

2016 Grand Cherokee

#### **VEHICLES SOLD IN CANADA**

With respect to any Vehicles Sold in Canada, the name FCA US LLC shall be deemed to be deleted and the name FCA Canada Inc. used in substitution therefore.

#### **DRIVING AND ALCOHOL**

Drunken driving is one of the most frequent causes of accidents.

Your driving ability can be seriously impaired with blood alcohol levels far below the legal minimum. If you are drinking, don't drive. Ride with a designated non-drinking driver, call a cab, a friend, or use public transportation.

#### **WARNING!**

Driving after drinking can lead to an accident. Your perceptions are less sharp, your reflexes are slower, and your judgment is impaired when you have been drinking. Never drink and then drive.

This manual illustrates and describes the operation of features and equipment that are either standard or optional on this vehicle. This manual may also include a description of features and equipment that are no longer available or were not ordered on this vehicle. Please disregard any features and equipment described in this manual that are not on this vehicle.

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



SEC	THON TABLE OF CONTENTS	PAGE	
1	INTRODUCTION	3	1
	THINGS TO KNOW BEFORE STARTING YOUR VEHICLE		
3	UNDERSTANDING THE FEATURES OF YOUR VEHICLE	115	3
4	UNDERSTANDING YOUR INSTRUMENT PANEL	291	4
5	STARTING AND OPERATING	465	5
6	WHAT TO DO IN EMERGENCIES	615	6
7	MAINTAINING YOUR VEHICLE	647	7

TARI F OF CONTENTS

# **INTRODUCTION**

# **CONTENTS**

INTRODUCTION	■ VEHICLE IDENTIFICATION NUMBER8
ROLLOVER WARNING	■ VEHICLE MODIFICATIONS/ALTERATIONS 9
HOW TO USE THIS MANUAL	
WARNINGS AND CAUTIONS	

#### INTRODUCTION

Congratulations on selecting your new FCA US LLC vehicle. Be assured that it represents precision workmanship, distinctive styling, and high quality - all essentials that are traditional to our vehicles.

This is a specialized utility vehicle. It can go places and perform tasks that conventional passenger cars are not intended. It handles and maneuvers differently from many passenger cars both on-road and off-road, so take time to become familiar with your vehicle.

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 federal, 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 "On-Road/Off-Road 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 various customer-oriented documents. Please take the time to read these publications carefully. Following the instructions and recommendations in this manual will help assure safe and enjoyable operation of your vehicle.

NOTE: After reviewing the owner information, it should be stored in the vehicle for convenient referencing and remain with the vehicle when sold.

When it comes to service, remember that your authorized dealer knows your Jeep® vehicle best, has factory-trained technicians and genuine MOPAR® parts, and cares about your satisfaction.

#### **ROLLOVER WARNING**

Utility vehicles have a significantly higher rollover rate than other types of vehicles. This vehicle has a higher ground clearance and a higher center of gravity than many passenger vehicles. It is capable of performing better in a wide variety of off-road applications. Driven in an unsafe manner, all vehicles can go out of control. Because of the higher center of gravity, if this vehicle is out of control it may roll over while some other vehicles may not.

Do not attempt sharp turns, abrupt maneuvers, or other unsafe driving actions that can cause loss of vehicle control. Failure to operate this vehicle safely may result in a collision, rollover of the vehicle, and severe or fatal injury. Drive carefully.

80bfe0

#### **Rollover Warning Label**

Failure to use the driver and passenger seat belts provided is a major cause of severe or fatal injury. In fact, the U.S. government notes that the universal use of existing seat belts could cut the highway death toll by 10,000 or more each year and could reduce disabling injuries by

two million annually. In a rollover crash, an unbelted person is significantly more likely to die than a person wearing a seat belt. Always buckle up.

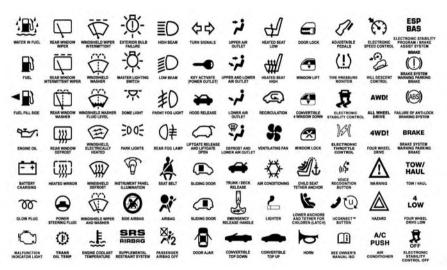
#### **HOW TO USE THIS MANUAL**

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.

Consult the following table for a description of the symbols that may be used on your vehicle or throughout this Owner's Manual:



010533317

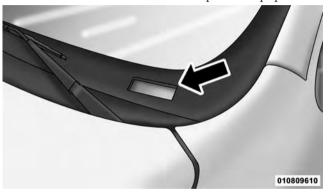
#### WARNINGS AND CAUTIONS

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.

#### **VEHICLE IDENTIFICATION NUMBER**

The Vehicle Identification Number (VIN) is found on a plate located on the left front corner of the instrument panel pad, visible from outside of the vehicle through the windshield. This number also is stamped into the right front body, behind the right front seat. Move the right front seat forward to allow better viewing of the stamped VIN. This number also appears on the Automobile Information Disclosure Label affixed to a window on your

vehicle. Save this label for a convenient record of your vehicle identification number and optional equipment.



**VIN Location** 



**Right Front Body VIN Location NOTE:** It is illegal to remove or alter the VIN.

#### 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.

# THINGS TO KNOW BEFORE STARTING YOUR VEHICLE

# **CONTENTS**

A WORD ABOUT YOUR KEYS	$\hfill\Box$ Rearming Of The System	20
$\hfill\Box$ Keyless Push Button Ignition	$\hfill\Box$ To Arm The System $\hfill$	21
□ Key Fob	$\hfill\Box$ To Disarm The System $\hfill$	21
$\hfill\Box$ Ignition Or Accessory On Message	$\hfill\Box$ Security System Manual Override	22
$\hfill\Box$ General Information	□ Tamper Alert	23
<b>■</b> SENTRY KEY	ILLUMINATED ENTRY — IF EQUIPPED	23
□ Replacement Keys	REMOTE KEYLESS ENTRY (RKE)	23
□ Customer Key Programming	$\hfill\Box$ To Unlock The Doors And Liftgate	24
$\hfill\Box$ General Information	$\hfill\Box$ To Lock The Doors And Liftgate	25
▼ VEHICLE SECURITY ALARM — IF EQUIPPED20	□ Using The Panic Alarm	26

□ Programming Additional Transmitters26	■ DOOR LOCKS
□ Transmitter Battery Replacement	□ Power Door Locks
□ General Information	□ Child-Protection Door Lock System —
■ REMOTE STARTING SYSTEM — IF EQUIPPED28	Rear Doors
□ How To Use Remote Start	■ KEYLESS ENTER-N-GO
□ Remote Start Abort Message On Driver	□ General Information
Information Display (DID) — If Equipped 29	■ WINDOWS
□ To Enter Remote Start Mode	□ Power Windows
☐ To Exit Remote Start Mode Without Driving The	□ Wind Buffeting
Vehicle	■ LIFTGATE
☐ To Exit Remote Start Mode And Drive The Vehicle	□ Power Liftgate — If Equipped
□ Comfort Systems — If Equipped	OCCUPANT RESTRAINT SYSTEMS
□ General Information	□ Important Safety Precautions

12 THINGS TO KNOW BEFORE STARTING YOUR VEHICLE I

THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 13

'	
□ Seat Belt Systems	□ Transporting Passengers
□ Supplemental Restraint System (SRS)	□ Exhaust Gas
□ Child Restraints	□ Safety Checks You Should Make Inside The
□ Transporting Pets	Vehicle
■ ENGINE BREAK-IN RECOMMENDATIONS109	□ Periodic Safety Checks You Should Make Outside The Vehicle
■ SAFETY TIPS	

#### A WORD ABOUT YOUR KEYS

Your vehicle uses a keyless ignition system. This system consists of a Key Fob with Remote Keyless Entry (RKE) transmitter and a Keyless Push Button Ignition.

# **Keyless Push Button Ignition**

This feature allows the driver to operate the ignition switch with the push of a button, as long as the Remote Keyless Entry (RKE) transmitter 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 RKE transmitter (Key Fob) may have a low or dead 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 ENGINE START/STOP button and push to operate the ignition switch.

# ACC START STOP O/AS ENGINE 0202001141

**Keyless Push Button Ignition** 

# **Key Fob**

The Key Fob also contains the Remote Keyless Entry (RKE) transmitter and an emergency key, which stores in the rear of the Key Fob.

The emergency key allows for entry into the vehicle should the battery in the vehicle or the Key Fob go dead.

#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 15

The emergency key is also for locking the glove box. You can keep the emergency key with you when valet parking.

To remove the emergency key, slide the mechanical latch at the top of the Key Fob sideways with your thumb and then pull the key out with your other hand.



0202042091

**Emergency Key Removal** 

**NOTE:** You can insert the double-sided emergency key into the lock cylinders with either side up.

# **Ignition Or Accessory On Message**

When opening the driver's door when the ignition is in ACC or ON (engine not running), a chime will sound to remind you to cycle the ignition to OFF. In addition to the chime, the ignition or accessory on message will display in the cluster.

**NOTE:** With the Uconnect system, the power window switches, radio, power sunroof (if equipped), and power outlets will remain active for up to 10 minutes after the ignition is placed in the OFF position. Opening either front door will cancel this feature. The time for this feature is programmable. Refer to "Uconnect Settings" in "Understanding Your Instrument Panel" for further information.

#### **WARNING!**

- Before exiting a vehicle, always shift the transmission into PARK, apply the parking brake, turn the engine OFF, remove the key fob from the ignition and lock your vehicle. If equipped with Keyless Enter-N-Go, always make sure the keyless ignition node is in "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.

(Continued)

# 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.
- 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 to thieves. Always remove the Key Fob from vehicle, place the ignition in the OFF position and lock all doors when leaving the vehicle unattended.

#### **General Information**

The following regulatory statement applies to all Radio Frequency (RF) devices equipped in this vehicle:

This device complies with Part 15 of the FCC Rules and with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference, and
- 2. This device must accept any interference received, including interference that may cause undesired operation.

