efficiency and damaging synthetic rope. A snatch block, secured to a point directly in front of the vehicle will enable you to change your pulling direction while still allowing the synthetic rope to be at 90° to wind properly onto the spooling drum.

Increasing Pulling Power
In some cases, you may find yourself needing more pulling power. The use of snatch blocks
increases mechanical advantage and that increases your pulling power.

**Double Line**

Because pulling power decreases with the number of layers of synthetic rope on the winch drum, you can use a snatch block to double line out more rope. This decreases the number of layers of synthetic rope on the drum, and increases pulling power. Start by feeding out enough synthetic rope to free the winch hook. Attach the hook to your vehicle’s frame/tow hook and run the rope through a snatch block. Disengage the clutch and, using the snatch block, pull out enough synthetic rope to reach your anchor point. Do not attach the hook to the mounting kit. Secure to the anchor point with a tree trunk protector or choker chain. Attach the Clevis/Shackle. Attach the Shackle to the two ends of the strap/chain, being careful not to over tighten (tighten and back-off one half turn).

**FUEL SAVER TECHNOLOGY — IF EQUIPPED**

This feature offers improved fuel economy by shutting off four of the engine's eight cylinders during light load and cruise conditions. The system is automatic with no driver inputs or additional driving skills required.

**NOTE:**
This system may take some time to return to full functionality after a battery disconnect.

**SPEED CONTROL**

When engaged, the Speed Control takes over accelerator operations at speeds greater than 20 mph (32 km/h), or 25 mph (40 km/h), depending on the powertrain used.

The Speed Control buttons are located on the right side of the steering wheel.

**NOTE:**
In order to ensure proper operation, the Speed Control system has been designed to shut down if multiple speed control functions are operated at the same time. If this occurs, the Speed Control system can be reactivated by pushing the Speed Control on/off button and resetting the desired vehicle set speed.

**To Activate**

Push the on/off button to activate the Speed Control. The cruise indicator light in the
instrument cluster display will illuminate. To turn the system off, push the on/off button a second time. The cruise indicator light will turn off. The system should be turned off when not in use.

<table>
<thead>
<tr>
<th>WARNING!</th>
</tr>
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<tbody>
<tr>
<td>Leaving the Speed Control system on when not in use is dangerous. You could accidentally set the system or cause it to go faster than you want. You could lose control and have an accident. Always leave the system off when you are not using it.</td>
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</table>

**To Set A Desired Speed**

Turn the Speed Control on. When the vehicle has reached the desired speed, push the SET (-) button and release. Release the accelerator and the vehicle will operate at the selected speed.

**NOTE:**
The vehicle should be traveling at a steady speed and on level ground before pushing the SET (-) button.

**To Vary The Speed Setting**

**To Increase Speed**

When the Speed Control is set, you can increase speed by pushing the RES (+) button. The driver’s preferred units can be selected through the instrument panel settings (if equipped). Refer to “Getting To Know Your Instrument Panel” for more information. The speed increment shown is dependent on the chosen speed unit of U.S. (mph) or Metric (km/h):

**U.S. Speed (mph)**

- Pushing the RES (+) button once will result in a 1 mph increase in set speed. Each subsequent tap of the button results in an increase of 1 mph.
- If the button is continually pushed, the set speed will continue to increase until the button is released, then the new set speed will be established.

**Metric Speed (km/h)**

- Pushing the RES (+) button once will result in a 1 km/h increase in set speed. Each subsequent tap of the button results in an increase of 1 km/h.
- If the button is continually pushed, the set speed will continue to increase until the button is released, then the new set speed will be established.

**To Decrease Speed**

When the Speed Control is set, you can decrease speed by pushing the SET (-) button. The driver’s preferred units can be selected through the instrument panel settings (if equipped). Refer to “Getting To Know Your Instrument Panel” for more information. The speed decrement shown is dependent on the chosen speed unit of U.S. (mph) or Metric (km/h):

**U.S. Speed (mph)**

- Pushing the SET (-) button once will result in a 1 mph decrease in set speed. Each subsequent tap of the button results in a decrease of 1 mph.
- If the button is continually pushed, the set speed will continue to decrease until the button is released, then the new set speed will be established.

**WARNING!**

Leaving the Speed Control system on when not in use is dangerous. You could accidentally set the system or cause it to go faster than you want. You could lose control and have an accident. Always leave the system off when you are not using it.
Metric Speed (km/h)

- Pushing the SET (-) button once will result in a 1 km/h decrease in set speed. Each subsequent tap of the button results in a decrease of 1 km/h.

  If the button is continually pushed, the set speed will continue to decrease until the button is released, then the new set speed will be established.

To Accelerate For Passing

Press the accelerator as you would normally. When the pedal is released, the vehicle will return to the set speed.

Using Speed Control On Hills

The transmission may downshift on hills to maintain the vehicle set speed.

NOTE:
The Speed Control system maintains speed up and down hills. A slight speed change on moderate hills is normal.

On steep hills, a greater speed loss or gain may occur so it may be preferable to drive without Speed Control.

---

**WARNING!**

Speed Control can be dangerous where the system cannot maintain a constant speed. Your vehicle could go too fast for the conditions, and you could lose control and have an accident. Do not use Speed Control in heavy traffic or on roads that are winding, icy, snow-covered or slippery.

To Resume Speed

To resume a previously set speed, push the RES (+) button and release. Resume can be used at any speed above 20 mph (32 km/h).

To Deactivate

A soft tap on the brake pedal, pushing the CANCEL button, or normal brake pressure while slowing the vehicle will deactivate the Speed Control without erasing the set speed from memory.

Pushing the on/off button, or placing the ignition in the OFF position, erases the set speed from memory.

The following conditions will also deactivate the Speed Control without erasing the set speed from memory:

- Vehicle parking brake is applied
- Stability event occurs
- Gear selector is moved out of DRIVE
- Engine overspeed occurs

**ADAPTIVE CRUISE CONTROL (ACC) — IF EQUIPPED**

Adaptive Cruise Control (ACC) increases the driving convenience provided by cruise control while traveling on highways and major roadways. However, it is not a safety system and not designed to prevent collisions. Speed Control function performs differently. Please refer to the proper section within this chapter.

ACC will allow you to keep cruise control engaged in light to moderate traffic conditions without the constant need to reset your cruise control. ACC utilizes a radar sensor and a forward facing camera designed to detect a vehicle directly ahead of you.
NOTE:
- If the sensor does not detect a vehicle ahead of you, ACC will maintain a fixed set speed.

- If the ACC sensor detects a vehicle ahead, ACC will apply limited braking or accelerate (not to exceed the original set speed) automatically to maintain a preset following distance, while matching the speed of the vehicle ahead.

The Cruise Control system has two control modes:
- Adaptive Cruise Control mode for maintaining an appropriate distance between vehicles.
- Normal (Fixed Speed) Cruise Control mode for cruising at a constant preset speed. For additional information, refer to “Normal (Fixed Speed) Cruise Control Mode” in this section.

NOTE:
Normal (Fixed Speed) Cruise Control will not react to preceding vehicles. Always be aware of the mode selected.

You can change the mode by using the Cruise Control buttons. The two control modes function differently. Always confirm which mode is selected.

WARNING!
- Adaptive Cruise Control (ACC) is a convenience system. It is not a substitute for active driving involvement. It is always the driver’s responsibility to be attentive of road, traffic, and weather conditions, vehicle speed, distance to the vehicle ahead; and, most importantly, brake operation to ensure safe operation of the vehicle under all road conditions. Your complete attention is always required while driving to maintain safe control of your vehicle. Failure to follow these warnings can result in a collision and death or serious personal injury.
- The ACC system:

WARNING! (Continued)
- Does not react to pedestrians, oncoming vehicles, and stationary objects (e.g., a stopped vehicle in a traffic jam or a disabled vehicle).
- Cannot take street, traffic, and weather conditions into account, and may be limited upon adverse sight distance conditions.
- Does not always fully recognize complex driving conditions, which can result in wrong or missing distance warnings.
- Will bring the vehicle to a complete stop while following a target vehicle and hold the vehicle for approximately two seconds in the stop position. At this point, there will be an “ACC may cancel soon” chime and warning to the driver. When ACC is cancelled, the system will release the brakes and the driver must take over braking. The system can be resumed when the target vehicle drives off by releasing the brake and pushing the resume button on the steering wheel.

(Continued)
Adaptive Cruise Control (ACC) Operation

The speed control buttons (located on the right side of the steering wheel) operate the ACC system.

Adaptive Cruise Control Buttons

1 — Adaptive Cruise Control On/Off Button
2 — Distance Button
3 — RES (+)
4 — SET (-)
5 — CANCEL
6 — Normal (Fixed Speed) Cruise Control On/Off Button

NOTE:
Any chassis/suspension or tire size modifications to the vehicle will affect the performance

You should switch off the ACC system:

- When driving in fog, heavy rain, heavy snow, sleet, heavy traffic, and complex driving situations (i.e., in highway construction zones).
- When entering a turn lane or highway off ramp; when driving on roads that are winding, icy, snow-covered, slippery, or have steep uphill or downhill slopes.
- When towing a trailer up or down steep slopes.

You can only engage ACC if the vehicle speed is above 0 mph (0 km/h).

The minimum set speed for the ACC system is 19 mph (30 km/h).

When the system is turned on and in the ready state, the instrument cluster display will read “ACC Ready.”

When the system is off, the instrument cluster display will read “Adaptive Cruise Control (ACC) Off.”

WARNING!

(Continued)

Any chassis/suspension or tire size modifications to the vehicle will affect the performance of the Adaptive Cruise Control and Forward Collision Warning System.

Activating Adaptive Cruise Control (ACC)

You can only engage ACC if the vehicle speed is above 0 mph (0 km/h).

The minimum set speed for the ACC system is 19 mph (30 km/h).

When the system is turned on and in the ready state, the instrument cluster display will read “ACC Ready.”

When the system is off, the instrument cluster display will read “Adaptive Cruise Control (ACC) Off.”
NOTE:
You cannot engage ACC under the following conditions:

- When in Four-Wheel Drive Low.
- When you apply the brakes.
- When the parking brake is applied.
- When the automatic transmission is in PARK, REVERSE or NEUTRAL.
- When the vehicle speed is outside of the speed range.
- When the brakes are overheated.
- When the driver door is open at low speed.
- When the driver seat belt is unbuckled at low speed.
- Electronic Stability Control (ESC) Full Off mode is active.

To Activate/Deactivate
Push and release the Adaptive Cruise Control (ACC) on/off button. The ACC menu in the instrument cluster displays “ACC Ready.”

ACC Ready

To Set A Desired ACC Speed
When the vehicle reaches the speed desired, push the SET (-) button and release. The instrument cluster display will show the set speed.

WARNING!
Leaving the Adaptive Cruise Control (ACC) system on when not in use is dangerous. You could accidentally set the system or cause it to go faster than you want. You could lose control and have a collision. Always leave the system off when you are not using it.

To Deactivate
Push and release the Adaptive Cruise Control (ACC) on/off button again. At this time, the system will turn off and the instrument cluster display will show “Adaptive Cruise Control (ACC) Off.”

Adaptive Cruise Control Off

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WARNING!
Leaving the Adaptive Cruise Control (ACC) system on when not in use is dangerous. You could accidentally set the system or cause it to go faster than you want. You could lose control and have a collision. Always leave the system off when you are not using it.
If the system is set when the vehicle speed is below 19 mph (30 km/h), the set speed shall be defaulted to 19 mph (30 km/h). If the system is Set when the vehicle speed is above 19 mph (30 km/h), the set speed shall be the current speed of the vehicle.

**NOTE:**
ACC cannot be set if there is a stationary vehicle in front of your vehicle in close proximity.

Remove your foot from the accelerator pedal after the ACC has been set. If you do not, the vehicle may continue to accelerate beyond the set speed. If this occurs:
- The message “ACC DRIVER OVERRIDE” will display in the instrument cluster display.
- The system will not be controlling the distance between your vehicle and the vehicle ahead. The vehicle speed will only be determined by the position of the accelerator pedal.

### To Cancel
The following conditions cancel the system:
- The brake pedal is applied.
- The CANCEL button is pushed.
- An Anti-Lock Brake System (ABS) event occurs.
- The gear selector is removed from the DRIVE position.
- The Electronic Stability Control/Traction Control System (ESC/TCS) activates.
- The vehicle parking brake is applied.
- Driver seatbelt is unbuckled at low speeds.
- Driver door is opened at low speeds.
- A Trailer Sway Control (TSC) event occurs.
- The driver switches ESC to Full Off mode.
- The braking temperature exceeds normal range (overheated).
- The trailer brake is applied manually (if equipped).

### To Turn Off
The system will turn off and clear the set speed in memory if:
- The Adaptive Cruise Control (ACC) on/off button is pushed.
- The Normal (Fixed Speed) Cruise Control on/off button is pushed.
- The ignition is placed in the OFF position.
- You switch to Four-Wheel Drive Low.

### To Resume
If there is a set speed in memory push the RES (+) button and then remove your foot from the accelerator pedal. The instrument cluster display will display the last set speed.

**NOTE:**
- If your vehicle stays at standstill for longer than two seconds, the driver will have to push the RES (+) button to reengage the ACC to the existing set speed.
- ACC cannot be resumed if there is a stationary vehicle in front of your vehicle in close proximity.
To Vary The Speed Setting

To Increase Speed
While ACC is set, you can increase the set speed by pushing the RES (+) button.

The speed increment shown is dependent on the chosen speed unit of U.S. (mph) or Metric (km/h):

**U.S. Speed (mph)**
- Pushing the RES (+) button once will result in a 1 mph increase in set speed. Each subsequent tap of the button results in an increase of 1 mph.
- If the button is continually pushed, the set speed will continue to increase in 5 mph increments until the button is released. The increase in set speed is reflected in the instrument cluster display.

**Metric Speed (km/h)**
- Pushing the RES (+) button once will result in a 1 km/h increase in set speed. Each subsequent tap of the button results in an increase of 1 km/h.
- If the button is continually pushed, the set speed will continue to increase in 10 km/h increments until the button is released. The increase in set speed is reflected in the instrument cluster display.

To Decrease Speed
While ACC is set, the set speed can be decreased by pushing the SET (-) button.

The speed decrement shown is dependent on the chosen speed unit of U.S. (mph) or Metric (km/h):

**U.S. Speed (mph)**
- Pushing the SET (-) button once will result in a 1 mph decrease in set speed. Each subsequent tap of the button results in a decrease of 1 mph.
- If the button is continually pushed, the set speed will continue to decrease in 5 mph decrements until the button is released. The decrease in set speed is reflected in the instrument cluster display.

**Metric Speed (km/h)**
- Pushing the SET (-) button once will result in a 1 km/h decrease in set speed. Each subsequent tap of the button results in a decrease of 1 km/h.
- If the button is continually pushed, the set speed will continue to decrease in 10 km/h decrements until the button is released. The decrease in set speed is reflected in the instrument cluster display.

**NOTE:**
- When you override and push the RES (+) button or SET (-) buttons, the new set speed will be the current speed of the vehicle.
- When you use the SET (-) button to decelerate, if the engine’s braking power does not slow the vehicle sufficiently to reach the set speed, the brake system will automatically slow the vehicle.
- The ACC system decelerates the vehicle to a full stop when following a target vehicle. If an ACC host vehicle follows a target vehicle to a

**WARNING!**
The Resume function should only be used if traffic and road conditions permit. Resuming a set speed that is too high or too low for prevailing traffic and road conditions could cause the vehicle to accelerate or decelerate too sharply for safe operation. Failure to follow these warnings can result in a collision and death or serious personal injury.

The Resume function should only be used if traffic and road conditions permit. Resuming a set speed that is too high or too low for prevailing traffic and road conditions could cause the vehicle to accelerate or decelerate too sharply for safe operation. Failure to follow these warnings can result in a collision and death or serious personal injury.
standstill, after two seconds the driver will either have to push the RES (+) button, or apply the accelerator pedal to reengage the ACC to the existing set speed.

- The ACC system maintains set speed when driving uphill and downhill. However, a slight speed change on moderate hills is normal. In addition, downshifting may occur while climbing uphill or descending downhill. This is normal operation and necessary to maintain set speed. When driving uphill and downhill, the ACC system will cancel if the braking temperature exceeds normal range (overheated).

**Setting The Following Distance In ACC**

The specified following distance for ACC can be set by varying the distance setting between four bars (longest), three bars (long), two bars (medium) and one bar (short). Using this distance setting and the vehicle speed, ACC calculates and sets the distance to the vehicle ahead. This distance setting displays in the instrument cluster display.

The system automatically defaults to the longest distance setting. To decrease the distance setting, push the Distance Button and release. Each time the button is pushed, the distance setting decreases by one bar. Once the shortest setting is reached, if the button is
pushed again it will reset to the default setting (longest).
If there is no vehicle ahead, the vehicle will maintain the set speed. If a slower moving vehicle is detected in the same lane, the instrument cluster displays the ACC Set With Target Indicator Light, and the system adjusts vehicle speed automatically to maintain the distance setting, regardless of the set speed. The vehicle will then maintain the set distance until:

- The vehicle ahead accelerates to a speed above the set speed.
- The vehicle ahead moves out of your lane or view of the sensor.
- The distance setting is changed.
- The system disengages. (Refer to “Activating Adaptive Cruise Control (ACC)” in this chapter.

The maximum braking applied by ACC is limited; however, the driver can always apply the brakes manually, if necessary.

NOTE:
The brake lights will illuminate whenever the ACC system applies the brakes.

A Proximity Warning will alert the driver if ACC predicts that its maximum braking level is not sufficient to maintain the set distance. If this occurs, a visual alert “BRAKE” will flash in the instrument cluster display and a chime will sound while ACC continues to apply its maximum braking capacity.

NOTE:
The brake lights will illuminate whenever the ACC system applies the brakes.

and does not necessarily mean that the Forward Collision Warning system is applying the brakes autonomously.

Trailer Detect — If Equipped
When a trailer is detected, the ACC system automatically defaults to the longest setting (four bars). The setting can be overridden by pushing the Distance Button on the steering wheel.

Overtake Aid

>>> CONDITION: {Market=Brazil or Market='Latin America'} >>>
When driving with ACC engaged and following a vehicle, the system will provide an additional acceleration up to the ACC set speed to assist in passing the vehicle. In locations with left hand drive traffic, an additional acceleration is triggered when the driver utilizes the left turn signal and will only be active when passing on the left hand side. In locations with right hand drive traffic, an additional acceleration is triggered when the driver utilizes the right turn signal and will only be active when passing on the right hand side.

<<< CONDITION END <<<
--- CONDITION: {Market=Brazil or Market='Latin America'} ---

NOTE:
When the vehicle transitions from a location with left hand drive traffic to a location with right hand drive traffic or vice versa, the ACC system will automatically detect the direction of traffic.

<<< CONDITION END <<<

ACC Operation At Stop

In the event that the ACC system brings your vehicle to a standstill while following a target vehicle, if the target vehicle starts moving within two seconds of your vehicle coming to a standstill, your vehicle will resume motion without the need for any driver action.

If the target vehicle does not start moving within two seconds of your vehicle coming to a standstill, then ACC will cancel and the driver must take over braking. When the target vehicle drives off, ACC can be resumed by releasing the brake and pushing the RES (+) button.

NOTE:
After the ACC system holds your vehicle at a standstill for approximately two seconds, a chime will sound and an “ACC may cancel soon” warning will display. The brakes will release when ACC is canceled and the driver must take over braking.

While ACC is holding your vehicle at a standstill, if the driver seatbelt is unbuckled or the driver door is opened, the ACC system will cancel and the brakes will release. Driver intervention will be required at this moment.

--- WARNING! ---

When the ACC system is resumed, the driver must ensure that there are no pedestrians, vehicles or objects in the path of the vehicle. Failure to follow these warnings can result in a collision and death or serious personal injury.

Adaptive Cruise Control (ACC) Menu

The instrument cluster display will show the current ACC system settings. The instrument cluster display is located in the center of the instrument cluster. The information it displays depends on ACC system status.

Push the Adaptive Cruise Control (ACC) on/off button (located on the steering wheel) until one of the following appears in the instrument cluster display:

Adaptive Cruise Control Off
When ACC is deactivated, the display will read “Adaptive Cruise Control Off.”

Adaptive Cruise Control Ready
When ACC is activated, but the vehicle speed setting has not been selected, the display will read “Adaptive Cruise Control Ready.”

Adaptive Cruise Control Set
When the RES (+) or the SET(-) button (located on the steering wheel) is pushed, the display will read “ACC SET.”

When ACC is set, the set speed will show in the instrument cluster display.

The ACC screen may display once again if any ACC activity occurs, which may include any of the following:

- System Cancel
- Driver Override
- System Off
- ACC Proximity Warning
- ACC Unavailable Warning

The instrument cluster display will return to the last display selected after five seconds of no ACC display activity.
Display Warnings And Maintenance

“Wipe Front Radar Sensor In Front Of Vehicle” Warning

The “ACC/FCW Unavailable Wipe Front Radar Sensor” warning will display and also a chime will indicate when conditions temporarily limit system performance.

This most often occurs at times of poor visibility, such as in snow or heavy rain. The ACC system may also become temporarily blinded due to obstructions, such as mud, dirt or ice. In these cases, the instrument cluster display will display “ACC/FCW Unavailable Wipe Front Radar Sensor” and the system will deactivate.

The “ACC/FCW Unavailable Wipe Front Radar Sensor” message can sometimes be displayed while driving in highly reflective areas (i.e. tunnels with reflective tiles, or ice and snow). The ACC system will recover after the vehicle has left these areas. Under rare conditions, when the radar is not tracking any vehicles or objects in its path this warning may temporarily occur.

NOTE:
If the “ACC/FCW Unavailable Wipe Front Radar Sensor” warning is active, Normal (Fixed Speed) Cruise Control is still available. For additional information refer to “Normal (Fixed Speed) Cruise Control Mode” in this section.

If weather conditions are not a factor, the driver should examine the sensor. It may require cleaning or removal of an obstruction. The sensor is located in the camera in the center of the windshield, on the forward side of the rearview mirror.

To keep the ACC System operating properly, it is important to note the following maintenance items:

- Always keep the sensor clean. Carefully clear the windshield.

- Do not remove any screws from the sensor. Doing so could cause an ACC system malfunction or failure and require a sensor realignment.

- Do not attach or install any accessories near the sensor, including transparent material or aftermarket grilles. Doing so could cause an ACC system failure or malfunction.

When the condition that deactivated the system is no longer present, the system will return to the “Adaptive Cruise Control Off” state and will resume function by simply reactivating it.

NOTE:
- If the “ACC/FCW Unavailable Wipe Front Radar Sensor” message occurs frequently (e.g. more than once on every trip) without any snow, rain, mud, or other obstruction, have the radar sensor realigned at your authorized dealer.

- Installing a snow plow, front-end protector, an aftermarket grille or modifying the grille is not recommended. Doing so may block the sensor and inhibit ACC/FCW operation.

“Clean Front Windshield” Warning

The “ACC/FCW Limited Functionality Clean Front Windshield” warning will display and also a chime will indicate when conditions temporarily limit system performance. This most often occurs at times of poor visibility, such as in snow or heavy rain and fog. The ACC system may also become temporarily blinded due to obstructions, such as mud, dirt, or ice on windshield, driving directly into the sun and fog on the inside of glass. In these cases, the instrument cluster display will show “ACC/FCW Limited Functionality Clean Front Windshield”
and the system will have degraded performance.

The “ACC/FCW Limited Functionality Clean Front Windshield” message can sometimes be displayed while driving in adverse weather conditions. The ACC/FCW system will recover after the vehicle has left these areas. Under rare conditions, when the camera is not tracking any vehicles or objects in its path this warning may temporarily occur.

If weather conditions are not a factor, the driver should examine the windshield and the camera located on the back side of the inside rearview mirror. They may require cleaning or removal of an obstruction.

When the condition that created limited functionality is no longer present, the system will return to full functionality.

**NOTE:**
If the “ACC/FCW Limited Functionality Clean Front Windshield” message occurs frequently (e.g. more than once on every trip) without any snow, rain, mud, or other obstruction, have the windshield and forward facing camera inspected at your authorized dealer.

**Service ACC/FCW Warning**

If the system turns off, and the instrument cluster displays “ACC/FCW Unavailable Service Required” or “Cruise/FCW Unavailable Service Required”, there may be an internal system fault or a temporary malfunction that limits ACC functionality. Although the vehicle is still drivable under normal conditions, ACC will be temporarily unavailable. If this occurs, try activating ACC again later, following an ignition cycle. If the problem persists, see your authorized dealer.

**Precautions While Driving With ACC**

In certain driving situations, ACC may have detection issues. In these cases, ACC may brake late or unexpectedly. The driver needs to stay alert and may need to intervene.

**NOTE:**

- Aftermarket add-ons such as snow plows, lift kits, and brush/grille bars can hinder module performance. Ensure the radar/camera has no obstructions in the field of view.

- Height modifications can limit module performance and functionality.

- Do not put stickers or easy passes over the camera/radar field of view.

- Any modifications to the vehicle that may obstruct the field of view of the radar/camera are not recommended.

**Cleaning Instructions**

Dust and dirt can accumulate on the cover and block the camera lens. Clean the camera lens with a soft microfiber cloth, being careful not to damage or scratch the module.

**Towing A Trailer**

ACC while towing a trailer is recommended only with an Integrated Trailer Brake Controller. Aftermarket trailer brake controllers will not activate the trailer brakes when ACC is braking.

**Offset Driving**

ACC may not detect a vehicle in the same lane that is offset from your direct line of travel, or a vehicle merging in from a side lane. There may not be sufficient distance to the vehicle ahead.
The offset vehicle may move in and out of the line of travel, which can cause your vehicle to brake or accelerate unexpectedly.

**Offset Driving Condition Example**

**Turns And Bends**
When driving on a curve with ACC engaged, the system may decrease the vehicle speed and acceleration for stability reasons, with no target vehicle detected. Once the vehicle is out of the curve the system will resume your original set speed. This is a part of normal ACC system functionality.

**NOTE:**
On tight turns ACC performance may be limited.

**Turn Or Bend Example**

**Using ACC On Hills**
When driving on hills, ACC may not detect a vehicle in your lane. Depending on the speed, vehicle load, traffic conditions, and the steepness of the hills, ACC performance may be limited.

**Lane Changing**
ACC may not detect a vehicle until it is completely in the lane in which you are traveling. In the illustration shown, ACC has not yet detected the vehicle changing lanes and it may not detect the vehicle until it's too late for the ACC system to take action. ACC may not detect a vehicle until it is completely in the lane. There may not be sufficient distance to the
lane-changing vehicle. Always be attentive and ready to apply the brakes if necessary.

Lane Changing Example

Narrow Vehicles
Some narrow vehicles traveling near the outer edges of the lane or edging into the lane are not detected until they have moved fully into the lane. There may not be sufficient distance to the vehicle ahead.

Narrow Vehicle Example

Stationary Objects And Vehicles
ACC does not react to stationary objects and stationary vehicles. For example, ACC will not react in situations where the vehicle you are following exits your lane and the vehicle ahead is stopped in your lane. Always be attentive and ready to apply the brakes if necessary.

Stationary Object And Stationary Vehicle Example

Normal (Fixed Speed) Cruise Control Mode

>>> CONDITION: ((Market=Brazil or Market='Latin America')) >>>
In addition to Adaptive Cruise Control mode, a Normal (Fixed Speed) Cruise Control mode is available for cruising at fixed speeds. The Normal (Fixed Speed) Cruise Control mode is designed to maintain a set cruising speed without requiring the driver to operate the accelerator. Speed Control can only be operated if the vehicle speed is above 19 mph (30 km/h).

<<< CONDITION END >>>
To change between the different control modes, push the Adaptive Cruise Control (ACC) on/off button which turns the ACC on and the Normal (Fixed Speed) Cruise Control off. Pushing of the Normal (Fixed Speed) Cruise Control on/off button will result in turning on (changing to) the Normal (Fixed Speed) Cruise Control mode.

**To Set A Desired Speed**

Turn the Normal (Fixed Speed) Cruise Control on. When the vehicle has reached the desired speed, push the RES (+) or SET (-) button and release. Release the accelerator and the vehicle will operate at the selected speed. Once a speed has been set a message “CRUISE CONTROL SET TO MPH (km/h)” will appear indicating what speed was set. This light will turn on when the system is turned on via the on/off control. It turns green when the cruise control is set.

**To Vary The Speed Setting**

**To Increase Speed**

When the Normal (Fixed Speed) Cruise Control is set, you can increase speed by pushing the RES (+) button.

The driver’s preferred units can be selected through the instrument panel settings. Refer to “Instrument Cluster Display” in “Getting To Know Your Instrument Panel” for more information. The speed increment shown is dependent on the speed of U.S. (mph) or Metric (km/h) units:

**U.S. Speed (mph)**

- Pushing the RES (+) button once will result in a 1 mph increase in set speed. Each subsequent tap of the button results in an increase of 1 mph.
- If the button is continually pushed, the set speed will continue to increase in 5 mph increments until the button is released. The increase in set speed is reflected in the instrument cluster display.

**Metric Speed (km/h)**

- Pushing the RES (+) button once will result in a 1 km/h increase in set speed. Each subsequent tap of the button results in an increase of 1 km/h.
- If the button is continually pushed, the set speed will continue to increase in 10 km/h increments until the button is released. The increase in set speed is reflected in the instrument cluster display.

**To Decrease Speed**

When the Normal (Fixed Speed) Cruise Control is set, you can decrease speed by pushing the SET (-) button.

The driver’s preferred units can be selected through the instrument panel settings. Refer to “Instrument Cluster Display” in “Getting To Know Your Instrument Panel” for more information. The speed decrement shown is dependent on the speed of U.S. (mph) or Metric (km/h) units:

**U.S. Speed (mph)**

- Pushing the SET (-) button once will result in a 1 mph decrease in set speed. Each subsequent tap of the button results in an increase of 1 mph.
- If the button is continually pushed, the set speed will continue to increase in 5 mph increments until the button is released. The decrease in set speed is reflected in the instrument cluster display.

**WARNING!**

In the Normal (Fixed Speed) Cruise Control mode, the system will not react to vehicles ahead. In addition, the proximity warning does not activate and no alarm will sound even if you are too close to the vehicle ahead since neither the presence of the vehicle ahead nor the vehicle-to-vehicle distance is detected. Be sure to maintain a safe distance between your vehicle and the vehicle ahead. Always be aware which mode is selected.
quent tap of the button results in a decrease of 1 mph.

- If the button is continually pushed, the set speed will continue to decrease in 5 mph decrements until the button is released. The decrease in set speed is reflected in the instrument cluster display.

**Metric Speed (km/h)**

- Pushing the SET (-) button once will result in a 1 km/h decrease in set speed. Each subsequent tap of the button results in a decrease of 1 km/h.

- If the button is continually pushed, the set speed will continue to decrease in 10 km/h decrements until the button is released. The decrease in set speed is reflected in the instrument cluster display.

**To Cancel**

The following conditions will cancel the Normal (Fixed Speed) Cruise Control without clearing the memory:

- The brake pedal is applied.
- The CANCEL button is pushed.
- The Electronic Stability Control/Traction Control System (ESC/TCS) activates.
- The vehicle parking brake is applied.
- The braking temperature exceeds normal range (overheated).
- The gear selector is removed from the DRIVE position.
- The driver switches ESC to Full Off mode.

**To Resume Speed**

>>> CONDITION: {(Market=Brazil or Market='Latin America')} >>>

To resume a previously set speed, push the RES (+) button and release. Resume can be used at any speed above 19 mph (30 km/h).

<<< CONDITION END <<<

**To Turn Off**

The system will turn off and erase the set speed in memory if:

- The Normal (Fixed Speed) Cruise Control on/off button is pushed.
- The ignition is placed in the OFF position.
- You engage Four-Wheel Drive Low.
- The Adaptive Cruise Control (ACC) on/off button is pushed.

**PARKSENSE REAR PARK ASSIST — IF EQUIPPED**

The ParkSense Rear Park Assist system provides visual and audible indications of the distance between the rear fascia and a detected obstacle when backing up (e.g., during a parking maneuver). Refer to “ParkSense System Usage Precautions” in this section for limitations of this system and recommendations.

ParkSense will retain the system state (enabled or disabled) from the previous ignition cycle when the ignition is placed in the ON/RUN position.
ParkSense can be active only when the gear selector is in REVERSE. If ParkSense is enabled at this gear selector position, the system will remain active until the vehicle speed is increased to approximately 7 mph (11 km/h) or above. When in REVERSE and above the system's operating speed, a warning will appear within the instrument cluster display indicating the vehicle speed is too fast. The system will become active again if the vehicle speed is decreased to speeds less than approximately 6 mph (9 km/h).

**ParkSense Sensors**

The four ParkSense sensors, located in the rear fascia/bumper, monitor the area behind the vehicle that is within the sensors’ field of view. The sensors can detect obstacles from approximately 12 inches (30 cm) up to 79 inches (200 cm) from the rear fascia/bumper in the horizontal direction, depending on the location, type and orientation of the obstacle.

**NOTE:**
If equipped as a dually, the ParkSense system has six rear sensors to assist in detection around the dually flares.

**ParkSense Warning Display**

The ParkSense Warning screen is located within the instrument cluster display. It provides visual warnings to indicate the distance between the rear fascia/bumper and the detected obstacle. Refer to “Instrument Cluster Display” in “Getting To Know Your Instrument Panel” for further information.

**ParkSense Display**

When the vehicle is in REVERSE, the warning display will turn on indicating the system status. The system will indicate a detected obstacle by showing a single arc in the left and/or right rear regions based on the object’s distance and location relative to the vehicle.

If an object is detected in the left and/or right rear region, the display will show a single solid arc in the left and/or right rear region and the system will produce a tone. As the vehicle moves closer to the object, the display will show the single arc moving closer to the vehicle and the tone will change from a single 1/2 second tone to slow, to fast, to continuous.
The vehicle is close to the obstacle when the warning display shows one flashing arc and sounds a continuous tone. The following chart shows the warning alert operation when the system is detecting an obstacle:

<table>
<thead>
<tr>
<th>WARNING ALERTS</th>
<th>Rear Distance (inches/cm)</th>
<th>Greater than 79 inches (200 cm)</th>
<th>79-59 inches (200-150 cm)</th>
<th>59-47 inches (150-120 cm)</th>
<th>47-39 inches (120-100 cm)</th>
<th>39-25 inches (100-65 cm)</th>
<th>25-12 inches (65-30 cm)</th>
<th>Less than 12 inches (30 cm)</th>
</tr>
</thead>
</table>

- Slow Tone
- Fast Tone
- Continuous Tone
NOTE: ParkSense will reduce the volume of the radio, if on, when the system is sounding an audio tone.

Adjustable Chime Volume Settings
The rear chime volume settings are programmable through the Uconnect system. Refer to “Uconnect Settings” in “Multimedia” for further information.

The chime volume settings include low, medium, and high. The factory default volume is medium.

### Enabling And Disabling ParkSense

ParkSense can be enabled and disabled with the ParkSense switch. When the gear selector is moved to REVERSE and the system is disabled, the instrument cluster display will show the vehicle graphic with “Off” over the arcs for as long as the vehicle is in REVERSE.

NOTE: The ParkSense system will automatically disable when the system detects that a trailer with trailer brakes has been connected to the Integrated Trailer Brake Module. The instrument cluster display will show an “Off” message over the arcs if the ParkSense system is off, or a “Trailer” message if the system is on, for as long as the vehicle is in REVERSE.

The ParkSense switch LED will be on when ParkSense is disabled or defective. The ParkSense switch LED will be off when the system is enabled.

If the ParkSense switch is pushed, and the system is disabled or requires service, the ParkSense switch LED will blink momentarily, and then the LED will be on.

### Service The ParkSense Rear Park Assist System

During vehicle start up, when the Rear ParkSense System has detected a faulted condition, the instrument cluster display will show an “Off” message over the arcs if the ParkSense system is off, or a “Trailer” message if the system is on, for as long as the vehicle is in REVERSE.
show the "Rear ParkSense Unavailable Service Required" or the "Rear ParkSense Unavailable Wipe Sensors" message. When the gear selector is moved into REVERSE, a vehicle graphic will show in the instrument cluster display, along with the display overlay “Rear ParkSense Unavailable Wipe Sensors.” If the system needs service, the display overlay will read “Rear ParkSense Unavailable Service Required.” Under this condition, ParkSense will not operate.

If "Rear ParkSense Unavailable Wipe Sensors" appears in the instrument cluster display make sure the outer surface and the underside of the rear fascia/bumper is clean and clear of snow, ice, mud, dirt or other obstruction, and then cycle the ignition. If the message continues to appear, see an authorized dealer.

If "Rear ParkSense Unavailable Service Required" appears in the instrument cluster display, see an authorized dealer.

**Cleaning The ParkSense System**

Clean the ParkSense sensors with water, car wash soap and a soft cloth. Do not use rough or hard cloths. Do not scratch or poke the sensors. Otherwise, you could damage the sensors.

**ParkSense System Usage Precautions**

**NOTE:**
- Ensure that the rear bumper is free of snow, ice, mud, dirt and debris to keep the ParkSense system operating properly.
- Jackhammers, large trucks, and other vibrations could affect the performance of ParkSense.
- When you move the gear selector into REVERSE with ParkSense turned off, the instrument cluster display will show "Off" on the vehicle graphic arcs for as long as the vehicle is in REVERSE.
- ParkSense, when on, will reduce the volume of the radio when it is sounding a tone.
- Clean the ParkSense sensors regularly, taking care not to scratch or damage them. The sensors must not be covered with ice, snow, slush, mud, dirt or debris. Failure to do so can result in the system not working properly. The ParkSense system might not detect an obstacle behind the fascia/bumper, or it could provide a false indication that an obstacle is behind the fascia/bumper.
- Ensure the ParkSense system is off if objects such as bicycle carriers, trailer hitches, etc., are placed within 18 inches (45 cm) of the rear fascia/bumper while driving the vehicle. Failure to do so can result in the system misinterpreting a close obstacle as a sensor problem, causing the "Rear ParkSense Unavailable Service Required" message to appear in the instrument cluster display.
- On vehicles equipped with a tailgate, ParkSense should be disabled when the tailgate is in the lowered or open position and the vehicle is in REVERSE. A lowered tailgate could provide a false indication that an obstacle is behind the vehicle.
The ParkSense Park Assist system provides visual and audible indications of the distance between the rear, and/or front fascia/bumper, and a detected obstacle when backing up or moving forward (e.g. during a parking maneuver). Refer to “ParkSense System Usage Precautions” in this section for limitations of this system and recommendations.

When the ignition is placed in the ON/RUN position, ParkSense can be active only when the gear selector is in REVERSE or DRIVE. If ParkSense is enabled at one of these gear selector positions, the system will remain active until the vehicle speed is increased to approximately 7 mph (11 km/h) or above. A warning will appear in the instrument cluster display when the vehicle is in REVERSE, indicating the vehicle is above ParkSense operating speed. The system will become active again if the vehicle speed is decreased to speeds less than approximately 6 mph (9 km/h).

**ParkSense Sensors**

The four ParkSense sensors, located in the rear fascia/bumper, monitor the area behind the vehicle that is within the sensors’ field of view. The sensors can detect obstacles from approximately 12 inches (30 cm) up to 79 inches (200 cm) from the rear fascia/bumper in the horizontal direction, depending on the location, type and orientation of the obstacle.
NOTE:
If equipped as a dually, the ParkSense system has six rear sensors to assist in detection around the dually flares.

The six ParkSense sensors, located in the front fascia/bumper, monitor the area in front of the vehicle that is within the sensors’ field of view. The sensors can detect obstacles from approximately 12 inches (30 cm) up to 47 inches (120 cm) from the front fascia/bumper in the horizontal direction, depending on the location, type and orientation of the obstacle.

**ParkSense Warning Display**

The ParkSense Warning screen is located within the instrument cluster display. It provides visual warnings to indicate the distance between the rear fascia/bumper and/or front fascia/bumper and the detected obstacle. Refer to “Instrument Cluster Display” in “Getting To Know Your Instrument Panel” for further information.

**ParkSense Display**

The warning display will turn on indicating the system status when the vehicle is in REVERSE or when the vehicle is in DRIVE and an obstacle has been detected. The system will indicate a detected obstacle by showing a single arc in the left and/or right rear regions based on the obstacle’s distance and location relative to the vehicle.
If an obstacle is detected in the left and/or right rear region, the display will show a single arc in
the left and/or right rear region and the system will produce a tone. As the vehicle moves closer
to the obstacle, the display will show the single arc moving closer to the vehicle and the tone
will change from a single 1/2 second tone to slow, to fast, to continuous.
The vehicle is close to the obstacle when the display shows one flashing arc and sounds a
continuous tone. The following chart shows the warning alert operation when the system is
detecting an obstacle:

<table>
<thead>
<tr>
<th>Rear Distance (inches/cm)</th>
<th>Greater than 79 inches (200 cm)</th>
<th>79-59 inches (200-150 cm)</th>
<th>59-47 inches (150-120 cm)</th>
<th>47-39 inches (120-100 cm)</th>
<th>39-25 inches (100-65 cm)</th>
<th>25-12 inches (65-30 cm)</th>
<th>Less than 12 inches (30 cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audible Alert Chime</td>
<td>None</td>
<td>Single 1/2 Second Tone</td>
<td>Slow</td>
<td>Slow</td>
<td>Fast</td>
<td>Fast</td>
<td>Continuous</td>
</tr>
<tr>
<td>Arcs-Left</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>2nd Flashing</td>
<td>1st Flashing</td>
</tr>
<tr>
<td>Arcs-Center</td>
<td>None</td>
<td>6th Solid</td>
<td>5th Solid</td>
<td>4th Solid</td>
<td>3rd Flashing</td>
<td>2nd Flashing</td>
<td>1st Flashing</td>
</tr>
<tr>
<td>Arcs-Right</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>2nd Flashing</td>
<td>1st Flashing</td>
</tr>
<tr>
<td>Radio Volume Reduced</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
NOTE:
ParkSense will reduce the volume of the radio, if on, when the system is sounding an audio tone.

Front Park Assist Audible Alerts
ParkSense will turn off the Front Park Assist audible alert (chime) after approximately three seconds when an obstacle has been detected, the vehicle is stationary, and brake pedal is applied.

Adjustable Chime Volume Settings
The Front and Rear chime volume settings are programmable through the Uconnect system. Refer to “Uconnect Settings” in “Multimedia” for further information.

The chime volume settings include low, medium, and high. The factory default volume is medium.

### WARNING ALERTS FOR FRONT

<table>
<thead>
<tr>
<th>Front Distance (inches/cm)</th>
<th>Greater than 47 inches (120 cm)</th>
<th>47-39 inches (120-100 cm)</th>
<th>39-25 inches (100-65 cm)</th>
<th>25-12 inches (65-30 cm)</th>
<th>Less than 12 inches (30 cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audible Alert Chime</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>Fast</td>
<td>Continuous</td>
</tr>
<tr>
<td>Arcs-Left</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>2nd Flashing</td>
<td>1st Flashing</td>
</tr>
<tr>
<td>Arcs-Center</td>
<td>None</td>
<td>4th Solid</td>
<td>3rd Flashing</td>
<td>2nd Flashing</td>
<td>1st Flashing</td>
</tr>
<tr>
<td>Arcs-Right</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>2nd Flashing</td>
<td>1st Flashing</td>
</tr>
<tr>
<td>Radio Volume Reduced</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

The Front or Rear ParkSense switch LED will be on when Front or Rear ParkSense is disabled or requires service. The Front or Rear ParkSense switch LED will be off when the Front or Rear system is enabled. If the Front or Rear ParkSense switch is pushed, and the system requires service, the Front or Rear ParkSense switch LED will blink momentarily, and then the LED will be on.

Service The ParkSense Front/Rear Park Assist System
During vehicle start up, when the Front/Rear ParkSense System has detected a faulted vehicle graphic will be displayed for as long as the vehicle is in REVERSE.
condition, the instrument cluster display will show the "Front/Rear ParkSense Unavailable Service Required" or the "Front/Rear ParkSense Unavailable Wipe Sensors" message.

When the gear selector is moved into REVERSE, a vehicle graphic will show in the instrument cluster display, along with the display overlay “Wipe Sensors.” If the system needs service, the display overlay will read “Service.” Under this condition, ParkSense will not operate. If "Front/Rear ParkSense Unavailable Wipe Sensors" appears in the instrument cluster display make sure the outer surface and the underside of the rear fascia/bumper is clean and clear of snow, ice, mud, dirt or other obstruction, and then cycle the ignition. If the message continues to appear, see an authorized dealer.

If "Front/Rear ParkSense Unavailable Service Required" appears in the instrument cluster display, see an authorized dealer.

**Cleaning The ParkSense System**

Clean the ParkSense sensors with water, car wash soap and a soft cloth. Do not use rough or hard cloths. Do not scratch or poke the sensors. Otherwise, you could damage the sensors.

**ParkSense System Usage Precautions**

**NOTE:**

- Ensure that the front and rear bumpers are free of snow, ice, mud, dirt and debris to keep the ParkSense system operating properly.

- Jackhammers, large trucks, and other vibrations could affect the performance of ParkSense.

- When you move the gear selector to the REVERSE position and Front or Rear ParkSense is turned off, the instrument cluster display will show "Off" on the vehicle graphic arcs. This vehicle graphic will be displayed for as long as the vehicle is in REVERSE.

- ParkSense, when on, will reduce the volume of the radio when it is sounding a tone.

- Clean the ParkSense sensors regularly, taking care not to scratch or damage them. The sensors must not be covered with ice, snow, slush, mud, dirt or debris. Failure to do so can result in the system not working properly. The ParkSense system might not detect an obstacle behind or in front of the fascia/bumper, or it could provide a false indication that an obstacle is behind or in front of the fascia/bumper.

- Use the ParkSense switch to turn the ParkSense system off if obstacles such as bicycle carriers, trailer hitches, etc. are placed within 18 inches (45 cm) from the rear fascia/bumper. Failure to do so can result in the system misinterpreting a close obstacle as a sensor problem, causing the “Front/Rear ParkSense Unavailable Service Required” message to be appear in the instrument cluster display.

- On vehicles equipped with a tailgate, ParkSense should be disabled when the tailgate is in the lowered or open position. A lowered tailgate could provide a false indication that an obstacle is behind the vehicle.
LaneSense — If Equipped

LaneSense Operation

The LaneSense system is operational at speeds above 37 mph (60 km/h) and below 112 mph (180 km/h). It uses a forward looking camera to detect lane markings and measure vehicle position within the lane boundaries.

When both lane markings are detected and the driver unintentionally drifts out of the lane while no turn signal has been applied OR the driver departs the lane on the opposite side of the applied turn signal (if the left turn signal is applied and the vehicle departs to the right), the LaneSense system provides a haptic warning in the form of torque applied to the steering wheel to prompt the driver to remain within the lane boundaries. The LaneSense system will also provide a visual warning through the instrument cluster display to prompt the driver to remain within the lane boundaries.

The driver may manually override the haptic warning by applying torque into the steering wheel at any time.

When only a single lane marking is detected and the driver unintentionally drifts across that lane marking (no turn signal applied), the LaneSense system provides a visual warning through the instrument cluster display to prompt the driver to remain within the lane.

When only a single lane marking is detected, a haptic (torque) warning will not be provided.

NOTE:

When operating conditions have been met, the LaneSense system will monitor if the driver’s hands are on the steering wheel and provides an audible and visual warning to the driver when the driver’s hands are not detected on the wheel.

WARNING!

- Drivers must be careful when backing up even when using ParkSense. Always check carefully behind your vehicle, look behind you, and be sure to check for pedestrians, animals, other vehicles, obstructions, and blind spots before backing up. You are responsible for safety and must continue to pay attention to your surroundings. Failure to do so can result in serious injury or death.

- Before using ParkSense, it is strongly recommended that the ball mount and hitch ball assembly is disconnected from the vehicle when the vehicle is not used for towing. Failure to do so can result in injury or damage to vehicles or obstacles because the hitch ball will be much closer to the obstacle than the rear fascia when the loudspeaker sounds the continuous tone. Also, the sensors could detect the ball mount and hitch ball assembly, depending on its size and shape, giving a false indication that an obstacle is behind the vehicle.

CAUTION!

- ParkSense is only a parking aid and it is unable to recognize every obstacle, including small obstacles. Parking curbs might be temporarily detected or not detected at all. Obstacles located above or below the sensors will not be detected when they are in close proximity.

- The vehicle must be driven slowly when using ParkSense in order to be able to stop in time when an obstacle is detected. It is recommended that the driver looks over his/her shoulder when using ParkSense.

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- Before using ParkSense, it is strongly recommended that the ball mount and hitch ball assembly is disconnected from the vehicle when the vehicle is not used for towing. Failure to do so can result in injury or damage to vehicles or obstacles because the hitch ball will be much closer to the obstacle than the rear fascia when the loudspeaker sounds the continuous tone. Also, the sensors could detect the ball mount and hitch ball assembly, depending on its size and shape, giving a false indication that an obstacle is behind the vehicle.
steering wheel. The system will cancel if the driver does not return their hands to the wheel.

**Turning LaneSense On Or Off**

The LaneSense button is located on the switch panel below the Uconnect display.

**NOTE:**
If your vehicle is equipped with a 12-inch Uconnect Display screen, the LaneSense button is located above the display.