**NOTE:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### **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 with a factory-mated Remote Keyless Entry (RKE) transmitter, an Ignition Node Module, Keyless Push Button Ignition and a 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 will not allow the engine to crank if an invalid Key Fob is used to start and operate the vehicle. The system will shut the engine off in two seconds if an invalid Key Fob is used to start the engine.

**NOTE:** A Key Fob that has not been programmed is also considered an invalid key.

During normal operation, after turning on the ignition switch, 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 used an invalid Key Fob to try to start the engine. Either of these conditions will result in the engine being 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.

# **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.

#### **CAUTION!**

- Always remove the Key Fobs from the vehicle and lock all doors when leaving the vehicle unattended.
- For vehicles equipped with Keyless Enter-N-Go, always remember to place the ignition in the OFF position.

**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.

# **Customer Key Programming**

Programming Key Fobs or RKE transmitters may be performed at an authorized dealer.

#### **General Information**

The following regulatory statement applies to all Radio Frequency (RF) devices equipped in this vehicle:

This device complies with Part 15 of the FCC Rules and with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference, and
- 2. This device must accept any interference received, including interference that may cause undesired operation.

**NOTE:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### VEHICLE SECURITY ALARM — IF EQUIPPED

The Vehicle Security Alarm monitors the vehicle doors for unauthorized entry and the Keyless Enter-N-Go START/STOP button for unauthorized operation. While the Vehicle Security Alarm is armed, interior switches for door locks and liftgaterelease are disabled. If something triggers the alarm, the Vehicle Security Alarm will provide the following audible and visible signals: the horn will pulse, the park lamps and/or turn signals will flash, and the Vehicle Security Light in the instrument cluster will flash.

# 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.

### To Arm The System

Follow these steps to arm the Vehicle Security Alarm:

- 1. Make sure the vehicles ignition is cycled to the "OFF" position (refer to "Starting Procedures" in "Starting And Operating" for further information).
  - For vehicles equipped with Keyless Enter-N-Go, make sure the vehicle ignition system is OFF.
  - For vehicles not equipped with Keyless Enter-N-Go, make sure the vehicle ignition system is OFF, and the key is physically removed from the ignition.
- 2. Perform one of the following methods to lock the vehicle:
  - Push LOCK 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

# ■ THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 21 same exterior zone (refer to "Keyless Enter-N-Go" in

- "Things To Know Before Starting Your Vehicle" for further information).
- Push the LOCK button on the Remote Keyless Entry (RKE) transmitter.
- 3. If any doors are open, close them.

# To Disarm The System

The Vehicle Security Alarm can be disarmed using any of the following methods:

- Push the UNLOCK button on the Remote Keyless Entry (RKE) transmitter.
- Grasp the Passive Entry Unlock Door Handle (if equipped, refer to "Keyless Enter-N-Go" in "Things To Know Before Starting Your Vehicle" for further information).

#### 22 THINGS TO KNOW BEFORE STARTING YOUR VEHICLE

- Cycle the vehicle ignition system out of the OFF position.
  - For vehicles equipped with Keyless Enter-N-Go, push the Keyless Enter-N-Go START/STOP button
  - For vehicles not equipped with Keyless Enter-N-Go, insert a valid key into the ignition switch and turn the key to the ON position.

(requires at least one valid Key Fob in the vehicle).

#### NOTE:

- The driver's door key cylinder and the liftgate button on the RKE transmitter cannot arm or disarm the Vehicle Security Alarm.
- The Vehicle Security Alarm remains armed during power liftgate entry. Pushing the liftgate button will not disarm the Vehicle Security Alarm. If someone enters the vehicle through the liftgate and opens any door, the alarm will sound.

• When the Vehicle Security Alarm is armed, the interior power door lock switches will not unlock the doors.

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.

# **Security System Manual Override**

The Vehicle Security Alarm will not arm if you lock the doors using the manual door lock plunger.

# If something has triggered the Vehicle Security Alarm in your absence, the horn will sound three times and the exterior lights will blink three times when you disarm the Vehicle Security Alarm. Check the vehicle for tampering.

#### **ILLUMINATED ENTRY — IF EQUIPPED**

The courtesy lights will turn on when you use the Remote Keyless Entry (RKE) transmitter to unlock the doors or open any door.

This feature also turns on the approach lighting in 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 is placed in the ON/RUN position from the OFF position.

#### NOTE:

- The front courtesy overhead console and door courtesy lights will turn on if the dimmer control is in the "Dome ON" position (extreme top position).
- The Illuminated Entry system will not operate if the dimmer control is in the "Dome defeat" position (extreme bottom position).

# REMOTE KEYLESS ENTRY (RKE)

The RKE system allows you to lock or unlock the doors, open the power liftgate, remote start your vehicle (if equipped), or activate the Panic Alarm from distances up to approximately 66 ft (20 m) using a hand-held Key Fob with RKE transmitter. The RKE transmitter does not need to be pointed at the vehicle to activate the system.

#### 24 THINGS TO KNOW BEFORE STARTING YOUR VEHICLE

**NOTE:** Driving at speeds 5 mph (8 km/h) and above disables the system from responding to all RKE transmitter buttons for all RKE transmitters.



Keyless Enter-N-Go Fob

### To Unlock The Doors And Liftgate

Push and release the UNLOCK button on the RKE transmitter once to unlock the driver's door or twice within five seconds to unlock all doors and liftgate. The turn signal lights will flash to acknowledge the unlock signal. The illuminated entry system will also turn on.

If the vehicle is equipped with Passive Entry, refer to "Keyless Enter-N-Go" in "Things To Know Before Starting Your Vehicle" for further information.

### 1st Press Of Key Fob Unlocks

This feature lets you program the system to unlock either the driver's door or all doors on the first push of the UNLOCK button on the RKE transmitter. To change the current setting, refer to "Uconnect Settings" in "Understanding Your Instrument Panel" for further information.

# Flash Lamps With Lock

This feature will cause the turn signal lights to flash when the doors are locked or unlocked with the RKE transmitter. This feature can be turned on or turned off. To change the current setting, refer to "Uconnect Settings" in "Understanding Your Instrument Panel" for further information.

# Headlight Illumination On Approach

This feature activates the headlights for up to 90 seconds when the doors are unlocked with the RKE transmitter. The time for this feature is programmable on vehicles equipped through Uconnect. To change the current setting, refer to "Uconnect Settings" in "Understanding Your Instrument Panel" for further information.

# To Lock The Doors And Liftgate

Push and release the LOCK button on the RKE transmitter to lock all doors and liftgate. The turn signal lights 2 will flash, and the horn will chirp to acknowledge the signal.

If the vehicle is equipped with Passive Entry, refer to "Keyless Enter-N-Go" in "Things To Know Before Starting Your Vehicle" for further information.

#### Sound Horn With Lock

This feature will cause the horn to chirp when the doors are locked with the RKE transmitter. This feature can be turned on or turned off. To change the current setting, refer to "Uconnect Settings" in "Understanding Your Instrument Panel" for further information.

# **Using The Panic Alarm**

To turn the Panic Alarm feature on or off, push and hold the PANIC button on the RKE transmitter for at least one second and release. When the Panic Alarm is activated, the turn signals will flash, the horn will pulse on and off, and the interior lights will turn on.

The Panic Alarm will stay on for three minutes unless you turn it off by either pushing the PANIC button a second time or drive the vehicle at a speed of 15 MPH (24 km/h) or greater.

#### NOTE:

• The interior lights will turn off if you place the ignition in the ACC or ON/RUN position while the Panic Alarm is activated. However, the exterior lights and horn will remain on.

• You may need to be less than 35 ft (11 m) from the vehicle when using the RKE transmitter to turn off the Panic Alarm due to the radio frequency noises emitted by the system.

# **Programming Additional Transmitters**

Programming Key Fobs or RKE transmitters may be performed at an authorized dealer.

# **Transmitter Battery Replacement**

The recommended replacement battery is one CR2032 battery.

#### NOTE:

 Perchlorate Material — special handling may apply. Batteries could contain dangerous materials. Please dispose of them according to respect for environment and local laws.

- Used batteries are harmful to the environment. You can dispose of them either in the correct containers as specified by law or by taking them to a Dealership, which will deal with their disposal.
- Do not touch the battery terminals that are on the back housing or the printed circuit board.
- 1. Remove the emergency key by sliding the mechanical latch on the back of the RKE transmitter sideways with your thumb and then pull the key out with your other hand.
- 2. Insert the tip of the emergency key or a #2 flat blade screwdriver into the slot and gently pry the two halves of the RKE transmitter apart. Make sure not to damage the seal during removal.



0213004940

# Separating RKE Transmitter Case

3. Remove the battery by turning the back cover over (battery facing downward) and tapping it lightly on a solid surface such as a table or similar, then replace the battery. When replacing the battery, match the + sign on the battery to the + sign on the inside of the battery clip, located on the back cover. Avoid touching the

#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE

new battery with your fingers. Skin oils may cause battery deterioration. If you touch a battery, clean it with rubbing alcohol.

4. To assemble the RKE transmitter case, snap the two halves together.

#### General Information

The following regulatory statement applies to all Radio Frequency (RF) devices equipped in this vehicle:

This device complies with Part 15 of the FCC Rules and with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference, and
- 2. This device must accept any interference received, including interference that may cause undesired operation.

**NOTE:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### REMOTE STARTING SYSTEM — IF EQUIPPED



This system uses the Remote Keyless Entry (RKE) transmitter 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:

- The vehicle must be equipped with an automatic transmission to be equipped with Remote Start.
- Obstructions between the vehicle and the RKE transmitter may reduce this range.

#### **How To Use Remote Start**

All of the following conditions must be met before the engine will remote start:

- Shift lever in PARK
- Doors closed
- Hood closed
- HAZARD switch off
- BRAKE switch inactive (brake pedal not pressed)
- Battery at an acceptable charge level
- RKE PANIC button not pushed
- Fuel meets minimum requirement
- System not disabled from previous Remote Start event
- Vehicle security alarm not active

#### **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 Remote Keyless Entry (RKE) transmitters away from children. Operation of the Remote Start System, windows, door locks or other controls could cause serious injury or death.