To turn the LaneSense system on, push the LaneSense button (LED turns off). A “LaneSense On” message is shown in the instrument cluster display.

To turn the LaneSense system off, push the LaneSense button again (LED turns on).

**NOTE:**
The LaneSense system will retain the last system state (on or off) from the last ignition cycle when the ignition is placed in the ON/RUN position.

**LaneSense Warning Message**
The LaneSense system will indicate the current lane drift condition through the instrument cluster display.

When the LaneSense system is on, the lane lines are gray when both of the lane boundaries have not been detected and the LaneSense telltale is solid white.

When the LaneSense system is on, the LaneSense Telltale is solid white when only the left lane marking has been detected and the system is ready to provide visual warnings in the instrument cluster display if an unintentional lane departure occurs on the left side.

- When the LaneSense system senses the lane has been approached and is in a lane departure situation, the visual warning in the instrument cluster display will show the left lane line flashing yellow (on/off). The LaneSense telltale changes from solid white to flashing yellow.
NOTE:
The LaneSense system operates with similar behavior for a right lane departure when only the right lane marking has been detected.

Left Lane Departure — Both Lane Lines Detected

- When the LaneSense system is on and both the lane markings have been detected, the system is "armed" to provide visual warnings in the instrument cluster display and a torque warning in the steering wheel if an unintentional lane departure occurs. The lane lines turn from gray to white and the LaneSense telltale is solid green.

Lanes Sensed (White Lines) With Green Telltale

** When the LaneSense system senses a lane drift situation, the left lane line turns solid yellow. The LaneSense telltale changes from solid green to solid yellow. At this time torque is applied to the steering wheel in the opposite direction of the lane boundary.

For example: If approaching the left side of the lane the steering wheel will turn to the right.

Lane Approached (Solid Yellow Lane Line) With Solid Yellow Telltale

** When the LaneSense system senses the lane has been approached and is in a lane departure situation, the left lane line flashes yellow (on/off). The LaneSense telltale changes from solid yellow to flashing yellow. At this time torque is applied to the steering wheel in the opposite direction of the lane boundary.

For example: If approaching the left side of the lane the steering wheel will turn to the right.
NOTE: The LaneSense system operates with similar behavior for a right lane departure.

Changing LaneSense Status

The LaneSense system has settings to adjust the intensity of the torque warning and the warning zone sensitivity (Early/Medium/Late) that you can configure through the Uconnect system screen. Refer to “Uconnect Settings” in “Multimedia” for further information.

NOTE:

- When enabled the system operates above 37 mph (60 km/h) and below 112 mph (180 km/h).
- Use of the turn signal suppresses the warnings.
- The system will not apply torque to the steering wheel whenever a safety system engages (Anti-Lock Brakes, Traction Control System, Electronic Stability Control, Forward Collision Warning, etc.).

>>> CONDITION: {MARKET='LATIN AMERICA' OR MARKET='BRAZIL'} >>>

PARKVIEW REAR BACK UP CAMERA — IF EQUIPPED <<< CONDITION END <<<

Your vehicle may be equipped with the ParkView Rear Back Up Camera that allows you to see an image of the rear surroundings of your vehicle whenever the gear selector is put into REVERSE or whenever it is initiated through the "Backup Camera" button in the "Controls" menu. Whenever the gear selector is put into REVERSE, the image will be displayed in the rearview mirror display (if equipped) or Uconnect screen (if equipped). If the image is displayed in the Uconnect screen, a caution note to “check entire surroundings” will display across the top of the screen. After five seconds this note will disappear.

Manual Activation Of The Rear View Camera:

1. Press the "Controls" button located on the bottom of the Uconnect display.
2. Press the "Backup Camera" icon to turn the Rear View Camera system on.

When the vehicle is shifted out of REVERSE (with Camera delay turned off), the rear Camera mode is exited and the previous screen appears again.

When the vehicle is shifted out of REVERSE (with Camera delay turned on), the rear Camera image will be displayed for up to 10 seconds after shifting to another gear, unless the vehicle speed exceeds 8 mph (13 km/h), the transmission is shifted into PARK, the ignition is placed in the OFF position, or the touchscreen
button “X” to disable display of the Rear View Camera image is pressed.

Whenever the Rear View Camera image is activated through the "Backup Camera" button in the "Controls" menu, and the vehicle speed is greater than, or equal to, 8 mph (13 km/h), a display timer for the image is initiated. The image will continue to be displayed until the display timer exceeds 10 seconds.

NOTE:
- If the vehicle speed remains below 8 mph (13 km/h), the Rear View Camera image will be displayed continuously until deactivated via the touchscreen button "X", the transmission is shifted into PARK, or the ignition is placed in the OFF position.
- The touchscreen button "X" to disable display of the camera image is made available ONLY when the vehicle is not in REVERSE gear.

Cargo Camera Icons — If Equipped

Backup Camera Touchscreen Button

AUX Camera Touchscreen Button

If equipped with a Cargo Camera, a touchscreen button is made available to indicate the current active Camera image being displayed whenever the Rear View Camera image is displayed.

If equipped with a Cargo Camera, a touchscreen button to switch the display to Cargo Camera image is made available whenever the Rear View Camera image is displayed.

A touchscreen button "X" to disable display of the camera image is made available when the vehicle is not in REVERSE gear.

When enabled, active guidelines are overlaid on the backup camera image to illustrate the width of the vehicle and its projected backup path based on the steering wheel position. The active guidelines will show separate zones that will help indicate the distance to the rear of the vehicle.

NOTE:
For further information about how to access and change the programmable features of the ParkView Rear Backup Camera, refer to “Uconnect Settings” in “Multimedia.”

A dashed center line overlay indicates the center of the vehicle to assist with parking or aligning to a hitch/receiver. The following table shows the approximate distances for each zone:

<table>
<thead>
<tr>
<th>Zones</th>
<th>Distance To The Rear Of The Vehicle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>0 - 1 ft (0 - 30 cm)</td>
</tr>
<tr>
<td>Yellow</td>
<td>1 ft - 6.5 ft (30 cm - 2m)</td>
</tr>
<tr>
<td>Green</td>
<td>6.5 ft or greater (2 m or greater)</td>
</tr>
</tbody>
</table>
Drivers must be careful when backing up even when using the ParkView Rear Back Up Camera. Always check carefully behind your vehicle, and be sure to check for pedestrians, animals, other vehicles, obstructions, or blind spots before backing up. You are responsible for the safety of your surroundings and must continue to pay attention while backing up. Failure to do so can result in serious injury or death.

NOTE:
If snow, ice, mud, or any foreign substance builds up on the camera lens, clean the lens, rinse with water, and dry with a soft cloth. Do not cover the lens.

Zoom View
When the Rear View Camera image is being displayed, and the vehicle speed is below 8 mph (13 km/h) while in any gear selector position, Zoom View is available. By pressing the “magnifying glass” icon in the upper left of the display screen, the image will zoom in to four times the standard view. Pressing the icon a second time will return the view to the standard Backup Camera display.

When Zoom View is selected while the vehicle is in REVERSE, then shifted to DRIVE, the camera delay view will display the standard Backup Camera view. If the vehicle is then returned to REVERSE gear from DRIVE, the Zoom View selection will automatically resume. Shifting to NEUTRAL from any gear will maintain the selected view (Zoom or Standard) as long as the vehicle is below 8 mph (13 km/h).

If the vehicle is in PARK, Zoom View is available until the gear selector is placed in DRIVE or REVERSE.

NOTE:
- If the vehicle is in DRIVE, NEUTRAL, or REVERSE, and speed is greater than or equal to 8 mph (13 km/h), Zoom View is unavailable and the icon will appear gray.
- While in Zoom View, the guidelines will not be visible.

AUX Camera — If Equipped
Your vehicle may be equipped with one or two AUX Cameras, which display rearview and side view images from the trailer on the touchscreen.

Activation
The AUX Camera is activated by first pressing the Backup Camera, Cargo Camera (if equipped), or Surround View Camera (if equipped) button on the touchscreen, followed by the AUX button located in the upper left corner of the rearview display. The AUX camera can also be activated when the vehicle is in REVERSE by pressing the AUX button.

WARNING!
Drivers must be careful when backing up even when using the ParkView Rear Back Up Camera. Always check carefully behind your vehicle, and be sure to check for pedestrians, animals, other vehicles, obstructions, or blind spots before backing up. You are responsible for the safety of your surroundings and must continue to pay attention while backing up. Failure to do so can result in serious injury or death.

CAUTION!
- To avoid vehicle damage, ParkView should only be used as a parking aid. The ParkView camera is unable to view every obstacle or object in your drive path.
- To avoid vehicle damage, the vehicle must be driven slowly when using ParkView to be able to stop in time when an obstacle is seen. It is recommended that the driver look frequently over his/her shoulder when using ParkView.

The ParkView Camera is located in the center of the tailgate handle.
If equipped with two AUX Cameras, you can switch between each camera by then pressing the AUX1 or AUX2 buttons on the Trailer Camera display.

AUX1 Camera Button

AUX2 Camera Button

Deactivation

The AUX Camera is deactivated by pressing the “X” in the upper right corner of the touchscreen. This will return the display back to the previously displayed screen.

NOTE:

- If the AUX button is pressed and no AUX Camera is connected, the touchscreen will display a blue screen along with the message “Camera System Unavailable.” The screen can be exited out by pressing the “X” in the upper right hand corner. This will return the display back to the previously displayed screen.

- Zoom View is not available with the AUX Camera feature.

- The display will always default to the Trailer Camera display (AUX 1).

SURROUND VIEW CAMERA SYSTEM — IF EQUIPPED

Your vehicle may be equipped with the Surround View Camera System that allows you to see an on-screen image of the surroundings and top view of your vehicle whenever the gear selector is put into REVERSE or manually activated via the Uconnect system. The top view of the vehicle will show which doors are open. The image will be displayed on the touchscreen display along with a caution note “Check Entire Surroundings” across the top of the screen. After five seconds, this note will disappear. The Surround View Camera System is comprised of four sequential cameras located in the front grille, rear tailgate and side mirrors.

NOTE:

The Surround View Camera System has programmable settings that may be selected through the Uconnect System. Refer to “Uconnect Settings” in “Multimedia” for further information.

When the vehicle is shifted into REVERSE, the rear camera view and top view is the default view of the system (Automatic Activation).

When the vehicle is shifted out of REVERSE (with camera delay turned on), the camera image will continue to be displayed for up to 10 seconds after shifting out of REVERSE unless the vehicle speed exceeds 8 mph (13 km/h), the vehicle is shifted into PARK or the ignition is placed in the OFF position. There is a touchscreen button “X” to disable the display of the camera image.

When the vehicle is shifted out of REVERSE (with camera delay turned off), the surround view camera mode is exited and the last known screen appears again.

While the “Rear View” camera is displayed and guidelines are enabled, active guidelines are overlaid on the image to illustrate the width of the vehicle, including the side view mirrors and its projected backup path based on the steering wheel position.

Different colored zones indicate the distance to the rear of the vehicle.

The following table shows the approximate distances for each zone:

<table>
<thead>
<tr>
<th>Zone</th>
<th>Distance To The Rear Of The Vehicle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>0 - 1 ft (0 - 30 cm)</td>
</tr>
</tbody>
</table>
Modes Of Operation
Standard Backup Camera view can be manually activated by selecting “Backup Camera” through the Controls menu within the Uconnect screen.

>>> CONDITION: {(Market=Brazil or Market='Latin America')} >>> Refer to “Parkview Rear Back Up Camera — If Equipped” in this section for more information on activation conditions.
<<< CONDITION END <<<

Top View
The Top view will show in the Uconnect System with Rear view and Front view in a split view display. There are integrated ParkSense arcs in the image at the front and rear of the vehicle. The arcs will change color from yellow to red corresponding the distance zones to the oncoming object.

The fifth button of the ParkSense Camera View screen will be changed based on the features present in the vehicle. If not equipped with a Cargo Camera or Trailer Reverse Guidance, the Backup Camera soft button will be displayed. If equipped with a Cargo Camera but no Trailer Reverse Guidance, the Cargo Camera soft button will be displayed, and if equipped with both a Cargo Camera and Trailer Reverse Guidance, the Cargo/Trailer Reverse Guidance soft button will be displayed.

Rear View
This is the Default view of the system in REVERSE and is always paired with the Top view of the vehicle with optional active guidelines for the projected path when enabled.

Rear Cross Path View
Pressing the Rear Cross Path soft key will give the driver a wider angle view of the rear camera system. The Top view will be disabled when this is selected.

Front View
The Front view will show you what is immediately in front of the vehicle and is always paired with the Top view of the vehicle.

| Yellow | 1 ft - 6.5 ft (30 cm - 2 m) |
| Green | 6.5 ft or greater (2 m or greater) |

**NOTE:**
- Front tires will display on the image when the tires are turned.
- Due to wide angle cameras in mirrors, the image will appear distorted.
- Top view will show which doors are open.
- Open front doors will cancel the outside image.
**Front Cross Path View**

Pressing the Front Cross Path soft key will give the driver a wider angle view of the front camera system. The Top view will be disabled when this is selected.

**Rear View Camera**

Pressing the Backup Camera soft key will provide a full screen rear view with Zoom View.

**NOTE:**
If the Backup Camera view was selected through the Surround View screen, exiting out of the Rear View Camera screen will return to the Surround View screen. If the Backup Camera was manually activated through the Controls menu of the Uconnect display, exiting out of the display screen will return to the Controls menu.

**Cargo Camera**

Pressing the Cargo Camera soft key will provide a full screen view of the cargo area.

**NOTE:**
If the Cargo Camera view was selected through the Surround View screen, exiting out of the Cargo Camera screen will return to the Surround View screen. If the Cargo Camera was manually activated through the Controls menu of the Uconnect display, exiting out of the display screen will return to the Controls menu.

**Trailer Reverse Guidance**

Pressing the Trailer Reverse Guidance soft key will provide a full screen view of the cargo area and trailer.

Pressing the Left & Right Tow Mirror Split Screen View button within the Trailer Reverse Guidance screen will display a split screen to allow the driver to see both sides of the trailer at the same time. This view allows the driver to pan left/right to better frame the trailer in the image.

**NOTE:**
Trailer Reverse Guidance can only be selected through the Surround View screen; exiting out of the Trailer Reverse Guidance screen will return to the Surround View screen.

**Zoom View**

When the Rear View Camera image is being displayed, and the vehicle speed is below 8 mph (13 km/h) while in any gear selector position, Zoom View is available. By pressing the “magnifying glass” icon in the upper left of the display screen, the image will zoom in to four times the standard view. Pressing the icon a second time will return the view to the standard Backup Camera display.

When Zoom View is selected while the vehicle is in REVERSE, then shifted to DRIVE, the camera delay view will display the standard Backup Camera view. If the vehicle is then returned to REVERSE gear from DRIVE, the Zoom View selection will automatically resume. Shifting to NEUTRAL from any gear will maintain the selected view (Zoom or Standard) as long as the vehicle is below 8 mph (13 km/h).

Zoom View is available until the gear selector is placed in DRIVE or REVERSE and speeds are at or above 8 mph (13 km/h).

**NOTE:**
- If the vehicle is in DRIVE, NEUTRAL, or REVERSE, and speed is greater than or equal to 8 mph (13 km/h), Zoom View is unavailable and the icon will appear gray.
- While in Zoom View, the guidelines will not be visible.
Deactivation

The system is deactivated in the following conditions if it was activated automatically:

- When the vehicle is shifted out of REVERSE (with camera delay turned on), the camera image will continue to be displayed for up to 10 seconds after shifting out of REVERSE unless the vehicle speed exceeds 8 mph (13 km/h), the vehicle is shifted into PARK or the ignition is placed in the OFF position. There is a touch screen button “X” to disable the display of the camera image.

- When the vehicle is shifted out of REVERSE (with camera delay turned off), the surround view camera mode is exited and the last known screen appears again.

The system is deactivated in the following conditions if it was activated manually from the Uconnect controls menu via the Surround View button, Backup Camera button, Cargo Camera button or Forward Facing Camera button:

- The "X" button on the display is pressed
- Vehicle is shifted into PARK
- Ignition is placed in the OFF position
- Vehicle speed is over 8 mph (13 km/h) for 10 seconds

NOTE:
If the Surround View Camera, Cargo Camera, Backup Camera, or Forward Facing Camera is activated manually, and the vehicle is shifted into REVERSE, deactivation methods for automatic activation are assumed.

The camera delay system is turned off manually through the Uconnect settings menu. Refer to “Uconnect Settings” in “Multimedia” for further information.

NOTE:

- If snow, ice, mud, or any foreign substance builds up on the camera lenses, clean the lenses, rinse with water, and dry with a soft cloth. Do not cover the lenses.
- If a malfunction with the system has occurred, see an authorized dealer.

Cargo Camera With Dynamic Centerline — If Equipped

The Dynamic Centerline feature provides an overlay on the Cargo Camera display screen that aligns to the center of the pickup box to aid in hooking up a fifth wheel camper or gooseneck trailer. The centerline auto aligns to the center of the pickup box, and can also be manually adjusted. The centerline will adjust in response to steering angle inputs, and will not obstruct the gooseneck receiver or an approaching trailer gooseneck in the camera feed.

Activation

The Dynamic Centerline feature can be activated through the Uconnect settings by pressing the Cargo Camera soft button, followed by the “Dynamic Centerline” soft button on the touchscreen.

If the Dynamic Centerline feature is turned on, the overlay will display anytime the Cargo Camera image is displayed.

Adjusting Centerline

Follow the steps below to manually adjust the centerline:
1. Press the “Adjust Centerline” soft button located in the bottom right corner of the Cargo Camera display.

2. Use the arrows on the bottom left corner of the Cargo Camera display to adjust the centerline horizontally or vertically.

3. Once the desired position is achieved, press the “Accept” button to set the centerline to the newly specified position.

Deactivation
The Dynamic Centerline feature will automatically be deactivated whenever the Cargo Camera display is deactivated. It can also be manually deactivated through the Uconnect settings.

Cargo Camera Zoom View
When the Cargo Camera image is being displayed, and the vehicle speed is below 8 mph (13 km/h) while in any gear selector position, Zoom View is available. By pressing the “magnifying glass” icon in the upper left of the display screen, the image will zoom in to four times the standard view. Pressing the icon a second time will return the view to the standard Cargo Camera display.

When Zoom View is selected while the vehicle is in REVERSE, then shifted to DRIVE, the camera delay view will display the standard Cargo Camera view. If the vehicle is then returned to REVERSE gear from DRIVE, the Zoom View selection will automatically resume.

Shifting to NEUTRAL from any gear will maintain the selected view (Zoom or Standard) as long as the vehicle is below 8 mph (13 km/h). Zoom View is available until the gear selector is placed in DRIVE or REVERSE and speeds are at or above 8 mph (13 km/h).

NOTE:
- If the vehicle is in DRIVE, NEUTRAL, or REVERSE, and speed is greater than or equal to 8 mph (13 km/h), Zoom View is unavailable and the icon will appear gray.
- While in Zoom View, the dynamic centerline will not be visible.

Forward Facing Camera With Tire Lines — If Equipped
The Forward Facing Camera displays a front view image of the road ahead, along with tire lines to guide the driver when driving on narrow roads. Tire lines can be activated/deactivated through the Uconnect settings.

Activation
The Forward Facing Camera can be activated by pressing the Forward Camera soft button on the touchscreen.

Once activated, the camera image will remain on as long as the vehicle speed is below 8 mph (13 km/h) and the vehicle is not in Four Wheel Drive Low (4WD Low).

Deactivation
The Forward Facing Camera is deactivated in the following conditions:
- The vehicle is not in 4WD Low and the vehicle speed exceeds 8 mph (13 km/h) for 10 seconds.
- The “X” button on the display is pressed.
- Vehicle is shifted into PARK.
- Ignition is placed in the OFF position.

NOTE:
If the vehicle is in 4WD Low, the Forward Facing Camera image will be displayed until the “X” button is pressed or the ignition is placed in the
OFF position. If the vehicle goes out of 4WD Low, then the regular deactivation conditions listed above are applied.

**Trailer Reverse Guidance — If Equipped**

The Trailer Reverse Guidance feature assists the driver in backing up a trailer by providing adjustable camera views of the trailer and surrounding area. The cameras are mounted on the side mirrors and the images will be displayed side-by-side on the touchscreen. Left and right camera images are swapped and mirrored on the touchscreen to show the equivalent area behind the vehicle as though the driver is using the side mirrors.

**Activation**

The Trailer Reverse Guidance feature can be activated by pressing the Trailer Reverse Guidance button on the Backup/Cargo Camera Display.

**Deactivation**

When the vehicle is shifted out of REVERSE (with camera delay turned on), the camera image will continue to be displayed for up to 10 seconds after shifting out of REVERSE unless the vehicle speed exceeds 8 mph (13 km/h), the vehicle is shifted into PARK or the ignition is placed in the OFF position. There is a touchscreen button “X” to disable the display of the camera image.

If Trailer Reverse Guidance is selected through manually activated Surround View, Backup Camera, or Cargo Camera, the below deactivation conditions are applied:

- The “X” button on the display is pressed
- The vehicle is shifted into PARK
- The ignition is placed in the OFF position
- The vehicle speed is over 8 mph (13 km/h) for 10 seconds

**WARNING!**

Drivers must be careful when backing up even when using the Surround View Camera. Always check carefully behind your vehicle, and be sure to check for pedestrians, animals, other vehicles, obstructions, or blind spots before backing up. You are responsible for the safety of your surroundings and must continue to pay attention while backing up. Failure to do so can result in serious injury or death.

**CAUTION!**

- To avoid vehicle damage, Surround View should only be used as a parking aid. The Surround View camera is unable to view every obstacle or object in your drive path.
- To avoid vehicle damage, the vehicle must be driven slowly when using Surround View to be able to stop in time when an obstacle is seen. It is recommended that the driver look frequently over his/her shoulder when using Surround View.

**NOTE:**

If the vehicle is not equipped with a Pickup Box:

- The bottom wedge of the Top view will be displayed in black.
- The Rear Cross Path soft button will be grayed out.
- The guidelines will not be overlaid on Top view/Rear view and Full Screen of Backup Camera view.
- Black video will be displayed for the right side of the Top and Rear view, and full screen of the Backup Camera view when the Rear View Camera is not connected.
AUX Camera — If Equipped
Your vehicle may be equipped with one or two AUX Cameras, which display rearview and side view images from the trailer on the touchscreen.

Activation
The AUX Camera is activated by first pressing the Backup Camera, Cargo Camera (if equipped), or Surround View Camera (if equipped) button on the touchscreen, followed by the AUX button located in the upper left corner of the rearview display. The AUX camera can also be activated when the vehicle is in REVERSE by pressing the AUX button.

If equipped with two AUX Cameras, you can switch between each camera by then pressing the AUX1 or AUX2 buttons on the Trailer Camera display.

Deactivation
The AUX Camera is deactivated by pressing the “X” in the upper right corner of the touchscreen. This will return the display back to the previously displayed screen.

NOTE:
- If the AUX button is pressed and no AUX Camera is connected, the touchscreen will display a blue screen along with the message “Camera System Unavailable.” The screen can be exited out by pressing the “X” in the upper right hand corner. This will return the display back to the previously displayed screen.
- Zoom View is not available with the AUX Camera feature.
- The display will always default to the Trailer Camera display (AUX 1).

ENGINE RUNAWAY
Diesel engine runaway is a rare condition affecting diesel engines, where the engine consumes its own lubrication oil and runs at higher and higher RPM until it overspeeds to a point where it destroys itself due to either mechanical failure or engine seizure through lack of lubrication.

WARNING!
In case of engine runaway due to flammable fumes from fuel spills or turbocharger oil leaks being sucked into the engine, do the following to help avoid personal injury and/or vehicle damage:
- Turn the ignition switch to the OFF position.
- Using a CO2 or dry chemical type fire extinguisher, direct the spray from the fire extinguisher into the grille on the passenger side so that the spray enters the engine air intake.

The inlet for the engine air intake is located behind the passenger side headlamp and receives air through the grille.

REFUELING THE VEHICLE — GASOLINE ENGINE
The fuel filler cap is located behind the fuel filler door, on the left side of the vehicle. Open the
fuel door and remove the fuel cap by turning it counter-clockwise.

**NOTE:**
When removing the fuel filler cap, lay the cap tether in the hook, located on the fuel filler door.

---

**WARNING!**

- Never have any smoking materials lit in or near the vehicle when the gas cap is removed or the tank is being filled.
- Never add fuel to the vehicle when the engine is running.

(Continued)

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**WARNING! (Continued)**

- A fire may result if gasoline is pumped into a portable container that is inside of a vehicle. You could be burned. Always place gas containers on the ground while filling.

---

**CAUTION!**

- Damage to the fuel system or emissions control system could result from using an improper fuel tank filler tube cap.
- A poorly fitting fuel filler cap could let impurities into the fuel system.
- A poorly fitting fuel filler cap may cause the “Malfunction Indicator Light (MIL)” to turn on.
- To avoid fuel spillage and overfilling, do not “top off” the fuel tank after filling. When the fuel nozzle “clicks” or shuts off, the fuel tank is full.

---

**NOTE:**

- When the fuel nozzle “clicks” or shuts off, the fuel tank is full.
- Tighten the gas cap until you hear a “clicking” sound. This is an indication that the gas cap is tightened properly. The MIL in the instrument cluster may turn on if the gas cap is not secured properly. Make sure that the gas cap is tightened each time the vehicle is refueled.

---

**WARNING!**

- Always place container on the ground before filling.
- Keep the pump nozzle in contact with the container when you are filling it.
- Use only approved containers for flammable liquid.
- Do not leave container unattended while filling.
- A static electric charge could cause a spark and fire hazard.
Loose Fuel Filler Cap Message

If the vehicle diagnostic system determines that the fuel filler cap is loose, improperly installed, or damaged, a loose gASCAP indicator will display in the instrument cluster telltale display area. Refer to “Instrument Cluster Display” in “Getting To Know Your Instrument Panel” for further information. Tighten the fuel filler cap properly and push the RIGHT button to turn off the message. If the problem continues, the message will appear the next time the vehicle is started.

REFUELING THE VEHICLE — DIESEL ENGINE

1. Open the fuel filler door.

   Fill Location

   NOTE:
   There is no fuel filler cap. A flapper door inside the filler pipe seals the system.

2. Insert the fuel nozzle fully into the filler pipe – the nozzle opens and holds the flapper door while refueling.

3. Fill the vehicle with fuel – when the fuel nozzle “clicks” or shuts off the fuel tank is full.

4. Remove the fuel nozzle and close the fuel door.

   Emergency Fuel Can Refueling

   NOTE:
   In the event that you run the vehicle out of fuel, once refueled, place the ignition in the ON position for 30 seconds, then turn the ignition OFF and wait 30 seconds. Repeat this procedure three times, prior to cranking the engine.

   Most fuel cans will not open the flapper door. A funnel is provided to open the flapper door to allow emergency refueling with a fuel can.

1. Retrieve fuel funnel from the jack kit located under the front passenger seat.

2. Insert funnel into same filler pipe opening as the fuel nozzle.

   NOTE:
   Ensure funnel is inserted fully to hold flapper door open.

3. Pour fuel into funnel opening.

4. Remove funnel from filler pipe, clean off prior to putting back in the jack kit.

WARNING!

- Never have any smoking materials lit in or near the vehicle when the fuel door is open or the tank is being filled.

- Never add fuel when the engine is running. This is in violation of most state and federal fire regulations and may cause the “Malfunction Indicator Light” to turn on.

- A fire may result if fuel is pumped into a portable container that is inside of a vehicle. You could be burned. Always place fuel containers on the ground while filling.
VEHICLE LOADING

Gross Vehicle Weight Rating (GVWR)
The GVWR is the total permissible weight of your vehicle including driver, passengers, vehicle, options and cargo. The label also specifies maximum capacities of front and rear axle systems (GAWR). Total load must be limited so GVWR and front and rear GAWR are not exceeded.

Payload
The payload of a vehicle is defined as the allowable load weight a truck can carry, including the weight of the driver, all passengers, options and cargo.

Gross Axle Weight Rating (GAWR)
The GAWR is the maximum permissible load on the front and rear axles. The load must be distributed in the cargo area so that the GAWR of each axle is not exceeded. Each axle GAWR is determined by the components in the system with the lowest load carrying capacity (axle, springs, tires or wheels). Heavier axles or suspension components sometimes specified by purchasers for increased durability does not necessarily increase the vehicle's GVWR.

Tire Size
The tire size on the Vehicle Certification Label represents the actual tire size on your vehicle. Replacement tires must be equal to the load capacity of this tire size.

Rim Size
This is the rim size that is appropriate for the tire size listed.

Inflation Pressure
This is the cold tire inflation pressure for your vehicle for all loading conditions up to full GAWR.

Curb Weight
The curb weight of a vehicle is defined as the total weight of the vehicle with all fluids, including vehicle fuel, at full capacity conditions, and with no occupants or cargo loaded into the vehicle. The front and rear curb weight values are determined by weighing your vehicle on a commercial scale before any occupants or cargo are added.

Loading
The actual total weight and the weight of the front and rear of your vehicle at the ground can best be determined by weighing it when it is loaded and ready for operation. The entire vehicle should first be weighed on a commercial scale to ensure that the GVWR has not been exceeded. The weight on the front and rear of the vehicle should then be determined separately to be sure that the load is properly distributed over the front and rear axle. Weighing the vehicle may show that the GAWR of either the front or rear axles has been exceeded but the total load is within the specified GVWR. If so, weight must be shifted from front to rear or rear to front as appropriate until the specified weight limitations are met. Store the heavier items down low and be sure that the weight is distributed equally. Stow all loose items securely before driving.

CAUTION!
To avoid fuel spillage and overfilling, do not “top off” the fuel tank after filling.
Improper weight distributions can have an adverse effect on the way your vehicle steers and handles and the way the brakes operate.

**CAUTION!**

Do not load your vehicle any heavier than the GVWR or the maximum front and rear GAWR. If you do, parts on your vehicle can break, or it can change the way your vehicle handles. This could cause you to lose control. Also overloading can shorten the life of your vehicle.

### TRAILER TOWING

In this section you will find safety tips and information on limits to the type of towing you can reasonably do with your vehicle. Before towing a trailer, carefully review this information to tow your load as efficiently and safely as possible.

To maintain the New Vehicle Limited Warranty coverage, follow the requirements and recommendations in this manual concerning vehicles used for trailer towing.

### Common Towing Definitions

The following trailer towing related definitions will assist you in understanding the following information:

**Gross Vehicle Weight Rating (GVWR)**

The GVWR is the total allowable weight of your vehicle. This includes driver, passengers, cargo and tongue weight. The total load must be limited so that you do not exceed the GVWR. Refer to “Vehicle Loading” in “Starting And Operating” for further information.

**Gross Axle Weight Rating (GAWR)**

The GAWR is the maximum capacity of the front and rear axles. Distribute the load over the front and rear axles evenly. Make sure that you do not exceed either front or rear GAWR. Refer to...

**WARNING!**

If the gross trailer weight is 5,000 lbs (2,267 kg) or more, it is recommended to use a weight-distributing hitch to ensure stable handling of your vehicle. If you use a standard weight-carrying hitch, you could lose control of your vehicle and cause a collision.

**Gross Combination Weight Rating (GCWR)**

The GCWR is the total allowable weight of your vehicle and trailer when weighed in combination.

**Gross Axle Weight Rating (GAWR)**

The GAWR is the maximum capacity of the front and rear axles. Distribute the load over the front and rear axles evenly. Make sure that you do not exceed either front or rear GAWR. Refer to...
Tongue Weight (TW)
The TW is the downward force exerted on the hitch ball by the trailer. You must consider this as part of the load on your vehicle.

Trailer Frontal Area
The frontal area is the maximum height multiplied by the maximum width of the front of a trailer.

Trailer Sway Control (TSC)
The TSC can be a mechanical telescoping link that can be installed between the hitch receiver and the trailer tongue that typically provides adjustable friction associated with the telescoping motion to dampen any unwanted trailer swaying motions while traveling. If equipped, the electronic TSC recognizes a swaying trailer and automatically applies individual wheel brakes and/or reduces engine power to attempt to eliminate the trailer sway.

Weight-Carrying Hitch
A weight-carrying hitch supports the trailer tongue weight, just as if it were luggage located at a hitch ball or some other connecting point of the vehicle. These kinds of hitches are the most popular on the market today and they are commonly used to tow small and medium sized trailers.

Weight-Distributing Hitch
A weight-distributing system works by applying leverage through spring (load) bars. They are typically used for heavier loads to distribute trailer tongue weight to the tow vehicle's front axle and the trailer axle(s). When used in accordance with the manufacturer's directions, it provides for a more level ride, offering more consistent steering and brake control, thereby enhancing towing safety. The addition of a friction/hydraulic sway control also dampens sway caused by traffic and crosswinds and contributes positively to tow vehicle and trailer stability. Trailer sway control and a weight distributing (load equalizing) hitch are recommended for heavier Tongue Weights (TW) and may be required depending on vehicle and trailer configuration/loading to comply with GAWR requirements.

**WARNING!**
- An improperly adjusted weight distributing hitch system may reduce handling, stability and braking performance and could result in a collision.
- Weight distributing systems may not be compatible with surge brake couplers. Consult with your hitch and trailer manufacturer or a reputable Recreational Vehicle dealer for additional information.
Recommended Distribution Hitch Adjustment Towing With 2500 Air Suspension

1. Position the truck to be ready to connect to the trailer (do not connect the trailer).

**NOTE:**
Normal Ride Height (NRH) or Alternate Trailer Height (ATH) can be used. The vehicle must remain in the engine running position while attaching a trailer for proper leveling of the air suspension system. It may not be possible to enter Alternate Trailer Height (ATH) while lightly loaded.

2. Measure the height of the top of the front wheel opening on the fender to ground, this is height H1.

3. Attach the trailer to the vehicle without the weight distribution bars connected.

4. Measure the height of the top of the front wheel opening on the fender to ground, this is height H2.

5. Install and adjust the tension in the weight distributing bars per the manufacturers' recommendations so that the height of the front fender is approximately \((H2-H1)/2+H1\) (about 1/2 the difference between H2 and H1 above normal ride height \([H1]\)).

6. Perform a visual inspection of the trailer and weight distributing hitch to confirm manufacturers’ recommendations have been met.
For all towing conditions, we recommend towing with tow haul mode engaged.

**Towing With All Other 2500 (Non-Air Suspension)**

1. Position the truck to be ready to connect to the trailer (do not connect the trailer).
2. Measure the height of the top of the front wheel opening on the fender to ground, this is height H1.
3. Attach the trailer to the vehicle without the weight distribution bars connected.
4. Measure the height of the top of the front wheel opening on the fender to ground, this is height H2.
5. Install and adjust the tension in the weight distributing bars per the manufacturers’ recommendations so that the height of the front fender is approximately \((H2-H1)/2 + H1\) (about 1/2 the difference between H2 and H1 above normal ride height \([H1]\)).
6. Perform a visual inspection of the trailer and weight distributing hitch to confirm manufacturers’ recommendations have been met.

<table>
<thead>
<tr>
<th>Measurement Example</th>
<th>Example 2500 Height (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>1,030</td>
</tr>
<tr>
<td>H2</td>
<td>1,058</td>
</tr>
<tr>
<td>H2-H1</td>
<td>28</td>
</tr>
<tr>
<td>((H2-H1)/2)</td>
<td>14</td>
</tr>
<tr>
<td>((H2-H1)/2 + H1)</td>
<td>1,044</td>
</tr>
</tbody>
</table>

**Fifth-Wheel Hitch**

The fifth-wheel hitch is a special high platform with a coupling that mounts over the rear axle of the tow vehicle in the truck bed. It connects a vehicle and fifth-wheel trailer with a coupling king pin.

Your truck may be equipped with a fifth-wheel hitch option. Refer to the separately provided fifth-wheel hitch safety, care, assembly, and operating instructions.

**Gooseneck Hitch**

The gooseneck hitch employs a pivoted coupling arm which attaches to a ball mounted in the bed of a pickup truck. The coupling arm connects to the hitch mounted over the rear axle in the truck bed.

**Trailer Hitch Type and Maximum Trailer Weight**

The following chart provides the maximum trailer weight a given factory equipped trailer hitch type can tow and should be used to assist
you in selecting the correct trailer hitch for your intended towing condition.

### Trailer Hitch Type and Maximum Trailer Weight

<table>
<thead>
<tr>
<th>Hitch Type</th>
<th>Max. Trailer Weight / Max. Tongue Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class V - 2500 Models</td>
<td>20,000 lbs (9,071 kg) / 2000 lbs (907 kg)</td>
</tr>
<tr>
<td>Fifth Wheel - 2500 Models</td>
<td>25,000 lbs (11,339 kg) / 2500 lbs (1,133 kg)</td>
</tr>
<tr>
<td>Gooseneck - 2500 Models</td>
<td>20,000 lbs (9,071 kg) / 2000 lbs (907 kg)</td>
</tr>
</tbody>
</table>

Refer to the “Trailer Towing Weights (Maximum Trailer Weight Ratings)” for the Maximum Gross Trailer Weight (GTW) towable for your given drivetrain.

All trailer hitches should be professionally installed on your vehicle.

**NOTE:**
All towing devices must be removed from the hitch on the vehicle when a trailer is not attached.

### Trailer Towing Weights (Maximum Trailer Weight Ratings)

**NOTE:**
For trailer towing information (maximum trailer weight ratings) refer to the following website addresses:

- ramtrucks.com/en/towing_guide/
- ramtruck.ca (Canada)
- rambodybuilder.com

### Trailer And Tongue Weight

Consider the following items when computing the weight on the rear axle of the vehicle:

- The tongue weight of the trailer.
- The weight of any other type of cargo or equipment put in or on your vehicle.
- The weight of the driver and all passengers.

**NOTE:**
Remember that everything put into or on the trailer adds to the load on your vehicle. Also, additional factory-installed options or dealer-installed options must be considered as part of the total load on your vehicle. Refer to the “Tire And Loading Information” placard for...
the maximum combined weight of occupants and cargo for your vehicle.

**Towing Requirements**

To promote proper break-in of your new vehicle drivetrain components, the following guidelines are recommended.

- Do not tow a trailer at all during the first 500 miles (805 km) the new vehicle is driven. The engine, axle or other parts could be damaged.
- Then, during the first 500 miles (805 km) that a trailer is towed, do not drive over 50 mph (80 km/h) and do not make starts at full throttle. This helps the engine and other parts of the vehicle wear in at the heavier loads.

>>> CONDITION: {(Market=Brazil or Market='Latin America')} >>>

Perform the maintenance listed in the “Scheduled Servicing”. Refer to “Scheduled Servicing” in “Servicing And Maintenance” for the proper maintenance intervals. When towing a trailer, never exceed the GAWR or GCWR ratings.

<<< CONDITION END <<<

**WARNING!**

- Make certain that the load is secured in the trailer and will not shift during travel. When trailering cargo that is not fully secured, dynamic load shifts can occur that may be difficult for the driver to control. You could lose control of your vehicle and have a collision.
- When hauling cargo or towing a trailer, do not overload your vehicle or trailer. Overloading can cause a loss of control, poor performance or damage to brakes, axle, engine, transmission, steering, suspension, chassis structure or tires.
- Safety chains must always be used between your vehicle and trailer. Always connect the chains to the hook retainers of the vehicle hitch. Cross the chains under the trailer tongue and allow enough slack for turning corners.

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**WARNING! (Continued)**

- Vehicles with trailers should not be parked on a grade. When parking, apply the parking brake on the tow vehicle. Put the tow vehicle transmission in PARK. For four-wheel drive vehicles, make sure the transfer case is not in NEUTRAL. Always, block or "chock" the trailer wheels.
- GCWR must not be exceeded.
- Total weight must be distributed between the tow vehicle and the trailer such that the following four ratings are not exceeded:
  - GVWR
  - GTW
  - GAWR
  - Tongue weight rating for the trailer hitch utilized.

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(Continued)
Towing Requirements — Tires

- Do not attempt to tow a trailer while using a compact spare tire.
- Do not drive more than 50 mph (80 km/h) when towing while using a full size spare tire.
- Proper tire inflation pressures are essential to the safe and satisfactory operation of your vehicle. Refer to “Tires” in “Servicing And Maintenance” for proper tire inflation procedures.
- Check the trailer tires for proper tire inflation pressures before trailer usage.
- Check for signs of tire wear or visible tire damage before towing a trailer. Refer to “Tires” in “Servicing And Maintenance” for the proper inspection procedure.
- When replacing tires, refer to “Tires” in “Servicing And Maintenance” for the proper tire replacement procedures. Replacing tires with a higher load carrying capacity will not increase the vehicle's GVWR and GAWR limits.

Towing Requirements — Trailer Brakes

- Do not interconnect the hydraulic brake system or vacuum system of your vehicle with that of the trailer. This could cause inadequate braking and possible personal injury.
- An electronically actuated trailer brake controller is required when towing a trailer with electronically actuated brakes. When towing a trailer equipped with a hydraulic surge actuated brake system, an electronic brake controller is not required.
- Trailer brakes are recommended for trailers over 1,000 lbs (453 kg) and required for trailers in excess of 2,000 lbs (907 kg).

**WARNING!**

- Do not connect trailer brakes to your vehicle's hydraulic brake lines. It can overload your brake system and cause it to fail. You might not have brakes when you need them and could have an accident.
- Towing any trailer will increase your stopping distance. When towing, you should allow for additional space between your vehicle and the vehicle in front of you. Failure to do so could result in an accident.

**CAUTION!**

If the trailer weighs more than 1,000 lbs (453 kg) loaded, it should have its own brakes and they should be of adequate capacity. Failure to do this could lead to accelerated brake lining wear, higher brake pedal effort, and longer stopping distances.
Integrated Trailer Brake Module — If Equipped

Your vehicle may have an Integrated Trailer Brake Module (ITBM) for Electric and Electric Over Hydraulic (EOH) trailer brakes.

NOTE:
This module has been designed and verified with electric trailer brakes and new electric over hydraulic systems. Some previous EOH systems may not be compatible with ITBM.

The user interface consists of the following:

1. Manual Brake Control Lever
   Slide the manual brake control lever to the left to activate power to the trailer's electric brakes independent of the tow vehicle's brakes. If the manual brake control lever is activated while the brake is also applied, the greater of the two inputs determines the power sent to the trailer brakes.
   The trailer and the vehicle's stop lamps will come on when braking normally with the vehicle brake pedal. Only the trailer stop lamps will come on when the manual brake control lever is applied.

2. Trailer Brake Status Indicator Light
   This light indicates the trailer electrical connection status.
   If no electrical connection is detected after the ignition is turned on, pushing the GAIN adjustment button or sliding the manual brake control lever will display the GAIN setting for 10 seconds and the “Trailer Brake Status Indicator Light” will not be displayed.
   If a fault is detected in the trailer wiring or the Integrated Trailer Brake Module (ITBM), the “Trailer Brake Status Indicator Light” will flash.

3. GAIN Adjustment Buttons (+/-)
   Pushing these buttons will adjust the brake control power output to the trailer brakes in 0.5 increments. The GAIN setting can be increased to a maximum of 10 or decreased to a minimum of 0 (no trailer braking).

4. GAIN
   The GAIN setting is used to set the trailer brake control for the specific towing condition and should be changed as towing conditions change. Changes to towing conditions include trailer load, vehicle load, road conditions and weather.

5. Adjusting GAIN
   NOTE:
   This should only be performed in a traffic free environment at speeds of approximately 20–25 mph (30–40 km/h).
   1. Make sure the trailer brakes are in good working condition, functioning normally and properly adjusted. See your trailer dealer if necessary.
   2. Hook up the trailer and make the electrical connections according to the trailer manufacturer's instructions.
3. When a trailer with electric/EOH brakes is plugged in, the trailer connected message should appear in the instrument cluster display (if the connection is not recognized by the ITBM, braking functions will not be available), the GAIN setting will illuminate and the correct type of trailer must be selected from the instrument cluster display options.

4. Push the UP or DOWN button on the steering wheel until “TRAILER TOW” appears on the screen.

5. Push the RIGHT arrow on the steering wheel to enter “TRAILER TOW”.

6. Push the UP or DOWN buttons until the Trailer Brake Type appears on the screen.

7. Push the RIGHT arrow and then push the UP or DOWN buttons until the proper Trailer Brake Type appears on the screen.

8. In a traffic-free environment, tow the trailer on a dry, level surface at a speed of 20–25 mph (30–40 km/h) and squeeze the manual brake control lever completely.

9. If the trailer wheels lockup (indicated by squealing tires), reduce the GAIN setting; if the trailer wheels turn freely, increase the GAIN setting.

Repeat steps 8 and 9 until the GAIN setting is at a point just below trailer wheel lockup. If towing a heavier trailer, trailer wheel lockup may not be attainable even with the maximum GAIN setting of 10.

* The suggested selection depends and may change depending on the customer preferences for braking performance. Condition of the trailer brakes, driving and road state may also affect the selection.

**Display Messages**
The trailer brake control interacts with the instrument cluster display. Display messages, along with a single chime, will be displayed when a malfunction is determined in the trailer connection, trailer brake control, or on the trailer. Refer to “Instrument Cluster Display” in “Getting To Know Your Instrument Panel” for further information.

**WARNING!**
Connecting a trailer that is not compatible with the ITBM system may result in reduced or complete loss of trailer braking. There may be an increase in stopping distance or trailer instability which could result in personal injury.
NOTE:

- An aftermarket controller may be available for use with trailers with air or electric-over-hydraulic trailer brake systems. To determine the type of brakes on your trailer and the availability of controllers, check with your trailer manufacturer or dealer.

- Removal of the ITBM will cause errors and it may cause damage to the electrical system and electronic modules of the vehicle. See your authorized dealer if an aftermarket module is to be installed.

NOTE:

- Disconnect trailer wiring connector from the vehicle before launching a boat (or any other device plugged into vehicle’s electrical connect) into water.

- Be sure to reconnect once clear from water area.

Towing Requirements — Trailer Lights And Wiring

Whenever you pull a trailer, regardless of the trailer size, stoplights and turn signals on the trailer are required for motoring safety.

>>> CONDITION: {(Market=Brazil or Market='Latin America')} >>>

The Trailer Tow Package may include a wiring harness. Use a factory approved trailer harness and connector.

<<< CONDITION END <<<

NOTE:

Do not cut or splice wiring into the vehicle’s wiring harness.

The electrical connections are all complete to the vehicle but you must mate the harness to a trailer connector. Refer to the following illustrations.

NOTE:

- 1 — Battery
- 2 — Backup Lamps
- 3 — Right Stop/Turn
- 4 — Electric Brakes
- 5 — Ground
- 6 — Left Stop/Turn
- 7 — Running Lamps

>>> CONDITION: {(Market=Brazil or Market='Latin America')} >>>

CAUTION!

Connecting a trailer that is not compatible with the ITBM system may result in reduced or complete loss of trailer braking. There may be a increase in stopping distance or trailer instability which could result in damage to your vehicle, trailer, or other property.

NOTE:

- Remove of the ITBM will cause errors and it may cause damage to the electrical system and electronic modules of the vehicle. See your authorized dealer if an aftermarket module is to be installed.

NOTE:

- Disconnect trailer wiring connector from the vehicle before launching a boat (or any other device plugged into vehicle’s electrical connect) into water.

- Be sure to reconnect once clear from water area.
### 13-Pin Connector — If Equipped

<table>
<thead>
<tr>
<th>Pin Number</th>
<th>Function</th>
<th>Wire Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Left Turn Signal</td>
<td>Black/White</td>
</tr>
<tr>
<td>2</td>
<td>Rear Fog Light</td>
<td>White</td>
</tr>
<tr>
<td>3</td>
<td>Ground/Common Return for Contacts (Pins) 1 and 2 and 4 to 8</td>
<td>Brown</td>
</tr>
<tr>
<td>4</td>
<td>Right Turn Signal</td>
<td>Black/Green</td>
</tr>
<tr>
<td>5</td>
<td>Right Rear Position, Side Marker Lights, and Rear Registration Plate Illumination Device.</td>
<td>Green/Red</td>
</tr>
<tr>
<td>6</td>
<td>Stop Lights</td>
<td>Black/Red</td>
</tr>
<tr>
<td>7</td>
<td>Left Rear Position, Side Marker Lights, and Rear Registration Plate Illumination Device.</td>
<td>Green/Black</td>
</tr>
<tr>
<td>8</td>
<td>Reverse Lights</td>
<td>Blue/Red</td>
</tr>
<tr>
<td>9</td>
<td>Permanent Power Supply (+12V)</td>
<td>Red</td>
</tr>
</tbody>
</table>
Towing Tips
Before setting out on a trip, practice turning, stopping, and backing up the trailer in an area located away from heavy traffic.

Automatic Transmission
The DRIVE range can be selected when towing. The transmission controls include a drive strategy to avoid frequent shifting when towing. However, if frequent shifting does occur while in DRIVE, select TOW/HAUL mode or select a lower gear range (using the Electronic Range Select (ERS) shift control).

NOTE:
Using TOW/HAUL mode or selecting a lower gear range (using the ERS shift control) while operating the vehicle under heavy loading conditions will improve performance and extend transmission life by reducing excessive shifting and heat build up. This action will also provide better engine braking.

Tow/Haul Mode
To reduce potential for automatic transmission overheating, activate TOW/HAUL mode when driving in hilly areas, or select a lower gear range.
range (using the Electronic Range Select (ERS) shift control) on more severe grades.