# Remote Start Abort Message On Driver Information Display (DID) — If Equipped

The following messages will display in the DID if the vehicle fails to remote start or exits remote start prematurely:

• Remote Start Cancelled — Door Open

#### 30 THINGS TO KNOW BEFORE STARTING YOUR VEHICLE

- Remote Start Cancelled Hood Open
- Remote Start Cancelled Fuel Low
- Remote Start Cancelled System Fault
- Remote Start Disabled Start Vehicle To Reset

The DID message stays active until the ignition is turned to the  $\mbox{ON/RUN}$  position.

#### To Enter Remote Start Mode

Push and release the REMOTE START button <sup>(2)</sup> on the RKE transmitter 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 RKE transmitter. However, the ignition switch must be cycled to 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 the one time push of the REMOTE START button 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 RKE transmitter to unlock the doors and disarm the Vehicle Security Alarm System (if equipped). Then, prior to the end of the 15 minute cycle, push and release the START/STOP button.

**NOTE:** "Remote Start Active — Push Start Button" will display in the Driver Information Display (DID) until you push the start button. Refer to "Driver Information" Display (DID)" in "Understanding Your Instrument Panel" for further information.

# Comfort Systems — If Equipped

When Remote Start is activated, Auto-Comfort will work anytime the temperature conditions are correct. When 2 the feature is enabled, regardless of Remote Start or regular keyless start, the 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 turned to the ON/RUN position.

The Comfort System can be activated and deactivated through the Uconnect system. For more information on Comfort System operation, refer to "Uconnect Settings" in "Understanding Your Instrument Panel."

#### **General Information**

The following regulatory statement applies to all Radio Frequency (RF) devices equipped in this vehicle:

This device complies with Part 15 of the FCC Rules and with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference, and
- 2. This device must accept any interference received, including interference that may cause undesired operation.

**NOTE:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### **DOOR LOCKS**

The power door locks can be manually locked from inside the vehicle by using the door lock knob. To lock each door, push the door lock knob on each door trim panel downward. To unlock the front doors, pull the inside door handle to the first detent. To unlock the rear doors, pull the door lock knob on the door trim panel upward. If the lock knob is down when the door is closed, the door will lock. Therefore, make sure the key is not inside the vehicle before closing the door.

**NOTE:** Manually locking the vehicle will not arm the Vehicle Security Alarm.



Manual Door Lock Knob

#### **WARNING!**

- For personal security and safety in the event of a collision, lock the vehicle doors before you drive as well as when you park and leave the vehicle.
- Before exiting a vehicle, always shift the transmission into PARK, apply the parking brake, turn the engine OFF, remove the key fob from the ignition and lock your vehicle. If equipped with Keyless Enter-N-Go, always make sure the keyless ignition node is in "OFF" mode, remove the Key Fob from the vehicle and lock the vehicle.

(Continued)

### WARNING! (Continued)

- 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.

#### **Power Door Locks**

The power door lock switch is located on each front door panel. Push the switch to lock or unlock the doors.



Power Door Lock Switch

If the door lock switch is pushed down when the door is closed, the door will lock. Therefore, make sure the Key Fob is not inside the vehicle before closing the door.

If the door lock switch is pushed while the ignition is in ACC or ON/RUN and the driver's door is open, the doors will not lock.

If a rear door is locked, it cannot be opened from inside the vehicle without first unlocking the door. The door may be unlocked manually by raising the lock knob.

# 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 your authorized dealer or through the Uconnect Settings in your radio.

# Automatic Unlock On Exit Feature — If Equipped

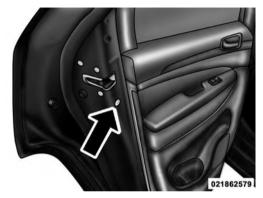
If Auto Unlock is enabled, this feature will unlock all the doors when any door is opened if the vehicle is stopped and in PARK. Refer to "Uconnect Settings" in "Understanding Your Instrument Panel" for further information.

# Child-Protection Door Lock System — Rear Doors

To provide a safer environment for small children riding 2 in the rear seats, the rear doors are equipped with Child-Protection Door Lock system.

# To Engage Or Disengage The Child-Protection **Door Lock System**

- 1. Open the rear door.
- 2. Insert the tip of the emergency key into the lock and rotate to the LOCK or UNLOCK position.
- 3. Repeat steps 1 and 2 for the opposite rear door.



Child-Protection Door Lock Location



Child-Protection Door Lock Function

Avoid trapping anyone in a vehicle in a collision. Remember that the rear doors can only be opened from the outside when the Child-Protection locks are engaged (locked).

**NOTE:** For emergency exit from the rear seats when the Child-Protection Door Lock System is engaged, manually raise the door lock knob to the unlocked position, roll down the window, and open the door using the outside door handle.

#### **KEYLESS ENTER-N-GO**

The Passive Entry system is an enhancement to the vehicle's Remote Keyless Entry (RKE) 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 RKE transmitter lock or unlock buttons.

#### NOTE:

• Passive Entry may be programmed ON/OFF. Refer to "Uconnect Settings" in "Understanding Your Instrument Panel" for further information.

- 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.
- If wearing gloves on your hands, or if it has been raining on the Passive Entry door handle, the unlock sensitivity can be affected, resulting in a slower response time.

#### To Unlock From The Driver's Side:

With a valid Passive Entry RKE transmitter within 5 ft (1.5 m) of the driver's door handle, grab the driver's front door handle to unlock the driver's door automatically. The interior door panel lock knob will raise when the door is unlocked.



Grab The Door Handle To Unlock

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

### To Unlock From The Passenger Side:

With a valid Passive Entry RKE transmitter within 5 ft (1.5 m) of the passenger door handle, grab the front passenger door handle to unlock all four 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 RKE Transmitter In Vehicle

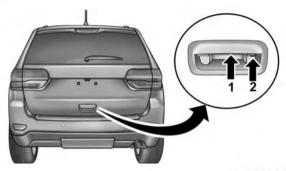
To minimize the possibility of unintentionally locking a Passive Entry RKE transmitter inside your vehicle, the Passive Entry system is equipped with an automatic door unlock feature which will function if the ignition is OFF.

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 RKE transmitters. If one of the vehicle's Passive Entry RKE transmitters is detected inside the vehicle, and no other valid Passive Entry RKE transmitters 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 RKE transmitter can be locked in the vehicle).

# To Unlock/Enter The Liftgate

The liftgate passive entry unlock feature is built into the electronic liftgate release. With a valid Passive Entry RKE 2 transmitter within 3 ft (1.0 m) of the liftgate, push the electronic liftgate release for a power open on vehicles equipped with Power Liftgate. Push the electronic liftgate release and lift for Manual Liftgate vehicles.

**NOTE:** If the vehicle is unlocked, then the liftgate will open with the electronic liftgate release and no RKE Transmitter is required.



0222003451

Passive Entry/Lock Button Location

- 1 Electronic Liftgate Release
- 2 Lock Button Location

# To Lock The Liftgate

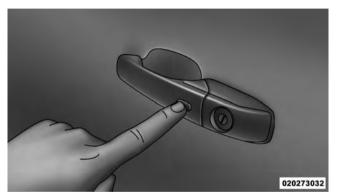
With a valid Passive Entry RKE transmitter within 3 ft (1.0 m) of the liftgate, push the passive entry lock button located to the right of electronic liftgate release.

NOTE: If "Unlock All Doors 1st Press" is programmed in Uconnect Settings, all doors will unlock when you push the electronic liftgate release. If "Unlock Driver Door 1st Press" is programmed in Uconnect, the liftgate will only unlock when you push the electronic liftgate release. For further information, refer to "Uconnect Settings" in "Understanding Your Instrument Panel."

### To Lock The Vehicle's Doors

With one of the vehicle's Passive Entry RKE transmitters within 5 ft (1.5 m) of the driver or passenger front door handle, push the door handle LOCK button to lock all four doors and liftgate.

**NOTE:** The key must be within 5 ft (1.5 m) of the handle being used to lock the vehicle.



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



Do NOT Grab The Door Handle When Locking

#### 42 THINGS TO KNOW BEFORE STARTING YOUR VEHICLE

#### NOTE:

- After pushing the door handle 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 will not operate if the RKE transmitter battery is dead.
- Closeness to mobile devices can have an effect on the passive entry system.

The vehicle doors can also be locked by using the RKE transmitter lock button or the lock button located on the vehicle's interior door panel.

#### **General Information**

The following regulatory statement applies to all radio frequency (RF) devices equipped in this vehicle:

This device complies with Part 15 of the FCC Rules and with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

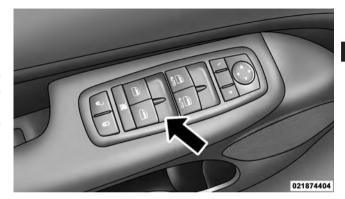
- 1. This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

**NOTE:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### **WINDOWS**

#### **Power Windows**

The power window controls are located on the driver's door trim panel. There is a single switch on the front passenger door and rear doors which operate the front and rear door windows. The window controls will operate only when the ignition switch is in the ON/RUN or ACC position.



**Power Window Switches** 

The power window switches remain active for up to ten minutes after the ignition switch has been turned OFF. Opening a vehicle front door will cancel this feature.

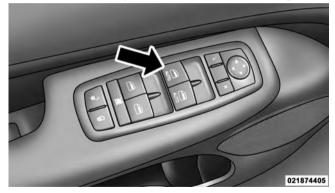
Never leave children unattended in a vehicle, and do not let children play with power windows. Do not leave the Key Fob in or near the vehicle, or in a location accessible to children, and do not leave the ignition of a vehicle equipped with Keyless Enter-N-Go in the ACC or ON/RUN mode. Occupants, particularly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

#### Auto-Down

Both the driver and front passenger window switches 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 open the window part way, push to the first detent and release it when you want the window to stop.