**Speed Control — If Equipped**
- Do not use on hilly terrain or with heavy loads.
- When using the Speed Control, if you experience speed drops greater than 10 mph (16 km/h), disengage until you can get back to cruising speed.
- Use Speed Control in flat terrain and with light loads to maximize fuel efficiency.

**Cooling System**
To reduce potential for engine and transmission overheating, take the following actions:

**City Driving**
- In city traffic — while stopped, place the transmission in NEUTRAL, but do not increase engine idle speed.

**Highway Driving**
- Reduce speed.
- Temporarily turn off air conditioning.

**Air Suspension System**
To aid in attaching/detaching the trailer from the vehicle, the air suspension system can be used. Refer to “Air Suspension System” in “Starting And Operating” for further information.

**NOTE:**
The vehicle must remain in the engine running position while attaching a trailer for proper leveling of the air suspension system.

**SNOWPLOW**

**2500 Models**
Snowplow Prep Packages are available as a factory installed option. These packages include components necessary to equip your vehicle with a snowplow.

**NOTE:**
Before installation of a snowplow it is highly recommended that the owner/installer obtain and follow the recommendations contained within the current Body Builders Guide. See an authorized dealer, installer or snowplow manufacturer for this information. There are unique electrical systems that must be connected to properly ensure operator safety and prevent overloading vehicle systems.

**WARNING!**
Attaching a snowplow to this vehicle could adversely affect performance of the airbag system in a collision. Do not expect that the airbag will perform as described earlier in this manual.

**CAUTION!**
The “Lamp Out” indicator could illuminate if exterior lamps are not properly installed.

**Before Plowing**
- Check the hydraulic system for leaks and proper fluid level.
- Check the mounting bolts and nuts for proper tightness.
- Check the runners and cutting edge for excessive wear. The cutting edge should be...
¼ to ½ in (6 cm to 1.2 cm) above ground in snow plowing position.

- Check that snowplow lighting is connected and functioning properly.

**Snowplow Prep Package Model Availability**

For Information about snowplow applications visit www.ramtrucks.com or refer to the current Body Builders Guide.

1. The maximum number of occupants in the truck should not exceed two.
2. The total GVWR or the Front GAWR or the Rear GAWR should never be exceeded.
3. Cargo capacity will be reduced by the addition of options or passengers, etc.

The loaded vehicle weight, including the snowplow system, all aftermarket accessories, driver, passengers, options, and cargo, must not exceed either the Gross Vehicle Weight (GVWR) or Gross Axle Weight (GAWR) ratings. These weights are specified on the Safety Compliance Certification Label on the driver's side door opening.

**NOTE:**

Detach the snowplow when transporting passengers.

Vehicle front end wheel alignment was set to specifications at the factory without consideration for the weight of the plow. Front end toe-in should be checked and reset if necessary at the beginning and end of the snowplow season. This will help prevent uneven tire wear.

The blade should be lowered whenever the vehicle is parked.

 Maintain and operate your vehicle and snowplow equipment following the recommendations provided by the specific snowplow manufacturer.

**Over The Road Operation With Snowplow Attached**

The blade restricts air flow to the radiator and causes the engine to operate at higher than normal temperatures. Therefore, when transporting the plow, angle the blade completely and position it as low as road or surface conditions permit. Do not exceed 40 mph (64 km/h). The operator should always maintain a safe stopping distance and allow adequate passing clearance.

**Operating Tips**

Under ideal snow plowing conditions, 20 mph (32 km/h) should be maximum operating speed. The operator should be familiar with the area and surface to be cleaned. Reduce speed and use extreme caution when plowing unfamiliar areas or under poor visibility.

**General Maintenance**

Snowplows should be maintained in accordance with the plow manufacturer's instructions.

Keep all snowplow electrical connections and battery terminals clean and free of corrosion. When plowing snow, to avoid transmission and drivetrain damage, the following precautions should be observed.

- Operate with transfer case in 4L when plowing small or congested areas where speeds are not likely to exceed 15 mph (24 km/h). At higher speeds operate in 4HI.
- Vehicles with automatic transmissions should use 4L range when plowing deep or
Do not shift the transmission unless the engine has returned to idle and wheels have stopped. Make a practice of stepping on the brake pedal while shifting the transmission.

### RECREATIONAL TOWING (BEHIND MOTORHOME, ETC.)

**Towing This Vehicle Behind Another Vehicle**

<table>
<thead>
<tr>
<th>Towing Condition</th>
<th>Wheels OFF The Ground</th>
<th>Two-Wheel Drive Models</th>
<th>Four-Wheel Drive Models</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flat Tow</td>
<td>NONE</td>
<td>NOT ALLOWED</td>
<td>See Instructions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>● Automatic transmission in PARK</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>● Transfer case in NEUTRAL (N)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>● Tow in forward direction</td>
</tr>
<tr>
<td>Dolly Tow</td>
<td>Front</td>
<td>NOT ALLOWED</td>
<td>NOT ALLOWED</td>
</tr>
<tr>
<td></td>
<td>Rear</td>
<td>OK</td>
<td>NOT ALLOWED</td>
</tr>
<tr>
<td>On Trailer</td>
<td>ALL</td>
<td>OK</td>
<td>OK</td>
</tr>
</tbody>
</table>

**Towing Condition Wheels OFF The Ground**

- Flat Tow: NONE
- Dolly Tow: Front, Rear
- On Trailer: ALL

**Two-Wheel Drive Models**

- Flat Tow: NOT ALLOWED
- Dolly Tow: NOT ALLOWED
- On Trailer: OK

**Four-Wheel Drive Models**

- Flat Tow: See Instructions
- Dolly Tow: NOT ALLOWED
- On Trailer: OK

**NOTE:**

- When towing your vehicle, always follow applicable state and provincial laws. Contact state and provincial Highway Safety offices for additional details.
- Vehicles equipped with air suspension must be placed in Transport mode before tying them down (from the body) on a trailer or flatbed truck. Refer to “Air Suspension – If Equipped” for more information. If the vehicle cannot be placed in Transport mode (for example, engine will not run), tie-downs must be fastened to the axles (not to the body). Failure to follow these instructions may cause fault codes to be set and/or cause loss of proper tie-down tension.
Recreational Towing — Two-Wheel Drive Models

DO NOT flat tow this vehicle. Damage to the drivetrain will result. Recreational towing (for two-wheel drive models) is allowed ONLY if the rear wheels are OFF the ground. This may be accomplished using a tow dolly or vehicle trailer. If using a tow dolly, follow this procedure:

**NOTE:**
If vehicle is equipped with air suspension, ensure the vehicle is set to Normal Ride Height.

1. Properly secure the dolly to the tow vehicle, following the dolly manufacturer’s instructions.
2. Drive the rear wheels onto the tow dolly.
3. Firmly apply the parking brake. Place automatic transmission in PARK.
4. Properly secure the rear wheels to the dolly, following the dolly manufacturer’s instructions.
5. Turn the ignition OFF and remove the key fob.

6. Install a suitable clamping device, designed for towing, to secure the front wheels in the straight position.

**CAUTION!**
- Towing with the rear wheels on the ground will cause severe transmission damage. Damage from improper towing is not covered under the New Vehicle Limited Warranty.
- Do not disconnect the driveshaft because fluid may leak from the transmission, causing damage to internal parts.

Recreational Towing — Four-Wheel Drive Models

**NOTE:**
Both the manual shift and electronic shift transfer cases must be shifted into NEUTRAL (N) for recreational towing. Automatic transmissions must be shifted into PARK for recreational towing. Refer to the following for the proper transfer case NEUTRAL (N) shifting procedure for your vehicle.

**CAUTION!**
- DO NOT dolly tow any 4WD vehicle. Towing with only one set of wheels on the ground (front or rear) will cause severe transmission and/or transfer case damage. Tow with all four wheels either ON the ground, or OFF the ground (using a vehicle trailer).
- Tow only in the forward direction. Towing this vehicle backwards can cause severe damage to the transfer case.
- Before recreational towing, the transfer case must be in NEUTRAL. To be certain the transfer case is fully in NEUTRAL, perform the procedure outlined under “Shifting Into NEUTRAL”. Internal transmission damage will result, if the transfer case is not in NEUTRAL during towing.
- The transmission must be placed in PARK for recreational towing.

(Continued)
Shifting Into NEUTRAL (N)
Use the following procedure to prepare your vehicle for recreational towing.

**WARNING!**
You or others could be injured or killed if you leave the vehicle unattended with the transfer case in the NEUTRAL (N) position without first fully engaging the parking brake. The transfer case NEUTRAL (N) position disengages both the front and rear driveshafts from the powertrain, and will allow the vehicle to roll, even if the automatic transmission is in PARK. The parking brake should always be applied when the driver is not in the vehicle.

**CAUTION!**
It is necessary to follow these steps to be certain that the transfer case is fully in NEUTRAL (N) before recreational towing to prevent damage to internal parts.

1. Bring the vehicle to a complete stop on level ground, with the engine running. Firmly apply the parking brake.
2. Shift the transmission to NEUTRAL.

**NOTE:**
If vehicle is equipped with air suspension, ensure the vehicle is set to Normal Ride Height.

3. Press and hold the brake pedal.
4. Shift the transfer case into NEUTRAL:
   - With manual shift transfer case, shift the transfer case lever into NEUTRAL (N)
   - With electronic shift transfer case, push and hold the transfer case NEUTRAL (N) button. Some models have a small, recessed “N” button (at the center of the transfer case switches) that must be pushed using a ballpoint pen or similar object. Other models have a rectangular NEUTRAL switch, below the rotary transfer case control knob. The NEUTRAL (N) indicator light will blink while the shift is in progress. The light will stop blinking (stay on solid) when the shift to NEUTRAL (N) is complete. After the shift is completed and the NEUTRAL (N) light stays on, release the NEUTRAL (N) button.
5. Release the parking brake.
6. Shift the transmission into REVERSE.
7. Release the brake pedal for five seconds and ensure that there is no vehicle movement.

8. Repeat steps 6 and 7 with automatic transmission in DRIVE.

9. Shift the transmission to NEUTRAL. Firmly apply the parking brake. Turn OFF the engine. For vehicles with Keyless Enter-N-Go, push and hold the ENGINE START/STOP button until the engine shuts off.

10. Shift the transmission into PARK. On 8-speed transmissions the shifter will automatically select PARK when the engine is turned off.

11. Turn the ignition to the OFF mode, then cycle the ignition to the RUN mode and back to the OFF mode. Remove the key fob from the ignition.

12. Attach the vehicle to the tow vehicle using a suitable tow bar.

13. Release the parking brake.

**NOTE:**

With electronic shift transfer case:

- Steps 2 through 3 are requirements that must be met before pushing the NEUTRAL (N) button, and must continue to be met until the shift has been completed. If any of these requirements are not met before pushing the NEUTRAL (N) button or are no longer met during the shift, the NEUTRAL (N) indicator light will flash continuously until all requirements are met or until the NEUTRAL (N) button is released.

- The ignition must be in the ON/RUN mode for a shift to take place and for the position indicator lights to be operable. If the ignition is not in the ON/RUN mode, the shift will not take place and no position indicator lights will be on or flashing.

- A flashing NEUTRAL (N) position indicator light indicates that shift requirements have not been met.

- If the vehicle is equipped with air suspension, the engine should be started and left running for a minimum of 60 seconds (with all the doors closed) at least once every 24 hours. This process allows the air suspension to adjust the vehicle’s ride height to compensate for temperature effects.

### Shifting Out Of NEUTRAL (N)

Use the following procedure to prepare your vehicle for normal usage:

1. Bring the vehicle to a complete stop, leaving it connected to the tow vehicle.

2. Firmly apply the parking brake.

3. Press and hold the brake pedal.

4. Start the engine. Shift the transmission into NEUTRAL.

- With manual shift transfer case, shift the transfer case lever to the desired position.

- With electronic shift transfer case with rotary selector switch, push and hold the transfer case NEUTRAL (N) button until the NEUTRAL (N) indicator light turns off. After the NEUTRAL (N) indicator light turns off, release the NEUTRAL (N) button. After the NEUTRAL (N) button has been released, the transfer case will shift.
to the position indicated by the selector switch.

- With electronic shift transfer case with push-button selector switch, push and hold the switch for the desired transfer case position, until the NEUTRAL (N) indicator light turns off and the desired position indicator light turns on.

**NOTE:**
When shifting out of transfer case NEUTRAL (N), turning the engine OFF is not required, but may be helpful to avoid gear clash. With the 8-speed automatic transmission, the engine must remain running, since turning the engine OFF will shift the transmission to PARK (and the transmission must be in NEUTRAL for the transfer case to shift out of NEUTRAL).

5. Turn the engine OFF. Shift automatic transmission into PARK. On 8-speed transmissions the shifter will automatically select PARK when the engine is turned off.

6. Release the brake pedal.

7. Disconnect vehicle from the tow vehicle.

8. Start the engine.

9. Press and hold the brake pedal.

10. Release the parking brake.

11. Shift the transmission into gear, release the brake pedal, and check that the vehicle operates normally.

**NOTE:**
With electronic shift transfer case:

- Steps 3 and 4 are requirements that must be met before pushing the button to shift out of NEUTRAL (N), and must continue to be met until the shift has been completed. If any of these requirements are not met before pushing the button or are no longer met during the shift, the NEUTRAL (N) indicator light will flash continuously until all requirements are met or until the button is released.

- The ignition must be in the ON/RUN mode for a shift to take place and for the position indicator lights to be operable. If the ignition is not in the ON/RUN mode, the shift will not take place and no position indicator lights will be on or flashing.

- A flashing NEUTRAL (N) position indicator light indicates that shift requirements have not been met.

**DRIVING TIPS**

**Driving On Slippery Surfaces**

**Acceleration**

Rapid acceleration on snow covered, wet, or other slippery surfaces may cause the driving wheels to pull erratically to the right or left. This phenomenon occurs when there is a difference in the surface traction under the rear (driving) wheels.

**WARNING!**
Rapid acceleration on slippery surfaces is dangerous. Unequal traction can cause sudden pulling of the rear wheels. You could lose control of the vehicle and possibly have a collision. Accelerate slowly and carefully whenever there is likely to be poor traction (ice, snow, wet, mud, loose sand, etc.).

**Driving Through Water**

Driving through water more than a few inches/centimeters deep will require extra caution to
ensure safety and prevent damage to your vehicle.

**Flowing/Rising Water**

**WARNING!**

Do not drive on or across a road or path where water is flowing and/or rising (as in storm run-off). Flowing water can wear away the road or path's surface and cause your vehicle to sink into deeper water. Furthermore, flowing and/or rising water can carry your vehicle away swiftly. Failure to follow this warning may result in injuries that are serious or fatal to you, your passengers, and others around you.

**CAUTION!**

- Always check the depth of the standing water before driving through it. Never drive through standing water that is deeper than the bottom of the tire rims mounted on the vehicle.
- Determine the condition of the road or the path that is under water and if there are any obstacles in the way before driving through the standing water.
- Do not exceed 5 mph (8 km/h) when driving through standing water. This will minimize wave effects.

**WARNING! (Continued)**

- Driving through standing water limits your vehicle's braking capabilities, which increases stopping distances. Therefore, after driving through standing water, drive slowly and lightly press on the brake pedal several times to dry the brakes.
- Failure to follow these warnings may result in injuries that are serious or fatal to you, your passengers, and others around you.

**CAUTION! (Continued)**

- Driving through standing water may cause damage to your vehicle's drivetrain components. Always inspect your vehicle's fluids (i.e., engine oil, transmission, axle, etc.) for signs of contamination (i.e., fluid that is milky or foamy in appearance) after driving through standing water. Do not continue to operate the vehicle if any fluid appears contaminated, as this may result in further damage. Such damage is not covered by the New Vehicle Limited Warranty.
- Getting water inside your vehicle's engine can cause it to lock up and stall out, and cause serious internal damage to the engine. Such damage is not covered by the New Vehicle Limited Warranty.

**Off-Road Driving Tips**

Care should be taken when attempting to climb steep hills or driving diagonally across a hill or slope. If natural obstacles force you to travel diagonally up or down a hill, choose a mild angle and keep as little side tilt as possible. Keep the
vehicle moving and make turns slowly and cautiously.
If you must back down a hill, back straight down using REVERSE gear. Never back down in NEUTRAL or diagonally across the hill.
When driving over sand, mud, and other soft terrain, shift to low gear and drive steadily. Apply the accelerator slowly to avoid spinning the wheels.
Do not reduce the tire pressures for this type of driving.

After Driving Off-Road
Off-road operation puts more stress on your vehicle than does most on-road driving. After going off-road, it is always a good idea to check for damage. That way you can get any problems taken care of right away and have your vehicle ready when you need it.

- Completely inspect the underbody of your vehicle. Check tires, body structure, steering, suspension, and exhaust system for damage.
- Inspect the radiator for mud and debris and clean as required.
- Check threaded fasteners for looseness, particularly on the chassis, drivetrain components, steering, and suspension. Retighten them, if required, and torque to the values specified in the Service Manual.
- Check for accumulations of plants or brush. These things could be a fire hazard. They might hide damage to fuel lines, brake hoses, axle pinion seals, and propeller shafts.
- After extended operation in mud, sand, water, or similar dirty conditions, have the radiator, fan, brake rotors, wheels, brake linings, and axle yokes inspected and cleaned as soon as possible.

**WARNING!**
Abrasive material in any part of the brakes may cause excessive wear or unpredictable braking. You might not have full braking power when you need it to prevent a collision. If you have been operating your vehicle in dirty conditions, get your brakes checked and cleaned as necessary.

- If you experience unusual vibration after driving in mud, slush or similar conditions, check the wheels for impacted material. Impacted material can cause a wheel imbalance and freeing the wheels of it will correct the situation.
HAZARD WARNING FLASHERS

The Hazard Warning Flashers switch is located on the upper switch bank just below the radio.

NOTE:
If your vehicle is equipped with a 12-inch Ucon-nect display, the Hazard Warning Flashers switch is located above the display.

Push the switch to turn on the Hazard Warning Flashers. When the switch is activated, all directional turn signals will flash on and off to warn oncoming traffic of an emergency. Push the switch a second time to turn off the Hazard Warning Flashers. This is an emergency warning system and it should not be used when the vehicle is in motion. Use it when your vehicle is disabled and it is creating a safety hazard for other motorists. When you must leave the vehicle to seek assistance, the Hazard Warning Flashers will continue to operate even though the ignition is placed in the OFF position.

NOTE:
With extended use the Hazard Warning Flashers may wear down your battery.

BULB REPLACEMENT

Replacement Bulbs

All of the inside bulbs are brass or glass-wedge base. Aluminum base bulbs are not approved.

<table>
<thead>
<tr>
<th>Interior Bulbs</th>
<th>Bulb Name</th>
<th>Bulb Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overhead Console Lamps</td>
<td>TS 212–9</td>
<td></td>
</tr>
<tr>
<td>Dome Lamp</td>
<td>7679</td>
<td></td>
</tr>
<tr>
<td>For lighted switches, see an authorized dealer for replacement instructions.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exterior Bulbs</th>
<th>Bulb Name</th>
<th>Bulb Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Beam (Halogen Reflector Headlamp)</td>
<td>H11LL</td>
<td></td>
</tr>
<tr>
<td>High Beam (Halogen Reflector Headlamp)</td>
<td>9005LL</td>
<td></td>
</tr>
<tr>
<td>Bulb Name</td>
<td>Bulb Number</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>------------------------------</td>
<td></td>
</tr>
<tr>
<td>Low &amp; High Beam (LED Reflector Headlamp)</td>
<td>LED (Serviced at an authorized dealer)</td>
<td></td>
</tr>
<tr>
<td>Low &amp; High Beam (LED Projector Headlamp)</td>
<td>LED (Serviced at an authorized dealer)</td>
<td></td>
</tr>
<tr>
<td>Turn Signal / Front Position (Halogen Reflector Headlamp)</td>
<td>7444NA</td>
<td></td>
</tr>
<tr>
<td>Turn Signal / Front Position (LED Headlamps)</td>
<td>LED (Serviced at an authorized dealer)</td>
<td></td>
</tr>
<tr>
<td>Front Side Marker (Halogen Reflector Headlamp)</td>
<td>W5W</td>
<td></td>
</tr>
<tr>
<td>Front Side Marker (LED Headlamps)</td>
<td>LED (Serviced at an authorized dealer)</td>
<td></td>
</tr>
<tr>
<td>Front Fog Lamps (Halogen Reflector Headlamp)</td>
<td>H11LL</td>
<td></td>
</tr>
<tr>
<td>Front Fog Lamps (LED Headlamps)</td>
<td>LED (Serviced at an authorized dealer)</td>
<td></td>
</tr>
<tr>
<td>Side Indicators (Front And Side View Mirror)</td>
<td>LED (Serviced at an authorized dealer)</td>
<td></td>
</tr>
<tr>
<td>Base Rear Tail/Turn and Stop Lamp</td>
<td>3157K</td>
<td></td>
</tr>
<tr>
<td>Premium Rear Tail/Turn and Stop Lamp</td>
<td>LED (Serviced at an authorized dealer)</td>
<td></td>
</tr>
<tr>
<td>Premium Backup Lamp</td>
<td>7440/W21W</td>
<td></td>
</tr>
<tr>
<td>Center High Mounted Stop Lamp (CHMSL)</td>
<td>921</td>
<td></td>
</tr>
<tr>
<td>Cab Roof Marker Lamps</td>
<td>194NA</td>
<td></td>
</tr>
<tr>
<td>Rear Lamp Bar ID Marker Lamp</td>
<td>194</td>
<td></td>
</tr>
<tr>
<td>Backup Lamp</td>
<td>921</td>
<td></td>
</tr>
<tr>
<td>Rear License Plate Lamp</td>
<td>194</td>
<td></td>
</tr>
</tbody>
</table>
Replacing Exterior Bulbs

Base Quad: Low Beam Headlamp, High Beam Headlamp, Front Park And Turn — If Equipped

Low Beam

1. Open the hood.

2. Disconnect and isolate the negative battery cable.

3. Reach into the front wheel house ahead of the front wheel, remove the fastener, and lift the cover over the access hole in the front of the wheel house splash shield. Access to the rear of the lamp can be gained through this access hole.

4. Reach through the access hole of the wheel house splash shield and disengage the bulb access cover by rotating counterclockwise.

5. Disconnect the internal lamp wiring harness connector from the low beam bulb.

**CAUTION!**

- Do not contaminate the bulb glass by touching it with your fingers or by allowing it to contact other oily surfaces. Shortened bulb life will result.

- Always use the correct bulb size and type for replacement. An incorrect bulb size or type may overheat and cause damage to the lamp, the bulb socket, or the lamp wiring.

6. Rotate the bulb counterclockwise quarter turn to unlock the bulb from the lamp.

7. Pull the bulb straight out from the housing.

8.

9. Reverse the procedure for installation of new bulb and covers.

High Beam

1. Open the hood.

2. Disconnect and isolate the negative battery cable.
3. Look under the hood and behind the headlamp to find the high beam bulb access cover.
4. Reach behind the headlamp and disengage the access cover by rotating counter-clockwise.
5. Disconnect the internal lamp wiring harness connector from the high beam bulb.

**CAUTION!**
- Do not contaminate the bulb glass by touching it with your fingers or by allowing it to contact other oily surfaces. Shortened bulb life will result.
- Always use the correct bulb size and type for replacement. An incorrect bulb size or type may overheat and cause damage to the lamp, the bulb socket, or the lamp wiring.

6. Rotate the bulb counterclockwise quarter turn to unlock the bulb from the lamp.
7. Pull the bulb straight out from the housing.
8. Reverse the procedure for installation of new bulb and covers.

**Front Park And Turn**
1. Open the hood.
2. Disconnect and isolate the negative battery cable.
3. Look under the hood and behind the headlamp to find the park and turn socket.
4. Reach behind the headlamp and unlock the park and turn socket from the lamp by rotating counterclockwise quarter turn.
5. Pull the bulb straight out from the housing.
6. Separate the bulb from the socket without twisting.
7. Reverse the procedure for installation of new bulb and covers.

**Side Marker Lamp**
1. Open the hood.
2. Disconnect and isolate the negative battery cable.
3. Reach into the front wheel house ahead of the front wheel, remove the fastener, and lift the cover over the access hole in the front of the wheel house splash shield. Access to the rear of the lamp can be gained through this access hole.

**Splash Shield Access Cover**
1 — Access Cover
2 — Fastener
4. Reach through the access hole of the wheel house splash shield and disengage the side marker socket by rotating counterclockwise quarter turn.

Fog Lamps — If Equipped
1. Reach under and behind the front bumper to access the back of the front fog lamp housing.
2. Disconnect the fog lamp wiring harness connector from the fog lamp bulb.
3. Rotate the bulb counterclockwise quarter turn to unlock the bulb from the housing.
4. Pull the bulb straight out from the housing.

5. Pull the socket and bulb straight out from the housing.
6. Separate the bulb from the socket without twisting.
7. Reverse the procedure for installation of new bulb and covers.

Rear Tail/Stop, Turn Signal And Backup Lamps
1. Remove the two screws and push pins that pass through the bed sheet metal.

2. Pull the outboard side of the lamp rearward far enough to unsnap the two receptacles on the outboard side of the lamp housing from the two plastic snap post retainers in the outer box side panel.

CAUTION!
Do not contaminate the bulb glass by touching it with your fingers or by allowing it to contact other oily surfaces. Shortened bulb life will result.

1 — Tail Lamp
2 — Fasteners
3. Disconnect the wiring harness connectors from the bulb socket.

4. Rotate the bulb socket counterclockwise a quarter turn to unlock it from the housing.

5. Pull the bulb straight out of the socket.

**CAUTION!**

Do not contaminate the bulb glass by touching it with your fingers or by allowing it to contact other oily surfaces. Shortened bulb life will result.

6. Reverse the procedure to install the bulb and housing.

**Center High Mounted Stop Lamp (CHMSL) With Cargo Lamp**

1. Remove the two screws holding the housing/lens to the body as shown.

2. Separate the connector holding the housing and wiring harness to the body.

3. Turn the desired bulb socket quarter turn and remove the socket and bulb from housing.

4. Pull the desired bulb straight from the socket.
IN CASE OF EMERGENCY

<table>
<thead>
<tr>
<th>CAUTION!</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not contaminate the bulb glass by touching it with your fingers or by allowing it to contact other oily surfaces. Shortened bulb life will result.</td>
</tr>
</tbody>
</table>

- Outside Bulbs: Cargo Lamps
- Inside Bulb: Center High Mounted Stop Lamp

5. Reverse the procedure for installation of bulbs and housing.

Cab Top Clearance Lamps — If Equipped

1. Remove the two screws from the top of the lamp.

2. Rotate the bulb socket quarter turn and pull it from the lamp assembly.

3. Pull the bulb straight from its socket and replace.

---

FUSES

<table>
<thead>
<tr>
<th>WARNING!</th>
</tr>
</thead>
<tbody>
<tr>
<td>• When replacing a blown fuse, always use an appropriate replacement fuse with the same amp rating as the original fuse. Never replace a fuse with another fuse of higher amp rating. Never replace a blown fuse with metal wires or any other material. Do not place a fuse inside a circuit breaker cavity or vice versa. Failure to use proper fuses may result in serious personal injury, fire and/or property damage.</td>
</tr>
</tbody>
</table>

• Before replacing a fuse, make sure that the ignition is off and that all the other services are switched off and/or disengaged.

• If the replaced fuse blows again, contact an authorized dealer.

• If a general protection fuse for safety systems (air bag system, braking system), power unit systems (engine system, transmission system) or steering system blows, contact an authorized dealer.
**Power Distribution Center**

The Power Distribution Center is located in the engine compartment near the battery. This center contains cartridge fuses, micro fuses, relays, and circuit breakers. A description of each fuse and component may be stamped on the inside cover, otherwise the cavity number of each fuse is stamped on the inside cover that corresponds to the following chart.

<table>
<thead>
<tr>
<th>Cavity</th>
<th>Cartridge Fuse</th>
<th>Micro Fuse</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F01</td>
<td>80 Amp Black</td>
<td>–</td>
<td>Rad Fan Control Module – If Equipped (DS 1500 Only)</td>
</tr>
<tr>
<td>F02</td>
<td>60 Amp Yellow</td>
<td>–</td>
<td>ABS Pump Motor (HD Only)</td>
</tr>
<tr>
<td>F03</td>
<td>60 Amp Yellow</td>
<td>–</td>
<td>Rad Fan – If Equipped</td>
</tr>
<tr>
<td>F04</td>
<td>50 Amp Red</td>
<td>–</td>
<td>400W Inverter – If Equipped (HD Only)</td>
</tr>
<tr>
<td>F05</td>
<td>40 Amp Green, 50 Amp Red (Special Services Vehicle (SSV))</td>
<td>–</td>
<td>Compressor For Air Suspension – If Equipped</td>
</tr>
<tr>
<td>F06</td>
<td>40 Amp Green</td>
<td>–</td>
<td>ABS Pump Motor (DS 1500 Only) Steering Torque Overlay Module (STOM) (HD Only)</td>
</tr>
<tr>
<td>F07</td>
<td>40 Amp Green</td>
<td>–</td>
<td>Starter Solenoid</td>
</tr>
<tr>
<td>Cavity</td>
<td>Cartridge Fuse</td>
<td>Micro Fuse</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>--------------------------------------------</td>
<td>------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>F08</td>
<td>20 Amp Blue (DS 1500 LD/Cummins Diesel)</td>
<td>–</td>
<td>NOX Sensor – If Equipped</td>
</tr>
<tr>
<td></td>
<td>40 Amp Green</td>
<td>–</td>
<td>Aux Relay Output- SSV Only</td>
</tr>
<tr>
<td>F09</td>
<td>40 Amp Green (SSV &amp; Cummins Diesel)</td>
<td>–</td>
<td>Aux Relay Output / Diesel Fuel Heater – If Equipped</td>
</tr>
<tr>
<td>F09</td>
<td>30 Amp Pink</td>
<td>–</td>
<td>Brake Vacuum Pump – If Equipped (HD Only)</td>
</tr>
<tr>
<td>F10</td>
<td>40 Amp Green</td>
<td>–</td>
<td>Body Controller / Exterior Lighting #2</td>
</tr>
<tr>
<td>F11</td>
<td>30 Amp Pink</td>
<td>–</td>
<td>PWR - Trailer Tow Electric Brake Batt Feed – If Equipped (DS 1500 Only)</td>
</tr>
<tr>
<td>F11</td>
<td>40 Amp Green</td>
<td>–</td>
<td>Brake System Module (ECU and Valves) (HD Only)</td>
</tr>
<tr>
<td>F12</td>
<td>40 Amp Green</td>
<td>–</td>
<td>Body Controller #3</td>
</tr>
<tr>
<td>F13</td>
<td>40 Amp Green</td>
<td>–</td>
<td>Blower Motor</td>
</tr>
<tr>
<td>F14</td>
<td>40 Amp Green</td>
<td>–</td>
<td>Body Controller #4 / Exterior Lighting</td>
</tr>
<tr>
<td>F15</td>
<td>30 Amp Pink</td>
<td>–</td>
<td>Power Side Steps – If Equipped (HD Only)</td>
</tr>
<tr>
<td></td>
<td>40 Amp Green</td>
<td>–</td>
<td>Extra Fuse - SSV Only</td>
</tr>
<tr>
<td>F16</td>
<td>30 Amp Pink</td>
<td>–</td>
<td>Smart-Bar Module – If Equipped (HD Only)</td>
</tr>
<tr>
<td>F17</td>
<td>30 Amp Pink</td>
<td>–</td>
<td>Winch Control Module – If Equipped (HD Only)</td>
</tr>
<tr>
<td>F19</td>
<td>20 Amp Blue (DS 1500 LD Diesel)</td>
<td>–</td>
<td>SCR – If Equipped</td>
</tr>
<tr>
<td></td>
<td>30 Amp Pink (Cummins Diesel)</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>F20</td>
<td>30 Amp Pink</td>
<td>–</td>
<td>Passenger Door Module</td>
</tr>
<tr>
<td>Cavity</td>
<td>Cartridge Fuse</td>
<td>Micro Fuse</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
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<td>------------</td>
<td>-------------</td>
</tr>
<tr>
<td>F21</td>
<td>30 Amp Pink</td>
<td>–</td>
<td>Drive Train Control Module</td>
</tr>
<tr>
<td>F22</td>
<td>20 Amp Blue</td>
<td>–</td>
<td>Engine Control Module GPEC / Heavy Duty / Other – If Equipped</td>
</tr>
<tr>
<td>F22</td>
<td>25 Amp White (Cummins Diesel)</td>
<td>–</td>
<td>PCM – If Equipped</td>
</tr>
<tr>
<td>F23</td>
<td>30 Amp Pink</td>
<td>–</td>
<td>CBC Feed # 1</td>
</tr>
<tr>
<td>F24</td>
<td>30 Amp Pink</td>
<td>–</td>
<td>Driver Door Module</td>
</tr>
<tr>
<td>F25</td>
<td>30 Amp Pink</td>
<td>–</td>
<td>Front Wiper</td>
</tr>
<tr>
<td>F26</td>
<td>30 Amp Pink</td>
<td>–</td>
<td>Anti-lock Brakes / Stability Control Module / Valves – If Equipped (DS 1500 Only)</td>
</tr>
<tr>
<td>F28</td>
<td>20 Amp Blue</td>
<td>–</td>
<td>Trailer Tow Backup Lights – If Equipped</td>
</tr>
<tr>
<td>F29</td>
<td>20 Amp Blue</td>
<td>–</td>
<td>Trailer Tow Parking Lights – If Equipped</td>
</tr>
<tr>
<td>F30</td>
<td>30 Amp Pink</td>
<td>–</td>
<td>Trailer Tow Receptacle / Trailer Tow (Separate E-Brake)/ Trailer Tow (BUX)</td>
</tr>
<tr>
<td>F31</td>
<td>30 Amp Pink</td>
<td>–</td>
<td>Diesel Heater Control – If Equipped (DS 1500 LD Diesel)</td>
</tr>
<tr>
<td>F31</td>
<td>20 Amp Blue</td>
<td>–</td>
<td>Aux App SSV Only – If Equipped</td>
</tr>
<tr>
<td>F32</td>
<td>–</td>
<td>–</td>
<td>Aux Feed, Special Services Vehicle-If Equipped (DS 1500 Only)</td>
</tr>
<tr>
<td>F33</td>
<td>20 Amp Blue</td>
<td>–</td>
<td>Trans Control Module – If Equipped (HD Only) Aux Feed, SSV Only (DS 1500 Only)</td>
</tr>
<tr>
<td>Cavity</td>
<td>Cartridge Fuse</td>
<td>Micro Fuse</td>
<td>Description</td>
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</tr>
<tr>
<td>F34</td>
<td>30 Amp Pink</td>
<td>–</td>
<td>Vehicle System Interface Module #2 – If Equipped (HD Only) SSV (DS 1500 Only)</td>
</tr>
<tr>
<td>F35</td>
<td>30 Amp Pink</td>
<td>–</td>
<td>Sunroof – If Equipped</td>
</tr>
<tr>
<td>F36</td>
<td>30 Amp Pink</td>
<td>–</td>
<td>Electric Back Light – If Equipped</td>
</tr>
<tr>
<td>F37</td>
<td>30 Amp Pink</td>
<td>–</td>
<td>Fuel Heater #2, Aux Relay 2 – If Equipped (HD Only) SSV (DS 1500 Only)</td>
</tr>
<tr>
<td>F38</td>
<td>30 Amp Pink</td>
<td>–</td>
<td>Integrated Trailer Brake Module – If Equipped (HD Only) Power Inverter 115V AC – If Equipped (DS 1500 Only)</td>
</tr>
<tr>
<td>F39</td>
<td>20 Amp Blue</td>
<td>–</td>
<td>Power Outlet – SSV Only</td>
</tr>
<tr>
<td>F40</td>
<td>–</td>
<td>10 Amp Red</td>
<td>Ventilated Seats – If Equipped (HD Only)</td>
</tr>
<tr>
<td>F41</td>
<td>–</td>
<td>10 Amp Red</td>
<td>Active Grille Shutter / Active Air Dam – If Equipped</td>
</tr>
<tr>
<td>F42</td>
<td>–</td>
<td>20 Amp Yellow</td>
<td>Horn</td>
</tr>
<tr>
<td>F43</td>
<td>–</td>
<td>15 Amp Blue</td>
<td>Heated Steering Wheel – If Equipped (HD Only)</td>
</tr>
<tr>
<td>F44</td>
<td>–</td>
<td>10 Amp Red</td>
<td>Diagnostic Port</td>
</tr>
<tr>
<td>F46</td>
<td>–</td>
<td>10 Amp Red</td>
<td>Upfitters Relay Coil – If Equipped (HD Only) Spare (DS 1500 Only)</td>
</tr>
<tr>
<td>F49</td>
<td>–</td>
<td>10 Amp Red</td>
<td>Instrument Panel Cluster / HVAC (DS 1500 Only) Instrument Cluster / MOD CSG (HD Only)</td>
</tr>
<tr>
<td>F50</td>
<td>–</td>
<td>20 Amp Yellow</td>
<td>Air Suspension Control Module – If Equipped</td>
</tr>
<tr>
<td>Cavity</td>
<td>Cartridge Fuse</td>
<td>Micro Fuse</td>
<td>Description</td>
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</tr>
<tr>
<td>F51</td>
<td></td>
<td>10 Amp Red</td>
<td>Ignition Node Module / Keyless Ignition Node Module, Radio Frequency Hub Module / Electric Steering Column Lock - If Equipped</td>
</tr>
<tr>
<td>F52</td>
<td></td>
<td>5 Amp Tan</td>
<td>Battery Sensor</td>
</tr>
<tr>
<td>F53</td>
<td></td>
<td>20 Amp Yellow</td>
<td>Trailer Tow – Left Turn/Stop Lights – If Equipped</td>
</tr>
<tr>
<td>F54</td>
<td></td>
<td>20 Amp Yellow</td>
<td>Non Memory Adjustable Pedals – If Equipped</td>
</tr>
<tr>
<td>F56</td>
<td></td>
<td>15 Amp Blue</td>
<td>Additional Diesel Content – If Equipped (DS 1500 Only)</td>
</tr>
<tr>
<td>F56</td>
<td></td>
<td>10 Amp Red</td>
<td>Fuel Vapor Blocker Valve – If Equipped (HD Only)</td>
</tr>
<tr>
<td>F57</td>
<td></td>
<td>20 Amp Yellow</td>
<td>TCM/PCM / Solenoid Trans Pressure SW (RFE Trans Only) – If Equipped (HD Only)</td>
</tr>
<tr>
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<td></td>
<td></td>
<td>Transmission (DS 1500 Only)</td>
</tr>
<tr>
<td>F58</td>
<td></td>
<td>10 Amp Red</td>
<td>Bed Lighting (LED) – If Equipped (HD Only)</td>
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<tr>
<td>F60</td>
<td></td>
<td>15 Amp Blue</td>
<td>Underhood Lamp / TCM – If Equipped (DS 1500 Only)</td>
</tr>
<tr>
<td>F61</td>
<td></td>
<td>10 Amp Red</td>
<td>UREA Sensor / PM Sensor – If Equipped (DS 1500 LD Diesel &amp; Cummins Diesel)</td>
</tr>
<tr>
<td>F62</td>
<td></td>
<td>10 Amp Red</td>
<td>Air Conditioning Clutch</td>
</tr>
<tr>
<td>F63</td>
<td></td>
<td>20 Amp Yellow</td>
<td>Ignition Coils (Gas), Ignition Coils Capacitors (Gas) / Short Runner Valve Actuator / Urea Heater Control Unit (DS 1500 LD Diesel) / RLY Coil Feed-SCR (DS 1500 LD Diesel)</td>
</tr>
<tr>
<td>F64</td>
<td></td>
<td>25 Amp Clear</td>
<td>Fuel Injectors / Powertrain Control Module / SRV – If Equipped</td>
</tr>
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<td>Cavity</td>
<td>Cartridge Fuse</td>
<td>Micro Fuse</td>
<td>Description</td>
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</tr>
<tr>
<td>F65</td>
<td></td>
<td>10 Amp Red</td>
<td>MOD Inverter (Wake Up) / Power Port / USB IP / WCPM – If Equipped (HD Only) Spare (DS 1500 Only)</td>
</tr>
<tr>
<td>F66</td>
<td></td>
<td>10 Amp Red</td>
<td>Sunroof / Light and Rain Sensor Module / Inside Rearview Mirror / Passenger Window SW / USB Port Rear / Feed for R/A RLY #2 Coil – If Equipped</td>
</tr>
<tr>
<td>F67</td>
<td></td>
<td>10 Amp Red</td>
<td>CD / DVD / UCI Port – If Equipped (HD Only) Bluetooth Hands-Free Module / CD – If Equipped (DS 1500 Only)</td>
</tr>
<tr>
<td>F68</td>
<td></td>
<td>10 Amp Red</td>
<td>AEB RACAM HTR – If Equipped (HD Only)</td>
</tr>
<tr>
<td>F69</td>
<td></td>
<td>15 Amp Blue</td>
<td>SCR Module – If Equipped (HD Only)</td>
</tr>
<tr>
<td>F70</td>
<td></td>
<td>30 Amp Green</td>
<td>Fuel Pump Motor / K09 RLY Coil Feed (Cummins Diesel) – If Equipped</td>
</tr>
<tr>
<td>F71</td>
<td></td>
<td>25 Amp Clear</td>
<td>Amplifier / Active Noise Cancelation – If Equipped (HD Only)</td>
</tr>
<tr>
<td>F72</td>
<td></td>
<td>10 Amp Red</td>
<td>PCM / DC/DC Converter Voltage – If Equipped (DS 1500 Only)</td>
</tr>
<tr>
<td>F73</td>
<td></td>
<td>20 Amp Yellow</td>
<td>Fuel Transfer Pump (Rear Tank) – If Equipped (HD Only)</td>
</tr>
<tr>
<td>F74</td>
<td></td>
<td>20 Amp Yellow</td>
<td>Brake Vacuum Pump Gas/Diesel – If Equipped (DS 1500 Only)</td>
</tr>
<tr>
<td>F74</td>
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<td>10 Amp Red</td>
<td>Backup Alarm – If Equipped (HD Only)</td>
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<tr>
<td>F75</td>
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<td>10 Amp Red</td>
<td>ATMM / Coil-SCR Module RLY – If Equipped (HD Only) Coolant Temperature Valve – If Equipped (DS 1500 Only)</td>
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<tr>
<td>Cavity</td>
<td>Cartridge Fuse</td>
<td>Micro Fuse</td>
<td>Description</td>
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| F76    | -              | 10 Amp Red | Electronic Stability Control (HD Only)  
|        |                |            | Brake System Module / Stop Lamp Switch / Electric Park  
|        |                |            | Brake / Clutch Pedal Switch (DS 1500 Only) |
| F77    | -              | 10 Amp Red | Drivetrain Control Module / Front Axle Disconnect Module / TCM / STOM (HD Only)  
|        |                |            | Drivetrain Control Module / ELSD / Front Axle Disconnect Module / Transmission Control Relay / RDM / Power Take Off Unit – If Equipped (DS 1500 Only) |
| F78    | -              | 10 Amp Red | Engine Control Module / Powertrain Control Module / Electric Power Steering (DS 1500 Only) |
| F78    | -              | 15 Amp Blue| Engine Control Module / Powertrain Control Module / AEB  
|        |                |            | RACM MOD / Feed To AUX PDC Relay Coils / HRLS (HD Only) |
| F79    | -              | 15 Amp Blue| ID / Clearance Lights |
| F80    | -              | 10 Amp Red | Universal Garage Door Opener / Compass / Anti-Intrusion Module (DS 1500 Only)  
<p>|        |                |            | ASSY Overhead Console / SW Assist / SW 911 – If Equipped (HD Only) |
| F81    | -              | 20 Amp Yellow| Trailer Tow Right Turn / Stop Lights – If Equipped |
| F82    | -              | 10 Amp Red | Steering Column Control Module / Cruise Control |
| F83    | -              | -          | No Connection |
| F84    | -              | 15 Amp Blue| ASBM / HVAC / ICS / Rear Heated Seat Switches |
| F85    | -              | 10 Amp Red | Airbag Module |</p>
<table>
<thead>
<tr>
<th>Cavity</th>
<th>Cartridge Fuse</th>
<th>Micro Fuse</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>F86</td>
<td></td>
<td>10 Amp Red</td>
<td>Airbag Module</td>
</tr>
<tr>
<td>F87</td>
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<td>10 Amp Red</td>
<td>Air Suspension / ITBM / Steering Column Control Module / MOD Gateway CAN-C Trailer TPM (HD Only) / Air Suspension / Trailer Tow / DC/DC Converter (Voltage Stabilizer) / Steering Column Control Module / Occupant Classification Sensor (DS 1500 Only)</td>
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<tr>
<td>F88</td>
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<td>15 Amp Blue</td>
<td>Instrument Panel Cluster</td>
</tr>
<tr>
<td>F90/F91</td>
<td></td>
<td>20 Amp Yellow</td>
<td>IGN or BATT Customer Selectable – If Equipped (HD Only) / Power Outlet (Rear Seats) Customer Selectable (DS 1500 Only)</td>
</tr>
<tr>
<td>F93</td>
<td></td>
<td>20 Amp Yellow</td>
<td>Cigar Lighter – If Equipped</td>
</tr>
<tr>
<td>F94</td>
<td></td>
<td>10 Amp Red</td>
<td>Shift-By-Wire / Transfer Case Switch (DS 1500 Only) / Shift-By-Wire / Transfer Case Switch / Module TPM Trailer (HD Only) / Module Gateway Can-C Trailer TPM (HD Only)</td>
</tr>
<tr>
<td>F95</td>
<td></td>
<td>10 Amp Red</td>
<td>Rearview Camera / Park Assist / CHMSL Camera / Blind Spot Sensor / Surround View Camera (HD Only) / Rear Camera / Park Assist / Blind Spot Sensor / Compass (DS 1500 Only)</td>
</tr>
<tr>
<td>F96</td>
<td></td>
<td>10 Amp Red</td>
<td>Rear Seat Heater Switch / Trunk Lamp With Flashlamp Charger / Truck Lamp – If Equipped (DS 1500 Only) / Trailer Camera – If Equipped (HD Only)</td>
</tr>
<tr>
<td>F97</td>
<td></td>
<td>25 Amp Clear</td>
<td>Rear Heated Seats And Heated Steering Wheel – If Equipped (DS 1500 Only)</td>
</tr>
<tr>
<td>F97</td>
<td></td>
<td>20 Amp Yellow</td>
<td>Front Heated Seat Passenger – If Equipped (HD Only)</td>
</tr>
</tbody>
</table>
CAUTION!

- When installing the power distribution center cover, it is important to ensure the cover is properly positioned and fully latched. Failure to do so may allow water to get into the power distribution center and possibly result in an electrical system failure.

CAUTION! (Continued)

- When replacing a blown fuse, it is important to use only a fuse having the correct amperage rating. The use of a fuse with a rating other than indicated may result in a dangerous electrical system overload. If a properly rated fuse continues to blow, it indicates a problem in the circuit that must be corrected.

JACKING AND TIRE CHANGING

WARNING!

- Do not attempt to change a tire on the side of the vehicle close to moving traffic. Pull far enough off the road to avoid the danger of being hit when operating the jack or changing the wheel.

(Continued)
NOTE:
If your vehicle is equipped with an air suspension system, there is a feature which allows the automatic leveling to be disabled to assist with changing a tire.

This feature can be activated through the Uconnect system.

Refer to “Uconnect Settings” in “Multimedia” for further information.

Jack Location
The jack and jack tools are stored under the front passenger seat.

Removal Of Jack And Tools
To access the jack and jack tools, you must remove the plastic access cover located on the side of the front passenger’s seat. To remove the cover, pull the front part of the cover (closest to the front of the seat) toward you to release a locking tab. Once the front of the cover is loose, slide the cover toward the front of the seat until it is free from the seat frame.

WARNING!
- Being under a jacked-up vehicle is dangerous. The vehicle could slip off the jack and fall on you. You could be crushed. Never put any part of your body under a vehicle that is on a jack. If you need to get under a raised vehicle, take it to a service center where it can be raised on a lift.
- Never start or run the engine while the vehicle is on a jack.
- The jack is designed to be used as a tool for changing tires only. The jack should not be used to lift the vehicle for service purposes. The vehicle should be jacked on a firm level surface only. Avoid ice or slippery areas.

Never start or run the engine while the vehicle is on a jack.

The jack is designed to be used as a tool for changing tires only. The jack should not be used to lift the vehicle for service purposes. The vehicle should be jacked on a firm level surface only. Avoid ice or slippery areas.

Jack Access Cover
Remove the jack and tools by turning the wing bolt counterclockwise, remove the wing bolt and then slide the assembly out from under the seat.
Remove the jack and tools from the bracket assembly. Turn the jack-turn-screw counterclockwise to release jack from bracket assembly.

**CAUTION!**
- The lug wrench can only be attached to extension 2.
- When attaching the tool to the winch mechanism be sure the large flared end opening on extension 4 is positioned correctly over the winch mechanism adjusting nut.
- Damage to the lug wrench, extensions and winch mechanism may occur from improper tool assembly.