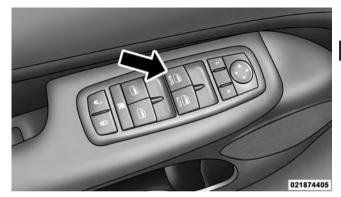
**Auto-Down Window Switches** 

# Auto Up Feature With Anti-Pinch Protection — Driver And Front Passenger Door Only

Lift the 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.



**Auto-Up Window Switches** 

**NOTE:** If the window runs into any obstacle during "Auto Up," 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-Up." If this happens, pull the switch lightly to the first detent and hold it 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.

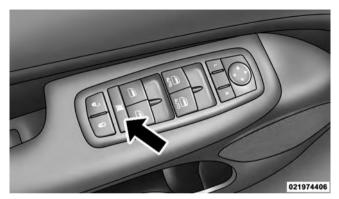
## Resetting The Auto Up Feature

Should the "Auto Up" feature stop working, the window probably needs to be reset. To reset "Auto Up":

- 1. 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.
- 2. 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 Button**

The Window Lockout button on the driver's door allows you to disable the window controls on the rear doors. To disable the window controls on the rear doors, push the Window Lockout button. To enable the window controls, push the Window Lockout button again.



Window Lockout Button

# 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.

#### LIFTGATE

# To Unlock/Enter The Liftgate

The liftgate passive entry unlock feature is built into the electronic liftgate release. With a valid Passive Entry RKE transmitter within 3 ft (1.0 m) of the liftgate, push the electronic liftgate release to open with one fluid motion.

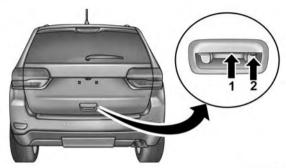
#### 48 THINGS TO KNOW BEFORE STARTING YOUR VEHICLE

NOTE: If "Unlock All Doors 1st Press" is programmed in Uconnect Settings, all doors will unlock when you push the electronic liftgate release. If "Unlock Driver Door 1st Press" is programmed in Uconnect Settings, only the liftgate will unlock when you push the electronic liftgate release. For further information, refer to "Uconnect Settings" in "Understanding Your Instrument Panel."

# To Lock The Liftgate

With a valid Passive Entry RKE transmitter within 3 ft (1.0 m) of the liftgate, push the passive entry lock button located to the right of electronic liftgate release.

**NOTE:** The liftgate unlock feature is built into the electronic liftgate release.



0222003451

# Passive Entry/Lock Button Location

— Electronic Liftgate Release 2 — Lock Button Location

Driving with the liftgate open can allow poisonous exhaust gases into your vehicle. You and your passengers could be injured by these fumes. Keep the liftgate closed when you are operating the vehicle.

# Power Liftgate — If Equipped



The power liftgate may be opened by pushing the electronic liftgate release (refer to "Keyless Enter-N-Go" located in "Things To Know Before Starting Your Vehicle") or by pushing the

LIFTGATE button on the Remote Keyless Entry (RKE) transmitter. Push the LIFTGATE button on the RKE transmitter twice within five seconds to open the power liftgate. Once the liftgate is open, pushing the button twice within five seconds a second time will close the liftgate.

The power liftgate may also be opened or closed by pushing the LIFTGATE button located on the front overhead console. If the liftgate is fully open, the liftgate can be closed by pushing the LIFTGATE button located on left rear trim panel, near the liftgate opening. If the liftgate is in motion, pushing the LIFTGATE button located on left rear trim panel will reverse the liftgate.

When the LIFTGATE button on the RKE transmitter is pushed two times, the turn signals will flash twice to signal that the liftgate is opening or closing (if Flash Lamps with Lock is enabled in the Uconnect settings), and the liftgate chime will be audible. For further information, refer to "Uconnect Settings" in "Understanding Your Instrument Panel."

#### NOTE:

- In the event of a power malfunction to the liftgate, an emergency liftgate latch release can be used to open the liftgate. The emergency liftgate latch release can be accessed through a snap-in cover located on the liftgate trim panel.
- If liftgate is left open for an extended period of time, the liftgate may need to be closed manually to reset power liftgate functionality.

#### **WARNING!**

During power operation, personal injury or cargo damage may occur. Ensure the liftgate travel path is clear. Make sure the liftgate is closed and latched before driving away.

#### NOTE:

- The power liftgate buttons will not operate if the vehicle is in gear or the vehicle speed is above 0 mph (0 km/h).
- The power liftgate will not operate in temperatures below -22°F (-30°C) or temperatures above 150°F (65°C). Be sure to remove any buildup of snow or ice from the liftgate before pushing any of the power liftgate switches.
- If anything obstructs the power liftgate while it is closing or opening, the liftgate will automatically reverse to the closed or open position, provided it meets sufficient resistance.
- There are also pinch sensors attached to the side of the liftgate. Light pressure anywhere along these strips will cause the liftgate to return to the open position.
- If the liftgate is not fully open, push the Liftgate button on the Key Fob twice to operate the liftgate.

- If the electronic liftgate release is pushed while the power liftgate is closing, the liftgate will reverse to the full open position.
- If the electronic liftgate release is pushed while the power liftgate is opening, the liftgate motor will disengage to allow manual operation.
- If the power liftgate encounters multiple obstructions within the same cycle, the system will automatically stop and the liftgate must be opened or closed manually.

 Driving with the liftgate open can allow poisonous exhaust gases into your vehicle. You and your passengers could be injured by these fumes. Keep the liftgate closed when you are operating the vehicle.

# WARNING! (Continued)

• If you are required to drive with the liftgate 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.

#### OCCUPANT RESTRAINT SYSTEMS

Some of the most important safety features in your vehicle are the restraint systems:

- Seat Belt Systems
- Supplemental Restraint Systems (SRS) Air Bags
- Supplemental Active Head Restraints
- Child Restraints

(Continued)

# **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:

- Children 12 years old and under should always ride buckled up in a vehicle with a rear seat.
- 2. 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")
- 3. Children that are not big enough to wear the vehicle seat belt properly (Refer to "Child Restraints") should be secured in a vehicle with a rear seat in child

- restraints or belt-positioning booster seats. Older children who do not use child restraints or belt-positioning booster seats should ride properly buckled up in a vehicle with a rear seat.
- 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 Advanced 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

9. If the air bag system in this vehicle needs to be modified to accommodate a disabled person, contact the Customer Center. Phone numbers are provided under "If You Need Assistance."

#### **WARNING!**

- Never place a rear-facing child restraint in front of an air bag. A deploying passenger Advanced Front Air Bag can cause death or serious injury to a child 12 years or younger, including a child in a rearfacing child restraint.
- Only use a rear-facing child restraint in a vehicle with a rear seat.

# **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.

# Driver And Passenger BeltAlert (If Equipped)

**4** 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 Belt Alert feature is active whenever the ignition switch is in the START or  ${\sf ON/RUN}$  position.

#### **Initial Indication**

If the driver is unbuckled when the ignition switch is first turned to the START or ON/RUN position, an intermittent 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 turned to 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 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 heavy object is 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.

BeltAlert can be activated or deactivated by your authorized dealer. FCA US LLC does not recommend deactivating BeltAlert.

**NOTE:** If BeltAlert has been deactivated and the driver or outboard front seat passenger (if equipped with outboard front passenger seat BeltAlert) is unbuckled the Seat Belt Reminder Light will turn on and remain on until the driver and outboard front seat passenger seat belts are buckled.

# Lap/Shoulder Belts

All seating positions in your vehicle are equipped with 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.

- 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.

# WARNING! (Continued)

- Do not allow people to ride in any area of your vehicle that is not equipped with seats and seat belts.
- Be sure everyone in your vehicle is in a seat and using a seat belt properly.
- 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.

(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 your 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.

### WARNING! (Continued)

- 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.
- 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.

(Continued) (Continued)

## WARNING! (Continued)

 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.

# 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.



Pulling Out The Latch Plate

3. When the seat belt is long enough to fit, insert the latch plate into the buckle until you hear a "click."



**Inserting Latch Plate Into Buckle** 

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.



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.

### 60 THINGS TO KNOW BEFORE STARTING YOUR VEHICLE

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 in (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.

In the driver and front passenger seats, the top of the

# Adjustable Upper Shoulder Belt Anchorage

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.



Adjustable Anchorage

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.

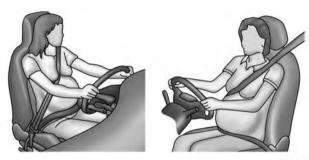
**NOTE:** The adjustable upper shoulder belt anchorage is equipped with an Easy Up feature. This feature allows the shoulder belt anchorage to be adjusted in the upward position without pushing or squeezing the release button. To verify the shoulder belt anchorage is latched, pull downward on the shoulder belt anchorage until it is locked into position.

#### Seat Belt Extender

If a seat belt is not long enough to fit properly, even when the webbing is fully extended and the adjustable upper shoulder belt anchorage (if equipped) is in its lowest position, your authorized dealer can provide you with a Seat Belt Extender. The Seat Belt Extender should be used. only if the existing seat belt is not long enough. When the Seat Belt Extender is not required for a different occupant, it must be removed.

- ONLY use a Seat Belt Extender if it is physically required in order to properly fit the original seat belt system. DO NOT USE the Seat Belt Extender if, when worn, the distance between the front edge of the Seat Belt Extender buckle and the center of the occupant's body is LESS than 6 inches.
- Using a Seat Belt Extender when not needed can increase the risk of serious injury or death in a collision. Only use the Seat Belt Extender when the lap belt is not long enough and only use in the recommended seating positions. Remove and store the Seat Belt Extender when not needed.