**WARNING!**
After using the jack and tools, always reinstall them in the original carrier and location. While driving you may experience abrupt stopping, rapid acceleration or sharp turns. A loose jack, tools, bracket or other objects in the vehicle may move around with force, resulting in serious injury.
Removing The Spare Tire

1. Remove the spare tire before attempting to jack up the truck. Attach the lug wrench to the extension tubes with the curved angle facing away from the vehicle.

2. Remove the protective cover over the access hole for the winch mechanism by sliding the cover upward.

3. Insert the extension tube through the access hole between the lower tailgate and the top of the bumper and into the winch mechanism tube.

4. Rotate the lug wrench handle counterclockwise until the spare tire is on the ground with enough cable slack to allow you to pull it out from under the vehicle.

5. Pull the spare tire out from under the vehicle to gain access to the spare tire retainer.

6. Lift the spare tire with one hand to give clearance to tilt the retainer at the end of the cable.
Gaining Access To The Retainer

7. Pull the retainer through the center of the wheel.

NOTE:
The winch mechanism is designed for use with the extension tubes only. Use of an air wrench or other power tools is not recommended and can damage the winch.

Preparations For Jacking

1. Park the vehicle on a firm, level surface. Avoid ice or slippery areas.

2. Place the gear selector into PARK (P).

3. Turn on the Hazard Warning Flashers.

4. Apply the parking brake.

5. Turn the ignition OFF.

6. Block both the front and rear of the wheel diagonally opposite the jacking position. For example, if the right front wheel is being changed, block the left rear wheel.

WARNING!

Do not attempt to change a tire on the side of the vehicle close to moving traffic. Pull far enough off the road to avoid being hit when operating the jack or changing the wheel.

Jacking Instructions

WARNING!

Carefully follow these tire changing warnings to help prevent personal injury or damage to your vehicle:

- Always park on a firm, level surface as far from the edge of the roadway as possible before raising the vehicle.
- Turn on the Hazard Warning Flashers.
- Apply the parking brake firmly and set the transmission in PARK.

NOTE:
Passengers should not remain in the vehicle when the vehicle is being lifted or raised.
NOTE:
If your vehicle is equipped with hub caps they must be removed before raising the vehicle off the ground. Refer to Hub Caps — If Equipped in this section for further information.

3. Placement of the jack is critical:

Jack Warning Label

CAUTION!

Do not attempt to raise the vehicle by jacking on locations other than those indicated in the Jacking Instructions for this vehicle.

1. Remove the spare wheel, jack, and tools from storage.

2. Using the lug wrench, loosen, but do not remove, the wheel nuts by turning them counterclockwise one turn while the wheel is still on the ground.

WARNING! (Continued)

- Block the wheel diagonally opposite the wheel to be raised.
- Never start or run the engine with the vehicle on a jack.
- Do not let anyone sit in the vehicle when it is on a jack.
- Do not get under the vehicle when it is on a jack. If you need to get under a raised vehicle, take it to a service center where it can be raised on a lift.
- Only use the jack in the positions indicated and for lifting this vehicle during a tire change.
- If working on or near a roadway, be extremely careful of motor traffic.
- To assure that spare tires, flat or inflated, are securely stowed, spares must be stowed with the valve stem facing the ground.
tending to the rear, connect the extension tubes and lug wrench.

NOTE:
If the bottle jack will not lower by turning the dial (thumb wheel) by hand, it may be necessary to use the jack driver in order to lower the jack.

4. By rotating the lug wrench clockwise, raise the vehicle until the wheel just clears the surface.

WARNING!
Raising the vehicle higher than necessary can make the vehicle less stable. It could slip off the jack and hurt someone near it. Raise the vehicle only enough to remove the tire.

5. Remove the lug nuts and pull the wheel off. Install the spare wheel and lug nuts with the cone shaped end of the wheel nuts toward the wheel. To avoid the risk of forcing the vehicle off the jack, do not fully tighten the lug nuts until the vehicle has been lowered.
6. Finish tightening the lug nuts. Push down on the lug wrench while at the end of the handle for increased leverage. Tighten the lug nuts in a star pattern until each nut has been tightened twice. For the correct lug nut torque refer to “Wheel And Tire Torque Specifications” in “Technical Specifications”. If in doubt about the correct tightness, have them checked with a torque wrench by an authorized dealer or service station.

7. Install the wheel center cap and remove the wheel blocks. Do not install chrome or aluminum wheel center caps on the spare wheel. This may result in cap damage.

8. Lower the jack to its fully closed position. Stow the replaced tire, jack, and tools as previously described.

NOTE:
The bottle jack will not lower by turning the dial (thumb wheel) by hand, it may be necessary to use the jack driver in order to lower the jack.

9. Adjust the tire pressure when possible.

NOTE:
Do not oil wheel studs. For chrome wheels, do not substitute with chrome plated lug nuts.

To Stow The Flat Or Spare

NOTE:
Have the flat tire repaired or replaced immediately.

WARNING!
A loose tire or jack thrown forward in a collision or hard stop could endanger the occupants of the vehicle. Always stow the jack parts and the spare tire in the places provided. Have the deflated (flat) tire repaired or replaced immediately.

1. Turn the wheel so that the valve stem is facing the ground and toward the rear of the vehicle for convenience in checking the spare tire inflation. Slide the wheel retainer through the center of the wheel.

2. Lift the spare tire with one hand to give clearance to tilt the retainer at the end of the cable and position it properly across the wheel opening.
3. Attach the lug wrench to the extension tubes with the curved angle facing away from the vehicle. Insert the extensions through the access hole between the lower tailgate and the top of the bumper and into the winch mechanism tube.

4. Rotate the lug wrench handle clockwise until the wheel is drawn into place against the underside of the vehicle. Continue to rotate until you feel the winch mechanism slip, or click three or four times. It cannot be overtightened. Push against the tire several times to ensure it is firmly in place.

NOTE:
The winch mechanism is designed for use with the jack extension tube only. Use of an air wrench or other power tools is not recommended and can damage the winch.

Reinstalling The Jack And Tools

1. Tighten the jack all the way down by turning the jack turn-screw counterclockwise until the jack is snug.

WARNING!
A loose tire or jack thrown forward in a collision or hard stop, could endanger the occupants of the vehicle. Always stow the jack parts and the spare tire in the places provided.
2. Position the jack and tools into bracket assembly. Make sure the lug wrench is under the jack near the jack turn-screw. Snap tools into bracket assembly clips. Install the jack into bracket assembly and turn the jack turn-screw clockwise until jack is snug into bracket assembly.

3. Place the jack and tool bracket assembly in the storage position holding the jack by the jack turn-screw, slip the jack and tools under the seat so that the bottom slot engages into the fastener on the floor.

**Hub Caps — If Equipped**

The hub caps must be removed before raising the vehicle off the ground.

**CAUTION!**

Use extreme caution when removing the front and rear wheel covers. Damage can occur to the center cap and/or the wheel if screwdriver type tools are used. A pulling motion, not a pry off motion, is recommended to remove the caps.

Use the flat end of the lug wrench to hook and pull off the hub cap. Find the opening in the hub cap, insert the lug wrench, and pull off the cap. If you need to pry against the wheel, protect the wheel surface.

4. Turn the wing bolt clockwise to secure to the floor pan. Reinstall the plastic cover.
### JUMP STARTING

If your vehicle has a discharged battery, it can be jump started using a set of jumper cables and a battery in another vehicle, or by using a portable battery booster pack. Jump starting can be dangerous if done improperly, so please follow the procedures in this section carefully.

### Preparations For Jump Start

The battery in your vehicle is located in the front of the engine compartment, behind the left headlight assembly.

**NOTE:**
When using a portable battery booster pack, follow the manufacturer's operating instructions and precautions.

#### Positive (+) Battery Post

The positive battery post may be covered with a protective cap if equipped. Lift up on the cap to gain access to the positive battery post. Do not jump off fuses. Only jump directly off positive post which has a positive (+) symbol on or around the post.

1. Apply the parking brake, shift into PARK (P) (Automatic Transmission) or FIRST gear (Manual Transmission) and cycle the ignition to OFF.
2. Turn off the heater, radio, and all unnecessary electrical accessories.
3. If using another vehicle to jump start the battery, park the vehicle within the jumper cables’ reach, apply the parking brake and make sure the ignition is OFF.

**WARNING!**
- Take care to avoid the radiator cooling fan whenever the hood is raised. It can start anytime the ignition switch is ON. You can be injured by moving fan blades.
- Remove any metal jewelry such as rings, watch bands and bracelets that could make an inadvertent electrical contact. You could be seriously injured.
### Jump Starting Procedure

| **WARNING!** | Do not allow vehicles to touch each other as this could establish a ground connection and personal injury could result. |
| **WARNING!** | Do not connect the jumper cable to any of the fuses on the positive battery terminal. The resulting electrical current will blow the fuse. |
| **CAUTION!** | Failure to follow these procedures could result in damage to the charging system of the booster vehicle or the discharged vehicle. |

#### Connecting The Jumper Cables

1. Connect the positive (+) end of the jumper cable to the positive (+) post of the discharged vehicle.

   **NOTE:**
   Do not jump off fuses. Only jump directly off positive post.

2. Connect the opposite end of the positive (+) jumper cable to the positive (+) post of the booster battery.

3. Connect the negative (-) end of the jumper cable to the negative (-) post of the booster battery.

4. Connect the opposite end of the negative (-) jumper cable to a good engine ground. A “ground” is an exposed metallic/unpainted part of the engine, frame or chassis, such as an accessory bracket or large bolt. The ground must be away from the battery and the fuel injection system.

5. Start the engine in the vehicle that has the booster battery, let the engine idle a few minutes, and then start the engine in the vehicle with the discharged battery.

6. Once the engine is started, remove the jumper cables in the reverse sequence.
Disconnecting The Jumper Cables

1. Disconnect the negative (−) end of the jumper cable from the engine ground of the vehicle with the discharged battery.

2. Disconnect the opposite end of the negative (−) jumper cable from the negative (−) post of the booster battery.

3. Disconnect the positive (+) end of the jumper cable from the positive (+) post of the booster battery.

4. Disconnect the opposite end of the positive (+) jumper cable from the positive (+) post of the vehicle with the discharged battery.

If frequent jump starting is required to start your vehicle you should have the battery and charging system inspected at an authorized dealer.

CAUTION!
Accessories plugged into the vehicle power outlets draw power from the vehicle’s battery, even when not in use (i.e., cellular devices, etc.). Eventually, if plugged in long enough without engine operation, the vehicle’s battery will discharge sufficiently to degrade battery life and/or prevent the engine from starting.

MANUAL PARK RELEASE — 8–SPEED TRANSMISSION

WARNING!
Always secure your vehicle by fully applying the parking brake before activating the Manual Park Release. In addition, you should be seated in the driver’s seat with your foot firmly on the brake pedal when activating the Manual Park Release. Activating the Manual Park Release will allow your vehicle to roll away if it is not secured by the parking brake, or by proper connection to a tow vehicle. Activating the Manual Park Release on an unsecured vehicle could lead to serious injury or death for those in or around the vehicle.

In order to push or tow the vehicle in cases where the transmission will not shift out of PARK (P) (such as a depleted battery), a Manual Park Release is available.
1. Firmly apply the parking brake.

2. Using a small screwdriver or similar tool, remove the Manual Park Release access cover, which is just above the parking brake release handle, below and to the left of the steering column.

3. Press and maintain firm pressure on the brake pedal.

4. Using the screwdriver or similar tool, push the Manual Park Release lever locking tab (just below the middle of the lever) to the right.

5. While holding the locking tab in the disengaged position, pull the tether strap to rotate the lever rearward, until it locks in place pointing towards the driver's seat. Release the locking tab and verify that the Manual Park Release lever is locked in the released position.

6. The vehicle is now out of PARK (P) and can be towed. Release the parking brake only when the vehicle is securely connected to a tow vehicle.

To Reset The Manual Park Release:

1. Push the locking tab to the right, to unlock the lever.

2. Rotate the Manual Park Release lever forward to its original position, until the locking tab snaps into place to secure the lever.

3. Pull gently on the tether strap to confirm that the lever is locked in its stowed position.

4. Re-install the access cover.

IF YOUR ENGINE OVERHEATS

In any of the following situations, you can reduce the potential for overheating by taking the appropriate action.

- On the highways — slow down.
- In city traffic — while stopped, place the transmission in NEUTRAL (N), but do not increase the engine idle speed while preventing vehicle motion with the brakes.

NOTE:

There are steps that you can take to slow down an impending overheat condition:

- If your Air Conditioner (A/C) is on, turn it off. The A/C system adds heat to the engine cooling system and turning the A/C off can help remove this heat.

- You can also turn the temperature control to maximum heat, the mode control to floor and the blower control to high. This allows the heater core to act as a supplement to the radiator and aids in removing heat from the engine cooling system.

WARNING!

You or others can be badly burned by hot engine coolant (antifreeze) or steam from your radiator. If you see or hear steam coming from under the hood, do not open the hood until the radiator has had time to cool. Never try to open a cooling system pressure cap when the radiator or coolant bottle is hot.
FREEING A STUCK VEHICLE

If your vehicle becomes stuck in mud, sand, or snow, it can often be moved using a rocking motion. Turn the steering wheel right and left to clear the area around the front wheels. Then shift back and forth between DRIVE (D) and REVERSE (R), while gently pressing the accelerator. Use the least amount of accelerator pedal pressure that will maintain the rocking motion, without spinning the wheels or racing the engine.

NOTE:

- For trucks equipped with an 8-speed transmission, shifts between DRIVE (D) and REVERSE (R) can only be achieved at wheel speeds of 5 mph (8 km/h) or less. Whenever the transmission remains in NEUTRAL (N) for more than two seconds, you must press the brake pedal to engage DRIVE (D) or REVERSE (R).

- Push the ESC OFF switch, to place the Electronic Stability Control (ESC) System in “Partial Off” mode, before rocking the vehicle. Refer to “Electronic Brake Control (EBC) System” in “Safety” for further information. Once the vehicle has been freed, push the ESC OFF switch again to restore “ESC On” mode.

CAUTION!

Driving with a hot cooling system could damage your vehicle. If the temperature gauge reads HOT (H), pull over and stop the vehicle. Idle the vehicle with the air conditioner turned off until the pointer drops back into the normal range. If the pointer remains on HOT (H), and you hear continuous chimes, turn the engine off immediately and call for service.

WARNING!

Fast spinning tires can be dangerous. Forces generated by excessive wheel speeds may cause damage, or even failure, of the axle and tires. A tire could explode and injure someone. Do not spin your vehicle's wheels faster than 30 mph (48 km/h) or for longer than 30 seconds continuously without stopping when you are stuck and do not let anyone near a spinning wheel, no matter what the speed.

CAUTION!

- Racing the engine or spinning the wheels may lead to transmission overheating and failure. Allow the engine to idle with the transmission in NEUTRAL for at least one minute after every five rocking-motion cycles. This will minimize overheating and reduce the risk of transmission failure during prolonged efforts to free a stuck vehicle.

- When “rocking” a stuck vehicle by shifting between DRIVE and REVERSE, do not spin the wheels faster than 15 mph (24 km/h), or drivetrain damage may result.

- Revving the engine or spinning the wheels too fast may lead to transmission overheating and failure. It can also damage the tires. Do not spin the wheels above 30 mph (48 km/h) while in gear (no transmission shifting occurring).
TOWING A DISABLED VEHICLE

This section describes procedures for towing a disabled vehicle using a commercial towing service.

If the transmission and drivetrain are operable, disabled vehicles may also be towed as described under “Recreational Towing (Behind Motorhome, Etc)" in the “Starting And Operating” section.

NOTE: Vehicles equipped with the Air Suspension System must be placed in Transport mode, before tying them down (from the body) on a trailer or flatbed truck. If the vehicle cannot be placed in Transport mode (for example, engine will not run), tie-downs must be fastened to the axles (not to the body). Failure to follow these instructions may cause fault codes to be set and/or cause loss of proper tie-down tension.

Refer to "Air Suspension System — If Equipped" in "Starting And Operating" for more information.

>>> CONDITION: ((Market=Brazil or Market='Latin America')) >>>

Proper towing or lifting equipment is required to prevent damage to your vehicle. Use only tow bars and other equipment designed for this purpose, following equipment manufacturer’s instructions. Use of safety chains is mandatory.

Attach a tow bar or other towing device to main structural members of the vehicle, not to bumpers or associated brackets. State and local laws regarding vehicles under tow must be observed.

If you must use the accessories (wipers, defrosters, etc.) while being towed, the ignition

<table>
<thead>
<tr>
<th>Towing Condition</th>
<th>Wheels OFF The Ground</th>
<th>2WD Models</th>
<th>4WD Models</th>
</tr>
</thead>
</table>
| Flat Tow         | NONE                  | If transmission is operable:  
• Transmission in NEUTRAL  
• 30 mph (48 km/h) max speed  
• 30 miles (48 km) max distance (8-speed transmission) | See instructions in “Recreational Towing” under “Starting And Operating”  
• Automatic Transmission in PARK  
• Transfer Case in NEUTRAL (N)  
• Tow in forward direction | NOT ALLOWED |
| Wheel Lift Or Dolly Tow | Front | OK | NOT ALLOWED |
| Rear | ALL | BEST METHOD | BEST METHOD |

<<< CONDITION END <<<

Towing Condition Wheels OFF The Ground 2WD Models 4WD Models

Flat Tow NONE If transmission is operable: • Transmission in NEUTRAL • 30 mph (48 km/h) max speed • 30 miles (48 km) max distance (8-speed transmission) See instructions in “Recreational Towing” under “Starting And Operating” • Automatic Transmission in PARK • Transfer Case in NEUTRAL (N) • Tow in forward direction NOT ALLOWED
Wheel Lift Or Dolly Tow Front OK NOT ALLOWED Rear
Flatbed ALL BEST METHOD BEST METHOD

If transmission is operable:
• Transmission in NEUTRAL
• 30 mph (48 km/h) max speed
• 30 miles (48 km) max distance (8-speed transmission)
must be in the ON/RUN mode, not the ACC mode.

If the key fob is unavailable or the vehicle's battery is discharged, refer to "Manual Park Release" in this section for instructions on shifting the transmission out of PARK for towing.

### CAUTION!
- Do not use sling type equipment when towing. Vehicle damage may occur.
- When securing the vehicle to a flat bed truck, do not attach to front or rear suspension components. Damage to your vehicle may result from improper towing.

**Two-Wheel Drive Models**

The manufacturer recommends towing your vehicle with all four wheels OFF the ground using a flatbed.

If flatbed equipment is not available, and the transmission is operable, the vehicle may be towed (with rear wheels on the ground) under the following conditions:
- The transmission must be in NEUTRAL.

**NOTE:**
Refer to "Manual Park Release" in this chapter for instructions on shifting the transmission to NEUTRAL when the engine is OFF.

- The towing speed must not exceed 30 mph (48 km/h).
- The towing distance must not exceed 30 miles (48 km) for 8-speed transmission.

If the transmission is not operable, or the vehicle must be towed faster than 30 mph (48 km/h) or farther than 30 miles (48 km) for 8-speed transmission, tow with the rear wheels OFF the ground. Acceptable methods are to tow the vehicle on a flatbed, or with the front wheels raised and the rear wheels on a towing dolly, or (when using a suitable steering wheel stabilizer to hold the front wheels in the straight position) with the rear wheels raised and the front wheels on the ground.

### CAUTION!
Towing this vehicle in violation of the above requirements can cause severe transmission damage. Damage from improper towing is not covered under the New Vehicle Limited Warranty.

**Four-Wheel Drive Models**

The manufacturer recommends towing with all wheels OFF the ground. Acceptable methods are to tow the vehicle on a flatbed or with one end of vehicle raised and the opposite end on a towing dolly.

If flatbed equipment is not available, and the transfer case is operable, the vehicle may be towed (in the forward direction, with ALL wheels on the ground), IF the transfer case is in NEUTRAL (N) and the transmission is in PARK (P).

Refer to “Recreational Towing (BEHIND MOTORHOME, ETC”) in “Starting And Operating” for further information and detailed instructions.
Emergency Tow Hooks — If Equipped

Your vehicle may be equipped with emergency tow hooks.

NOTE:
For off-road recovery, it is recommended to use both of the front tow hooks to minimize the risk of damage to the vehicle.

CAUTION!
- Front or rear wheel lifts must not be used (if the remaining wheels are on the ground). Internal damage to the transmission or transfer case will occur if a front or rear wheel lift is used when towing.
- Towing this vehicle in violation of the above requirements can cause severe transmission and/or transfer case damage. Damage from improper towing is not covered under the New Vehicle Limited Warranty.

WARNING!
- Do not use a chain for freeing a stuck vehicle. Chains may break, causing serious injury or death.

ENHANCED ACCIDENT RESPONSE SYSTEM (EARS)

This vehicle is equipped with an Enhanced Accident Response System. Please refer to “Occupant Restraint Systems” in “Safety” for further information on the Enhanced Accident Response System (EARS) function.

EVENT DATA RECORDER (EDR)

This vehicle is equipped with an Event Data Recorder (EDR). The main purpose of an EDR is to record data that will assist in understanding how a vehicle's systems performed under certain crash or near crash-like situations, such as an air bag deployment or hitting a road obstacle.

Please refer to “Occupant Restraint Systems” in “Safety” for further information on the Event Data Recorder (EDR).
SERVICING AND MAINTENANCE

SCHEDULED SERVICING — GASOLINE ENGINE

The oil change indicator system will remind you that it is time to take your vehicle in for scheduled maintenance.

An “Oil Change Required” will be displayed in the instrument cluster and a single chime will sound, indicating that an oil change is necessary.

The oil change indicator message will illuminate approximately 7,500 miles (12,000 km) after the most recent oil change was performed. Have your vehicle serviced as soon as possible, within 500 miles (805 km). However, an earlier oil change at 3,000 miles (5,000 km) may be required if the vehicle is operated under “Severe Duty Conditions” later in this section.

NOTE:

- The oil change indicator message will not monitor the time since the last oil change. Change your vehicle's oil if it has been 6 months since your last oil change even if the oil change indicator message is NOT illuminated.
- Change your engine oil more often if you drive your vehicle off-road for an extended period of time.
- Under no circumstances should oil change intervals exceed 7,500 miles (12,000 km) or 6 months, whichever comes first.

At Each Stop for Fuel

- Check the engine oil level about five minutes after a fully warmed engine is shut off. Checking the oil level while the vehicle is on level ground will improve the accuracy of the oil level reading. Add oil only when the level is at or below the ADD or MIN mark.
- Check the windshield washer solvent and add if required.
- Check the fluid levels of the coolant reservoir, brake master cylinder, and, power steering and fill as needed
- Check function of all interior and exterior lights

Once a Month

- Check engine oil level
- Check windshield washer fluid level
- Check tire pressure and look for unusual wear or damage. Rotate tires at the first sign of irregular wear, even if it occurs before the oil indicator system turns on.
At Each Oil Change

- Change the engine oil filter.
- Inspect the brake hoses and lines.
- Inspect the battery and clean and tighten terminals as required.
- Inspect the automatic transmission fluid if equipped with dipstick.
- Inspect the U-joints and CV joints (if equipped).
- Inspect brake pads, shoes, rotors, drums, hoses and park brake.
- Inspect engine cooling system protection and hoses.
- Inspect the exhaust system.
- Inspect the engine air cleaner if using in dusty or off-road conditions. Replace engine air cleaner filter if necessary.

**CAUTION!**

Failure to perform the required maintenance items may result in damage to the vehicle.
### Maintenance Plan

| Mileage or time passed (whichever comes first): | 7,500 | 15,000 | 22,500 | 30,000 | 37,500 | 45,000 | 52,500 | 60,000 | 67,500 | 75,000 | 82,500 | 90,000 | 97,500 | 105,000 | 112,500 | 120,000 | 127,500 | 135,000 | 142,500 | 150,000 |
| Or Months: | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 | 66 | 72 | 78 | 84 | 90 | 96 | 102 | 108 | 114 | 120 |
| Or Kilometers | 12,000 | 24,000 | 36,000 | 48,000 | 60,000 | 72,000 | 84,000 | 96,000 | 108,000 | 120,000 | 132,000 | 144,000 | 156,000 | 168,000 | 180,000 | 192,000 | 204,000 | 216,000 | 228,000 | 240,000 |

### Additional Inspections

- Inspect the CV/Universal joints.
- Inspect front suspension, tie rod ends, and replace if necessary.
- Inspect the front and rear axle surfaces. If gear oil leakage is suspected, check the fluid level. If using your vehicle for police, taxi, fleet, off-road or frequent trailer towing, change axle fluid.*
| Mileage or time passed (whichever comes first): | 7,500 | 15,000 | 22,500 | 30,000 | 37,500 | 45,000 | 52,500 | 60,000 | 67,500 | 75,000 | 82,500 | 90,000 | 97,500 | 105,000 | 112,500 | 120,000 | 127,500 | 135,000 | 142,500 | 150,000 |
| Or Months: | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 | 66 | 72 | 78 | 84 | 90 | 96 | 102 | 108 | 114 | 120 |
| Or Kilometers: | 12,000 | 24,000 | 36,000 | 48,000 | 60,000 | 72,000 | 84,000 | 96,000 | 108,000 | 120,000 | 132,000 | 144,000 | 156,000 | 168,000 | 180,000 | 192,000 | 204,000 | 216,000 | 228,000 | 240,000 |

- Inspect the brake linings, replace as necessary.
- Adjust parking brake as necessary.
- Inspect transfer case fluid.

**Additional Maintenance**

- Change engine oil and oil filter. ††
- Rotate tires.
- Replace engine air filter.
- Replace cabin air filter.
- Change brake fluid every 24 months if using DOT 4 brake fluid.**
| Mileage or time passed (whichever comes first): | 7,500 | 15,000 | 22,500 | 30,000 | 37,500 | 45,000 | 52,500 | 60,000 | 67,500 | 75,000 | 82,500 | 90,000 | 97,500 | 105,000 | 112,500 | 120,000 | 127,500 | 135,000 | 142,500 | 150,000 |
| Or Months: | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 | 66 | 72 | 78 | 84 | 90 | 96 | 102 | 108 | 114 | 120 | 126 | 132 | 138 | 144 | 150 |
| Or Kilometers | 12,000 | 24,000 | 36,000 | 48,000 | 60,000 | 72,000 | 84,000 | 96,000 | 108,000 | 120,000 | 132,000 | 144,000 | 156,000 | 168,000 | 180,000 | 192,000 | 204,000 | 216,000 | 228,000 | 240,000 | 252,000 | 264,000 | 276,000 | 288,000 | 300,000 |

Replace spark plugs.***

Flush and replace the engine coolant at 10 years or 150,000 miles (240,000 km) whichever comes first.

Inspect the transfer case fluid, change for any of the following: police, taxi, fleet, or frequent trailer towing.

Change the transfer case fluid.

Inspect and replace PCV valve if necessary.
* Inspect the front and rear axle surfaces every 20,000 miles (32,000 km). If gear oil leakage is suspected, check the fluid level. If using your vehicle for police, taxi, fleet, off-road or frequent trailer towing change the axle fluid every 20,000 miles (32,000 km).

** DOT 4 brake fluid is time based only; mileage intervals do not apply.

*** The spark plug change interval is mileage based only, yearly intervals do not apply.

† This maintenance is recommended by the manufacturer to the owner, but is not required to maintain emissions warranty.

Severe Duty Conditions
† † Change the engine oil and engine oil filter at every 4,500 miles (7,500 km) or 6 months if using your vehicle under any of the following severe duty conditions:

- Stop and go driving
- Driving in dusty conditions
- Short trips of less than 10 miles (16 km)
- Trailer towing
- Taxi, police, or delivery service (commercial service)
- Off-road or desert operation

SCHEDULED SERVICING— DIESEL ENGINE

At Each Stop For Fuel
Check the engine oil level at least 30 minutes after a fully warmed engine is shut off. Checking the oil level while the vehicle is on level ground will improve the accuracy of the oil level reading. Add oil only when the level is at or below the ADD or MIN mark.

Once A Month
- Inspect the batteries, and clean and tighten the terminals as required.
- Check the fluid levels of the coolant reservoir, brake master cylinder, and automatic transmission, and add as needed.

At Each Oil Change
- Change the engine oil filter.
- Inspect the exhaust system.
- Inspect engine air filter.
- Check the coolant level, hoses, and clamps.
- Inspect front end, and lubricate — If equipped with serviceable fittings.
- Lube the front drive shaft fitting (4X4 models only).
- Inspect the CV/Universal joints.

Inspection and service should also be performed anytime a malfunction is observed or suspected. Retain all receipts.
Oil Change Indicator System

Your vehicle is equipped with an engine oil change indicator system. This system will alert you when it is time to change your engine oil by displaying the words “Oil Change Required” on your instrument cluster display. The oil change reminder will remind the owner to change the engine oil every 15,000 miles (24,000 km) or 500 hours, whichever comes first, except for models that are using B20 Biodiesel, which are 12,500 miles or 400 hours, whichever comes first. Failure to change the engine oil per the maintenance schedule can result in internal engine damage.

For information on resetting the Oil Change Indicator message, refer to “Oil Life Reset” under “Instrument Cluster Display” in “Getting To Know Your Instrument Panel” for further information.

Replace the engine oil and oil filter every 15,000 miles (24,000 km) or 12 months, or sooner if prompted by the oil change indicator system. Under no circumstances should oil change intervals exceed 15,000 miles (24,000 km) or 12 months, whichever comes first.

NOTE:
- Under no circumstances should oil change intervals exceed 15,000 miles (24,000 km) or 12 months or 500 hours, whichever comes first.
- Replace the engine oil and oil filter every 12,500 miles (20,000 km) or 6 months or 400 hours when running B20 fuel.

If this vehicle is operated with greater than 5% levels of Biodiesel, the oil change interval must not exceed 12,500 miles (20,000 km) under any circumstances. See the Fuel Requirements section for more information regarding the use of Biodiesel blends (B6-B20) fuel meeting ASTM specification D-7467.

Perform Service Indicator

Your vehicle will require emissions maintenance at a set interval. To help remind you when this maintenance is due, the instrument cluster will display “Perform Service”. When the “Perform Service” message is displayed on the instrument cluster it is necessary to have the emissions maintenance performed. Emissions maintenance may include replacing the Closed Crankcase Ventilation (CCV) filter element. The procedure for clearing and resetting the “Perform Service”
indicator message is located in the appropriate Service Information.

### Maintenance Plan

| Mileage or time passed (whichever comes first): | 7,500 | 15,000 | 22,500 | 30,000 | 37,500 | 45,000 | 52,500 | 60,000 | 67,500 | 75,000 | 82,500 | 90,000 | 97,500 | 105,000 | 112,500 | 120,000 | 127,500 | 135,000 | 142,500 | 150,000 |
|-----------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Or Months:                                    | 6     | 12    | 18    | 24    | 30    | 36    | 42    | 48    | 54    | 60    | 66    | 72    | 78    | 84    | 90    | 96    | 102   | 108   | 114   | 120   |
| Or Kilometers:                                | 12,000| 24,000| 36,000| 48,000| 60,000| 72,000| 84,000| 96,000| 108,000|120,000|132,000|144,000|156,000|168,000|180,000|192,000|204,000|216,000|228,000|240,000|

Inspect the CV/Universal joints. X X X X X X X X X X X X X X X X X X X X

Change engine oil every 15,000 miles (24,000 km) or 12 months or 500 hours or sooner if prompted by the oil change indicator system, whichever comes first. ** X X X X X X X X X X X X X X X X X X X X

### Additional Inspections

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<thead>
<tr>
<th>Rotate the tires.</th>
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<tbody>
<tr>
<td>Lubricate front drive shaft fitting (4x4).</td>
<td>X X X X X X X X X X X X X X X X X X X X</td>
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<tr>
<td>Mileage or time passed (whichever comes first):</td>
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<td>Or Months:</td>
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<td>Or Kilometers:</td>
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</table>

Lubricate outer tie rod ends. X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X

Inspect engine air filter, replace if necessary. **** X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X

Inspect the front suspension, tie rod ends and boot seals for cracks or leaks and all parts for damage, wear, improper looseness or end play; replace if necessary. X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X

Inspect the brake linings. X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X

Inspect and adjust parking brake. X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X

Inspect drive belt; replace as necessary. X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X

Inspect wheel bearings. X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
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<td>Or Months:</td>
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<td>228,000</td>
<td>240,000</td>
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</table>

**Additional Maintenance**

- Replace cabin air filter. X X X X X X X X X X X
- Replace engine fuel filter element. X X X X X X X X X X
- Replace chassis mounted fuel filter element. X X X X X X X X X X

Inspect the front and rear axle surfaces. If gear oil leakage is suspected, check the fluid level. If using your vehicle for police, taxi, fleet, off-road or frequent trailer towing change the axle fluid. *
| Mileage or time passed (whichever comes first): | 7,500 | 15,000 | 22,500 | 30,000 | 37,500 | 45,000 | 52,500 | 60,000 | 67,500 | 75,000 | 82,500 | 90,000 | 97,500 | 105,000 | 112,500 | 120,000 | 127,500 | 135,000 | 142,500 | 150,000 |
| Or Months: | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 | 66 | 72 | 78 | 84 | 90 | 96 | 102 | 108 | 114 | 120 |
| Or Kilometers: | 12,000 | 24,000 | 36,000 | 48,000 | 60,000 | 72,000 | 84,000 | 96,000 | 108,000 | 120,000 | 132,000 | 144,000 | 156,000 | 168,000 | 180,000 | 192,000 | 204,000 | 216,000 | 228,000 | 240,000 |

- Inspect the transfer case fluid (4x4), change for any of the following: police, taxi, fleet, or frequent trailer towing.
- Change the transfer case fluid (4x4).
- Change automatic transmission fluid and filter(s) if using your vehicle for any of the following: police, fleet, or frequent trailer towing.
- Change automatic transmission fluid and filter(s).
- Replace Crankcase Ventilation Filter (CCV).
Inspection and service should also be performed anytime a malfunction is observed or suspected. Retain all receipts.

* Inspect the front and rear axle surfaces every 20,000 miles (32,000 km). If gear oil leakage is suspected, check the fluid level. If using your vehicle for police, taxi, fleet, off-road or frequent trailer towing change the axle fluid every 20,000 miles (32,000 km).

** Under no circumstances should oil change intervals exceed 15,000 miles (24,000 km) or 12 months, whichever comes first.

*** The manufacturer highly recommends that all cooling system service, maintenance, and repairs be performed by your local authorized dealer.

| Mileage or time passed (whichever comes first): | 7,500 | 15,000 | 22,500 | 30,000 | 37,500 | 45,000 | 52,500 | 60,000 | 67,500 | 75,000 | 82,500 | 90,000 | 97,500 | 105,000 | 112,500 | 120,000 | 127,500 | 135,000 | 142,500 | 150,000 |
|-----------------------------------------------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Or Months:                                   | 6     | 12     | 18     | 24     | 30     | 36     | 42     | 48     | 54     | 60     | 66     | 72     | 78     | 84     | 90     | 96     | 102    | 108    | 114    | 120    |
| Or Kilometers:                               | 12,000| 24,000 | 36,000 | 48,000 | 60,000 | 72,000 | 84,000 | 96,000 | 108,000| 120,000| 132,000| 144,000| 156,000| 168,000| 180,000| 192,000| 204,000| 216,000| 228,000| 240,000|
| Flush and replace power steering fluid.      |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| X                                             |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Flush and replace engine coolant. ***         |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| X                                             |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Adjust valve lash clearance. **               |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| X                                             |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |

CAUTION!
WARNING!

- You can be badly injured working on or around a motor vehicle. Do only service work for which you have the knowledge and the right equipment. If you have any doubt about your ability to perform a service job, take your vehicle to a competent mechanic.

- Failure to properly inspect and maintain your vehicle could result in a component malfunction and affect vehicle handling and performance. This could cause an accident.
ENGINE COMPARTMENT

6.4L Gasoline Engine

1 — Engine Coolant Reservoir Cap
2 — Engine Coolant Reservoir
3 — Engine Oil Fill
4 — Engine Oil Dipstick
5 — Brake Fluid Reservoir Cap
6 — Battery
7 — Washer Fluid Reservoir Cap
8 — Power Distribution Center (Fuses)
9 — Power Steering Fluid Reservoir Cap
10 — Engine Air Cleaner Filter
6.7L Diesel Engine

1 — Battery
2 — Engine Coolant Reservoir Cap
3 — Engine Coolant Reservoir
4 — Automatic Transmission Dipstick
5 — Engine Oil Fill
6 — Engine Oil Dipstick
7 — Brake Fluid Reservoir Cap
8 — Battery
9 — Power Distribution Center (Fuses)
10 — Washer Fluid Reservoir Cap
11 — Power Steering Fluid Reservoir Cap
12 — Engine Air Cleaner Filter
Checking Oil Level — Gasoline Engine
To ensure proper lubrication of your vehicle's engine, the engine oil must be maintained at the correct level. Check the oil level at regular intervals, such as every fuel stop. The best time to check the engine oil level is about five minutes after a fully warmed up engine is shut off.

Checking the oil while the vehicle is on level ground will improve the accuracy of the oil level readings. Always maintain the oil level within the SAFE zone on the dipstick. Adding one quart of oil when the reading is at the bottom of the SAFE zone will result in a reading at the top of the safe zone on these engines.

CAUTION!
Overfilling or underfilling will cause oil aeration or loss of oil pressure. This could damage your engine.

Checking Oil Level — Diesel Engine
To ensure proper lubrication of your vehicle's engine, the engine oil must be maintained at the correct level. Check the oil level at regular intervals. The best time to check the oil level is before starting the engine after it has been parked overnight. When checking oil after operating the engine, first ensure the engine is at full operating temperature, then wait for 30 minutes after engine shutdown to check the oil.

Checking the oil while the vehicle is on level ground will improve the accuracy of the oil level readings. Add oil only when the level on the dipstick is below the “ADD” mark. The total capacity from the ADD mark to the Full mark is 2 qts (1.9L).

CAUTION!
Overfilling or underfilling the crankcase will cause oil aeration or loss of oil pressure. This could damage your engine.

Never operate the engine with oil level below the “ADD” mark or above the upper “SAFE” mark.

Adding Washer Fluid
The fluid reservoir is located under the hood and should be checked for fluid level at regular intervals. Fill the reservoir with windshield washer solvent only (not radiator antifreeze). When refilling the washer fluid reservoir, take some washer fluid and apply it to a cloth or towel and wipe the wiper blades clean. This will help blade performance.

To prevent freeze-up of your windshield washer system in cold weather, select a solution or mixture that meets or exceeds the temperature range of your climate. This rating information can be found on most washer fluid containers.
After the engine has warmed up, operate the defroster for a few minutes to reduce the possibility of smearing or freezing the fluid on the cold windshield. Windshield washer solution used with water as directed on the container, aids cleaning action, reduces the freezing point to avoid line clogging, and is not harmful to paint or trim.

Maintenance-Free Battery
Your vehicle is equipped with a maintenance-free battery. You will never have to add water, nor is periodic maintenance required.

WARNING!
Commercially available windshield washer solvents are flammable. They could ignite and burn you. Care must be exercised when filling or working around the washer solution.

WARNING!
- Battery fluid is a corrosive acid solution and can burn or even blind you. Do not allow battery fluid to contact your eyes, skin, or clothing. Do not lean over a battery when attaching clamps. If acid splashes in eyes or on skin, flush the area immediately with large amounts of water. Refer to “Jump Starting Procedure” in “In Case Of Emergency” for further information.
- Battery gas is flammable and explosive. Keep flame or sparks away from the battery. Do not use a booster battery or any other booster source with an output greater than 12 Volts. Do not allow cable clamps to touch each other.
- Battery posts, terminals, and related accessories contain lead and lead compounds. Wash hands after handling.

WARNING!
- It is essential when replacing the cables on the battery that the positive cable is attached to the positive post and the negative cable is attached to the negative post. Battery posts are marked positive (+) and negative (-) and are identified on the battery case. Cable clamps should be tight on the terminal posts and free of corrosion.
- If a “fast charger” is used while the battery is in the vehicle, disconnect both vehicle battery cables before connecting the charger to the battery. Do not use a “fast charger” to provide starting voltage.

Pressure Washing

CAUTION!
Cleaning the engine compartment with a high pressure washer is not recommended. Precautions have been taken to safeguard all parts and connections however, the pressures generated by these machines is such that complete protection against water ingress cannot be guaranteed.
DEALER SERVICE
An authorized dealer has the qualified service personnel, special tools, and equipment to perform all service operations in an expert manner. Service Manuals are available which include detailed service information for your vehicle. Refer to these Service Manuals before attempting any procedure yourself.

NOTE:
Intentional tampering with emissions control systems may void your warranty and could result in civil penalties being assessed against you.

Engine Oil
Change Engine Oil — Gasoline Engine
The oil change indicator system will remind you that it is time to take your vehicle in for scheduled maintenance. Refer to the “Scheduled Servicing” in this chapter for further information.

NOTE:
Under no circumstances should oil change intervals exceed 8,000 miles (13,000 km), 12 months or 350 hours of engine run time, whichever comes first. The 350 hours of engine run or idle time is generally only a concern for fleet customers.

Change Engine Oil — Diesel Engine
>>> CONDITION: {Market=Brazil or Market='Latin America'} <<<
Refer to “Scheduled Servicing” in this section for the proper maintenance intervals.
<<< CONDITION END <<<

Engine Oil Selection — Gasoline Engine
For best performance and maximum protection under all types of operating conditions, the manufacturer only recommends engine oils that are API certified and meet the requirements of FCA Material Standard MS-12633 or ACEA A3/B4.

Engine Oil Selection — Diesel Engine
For best performance and maximum protection under all types of operating conditions, the manufacturer only recommends engine oils that are API CK-4 certified and meet the requirements of FCA LLC. Use Mopar or an equivalent oil meeting FCA Material Standard MS-10902. Products meeting Cummins CES 20081 may also be used. The identification of these engine oils are typically located on the back of the oil container.

American Petroleum Institute (API) Engine Oil Identification Symbol
This symbol means that the oil has been certified by the American Petroleum Institute (API). The manufacturer only recommends API Certified engine oils.
This symbol certifies 0W-20, 5W-20, 0W-30, 5W-30 and 10W-30 engine oils.

WARNING!
You can be badly injured working on or around a motor vehicle. Only do service work for which you have the knowledge and the proper equipment. If you have any doubt about your ability to perform a service job, take your vehicle to a competent mechanic.
364 SERVICING AND MAINTENANCE

CAUTION!
Do not use chemical flushes in your engine oil as the chemicals can damage your engine. Such damage is not covered by the New Vehicle Limited Warranty.

Engine Oil Viscosity — Gasoline Engine
Use Mopar SAE 0W-40 engine oil approved to FCA Material Standard MS-12633 such as Pennzoil Ultra equivalent is recommended for all operating temperatures.
The engine oil filler cap also shows the recommended engine oil viscosity for your engine. For information on engine oil filler cap location, refer to the “Engine Compartment” illustration in this section.
Lubricants which do not have both the engine oil certification mark and the correct SAE viscosity grade number should not be used.

Engine Oil Viscosity — Diesel Engine
In ambient temperatures above 0°F (-18°C), we recommend the use of SAE 10W-30 engine oil such as Mopar, Shell Rotella and Shell Rimula that meets FCA Material Standard MS-10902 and the API CK-4 engine oil category is required. Products meeting Cummins CES 20081 may also be used. The identification of these engine oils is typically located on the back of the oil container.
In ambient temperatures below 0°F (-18°C), we recommend you use SAE 5W-40 synthetic engine oil such as Mopar, Shell Rotella and Shell Rimula that meets FCA Material Standard MS-10902 and the API CK-4 engine oil category is required.

Synthetic Engine Oils
You may use synthetic engine oils, provided the recommended oil quality requirements are met, and the recommended maintenance intervals for oil and filter changes are followed. Synthetic engine oils which do not have both the engine oil certification mark and the correct SAE viscosity grade number should not be used.

Synthetic Engine Oils
Synthetic engine oils, provided the recommended oil quality requirements are met, and the recommended maintenance intervals for oil and filter changes are followed. Synthetic engine oils which do not have both the engine oil certification mark and the correct SAE viscosity grade number should not be used.

Materials Added To Engine Oil
The manufacturer strongly recommends against the addition of any additives (other than leak detection dyes) to the engine oil. Engine oil is an engineered product and its performance may be impaired by supplemental additives.

Disposing Of Used Engine Oil And Oil Filters
Care should be taken in disposing of used engine oil and oil filters from your vehicle. Used oil and oil filters, indiscriminately discarded, can present a problem to the environment. Contact an authorized dealer, service station or
governmental agency for advice on how and where used oil and oil filters can be safely discarded in your area.

**Engine Oil Filter**
The engine oil filter should be replaced with a new filter at every engine oil change.

**Engine Oil Filter Selection**
This manufacturer’s engines have a full-flow type disposable oil filter. Use a filter of this type for replacement. The quality of replacement filters varies considerably. Only high quality filters should be used to ensure most efficient service. Mopar engine oil filters are high quality oil filters and are recommended.

**Engine Air Cleaner Filter**

>>> CONDITION: {Market=Brazil or Market='Latin America'} >>>
Refer to the “Maintenance Plan” in this section for the proper maintenance intervals.

<<< CONDITION END <<<

**NOTE:**
Be sure to follow the “Severe Duty Conditions” maintenance interval if applicable.

<table>
<thead>
<tr>
<th>WARNING!</th>
</tr>
</thead>
<tbody>
<tr>
<td>The air induction system (air cleaner, hoses, etc.) can provide a measure of protection in the case of engine backfire. Do not remove the air induction system (air cleaner, hoses, etc.) unless such removal is necessary for repair or maintenance. Make sure that no one is near the engine compartment before starting the vehicle with the air induction system (air cleaner, hoses, etc.) removed. Failure to do so can result in serious personal injury.</td>
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**Engine Air Cleaner Filter Selection**
The quality of replacement engine air cleaner filters varies considerably. Only high quality filters should be used to ensure most efficient service. Mopar engine air cleaner filters are a high quality filter and are recommended.

**Engine Air Cleaner Filter Inspection And Replacement — Gasoline Engine**
Inspect engine air cleaner filter for dirt and debris, if you find evidence of either dirt or debris you should change your air cleaner filter.

**Engine Air Cleaner Filter Removal**

1. With suitable tool fully loosen (six) fasteners on air cleaner filter.

2. Lift the air cleaner cover to access the air cleaner filter.

---

![Diagram of Air Cleaner Filter]

1 — Fasteners
2 — Air Hose Clamp
3 — Air Cleaner Cover
3. Remove the air cleaner filter element from the housing assembly.

**Open Air Cleaner Filter Assembly**
1 — Air Cleaner Cover 
2 — Air Cleaner Filter

**Engine Air Cleaner Filter Installation**

**NOTE:**
Inspect and clean the housing if dirt or debris is present before replacing the air filter element.

1. Install the air cleaner filter element into the housing assembly with the air cleaner filter inspection surface facing downward.

2. Install the air cleaner cover onto the housing assembly.

3. Tighten the fasteners (six) on the air cleaner filter assembly

**Engine Air Cleaner Filter Inspection and Replacement — Diesel Engine**

Inspect engine air cleaner filter for dirt and debris, if you find evidence of either dirt or debris you should change your air cleaner filter.

**Engine Air Cleaner Filter Removal**

1. Remove the screws from the air cleaner cover.

2. Lift the air cleaner cover to access the air cleaner filter.

3. Remove the air cleaner filter element from the housing assembly.

**Air Cleaner Filter**
1 — Air Cleaner Filter 
2 — Air Cleaner Filter Inspection Surface

**Engine Air Cleaner Filter Installation**

**NOTE:**
Inspect and clean the housing if dirt or debris is present before replacing the air filter element.

1. Install the air cleaner filter element into the housing assembly with the air cleaner filter inspection surface facing downward.

2. Install the air cleaner cover onto the housing assembly locating tabs.
3. Install screws to secure the air cleaner cover to the housing assembly.

Draining Fuel/Water Separator Filter

There are two fuel filter assemblies. One is located on the driver's side of the engine. The best access to this water drain valve is from under the hood. The second one is on the under body, located in front of the rear axle above the drive shaft on pick-up models. The best access to this water drain valve is from under the vehicle.

CAUTION!

- Do not drain the fuel/water separator filter when the engine is running.
- Diesel fuel will damage blacktop paving surfaces. Drain the filter into an appropriate container.

If water is detected in the water separator while the engine is running, or while the ignition switch is in the ON position, the “Water In Fuel Indicator Light” will illuminate and an audible chime will be heard five times. At this point you should stop the engine and drain the water from both of the filters.

CAUTION!

If the “Water In Fuel Indicator Light” remains on, DO NOT START the engine before you drain water from the fuel filters to avoid engine damage.

If the “Water In Fuel Indicator Light” comes on and a single chime is heard while you are driving, or with the ignition switch in the ON position, there may be a problem with your water separator wiring or sensor. See an authorized dealer for service.

Upon proper draining of the water from both fuel filters, the “Water In Fuel Indicator Light” will remain illuminated for approximately 10 seconds. If the water was drained while the engine was running, the “Water In Fuel Indicator Light” may remain on for approximately three minutes.

NOTE:
Care should be taken in disposing of used fluids from your vehicle. Used fluids, indiscriminately discarded, can present a problem to the environment. Contact an authorized dealer, service station, or government agency for advice on recycling programs and for where used fluids and filters can be properly disposed of in your area.

Drain the fuel/water separator filters when the “Water In Fuel Indicator Light” is ON. Within 10 minutes of vehicle shutdown, turn the engine mounted filter drain valve (located on the side of the filter assembly) counterclockwise a quarter turn, and turn the under body mounted filter drain valve (located on the bottom of the filter assembly) counterclockwise wise 1 full turn. Then turn the ignition switch to the ON position, and allow any accumulated water to drain. Leave the drain valve open until all water and contaminants have been removed. When clean fuel is visible, close the drain valve following these guidelines:

1. Rotate the drain clockwise to close until you feel resistance from the internal seal.
2. Continue turning the drain 1/2 of a turn to properly compress the seal.
NOTE:
Over-compression of the seal due to over-tightening of the drain will damage the seal, cause a leak, and require the entire sensor to be replaced.

3. Turn the ignition switch to OFF.

The sensor drain should not be over-tightened during normal service operations to avoid internal damage and future fuel leaks. The drain should be closed and secured without the use of tools.

If more than a couple ounces/milliliters of fuel have been drained, follow the directions for “Priming If The Engine Has Run Out Of Fuel.”

**Engine Mounted Fuel Filter Replacement**

NOTE:
- Using a fuel filter that does not meet the manufacturer's filtration and water separation requirements can severely impact fuel system life and reliability.
- The engine mounted filter housing is equipped with a No-Filter-No-Run (NFNR) feature. Engine will not run if:
  a. No filter is installed.
  b. Inferior/Non-approved filter is used. Use of OEM filter is required to ensure vehicle will run.

**CAUTION!**
- Diesel fuel will damage blacktop paving surfaces. Drain the filter into an appropriate container.
- Do not prefill the fuel filter when installing a new fuel filter. There is a possibility debris could be introduced into the fuel filter during this action. It is best to install the filter dry and allow the in-tank lift pump to prime the fuel system.

**NOTE:**
The engine mounted fuel filter is located on the driver’s side of the engine. The best access to this filter is from under the hood.

1. Ensure engine is turned off.
2. Place drain pan under the fuel filter drain hose.
3. Open the water drain valve quarter turn counterclockwise and completely drain fuel and water into the approved container.
4. Close the water drain valve.
5. Remove lid using a socket or strap wrench. Rotate counterclockwise for removal. Remove used o-ring and discard it.

6. Remove the used filter cartridge from the housing and dispose of according to your local regulations.

7. Wipe clean the sealing surfaces of the lid and housing.

8. Install new o-ring back into ring groove on the filter housing and lubricate with clean engine oil.

9. Remove new filter cartridge from plastic bag and install into housing.

**NOTE:**
Do not remove cartridge from bag until you reach this step in order to keep cartridge clean.

10. Push down on the cartridge to ensure it is properly seated. **Do not pre-fill the filter housing with fuel.**

11. Install lid onto housing and tighten to 22.5 ft lbs (30.5 N.m). Do not overtighten the lid.

12. Prime the engine using the procedure in “Priming If The Engine Has Run Out Of Fuel.” Then start the engine and confirm there are no leaks.

**Underbody Mounted Fuel Filter Replacement**

**NOTE:**
- Using a fuel filter that does not meet the manufacturer’s filtration and water separating requirements can severely impact fuel system life and reliability.
- The underbody mounted filter housing will cause the engine not to run if:
  - a. No filter is installed.
  - b. Inferior/Non-approved filter is used. Use of OEM filter is required to ensure vehicle will run.

**CAUTION!**
- Diesel fuel will damage blacktop paving surfaces. Drain the filter into an appropriate container.
- Do not prefill the fuel filter when installing a new fuel filter. There is a possibility debris could be introduced into the fuel filter during this action. It is best to install the filter dry and allow the in-tank lift pump to prime the fuel system.
NOTE:
The underbody mounted fuel filter is located in front of the rear axle above the drive shaft.

1. Ensure engine is turned off.
2. Place drain pan under the fuel filter drain hose.
3. Open the water drain valve one full turn counterclockwise and completely drain fuel and water into the approved container.
4. Close the water drain valve.
5. Remove lid using a socket or strap wrench. Rotate counterclockwise for removal. Remove used o-ring and discard it.
6. Remove the used filter cartridge from the housing and dispose of according to your local regulations.
7. Wipe clean the sealing surfaces of the lid and housing.
8. Install new o-ring back into ring groove on the filter housing and lubricate with clean engine oil.

NOTE:
Water In Fuel (WIF) sensor is re-usable. Service kit comes with new o-ring for filter canister and WIF sensor.

### Priming If The Engine Has Run Out Of Fuel

1. Add a substantial amount of fuel to the tank, approximately 2 to 5 gal (8L to 19L).
2. Press ignition switch twice without your foot on brake to put vehicle in RUN position. This will activate the in tank fuel pump for approximately 30 seconds. Repeat this process twice.
3. Start the engine using the “Normal Starting” procedure. Refer to “Starting The Engine” in “Starting and Operating” for further information.

**WARNING:**
Do not open the high pressure fuel system with the engine running. Engine operation causes high fuel pressure. High pressure fuel spray can cause serious injury or death.

**NOTE:**
The engine may run rough until the air is forced from all the fuel lines.

**CAUTION!**
Do not engage the starter motor for more than 15 seconds at a time. Allow two minutes between the cranking intervals.

**WARNING!**
Do not use alcohol or gasoline as a fuel blending agent. They can be unstable under certain conditions and be hazardous or explosive when mixed with diesel fuel.

**CAUTION!**
Due to lack of lubricants in alcohol or gasoline, the use of these fuels can cause damage to the fuel system.

**NOTE:**
- Use of biodiesel mixture in excess of 20% can negatively impact the fuel filter’s ability to separate water from the fuel, resulting in
high pressure fuel system corrosion or damage.

- In addition, commercially available fuel additives are not necessary for the proper operation of your diesel engine.
- For extreme cold conditions, "Mopar Premium Diesel Fuel Treatment" is recommended to assist with cold starting.

**Intervention Regeneration Strategy — Message Process Flow**

The Cummins diesel engine meets all Heavy Duty Diesel Engine Emissions Standards, resulting in one of the lowest emitting diesel engines ever produced.

To achieve these emissions standards, your vehicle is equipped with a state-of-the-art engine and exhaust system. The engine and exhaust aftertreatment system work together to achieve the Heavy Duty Diesel Engine Emissions Standards. These systems are seamlessly integrated into your vehicle and managed by the Cummins Powertrain Control Module (PCM). The PCM manages engine combustion to allow the exhaust system’s catalyst to trap and burn Particulate Matter (PM) pollutants, with no input or interaction on your part.

If the engine is allowed to idle or the truck is driven on low engine speed drive cycles for more than 2 hours, the system will automatically enter an emissions operating mode that will increase the engine idle speed to 900 RPM. While in this mode, which is designed to help maintain the diesel particulate filter, the engine idle speed will return to normal when the brake pedal is applied. A small change in engine tone or a slight change in engine performance while accelerating may also be noticeable at speeds below 20 mph (32 km/h). This operating mode may last for up to an hour of idle time, or around 20 minutes of driving time.

Additionally, your vehicle has the ability to alert you to additional maintenance required on your truck or engine.

Refer to “Instrument Cluster Display” in “Getting To Know Your Instrument Panel” for further information.

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**WARNING!**

A hot exhaust system can start a fire if you park over materials that can burn. Such materials might be grass or leaves coming into contact with your exhaust system. Do not park or operate your vehicle in areas where your exhaust system can contact anything that can burn.

**Air Conditioner Maintenance**

For best possible performance, your air conditioner should be checked and serviced by an authorized dealer at the start of each warm season. This service should include cleaning of the condenser fins and a performance test. Drive belt tension should also be checked at this time.

>>> CONDITION: {Market=Brazil or Market='Latin America'} >>>
Refrigerant Recovery and Recycling R-134a — If Equipped

R-134a Air Conditioning Refrigerant is a hydrofluorocarbon (HFC) that is an ozone-friendly substance. The manufacturer recommends that air conditioning service be performed by an authorized dealer or other service facilities using recovery and recycling equipment.

NOTE:
Use only manufacturer approved A/C system PAG compressor oil and refrigerants.

Refrigerant Recovery and Recycling R-1234yf — If Equipped

R-1234yf Air Conditioning Refrigerant is a hydrofluoroolefin (HFO) that is endorsed by the Environmental Protection Agency and is an ozone-friendly substance with a low global-warming potential. The manufacturer recommends that air conditioning service be performed by an authorized dealer using recovery and recycling equipment.

NOTE:
Use only manufacturer approved A/C system PAG compressor oil, and refrigerants.

Cabin Filter Replacement (A/C Air Filter)

Refer to the “Service and Warranty Handbook” for the proper maintenance intervals.
NOTE:
The cabin air filter is located in the fresh air inlet behind the glove compartment. Perform the following to replace the filter:

1. Open the glove compartment and remove all contents.

2. With the glove compartment door open, remove the glove compartment tension tether and tether clip by sliding the clip toward the face of the glove compartment door. Lift the clip out of the glove compartment door and release into the dash panel.

3. There are travel stops on both sides of the glove compartment. Push inward on the right side of the glove compartment travel stop to disengage the stop. Then pull the right side of the glove compartment outward (away from the hinge) to disengage the right side of the compartment from the hinge. Continue by removing the left side from the hinge by slightly lowering the compartment while pulling outward until it is completely disengaged from the hinge.

4. Remove the filter cover by pushing in on the finger tabs on each end of the filter cover.
5. Remove the cabin air filter by pulling it straight out of the housing.

6. Install the cabin air filter with the arrow on the filter pointing toward the floor. When installing the filter cover, press until you hear an audible click.

7. Reinstall the glove compartment on the hinges.

8. Pull the tension tether outward and reinstall the glove compartment past the travel stops by pushing in on the glove compartment sides.

9. Reattach the glove compartment tension tether by inserting the tether clip in the glove compartment and sliding the clip away from the face of the glove compartment door.

### Accessory Drive Belt Inspection

**WARNING!**

- Do not attempt to inspect an accessory drive belt with vehicle running.
- When working near the radiator cooling fan, disconnect the fan motor lead. The fan is temperature controlled and can start at any time regardless of ignition mode. You could be injured by the moving fan blades.
- You can be badly injured working on or around a motor vehicle. Only do service work for which you have the knowledge and the proper equipment. If you have any doubt about your ability to perform a service job, take your vehicle to a competent mechanic.

**NOTE:**

When inspecting the accessory drive belt, small cracks that run across the ribbed surface of the belt from rib to rib, are considered normal. These are not a reason to replace the belt. However, cracks running long a rib (not across) are not normal. Any belt with cracks running
along a rib must be replaced. Also have the belt replaced if it has excessive wear, frayed cords, or severe glazing.

>>> CONDITION: {((Market=Brazil or Market='Latin America'))} >>>

Accessory Belt (Serpentine Belt)

Conditions that would require replacement:

- Rib chunking (one or more ribs has separated from belt body)
- Rib or belt wear
- Longitudinal belt cracking (cracks between two ribs)
- Belt slips
- "Groove jumping" (belt does not maintain correct position on pulley)
- Belt broken (note: identify and correct problem before new belt is installed)
- Noise (objectionable squeal, squeak, or rumble is heard or felt while drive belt is in operation)

<<< CONDITION END <<<

Body Lubrication

>>> CONDITION: {Market=Brazil or Market='Latin America'} >>>

Locks and all body pivot points, including such items as seat tracks, door hinge pivot points and rollers, liftgate, tailgate, decklid, sliding doors and hood hinges, should be lubricated periodically with a lithium based grease, such as Mopar Spray White Lube to ensure quiet, easy operation and to protect against rust and wear. Prior to the application of any lubricant, the parts concerned should be wiped clean to remove dust and grit; after lubricating, excess oil and grease should be removed. Particular attention should also be given to hood latching components to ensure proper function. When performing other underhood services, the hood latch release mechanism, and safety catch should be cleaned and lubricated.

<<< CONDITION END <<<

Belt replacement on some models requires the use of special tools, we recommend having your vehicle serviced at an authorized dealer.

<<< CONDITION END <<<
The external lock cylinders should be lubricated twice a year, preferably in the Autumn and Spring. Apply a small amount of a high quality lubricant, such as Mopar Lock Cylinder Lubricant directly into the lock cylinder.

Windshield Wiper Blades
Clean the rubber edges of the wiper blades and the windshield periodically with a sponge or soft cloth and a mild nonabrasive cleaner. This will remove accumulations of salt or road film. Operation of the wipers on dry glass for long periods may cause deterioration of the wiper blades. Always use washer fluid when using the wipers to remove salt or dirt from a dry windshield. Avoid using the wiper blades to remove frost or ice from the windshield. Keep the blade rubber out of contact with petroleum products such as engine oil, gasoline, etc.

NOTE:
Life expectancy of wiper blades varies depending on geographical area and frequency of use. Poor performance of blades may be present with chattering, marks, water lines or wet spots. If any of these conditions are present, clean the wiper blades or replace as necessary.

The wiper blades and wiper arms should be inspected periodically, not just when wiper performance problems are experienced. This inspection should include the following points:
- Wear or uneven edges
- Foreign material
- Hardening or cracking
- Deformation or fatigue

If a wiper blade or wiper arm is damaged, replace the affected wiper arm or blade with a new unit. Do not attempt to repair a wiper arm or blade that is damaged.

Wiper Blade Removal/Installation
1. Lift the wiper arm to raise the wiper blade off of the glass, until the wiper arm is in the full up position.
2. To disengage the wiper blade from the wiper arm, flip up the locking tab.
4. Slide the wiper blade down towards the base of the wiper arm.

5. With the wiper blade disengaged, remove the wiper blade from the wiper arm by holding the wiper arm with one hand and separating the wiper blade from the wiper arm with the other hand (move the wiper blade down toward the base of the wiper arm and away from the J hook in the end of the wiper arm).

6. Gently lower the wiper arm onto the glass.

**Installing The Front Wipers**

1. Lift the wiper arm off of the glass, until the wiper arm is in the full up position.

2. Position the wiper blade under the hook on the tip of the wiper arm with the wiper locking tab open.

3. Insert the receiver bracket on the wiper assembly into the hook on the tip of the arm through the opening in the wiper blade under the locking tab.

4. Slide the wiper blade up into the hook on the wiper arm until it is latched (engagement will be accompanied by an audible click). Fold down the latch release tab and snap it into its locked position.

5. Gently lower the wiper blade onto the glass.

**Exhaust System**

The best protection against carbon monoxide entry into the vehicle body is a properly maintained engine exhaust system. If you notice a change in the sound of the exhaust system; or if the exhaust fumes can be detected inside the vehicle; or when the underside or rear of the vehicle is damaged; have an authorized technician inspect the complete exhaust system and adjacent body areas for broken, damaged, deteriorated, or mispositioned parts. Open seams or loose connections could permit exhaust fumes to seep into the passenger compartment. In addition, have the exhaust system inspected each time the vehicle is raised for lubrication or oil change. Replace as required.
Under normal operating conditions, the catalytic converter will not require maintenance. However, it is important to keep the engine properly tuned to ensure proper catalyst operation and prevent possible catalyst damage.

NOTE:
Intentional tampering with emissions control systems can result in civil penalties being assessed against you.

In unusual situations involving grossly malfunctioning engine operation, a scorching odor may suggest severe and abnormal catalyst overheating. If this occurs, stop the vehicle, turn off the engine and allow it to cool. Service, including a tune-up to manufacturer’s specifications, should be obtained immediately.

To minimize the possibility of catalytic converter damage:

- Do not interrupt the ignition when the transmission is in gear and the vehicle is in motion.
- Do not try to start the vehicle by pushing or towing the vehicle.
- Do not idle the engine with any ignition components disconnected or removed, such as when diagnostic testing, or for prolonged periods during very rough idle or malfunctioning operating conditions.
Cooling System

**WARNING!**

- You or others can be badly burned by hot engine coolant (antifreeze) or steam from your radiator. If you see or hear steam coming from under the hood, do not open the hood until the radiator has had time to cool. Never open a cooling system pressure cap when the radiator or coolant bottle is hot.
- Keep hands, tools, clothing, and jewelry away from the radiator cooling fan when the hood is raised. The fan starts automatically and may start at any time, whether the engine is running or not.

>>> CONDITION: {(Market=Brazil or Market='Latin America')} >>>

- When working near the radiator cooling fan, disconnect the fan motor lead or turn the ignition to the OFF mode. The fan is temperature controlled and can start at any time the ignition is in the ON mode.

<<< CONDITION END <<<

### Engine Coolant Checks

Check the engine coolant (antifreeze) protection every 12 months (before the onset of freezing weather, where applicable). If the engine coolant (antifreeze) is dirty or rusty in appearance, the system should be drained, flushed and refilled with fresh coolant. Check the front of the A/C condenser (if equipped) or radiator for any accumulation of bugs, leaves, etc. If dirty, clean by gently spraying water from a garden hose vertically down the face of the A/C condenser (if equipped) or the back of the radiator core.

Check the engine cooling system hoses for brittle rubber, cracking, tears, cuts and tightness of the connection at the coolant recovery bottle and radiator. Inspect the entire system for leaks.

**DO NOT REMOVE THE COOLANT PRESSURE CAP WHEN THE COOLING SYSTEM IS HOT.**

### Cooling System — Drain, Flush And Refill

**NOTE:**

- Some vehicles require special tools to add coolant properly. Failure to fill these systems properly could lead to severe internal engine damage. If any coolant is needed to be added to the system please contact an authorized dealer.

- If the engine coolant (antifreeze) is dirty or contains visible sediment, have an authorized dealer clean and flush with OAT coolant (antifreeze) (conforming to MS.90032).

>>> CONDITION: {Market=Brazil or Market='Latin America'} >>>

Refer to the “Maintenance Plan” in this section for the proper maintenance intervals.

<<< CONDITION END <<<

### Selection Of Coolant

Refer to “Fluids And Lubricants” in “Technical Specifications” for further information.

**NOTE:**

- Mixing of engine coolant (antifreeze) other than specified Organic Additive Technology (OAT) engine coolant (antifreeze), may result in engine damage and may decrease corrosion protection. Organic Additive Technology (OAT) engine coolant is different and should not be mixed with Hybrid Organic Additive Technology (HOAT) engine coolant (antifreeze) or any “globally compatible” coolant (antifreeze). If a non-OAT engine coolant...
(antifreeze) is introduced into the cooling system in an emergency, the cooling system will need to be drained, flushed, and refilled with fresh OAT coolant (conforming to MS.90032), by an authorized dealer as soon as possible.

- Do not use water alone or alcohol-based engine coolant (antifreeze) products. Do not use additional rust inhibitors or antirust products, as they may not be compatible with the radiator engine coolant and may plug the radiator.

- This vehicle has not been designed for use with propylene glycol-based engine coolant (antifreeze). Use of propylene glycol-based engine coolant (antifreeze) is not recommended.

- Some vehicles require special tools to add coolant properly. Failure to fill these systems properly could lead to severe internal engine damage. If any coolant is needed to be added to the system please contact an authorized dealer.

Adding Coolant

Your vehicle has been built with an improved engine coolant (OAT coolant conforming to MS.90032) that allows extended maintenance intervals. This engine coolant (antifreeze) can be used up to 10 years or 150,000 miles (240,000 km) before replacement. To prevent reducing this extended maintenance period, it is important that you use the same engine coolant (OAT coolant conforming to MS.90032) throughout the life of your vehicle.

Please review these recommendations for using Organic Additive Technology (OAT) engine coolant (antifreeze) that meets the requirements of FCA Material Standard MS.90032. When adding engine coolant (antifreeze):

>>> CONDITION: {(Market=Brazil or Market='Latin America')} >>>

- We recommend using Mopar Antifreeze/Coolant 10 Year/150,000 Mile (240,000 km) Formula OAT (Organic Additive Technology) that meets the requirements of FCA Material Standard MS.90032.

- Mix a minimum solution of 50% OAT engine coolant that meets the requirements of FCA Material Standard MS.90032 and distilled water. Use higher concentrations (not to exceed 70%) if temperatures below −34 °F (−37 °C) are anticipated. Please contact an authorized dealer for assistance.

- Use only high purity water such as distilled or deionized water when mixing the water/engine coolant (antifreeze) solution. The use of lower quality water will reduce the amount of corrosion protection in the engine cooling system.

<<< CONDITION END <<<

NOTE:

- It is the owner's responsibility to maintain the proper level of protection against freezing according to the temperatures occurring in the area where the vehicle is operated.

- Some vehicles require special tools to add coolant properly. Failure to fill these systems properly could lead to severe internal engine damage. If any coolant is needed to be added to the system, please contact a local authorized dealer.

- Mixing engine coolant (antifreeze) types is not recommended and can result in cooling system damage. If HOAT and OAT coolant are mixed in an emergency, have a authorized dealer drain, flush, and refill with OAT coolant.
(conforming to MS.90032) as soon as possible.

**Cooling System Pressure Cap**

The cap must be fully tightened to prevent loss of engine coolant (antifreeze), and to ensure that engine coolant (antifreeze) will return to the radiator from the coolant expansion bottle/recovery tank if so equipped.

The cap should be inspected and cleaned if there is any accumulation of foreign material on the sealing surfaces.

### Disposal Of Used Coolant

Used ethylene glycol-based coolant (antifreeze) is a regulated substance requiring proper disposal. Check with your local authorities to determine the disposal rules for your community. To prevent ingestion by animals or children, do not store ethylene glycol-based coolant in open containers or allow it to remain in puddles on the ground. If ingested by a child or pet, seek emergency assistance immediately. Clean up any ground spills immediately.

### Points To Remember

- Do not open hot engine cooling system. Never add engine coolant (antifreeze) when the engine is overheated. Do not loosen or remove the cap to cool an overheated engine. Heat causes pressure to build up in the cooling system. To prevent scalding or injury, do not remove the pressure cap while the system is hot or under pressure.
- Do not use a pressure cap other than the one specified for your vehicle. Personal injury or engine damage may result.

**WARNING!**

- Do not overfill the coolant expansion bottle.
- Check the coolant freeze point in the radiator and in the coolant expansion bottle. If engine coolant (antifreeze) needs to be added, the contents of the coolant expansion bottle must also be protected against freezing.
- If frequent engine coolant (antifreeze) additions are required, the cooling system should be pressure tested for leaks.
- Maintain engine coolant (antifreeze) concentration at a minimum of 50% OAT coolant (conforming to MS.90032) and distilled water for proper corrosion protection of your engine which contains aluminum components.
- Make sure that the coolant expansion bottle overflow hoses are not kinked or obstructed.
- Keep the front of the radiator clean. If your vehicle is equipped with air conditioning, keep the front of the condenser clean.
- Do not change the thermostat for Summer or Winter operation. If replacement is ever necessary, install ONLY the correct type ther-
mostat. Other designs may result in unsatisfactory engine coolant (antifreeze) performance, poor gas mileage, and increased emissions.

**Charge Air Cooler — Inter-Cooler**

The charge air cooler is positioned below the radiator and the air conditioner condenser. Air enters the engine through the air cleaner and passes through the turbocharger, where it is pressurized. This pressurized air rapidly reaches high temperature. The air is then directed through a hose to the charge air cooler and through another hose to the intake manifold of the engine. The air entering the engine has been cooled by about 50° to 100°F (10° to 38°C). This cooling process enables more efficient burning of fuel resulting in fewer emissions.

To guarantee optimum performance of the system, keep the surfaces of the charge air cooler, condenser and radiator clean and free of debris. Periodically check the hoses leading to and from the charge air cooler for cracks or loose clamps resulting in loss of pressure and reduced engine performance.

**Brake System**

>>> CONDITION: ((Market=Brazil or Market='Latin America')) >>>

In order to ensure brake system performance, all brake system components should be inspected periodically. Refer to the “Maintenance Plan” in this section for the proper maintenance intervals.

<<< CONDITION END <<<

**WARNING!**

Riding the brakes can lead to brake failure and possibly a collision. Driving with your foot resting or riding on the brake pedal can result in abnormally high brake temperatures, excessive lining wear, and possible brake damage. You would not have your full braking capacity in an emergency.

**Fluid Level Check — Brake Master Cylinder**

The fluid level of the master cylinder should be checked when performing under the hood service or immediately if the brake system warning lamp indicates system failure.

If necessary, add fluid to bring level within the designated marks on the side of the reservoir of the brake master cylinder. Be sure to clean the top of the master cylinder area before removing cap.

With disc brakes the fluid level can be expected to fall as the brake linings wear. However, an unexpected drop in fluid level may be caused by a leak and a system check should be conducted.

Refer to “Fluids And Lubricants” in “Technical Specifications” for further information.
Automatic Transmission

Selection Of Lubricant

It is important to use the proper transmission fluid to ensure optimum transmission performance and life. Use only the manufacturer’s specified transmission fluid. Refer to “Fluids And Lubricants” in “Technical Specifications”. It is important to maintain the transmission fluid at the correct level using the recommended fluid. No chemical flushes should be used in any transmission; only the approved lubricant should be used.

Special Additives

The manufacturer strongly recommends against using any special additives in the transmission. Automatic Transmission Fluid (ATF) is an engineered product and its performance may be impaired by supplemental additives. Therefore, do not add any fluid additives to the transmission. Avoid using transmission sealers as they may adversely affect seals.

WARNING! (Continued)

- To avoid contamination from foreign matter or moisture, use only new brake fluid or fluid that has been in a tightly closed container. Keep the master cylinder reservoir cap secured at all times. Brake fluid in a open container absorbs moisture from the air resulting in a lower boiling point. This may cause it to boil unexpectedly during hard or prolonged braking, resulting in sudden brake failure. This could result in an collision.

- Overfilling the brake fluid reservoir can result in spilling brake fluid on hot engine parts, causing the brake fluid to catch fire. Brake fluid can also damage painted and vinyl surfaces, care should be taken to avoid its contact with these surfaces.

- Do not allow petroleum based fluid to contaminate the brake fluid. Brake seal components could be damaged, causing partial or complete brake failure. This could result in a collision.

CAUTION!

Using a transmission fluid other than the manufacturer’s recommended fluid may cause deterioration in transmission shift quality and/or torque converter shudder. Refer to “Fluids, Lubricants, And Genuine Parts” in this section for fluid specifications.

Fluid Level Check — Eight-Speed Transmission

The fluid level is preset at the factory and does not require adjustment under normal operating conditions. Routine fluid level checks are not required, therefore the transmission has no dipstick. An authorized dealer can check your transmission fluid level using special service tools.

If you notice fluid leakage or transmission malfunction, visit an authorized dealer immediately to have the transmission fluid level checked. Operating the vehicle with an improper fluid level can cause severe transmission damage.
Fluid Level Check — Six-Speed Transmission
It is best to check the fluid level when the transmission is at normal operating temperature (170-180°F / 77-82°C for 68RFE transmission, or 158-176°F / 70-80°C for AS69RC transmission). This normally occurs after at least 15 miles (25 km) of driving. At normal operating temperature the fluid cannot be held comfortably between the fingertips. You can read the transmission sump temperature in the instrument cluster display (refer to “Instrument Cluster Display” in “Getting To Know Your Instrument Panel” for further information).

Use the following procedure to check the transmission fluid level properly:

1. Monitor the transmission temperature using the instrument cluster display, and operate the vehicle as required to reach the normal operating temperature. If the transmission is not functioning properly, or the vehicle cannot be driven, see the NOTE and CAUTION below about checking the fluid level at colder temperatures.

2. Park the vehicle on level ground.

3. Run the engine at normal idle speed for at least 60 seconds, and leave the engine running for the rest of this procedure.

4. Fully apply the parking brake and press the brake pedal.

5. Place the gear selector momentarily into each gear position (allowing time for the transmission to fully engage in each position), ending with the transmission in PARK.

6. Remove the dipstick, wipe it clean and reinsert it until seated.

7. Remove the dipstick again and note the fluid level on both sides. The fluid level reading is only valid if there is a solid coating of oil on both sides of the dipstick. Note that the holes in the dipstick will be full of fluid if the actual level is at or above the hole. The fluid level should be between the “HOT” (upper) reference holes on the dipstick at normal operating temperature. If the fluid level is low, add fluid through the dipstick tube to bring it to the proper level. **Do not overfill.** Use ONLY the specified fluid (see "Fluids And Lubricants" for fluid specifications). After adding any quantity of oil through the dipstick tube, wait a minimum of two minutes for the oil to fully drain into the transmission before rechecking the fluid level.

NOTE:
If it is necessary to check the transmission below the operating temperature, the fluid level should be between the two “COLD” (lower) holes on the dipstick with the fluid at 60-70°F / 16-21°C for 68RFE transmission, or 68-86°F / 20-30°C for AS69RC transmission. Only use the COLD region of the dipstick as a rough reference when setting the fluid level after a transmission service or fluid change. Re-check the
fluid level, and adjust as required, once the transmission reaches normal operating temperature.

8. Reinsert the dipstick. Check for leaks. Release the parking brake.

NOTE:
To prevent dirt and water from entering the transmission after checking or replenishing fluid, make sure that the dipstick cap is properly reseated. It is normal for the dipstick cap to spring back slightly from its fully seated position, as long as its seal remains engaged in the dipstick tube.

Fluid And Filter Changes — Eight-Speed Transmission
Under normal operating conditions, the fluid installed at the factory will provide satisfactory lubrication for the life of the vehicle. Routine fluid and filter changes are not required. However, change the fluid and filter if the fluid becomes contaminated (with water, etc.), or if the transmission is disassembled for any reason.

Fluid And Filter Changes — Six-Speed Transmission
Refer to the “Maintenance Plan” for the proper maintenance intervals. In addition, change the fluid and filter(s) if the fluid becomes contaminated (with water, etc.), or if the transmission is disassembled for any reason.

Rear Axle And 4x4 Front Driving Axle Fluid Level
For normal service, periodic fluid level checks are not required. When the vehicle is serviced for other reasons the exterior surfaces of the axle assembly should be inspected. If gear oil leakage is suspected inspect the fluid level. Refer to “Fluids And Lubricants” in “Technical Specifications” for further information. This inspection should be made with the vehicle in a level position.
For all 2500 Model axles, the fluid level should be 1/4 in ± 1/4 in (6.4 mm ± 6.4 mm) below the fill hole on the 9.25 in front, and 11.5 in rear axle.

Lubricant Selection
Refer to “Fluids And Lubricants” in “Technical Specification” for further information.

NOTE:
The presence of water in the gear lubricant will result in corrosion and possible failure of differential components. Operation of the vehicle in water, as may be encountered in some off-highway types of service, will require draining and refilling the axle to avoid damage.

Limited-Slip Differentials DO REQUIRE limited slip oil additive (friction modifiers).

NOTE:
Slight noise and mild shuddering may be evident while turning a vehicle with limited slip
differential on concrete or dry pavement. These conditions should be considered normal operation of the limited slip differential.

**Drain And Refill**

>>> CONDITION: {Market=Brazil or Market='Latin America'} >>>

Refer to the “Maintenance Plan” for the proper maintenance intervals.

<<< CONDITION END <<<

**Transfer Case**

**Selection Of Lubricant**

Use only the manufacturer's recommended fluid. Refer to “ Fluids And Lubricants” in “Technical Specifications” for further information.

**Fluid Level Check**

This fluid level can be checked by removing the filler plug. The fluid level should be to the bottom edge of the filler plug hole with the vehicle in a level position.

**Drain And Refill**

>>> CONDITION: {Market=Brazil or Market='Latin America'} >>>

Refer to the “Maintenance Plan” in this section for the proper maintenance intervals.

<<< CONDITION END <<<

**HOISTING**

A conventional floor jack may be used at the jacking locations. Refer to the graphics that show jacking locations in “Jacking And Tire Changing” in “In Case Of Emergency” for further information. However, a floor jack or frame hoist must never be used on any other parts of the underbody.

**TIRES**

**Tires — General Information**

**Tire Pressure**

Proper tire inflation pressure is essential to the safe and satisfactory operation of your vehicle. Four primary areas are affected by improper tire pressure:

- Safety
- Fuel Economy
- Tread Wear
- Ride Comfort and Vehicle Stability

**Safety**

**WARNING!**

- Improperly inflated tires are dangerous and can cause collisions.
- Underinflation increases tire flexing and can result in overheating and tire failure.
- Overinflation reduces a tire’s ability to cushion shock. Objects on the road and chuckholes can cause damage that result in tire failure.
Both underinflation and over-inflation affect the stability of the vehicle and can produce a feeling of sluggish response or over responsiveness in the steering.

**NOTE:**

- Unequal tire pressures from side to side may cause erratic and unpredictable steering response.
- Unequal tire pressure from side to side may cause the vehicle to drift left or right.

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### Fuel Economy

Underinflated tires will increase tire rolling resistance resulting in higher fuel consumption.

### Tread Wear

Improper cold tire inflation pressures can cause abnormal wear patterns and reduced tread life, resulting in the need for earlier tire replacement.

### Ride Comfort and Vehicle Stability

Proper tire inflation contributes to a comfortable ride. Over-inflation produces a jarring and uncomfortable ride.

### Tire Inflation Pressures

The proper cold tire inflation pressure is listed on the driver's side B-Pillar or rear edge of the driver's side door.

At least once a month:

- Check and adjust tire pressure with a good quality pocket-type pressure gauge. Do not make a visual judgment when determining proper inflation. Tires may look properly inflated even when they are under-inflated.
- Inspect tires for signs of tire wear or visible damage.

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### WARNING! (Continued)

- Overinflated or underinflated tires can affect vehicle handling and can fail suddenly, resulting in loss of vehicle control.
- Unequal tire pressures can cause steering problems. You could lose control of your vehicle.
- Unequal tire pressures from one side of the vehicle to the other can cause the vehicle to drift to the right or left.
- Always drive with each tire inflated to the recommended cold tire inflation pressure.

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### CAUTION!

After inspecting or adjusting the tire pressure, always reinstall the valve stem cap. This will prevent moisture and dirt from entering the valve stem, which could damage the valve stem.

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Inflation pressures specified on the placard are always “cold tire inflation pressure”. Cold tire inflation pressure is defined as the tire pressure after the vehicle has not been driven for at least three hours, or driven less than 1 mile (1.6 km) after sitting for a minimum of three hours. The cold tire inflation pressure must not exceed the maximum inflation pressure molded into the tire sidewall.

Check tire pressures more often if subject to a wide range of outdoor temperatures, as tire pressures vary with temperature changes.

Tire pressures change by approximately 1 psi (7 kPa) per 12 °F (7 °C) of air temperature change. Keep this in mind when checking tire pressure inside a garage, especially in the Winter.

Example: If garage temperature = 68 °F (20 °C) and the outside temperature = 32 °F (0 °C) then the cold tire inflation pressure should be increased by 3 psi (21 kPa), which equals 1 psi
(7 kPa) for every 12°F (7 °C) for this outside temperature condition.

Tire pressure may increase from 2 to 6 psi (13 to 40 kPa) during operation. DO NOT reduce this normal pressure build up or your tire pressure will be too low.

**Tire Pressures For High Speed Operation**

The manufacturer advocates driving at safe speeds and within posted speed limits. Where speed limits or conditions are such that the vehicle can be driven at high speeds, maintaining correct tire inflation pressure is very important. Increased tire pressure and reduced vehicle loading may be required for high-speed vehicle operation. Refer to an authorized tire dealer or original equipment vehicle dealer for recommended safe operating speeds, loading and cold tire inflation pressures.

### WARNING!

High speed driving with your vehicle under maximum load is dangerous. The added strain on your tires could cause them to fail. You could have a serious collision. Do not drive a vehicle loaded to the maximum capacity at continuous speeds above 75 mph (120 km/h).

### Radial Ply Tires

- **WARNING!**

  Combining radial ply tires with other types of tires on your vehicle will cause your vehicle to handle poorly. The instability could cause a collision. Always use radial ply tires in sets of four. Never combine them with other types of tires.

**Tire Repair**

If your tire becomes damaged, it may be repaired if it meets the following criteria:

- The tire has not been driven on when flat.
- The damage is only on the tread section of your tire (sidewall damage is not repairable).
- The puncture is no greater than a ¼ of an inch (6 mm).

Consult an authorized tire dealer for tire repairs and additional information.

Damaged Run Flat tires, or Run Flat tires that have experienced a loss of pressure should be replaced immediately with another Run Flat tire of identical size and service description (Load Index and Speed Symbol). Replace the tire pressure sensor as well as it is not designed to be reused.

### Run Flat Tires — If Equipped

Run Flat tires allow you the capability to drive 50 miles (80 km) at 50 mph (80 km/h) after a rapid loss of inflation pressure. This rapid loss of inflation is referred to as the Run Flat mode. A Run Flat mode occurs when the tire inflation pressure is of/or below 14 psi (96 kPa). Once a Run Flat tire reaches the run flat mode it has...
limited driving capabilities and needs to be replaced immediately. A Run Flat tire is not repairable. When a run flat tire is changed after driving with underinflated tire condition, please replace the TPM sensor as it is not designed to be reused when driven under run flat mode 14 psi (96 kPa) condition.

NOTE:
TPM Sensor must be replaced after driving the vehicle on a flat tire condition.

It is not recommended driving a vehicle loaded at full capacity or to tow a trailer while a tire is in the run flat mode.

>>> CONDITION: {(Market=Brazil or Market='Latin America')} >>>
See the tire pressure monitoring section for more information.

<<< CONDITION END <<<

Tire Spinning
When stuck in mud, sand, snow, or ice conditions, do not spin your vehicle's wheels above 30 mph (48 km/h) or for longer than 30 seconds continuously without stopping.

Refer to “Freeing A Stuck Vehicle” in “In Case Of Emergency” for further information.

<table>
<thead>
<tr>
<th>WARNING!</th>
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<tbody>
<tr>
<td>Fast spinning tires can be dangerous. Forces generated by excessive wheel speeds may cause tire damage or failure. A tire could explode and injure someone. Do not spin your vehicle's wheels faster than 30 mph (48 km/h) for more than 30 seconds continuously when you are stuck, and do not let anyone near a spinning wheel, no matter what the speed.</td>
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</table>

Tread Wear Indicators
Tread wear indicators are in the original equipment tires to help you in determining when your tires should be replaced.

1 — Worn Tire
2 — New Tire

Tire Tread

These indicators are molded into the bottom of the tread grooves. They will appear as bands when the tread depth becomes a 1/16 of an inch (1.6 mm). When the tread is worn to the tread wear indicators, the tire should be replaced.

Refer to “Replacement Tires” in this section for further information.
The service life of a tire is dependent upon varying factors including, but not limited to:

- Driving style
- Tire pressure - Improper cold tire inflation pressures can cause uneven wear patterns to develop across the tire tread. These abnormal wear patterns will reduce tread life, resulting in the need for earlier tire replacement
- Distance driven

>>> CONDITION: {Market=Brazil or Market='Latin America'} >>>

Performance tires, tires with a speed rating of V or higher, and Summer tires typically have a reduced tread life. Rotation of these tires per the vehicle scheduled maintenance is highly recommended

<<< CONDITION END <<<

NOTE:
Wheel Valve Stem must be replaced as well when installing new tires due to wear and tear in existing tires.

Keep dismounted tires in a cool, dry place with as little exposure to light as possible. Protect tires from contact with oil, grease, and gasoline.

Replacement Tires
The tires on your new vehicle provide a balance of many characteristics. They should be inspected regularly for wear and correct cold tire inflation pressures. The manufacturer strongly recommends that you use tires equivalent to the originals in size, quality and performance when replacement is needed. Refer to the paragraph on “Tread Wear Indicators” in this section. Refer to the Tire and Loading Information placard or the Vehicle Certification Label for the size designation of your tire. The Load Index and Speed Symbol for your tire will be found on the original equipment tire sidewall.

It is recommended to replace the two front tires or two rear tires as a pair. Replacing just one tire can seriously affect your vehicle’s handling. If you ever replace a wheel, make sure that the wheel’s specifications match those of the original wheels.

It is recommended you contact an authorized tire dealer or original equipment dealer with any questions you may have on tire specifications or capability. Failure to use equivalent replacement tires may adversely affect the safety, handling, and ride of your vehicle.

WARNING!
Tires and the spare tire should be replaced after six years, regardless of the remaining tread. Failure to follow this warning can result in sudden tire failure. You could lose control and have a collision resulting in serious injury or death.
Tire Types

All Season Tires — If Equipped
All Season tires provide traction for all seasons (Spring, Summer, Autumn, and Winter). Traction levels may vary between different all season tires. All season tires can be identified by the M+S, M&S, M/S or MS designation on the tire sidewall. Use all season tires only in sets of four; failure to do so may adversely affect the safety and handling of your vehicle.

Summer Or Three Season Tires — If Equipped
Summer tires provide traction in both wet and dry conditions, and are not intended to be driven in snow or on ice. If your vehicle is equipped with Summer tires, be aware these tires are not designed for Winter or cold driving conditions. Install Winter tires on your vehicle when ambient temperatures are less than 40°F (5°C) or if roads are covered with ice or snow.

Snow Tires
Some areas of the country require the use of snow tires during the Winter. Snow tires can be identified by a “mountain/snowflake” symbol on the tire sidewall. If you need snow tires, select tires equivalent in size and type to the original equipment tires. Use snow tires only in sets of four; failure to do so may adversely affect the safety and handling of your vehicle.

WARNING!
- Do not use a tire, wheel size, load rating, or speed rating other than that specified for your vehicle. Some combinations of unapproved tires and wheels may change suspension dimensions and performance characteristics, resulting in changes to steering, handling, and braking of your vehicle. This can cause unpredictable handling and stress to steering and suspension components. You could lose control and have a collision resulting in serious injury or death. Use only the tire and wheel sizes with load ratings approved for your vehicle.
- Never use a tire with a smaller load index or capacity, other than what was originally equipped on your vehicle. Using a tire with a smaller load index could result in tire overloading and failure. You could lose control and have a collision.
- Failure to equip your vehicle with tires having adequate speed capability can result in sudden tire failure and loss of vehicle control.

CAUTION!
Replacing original tires with tires of a different size may result in false speedometer and odometer readings.

For more information, contact an authorized dealer.
Summer tires do not contain the all season designation or mountain/snowflake symbol on the tire sidewall. Use Summer tires only in sets of four; failure to do so may adversely affect the safety and handling of your vehicle.

WARNING!
- Do not use Summer tires in snow/ice conditions. You could lose vehicle control, resulting in severe injury or death. Driving too fast for conditions also creates the possibility of loss of vehicle control.
Snow tires generally have lower speed ratings than what was originally equipped with your vehicle and should not be operated at sustained speeds over 75 mph (120 km/h). For speeds above 75 mph (120 km/h) refer to original equipment or an authorized tire dealer for recommended safe operating speeds, loading and cold tire inflation pressures. While studded tires improve performance on ice, skid and traction capability on wet or dry surfaces may be poorer than that of non-studded tires. Some states prohibit studded tires; therefore, local laws should be checked before using these tire types.

**Spare Tires — If Equipped**

**NOTE:**
For vehicles equipped with Tire Service Kit instead of a spare tire, please refer to “Tire Service Kit” in “In Case Of Emergency” for further information.

<table>
<thead>
<tr>
<th><strong>CAUTION!</strong></th>
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<tr>
<td>Because of the reduced ground clearance, do not take your vehicle through an automatic car wash with a compact or limited use temporary spare installed. Damage to the vehicle may result.</td>
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</table>

Refer to the “Towing Requirements - Tires” in “Starting And Operating” for restrictions when towing with a spare tire designated for temporary emergency use.

**Spare Tire Matching Original Equipped Tire And Wheel — If Equipped**
Your vehicle may be equipped with a spare tire and wheel equivalent in look and function to the original equipment tire and wheel found on the front or rear axle of your vehicle. This spare tire may be used in the tire rotation for your vehicle. If your vehicle has this option, refer to an authorized tire dealer for the recommended tire rotation pattern.

**Compact Spare Tire — If Equipped**
The compact spare is for temporary emergency use only. You can identify if your vehicle is equipped with a compact spare by looking at the spare tire description on the Tire and Loading Information Placard located on the driver’s side door opening or on the sidewall of the tire. Compact spare tire descriptions begin with the letter “T” or “S” preceding the size designation. Example: T145/80D18 103M.

**T, S = Temporary Spare Tire**
Since this tire has limited tread life, the original equipment tire should be repaired (or replaced) and reinstalled on your vehicle at the first opportunity.

Do not install a wheel cover or attempt to mount a conventional tire on the compact spare wheel, since the wheel is designed specifically for the compact spare tire. Do not install more than one compact spare tire and wheel on the vehicle at any given time.

**CAUTION!**
Because of the reduced ground clearance, do not take your vehicle through an automatic car wash with a compact or limited use temporary spare installed. Damage to the vehicle may result.

Refer to the “Towing Requirements - Tires” in “Starting And Operating” for restrictions when towing with a spare tire designated for temporary emergency use.

**Spare Tire Matching Original Equipped Tire And Wheel — If Equipped**
Your vehicle may be equipped with a spare tire and wheel equivalent in look and function to the original equipment tire and wheel found on the front or rear axle of your vehicle. This spare tire may be used in the tire rotation for your vehicle. If your vehicle has this option, refer to an authorized tire dealer for the recommended tire rotation pattern.

**Compact Spare Tire — If Equipped**
The compact spare is for temporary emergency use only. You can identify if your vehicle is equipped with a compact spare by looking at the spare tire description on the Tire and Loading Information Placard located on the driver’s side door opening or on the sidewall of the tire. Compact spare tire descriptions begin with the letter “T” or “S” preceding the size designation. Example: T145/80D18 103M.

**T, S = Temporary Spare Tire**
Since this tire has limited tread life, the original equipment tire should be repaired (or replaced) and reinstalled on your vehicle at the first opportunity.

Do not install a wheel cover or attempt to mount a conventional tire on the compact spare wheel, since the wheel is designed specifically for the compact spare tire. Do not install more than one compact spare tire and wheel on the vehicle at any given time.
Collapsible Spare Tire — If Equipped
The collapsible spare tire is for temporary emergency use only. You can identify if your vehicle is equipped with a collapsible spare by looking at the spare tire description on the Tire and Loading Information Placard located on the driver’s side door opening or on the sidewall of the tire.

Collapsible spare tire description example: 165/80-17 101P.

Since this tire has limited tread life, the original equipment tire should be repaired (or replaced) and reinstalled on your vehicle at the first opportunity.

Inflate collapsible tire only after the wheel is properly installed to the vehicle. Inflate the collapsible tire using the electric air pump before lowering the vehicle.

Do not install a wheel cover or attempt to mount a conventional tire on the collapsible spare wheel, since the wheel is designed specifically for the collapsible spare tire.

Full Size Spare — If Equipped
The full size spare is for temporary emergency use only. This tire may look like the originally equipped tire on the front or rear axle of your vehicle, but it is not. This spare tire may have limited tread life. When the tread is worn to the tread wear indicators, the temporary use full size spare tire needs to be replaced. Since it is not the same as your original equipment tire, replace (or repair) the original equipment tire and reinstall on the vehicle at the first opportunity.

Limited Use Spare — If Equipped
The limited use spare tire is for temporary emergency use only. This tire may look like the originally equipped tire on the front or rear axle of your vehicle, but it is not. Installation of this limited use spare tire affects vehicle handling. Since it is not the same as your original equipment tire, replace (or repair) the original equipment tire and reinstall on the vehicle at the first opportunity.

WARNING!
Compact and collapsible spares are for temporary emergency use only. With these spares, do not drive more than 50 mph (80 km/h). Temporary use spares have limited tread life. When the tread is worn to the tread wear indicators, the temporary use spare tire needs to be replaced. Be sure to follow the warnings, which apply to your spare. Failure to do so could result in spare tire failure and loss of vehicle control.

WARNING!
Compact and Collapsible spares are for temporary emergency use only. With these spares, do not drive more than 50 mph (80 km/h). Temporary use spares have limited tread life. When the tread is worn to the tread wear indicators, the temporary use spare tire needs to be replaced. Be sure to follow the warnings, which apply to your spare. Failure to do so could result in spare tire failure and loss of vehicle control.
and reinstall on the vehicle at the first opportunity.

**WARNING!**
Limited use spares are for emergency use only. Installation of this limited use spare tire affects vehicle handling. With this tire, do not drive more than the speed listed on the limited use spare wheel. Keep inflated to the cold tire inflation pressures listed on your Tire and Loading Information Placard located on the driver’s side B-Pillar or the rear edge of the driver’s side door. Replace (or repair) the original equipment tire at the first opportunity and reinstall it on your vehicle. Failure to do so could result in loss of vehicle control.

**Wheel And Wheel Trim Care**
All wheels and wheel trim, especially aluminum and chrome plated wheels, should be cleaned regularly using mild (neutral Ph) soap and water to maintain their luster and to prevent corrosion. Wash wheels with the same soap solution recommended for the body of the vehicle and remember to always wash when the surfaces are not hot to the touch.

Your wheels are susceptible to deterioration caused by salt, sodium chloride, magnesium chloride, calcium chloride, etc., and other road chemicals used to melt ice or control dust on dirt roads. Use a soft cloth or sponge and mild soap to wipe away promptly. Do not use harsh chemicals or a stiff brush. They can damage the wheel’s protective coating that helps keep them from corroding and tarnishing.

**CAUTION!**

When cleaning extremely dirty wheels including excessive brake dust, care must be taken in the selection of tire and wheel cleaning chemicals and equipment to prevent damage to the wheels. Mopar Wheel Treatment or Mopar Chrome Cleaner or their equivalent is recommended or select a non-abrasive, non-acidic cleaner for aluminum or chrome wheels.