### Seat Belts And Pregnant Women



0226075266

### Pregnant Women And Seat Belts

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 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**

This vehicle has a seat belt system with an Energy Management feature in the front seating positions that may help further reduce the risk of injury in the event of a collision. This seat belt system has a retractor assembly that is designed to release webbing in a controlled manner.

# **Automatic Locking Retractor (ALR)**

The seat belts in the passenger seating positions are 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

#### 64 THINGS TO KNOW BEFORE STARTING YOUR VEHICLE

Restraints" section of this manual. The table below defines the type of feature for each seating position.



022668725

• ALR = Switchable Automatic Locking Retractor

If the passenger seating position is equipped with an ALR and is being used for normal usage, 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 a vehicle with a rear seat.

- Never place a rear-facing child restraint in front of an air bag. A deploying Passenger Advanced Front Air Bag can cause death or serious injury to a child 12 years or younger, including a child in a rearfacing child restraint.
- Only use a rear-facing child restraint in 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 2 Mode and activate the vehicle sensitive (emergency) locking mode.

#### **WARNING!**

- The seat belt assembly must be replaced if the switchable Automatic Locking Retractor (ALR) feature or any other seat belt function is not working properly when checked according to the procedures in the Service Manual.
- Failure to replace the seat belt assembly could increase the risk of injury in collisions.

(Continued)

# 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.

## Supplemental Active Head Restraints (AHR)

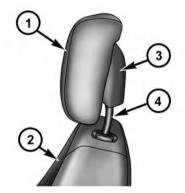
These head restraints are passive, deployable components, and vehicles with this equipment cannot be readily identified by any markings, only through visual inspection of the head restraint. The head restraint will be split in two halves, with the front half being soft foam and trim, the back half being decorative plastic.

#### How The Active Head Restraints (AHR) Work

The Occupant Restraint Controller (ORC) determines whether the severity, or type of rear impact will require the Active Head Restraints (AHR) to deploy. If a rear impact requires deployment, both the driver and front passenger seat AHRs will be deployed.

When AHRs deploy during a rear impact, the front half of the head restraint extends forward to minimize the gap between the back of the occupant's head and the AHR. This system is designed to help prevent or reduce the extent of injuries to the driver and front passenger in certain types of rear impacts.

**NOTE:** The Active Head Restraints (AHR) may or may not deploy in the event of a front or side impact. However if during a front impact, a secondary rear impact occurs, the AHR may deploy based on the severity and type of the impact.



022607508

#### Active Head Restraint (AHR) Components

- 1 Head Restraint Front Half (Soft Foam and Trim)
- 2 Seatback
- 3 Head Restraint Back Half (Decorative Plastic Rear Cover)
- 4 Head Restraint Guide Tubes

#### **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 collision.
- Do not place items over the top of the Active Head Restraint, such as coats, seat covers or portable DVD players. These items may interfere with the operation of the Active Head Restraint in the event of a collision and could result in serious injury or death.
- Active Head Restraints may be deployed if they are struck by an object such as a hand, foot or loose cargo. To avoid accidental deployment of the Active Head Restraint ensure that all cargo is secured,

(Continued)

# WARNING! (Continued)

as loose cargo could contact the Active Head Restraint during sudden stops. Failure to follow this warning could cause personal injury if the Active Head Restraint is deployed.

**NOTE:** For more information on properly adjusting and positioning the head restraint, refer to "Adjusting Active Head Restraints" in "Understanding The Features Of Your Vehicle."

# Resetting Active Head Restraints (AHR)

If the Active Head Restraints are triggered during a collision, the front half of the head restraint will be extended forward and separated from the rear half of the head restraint (See Image). Do not drive your vehicle after the AHRs have deployed. The head restraint must be reset into the original position to best protect the occupant for all types of collisions. An authorized FCA

US LLC dealer must reset the AHRs on the driver's and front passenger's seat before driving. Personally attempting to reset the AHRs may result in damage to the AHRs that could impair their function.



022607494

**AHR In Reset Position** 

Deployed AHRs are not able to best protect you in all types of collisions. Have deployed AHRs reset by an authorized dealer immediately.

# Supplemental Restraint System (SRS)

# 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
- Advanced Front Air Bags

- Supplemental Knee Air Bags
- Supplemental Side Air Bags
- Front and Side Impact Sensors
- Seat Belt Pretensioners
- Seat Belt Buckle Switch

# **Advanced Front Air Bags**

This vehicle has Advanced Front Air Bags for both the driver and front passenger as a supplement to the seat belt restraint systems. The driver's Advanced Front Air Bag is mounted in the center of the steering wheel. The passenger's Advanced 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.



Advanced Front Air Bag And Knee Bolster Locations

- 1 Driver And Passenger Advanced Front Air Bags
- 2 Passenger Knee Impact Bolster
- 3 Driver Knee Impact Bolster/Supplemental Knee Air Bag

- Being too close to the steering wheel or instrument panel during Advanced 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.
- Never place a rear-facing child restraint in front of an air bag. A deploying Passenger Advanced Front Air Bag can cause death or serious injury to a child 12 years or younger, including a child in a rearfacing child restraint.
- Only use a rear-facing child restraint in a vehicle with a rear seat.

# **Advanced 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 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.

### **WARNING!**

- No objects should be placed over or near the air bag on the instrument panel or steering wheel, because any such objects could cause harm if the vehicle is in a collision severe enough to cause the air bags to inflate.
- Do not put anything on or around the air bag covers or attempt to open them manually. You may damage the air bags and you could be injured because the air bags may no longer be functional. The protective covers for the air bag cushions are designed to open only when the air bags are inflating.
- 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, air bags won't deploy at all. Always wear your seat belts even though you have air bags.

# Advanced Front Air Bag Operation

Advanced Front Air Bags are designed to provide additional protection by supplementing the seat belts. Advanced Front Air Bags are not expected to reduce the risk of injury in rear, side, or rollover collisions. The Advanced 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, Advanced 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 Advanced Front Air Bags, it signals the inflator units. A large quantity of non-toxic gas is generated to inflate the Advanced Front Air Bags.

The steering wheel hub trim cover and the upper right side of the instrument panel separate and fold out of the way as the air bags inflate to their full size. The Advanced Front Air Bags fully inflate in less time than it takes to blink your eyes. The air bags then quickly deflate while helping to restrain the driver and front passenger.

The Knee Impact Bolsters help protect the knees of the driver and front passenger, and position the front occupants for improved interaction with the Advanced 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.

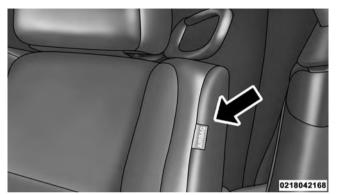
# Supplemental Driver Knee Air Bag

This vehicle is equipped with a Supplemental Driver Knee Air Bag mounted in the instrument panel below the 2 steering column. The Supplemental Driver Knee Air Bag provides enhanced protection during a frontal impact by working together with the seat belts, pretensioners, and Advanced Front Air Bags.

# Supplemental Side Air Bags

Your vehicle is equipped with two types of side air bags:

1. Supplemental Seat-Mounted Side Air Bags (SABs): Located in the outboard side of the front seats. The SABs are marked with a "SRS AIRBAG" or "AIR-BAG" label sewn into the outboard side of the seats.



Front Supplemental Seat-Mounted Side Air Bag Label
The SABs may help to reduce the risk of occupant injury
during certain side impacts and/or vehicle rollover
events, 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. 2. Supplemental Side Air Bag Inflatable Curtains (SABICs): 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 may help reduce the risk of head or other injuries to front and rear seat outboard occupants in certain side impacts and/or vehicle rollover events, in addition to the injury reduction potential provided by the seat belts and body structure.

The SABICs deploy downward, covering the side windows. An inflating SABIC pushes the outside edge of the trim 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 may help reduce the risk of partial or complete ejection of vehicle occupants through side windows in certain rollover or side impact events.

### **WARNING!**

- Your vehicle is equipped with left and right Supplemental Side Air Bag Inflatable Curtains (SABICs). Do not 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.
- Your vehicle is equipped with SABICs. 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.

The SABICs and SABs ("Side Air Bags") are designed to activate in certain side impacts and certain rollover events. The Occupant Restraint Controller ("ORC") determines whether the deployment of the Side Air Bags in a particular side impact or 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 should have deployed.

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. 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 inflating Side Air Bags. 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.
- Being too close to the Side Air Bags during deployment could cause you to be severely injured or killed.

(Continued)

# WARNING! (Continued)

 Relying on the Side Air Bags alone could lead to more severe injuries in a collision. The Side Air Bags work with your seat belt to restrain you properly. In some collisions, Side Air Bags won't deploy at all. Always wear your seat belt even though you have Side Air Bags.

**NOTE:** Air bag covers may not be obvious in the interior trim, but they will open during air bag deployment.

## **Side Impacts**

In side impacts, 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.

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 Advanced Front Air Bags deploy.

### **Rollover Events**

Side Air Bags are designed to activate in certain rollover events. The ORC determines whether the deployment of the Side Air Bags 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 should have deployed.

The Side Air Bags 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. A slower-developing event may deploy the seat belt pretensioners on both sides of the vehicle. A faster-developing event may deploy the seat belt pretensioners as well as the Side Air Bags on both sides of the vehicle. The rollover sensing-system may also deploy the seat belt pretensioners, with or without the Side Air Bags, on both sides of the vehicle if the vehicle experiences a near rollover event.

# If A Deployment Occurs

The Advanced 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.

### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 79

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.

### **WARNING!**

Deployed air bags and seat belt pretensioners cannot protect you in another collision. Have the air bags, seat belt pretensioners, and the seat belt retractor assemblies replaced by an authorized dealer immediately. Also, have the Occupant Restraint Controller System serviced as well.

### NOTE:

• Air bag covers may not be obvious in the interior trim, but they will open during air bag deployment.