**WARNING!**
Limited use spares are for emergency use only. Installation of this limited use spare tire affects vehicle handling. With this tire, do not drive more than the speed listed on the limited use spare wheel. Keep inflated to the cold tire inflation pressures listed on your Tire and Loading Information Placard located on the driver’s side B-Pillar or the rear edge of the driver’s side door. Replace (or repair) the original equipment tire at the first opportunity and reinstall it on your vehicle. Failure to do so could result in loss of vehicle control.

**CAUTION!**

Avoid products or automatic car washes that use acidic solutions or strong alkaline additives or harsh brushes. Many aftermarket wheel cleaners and automatic car washes may damage the wheel's protective finish. Such damage is not covered by the New Vehicle Limited Warranty. Only car wash soap, Mopar Wheel Cleaner or equivalent is recommended.

**CAUTION!**

Do not use scouring pads, steel wool, a bristle brush, metal polishes or oven cleaner. These products may damage the wheel's protective finish. Such damage is not covered by the New Vehicle Limited Warranty. Only car wash soap, Mopar Wheel Cleaner or equivalent is recommended.
NOTE:
If you intend parking or storing your vehicle for an extended period after cleaning the wheels with wheel cleaner, drive your vehicle and apply the brakes to remove the water droplets from the brake components. This activity will remove the red rust on the brake rotors and prevent vehicle vibration when braking.

Dark Vapor Chrome, Black Satin Chrome, or Low Gloss Clear Coat Wheels

CAUTION!
If your vehicle is equipped with these specialty wheels, DO NOT USE wheel cleaners, abrasives, or polishing compounds. They will permanently damage this finish and such damage is not covered by the New Vehicle Limited Warranty. HAND WASH ONLY USING MILD SOAP AND WATER WITH A SOFT CLOTH. Used on a regular basis; this is all that is required to maintain this finish.

Tire Rotation Recommendations
Tires on the front and rear axles of vehicles operate at different loads and perform different steering, driving, and braking functions. For these reasons, they wear at unequal rates. These effects can be reduced by timely rotation of tires. The benefits of rotation are especially worthwhile with aggressive tread designs such as those on all season type tires. Rotation will increase tread life, help to maintain mud, snow and wet traction levels and contribute to a smooth, quiet ride.

Refer to the “Maintenance Plan” in Servicing and Maintenance for the proper maintenance intervals. More frequent rotation is permissible if desired. The reasons for any rapid or unusual wear should be corrected prior to rotation being performed.

The suggested rotation method is the “rearward cross” shown in the following diagram. This rotation pattern does not apply to some directional tires that must not be reversed.

STORING THE VEHICLE
If you are storing your vehicle for more than 21 days, we recommend that you take the following steps to minimize the drain on your vehicle’s battery:

- Disconnect the negative cable from battery.
- Any time you store your vehicle or keep it out of service (i.e., vacation) for two weeks or more, run the air conditioning system at idle for about five minutes in the fresh air and high blower setting. This will ensure adequate system lubrication to minimize the possibility of compressor damage when the system is started again.
BODYWORK

Protection From Atmospheric Agents

Vehicle body care requirements vary according to geographic locations and usage. Chemicals that make roads passable in snow and ice and those that are sprayed on trees and road surfaces during other seasons are highly corrosive to the metal in your vehicle. Outside parking, which exposes your vehicle to airborne contaminants, road surfaces on which the vehicle is operated, extreme hot or cold weather and other extreme conditions will have an adverse effect on paint, metal trim, and underbody protection.

The following maintenance recommendations will enable you to obtain maximum benefit from the corrosion resistance built into your vehicle.

What Causes Corrosion?

Corrosion is the result of deterioration or removal of paint and protective coatings from your vehicle.

The most common causes are:

- Road salt, dirt and moisture accumulation
- Stone and gravel impact
- Insects, tree sap and tar
- Salt in the air near seacoast localities
- Atmospheric fallout/industrial pollutants

Body And Underbody Maintenance

Cleaning Headlights

Your vehicle is equipped with plastic headlights and fog lights that are lighter and less susceptible to stone breakage than glass headlights.

Plastic is not as scratch resistant as glass and therefore different lens cleaning procedures must be followed.

To minimize the possibility of scratching the lenses and reducing light output, avoid wiping with a dry cloth. To remove road dirt, wash with a mild soap solution followed by rinsing.

Do not use abrasive cleaning components, solvents, steel wool or other aggressive material to clean the lenses.

Tri-Fold Soft Tonneau Cover Care

For cleaning and protecting the vinyl Tri-Fold Tonneau cover, use Mopar Whitewall & Vinyl Top Cleaner and Mopar Leather and Vinyl Conditioner/Protectant.

Preserving The Bodywork

Washing

- >>> CONDITION: {Market=Brazil or Market='Latin America'} >>>

Wash your vehicle regularly. Always wash your vehicle in the shade using Mopar Car Wash, or a mild car wash soap, and rinse the panels completely with clear water.

<<< CONDITION END <<<

- >>> CONDITION: {Market=Brazil or Market='Latin America'} >>>

If insects, tar, or other similar deposits have accumulated on your vehicle, use Mopar
Super Kleen Bug and Tar Remover to remove.

<<< CONDITION END <<<

- >>> CONDITION: {Market=Brazil or Market='Latin America'} >>>

Use a high quality cleaner wax, such as Mopar Cleaner Wax to remove road film, stains and to protect your paint finish. Take care never to scratch the paint.

<<< CONDITION END <<<

- Avoid using abrasive compounds and power buffing that may diminish the gloss or thin out the paint finish.

**CAUTION!**

- Do not use abrasive or strong cleaning materials such as steel wool or scouring powder that will scratch metal and painted surfaces.
- Use of power washers exceeding 1,200 psi (8,274 kPa) can result in damage or removal of paint and decals.

**Bumper Care**

The customer is responsible to clean and maintain the chrome components of the vehicle. Washing away road debris and salt using an automotive soap. Bumpers should be cleaned regularly using mild (neutral Ph) soap and water to maintain their luster and to prevent corrosion.

Your bumpers are susceptible to deterioration caused by salt, sodium chloride, magnesium chloride, calcium chloride, etc., and other road chemicals used to melt ice or control dust on dirt roads. Do not use harsh chemicals or a stiff brush. They can stain or damage the protective coating that helps keep them from corroding and tarnishing.

**CAUTION!**

Do not use scouring pads, steel wool, a bristle brush, metal polishes, or oven cleaner. These products may damage the bumper’s protective finish. Such damage is not covered by the New Vehicle Limited Warranty. Only car wash soap, Mopar Chrome Cleaner, or equivalent is recommended.

Avoid products or automatic car washes that use acidic solutions, strong alkaline additives, or harsh brushes. Many aftermarket cleaners and automatic car washes may damage the bumper’s protective finish. Such damage is not covered by the New Vehicle Limited Warranty. Only car wash soap, Mopar Chrome Cleaner, or equivalent is recommended.

**Special Care**

- If you drive on salted or dusty roads or if you drive near the ocean, hose off the undercarriage at least once a month.
- It is important that the drain holes in the lower edges of the doors, rocker panels, and trunk be kept clear and open.
- If you detect any stone chips or scratches in the paint, touch them up immediately. The cost of such repairs is considered the responsibility of the owner.
- If your vehicle is damaged due to a collision or similar cause that destroys the paint and protective coating, have your vehicle repaired.
as soon as possible. The cost of such repairs is considered the responsibility of the owner.

- If you carry special cargo such as chemicals, fertilizers, de-icer salt, etc., be sure that such materials are well packaged and sealed.
- If a lot of driving is done on gravel roads, consider mud or stone shields behind each wheel.
- >>> CONDITION: {Market=Brazil or Market='Latin America'} >>>
  Use Mopar Touch Up Paint on scratches as soon as possible. An authorized dealer has touch up paint to match the color of your vehicle.
<<< CONDITION END <<<

Spray-On Bedliner – If Equipped

During ownership, the shine and luster of the Spray-On Bedliner can fade from oxidation, road dirt, heavy-duty hauling and hard water stains. Weathering and UV exposure will lead to fading, dulling, and loss of gloss over time.

To help maintain the appearance of your Spray-On Bedliner, the manufacturer recommends you periodically rinse all loose dirt from your truck bed and clean your truck at least twice per year using the Mopar Spray-On Bedliner Conditioner available at your local authorized dealer.

To Help Maintain The Appearance Of Your Spray-On Bedliner, Follow The Steps Below:

1. Rinse your truck bed out with water to remove any loose dirt and debris.
2. Mix a mild soap or detergent with water with a soft cloth or brush.
3. Rinse bedliner with water.
4. Once dry, apply a small amount of Mopar Spray-On Bedliner Conditioner to a moist towel or sponge and wipe over the entire surface of the truck bedliner.

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3. Rinse bedliner with water.
4. Once dry, apply a small amount of Mopar Spray-On Bedliner Conditioner to a moist towel or sponge and wipe over the entire surface of the truck bedliner.

**WARNING!**

Do not use silicon-based protection products to clean your bedliner. Silicon-based products can become slippery and may result in personal injury.

Spray-On Bedliners are chemically-resistant to many different types of chemicals (including gasoline, oil, hydraulic fluids) for short periods of time. If a spill occurs on your Spray-On Bedliner, rinse the truck out as soon as possible to avoid permanent damage.

**Repairing The Spray-On Bedliner**

While extremely tough, it is possible to damage a Spray-On Bedliner. One common condition is when loading a heavy pallet and dragging that pallet across the floor of the bed. If a nail or sharp point is exposed under the weight of the pallet a scratch or tear is possible. While not covered by your New Vehicle Limited Warranty, a cosmetic fix to cover the metal exposed by the scratch is required. To repair a tear or gouge, follow the directions provided in the Mopar Quick Repair Kit.

**INTERIORS**

**Seats And Fabric Parts**

>>> CONDITION: {Market=Brazil or Market='Latin America'} >>>

Use Mopar Total Clean to clean fabric upholstery and carpeting.
<<< CONDITION END <<<

**WARNING!**

Do not use silicon-based protection products to clean your bedliner. Silicon-based products can become slippery and may result in personal injury.

Spray-On Bedliners are chemically-resistant to many different types of chemicals (including gasoline, oil, hydraulic fluids) for short periods of time. If a spill occurs on your Spray-On Bedliner, rinse the truck out as soon as possible to avoid permanent damage.

**Repairing The Spray-On Bedliner**

While extremely tough, it is possible to damage a Spray-On Bedliner. One common condition is when loading a heavy pallet and dragging that pallet across the floor of the bed. If a nail or sharp point is exposed under the weight of the pallet a scratch or tear is possible. While not covered by your New Vehicle Limited Warranty, a cosmetic fix to cover the metal exposed by the scratch is required. To repair a tear or gouge, follow the directions provided in the Mopar Quick Repair Kit.

**INTERIORS**

**Seats And Fabric Parts**

>>> CONDITION: {Market=Brazil or Market='Latin America'} >>>

Use Mopar Total Clean to clean fabric upholstery and carpeting.
<<< CONDITION END <<<
Stain Repel Fabric Cleaning Procedure — If Equipped

Stain Repel seats may be cleaned in the following manner:
- Remove as much of the stain as possible by blotting with a clean, dry towel.
- Blot any remaining stain with a clean, damp towel.
- For tough stains, apply Mopar Total Clean, or a mild soap solution to a clean, damp cloth and remove stain. Use a fresh, damp towel to remove soap residue.
- For grease stains, apply Mopar Multi-Purpose Cleaner to a clean, damp cloth and remove stain. Use a fresh, damp towel to remove soap residue.
- Do not use any harsh solvents or any other form of protectants on Stain Repel products.

Seat Belt Maintenance

Do not bleach, dye or clean the belts with chemical solvents or abrasive cleaners. This will weaken the fabric. Sun damage can also weaken the fabric.

If the belts need cleaning, use a mild soap solution or lukewarm water. Do not remove the belts from the vehicle to wash them. Dry with a soft cloth.

Replace the belts if they appear frayed or worn or if the buckles do not work properly.

NOTE:

If the belts retract slowly, inspect the upper turning loop for soiling. If soiling is present, clean with a wet soft cloth until all residue is removed.

WARNING!

Do not use volatile solvents for cleaning purposes. Many are potentially flammable, and if used in closed areas they may cause respiratory harm.

WARNING!

A frayed or torn belt could rip apart in a collision and leave you with no protection. Inspect the belt system periodically, checking for cuts, frays, or loose parts. Damaged parts must be replaced immediately. Do not disassemble or modify the system. Seat belt assemblies must be replaced after a collision if they have been damaged (i.e., bent retractor, torn webbing, etc.).

Plastic And Coated Parts

>>> CONDITION: {Market=Brazil or Market='Latin America'} >>>

Use Mopar Total Clean to clean vinyl upholstery.

<<< CONDITION END <<<<
Cleaning Plastic Instrument Cluster Lenses

The lenses in front of the instruments in this vehicle are molded in clear plastic. When cleaning the lenses, care must be taken to avoid scratching the plastic.

1. Clean with a wet soft cloth. A mild soap solution may be used, but do not use high alcohol content or abrasive cleaners. If soap is used, wipe clean with a clean damp cloth.

2. Dry with a soft cloth.

Leather Parts

>>> CONDITION: \{Market=Brazil or Market='Latin America'\} >>>

Mopar Total Clean is specifically recommended for leather upholstery.

<<< CONDITION END <<<

>>> CONDITION: \{Market=Brazil or Market='Latin America'\} >>>

Your leather upholstery can be best preserved by regular cleaning with a damp soft cloth. Small particles of dirt can act as an abrasive and damage the leather upholstery and should be removed promptly with a damp cloth. Stubborn soils can be removed easily with a soft cloth and Mopar Total Clean. Care should be taken to avoid soaking your leather upholstery with any liquid. Please do not use polishes, oils, cleaning fluids, solvents, detergents, or ammonia-based cleaners to clean your leather upholstery. Application of a leather conditioner is not required to maintain the original condition.

<<< CONDITION END <<<

Glass Surfaces

>>> CONDITION: \{Market=Brazil or Market='Latin America'\} >>>

All glass surfaces should be cleaned on a regular basis with Mopar Glass Cleaner, or any commercial household-type glass cleaner. Never use an abrasive type cleaner. Use caution when cleaning the inside rear window equipped with electric defrosters or windows equipped with radio antennas. Do not use scrapers or other sharp instruments that may scratch the elements.
When cleaning the rear view mirror, spray cleaner on the towel or cloth that you are using. Do not spray cleaner directly on the mirror.
TECHNICAL SPECIFICATIONS

IDENTIFICATION DATA

Vehicle Identification Number

The Vehicle Identification Number (VIN) is found on the left front corner of the instrument panel, visible through the windshield. This number also appears on the vehicle frame etched on right hand center rail, as well as the Automobile Information Disclosure Label affixed to a window on your vehicle, the vehicle registration and title.

NOTE:
It is illegal to remove or alter the VIN.

BRAKE SYSTEM

If power assist is lost for any reason (for example, repeated brake applications with the engine off), the brakes will still function. However, you will experience a substantial increase in braking effort to stop the vehicle.

If either the front or rear hydraulic system loses normal braking capability, the remaining system will still function with some loss of overall braking effectiveness. This will be evident by increased pedal travel during application, greater pedal force required to slow or stop, and activation of the “Brake Warning Light” and the “ABS Warning Light” (if equipped) during brake use.

Hydraulic Brake Assist — If Equipped

The brake system power assist is provided by a hydro-boost unit which shares fluid with the power steering system. You may experience some clicking or hissing noises from the hydro-boost system during hard braking conditions.

NOTE:
Under cold temperatures, pedal effort will be higher than normal until the power steering fluid reaches operating temperature.

WHEEL AND TIRE TORQUE SPECIFICATIONS

Proper lug nut/bolt torque is very important to ensure that the wheel is properly mounted to the vehicle. Any time a wheel has been removed and reinstalled on the vehicle, the lug nuts/bolts should be torqued using a properly calibrated torque wrench using a high quality six sided (hex) deep wall socket.

Torque Specifications

<table>
<thead>
<tr>
<th>Lug Nut/Bolt Type</th>
<th>Lug Nut/Bolt Size</th>
<th>Lug Nut/Bolt Socket Size</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lug Nut/Bolt</strong></td>
<td><strong>Lug Nut/Bolt</strong></td>
<td><strong>Lug Nut/Bolt</strong></td>
</tr>
</tbody>
</table>
**Use only authorized dealer recommended lug nuts/bolts and clean or remove any dirt or oil before tightening.

<table>
<thead>
<tr>
<th>120-150 Ft-Lbs (160-200 Nm)</th>
<th>Cone</th>
<th>M14 x 1.50 22 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>130-160 Ft-Lbs (190-220 Nm)</td>
<td>Flanged</td>
<td></td>
</tr>
</tbody>
</table>

After 25 miles (40 km), check the lug nut/bolt torque to be sure that all the lug nuts/bolts are properly seated against the wheel.

Wheel Mounting Surface

Tighten the lug nuts/bolts in a star pattern until each nut/bolt has been tightened twice. Ensure that the socket is fully engaged on the lug nut/bolt (do not insert it halfway).

**WARNING!**

To avoid the risk of forcing the vehicle off the jack, do not tighten the lug nuts/bolts fully until the vehicle has been lowered. Failure to follow this warning may result in personal injury.

FUEL REQUIREMENTS — GASOLINE ENGINE

6.4L Engine

Do not use E-85 flex fuel or ethanol blends greater than 15% (27% Brazil only) in this engine.

>>> CONDITION: {Market=Brazil or Market='Latin America')} >>>

This engine is designed to meet all emissions regulations and provide satisfactory fuel economy and performance when using high-quality unleaded gasoline having a Research Octane Number (RON) of 91 to 95. The manufacturer recommends the use of a 95 Research Octane Number for optimum performance.

<<< CONDITION END <<<

>>> CONDITION: {Market=Brazil or Market='Latin America')} >>>

Light spark knock at low engine speeds is not harmful to your engine. However, continued heavy spark knock at high speeds can cause damage, and immediate service is required. Poor quality gasoline can cause problems such as hard starting, stalling, and hesitations. If you experience these symptoms, try another brand.
of gasoline before considering service for the vehicle.

Besides using unleaded gasoline with the proper octane rating, gasolines that contain detergents, corrosion and stability additives are recommended. Using gasolines that have these additives may help improve fuel economy, reduce emissions, and maintain vehicle performance.

Poor quality gasoline can cause problems such as hard starting, stalling, and hesitations. If you experience these symptoms, try another brand of gasoline before considering service for the vehicle.

Methanol

(Methyl) is used in a variety of concentrations when blended with unleaded gasoline. You may find fuels containing 3% or more methanol along with other alcohols called cosolvents. Problems that result from using methanol/gasoline are not the responsibility of the manufacturer. While Methyl Tertiary-Butyl Ether (MTBE) is an oxygenate made from Methanol, it does not have the negative effects of Methanol.

**WARNING!**

Do not use gasolines containing Methanol. Use of these blends may result in starting and drivability problems and may damage critical fuel system components.

Ethanol

The manufacturer recommends that your vehicle be operated on fuel containing no more than 15% (27% Brazil only) ethanol. Purchasing your fuel from a reputable supplier may reduce the risk of exceeding this 15% (27% Brazil only) limit and/or of receiving fuel with abnormal properties. It should also be noted that an increase in fuel consumption should be expected when using ethanol-blended fuels, due to the lower energy content of ethanol. Problems that result from using methanol/gasoline or E-85 ethanol blends are not the responsibility of the manufacturer.

**CAUTION!**

Use of fuel with Ethanol content higher than 15% (27% Brazil only) may result in engine malfunction, starting and operating difficulties, and materials degradation. These adverse effects could result in permanent damage to your vehicle.

Reformulated Gasoline

Many areas of the country require the use of cleaner burning gasoline referred to as “Reformulated Gasoline”. Reformulated gasoline contains oxygenates and are specifically blended to reduce vehicle emissions and improve air quality. The use of reformulated gasoline is recommended. Properly blended reformulated gasoline will provide improved performance
and durability of engine and fuel system components.

**Materials Added To Fuel**

Besides using unleaded gasoline with the proper octane rating, gasolines that contain detergents, corrosion and stability additives are recommended. Using gasolines that have these additives will help improve fuel economy, reduce emissions, and maintain vehicle performance.

Indiscriminate use of fuel system cleaning agents should be avoided. Many of these materials intended for gum and varnish removal may contain active solvents or similar ingredients. These can harm fuel system gasket and diaphragm materials.

**Do Not Use E-85 In Non-Flex Fuel Vehicles**

Non-Flex Fuel Vehicles (FFV) are compatible with gasoline containing up to 15% ethanol (E-15) (27% ethanol (E-27) Brazil only). Use of gasoline with higher ethanol content may void the New Vehicle Limited Warranty.

If a Non-FFV vehicle is inadvertently fueled with E-85 fuel, the engine will have some or all of these symptoms:
- Operate in a lean mode
- OBD II Malfunction Indicator Light on
- Poor engine performance
- Poor cold start and cold drivability
- Increased risk for fuel system component corrosion

**CNG And LP Fuel System Modifications**

Modifications that allow the engine to run on Compressed Natural Gas (CNG) or Liquid Propane (LP) may result in damage to the engine, emissions, and fuel system components. Problems that result from running CNG or LP are not the responsibility of the manufacturer and may void or not be covered under the New Vehicle Limited Warranty.

**MMT In Gasoline**

**CONDITION: {Market=Brazil or Market='Latin America'}**

Methylcyclopentadienyl Manganese Tricarbonyl (MMT) is a manganese containing metallic additive that is blended into some gasoline to increase octane. Gasoline blended with MMT provides no performance advantage beyond gasoline of the same octane number without MMT. Gasoline blended with MMT reduces spark plug life and reduces emission system performance in some vehicles. The manufacturer recommends that gasoline without MMT be used in your vehicle. The MMT content of gasoline may not be indicated on the gasoline pump; therefore, you should ask your gasoline retailer whether or not the gasoline contains MMT.

**<<< CONDITION END >>>**
Carbon Monoxide Warnings

**WARNING!**

Carbon monoxide (CO) in exhaust gases is deadly. Follow the precautions below to prevent carbon monoxide poisoning:

- Do not inhale exhaust gases. They contain carbon monoxide, a colorless and odorless gas, which can kill. Never run the engine in a closed area, such as a garage, and never sit in a parked vehicle with the engine running for an extended period. If the vehicle is stopped in an open area with the engine running for more than a short period, adjust the ventilation system to force fresh, outside air into the vehicle.

- Guard against carbon monoxide with proper maintenance. Have the exhaust system inspected every time the vehicle is raised. Have any abnormal conditions repaired promptly. Until repaired, drive with all side windows fully open.

**FUEL REQUIREMENTS — DIESEL ENGINE**

Use good quality diesel fuel from a reputable supplier in your vehicle. It’s recommended to
use Low Sulfur Highway Diesel fuel to avoid damage to the emissions control system.

<table>
<thead>
<tr>
<th>Market</th>
<th>Diesel =&lt; 50 PPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costa Rica</td>
<td>Diesel Automotriz — 50ppm</td>
</tr>
<tr>
<td>Panama</td>
<td>Diesel S500 — 500ppm</td>
</tr>
<tr>
<td>Honduras</td>
<td>Diesel Automotriz — 50ppm</td>
</tr>
<tr>
<td>Guatemala</td>
<td>Diesel — 50ppm</td>
</tr>
<tr>
<td>Brazil</td>
<td>Diesel S-10 — 10ppm</td>
</tr>
<tr>
<td>Peru</td>
<td>Diesel S-350 — 350 ppm</td>
</tr>
<tr>
<td>Paraguay</td>
<td>Diesel S-50 — 50ppm</td>
</tr>
<tr>
<td>Uruguay</td>
<td>Gasoil Premium — 500 ppm</td>
</tr>
<tr>
<td>Colombia</td>
<td>Diesel B-10 — 50ppm</td>
</tr>
<tr>
<td>Argentina</td>
<td>Gasoil GRADO 3 — 10ppm</td>
</tr>
<tr>
<td>Chile</td>
<td>Diesel A-1 — 15ppm</td>
</tr>
</tbody>
</table>

**NOTE:**
The diesel specification in this chart depend on the availability in each country and are subject to change without previous notification.

**WARNING!**
Do not use alcohol or gasoline as a fuel blending agent. They can be unstable under certain conditions and hazardous or explosive when mixed with diesel fuel.

Diesel fuel is seldom completely free of water. To prevent fuel system trouble, drain the accumulated water from the fuel/water separator using the fuel/water separator drain provided on both fuel filters. If you buy good quality fuel, fuel conditioners should not be required in your vehicle. If available in your area, a high cetane “premium” diesel fuel may offer improved cold-starting and warm-up performance.
**NOTE:**

- If you accidentally fill the fuel tank with gasoline in your diesel vehicle, Do not start the vehicle. If you restart your vehicle you risk damage the engine and fuel system. Please call your local dealer for service.

- A maximum blend of 20% biodiesel meeting ASTM specification D-7467 may be used with your Cummins diesel engine.

- In addition, commercially available fuel additives are not necessary for the proper operation of your Cummins diesel engine.

## Biodiesel Fuel Requirements

### Pickup Models

Your vehicle has been validated and approved for the use of Biodiesel in blends up to 20% (B20) provided that you comply with the requirements outlined below. It is important that you understand and comply with these requirements. Failure to comply with Oil Change requirements for vehicles operating on biodiesel blends up to B20 will result in premature engine wear. Such wear is not covered by the New Vehicle Limited Warranty.

Biodiesel is a fuel produced from renewable resources typically derived from animal fat, rapeseed oil (Rapeseed Methyl Ester (RME) base), or soybean oil (Soy Methyl Ester (SME or SOME) base). Biodiesel fuel has inherent limitations which require that you understand and adhere to the following requirements if you use blends of Biodiesel greater then 5% but not greater than 20% (B6-B20). There are no unique restrictions for the use of B5. Use of blends greater than 20% is not approved. Use of blends greater than 20% can result in engine damage. Such damage is not covered by the New Vehicle Limited Warranty.

### Fuel Quality — Must Comply With ASTM Standards

The quality of biodiesel fuel may vary widely. Only fuel produced by a BQ9000 supplier to the following specifications may be blended to meet biodiesel blend (B6–B20) fuel meeting ASTM specification D-7467:

- Pretrodiesel fuel meeting ASTM specification D-975 and biodiesel fuel (B100) meeting ASTM specification D-6751.

### Fuel Oxidation Stability — Must Use Fuel Within Six Months Of Manufacture

Biodiesel fuel has poor oxidation stability which can result in long term storage problems. Fuel produced to approved ASTM standards, if stored properly, provides for protection against fuel oxidation for up to six months.

### Fuel Water Separation — Must Use Mopar/Cummins Approved Fuel Filter Elements

You must use Mopar/Cummins approved fuel filter elements in both your engine mounted filter and frame mounted filter. Biodiesel fuel has a natural affinity to water and water accelerates microbial growth. Your Mopar/Cummins filtration system is designed...
to provide adequate fuel water separation capabilities.

**Bio-Diesel Fuel Properties — Low Ambient Temperatures**

Biodiesel fuel may gel or solidify at low ambient temperatures, which may pose problems for both storage and operation. Precautions can be necessary at low ambient temperatures, such as storing the fuel in a heated building or a heated storage tank, or using cold temperature additives.

**Fuel In Oil Dilution — Must Adhere To Required Oil Change Interval**

Fuel dilution of lubricating oil has been observed with the use of Biodiesel fuel. Fuel in oil must not exceed 5 percent. To ensure this limit is met your oil change interval must be maintained to the following schedule:

- Ram PickUp 2500 models – 12,500 Miles* (*unless otherwise notified with a oil service message)

---

**FLUID CAPACITIES — GASOLINE ENGINE**

<table>
<thead>
<tr>
<th></th>
<th>US</th>
<th>Metric</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fuel (Approximate)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2500 Shortbed Models</td>
<td>31 Gallons</td>
<td>117 Liters</td>
</tr>
<tr>
<td>2500 Longbed Models</td>
<td>32 Gallons</td>
<td>121 Liters</td>
</tr>
<tr>
<td><strong>Engine Oil With Filter</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**CAUTION!**

- Under no circumstances should oil change intervals exceed 15,000 miles (24,000 km) when operating with conventional fuel or exceed 12,500 miles (20,000 km) when operating on biodiesel blends up to B20. Oil change intervals should not exceed 6 months in either case. Failure to comply with these Oil Change requirements for vehicles operating on biodiesel blends up to B20 may result in premature engine wear. Such wear is not covered by the New Vehicle Limited Warranty.

- B20 Biodiesel capable: The engine may suffer severe damage if operated with concentrations of Biodiesel higher than 20%.
### FLUID CAPACITIES — DIESEL ENGINE

<table>
<thead>
<tr>
<th></th>
<th>US</th>
<th>Metric</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>6.4L Engine</strong> (We recommend you use SAE 0W-40 engine oil meeting the requirements of FCA Material Standard MS-12633 for use in all operating temperatures.)</td>
<td>7 Quarts</td>
<td>6.6 Liters</td>
</tr>
<tr>
<td><strong>Cooling System</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>6.4L Engine</strong> — (We recommend you use Mopar Antifreeze/Coolant 10 Year/150,000 Mile (240,000 Km) Formula that meets the requirements of FCA Material Standard MS.90032.)</td>
<td>18.44 Quarts</td>
<td>17.45 Liters</td>
</tr>
<tr>
<td><strong>Fuel (Approximate)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2500 Models</td>
<td>31 Gallons</td>
<td>117 Liters</td>
</tr>
<tr>
<td><strong>Engine Oil With Filter</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.7L Turbo Diesel Engine</td>
<td>12 Quarts</td>
<td>11.4 Liters</td>
</tr>
<tr>
<td><strong>Cooling System</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.7L Turbo Diesel Engine (Mopar Engine Coolant/Antifreeze 10 Year/150,000 Mile (240,000 Km) Formula)</td>
<td>5.5 Gallons</td>
<td>20.8 Liters</td>
</tr>
</tbody>
</table>
## FLUIDS AND LUBRICANTS — GASOLINE ENGINE

### Engine

<table>
<thead>
<tr>
<th>Component</th>
<th>Fluid, Lubricant, or Genuine Part</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine Coolant</td>
<td>We recommend you use Mopar Antifreeze/Coolant 10 Year/150,000 Mile (240,000 Km) Formula OAT (Organic Additive Technology).</td>
</tr>
<tr>
<td>Engine Oil – 6.4L</td>
<td>For best performance and maximum protection under all types of operating conditions, we recommend you use full synthetic engine oils that meet the requirements of FCA Material Standard MS-12633 or ACEA A3/B3. The manufacturer recommends the use of a full synthetic 0W-40 such as Mopar, Shell Helix or equivalent engine oil.</td>
</tr>
<tr>
<td>Engine Oil Filter</td>
<td>We recommend you use Mopar brand Engine Oil Filters.</td>
</tr>
<tr>
<td>Spark Plugs</td>
<td>We recommend you use Mopar Spark Plugs.</td>
</tr>
<tr>
<td>Fuel Selection – 6.4L Engines</td>
<td>91–95 Research Octane Number (RON). The manufacturer recommends the use of 95 RON for optimum performance.</td>
</tr>
</tbody>
</table>
CAUTION!

- Mixing of engine coolant (antifreeze) other than specified Organic Additive Technology (OAT) engine coolant (antifreeze), may result in engine damage and may decrease corrosion protection. Organic Additive Technology (OAT) engine coolant is different and should not be mixed with Hybrid Organic Additive Technology (HOAT) engine coolant (antifreeze) or any “globally compatible” coolant (antifreeze). If a non-OAT engine coolant (antifreeze) is introduced into the cooling system in an emergency, the cooling system will need to be drained, flushed, and refilled with fresh OAT coolant (conforming to MS.90032), by an authorized dealer as soon as possible.

- Do not use water alone or alcohol-based engine coolant (antifreeze) products. Do not use additional rust inhibitors or antirust products, as they may not be compatible with the radiator engine coolant and may plug the radiator.

(Continued)

CAUTION! (Continued)

- This vehicle has not been designed for use with propylene glycol-based engine coolant (antifreeze). Use of propylene glycol-based engine coolant (antifreeze) is not recommended.
### Chassis

<table>
<thead>
<tr>
<th>Component</th>
<th>Fluid, Lubricant, or Genuine Part</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Automatic Transmission – Eight-Speed Automatic</strong></td>
<td>Use only Mopar ZF 8 &amp; 9 Speed ATF Automatic Transmission Fluid, or equivalent. Failure to use the correct fluid may affect the function or performance of your transmission.</td>
</tr>
<tr>
<td><strong>Transfer Case</strong></td>
<td>We recommend you use Mopar Transfer Case Lubricant for Borg Warner 44-44 and 44-45.</td>
</tr>
<tr>
<td><strong>Front and Rear Axle</strong></td>
<td>We recommend you use SAE 75W-85 HD Ram GL-5 Synthetic Axle Lubricant in 9.25 Front &amp; 11.5 Rear Axles.</td>
</tr>
<tr>
<td><strong>Brake Master Cylinder</strong></td>
<td>&gt;&gt; CONDITION: {{Market=Brazil or Market='Latin America'}} &gt;&gt;&gt; We recommend you use Mopar DOT 3. If DOT 3 brake fluid is not available, then DOT 4 is acceptable. &lt;&lt;&lt; CONDITION END &lt;&lt;&lt; &gt;&gt; CONDITION: {{Market=Brazil or Market='Latin America'}} &gt;&gt;&gt; DOT 4 Brake fluid must be replaced every 24 months regardless of mileage. &lt;&lt;&lt; CONDITION END &lt;&lt;&lt;</td>
</tr>
<tr>
<td><strong>Power Steering Reservoir</strong></td>
<td>We recommend you use Mopar Power Steering Fluid +4 or Mopar ATF+4 Automatic Transmission Fluid.</td>
</tr>
</tbody>
</table>
## Fluids and Lubricants — Diesel Engine

### Engine

<table>
<thead>
<tr>
<th>Component</th>
<th>Fluid, Lubricant, or Genuine Part</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine Coolant</td>
<td>We recommend you use Mopar Antifreeze/Coolant 10 Year/150,000 Mile (240,000 Km) Formula OAT (Organic Additive Technology).</td>
</tr>
<tr>
<td>Engine Oil</td>
<td>In ambient temperatures below 0 °F (-18 °C), We recommend you use 5W-40 <strong>synthetic</strong> engine oil such as Mopar, Shell Rotella and Shell Rimula that meets FCA US Material Standard MS-10902 and the API CK-4 engine oil category is required.</td>
</tr>
<tr>
<td></td>
<td>In ambient temperatures above 0 °F (-18 °C), We recommend you use 10W-30 engine oil such as Mopar, Shell Rotella and Shell Rimula that meets FCA US Material Standard MS-10902 and the API CK-4 engine oil category is required.</td>
</tr>
<tr>
<td>Engine Oil Filter</td>
<td>We recommend you use Mopar Engine Oil Filters.</td>
</tr>
<tr>
<td>Fuel Filters</td>
<td>We recommend you use Mopar Fuel Filter. Must meet 3 micron rating. <strong>Using a fuel filter that does not meet the manufacturers filtration and water separating requirements can severely impact fuel system life and reliability.</strong></td>
</tr>
<tr>
<td>Crankcase Ventilation Filter (CCV)</td>
<td>We recommend you use Mopar CCV Filter.</td>
</tr>
</tbody>
</table>
**Chassis**

<table>
<thead>
<tr>
<th>Component</th>
<th>Fluid, Lubricant, or Genuine Part</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automatic Transmission (Six-Speed 68RFE)</td>
<td>Only use ATF+4 Automatic Transmission Fluid. Failure to use ATF+4 fluid may affect the function or performance of your transmission. We recommend Mopar ATF+4 fluid.</td>
</tr>
<tr>
<td>Transfer Case</td>
<td>We recommend you use Mopar BW44–44 Transfer Case Fluid.</td>
</tr>
<tr>
<td>Front and Rear Axle Fluid</td>
<td>We recommend you use SAE 75W-85 HD Ram GL-5 Synthetic Axle Lubricant. Limited slip additive is not required for Limited-Slip Rear Axles.</td>
</tr>
</tbody>
</table>
MULTIMEDIA

UCONNECT SYSTEMS

For detailed information about your Uconnect 4/4C/4C NAV with 8.4-inch or 12-inch display, refer to your Uconnect Owner’s Manual Supplement.

NOTE:
Uconnect screen images are for illustration purposes only and may not reflect exact software for your vehicle.

CYBERSECURITY

Your vehicle may be a connected vehicle and may be equipped with both wired and wireless networks. These networks allow your vehicle to send and receive information. This information allows systems and features in your vehicle to function properly.

Your vehicle may be equipped with certain security features to reduce the risk of unauthorized and unlawful access to vehicle systems and wireless communications. Vehicle software technology continues to evolve over time and FCA, working with its suppliers, evaluates and takes appropriate steps as needed. Similar to a computer or other devices, your vehicle may require software updates to improve the usability and performance of your systems or to reduce the potential risk of unauthorized and unlawful access to your vehicle systems.

The risk of unauthorized and unlawful access to your vehicle systems may still exist, even if the most recent version of vehicle software (such as Uconnect software) is installed.

WARNING!

• It is not possible to know or to predict all of the possible outcomes if your vehicle’s systems are breached. It may be possible that vehicle systems, including safety related systems, could be impaired or a loss of vehicle control could occur that may result in an accident involving serious injury or death.

WARNING! (Continued)

• ONLY insert media (e.g., USB, SD card, or CD) into your vehicle if it came from a trusted source. Media of unknown origin could possibly contain malicious software, and if installed in your vehicle, it may increase the possibility for vehicle systems to be breached.

• As always, if you experience unusual vehicle behavior, take your vehicle to your nearest authorized dealer immediately.

>>> CONDITION: {Market=Brazil or Market='Latin America'} >>>

(Continued)
NOTE:

- FCA or your dealer may contact you directly regarding software updates.
- To help further improve vehicle security and minimize the potential risk of a security breach, vehicle owners should:
  - Only connect and use trusted media devices (e.g. personal mobile phones, USBs, CDs).

Privacy of any wireless and wired communications cannot be assured. Third parties may unlawfully intercept information and private communications without your consent. For further information, refer to “Onboard Diagnostic System (OBD II) Cybersecurity” in “Getting To Know Your Instrument Panel”.

UCONNECT SETTINGS

The Uconnect system uses a combination of buttons on the touchscreen and buttons on the faceplate located on the center of the instrument panel. These buttons allow you to access and change the Customer Programmable Features. Many features can vary by vehicle.

Buttons on the faceplate are located below and/or beside the Uconnect system in the center of the instrument panel. In addition, there is a Scroll/Enter control knob located on the right side. Turn the control knob to scroll through menus and change settings. Push the center of the control knob one or more times to select or change a setting.

Your Uconnect system may also have Screen Off and Mute buttons on the faceplate. Push the Screen Off button on the faceplate to turn off the Uconnect screen. Push the button again or tap the screen to turn the screen on. Press the Back Arrow button to exit out of a Menu or certain option on the Uconnect system.

Uconnect 4/4C/4C NAV Settings

Press the Settings button on the touchscreen to display the settings menu screen. In this mode the Uconnect system allows you to access programmable features that may be equipped such as Language, Display, Units, Voice, Clock, Camera, Safety & Driving Assistance, Mirrors & Wipers, Lights, Doors & Locks, Power Side Steps (if equipped), Auto-On Comfort Systems (if equipped), Engine Off Options, Air...
Suspension (if equipped), Trailer (if equipped), Audio, Phone/Bluetooth® Settings, Radio Setup (if equipped), Restore Default Settings, Clear Personal Data, and System Information (if equipped).

<<< CONDITION END <<<

When making a selection, press the button on the touchscreen to enter the desired menu. Once in the desired menu, press and release the preferred setting until a check-mark appears next to the setting, showing that setting has been selected. Once the setting is complete, press the Back Arrow button on the touchscreen to return to the previous menu or press the X button on the touchscreen to close out of the settings screen. Pressing the Up or Down Arrow buttons on the touchscreen on the right side of the screen will allow you to toggle up or down through the list of available settings.

### Language

After pressing the Language button on the touchscreen, the following settings will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language</td>
<td>Brasileiro/Deutsch/English</td>
</tr>
<tr>
<td></td>
<td>Español/Français/Italiano/Nederlands</td>
</tr>
<tr>
<td></td>
<td>Polski/Português/Türk/Pусский</td>
</tr>
</tbody>
</table>

**NOTE:**

When the “Language” feature is selected, you may select one of multiple languages (Brasileiro/Deutsch/English/Español/Français/Italiano/Nederlands/Polski/Português/Türk/Pусский) for all display nomenclature, including the trip functions and the navigation system (if equipped). Press the Language button on the touchscreen until a check-mark appears next to the language, showing that setting has been selected.

<<< CONDITION END <<<
Display
After pressing the Display button on the touchscreen, the following settings will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display Mode</td>
<td>Auto</td>
</tr>
</tbody>
</table>

**NOTE:**
When Auto or Manual is selected for the Display Mode, the usage of the Parade Mode feature will cause the radio to activate the Display Brightness Day control even though the headlights are on.

| Display Brightness With Headlights ON | - | + |

**NOTE:**
To make changes to the "Display Brightness With Headlights ON" setting, the headlights must be on and the interior dimmer switch must not be in the "party" or "parade" position.

| Display Brightness With Headlights OFF | - | + |

**NOTE:**
To make changes to the "Display Brightness With Headlights OFF" setting, the headlights must be off and the interior dimmer switch must not be in the "party" or "parade" position.

<table>
<thead>
<tr>
<th>Touchscreen Beep</th>
<th>On</th>
<th>Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>Controls Screen Time-Out — If Equipped</td>
<td>On</td>
<td>Off</td>
</tr>
<tr>
<td>Fuel Saver Display in Cluster — If Equipped</td>
<td>On</td>
<td>Off</td>
</tr>
</tbody>
</table>

**NOTE:**
When selected, the system displays fuel saver mode in the instrument cluster.

| Navigation Next Turn Pop-ups Displayed in Cluster — If Equipped | On | Off |
After pressing the Units button on the touchscreen, you may select each unit of measurement independently displayed in the instrument cluster display, and navigation system (if equipped). The following selectable units of measurement are listed below:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone Pop-ups Displayed in Cluster — If Equipped</td>
<td>On</td>
</tr>
</tbody>
</table>

### Units

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Units</td>
<td>US</td>
</tr>
</tbody>
</table>

**NOTE:**
When the “Custom” setting is selected, units will appear according to your personally configured settings. To configure these settings, press “Custom”. The following settings will appear:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed</td>
<td>MPH</td>
</tr>
<tr>
<td>Distance</td>
<td>mi</td>
</tr>
<tr>
<td>Fuel Consumption</td>
<td>MPG (US)</td>
</tr>
<tr>
<td>Pressure</td>
<td>psi</td>
</tr>
<tr>
<td>Power — If Equipped</td>
<td>HP (US)</td>
</tr>
<tr>
<td>Temperature</td>
<td>°F</td>
</tr>
<tr>
<td>Torque — If Equipped</td>
<td>lb-ft</td>
</tr>
</tbody>
</table>
Voice
After pressing the Voice button on the touchscreen, the following settings will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voice Response Length</td>
<td>Brief</td>
</tr>
<tr>
<td></td>
<td>Detailed</td>
</tr>
<tr>
<td>Show Command List</td>
<td>Never</td>
</tr>
<tr>
<td></td>
<td>w/Help</td>
</tr>
<tr>
<td></td>
<td>Always</td>
</tr>
</tbody>
</table>

Clock
After pressing the Clock button on the touchscreen, the following settings will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sync Time With GPS — If Equipped</td>
<td>On</td>
</tr>
<tr>
<td></td>
<td>Off</td>
</tr>
<tr>
<td>Set Time Hours</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Set Time Minutes</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Time Format</td>
<td>12 hrs</td>
</tr>
<tr>
<td></td>
<td>24 hrs</td>
</tr>
<tr>
<td></td>
<td>AM</td>
</tr>
<tr>
<td></td>
<td>PM</td>
</tr>
<tr>
<td>Show Time In Status Bar — If Equipped</td>
<td>On</td>
</tr>
<tr>
<td></td>
<td>Off</td>
</tr>
</tbody>
</table>

NOTE:
The “Show Time In Status Bar” feature allows you to turn on or shut off the digital clock in the status bar.
Camera

After pressing the Camera button on the touchscreen, the following settings will be available:

>>> CONDITION: {Market=Brazil or Market='Latin America'} >>>

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ParkView Backup Camera Delay — If Equipped</td>
<td>On</td>
</tr>
<tr>
<td>ParkView Backup Camera Delay — If Equipped</td>
<td>Off</td>
</tr>
</tbody>
</table>

NOTE:
The “ParkView Backup Camera Delay” setting determines whether or not the screen will display the rear view image with dynamic grid lines for up to 10 seconds after the vehicle is shifted out of REVERSE. This delay will be canceled if the vehicle’s speed exceeds 8 mph (13 km/h), the transmission is shifted into PARK, or the ignition is switched to the OFF position.

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ParkView Backup Camera Active Guide Lines — If Equipped</td>
<td>On</td>
</tr>
<tr>
<td>ParkView Backup Camera Active Guide Lines — If Equipped</td>
<td>Off</td>
</tr>
</tbody>
</table>

NOTE:
The “ParkView Backup Camera Active Guide Lines” feature overlays the Rear Backup Camera image with active, or dynamic, grid lines to help illustrate the width of the vehicle and its projected backup path based on the steering wheel position when the option is checked. A dashed center line overlay indicates the center of the vehicle to assist with parking or aligning to a hitch/receiver.

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ParkView Backup Camera Fixed Guide Lines — If Equipped</td>
<td>On</td>
</tr>
<tr>
<td>ParkView Backup Camera Fixed Guide Lines — If Equipped</td>
<td>Off</td>
</tr>
<tr>
<td>Forward Facing Camera Guidelines — If Equipped</td>
<td>On</td>
</tr>
</tbody>
</table>

NOTE:
The “Forward Facing Camera Guidelines” feature is an off-road type of feature that shows the path of the tires based on the steering wheel input.
After pressing the Safety & Driving Assistance button on the touchscreen, the following settings will be available:

<<< CONDITION: {Market=Brazil or Market='Latin America'} >>>

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHMSL (Center High Mounted Stop Lamp)</td>
<td>On</td>
</tr>
<tr>
<td>Camera Dynamic Centerline — If Equipped</td>
<td>Off</td>
</tr>
</tbody>
</table>

**NOTE:**
When the “CHMSL Camera Dynamic Centerline” feature is selected, it will assist in backing up for trailer alignment and hookup. This feature is only available if your vehicle is equipped with Surround View Camera.

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surround View Camera — If Equipped</td>
<td>On</td>
</tr>
<tr>
<td></td>
<td>Off</td>
</tr>
</tbody>
</table>

**NOTE:**
When the “CHMSL Camera Dynamic Centerline” feature is selected, it will assist in backing up for trailer alignment and hookup. This feature is only available if your vehicle is equipped with Surround View Camera.

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surround View Camera Delay — If Equipped</td>
<td>On</td>
</tr>
<tr>
<td></td>
<td>Off</td>
</tr>
</tbody>
</table>

**NOTE:**
The “Surround View Camera Delay” setting determines whether or not the screen will display the 360 degree view image with guidelines for up to 10 seconds after the vehicle is shifted out of REVERSE. This delay will be canceled if the vehicle’s speed exceeds 8 mph (13 km/h), the transmission is shifted into PARK, or the ignition is switched to the OFF position.
<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surround View Camera Guidelines — If Equipped</td>
<td>On</td>
</tr>
</tbody>
</table>

**NOTE:**
The “Surround View Camera Guidelines” feature allows you to see active guidelines over the Surround View Camera display whenever the gear selector is put into REVERSE or the Surround View button on the touchscreen is pressed. The image will be displayed on the radio touchscreen display.

| ParkView Backup Camera Delay — If Equipped      | On                 | Off                |

**NOTE:**
The “ParkView Backup Camera Delay” setting determines whether or not the screen will display the rear view image with dynamic grid lines for up to 10 seconds after the vehicle is shifted out of REVERSE. This delay will be canceled if the vehicle’s speed exceeds 8 mph (13 km/h), the transmission is shifted into PARK, or the ignition is switched to the OFF position.

| Active Parkview Backup Camera Guidelines — If Equipped | On                 | Off                |

**NOTE:**
The “Active ParkView Backup Camera Guidelines” feature overlays the Rear Backup Camera image with active, or dynamic, grid lines to help illustrate the width of the vehicle and its projected backup path, based on the steering wheel position when the option is checked. A dashed center line overlay indicates the center of the vehicle to assist with parking or aligning to a hitch/receiver.

| Fixed Parkview Backup Camera Guidelines — If Equipped | On                 | Off                |
| Forward Facing Camera Guidelines — If Equipped       | On                 | Off                |

**NOTE:**
The “Forward Facing Camera Guidelines” feature is an off-road type of feature that shows the path of the tires based on the steering wheel input.
<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHMSL (Center High Mounted Stop Lamp) Camera Dynamic Centerline — If Equipped</td>
<td>On</td>
</tr>
</tbody>
</table>

**NOTE:**
When the “CHMSL Camera Dynamic Centerline” feature is selected, it will assist in backing up for trailer alignment and hook up. This feature is only available if your vehicle is equipped with Surround View Camera.