#### 80 THINGS TO KNOW BEFORE STARTING YOUR VEHICLE

• 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 ORC will determine whether to have the Enhanced Accident Response System perform the following functions:

- Cut off fuel to the engine.
- Flash hazard lights as long as the battery has power or until the hazard light button is pressed. The hazard lights can be deactivated by pressing the hazard light button.
- Turn on the interior lights, which remain on as long as the battery has power.
- Unlock the power door locks.

# **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.

# Air Bag Warning Light

The air bags must be ready to inflate for your protection



in a collision. The Occupant Restraint Controller (ORC) monitors the internal circuits and interconnecting wiring associated with air bag system electrical components.

The 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 bags 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 turned to 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 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 turned to 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 bags to protect you in a collision. If the light does not come on as a bulb check when the ignition is first placed in the on position, and 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 the "Instrument Panel" section of this manual.

# 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 right side of the instrument panel. Do not

# WARNING! (Continued)

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.
- Do not attempt to modify any part of your air bag system. The air bag may inflate accidentally or may not function properly if modifications are made. Take your vehicle to an authorized dealer for any air bag system service. If your seat, including your trim cover and cushion, needs to be serviced in any way (including removal or loosening/tightening of seat attachment bolts), take the vehicle to your authorized dealer. Only manufacturer approved seat accessories may be used. If it is necessary to modify the air bag system for persons with disabilities, contact your authorized dealer.

## Event Data Recorder (EDR)

This vehicle is equipped with an event data recorder (EDR). The main purpose of an EDR is to record, in 2 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.

Every state in the United States, and every Canadian province, requires that small children ride in proper restraint systems. This is the law, and you can be prosecuted for ignoring it.

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!**

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

(Continued)

#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 85

# WARNING! (Continued)

great that you could not hold the child, no matter how strong you are. The child and others could be badly injured. Any child riding in your vehicle should be in a proper restraint for the child's size.

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.

#### NOTE:

- additional information. For refer to www.seatcheck.org or call 1-866-732-8243.
- Canadian residents should refer to Transport Canada's website for additional information: www.tc.gc.ca/ eng/motorvehiclesafety/safedrivers-childsafetyindex-53.htm

# Summary Of Recommendations For Restraining Children In Vehicles

	Child Size, Height, Weight Or Age	Recommended Type Of Child Restraint
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	Either an Infant Carrier or a Convertible Child Restraint, facing rearward in the rear seat of the vehicle
Small Children	Children who are at least two years old or who have out-grown the height or weight limit of their rear-facing child restraint	Forward-Facing Child Restraint with a five-point Harness, facing forward in the rear seat of the vehicle
Larger Children	Children who have out-grown their forward-facing child restraint, but are too small to properly fit the vehicle's seat belt	Belt Positioning Booster Seat and the vehicle seat belt, seated in the rear seat of the vehicle
Children Too Large for Child Restraints	Children 12 years old or younger, who have out-grown the height or weight limit of their booster seat	Vehicle Seat Belt, seated in the rear seat of the vehicle

### **Infants 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 Advanced Front Air Bag can cause death or serious injury to a child 12 years or younger, including a child in a rearfacing child restraint.
- Only use a rear-facing child restraint in a vehicle with a rear seat.

### 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.

### **WARNING!**

 Improper installation can lead to failure of an infant or child restraint. It could come loose in a collision. The child could be badly injured or killed. Follow the child restraint manufacturer's

# WARNING! (Continued)

directions exactly when installing an infant or child restraint.

- After a child restraint is installed in the vehicle, do not move the vehicle seat forward or rearward because it can loosen the child restraint attachments. Remove the child restraint before adjusting the vehicle seat position. When the vehicle seat has been adjusted, reinstall the child restraint.
- When your child restraint is not in use, secure it in the vehicle with the seat belt or LATCH anchorages, or remove it from the vehicle. Do not leave it loose in the vehicle. In a sudden stop or accident, it could strike the occupants or seatbacks and cause serious personal injury.

(Continued)

- 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 they are still sitting all the way back?
- 3. Does the shoulder belt cross the child's shoulder between their neck and arm?
- 4. Is the lap part of the belt as low as possible, touching the child's thighs and not their 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**

Restraint Type	Combined	Use any attachment method shown with an "X" Below			
	Weight of the Child + Child Restraint	LATCH – Lower Anchors Only	Seat Belt Only	LATCH – Lower Anchors + Top Tether Anchor	Seat Belt + Top Tether Anchor
Rear-Facing Child Restraint	Up to 65 lbs (29.5 kg)	X	X		
Rear-Facing Child Restraint	More than 65 lbs (29.5 kg)		X		
Forward-Facing Child Restraint	Up to 65 lbs (29.5 kg)			X	X
Forward-Facing Child Restraint	More than 65 lbs (29.5 kg)				X

### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 91

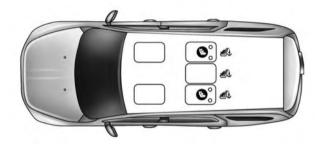
# Lower Anchors And Tethers For CHildren (LATCH) Restraint System



022668173

Your vehicle is equipped with the child restraint anchorage system called LATCH, which stands for Lower Anchors and Tethers for CHildren. The LATCH system 2 has three vehicle anchor points for installing LATCHequipped 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



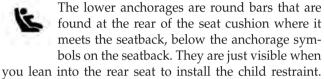
022668566

- Lower Anchorage Symbol 2 anchorages per seating position
- Top Tether Anchorage Symbol

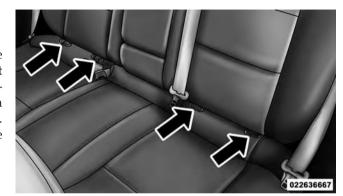
Frequently Asked Questions About Installing Child Restraints With LATCH					
What is the weight limit (child's weight + weight of the child restraint) for using the LATCH anchorage system to attach the child restraint?	65 lbs (29.5 kg)	Use the LATCH anchorage system until the combined weight of the child 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).			
Can the LATCH anchorages and the seat belt be used to- gether to attach a rear-facing or forward-facing child restraint?	No	Do not use the seat belt when you use the LATCH anchorage system to attach a rearfacing or forward-facing child restraint.			
Can a child seat be installed in the center position using the inner LATCH lower anchor- ages?	No	Use the seat belt and tether anchor to install a child seat in the center seating position.			

Can two child restraints be at-	Never "share" a LATCH anchorage with
	Trever braie a Entrerr anchorage with
tached using a common lower	two or more child restraints. If the center
LATCH anchorage?	position does not have dedicated LATCH
	lower anchorages, use the seat belt to in-
	stall a child seat in the center position
	next to a child seat using the LATCH an-
	chorages in an outboard position.
Can the rear-facing child re-	The child seat may touch the back of the
straint touch the back of the	front passenger seat if the child restraint
front passenger seat?	manufacturer also allows contact. See
	your child restraint owner's manual for
	more information.
Can the head restraints be re-	The head restraints may be removed in
moved?	the center seating position only.

# **Locating LATCH Anchorages**



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.



**LATCH Anchorages** 

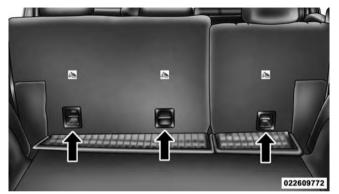
# **Locating Tether Anchorages**



There are tether strap anchorages behind each rear seating position located on the back of the seat. To access them, pull the carpeted floor panel away from the seat back, this will expose the top tether strap anchorages.



Pulling Down The Carpet Floor Panel To Access Top Tether Strap Anchorage



Pulling Down The Carpet Floor Panel To Access Top Tether Strap Anchorage

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

### **WARNING!**

- 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.
- Never use the same lower anchorage to attach more than one child restraint. Please refer to "Installing The LATCH-Compatible Child Restraint System" for typical installation instructions.

### Center Arm Rest Tether

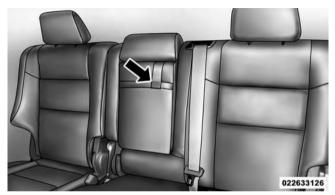
For rear-facing child restraints secured in the center seat position with the vehicle seat belts, the rear center seat position has an armrest tether that secures the arm rest in the upward position.

1. To access the center seat arm rest tether, first lower the arm rest. The tether is located behind the armrest and hooked onto the plastic seat backing.



Center Seat Position Arm Rest Tether

- 2. Pull down on the tether to unhook it from the plastic seat backing.
- 3. Raise the armrest and attach the tether hook to the strap located on the front of the arm rest.



Center Seat Position Arm Rest Tether Attached 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. For some second row seats, you may need to recline the seat and / or raise the head restraint 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.
- 3. Attach the lower hooks or connectors of the child restraint to the lower anchorages in the selected seating position.

### 100 THINGS TO KNOW BEFORE STARTING YOUR VEHICLE

- 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.
- 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 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.

### **WARNING!**

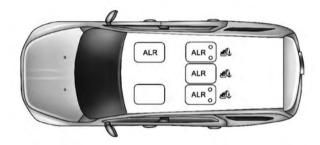
- Improper installation of a child restraint to the LATCH anchorages can lead to failure of the restraint. The child could be badly injured or killed. Follow the child restraint manufacturer's directions exactly when installing an infant or child restraint.
- stand only those loads imposed by correctly-fitted 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.

• Child restraint anchorages are designed to with-

# Installing Child Restraints Using The Vehicle Seat Belt

The seat belts in the passenger seating positions are 2 equipped with a Switchable Automatic Locking Retractor (ALR) that is 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 under "Occupant Restraints" for additional information on ALR.

# Lap/Shoulder Belt Systems For Installing Child Restraints In This Vehicle



022668725

- ALR = Switchable Automatic Locking Retractor
- Top Tether Anchorage Symbol

Frequently Asked Questions About Installing Child Restraints With Seat Belts					
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?	Weight limit of the Child Restraint	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.			
Can the rear-facing child restraint touch the back of the front passenger seat?	Yes	Contact between the front passenger seat and the child restraint is allowed, if the child restraint manufacturer also allows contact.			
Can the head restraints be removed?	Yes	The head restraints may be removed in the center seating position only.			
Can the buckle stalk be twisted to tighten the seat belt against the belt path of the child restraint?	No	Do not twist the buckle stalk in a seating position with an ALR retractor.			

# Installing A Child Restraint With A Switchable Automatic Locking Retractor (ALR)

- 1. Place the child seat in the center of the seating position. For some second row seats, you may need to recline the seat and/or raise the head restraint 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. 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. 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.
- 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 Child Restraints Using the Top Tether Anchorage



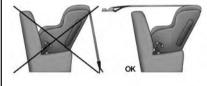
### **WARNING!**

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

(Continued)

# WARNING! (Continued)

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.





0226047162

#### 106 THINGS TO KNOW BEFORE STARTING YOUR VEHICLE

- 1. Look behind the seating position where you plan to install the child restraint to find the tether anchorage. You may need to move the seat forward to provide better access to the tether anchorage. If there is no top tether anchorage for that seating position, move the child restraint to another position in the vehicle if one is available.
- To access the top tether strap anchorages behind the rear seat, pull the carpeted floor panel away from the seat back, this will expose the top tether strap anchorages.



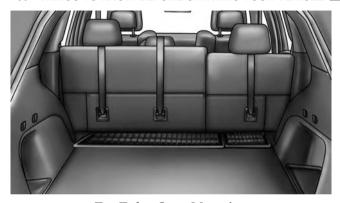
Pulling Down The Carpet Floor Panel To Access Top Tether Strap Anchorage

## Top Tether Strap Anchorage (Located on Seatback)

3. Route the tether strap to provide the most direct path for the strap between the anchor and the child seat. If your vehicle is equipped with adjustable rear head restraints, raise the head restraint, and where possible, route the tether strap under the head restraint and

#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 107

- between the two posts. If not possible, lower the head restraint and pass the tether strap around the outboard side of the head restraint.
- 4. For the center seating position, route the tether strap over the seatback and headrest then attach the hook to the tether anchor located on the back of the seat.
- 5. Attach the tether strap hook of the child restraint to the top tether anchorage as shown in the diagram.



**Top Tether Strap Mounting** 

6. Remove slack in the tether strap according to the child restraint manufacturer's instructions.

### **WARNING!**

- The top tether anchorages are not visible until the gap panel is folded down. Do not use the visible cargo tie down hooks, located on the floor behind the seats, to attach a child restraint tether anchor.
- An incorrectly anchored tether strap could lead to increased head motion and possible injury to the child. Use only the anchorage position directly behind the child seat to secure a child restraint top tether strap.
- If your vehicle is equipped with a split rear seat, make sure the tether strap does not slip into the opening between the seatbacks as you remove slack in the 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 in pet harnesses or pet carriers that are secured by seat belts.

#### **ENGINE BREAK-IN RECOMMENDATIONS**

For vehicles equipped with the 3.6L or 5.7L use the following engine break-in recommendations:

A long break-in period is not required for the drivetrain (engine, transmission, clutch, and rear axle) in your new vehicle.

Drive moderately during the first 300 mi (500 km). After the initial 60 mi (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. However, wide-open throttle acceleration in low gear can be detrimental and should be avoided.

The engine oil, transmission fluid, and axle lubricant installed at the factory is high-quality and energyconserving. Oil, fluid, and lubricant changes should be consistent with anticipated climate and conditions under which vehicle operations will occur. For the recommended viscosity and quality grades, refer to "Maintenance Procedures" in "Maintaining Your Vehicle".

# **CAUTION!**

Never use Non-Detergent Oil or Straight Mineral Oil in the engine or damage may result.

#### 110 THINGS TO KNOW BEFORE STARTING YOUR VEHICLE

**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 an indication of difficulty. Please check your oil level with the engine oil indicator often during the break in period. Add oil as required.

## **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.
- Be sure everyone in your vehicle is in a seat and using a seat belt properly.

(Continued)

#### **Exhaust Gas**

### **WARNING!**

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.

(Continued)

# WARNING! (Continued)

• If it is necessary to sit in a parked vehicle with the engine running, adjust your heating or cooling controls to force outside air into the vehicle. Set the blower at high speed.

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.

# 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. This light will illuminate with a single chime when a fault with the Air Bag Warning Light has been detected, it will stay on until the fault is cleared. If the light comes on intermittently or remains on while driving, have an authorized dealer service the vehicle immediately. Refer to "Occupant Restraints" in "Things To Know Before Starting Your Vehicle" 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 your authorized dealer for service if your defroster is inoperable.

# Floor Mat Safety Information

Always use floor mats designed to fit the footwell of your vehicle. Use only floor mats that leave the pedal area

unobstructed and that are firmly secured so that they cannot slip out of position and interfere with the pedals or impair safe operation of your vehicle in other ways.

### **WARNING!**

Pedals that cannot move freely can cause loss of vehicle control and increase the risk of serious personal injury.

- Always make sure that floor mats are properly attached to the floor mat fasteners.
- Never place or install floor mats or other floor coverings in the vehicle that cannot be properly secured to prevent them from moving and interfering with the pedals or the ability to control the vehicle.
- Never put floor mats or other floor coverings on top of already installed floor mats. Additional floor

# WARNING! (Continued)

mats and other coverings will reduce the size of the pedal area and interfere with the pedals.

- Check mounting of mats on a regular basis. Always properly reinstall and secure floor mats that have been removed for cleaning.
- Always make sure that objects cannot fall into the driver footwell while the vehicle is moving. Objects can become trapped under the brake pedal and accelerator pedal causing a loss of vehicle control.
- If required, mounting posts must be properly installed, if not equipped from the factory.

Failure to properly follow floor mat installation or mounting can cause interference with the brake pedal and accelerator pedal operation causing loss of control of the vehicle.

# 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 nuts 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 vehicle after overnight parking for fuel, engine coolant, oil, or other fluid leaks. Also, if gasoline fumes are detected or if fuel, power steering fluid (if equipped), or brake fluid leaks are suspected. The cause should be located and corrected immediately.

# **CONTENTS**

■ MIRRORS	□ Heated Mirrors — If Equipped
$\hfill\Box$ Inside Day/Night Mirror — If Equipped123	☐ Tilt Mirrors In Reverse (Available With Memory
□ Automatic Dimming Mirror — If Equipped123	Seat Only) — If Equipped
□ Outside Mirrors	□ Illuminated Vanity Mirrors
□ Outside Mirrors Folding Feature	□ Sun Visor "Slide-On-Rod" Feature —  If Equipped
□ Power Folding Outside Mirrors — If Equipped	■ BLIND SPOT MONITORING (BSM) — IF EQUIPPED
□ Power Mirrors	□ Rear Cross Path (RCP)
□ Outside Automatic Dimming Mirrors — If Equipped	□ Modes Of Operation
	□ General Information

116 UNDERSTANDING THE FEATURES OF YOUR VEHICLE	
■ SEATS	■ DRIVER MEMORY SEAT — IF EQUIPPED162
□ Power Seats — If Equipped	□ Programming The Memory Feature
□ Power Lumbar — If Equipped	☐ Linking And Unlinking The Remote Keyless Entry
☐ Manual Front Seats Forward/Rearward	Transmitter To Memory
Adjustment	□ Memory Position Recall
□ Manual Front Passenger Seatback Adjustment —	□ Easy Entry/Exit Seat
Recline	■ TO OPEN AND CLOSE THE HOOD
□ Front Passenger Seat Fold-Flat Feature — If Equipped	■ LIGHTS
□ Heated Seats — If Equipped	□ Headlight Switch
☐ Front Ventilated Seats — If Equipped	$\square$ Automatic Headlights — If Equipped 170
* **	☐ Headlights On Automatically With Wipers 170
□ Head Restraints	
□ 60/40 Split Rear Seat	□ Automatic High Beam — If Equipped170
□ Reclining Rear Seat	□ Daytime Running Lights — If Equipped171

□ Automatic Headlight Leveling — HID Headlights	□ Lane Change Assist
Only	□ Flash-To-Pass
□ Headlight Delay	□ High/Low Beam Switch
□ Parking Lights And Panel Lights	■ WINDSHIELD WIPERS AND WASHERS 179
□ Fog Lights — If Equipped	□ Windshield Wiper Operation
□ Interior Lights	□ Intermittent Wiper System
□ Lights-On Reminder	□ Windshield Washer Operation
□ Battery Saver	□ Mist
□ Front Map/Reading Lights — If Equipped175	□ Rain Sensing Wipers — If Equipped
□ Courtesy Lights	■ HEADLIGHT WASHERS — IF EQUIPPED 184
□ Ambient Light — If Equipped	■ TILT/TELESCOPING STEERING COLUMN184
□ Multifunction Lever	■ POWER TILT/TELESCOPING STEERING
□ Turn Signals	COLUMN — IF EQUIPPED

118 UNDERSTANDING THE FEATURES OF YOUR VEHICLE	
■ HEATED STEERING WHEEL —	□ To Activate/Deactivate
IF EQUIPPED	□ To Set A Desired ACC Speed
■ ELECTRONIC SPEED CONTROL — IF EQUIPPED	□ To Cancel
□ To Activate	□ To Turn Off
□ To Set A Desired Speed	□ To Resume
□ To Deactivate	□ To Vary The Speed Setting
□ To Resume Speed	□ Setting The Following Distance In ACC
□ To Vary The Speed Setting	□ Overtake Aid
□ To Accelerate For Passing	□ ACC Operation At Stop
■ ADAPTIVE CRUISE CONTROL (ACC) — IF	□ Adaptive Cruise Control (ACC) Menu207
EQUIPPED	□ Display Warnings And Maintenance
□ Adaptive Cruise Control (ACC) Operation194	□ Precautions While Driving With ACC
☐ Activating Adaptive Cruise Control (ACC)195	□ General Information