<table>
<thead>
<tr>
<th>Forward Collision Warning — If Equipped</th>
<th>Off</th>
<th>Warning Only</th>
<th>Warning &amp; Braking</th>
</tr>
</thead>
</table>

**NOTE:**
Warns driver to slow the vehicle in case of potential forward collision, or applies brakes and a warning.

<table>
<thead>
<tr>
<th>Forward Collision Warning Sensitivity — If Equipped</th>
<th>Near</th>
<th>Med</th>
<th>Far</th>
</tr>
</thead>
</table>

**NOTE:**
Sets the distance in which a Forward Collision Warning occurs.

<table>
<thead>
<tr>
<th>Front ParkSense Volume</th>
<th>Low</th>
<th>Med</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rear ParkSense Volume</td>
<td>Low</td>
<td>Med</td>
<td>High</td>
</tr>
<tr>
<td>Power Side Steps — If Equipped</td>
<td>Auto</td>
<td>Store</td>
<td></td>
</tr>
<tr>
<td>Blind Spot Alert</td>
<td>Off</td>
<td>Lights</td>
<td>Lights &amp; Chime</td>
</tr>
<tr>
<td>Hill Start Assist — If Equipped</td>
<td>On</td>
<td>Off</td>
<td></td>
</tr>
<tr>
<td>Tire Fill Assist — If Equipped</td>
<td>On</td>
<td>Off</td>
<td></td>
</tr>
</tbody>
</table>
Mirrors & Wipers
After pressing the Mirrors & Wipers button on the touchscreen, the following settings will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tilt Side Mirrors In Reverse — If Equipped</td>
<td>On</td>
</tr>
</tbody>
</table>

**NOTE:**
When the “Tilt Side Mirrors In Reverse” feature is selected, the outside side-view mirrors will tilt downward when the ignition is in the ON/RUN position and the transmission gear selector is in the REVERSE position. The mirrors will move back to their previous position when the transmission is shifted out of REVERSE.

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rain Sensing Auto Wipers — If Equipped</td>
<td>On</td>
</tr>
</tbody>
</table>

**NOTE:**
Automatically adjusts the wiper speed based on the amount of precipitation.

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headlights with Wipers</td>
<td>On</td>
</tr>
</tbody>
</table>

**NOTE:**
When the “Headlight Off Delay” feature is selected, the driver can choose to have the headlights remain on for 0, 30, 60, or 90 seconds when exiting the vehicle.

Lights
After pressing the Lights button on the touchscreen, the following settings will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headlight Off Delay</td>
<td>–</td>
</tr>
</tbody>
</table>

**NOTE:**
When the “Headlight Off Delay” feature is selected, the driver can choose to have the headlights remain on for 0, 30, 60, or 90 seconds when exiting the vehicle.
<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
<th>NOTE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headlight Illumination On Approach</td>
<td>-</td>
<td>When the “Headlight Illumination On Approach” feature is selected, the headlights will activate and remain on for 0, 30, 60, or 90 seconds when the doors are unlocked with the key fob.</td>
</tr>
<tr>
<td>Headlights With Wipers — If Equipped</td>
<td>On</td>
<td>When the “Headlights With Wipers” feature is selected, and the headlight switch is in the AUTO position, the headlights turn on approximately 10 seconds after the wipers are turned on. The headlights also turn off when the wipers are turned off if they were turned on by this feature.</td>
</tr>
<tr>
<td>Auto Dim High Beams — If Equipped</td>
<td>On</td>
<td>When the “Auto Dim High Beams” feature is selected, the high beam headlights deactivate automatically under certain conditions.</td>
</tr>
<tr>
<td>Daytime Running Lights — If Equipped</td>
<td>On</td>
<td>When the “Daytime Running Lights” feature is selected, the daytime running lights can be turned On or Off. This feature is only available if allowed by law in the country of the vehicle purchase.</td>
</tr>
<tr>
<td>Flash Lights With Lock</td>
<td>On</td>
<td>When the “Flash Lights With Lock” feature is selected, the exterior lamps flash when the doors are locked or unlocked with the key fob. This feature may be selected with or without the “Sound Horn With Lock” feature selected.</td>
</tr>
<tr>
<td>Rear Cargo Guidance Lights — If Equipped</td>
<td>On</td>
<td>When the “Rear Cargo Guidance Lights” feature is selected, the lights in the cargo and bed of the truck will come on either when the headlight switch is pressed, or the button on the back bed of the truck is pressed.</td>
</tr>
</tbody>
</table>
### Doors & Locks

After pressing the Doors & Locks button on the touchscreen, the following settings will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Auto Door Locks — If Equipped</strong></td>
<td>On</td>
</tr>
</tbody>
</table>

**NOTE:**
When the “Auto Door Locks” feature is selected, all doors lock automatically when the vehicle reaches a speed of 15 mph (24 km/h).

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Auto Unlock On Exit</strong></td>
<td>On</td>
</tr>
</tbody>
</table>

**NOTE:**
When the “Auto Unlock On Exit” feature is selected, all doors unlock when the vehicle is stopped and the transmission is in the PARK or NEUTRAL position, and the driver's door is opened.

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flash Lights With Lock</strong></td>
<td>On</td>
</tr>
</tbody>
</table>

**NOTE:**
When the “Flash Lights With Lock” feature is selected, the front and rear turn signals flash when the doors are locked or unlocked with the key fob. This feature may be selected with or without the “Sound Horn With Lock” feature selected.

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sound Horn With Lock</strong></td>
<td>Off</td>
</tr>
<tr>
<td><strong>— If Equipped</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sound Horn With Remote Start</strong></td>
<td>On</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1st Press Of Key Fob Unlocks</strong></td>
<td>Driver Door</td>
</tr>
<tr>
<td><strong>— If Equipped</strong></td>
<td></td>
</tr>
</tbody>
</table>
NOTE:

- When “1st Press Of Key Fob Unlocks: Driver Door” is programmed, only the driver’s door unlocks on the first press of the key fob Unlock button. You must push the key fob unlock button twice to unlock the passengers’ doors.

- When “All Doors” is programmed, all of the doors unlock on the first push of the key fob unlock button.

- If the vehicle is programmed “1st Press Of Key Fob Unlocks: All Doors”, all doors will unlock no matter which Passive Entry equipped door handle is grasped. If “1st Press Of Key Fob Unlocks: Driver Door” is programmed, only the driver’s door will unlock when the driver’s door is grasped.

- With Passive Entry, if “1st Press Of Key Fob Unlocks: Driver Door” is programmed, pushing the handle more than once only results in the driver’s door opening. If “Driver Door” is programmed, once the driver’s door is opened, the interior door lock/unlock switch can be used to unlock all doors (or use key fob).

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passive Entry — If Equipped</td>
<td>On</td>
</tr>
</tbody>
</table>

NOTE:
The “Passive Entry” feature allows you to lock and unlock the vehicle’s door(s) without having to push the key fob Lock or Unlock buttons.

| Personal Settings Linked To Key Fob — If Equipped | On | Off |

NOTE:
- The “Personal Settings Linked To Key Fob” feature provides automatic driver seat positioning to enhance driver mobility when entering and exiting the vehicle.

- The seats return to the memorized seat location (if “Personal Settings Linked To Key Fob” is set to On) when the key fob is used to unlock the door.
Power Side Steps — If Equipped
After pressing the Power Side Steps button on the touchscreen, the following settings will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Side Steps</td>
<td>Automatic</td>
</tr>
<tr>
<td></td>
<td>Stow</td>
</tr>
</tbody>
</table>

Auto-On Comfort Systems — If Equipped
After pressing the Auto-On Comfort Systems button on the touchscreen, the following settings will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto-On Driver Heated/Ventilated Seat &amp; Steering Wheel With Vehicle Start — If Equipped</td>
<td>Off</td>
</tr>
<tr>
<td></td>
<td>Remote Start</td>
</tr>
<tr>
<td></td>
<td>All Starts</td>
</tr>
</tbody>
</table>

**NOTE:**
When the “Auto-On Driver Heated/Ventilated Seat & Steering Wheel With Vehicle Start” feature is selected, the driver's heated seat and heated steering wheel will automatically turn on when temperatures are below 40 °F (4.4 °C). When temperatures are above 80 °F (26.7 °C), the driver vented seat will turn on.
**Engine Off Options**

After pressing the Engine Off Options button on the touchscreen, the following settings will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine Off Power Delay</td>
<td></td>
</tr>
<tr>
<td>Headlight Off Delay</td>
<td></td>
</tr>
<tr>
<td>Auto Entry/Exit — If Equipped</td>
<td>On</td>
</tr>
<tr>
<td>Easy Exit Seat — If Equipped</td>
<td>On</td>
</tr>
</tbody>
</table>

**NOTE:**
- When the “Engine Off Power Delay” feature is selected, the power window switches, radio, Uconnect phone system (if equipped), power sunroof (if equipped), and power outlets will remain active for up to 10 minutes after the ignition is cycled to OFF. Opening either front door will cancel this feature.
- When the “Headlight Off Delay” feature is selected, the driver can choose to have the headlights remain on for 0, 30, 60, or 90 seconds when exiting the vehicle.
- When the “Easy Exit Seat” feature is selected, the Driver’s seat will automatically move rearward once the engine is shut off.
Air Suspension — If Equipped
After pressing the Suspension button on the touchscreen, the following settings will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display Suspension Messages</td>
<td>All</td>
</tr>
<tr>
<td></td>
<td>Warnings Only</td>
</tr>
<tr>
<td>Tire Jack Mode</td>
<td>On</td>
</tr>
<tr>
<td></td>
<td>Off</td>
</tr>
</tbody>
</table>

**NOTE:**
When the “Tire Jack Mode” feature is selected, the air suspension system is disabled to assist with changing a spare tire.

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport Mode</td>
<td>On</td>
</tr>
<tr>
<td></td>
<td>Off</td>
</tr>
</tbody>
</table>

**NOTE:**
When the “Transport Mode” feature is selected, the air suspension system lowers and then disables to assist with flatbed towing.

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheel Alignment Mode</td>
<td>On</td>
</tr>
<tr>
<td></td>
<td>Off</td>
</tr>
</tbody>
</table>

**NOTE:**
Before performing a wheel alignment, the “Wheel Alignment Mode” must be enabled. Refer to an authorized dealer for further information.

Trailer — If Equipped
After pressing the Trailer button on the touchscreen, the following settings will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trailer</td>
<td>Trailer 1</td>
</tr>
<tr>
<td></td>
<td>Trailer 2</td>
</tr>
<tr>
<td></td>
<td>Trailer 3</td>
</tr>
<tr>
<td></td>
<td>Trailer 4</td>
</tr>
</tbody>
</table>

Once selecting the specific trailer, the following programmable options become available:
### Setting Name | Selectable Options
--- | ---
Use This Trailer | On | Off
Braking | Light Electric | Light Electric Over Hydraulic | Heavy Electric | Heavy Electric Over Hydraulic
Tire Pressure — If Equipped | Are you sure you want to delete the Tire Pressure Settings for Trailer 1? |
| Yes | No
| Number Of Axles | + | -
| Number Of Tires | + | -

**NOTE:**
After pressing Next, the Tire Pressure screen appears. The default for this option is 50 PSI (344 kPa), however the range is selectable anywhere between 25–125 PSI (172–862 kPa). Once PSI (kPa) is programmed, the pairing screen appears. Tire sensors must be paired in order shown. Starting with Tire 1, deflate tire by 5 PSI (34 kPa) and wait for a horn chirp. Repeat process until complete. Do not exit the pairing screen until process is complete. If pairing has been unsuccessful, a double horn chirp will sound, and a prompt on the touchscreen will allow you to retry the procedure; “Retry” will only appear when setup fails. Each tire must be successfully paired during a single pairing process to receive the success screen.

### Trailer Name | List of Trailer Names
--- | ---

**NOTE:**
You can select and personalize your trailer name depending on the type of trailer you are hauling. Select the trailer name from the following list: trailer, boat, car, cargo, dump, equipment, flatbed, gooseneck, horse, livestock, motorcycle, snowmobile, travel, utility, and 5th wheel.

**NOTE:**
For further information about Trailer Tire Pres-
sure Monitoring, refer to “Auxiliary Driving Systems” in “Safety.”

**Audio**

After pressing the Audio button on the touchscreen, the following settings will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance/Fade</td>
<td>Front, Rear, Left, Right</td>
</tr>
</tbody>
</table>

**NOTE:**
The “Balance/Fade” feature allows you to adjust the Balance and Fade settings. Press and drag the Speaker icon or use the arrows to adjust, tap the C icon to readjust to the center.

| Equalizer  | + | – |

**NOTE:**
When in the “Equalizer” display, you may adjust the Bass, Mid and Treble settings.

| Speed Adjusted Volume | Off | 1 | 2 | 3 |

**NOTE:**
The “Speed Adjusted Volume” feature increases or decreases volume relative to vehicle speed.

| Surround Sound — If Equipped | On | Off |

**NOTE:**
The “Surround Sound” feature provides simulated surround sound mode.

| AUX Volume Offset — If Equipped | On | Off |
### Phone/Bluetooth® Settings

After pressing the Phone/Bluetooth® Settings button on the touchscreen, the following settings will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NOTE:</strong> The “AUX Volume Offset” feature provides the ability to tune the audio level for portable devices connected through the AUX input.</td>
<td></td>
</tr>
<tr>
<td><strong>Auto Play</strong></td>
<td>On</td>
</tr>
<tr>
<td></td>
<td>Off</td>
</tr>
</tbody>
</table>

#### Phone Pop-ups Displayed in Cluster — If Equipped

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone Pop-ups Displayed in Cluster — If Equipped</td>
<td>On</td>
</tr>
<tr>
<td></td>
<td>Off</td>
</tr>
</tbody>
</table>

#### Do Not Disturb

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do Not Disturb</td>
<td>List of Settings</td>
</tr>
</tbody>
</table>

#### Paired Phones and Audio Devices

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paired Phones and Audio Devices</td>
<td>List Of Paired Phones and Audio Sources</td>
</tr>
</tbody>
</table>

#### Smartphone Projection Manager — If Equipped

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smartphone Projection Manager — If Equipped</td>
<td>On</td>
</tr>
<tr>
<td></td>
<td>Off</td>
</tr>
</tbody>
</table>

**NOTE:**
Press “Do Not Disturb” to access the available settings. The following settings are: Auto Reply (Both, Text, Call), Auto Reply Message (Custom, Default), and Custom Auto Reply Message (Create Message).

**NOTE:**
The “Paired Phones and Audio Devices” feature shows which phones and audio sources are paired to the Phone and Audio Sources Settings system. For further information, refer to the Uconnect Owner’s Manual Supplement.
Radio Setup — If Equipped
After pressing the Radio Setup button on the touchscreen, the following settings will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional — If Equipped</td>
<td>On</td>
</tr>
</tbody>
</table>

**NOTE:**
When the “Regional” feature is selected, it forces regional service-following enabling automatic switching to network stations.

Restore Default Settings
After pressing the Restore Default Settings button on the touchscreen, the following settings will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restore Default Settings</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**NOTE:**
When the “Restore Settings” feature is selected, it resets clock, audio and other features to their default settings.
Clear Personal Data
After pressing the Clear Personal Data Settings button on the touchscreen, the following settings will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear Personal Data</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Cancel</td>
</tr>
</tbody>
</table>

NOTE:
When this feature is selected, it will remove all personal data including Bluetooth® devices and presets. If “Yes” is selected, a pop-up will appear asking "Are you sure you want to clear all personal data?" select “Yes” to clear, or “Cancel” to exit.

System Information — If Equipped
After pressing the System Information button on the touchscreen, the following settings will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software License</td>
<td>System Software Information Screen</td>
</tr>
</tbody>
</table>

NOTE:
When the “Software License” feature is selected, a “System Software Information” screen will appear, displaying the system software version.
Uconnect 4C NAV With 12-inch Display
Settings

Touchscreen And Buttons On The Faceplate
1 — Uconnect Buttons On The Touchscreen
2 — Uconnect Buttons On The Faceplate

>>> CONDITION: {Market=Brazil or Market='Latin America'} >>>
Press the Settings button on the touchscreen to display the settings menu screen. In this mode the Uconnect system allows you to access programmable features that may be equipped such as Language, Display, Units (if equipped), Voice Settings, Clock, Camera, Safety & Driving Assistance, Mirrors & Wipers, Lights, Doors & Locks, Auto-On Comfort & Remote Start (if equipped), Engine Off Options, Suspension (if equipped), Trailer Brake, Audio Settings, Bluetooth®, Radio Setup (if equipped), and Reset.

<<< CONDITION END <<<
When making a selection, press the button on the touchscreen to enter the desired menu. Once in the desired menu, press and release the preferred setting until a check-mark appears next to the setting, showing that setting has been selected. Once the setting is complete, press the Back Arrow button on the touchscreen to return to the previous menu or press the X button on the touchscreen to close out of the settings screen. Pressing the Up or Down Arrow buttons on the touchscreen on the right side of the screen will allow you to toggle up or down through the list of available settings.
NOTE:
All settings should be changed with the ignition in the ON/RUN position.

Language
After pressing the Language button on the touchscreen, the following settings will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language</td>
<td>阿拉伯/Brasileiro/Deutsch/English</td>
</tr>
<tr>
<td></td>
<td>Español/Français/Italiano/Nederlands</td>
</tr>
<tr>
<td></td>
<td>Polski/Português/Türk/Pусский</td>
</tr>
</tbody>
</table>

NOTE:
When the Language feature is selected, you may select one of multiple languages (Brasileiro/Deutsch/English/Español/Français/Italiano/Nederlands/Polski/Português/Türk/Pусский) for all display nomenclature, including the trip functions and the navigation system (if equipped). Arabic, if available, can be selected for navigation audible prompts and map information. Press the Language button on the touchscreen, then press the desired language button on the touchscreen until a check-mark appears next to the language, showing that setting has been selected.
Display

After pressing the Display button on the touchscreen, the following settings will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display Brightness Mode</td>
<td>Auto</td>
</tr>
</tbody>
</table>

**NOTE:**
Select Auto or Manual display mode and this allows adjustment of overall screen brightness.

<table>
<thead>
<tr>
<th>Display Brightness Headlight ON</th>
<th>-</th>
<th>+</th>
</tr>
</thead>
</table>

**NOTE:**
To make changes to the "Display Brightness With Headlights ON" setting, the headlights must be on and the interior dimmer switch must not be in the "party" or "parade" position.

<table>
<thead>
<tr>
<th>Display Brightness Headlight OFF</th>
<th>-</th>
<th>+</th>
</tr>
</thead>
</table>

**NOTE:**
To make changes to the "Display Brightness With Headlights OFF" setting, the headlights must be off and the interior dimmer switch must not be in the "party" or "parade" position.

<table>
<thead>
<tr>
<th>Set Theme</th>
<th>Pre-configured Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Touchscreen Beep</td>
<td>On</td>
</tr>
<tr>
<td>Controls Screen Timeout — If Equipped</td>
<td>On</td>
</tr>
<tr>
<td>Fuel Saver Display — If Equipped</td>
<td>On</td>
</tr>
</tbody>
</table>

**NOTE:**
When selected, the system displays fuel saver mode in the instrument cluster.

<table>
<thead>
<tr>
<th>Navigation Turn-by-Turn Displayed in Cluster — If Equipped</th>
<th>On</th>
<th>Off</th>
</tr>
</thead>
</table>
### Multimedia 441

**Units — If Equipped**

After pressing Units on the touchscreen, the following will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone Pop-ups Displays In Cluster</td>
<td>On</td>
</tr>
<tr>
<td></td>
<td>Off</td>
</tr>
<tr>
<td>Ready To Drive Pop-Ups — If Equipped</td>
<td>On</td>
</tr>
<tr>
<td></td>
<td>Off</td>
</tr>
</tbody>
</table>

#### Setting Name | Selectable Options

- **Units**: US, Metric, Custom

**NOTE:**

When the “Custom” setting is selected, units will appear according to your personally configured settings. To configure these settings, press “Custom”.

The following settings will appear:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed</td>
<td>MPH, km/h</td>
</tr>
<tr>
<td>Distance</td>
<td>mi, km</td>
</tr>
<tr>
<td>Fuel Consumption</td>
<td>MPG (US), MPG (UK), L/100 km, km/L</td>
</tr>
<tr>
<td>Pressure</td>
<td>psi, kPa, bar</td>
</tr>
<tr>
<td>Power — If Equipped</td>
<td>HP (US), HP (UK), Kw</td>
</tr>
<tr>
<td>Temperature</td>
<td>°F, °C</td>
</tr>
<tr>
<td>Torque — If Equipped</td>
<td>lb-ft, Nm</td>
</tr>
</tbody>
</table>
Voice Settings
After pressing the Voice Settings button on the touchscreen, the following settings will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voice Response Length</td>
<td>Brief</td>
</tr>
<tr>
<td></td>
<td>Detailed</td>
</tr>
<tr>
<td>Show Command List</td>
<td>Never</td>
</tr>
<tr>
<td></td>
<td>w/Help</td>
</tr>
<tr>
<td></td>
<td>Always</td>
</tr>
</tbody>
</table>

Clock
After pressing the Clock button on the touchscreen, the following settings will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sync Time With GPS — If Equipped</td>
<td>On</td>
</tr>
<tr>
<td></td>
<td>Off</td>
</tr>
<tr>
<td>Set Time Hours</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>–</td>
</tr>
<tr>
<td>Set Time Minutes</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>–</td>
</tr>
<tr>
<td>Set Time Format</td>
<td>AM</td>
</tr>
<tr>
<td></td>
<td>PM</td>
</tr>
<tr>
<td></td>
<td>12 hrs</td>
</tr>
<tr>
<td></td>
<td>24 hrs</td>
</tr>
<tr>
<td>Show Time in Status Bar — If Equipped</td>
<td>On</td>
</tr>
<tr>
<td></td>
<td>Off</td>
</tr>
</tbody>
</table>

Camera
After pressing the Camera button on the touchscreen, the following settings will be available:

>>> CONDITION: {Market=Brazil or Market="Latin America"} >>>
### Setting Name | Selectable Options
---|---
**Parkview Camera Delay — If Equipped** | On | Off
**NOTE:**
The “Parkview Camera Delay” setting determines whether or not the screen will display the rear view image with dynamic grid lines for up to 10 seconds after the vehicle is shifted out of REVERSE. This delay will be canceled if the vehicle’s speed exceeds 8 mph (13 km/h), the transmission is shifted into PARK, or the ignition is switched to the OFF position.

**Active Backup Camera Guidelines — If Equipped** | On | Off
**NOTE:**
The “Active Backup Camera Guidelines” feature overlays the Rear Backup Camera image with active or dynamic grid lines to help illustrate the width of the vehicle and its projected backup path, based on the steering wheel position when the option is checked. A dashed center line overlay indicates the center of the vehicle to assist with parking or aligning to a hitch/receiver.

**Fixed Backup Camera Guidelines — If Equipped** | On | Off

**Forward Facing Camera Guidelines — If Equipped** | On | Off
**NOTE:**
The “Forward Facing Camera Guidelines” feature is an off-road type of feature that shows the path of the tires based on the steering wheel input.

**CHMSL (Center High Mounted Stop Lamp) Camera Dynamic Centerline — If Equipped** | On | Off
**NOTE:**
When the “CHMSL Camera Dynamic Centerline” feature is selected, it will assist in backing up for trailer alignment and hookup. This feature is only available if your vehicle is equipped with Surround View Camera.

<<< CONDITION END >>>
## Safety & Driving Assistance

After pressing the Safety & Driving Assistance button on the touchscreen, the following settings will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forward Collision Warning — If Equipped</td>
<td>Off, Warning Only, Warning &amp; Active Braking</td>
</tr>
<tr>
<td><strong>NOTE:</strong></td>
<td></td>
</tr>
<tr>
<td>Sounds an audible warning for the driver to slow the vehicle in case of a possible collision or sounds an audible warning and applies brakes.</td>
<td></td>
</tr>
<tr>
<td>Forward Collision Warning Sensitivity — If Equipped</td>
<td>Near, Med, Far</td>
</tr>
<tr>
<td><strong>NOTE:</strong></td>
<td></td>
</tr>
<tr>
<td>Sets the distance in which a Forward Collision Warning occurs.</td>
<td></td>
</tr>
<tr>
<td>Front ParkSense Volume</td>
<td>Low, Med, High</td>
</tr>
<tr>
<td>Rear ParkSense Volume</td>
<td>Low, Med, High</td>
</tr>
<tr>
<td>Blind Spot Alert</td>
<td>Off, Lights, Lights + Chime</td>
</tr>
<tr>
<td>Power Side Step — If Equipped</td>
<td>Auto, Store</td>
</tr>
<tr>
<td>Hill Start Assist — If Equipped</td>
<td>On, Off</td>
</tr>
<tr>
<td>Tire Fill Assist — If Equipped</td>
<td>On, Off</td>
</tr>
</tbody>
</table>
Mirrors & Wipers
After pressing the Mirror & Wipers button on the touchscreen, the following settings will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tilt Side Mirrors In Reverse — If Equipped</td>
<td>On            Off</td>
</tr>
</tbody>
</table>

**NOTE:**
When the “Tilt Side Mirrors In Reverse” feature is selected, the outside side-view mirrors will tilt downward when the ignition is in the ON/RUN position and the transmission gear selector is in the REVERSE position. The mirrors will move back to their previous position when the transmission is shifted out of REVERSE.

| Rain Sensing Auto Wipers | On | Off |

**NOTE:**
Automatically adjusts the wiper speed based on the amount of precipitation.

| Headlights with Wipers | On | Off |

**Lights**
After pressing the Lights button on the touchscreen, the following settings will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headlight Off Delay</td>
<td>-                  +</td>
</tr>
</tbody>
</table>

**NOTE:**
When the “Headlight Off Delay” feature is selected, the driver can choose to have the headlights remain on for 0, 30, 60, or 90 seconds when exiting the vehicle.
<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headlight Illumination On Approach</td>
<td>-</td>
</tr>
</tbody>
</table>

**NOTE:**
When the “Headlight Illumination On Approach” feature is selected, the headlights will activate and remain on for 0, 30, 60, or 90 seconds when the doors are unlocked with the key fob.

<table>
<thead>
<tr>
<th>Headlights With Wipers — If Equipped</th>
<th>On</th>
</tr>
</thead>
</table>

**NOTE:**
When the “Headlights With Wipers” feature is selected, and the headlight switch is in the AUTO position, the headlights turn on approximately 10 seconds after the wipers are turned on. The headlights also turn off when the wipers are turned off if they were turned on by this feature.

<table>
<thead>
<tr>
<th>Auto Dim High Beams — If Equipped</th>
<th>On</th>
</tr>
</thead>
</table>

**NOTE:**
When the “Auto Dim High Beams” feature is selected, the high beam headlights deactivate automatically under certain conditions.

<table>
<thead>
<tr>
<th>Daytime Running Lights</th>
<th>On</th>
</tr>
</thead>
</table>

**NOTE:**
When the “Daytime Running Lights” feature is selected, the daytime running lights can be turned On or Off. This feature is only available if allowed by law in the country of the vehicle purchase.

<table>
<thead>
<tr>
<th>Steering Directed Lights</th>
<th>On</th>
</tr>
</thead>
</table>

**NOTE:**
When the “Steering Directed Lights” feature is selected, the headlights turn with the direction of the steering wheel.

<table>
<thead>
<tr>
<th>Flash Lights with Lock</th>
<th>On</th>
</tr>
</thead>
</table>

**NOTE:**
When the “Flash Lights With Lock” feature is selected, the exterior lamps flash when the doors are locked or unlocked with the key fob. This feature may be selected with or without the “Sound Horn With Lock” feature selected.
After pressing the Doors & Locks button on the touchscreen, the following settings will be available:

### Rear Guidance Lights w/ Cargo Lights— If Equipped

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rear Guidance Lights w/ Cargo Lights— If Equipped</td>
<td>On</td>
</tr>
</tbody>
</table>

**NOTE:**
When the “Rear Guidance Lights w/ Cargo Lights” feature is selected, the lights in the cargo and bed of the truck will come on either when the headlight switch is pressed, or the button on the back bed of the truck is pressed.

### Auto Door Locks

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto Door Locks</td>
<td>On</td>
</tr>
<tr>
<td>Auto Unlock On Exit</td>
<td>On</td>
</tr>
</tbody>
</table>

**NOTE:**
When the “Auto Unlock On Exit” feature is selected, all doors unlock when the vehicle is stopped, the transmission is in the PARK or NEUTRAL position, and the driver's door is opened.

### Flash Lights With Lock

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Lights With Lock</td>
<td>On</td>
</tr>
</tbody>
</table>

**NOTE:**
When the “Flash Lights With Lock” feature is selected, the front and rear turn signals flash when the doors are locked or unlocked with the key fob. This feature may be selected with or without the “Sound Horn With Lock” feature selected.

### Sound Horn With Lock — If Equipped

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sound Horn With Lock — If Equipped</td>
<td>Off</td>
</tr>
<tr>
<td>Sound Horn With Remote Start</td>
<td>On</td>
</tr>
<tr>
<td>1st Press Of Key Fob Unlocks</td>
<td>Driver Door</td>
</tr>
</tbody>
</table>
When “1st Press Of Key Fob Unlocks: Driver Door” is programmed, only the driver’s door unlocks on the first press of the key fob unlock button. You must push the key fob unlock button twice to unlock the passengers’ doors.

When “All Doors” is programmed, all of the doors unlock on the first push of the key fob unlock button.

If the vehicle is programmed “1st Press Of Key Fob Unlocks: All Doors”, all doors unlock no matter which Passive Entry equipped door handle is grasped. If “1st Press Of Key Fob Unlocks: Driver Door” is programmed, only the driver’s door unlocks when the driver’s door is grasped.

With Passive Entry, if “1st Press Of Key Fob Unlocks: Driver Door” is programmed, pushing the handle more than once only results in the driver’s door opening. If “Driver Door” is programmed, once the driver’s door is opened, the interior door lock/unlock switch can be used to unlock all doors (or use key fob).

### Passive Entry — If Equipped

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passive Entry — If Equipped</td>
<td>On</td>
</tr>
</tbody>
</table>

NOTE:
The “Passive Entry” feature allows you to lock and unlock the vehicle’s door(s) without having to push the key fob lock or unlock buttons.

### Personal Settings Linked To Key Fob — If Equipped

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Settings Linked To Key Fob — If Equipped</td>
<td>On</td>
</tr>
</tbody>
</table>

NOTE:
The “Personal Settings Linked To Key Fob” feature provides automatic driver seat positioning to enhance driver mobility when entering and exiting the vehicle.

The seats return to the memorized seat location (if “Personal Settings Linked To Key Fob” is set to On) when the key fob is used to unlock the door.
**Auto-On Comfort & Remote Start — If Equipped**

After pressing the Auto-On Comfort & Remote Start button on the touchscreen, the following settings will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto-On Driver Heated/Vented Seat &amp; Steering Wheel — If Equipped</td>
<td>Off</td>
</tr>
</tbody>
</table>

**NOTE:**
When the “Auto-On Driver Heated/Vented Seat & Steering Wheel” feature is selected, the driver’s heated seat and heated steering wheel will automatically turn on when temperatures are below 40°F (4.4°C). When temperatures are above 80°F (26.7°C), the driver vented seat will turn on.

**Engine Off Options**

After pressing the Engine Off Options button on the touchscreen, the following settings will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine Off Power Delay</td>
<td>+</td>
</tr>
</tbody>
</table>

**NOTE:**
When the “Engine Off Power Delay” feature is selected, the power window switches, radio, Uconnect phone system (if equipped), power sunroof (if equipped), and power outlets will remain active for up to 10 minutes after the ignition is cycled to OFF. Opening either front door will cancel this feature.

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headlight Off Delay</td>
<td>+</td>
</tr>
</tbody>
</table>
Suspension — If Equipped

After pressing the Suspension button on the touchscreen, the following settings will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display Suspension Messages</td>
<td>All Warning Only</td>
</tr>
<tr>
<td>Tire Jack Mode</td>
<td>On Off</td>
</tr>
</tbody>
</table>

NOTE:
When the “Tire Jack Mode” feature is selected, the air suspension system is disabled to assist with changing a spare tire.

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport Mode</td>
<td>On Off</td>
</tr>
</tbody>
</table>

NOTE:
When the “Transport Mode” feature is selected, the air suspension system lowers and then disables to assist with flatbed towing.
After pressing the Trailer Brake button on the touchscreen, the following settings will be available:

### Wheel Alignment Mode

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheel Alignment Mode</td>
<td>On</td>
</tr>
<tr>
<td></td>
<td>Off</td>
</tr>
</tbody>
</table>

**NOTE:**
Before performing a wheel alignment, the “Wheel Alignment Mode” must be enabled. Refer to an authorized dealer for further information.

### Trailer Brake

After pressing the Trailer Brake button on the touchscreen, the following settings will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trailer</td>
<td>Trailer 1</td>
</tr>
<tr>
<td></td>
<td>Trailer 2</td>
</tr>
<tr>
<td></td>
<td>Trailer 3</td>
</tr>
<tr>
<td></td>
<td>Trailer 4</td>
</tr>
</tbody>
</table>

Once selecting the specific trailer, the following programmable options become available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use This Trailer</td>
<td>On</td>
</tr>
<tr>
<td></td>
<td>Off</td>
</tr>
<tr>
<td>Braking</td>
<td>Light Electric</td>
</tr>
<tr>
<td></td>
<td>Light Electric Over Hydraulic</td>
</tr>
<tr>
<td></td>
<td>Heavy Electric</td>
</tr>
<tr>
<td></td>
<td>Heavy Electric Over Hydraulic</td>
</tr>
</tbody>
</table>
NOTE:
For further information about Trailer Tire Pres-

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tire Pressure</td>
<td>Are you sure you want to delete the Tire Pressure Settings for Trailer 1?</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>+</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>+</td>
</tr>
</tbody>
</table>

NOTE:
After pressing Next, the Tire Pressure screen appears. The default for this option is 50 PSI (344 kPa), however the range is selectable anywhere between 25–125 PSI (172–862 kPa). Once PSI (kPa) is programmed the pairing screen appears. Tire sensors must be paired in order shown. Starting with Tire 1, deflate tire by 5 PSI (34 kPa) and wait for a horn chirp. Repeat process until complete. Do not exit the pairing screen until process is complete. If pairing has been unsuccessful, a double horn chirp will sound, and a prompt on the touchscreen will allow you to retry the procedure; “Retry” will only appear when setup fails. Each tire must be successfully paired during a single pairing process to receive the success screen.

| Trailer Name | List of Trailer Names |

NOTE:
You can select and personalize your trailer name depending on the type of trailer you are hauling. Select the trailer name from the following list: trailer, boat, car, cargo, dump, equipment, flatbed, gooseneck, horse, livestock, motorcycle, snowmobile, travel, utility, and 5th wheel.

NOTE:
For further information about Trailer Tire Pres-
Audio Settings
After pressing the Audio Settings button on the touchscreen, the following settings will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance/Fade</td>
<td>Front</td>
</tr>
<tr>
<td>Equalizer</td>
<td>+</td>
</tr>
<tr>
<td>Speed Adjusted Volume</td>
<td>Off</td>
</tr>
<tr>
<td>Surround Sound — If Equipped</td>
<td>On</td>
</tr>
<tr>
<td>AUX Volume Offset — If Equipped</td>
<td>On</td>
</tr>
</tbody>
</table>

**NOTE:**
The “Balance/Fade” feature allows you to adjust the Balance and Fade settings. Press and drag the Speaker icon or use the arrows to adjust, tap the C icon to readjust to the center.

**NOTE:**
When in the “Equalizer” display, you may adjust the Bass, Mid and Treble settings.

**NOTE:**
The “Speed Adjusted Volume” feature increases or decreases volume relative to vehicle speed.

**NOTE:**
The “Surround Sound” feature provides simulated surround sound mode.
After pressing the Bluetooth® button on the touchscreen, the following settings will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NOTE:</strong> The “AUX Volume Offset” feature provides the ability to tune the audio level for portable devices connected through the AUX input.</td>
<td></td>
</tr>
<tr>
<td>Auto Play</td>
<td>On</td>
</tr>
</tbody>
</table>

**Bluetooth®**

After pressing the Bluetooth® button on the touchscreen, the following settings will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NOTE:</strong> Press “Do Not Disturb” to access the available settings. The following settings are: Auto Reply (Both, Text, Call), Auto Reply Message (Custom, Default), and Custom Auto Reply Message (Create Message).</td>
<td></td>
</tr>
<tr>
<td>Phone Pop-ups Displayed in Cluster</td>
<td>On</td>
</tr>
<tr>
<td>Do Not Disturb</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NOTE:</strong> The “Paired Phones and Audio Devices” feature shows which phones and audio sources are paired to the Phone and Audio Sources Settings system. For further information, refer to the Uconnect Owner’s Manual Supplement.</td>
<td></td>
</tr>
<tr>
<td>Paired Phones and Audio Devices</td>
<td>List Of Paired Phones and Audio Sources</td>
</tr>
<tr>
<td>Smartphone Device Mirroring — If Equipped</td>
<td>On</td>
</tr>
<tr>
<td>Enable CarPlay Projections — If Equipped</td>
<td>On</td>
</tr>
<tr>
<td>Automatically Display Pop-Ups in Cluster — If Equipped</td>
<td>On</td>
</tr>
</tbody>
</table>
After pressing the Radio Setup button on the touchscreen, the following settings will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set as Default Device — If Equipped</td>
<td>On</td>
</tr>
<tr>
<td></td>
<td>Off</td>
</tr>
<tr>
<td>Projection Manager</td>
<td>Smartphone Device Mirroring On</td>
</tr>
<tr>
<td></td>
<td>Smartphone Device Mirroring Off</td>
</tr>
</tbody>
</table>

NOTE:
When the “Regional” feature is selected, it forces regional service-following enabling automatic switching to network stations.

Reset
After pressing the Reset button on the touchscreen, the following settings will be available:

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reset App Drawer to Default Order</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Cancel</td>
</tr>
</tbody>
</table>
## STEERING WHEEL AUDIO CONTROLS — IF EQUIPPED

The remote sound system controls are located on the back surface of the steering wheel. Reach behind the wheel to access the switches.

<table>
<thead>
<tr>
<th>Setting Name</th>
<th>Selectable Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restore Settings</td>
<td>Yes</td>
</tr>
<tr>
<td>Clear Personal Data</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**NOTE:**
When the “Restore Settings” feature is selected, it resets all settings to their default settings.

**NOTE:**
When the “Clear Personal Data” feature is selected, it removes all personal data including Bluetooth® devices and presets.

### The right-hand control
The right-hand control is a rocker type switch with a push-button in the center. Pushing the top of the switch will increase the volume, and pushing the bottom of the switch will decrease the volume.

| CONDITION: {Market=Brazil or Market='Latin America'} |

Pushing the center button will make the radio switch between the various modes available (AM/FM or Media, etc.).

| CONDITION END |

The left-hand control is a rocker type switch with a push-button in the center. The function of the left-hand control is different depending on which mode you are in.

The following describes the left-hand control operation in each mode.

### Radio Operation
Pushing the top of the switch will SEEK up for the next listenable station and pushing the bottom of the switch will SEEK down for the next listenable station.

| CONDITION: {Market=Brazil or Market='Latin America'} |

The button located in the center of the left-hand control will tune to the next preset station that you have programmed in the radio preset button.

| CONDITION END |

### Media Mode
Pushing the top of the switch once will go to the next track on the selected media (AUX/USB/Bluetooth®). Pushing the bottom of the switch once goes to the beginning of the current track,
or to the beginning of the previous track if it is within eight seconds after the current track begins to play.

**IPOD®/USB/MP3 CONTROL — IF EQUIPPED**

Located on the center stack, just below the instrument panel, is the main media hub. There are four total USB Ports: Two Mini-USBs (Type C) and two Standard USBs (Type A). There is also an AUX Port located in the middle of the USB Ports.

Plugging in a smartphone device to a USB Port may activate Android Auto™ or Apple CarPlay® features, if equipped. For further information, refer to “Android Auto™” or “Apple CarPlay®” in the Owner’s Manual Supplement.

**NOTE:**

Two devices can be plugged in at the same time and both ports will provide charging capabilities. Only one port can transfer data to the system at a time. A pop-up will appear and allow you to select the device transferring data.

For example, if a device is plugged into the Type A USB port and another device is plugged into the Type C USB port, a message will appear and allow you to select which device to use.

A third and fourth USB Ports are located behind the center console, above the power inverter. One is a charge only port, and can only charge USB devices. The other USB Port allows you to play music from iPod®/MP3 players or USB devices through your vehicle’s sound system.

Applicable to only Uconnect 4C/4C NAV With 8.4-inch Display, and Uconnect 4C NAV With 12-inch Display radios, different scenarios are listed below when a non-phone device is plugged into the smaller and larger USB Ports,
and when a phone device is plugged into the smaller and larger USB Ports:

- A new device is now connected. Previous connection was lost.
- (Phone Name) now connected. Previous connection was lost.
- Another device is in use through the same USB port. Please disconnect the first device to use the second device.

Plugging in a phone or another USB device may cause the connection to a previous device to be lost.

If equipped, your vehicle may also contain a USB Port located on the top tray of the vehicle's center console.

If equipped, two Mini-USB Ports (Type C), two Standard USB Ports (Type A), and one AUX Port may be located to the left of the center stack, just below the climate controls.

Some USB ports support media and charging. You can use features, such as Apple CarPlay®, Android Auto™, Pandora® and others while charging your phone.

**NOTE:**
Plugging in a phone or another USB device may cause the connection to a previous device to be lost.

For further information, refer to the Uconnect Owner’s Manual Supplement or visit UconnectPhone.com.

---

**RADIO OPERATION AND MOBILE PHONES**

Under certain conditions, the mobile phone being on in your vehicle can cause erratic or noisy performance from your radio. This condition may be lessened or eliminated by relocating the mobile phone antenna. This condition is not harmful to the radio. If your radio performance does not satisfactorily “clear” by the repositioning of the antenna, it is recommended that the radio volume be turned down or off during mobile phone operation when not using Uconnect (if equipped).

**VOICE RECOGNITION QUICK TIPS**

**Introducing Uconnect**

Start using Uconnect Voice Recognition (VR) with these helpful quick tips. It provides the key
Voice Commands and tips you need to know to control your Uconnect system.

**Get Started**

All you need to control your Uconnect system with your voice are the buttons on your steering wheel.

1. Visit UconnectPhone.com to check mobile device and feature compatibility and to find phone pairing instructions.

2. Reduce background noise. Wind noise and passenger conversations are examples of noise that may impact recognition.

3. Speak clearly at a normal pace and volume while facing straight ahead. The microphone is located in the headliner and aimed at the driver.

4. Each time you give a Voice Command, you must first push either the VR or Phone button, wait until after the beep, then say your Voice Command.

5. You can interrupt the help message or system prompts by pushing the VR or Phone button and saying a Voice Command from current category.

Notice the visual cues that inform you of your voice recognition system’s status. Cues appear on the top of the touchscreen.

### Basic Voice Commands

The basic Voice Commands below can be given at any point while using your Uconnect system.

Push the VR button on the steering wheel. After the beep, say:

- **“Cancel”** to stop a current voice session
- **“Help”** to hear a list of suggested Voice Commands
- **“Repeat”** to listen to the system prompts again
Radio

>>> CONDITION: {Market=Brazil or Market='Latin America'} >>>
Use your voice to quickly get to the AM or FM Radio stations you would like to hear.
<<< CONDITION END <<<

Push the VR button ⍺赕 on the steering wheel. After the beep, say:
- “Tune to ninety-five-point-five FM”

TIP:
At any time, if you are not sure of what to say or want to learn a Voice Command, push the VR button ⍺龇 on the steering wheel and say “Help.” The system provides you with a list of commands.

Media

Uconnect offers connections via USB, Bluetooth® and auxiliary ports (if equipped). Voice operation is only available for connected USB and AUX devices.

Push the VR button ⍺龇 on the steering wheel. After the beep, say one of the following commands and follow the prompts to switch your media source or choose an artist.
- “Change source to Bluetooth®”
- “Change source to AUX”
- “Change source to USB”
- “Play artist Beethoven”; “Play album Greatest Hits”; “Play song Moonlight Sonata”; “Play genre Classical”

TIP:
Press the Browse button on the touchscreen to see all of the music on your USB device. Your Voice Command must match exactly how the artist, album, song and genre information is displayed.

Phone

Making and answering hands-free phone calls is easy with Uconnect. When the Phonebook button is illuminated on your touchscreen, your system is ready. Check UconnectPhone.com for
mobile phone compatibility and pairing instructions.

Push the Phone button \( \text{button} \). After the beep, say one of the following commands:

- “Call John Smith”
- “Dial 123-456-7890 and follow the system prompts”
- “Redial” (call previous outgoing phone number)
- “Call back” (call previous incoming phone number)

**TIP:**
When providing a Voice Command, push the Phone button \( \text{button} \) and say “Call,” then pronounce the name **exactly** as it appears in your phone book. When a contact has multiple phone numbers, you can say “Call John Smith work.”

**Voice Text Reply — If Equipped**

**>>> CONDITION: {Market=Brazil or Market='Latin America'} >>>**

Uconnect announces incoming text messages. Push the VR button \( \text{button} \) on the steering wheel or Phone button \( \text{button} \) (if enabled) and say “Listen.”

1. Once an incoming text message is read to you, push the VR button \( \text{button} \) on the steering wheel or Phone button \( \text{button} \) (if enabled). After the beep, say: “Reply.”
2. Listen to the Uconnect prompts. After the beep, repeat one of the predefined messages and follow the system prompts.

<table>
<thead>
<tr>
<th>PRE-DEFINED VOICE TEXT REPLY RESPONSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes.</td>
</tr>
<tr>
<td>No.</td>
</tr>
<tr>
<td>Okay.</td>
</tr>
<tr>
<td>Call me.</td>
</tr>
</tbody>
</table>

(Must have compatible mobile phone paired to Uconnect system.)

**PRE-DEFINED VOICE TEXT REPLY RESPONSES**

| I’ll call you later. | I need directions. | See you in 5 <or 10, 15, 20, 25, 30, 45, 60> minutes. |
| I’m on my way. | Can’t talk right now. | |
| I’m lost. | | Thanks. |

**NOTE:**
Only use the numbering listed, otherwise the system does not transpose the message.

**TIP:**
Your mobile phone must have the full implementation of the Message Access Profile (MAP) to take advantage of this feature. For details about MAP, visit UconnectPhone.com.

**<<< CONDITION END >>>**

Apple® iPhone® iOS 6 or later supports reading incoming text messages only. For further information on how to enable this feature on your Apple® iPhone®, refer to your iPhone’s® “User Manual”.

**TIP:**
Voice Text Reply is not compatible with
iPhone®, but if your vehicle is equipped with Siri® Eyes Free, you can use your voice to send a text message.

Climate (4C/4C NAV)
Adjust vehicle temperatures hands-free and keep everyone comfortable while you keep moving ahead. (If vehicle is equipped with climate control.)

Push the VR button on the steering wheel. After the beep, say one of the following commands:
- >>> CONDITION: {Market=Brazil or Market='Latin America'} >>>
  "Set driver temperature to 20 degrees"
  <<< CONDITION END <<<
- >>> CONDITION: {Market=Brazil or Market='Latin America'} >>>
  "Set passenger temperature to 20 degrees"
  <<< CONDITION END <<<

TIP:
Voice Command for Climate may only be used to adjust the interior temperature of your vehicle. Voice Command will not work to adjust the heated seats or steering wheel if equipped.

Navigation (4C NAV)
The Uconnect navigation feature helps you save time and become more productive when you know exactly how to get to where you want to go.

1. To enter a destination, push the VR button on the steering wheel. After the beep, say: "Find address 800 Chrysler Drive Auburn Hills, Michigan."
2. Then follow the system prompts.

TIP:
To start a POI search, push the VR button on the steering wheel. After the beep, say: "Find nearest coffee shop."

>>> CONDITION: {Market='Latin America'} >>>
Argentina
<<< CONDITION END <<<
Ref.: “Argentina_bicontinental”.

CARTOGRAPHY FOR NAVIGATION
<<< CONDITION END <<<

The map below saves errors or omissions that are contained in the cartography loaded in the internal memory of the navigation system satellite, and conform to the official mapping established by the National Executive Power through the National Geographic Institute by Law 22,963, approved by File No. CC 150899/5.

Source: National Geographic Institute (Argentine Republic)

http://www.ign.gob.ar/AreaServicios/MapasEscolares/#nanogallery/gallery3/0/8

Ref.: “Argentina_bicontinental”.
Siri® Eyes Free — If Equipped
Siri lets you use your voice to send text messages, select media, place phone calls and much more. Siri uses your natural language to understand what you mean and responds back to confirm your requests. The system is designed to keep your eyes on the road and your hands on the wheel by letting Siri help you perform useful tasks.
To enable Siri, push and hold, then release the Uconnect Voice Recognition (VR) button on the steering wheel. After you hear a double beep you can ask Siri to play podcasts and music, get directions, read text messages and many other useful requests.

Using Do Not Disturb
With Do Not Disturb, you can disable notifications from incoming calls and texts, allowing you to keep your eyes on the road and hands on the wheel. For your convenience, there is a counter display to keep track of your missed calls and text messages while you were using Do Not Disturb.
Do Not Disturb can automatically reply with a text message, a call, or both, when declining an incoming call and send it to voicemail.

Automatic reply messages can be:
● “I am driving right now, I will get back to you shortly”.
● Create a custom auto reply message up to 160 characters.
While in Do Not Disturb, Conference Call can be selected so you can still place a second call without being interrupted by incoming calls.

NOTE:
● Only the beginning of your custom message will be seen on the touchscreen.
● Reply with text message is not compatible with iPhones®.
● Auto reply with text message is only available on phones that support Bluetooth® MAP.

Android Auto™ — If Equipped

NOTE:
Feature availability depends on your carrier and mobile phone manufacturer. Some Android Auto™ features may or may not be available in every region and/or language.

Android Auto™ allows you to use your voice to interact with Android’s™ best-in-class speech
technology through your vehicle’s voice recognition system, and use your smartphone’s data plan to project your Android™-powered smartphone and a number of its apps onto your Uconnect touchscreen. Connect your Android™ 5.0 or higher to one of the media USB ports, using the factory-provided USB cable, and press the new Android Auto™ icon that replaces your “Phone” icon on the main menu bar to begin Android Auto™. Push and hold the VR button on the steering wheel, or press and hold the “Microphone” icon within Android Auto™, to activate Android’s™ VR, which recognizes natural voice commands, to use a list of your smartphone’s features:

- Maps
- Music
- Phone
- Text Messages
- Additional Apps

Refer to your Uconnect Owner’s Manual Supplement for further information.

NOTE:
Requires compatible smartphone running Android™ 5.0 or higher and download app on Google Play. Android™, Android Auto™, and Google Play are trademarks of Google Inc.

Apple CarPlay® — If Equipped

NOTE:
Feature availability depends on your carrier and mobile phone manufacturer. Some Apple CarPlay® features may or may not be available in every region and/or language.

Apple CarPlay® allows you to use your voice to interact with Siri through your vehicle’s voice recognition system, and use your smartphone to project your iPhone® and many apps onto your Uconnect touchscreen (smartphone’s data plan will be used for certain apps). Connect your iPhone® 5 or higher to one of the media USB ports, using the Apple® factory-provided Lightning cable, and press the new Apple CarPlay® icon that replaces your Phone icon on the main menu bar to begin Apple CarPlay®. Push and hold the VR button on the steering wheel, or press and hold the Home button within Apple CarPlay®, to activate Siri, which recognizes natural voice commands to use certain iPhone’s® features such as:

- Phone
- Music
- Messages
- Maps
- Additional Apps

Refer to your Uconnect Owner’s Manual Supplement for further information.

NOTE:
Requires compatible iPhone®. See dealer for phone compatibility. Data plan rates apply.

Vehicle user interface is a product of Apple®. Apple CarPlay® is a trademark of Apple® Inc. iPhone® is a trademark of Apple® Inc., registered in the US and other countries. Apple® terms of use and privacy statements apply.

Additional Information

>>> CONDITION: {Market=Brazil or Market='Latin America'} >>>
© 2020 FCA. All rights reserved. Mopar and Uconnect are registered trademarks and Mopar
Owner Connect is a trademark of FCA. Android™ is a trademark of Google Inc.

<<< CONDITION END <<<
CUSTOMER ASSISTANCE

IF YOU NEED ASSISTANCE

(\*) Customer Service offers information and assistance on products, services, dealerships and 24H Roadside Assistance. It can be contacted from the main European countries by calling the Universal Toll Free Number. In case of problems, please use the Local Toll Free Number or the International Toll Number. The manufacturer distributors are vitally interested in your satisfaction with their products and services. If a servicing problem or other difficulty should occur, we recommend that you take the following steps:

Discuss the problem at the authorized dealer with the dealer principal or the service manager. Management personnel at the authorized dealer are in the best position to resolve the problem.

When you contact the distributor please provide all of the following information:

- Your name, address and phone number.
- Vehicle Identification Number (this 17-digit number is found on a label, located on the left front corner of the instrument panel, visible through the windshield. It is also available from your vehicle registration or title).
- Selling and servicing authorized dealer.
- Vehicle's delivery date and current odometer distance.
- Service history of your vehicle.
- An accurate description of the problem and the conditions under which it occurs.

ARGENTINA

FCA Automobiles Argentina S.A.
Carlos Maria Della Paolera 299, Piso 25
Caba, Buenos Aires, Argentina
Local Toll Free Number
Tel: +0 800 333 7070

AUSTRALIA

FCA Australia Pty. Ltd.
ABN 23 125 956 505
PO Box 23267, Docklands Victoria 3008
Tel. 1300 133 079
**CUSTOMER ASSISTANCE**

**AUSTRIA**

- **Jeep Customer Service***
  - Universal Toll Free Number  Tel: 00 800 0 426 5337
  - Local Toll Free Number  Tel: 0800 20 1741
  - International Toll Number  Tel: + 39 02 444 12 045

- **Chrysler Customer Service***
  - Universal Toll Free Number  Tel: 00 800 1692 1692
  - Local Toll Free Number  Tel: 0800 20 1745
  - International Toll Number  Tel: +39 02 444 12046

- **Dodge Customer Service***
  - Universal Toll Free Number  Tel: 00 800 36343 000
  - Local Toll Free Number  Tel: 0800 20 1747
  - International Toll Number  Tel: Not Available

**BALANCE OF THE CARIBBEAN**

Interamericana Trading Corporation
Warrens, St. Michael
Barbados, West Indies
BB22026, PO Box 98
Tel.: 246–417–8000
Fax: 246–425–2888

**BELGIUM**

- **Jeep Customer Service***
  - Universal Toll Free Number  Tel: 00 800 0 426 5337
  - Local Toll Free Number  Tel: 0800 55 888
  - International Toll Number  Tel: +39 02 444 12 045

- **Chrysler Customer Service***
  - Universal Toll Free Number  Tel: 00 800 1692 1692
  - Local Toll Free Number  Tel: 0800 18 142
  - International Toll Number  Tel: +39 02 444 12046

- **Dodge Customer Service***
  - Universal Toll Free Number  Tel: 00 800 36343 000
  - Local Toll Free Number  Tel: 0800 16 166
  - International Toll Number  Tel: Not Available
CUSTOMER ASSISTANCE

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FCA FIAT CHRYSLER AUTÔMOVEIS BRASIL LTDA
São Paulo – SP – CEP 04561-970
Tel: 0800 703 7150

BOLIVIA
Ovando & Cia S.A.
Av. Cristobal de Mendoza (2do Anillo) y Canal Isuto
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Fax: +562 603 9196

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PR. China
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Tel: 400-650-0118 Ext. 2

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Chrysler Colombia S.A.
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Bogotá Colombia
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La Uruca, frente al Banco Nacional
San José, Costa Rica
PO Box 705-1150
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CROATIA
Autocommerce Hrvatska d.o.o.
Jablanska 80
10 000 Zagreb
Tel: 00 385 1 3869 001
Fax: 00 385 1 3869 069
CUSTOMER ASSISTANCE

CZECH REPUBLIC

- Jeep Customer Service*
  - Universal Toll Free Number Tel: 800 200 233
  - International Toll Number Tel: +420 800 200 233

- Chrysler Customer Service*
  - Universal Toll Free Number Tel: 800 200 233
  - International Toll Number Tel: +420 800 200 233

- Dodge Customer Service*
  - Universal Toll Free Number Tel: 800 200 233
  - International Toll Number Tel: +420 800 200 233

DENMARK

- Jeep Customer Service*
  - Universal Toll Free Number Tel: 00 800 0 426 5337
  - Local Toll Free Number Tel: 80 20 2337
  - International Toll Number Tel: +39 02 444 12 045

- Chrysler Customer Service*
  - Universal Toll Free Number Tel: 00 800 1692 1692
  - Local Toll Free Number Tel: 80 20 30 35
  - International Toll Number Tel: +39 02 444 12046

- Dodge Customer Service*
  - Universal Toll Free Number Tel: 00 800 36343 000
  - Local Toll Free Number Tel: 80 20 30 36
  - International Toll Number Tel: Not Available

DOMINICAN REPUBLIC

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Quito, Ecuador
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Grupo Q del Salvador
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  - Universal Toll Free Number Tel: 00 800 0 426 5337
  - Local Toll Free Number Tel: 0800 0 42653
  - International Toll Number Tel: +39 02 444 12 045
- Chrysler Customer Service*
  - Universal Toll Free Number Tel: 00 800 1692 1692
  - Local Toll Free Number Tel: 0800 169216
  - International Toll Number Tel: +39 02 444 12046
- Dodge Customer Service*
  - Universal Toll Free Number Tel: 00 800 36343 000
  - Local Toll Free Number Tel: 0800 363430
  - International Toll Number Tel: Not Available

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  - Local Toll Free Number Tel: 0800 0 42653
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GERMANY
- Jeep Customer Service*
  - Universal Toll Free Number Tel: 00 800 0 426 5337
  - Local Toll Free Number Tel: 0800 0426533
  - International Toll Number Tel: +39 02 444 12 045
- Chrysler Customer Service*
  - Universal Toll Free Number Tel: 00 800 1692 1692
  - Local Toll Free Number Tel: 0800 169216
  - International Toll Number Tel: +39 02 444 12046
- Dodge Customer Service*
  - Universal Toll Free Number Tel: 00 800 36343 000
  - Local Toll Free Number Tel: 0800 363430
  - International Toll Number Tel: Not Available
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HUNGARY

• Jeep Customer Service*
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• Chrysler Customer Service*
  • Universal Toll Free Number Tel: 82 10 10 80
  • International Toll Number Tel: +36 80 10 10 80

• Dodge Customer Service*
  • Universal Toll Free Number Tel: 81 10 10 80
  • International Toll Number Tel: +36 80 10 10 80

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IRELAND

- Jeep Customer Service*
  - Universal Toll Free Number  Tel: 00 800 0 426 5337
  - Local Toll Free Number  Tel: 1800 505337
  - International Toll Number  Tel: +39 02 444 12 045

- Chrysler Customer Service*
  - Universal Toll Free Number  Tel: 00 800 1692 1692
  - Local Toll Free Number  Tel: 1800 363463
  - International Toll Number  Tel: +39 02 444 12046

- Dodge Customer Service*
  - Universal Toll Free Number  Tel: 00 800 36343 000
  - Local Toll Free Number  Tel: 1800 363430
  - International Toll Number  Tel: Not Available

ITALY

- Jeep Customer Service*
  - Universal Toll Free Number  Tel: 00 800 0 426 5337
  - Local Toll Free Number  Tel: 800 0 42653
  - International Toll Number  Tel: +39 02 444 12 045

- Chrysler Customer Service*
  - Universal Toll Free Number  Tel: 00 800 1692 1692
  - Local Toll Free Number  Tel: 800 1692 16
  - International Toll Number  Tel: +39 02 444 12046

- Dodge Customer Service*
  - Universal Toll Free Number  Tel: 00 800 36343 000
  - Local Toll Free Number  Tel: 800 363430
  - International Toll Number  Tel: Not Available

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Mob.: +371 29498662
Fax: +371 67812313

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service24h@silberauto.lt
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  - Local Toll Free Number Tel: 8002 5888
  - International Toll Number Tel: +39 02 444 12 045
- Chrysler Customer Service*
  - Universal Toll Free Number Tel: 00 800 1692 1692
  - Local Toll Free Number Tel: 8002 8216
  - International Toll Number Tel: +39 02 444 12046
- Dodge Customer Service*
  - Universal Toll Free Number Tel: 00 800 36343 000
  - Local Toll Free Number Tel: 8002 8217
  - International Toll Number Tel: Not Available

NETHERLANDS
- Jeep Customer Service*
  - Universal Toll Free Number Tel: 00 800 0 426 5337
  - International Toll Number Tel: +39 02 444 12 045
- Chrysler Customer Service*
  - Universal Toll Free Number Tel: 00 800 1692 1692
  - International Toll Number Tel: +39 02 444 12046
- Dodge Customer Service*
  - Universal Toll Free Number Tel: 00 800 36343 000
  - International Toll Number Tel: Not Available

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Chrysler New Zealand
Private Bag 14907
Panmure New Zealand
Tel.: 09573 7800
Fax: 09573 7808

NORWAY
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  - Universal Toll Free Number Tel: 00 800 0 426 5337
  - International Toll Number Tel: +39 02 444 12 045

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  - International Toll Number Tel: Not Available

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  - International Toll Number Tel: +39 02 444 12 045
- Chrysler Customer Service*
  - Universal Toll Free Number Tel: 00 800 1692 1692
  - Local Toll Free Number Tel: 900 1692 00
  - International Toll Number Tel: +39 02 444 12046
- Dodge Customer Service*
  - Universal Toll Free Number Tel: 00 800 36343 000
  - Local Toll Free Number Tel: 900 363430
  - International Toll Number Tel: Not Available

SWEDEN
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  - Universal Toll Free Number Tel: 00 800 0 426 5337
  - Local Toll Free Number Tel: 020 5337 00
  - International Toll Number Tel: +39 02 444 12 045
- Chrysler Customer Service*
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  - Local Toll Free Number Tel: 020 303035
  - International Toll Number Tel: +39 02 444 12046
- Dodge Customer Service*
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  - International Toll Number Tel: Not Available
<table>
<thead>
<tr>
<th>Country</th>
<th>Customer Service*</th>
<th>Universal Toll Free Number</th>
<th>Local Toll Free Number</th>
<th>International Toll Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switzerland</td>
<td>Jeep</td>
<td>Tel: 00 800 0 426 5337</td>
<td>Tel: 0800 0426 53</td>
<td>Tel: +39 02 444 12 045</td>
</tr>
<tr>
<td></td>
<td>Chrysler</td>
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<td>Tel: +39 02 444 12046</td>
</tr>
<tr>
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<td>Dodge</td>
<td>Tel: 00 800 36343 000</td>
<td>Tel: 0800 3634 30</td>
<td>Tel: Not Available</td>
</tr>
<tr>
<td>Taiwan</td>
<td>Chrysler</td>
<td>Tel: 00 800 0 426 5337</td>
<td>Tel: 0800 1692 1692</td>
<td>Tel: +39 02 444 12046</td>
</tr>
<tr>
<td></td>
<td>Dodge</td>
<td>Tel: 00 800 36343 000</td>
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<td>Tel: Not Available</td>
</tr>
<tr>
<td>UKRAINE</td>
<td>Chrysler</td>
<td>Tel: 00 800 0 426 5337</td>
<td>Tel: 0800 1692 1692</td>
<td>Tel: +39 02 444 12046</td>
</tr>
<tr>
<td></td>
<td>Dodge</td>
<td>Tel: 00 800 36343 000</td>
<td>Tel: 0800 3634 30</td>
<td>Tel: Not Available</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Jeep</td>
<td>Tel: 00 800 0 426 5337</td>
<td>Tel: 0800 1692 1692</td>
<td>Tel: +39 02 444 12046</td>
</tr>
<tr>
<td></td>
<td>Chrysler</td>
<td>Tel: 00 800 0 426 5337</td>
<td>Tel: 0800 1692 1692</td>
<td>Tel: +39 02 444 12046</td>
</tr>
<tr>
<td></td>
<td>Dodge</td>
<td>Tel: 00 800 36343 000</td>
<td>Tel: 0800 3634 30</td>
<td>Tel: Not Available</td>
</tr>
</tbody>
</table>
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MODEL ______________________________________
REGISTRATION OR LICENSE NUMBER ______________________________________
VIN ______________________________________
NEW OWNER'S NAME ______________________________________
NEW OWNER'S ADDRESS ______________________________________

TELEPHONE NO. ______________________________________

IF RESOLD BY CHRYSLER JEEP DEALERSHIP, ENTER DEALER STAMP IN BOX ABOVE.

FIRST OWNER 8040712
CHANGE OF OWNERSHIP NOTIFICATION

MODEL
REGISTRATION OR LICENSE NUMBER
VIN
NEW OWNER’S NAME
NEW OWNER’S ADDRESS

TELEPHONE NO.

IF RESOLD BY CHRYSLER JEEP DEALERSHIP, ENTER DEALER STAMP IN BOX ABOVE.

SECOND OWNER
8040753
INDEX

A
Adaptive Cruise Control (ACC) (Cruise Control) 252
Adding Engine Coolant (Antifreeze) ................. 380
Adding Fuel ................................................. 288, 290
Additives, Fuel ............................................... 405
Adjust
Down ................................................................ 32
Forward ........................................................... 31
Rearward ..................................................... 31
Up ................................................................ 32
Adjustable Pedals ............................................ 38
Air Bag
Air Bag Operation ............................................ 164
Air Bag Warning Light .................................... 161
Enhanced Accident Response ..................... 168, 345
Event Data Recorder (EDR) ......................... 345
If Deployment Occurs .................................. 168
Knee Impact Bolsters ................................... 164
Maintaining Your Air Bag System ............ 169
Maintenance ............................................. 169
Redundant Air Bag Warning Light ............. 162
Transporting Pets ......................................... 188
Air Bag Light ........................................ 114, 161, 189
Air Cleaner, Engine (Engine Air Cleaner Filter) .... 365
Air Conditioner Maintenance ..................... 371
Air Conditioner Refrigerant .................... 371, 372
Air Conditioner System .......................... 371
Air Conditioning .......................................... 61
Air Conditioning Filter .......................... 63
Air Conditioning System ........................ 61
Air Conditioning, Operating Tips ............ 62
Air Filter .................................................. 365
Air Pressure
  Tires ........................................................ 387
Alarm
  Security Alarm ........................................... 22, 115
Alterations/Modifications
  Vehicle ..................................................... 12
Android Auto ................................................. 463
Antifreeze (Engine Coolant) .................... 379, 409
  Capacities ................................................ 410
  Disposal .................................................. 381
Anti-Lock Brake System (ABS) ......... 125
Anti-Lock Warning Light ....................... 119
Apple CarPlay .............................................. 464
Assist, Hill Start ........................................... 132
Audio Systems (Radio) ......................... 416
Auto Down Power Windows ................. 64
Automatic Door Locks .......................... 27
Automatic Headlights ............................ 47
Automatic Tailgate Release ..................... 68
Automatic Temperature Control (ATC) ... 61
Automatic Transmission ...................... 210, 385
  Adding Fluid ................................. 384, 385
  Fluid And Filter Change ................... 385
  Fluid Change ......................................... 385
  Fluid Level Check ............................. 383, 384
  Fluid Type .......................................... 383, 413, 415
  Shifting ............................................... 214
  Special Additives .................................. 383
  Automatic Transmission Limp Home Mode... 213
AUX Camera ........................................ 281, 288
Auxiliary Driving Systems ..................... 134
Axle Fluid ........................................... 385, 413, 415
Axle Lubrication ........................................ 385

B
Back-Up ......................................................... 279
Back-Up Camera ........................................... 279
Bar, Stabilizer/Sway System ..................... 230
Battery ........................................ 115, 362
  Blanket ................................................. 201
  Charging System Light ......................... 115
  Keyless Key Fob Replacement ................ 14
Battery Saver Feature ............................. 49
Belts, Seat ................................................. 189
Blind Spot Monitoring ......................... 134
Body Builders Guide .............................. 12
<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body Mechanism Lubrication</td>
<td>375</td>
</tr>
<tr>
<td>Brake Assist System</td>
<td>126</td>
</tr>
<tr>
<td>Brake Control System</td>
<td>126</td>
</tr>
<tr>
<td>Brake Fluid</td>
<td>382, 413</td>
</tr>
<tr>
<td>Brake System</td>
<td>382, 402</td>
</tr>
<tr>
<td>Fluid Check</td>
<td>382</td>
</tr>
<tr>
<td>Master Cylinder</td>
<td>382</td>
</tr>
<tr>
<td>Parking</td>
<td>206</td>
</tr>
<tr>
<td>Warning Light</td>
<td>114</td>
</tr>
<tr>
<td>Brake/Transmission Interlock</td>
<td>209</td>
</tr>
<tr>
<td>Bulb Replacement</td>
<td>313</td>
</tr>
<tr>
<td>Bulbs, Light</td>
<td>191, 313</td>
</tr>
<tr>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Cab Top Clearance Lights</td>
<td>319</td>
</tr>
<tr>
<td>Camera</td>
<td>279</td>
</tr>
<tr>
<td>Camera, AUX</td>
<td>281, 288</td>
</tr>
<tr>
<td>Camera, Rear</td>
<td>279, 282</td>
</tr>
<tr>
<td>Camper</td>
<td>88</td>
</tr>
<tr>
<td>Capacities, Antifreeze (Engine Coolant)</td>
<td>410</td>
</tr>
<tr>
<td>Capacities, Fluid</td>
<td>409, 410</td>
</tr>
<tr>
<td>Caps, Filler</td>
<td></td>
</tr>
<tr>
<td>Oil (Engine)</td>
<td>359, 364</td>
</tr>
<tr>
<td>Radiator (Coolant Pressure)</td>
<td>381</td>
</tr>
<tr>
<td>Car Washes</td>
<td>396</td>
</tr>
<tr>
<td>Carbon Monoxide Warning</td>
<td>189, 406</td>
</tr>
<tr>
<td>Cargo Light</td>
<td>48</td>
</tr>
<tr>
<td>Cellular Phone</td>
<td>458</td>
</tr>
<tr>
<td>Center High Mounted Stop Light</td>
<td>318</td>
</tr>
<tr>
<td>Center Seat Storage Compartment</td>
<td>71</td>
</tr>
<tr>
<td>Charge Air Cooler</td>
<td>382</td>
</tr>
<tr>
<td>Checking Your Vehicle For Safety</td>
<td>188</td>
</tr>
<tr>
<td>Checks, Safety</td>
<td>188</td>
</tr>
<tr>
<td>Child Restraint</td>
<td>170</td>
</tr>
<tr>
<td>Child Restraints</td>
<td></td>
</tr>
<tr>
<td>Booster Seats</td>
<td>174</td>
</tr>
<tr>
<td>Child Seat Installation</td>
<td>181, 183</td>
</tr>
<tr>
<td>How To Stow An unused ALR Seat Belt</td>
<td>180</td>
</tr>
<tr>
<td>Infant And Child Restraints</td>
<td>172</td>
</tr>
<tr>
<td>Locating The LATCH Anchorages</td>
<td>178</td>
</tr>
<tr>
<td>Lower Anchors And Tethers For Children</td>
<td>175</td>
</tr>
<tr>
<td>Older Children And Child Restraints</td>
<td>173</td>
</tr>
<tr>
<td>Seating Positions</td>
<td>175</td>
</tr>
<tr>
<td>Clean Air Gasoline</td>
<td>404</td>
</tr>
<tr>
<td>Cleaning</td>
<td></td>
</tr>
<tr>
<td>Wheels</td>
<td>394</td>
</tr>
<tr>
<td>Climate Control</td>
<td>53</td>
</tr>
<tr>
<td>Automatic</td>
<td>54</td>
</tr>
<tr>
<td>Cold Weather Operation</td>
<td>194</td>
</tr>
<tr>
<td>Compact Spare Tire</td>
<td>392</td>
</tr>
<tr>
<td>Cooling Pressure Cap (Radiator Cap)</td>
<td>381</td>
</tr>
<tr>
<td>Cooling System</td>
<td>379</td>
</tr>
<tr>
<td>Adding Coolant (Antifreeze)</td>
<td>380</td>
</tr>
<tr>
<td>Coolant Capacity</td>
<td>410</td>
</tr>
<tr>
<td>Coolant Level</td>
<td>379</td>
</tr>
<tr>
<td>Cooling Capacity</td>
<td>409</td>
</tr>
<tr>
<td>Disposal Of Used Coolant</td>
<td>381</td>
</tr>
<tr>
<td>Drain, Flush, And Refill</td>
<td>379</td>
</tr>
<tr>
<td>Points To Remember</td>
<td>381</td>
</tr>
<tr>
<td>Pressure Cap</td>
<td>381</td>
</tr>
<tr>
<td>Radiator Cap</td>
<td>381</td>
</tr>
<tr>
<td>Selection Of Coolant (Antifreeze)</td>
<td>379, 409, 411, 414</td>
</tr>
<tr>
<td>Corrosion Protection</td>
<td>396</td>
</tr>
<tr>
<td>Cruise Control (Speed Control)</td>
<td>250, 252</td>
</tr>
<tr>
<td>Cruise Light</td>
<td>123</td>
</tr>
<tr>
<td>Cupholders</td>
<td>76</td>
</tr>
<tr>
<td>Customer Assistance</td>
<td>466</td>
</tr>
<tr>
<td>Cybersecurity</td>
<td>416</td>
</tr>
<tr>
<td>D</td>
<td></td>
</tr>
<tr>
<td>Daytime Running Lights</td>
<td>45</td>
</tr>
<tr>
<td>Dealer Service</td>
<td>363</td>
</tr>
<tr>
<td>Defroster, Windshield</td>
<td>190</td>
</tr>
<tr>
<td>Delay (Intermittent) Wipers</td>
<td>52</td>
</tr>
<tr>
<td>Diagnostic System, Onboard</td>
<td>124</td>
</tr>
<tr>
<td>Diesel Exhaust Brake</td>
<td>207</td>
</tr>
<tr>
<td>Diesel Fuel</td>
<td>406</td>
</tr>
<tr>
<td>Diesel Fuel Requirements</td>
<td>406</td>
</tr>
<tr>
<td>Diesel Fuel System, Re-Priming</td>
<td>370</td>
</tr>
<tr>
<td>Differential, Limited Slip</td>
<td>241</td>
</tr>
</tbody>
</table>
Disabled Vehicle Towing .................................. 343
Do Not Disturb ............................................. 463
Door Ajar .................................................... 116
Door Ajar Light ............................................. 116
Door Locks
  Automatic ................................................. 27
  Doors ....................................................... 23
Draining Fuel/Water Separator Filter ............... 367
Driver’s Seat Back Tilt ................................ 30
Driving
  Off-Pavement ............................................. 231
  Off-Road ................................................... 231
  Through Flowing, Rising, Or Shallow Standing Water ............................................. 310

EElectric Brake Control System ......................... 126
  Anti-Lock Brake System ................................. 125
  Electronic Roll Mitigation .............................. 127, 133
  Electrical Power Outlets ................................ 76
  Electronic Range Select (ERS) ......................... 213, 218
  Electronic Stability Control (ESC) ...................... 127
  Electronic Throttle Control Warning Light .......... 116
  Electronically Shifted Transfer Case ................. 221
  Emergency Braking ....................................... 206
  Emergency, In Case Of
    Freeing Vehicle When Stuck ......................... 342
    Hazard Warning Flasher ............................... 313
    Jump Starting ......................................... 338
  Engine ..................................................... 359, 360
    Air Cleaner ............................................. 365
    Block Heater .......................................... 197, 205
    Break-In Recommendations ......................... 205
    Compartment .......................................... 360
    Compartment Identification ......................... 359
    Coolant (Antifreeze) .................................. 411, 414
    Exhaust Gas Caution ................................ 189, 406
    Fails To Start ......................................... 194
    Flooded, Starting ..................................... 194
    Fuel Requirements .................................... 403, 409
    Identification ......................................... 360
    Idling ..................................................... 202
    Jump Starting ......................................... 338
    Oil ......................................................... 363, 409, 411, 414
    Oil Filler Cap .......................................... 359, 364
    Oil Filter ................................................ 365
    Oil Reset ................................................ 103
    Oil Selection .......................................... 409
    Oil Synthetic .......................................... 364
    Overheating ............................................ 341
    Runaway .................................................. 288
    Starting .................................................. 193
  Engine Oil Viscosity ................................... 364
  Enhanced Accident Response Feature 168, 345
  Entry System, Illuminated ............................ 51
  Ethanol .................................................... 404
  Exhaust Brake ........................................... 207
  Exhaust Gas Cautions ................................ 189, 406
  Exhaust System ........................................ 189, 377
  Exterior Lighting ....................................... 45
  Exterior Lights ......................................... 45, 191

F  Filters
  Air Cleaner ............................................. 365
  Air Conditioning ......................................... 63
  Engine Fuel ............................................. 367
  Engine Oil ............................................... 365, 411, 414
  Engine Oil Disposal .................................. 364
  Flashers
    Turn Signals ............................................ 48, 123, 191
    Flash-To-Pass .......................................... 46
    Flat Tire Stowage ..................................... 335, 386, 392
    Fluid Capacities .................................... 409, 410
    Fluid Leaks ............................................. 191
  Fluid Level Checks
    Brake ...................................................... 382
    Fluid, Brake .......................................... 413
    Fluids And Lubricants ............................... 411, 414
    Fog Lights ............................................. 48, 120, 317
    Fog Lights, Rear ....................................... 48
    Fold Flat Load Floor ................................. 74
    Fold-Flat Seats ......................................... 30
    Forward Collision Warning ......................... 141
    Four Wheel Drive ...................................... 221
Keyless Enter-N-Go........................................25, 193, 195
Lock The Vehicle’s Doors ..................428, 447
Passive Entry .....................................................25
Passive Entry Programming ..........428, 447
Keys .................................................................13
Replacement .....................................................22

L
Lane Change And Turn Signals .................48
Lane Change Assist .............................................48
LaneSense .........................................................276
Latches ..........................................................191
Hood ..............................................................68
Lead Free Gasoline ......................................403
Leaks, Fluid ....................................................191
Life Of Tires .....................................................390
Light Bulbs .....................................................191, 313

Lights ...............................................................191
Air Bag .........................................................114, 161, 189
Automatic High Beam ........................................46
Brake Assist Warning ........................................129
Brake Warning ....................................................114
Bulb Replacement ............................................313
Cab Top Clearance .........................................319
Cargo .............................................................48
Center Mounted Stop ......................................318
Courtesy/Reading ...........................................50
Cruise ............................................................123
Daytime Running ............................................45
Electronic Stability Program (ESP) Indicator ...115
Exterior ...........................................................45, 191
Fog ...............................................................120, 317
Four Wheel Drive Indicator ..............................226
Hazard Warning Flasher ....................................313
Headlights .........................................................45, 47
High Beam .........................................................45
Hill Descent Control Indicator .....................130
Illuminated Entry .............................................51
Interior ...........................................................50
Lights On Reminder .............................................47
Low Fuel ..........................................................118
Malfunction Indicator (Check Engine) ...........117
Park ..............................................................123
Passing ...........................................................46
Seat Belt Reminder ...........................................113
Security Alarm ...................................................115
Service ..........................................................313
Traction Control ................................................129
Transfer Case ...................................................226
Turn Signals ...............................................48, 123, 191, 315, 317
Warning Instrument Cluster Descriptions ....115, 123
Limited-Slip Differential .........................241, 385
Load Shed Battery Saver Mode .................112
Load Shed Battery Saver On .........................112
Load Shed Electrical Load Reduction ...........112
Load Shed Intelligent Battery Sensor ..........112
Loading Vehicle ...............................................291
Locks
Automatic Door ..............................................27
Child Protection ..............................................27
Power Door .....................................................24
Low Tire Pressure System .........................143
Lubrication, Body ..........................................375
Lug Nuts/Bolts ..................................................402

M
Maintenance .....................................................67
Maintenance Free Battery ..............................362
Maintenance Schedule ................................346, 351, 353
Malfunction Indicator Light (Check Engine) ..117
Manual
Park Release ...................................................340
Media Hub .......................................................457
Memory Seat ...................................................28
Memory Settings .............................................28
Methanol .........................................................404
<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ramp Travel Index</td>
<td>232</td>
</tr>
<tr>
<td>Rear Axle (Differential)</td>
<td>385</td>
</tr>
<tr>
<td>Rear Camera</td>
<td>282</td>
</tr>
<tr>
<td>Rear Cargo Area Utility Rails</td>
<td>87</td>
</tr>
<tr>
<td>Rear Cross Path</td>
<td>137</td>
</tr>
<tr>
<td>Rear ParkSense System</td>
<td>266, 271</td>
</tr>
<tr>
<td>Rear Window, Sliding</td>
<td>65</td>
</tr>
<tr>
<td>Reclining Rear Seats</td>
<td>31</td>
</tr>
<tr>
<td>Recreational Towing</td>
<td>306</td>
</tr>
<tr>
<td>Shifting Into Transfer Case Neutral (N)</td>
<td>308</td>
</tr>
<tr>
<td>Shifting Out Of Transfer Case Neutral (N)</td>
<td>309</td>
</tr>
<tr>
<td>Refor...</td>
<td>372</td>
</tr>
<tr>
<td>Rele...</td>
<td>68</td>
</tr>
<tr>
<td>Rele...</td>
<td>68</td>
</tr>
<tr>
<td>Rele...</td>
<td>152</td>
</tr>
<tr>
<td>Remote Keyless Entry</td>
<td>13</td>
</tr>
<tr>
<td>Programming Additional Key Fobs</td>
<td>16, 22</td>
</tr>
<tr>
<td>Remote Start (Diesel)</td>
<td>19</td>
</tr>
<tr>
<td>Remote Start (Gasoline)</td>
<td>18</td>
</tr>
<tr>
<td>Remote Starting</td>
<td></td>
</tr>
<tr>
<td>Exit Remote Start Mode</td>
<td>19</td>
</tr>
<tr>
<td>Uconnect Customer Programmable Features</td>
<td>430, 449</td>
</tr>
<tr>
<td>Uconnect Settings</td>
<td>430, 449</td>
</tr>
<tr>
<td>Replacement Bulbs</td>
<td>313</td>
</tr>
<tr>
<td>Replacement Keys</td>
<td>22</td>
</tr>
<tr>
<td>Replacement Tires</td>
<td>390</td>
</tr>
<tr>
<td>Resetting Perform Service Indicator</td>
<td>352</td>
</tr>
<tr>
<td>Restraints, Child</td>
<td>170</td>
</tr>
<tr>
<td>Restraints, Head</td>
<td>35</td>
</tr>
<tr>
<td>Rotation, Tires</td>
<td>395</td>
</tr>
<tr>
<td>S</td>
<td></td>
</tr>
<tr>
<td>Safety Checks Inside Vehicle</td>
<td>189</td>
</tr>
<tr>
<td>Safety Checks Outside Vehicle</td>
<td>191</td>
</tr>
<tr>
<td>Safety Tips</td>
<td>188</td>
</tr>
<tr>
<td>Safety, Exhaust Gas</td>
<td>189</td>
</tr>
<tr>
<td>Schedule, Maintenance</td>
<td>346</td>
</tr>
<tr>
<td>Scheduled Maintenance</td>
<td>346</td>
</tr>
<tr>
<td>Seat Belt Reminder</td>
<td>113</td>
</tr>
<tr>
<td>Seat Belts</td>
<td>152, 189</td>
</tr>
<tr>
<td>Adjustable Shoulder Belt</td>
<td>156</td>
</tr>
<tr>
<td>Adjustable Upper Shoulder Anchorage</td>
<td>156</td>
</tr>
<tr>
<td>Adjustable Upper Shoulder Anchorage 156</td>
<td></td>
</tr>
<tr>
<td>Automatic Locking Retractor (ALR)</td>
<td>159</td>
</tr>
<tr>
<td>Child Restraints</td>
<td>170</td>
</tr>
<tr>
<td>Energy Management Feature</td>
<td>159</td>
</tr>
<tr>
<td>Front Seat</td>
<td>152, 155</td>
</tr>
<tr>
<td>Inspection</td>
<td>189</td>
</tr>
<tr>
<td>Lap/Shoulder Belt Operation</td>
<td>155</td>
</tr>
<tr>
<td>Lap/Shoulder Belt Untwisting</td>
<td>156</td>
</tr>
<tr>
<td>Operating Instructions</td>
<td>155</td>
</tr>
<tr>
<td>Pregnant Women</td>
<td>158</td>
</tr>
<tr>
<td>Pretensioners</td>
<td>159</td>
</tr>
<tr>
<td>Reminder</td>
<td>152</td>
</tr>
<tr>
<td>Seat Belt Pretensioner</td>
<td>159</td>
</tr>
<tr>
<td>Seat Belt Reminder</td>
<td>152</td>
</tr>
<tr>
<td>Untwisting Procedure</td>
<td>156</td>
</tr>
<tr>
<td>Seat Belts Maintenance</td>
<td>399</td>
</tr>
<tr>
<td>Seats</td>
<td>30, 31</td>
</tr>
<tr>
<td>Adjustment</td>
<td>30, 31</td>
</tr>
<tr>
<td>Easy Entry</td>
<td>33</td>
</tr>
<tr>
<td>Folding Floor</td>
<td>74</td>
</tr>
<tr>
<td>Head Restraints</td>
<td>35</td>
</tr>
<tr>
<td>Memory</td>
<td>28</td>
</tr>
<tr>
<td>Power</td>
<td>31</td>
</tr>
<tr>
<td>Rear Folding</td>
<td>30</td>
</tr>
<tr>
<td>Reclining Rear</td>
<td>31</td>
</tr>
<tr>
<td>Tilting</td>
<td>30</td>
</tr>
<tr>
<td>Security Alarm</td>
<td>22, 115</td>
</tr>
<tr>
<td>Selection Of Coolant (Antifreeze)</td>
<td>411, 414</td>
</tr>
<tr>
<td>Sentry Key</td>
<td></td>
</tr>
<tr>
<td>Key Programming</td>
<td>22</td>
</tr>
<tr>
<td>Sentry Key (Immobilizer)</td>
<td>21</td>
</tr>
<tr>
<td>Sentry Key Replacement</td>
<td>22</td>
</tr>
<tr>
<td>Service Assistance</td>
<td>466</td>
</tr>
<tr>
<td>Shifting</td>
<td>208</td>
</tr>
<tr>
<td>Automatic Transmission</td>
<td>210, 214</td>
</tr>
<tr>
<td>Transfer Case</td>
<td>226</td>
</tr>
<tr>
<td>Transfer Case, Shifting Into Transfer Case Neutral (N)</td>
<td>308</td>
</tr>
<tr>
<td>Transfer Case, Shifting Out Of Transfer Case Neutral (N)</td>
<td>309</td>
</tr>
<tr>
<td>Side Steps, Power</td>
<td>25</td>
</tr>
<tr>
<td>Signals, Turn</td>
<td>48, 123, 191</td>
</tr>
<tr>
<td>Siri</td>
<td>463</td>
</tr>
<tr>
<td>Sliding Rear Window, Power</td>
<td>65</td>
</tr>
<tr>
<td>Snow Plow</td>
<td>304</td>
</tr>
<tr>
<td>Snow Tires</td>
<td>391</td>
</tr>
<tr>
<td>Topic</td>
<td>Page</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Spare Tires</td>
<td>392, 393</td>
</tr>
<tr>
<td>Spark Plugs</td>
<td>411</td>
</tr>
<tr>
<td>Speed Control</td>
<td></td>
</tr>
<tr>
<td>Accel/Decel</td>
<td>252</td>
</tr>
<tr>
<td>Cancel</td>
<td>252</td>
</tr>
<tr>
<td>Resume</td>
<td>252</td>
</tr>
<tr>
<td>Speed Control (Cruise Control)</td>
<td>250, 252</td>
</tr>
<tr>
<td>Stabilizer/Sway Bar System</td>
<td>230</td>
</tr>
<tr>
<td>Starting</td>
<td>192, 193, 194</td>
</tr>
<tr>
<td>Automatic Transmission</td>
<td>192, 195</td>
</tr>
<tr>
<td>Button</td>
<td>16</td>
</tr>
<tr>
<td>Cold Weather</td>
<td>194</td>
</tr>
<tr>
<td>Engine Block Heater</td>
<td>197</td>
</tr>
<tr>
<td>Engine Fails To Start</td>
<td>194</td>
</tr>
<tr>
<td>Starting And Operating</td>
<td>193</td>
</tr>
<tr>
<td>Starting Procedures</td>
<td>193, 194</td>
</tr>
<tr>
<td>Starting Procedures (Diesel Engines)</td>
<td>194</td>
</tr>
<tr>
<td>Starting Procedures (Gas Engines)</td>
<td>192</td>
</tr>
<tr>
<td>Steering</td>
<td></td>
</tr>
<tr>
<td>Tilt Column</td>
<td>37</td>
</tr>
<tr>
<td>Wheel, Heated</td>
<td>37, 38</td>
</tr>
<tr>
<td>Wheel, Tilt</td>
<td>37</td>
</tr>
<tr>
<td>Steering Wheel Audio Controls</td>
<td>456</td>
</tr>
<tr>
<td>Steering Wheel Mounted Sound System Controls</td>
<td>456</td>
</tr>
<tr>
<td>Steps, Power Side</td>
<td>25</td>
</tr>
<tr>
<td>Storage</td>
<td>70</td>
</tr>
<tr>
<td>Storage Compartment, Center Seat</td>
<td>71</td>
</tr>
<tr>
<td>Storage, Vehicle</td>
<td>62, 395</td>
</tr>
<tr>
<td>Storing Your Vehicle</td>
<td>395</td>
</tr>
<tr>
<td>Sun Roof</td>
<td>65, 67</td>
</tr>
<tr>
<td>Sunglasses Storage</td>
<td>80</td>
</tr>
<tr>
<td>Sunshade Operation</td>
<td>67</td>
</tr>
<tr>
<td>Sway Control, Trailer</td>
<td>134</td>
</tr>
<tr>
<td>Synthetic Engine Oil</td>
<td>364</td>
</tr>
<tr>
<td>Tires</td>
<td>191, 386, 392</td>
</tr>
<tr>
<td>Aging (Life Of Tires)</td>
<td>390</td>
</tr>
<tr>
<td>Air Pressure</td>
<td>386</td>
</tr>
<tr>
<td>Compact Spare</td>
<td>392</td>
</tr>
<tr>
<td>General Information</td>
<td>386, 392</td>
</tr>
<tr>
<td>High Speed</td>
<td>388</td>
</tr>
<tr>
<td>Inflation Pressure</td>
<td>387</td>
</tr>
<tr>
<td>Life Of Tires</td>
<td>390</td>
</tr>
<tr>
<td>Pressure Monitoring System (TPMS)</td>
<td>118, 143</td>
</tr>
<tr>
<td>Radial</td>
<td>388</td>
</tr>
<tr>
<td>Replacement</td>
<td>390</td>
</tr>
<tr>
<td>Rotation</td>
<td>395</td>
</tr>
<tr>
<td>Safety</td>
<td>386</td>
</tr>
<tr>
<td>Snow Tires</td>
<td>391</td>
</tr>
<tr>
<td>Spare Tires</td>
<td>392, 393</td>
</tr>
<tr>
<td>Spinning</td>
<td>389</td>
</tr>
<tr>
<td>Tackle Towing</td>
<td>298</td>
</tr>
<tr>
<td>Tread Wear Indicators</td>
<td>389</td>
</tr>
<tr>
<td>Wheel Nut Torque</td>
<td>402</td>
</tr>
<tr>
<td>To Open Hood</td>
<td>68</td>
</tr>
<tr>
<td>Tongue Weight/Trailer Weight</td>
<td>296</td>
</tr>
<tr>
<td>Tonneau Cover</td>
<td>90, 396</td>
</tr>
<tr>
<td>Tonneau Cover Cleaning</td>
<td>396</td>
</tr>
<tr>
<td>Torque Converter Cleaning</td>
<td>220</td>
</tr>
<tr>
<td>Towing</td>
<td>292, 343</td>
</tr>
<tr>
<td>Disabled Vehicle</td>
<td>343</td>
</tr>
<tr>
<td>Guide</td>
<td>296</td>
</tr>
<tr>
<td>Recreational</td>
<td>306</td>
</tr>
<tr>
<td>Weight</td>
<td>296</td>
</tr>
<tr>
<td>Towing Behind A Motorhome</td>
<td>306</td>
</tr>
<tr>
<td>Section</td>
<td>Page</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Traction</td>
<td>310</td>
</tr>
<tr>
<td>Traction Control</td>
<td>133</td>
</tr>
<tr>
<td>Trailer Sway Control (TSC)</td>
<td>134</td>
</tr>
<tr>
<td>Trailer Towing</td>
<td>292</td>
</tr>
<tr>
<td>Cooling System Tips</td>
<td>304</td>
</tr>
<tr>
<td>Hitches</td>
<td>295</td>
</tr>
<tr>
<td>Minimum Requirements</td>
<td>42</td>
</tr>
<tr>
<td>Mirrors</td>
<td>303</td>
</tr>
<tr>
<td>Trailer And Tongue Weight</td>
<td>296</td>
</tr>
<tr>
<td>Wiring</td>
<td>301</td>
</tr>
<tr>
<td>Trailer Towing Guide</td>
<td>296</td>
</tr>
<tr>
<td>Trailer Weight</td>
<td>296</td>
</tr>
<tr>
<td>Transfer Case</td>
<td>386</td>
</tr>
<tr>
<td>Electronically Shifted Fluid</td>
<td>221</td>
</tr>
<tr>
<td>Fluid</td>
<td>413, 415</td>
</tr>
<tr>
<td>Transmission</td>
<td>210</td>
</tr>
<tr>
<td>Automatic</td>
<td>210, 214, 383</td>
</tr>
<tr>
<td>Fluid</td>
<td>413, 415</td>
</tr>
<tr>
<td>Maintenance</td>
<td>383</td>
</tr>
<tr>
<td>Shifting</td>
<td>208</td>
</tr>
<tr>
<td>Transporting Pets</td>
<td>188</td>
</tr>
<tr>
<td>Tread Wear Indicators</td>
<td>389</td>
</tr>
<tr>
<td>Turn Signals</td>
<td>48, 123, 315, 317</td>
</tr>
<tr>
<td>Uconnect</td>
<td></td>
</tr>
<tr>
<td>Uconnect Settings</td>
<td>428, 430, 447, 449</td>
</tr>
<tr>
<td>Uconnect Settings Customer Programmable Features</td>
<td>25, 428, 430, 447, 449</td>
</tr>
<tr>
<td>Uconnect Voice Command</td>
<td>458</td>
</tr>
<tr>
<td>Unleaded Gasoline</td>
<td>403</td>
</tr>
<tr>
<td>Untwisting Procedure, Seat Belt</td>
<td>156</td>
</tr>
<tr>
<td>USB</td>
<td>457</td>
</tr>
<tr>
<td>Utility Rails, Rear Cargo Area</td>
<td>87</td>
</tr>
<tr>
<td>V</td>
<td></td>
</tr>
<tr>
<td>Vehicle Identification Number (VIN)</td>
<td>402</td>
</tr>
<tr>
<td>Vehicle Loading</td>
<td>291</td>
</tr>
<tr>
<td>Vehicle Modifications/Alterations</td>
<td>12</td>
</tr>
<tr>
<td>Vehicle Storage</td>
<td>62, 395</td>
</tr>
<tr>
<td>Viscosity, Engine Oil</td>
<td>364</td>
</tr>
<tr>
<td>Voice Recognition System (VR)</td>
<td>458</td>
</tr>
<tr>
<td>Voltmeter</td>
<td>200</td>
</tr>
<tr>
<td>W</td>
<td></td>
</tr>
<tr>
<td>Warning Lights (Instrument Cluster Descriptions)</td>
<td>118</td>
</tr>
<tr>
<td>Warnings And Cautions</td>
<td>12</td>
</tr>
<tr>
<td>Washers, Windshield</td>
<td>52, 361</td>
</tr>
<tr>
<td>Washing Vehicle</td>
<td>396</td>
</tr>
<tr>
<td>Water</td>
<td></td>
</tr>
<tr>
<td>Driving Through</td>
<td>310</td>
</tr>
<tr>
<td>Water Separator, Diesel Fuel</td>
<td>367</td>
</tr>
<tr>
<td>Wheel And Wheel Tire Care</td>
<td>394</td>
</tr>
<tr>
<td>Wheel And Wheel Tire Trim</td>
<td>394</td>
</tr>
<tr>
<td>Wheel Covers</td>
<td>337</td>
</tr>
<tr>
<td>Winch</td>
<td>241</td>
</tr>
<tr>
<td>Accessories</td>
<td>243</td>
</tr>
<tr>
<td>Operation</td>
<td>243</td>
</tr>
<tr>
<td>Rigging Techniques</td>
<td>249</td>
</tr>
<tr>
<td>Usage</td>
<td>241</td>
</tr>
<tr>
<td>Wind Buffeting</td>
<td>65, 67</td>
</tr>
<tr>
<td>Window Fogging</td>
<td>62</td>
</tr>
<tr>
<td>Windows</td>
<td>63</td>
</tr>
<tr>
<td>Power</td>
<td>63</td>
</tr>
<tr>
<td>Rear Sliding</td>
<td>65</td>
</tr>
<tr>
<td>Reset Auto-Up</td>
<td>64</td>
</tr>
<tr>
<td>Windshield Defroster</td>
<td>190</td>
</tr>
<tr>
<td>Windshield Washers</td>
<td>51, 52, 361</td>
</tr>
<tr>
<td>Fluid</td>
<td>51, 361</td>
</tr>
<tr>
<td>Windshield Wiper Blades</td>
<td>376</td>
</tr>
<tr>
<td>Windshield Wipers</td>
<td>51</td>
</tr>
<tr>
<td>Wipers Blade Replacement</td>
<td>376</td>
</tr>
<tr>
<td>Wipers, Intermittent</td>
<td>52</td>
</tr>
<tr>
<td>Wipers, Rain Sensitive</td>
<td>52</td>
</tr>
<tr>
<td>Wireless Charging Pad</td>
<td>79</td>
</tr>
</tbody>
</table>