□ Normal (Fixed Speed) Electronic Speed Control	□ ParkSense Display
Mode	□ Enabling And Disabling ParkSense
FORWARD COLLISION WARNING (FCW) WITH MITIGATION — IF EQUIPPED	□ Service The ParkSense Rear Park Assist System
□ Forward Collision Warning (FCW) With Mitigation Operation	□ Cleaning The ParkSense System
□ Turning FCW ON Or OFF	□ ParkSense System Usage Precautions233
□ Changing FCW And Active Braking Status221	PARKSENSE FRONT AND REAR PARK ASSIST — IF EQUIPPED
□ FCW Limited Warning	□ ParkSense Sensors
□ Service FCW Warning	□ ParkSense Warning Display
PARKSENSE REAR PARK ASSIST — IF EQUIPPED	□ ParkSense Display
□ ParkSense Sensors	□ Enabling And Disabling ParkSense
□ ParkSense Warning Display	$\hfill\Box$ Service The ParkSense Park Assist System244
- Turkeetide Walling Dioplay	□ Cleaning The ParkSense System

120 UNDERSTANDING THE FEATURES OF YOUR VEHICLE	
□ ParkSense System Usage Precautions245	□ Security
■ PARKVIEW REAR BACK UP CAMERA — IF	□ Troubleshooting Tips
EQUIPPED	□ General Information
■ OVERHEAD CONSOLE	■ POWER SUNROOF — IF EQUIPPED
□ Front Map/Reading Lights — If Equipped251	□ Opening Sunroof — Express
□ Courtesy Lights	□ Opening Sunroof — Manual Mode
□ Sunglasses Bin Door	□ Closing Sunroof — Express
■ GARAGE DOOR OPENER — IF EQUIPPED253	□ Closing Sunroof — Manual Mode
□ Before You Begin Programming HomeLink254	□ Pinch Protect Feature
□ Programming A Rolling Code	□ Venting Sunroof — Express
□ Programming A Non-Rolling Code	□ Sunshade Operation
□ Canadian/Gate Operator Programming258	□ Wind Buffeting
□ Using HomeLink	□ Sunroof Maintenance

□ Ignition Off Operation	□ Pinch Protect Feature
□ Relearn Procedure	□ Wind Buffeting
■ COMMANDVIEW SUNROOF WITH POWER SHADE — IF EQUIPPED	□ Sunroof Maintenance
□ Opening Sunroof — Express	■ ELECTRICAL POWER OUTLETS
□ Opening Sunroof — Manual Mode	■ POWER INVERTER — IF EQUIPPED
□ Closing Sunroof — Express	■ CUPHOLDERS
□ Closing Sunroof — Manual Mode	■ STORAGE
□ Opening Power Shade — Express	□ Glove Compartment
□ Opening Power Shade — Manual Mode 268	□ Door Storage
□ Closing Power Shade — Express	□ Console Features
□ Closing Power Shade — Manual Mode 268	■ CARGO AREA FEATURES
□ Venting Sunroof — Express	□ Rechargeable Flashlight

□ Cargo Storage Bins	□ Rear Window Wiper/Washer
$\hfill\Box$ Retractable Cargo Area Cover — If Equipped $$ .283	□ Rear Window Defroster
□ Rear Cargo Tie-Downs	■ ROOF LUGGAGE RACK — IF EQUIPPED 288
■ REAR WINDOW FEATURES	

#### **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 Mirror feature is disabled when the vehicle is in reverse gear to improve rear view viewing.

The Automatic Dimming Mirror feature can be turned On or Off through the touchscreen.

- Push the Mirror Dimmer button once to turn the feature On.
- Push the Mirror Dimmer button a second time to turn the feature Off.



0304049205

# **Automatic Dimming Mirror**

If equipped, the rearview mirror contains an ASSIST and a 9-1-1 button.

# **WARNING!**

ALWAYS obey traffic laws and pay attention to the road. Some Uconnect Access services, including 9-1-1 and Assist, will NOT work without an operable 1X (voice/data) or 3G (data) network connection.

#### NOTE:

- Your vehicle may be transmitting data as authorized by the subscriber.
- The 9-1-1 and ASSIST buttons will only function if you are connected to an operable 1X(voice/data) or 3G(data) network. Other Uconnect services will only be operable if your Uconnect Access service is active and you are connected to an operable 1X(voice/data) or 3G(data) network.

#### ASSIST Call

The ASSIST Button is used to automatically connect you to any one of the following support centers:

- Roadside Assistance If you get a flat tire, or need a 3 tow, just push the ASSIST button and you'll be connected to someone who can help. Roadside Assistance will know what vehicle you're driving and its location. Additional fees may apply for roadside Assistance.
- Uconnect Access Customer Care In-vehicle support for Uconnect Access and Uconnect Access Via Mobile features.
- Vehicle Customer Care Total support for all other vehicle issues.

# 9-1-1 Call

1. Push the 9-1-1 Call button on the Rearview Mirror.

# **NOTE:** In case the 9-1-1 Call button is pushed in error,

there will be a 10 second delay before the 9-1-1 Call system initiates a call to a 9-1-1 operator. To cancel the 9-1-1 Call connection, push the 9-1-1 Call button on the Rearview Mirror or press the cancellation button on the Device Screen. Termination of the 9-1-1 Call will turn off the green LED light on the Rearview Mirror.

- 2. The LED light located between the ASSIST and 9-1-1 buttons on the Rearview Mirror will turn green once a connection to a 9-1-1 operator has been made.
- 3. Once a connection between the vehicle and a 9-1-1 operator is made, the 9-1-1 Call system may transmit the following important vehicle information to a 9-1-1 operator:
  - Indication that the occupant placed a 9-1-1 Call.
  - The vehicle brand.
  - The last known GPS coordinates of the vehicle.

4. You should be able to speak with the 9-1-1 operator through the vehicle audio system to determine if additional help is needed.

# **WARNING!**

ALWAYS obey traffic laws and pay attention to the road. Some Uconnect Access services, including 9-1-1 and Assist, will NOT work without an operable 1X (voice/data) or 3G (data) network connection.

#### NOTE:

- Your vehicle may be transmitting data as authorized by the subscriber.
- Once a connection is made between the vehicle's 9-1-1 Call system and the 9-1-1 operator, the 9-1-1 operator may be able to open a voice connection with the vehicle to determine if additional help is needed. Once the 9-1-1 operator opens a voice connection with the vehicle's 9-1-1 Call system, the operator should be able to speak with you or other vehicle occupants and hear sounds occurring in the vehicle. The vehicle's 9-1-1 Call system will attempt to remain connected with the 9-1-1 operator until the 9-1-1 operator terminates the connection.
- 5. The 9-1-1 operator may attempt to contact appropriate emergency responders and provide them with important vehicle information and GPS coordinates.

## **WARNING!**

- If anyone in the vehicle could be in danger (e.g., fire or smoke is visible, dangerous road conditions or location), do not wait for voice contact from a 9-1-1 operator. All occupants should exit the vehicle immediately and move to a safe location.
- Never place anything on or near the vehicle's operable 1X (voice/data) or 3G(data) network and GPS antennas. You could prevent operable 1X (voice/data) or 3G(data) network and GPS signal reception, which can prevent your vehicle from placing an emergency call. An operable 1X (voice/data) or 3G(data) network and GPS signal reception is required for the 9-1-1 Call system to function properly.

(Continued)

# WARNING! (Continued)

• The 9-1-1 Call system is embedded into the vehicle's electrical system. Do not add aftermarket electrical equipment to the vehicle's electrical system. This may prevent your vehicle from sending a signal to initiate an emergency call. To avoid interference that can cause the 9-1-1 Call system to fail, never add aftermarket equipment (e.g., two-way mobile radio, CB radio, data recorder, etc.) to your vehicle's electrical system or modify the antennas on your vehicle. IF YOUR VEHICLE LOSES BAT-TERY POWER FOR ANY REASON (INCLUDING DURING OR AFTER AN ACCIDENT), THE UCONNECT FEATURES, APPS AND SERVICES, AMONG OTHERS, WILL NOT OPERATE.

# WARNING! (Continued)

• Modifications to any part of the 9-1-1 Call system could cause the air bag system to fail when you need it. You could be injured if the air bag system is not there to help protect you.

# 9-1-1 Call System Limitations

Vehicles sold in Canada and Mexico **DO NOT** have 9-1-1 Call system capabilities.

9-1-1 or other emergency line operators in Canada and Mexico may not answer or respond to 9-1-1 system calls.

If the 9-1-1 Call system detects a malfunction, any of the following may occur at the time the malfunction is detected, and at the beginning of each ignition cycle:

 The Rearview Mirror light located between the ASSIST and 9-1-1 buttons will continuously be illuminated red.

- The Device Screen will display the following message "Vehicle device requires service. Please contact your dealer."
- An In-Vehicle Audio message will state "Vehicle device requires service. Please contact your dealer."

#### WARNING!

- Ignoring the Rearview Mirror light could mean you will not have 9-1-1 Call services. If the Rearview Mirror light is illuminated, have an authorized dealer service the 9-1-1 Call system immediately.
- The Occupant Restraint Control module turns on the air bag Warning Light on the instrument panel if a malfunction in any part of the system is detected. If the Air Bag Warning Light is illuminated, have an authorized dealer service the Occupant Restraint Control system immediately.

Even if the 9-1-1 Call system is fully functional, factors beyond FCA US LLC's control may prevent or stop the 9-1-1 Call system operation. These include, but are not limited to, the following factors:

- Delayed accessories mode is active.
- The ignition is in the OFF position.
- The vehicle's electrical systems are not intact.
- The 9-1-1 Call system software and/or hardware are damaged during a crash.
- The vehicle battery loses power or becomes disconnected during a vehicle crash.
- 1X(voice/data) or 3G(data) network and/or Global Positioning Satellite signals are unavailable or obstructed.
- Equipment malfunction at the 9-1-1 operator facility.

- Operator error by the 9-1-1 operator.
- 1X (voice/data) or 3G (data) network congestion.
- Weather.
- Buildings, structures, geographic terrain, or tunnels.

#### **WARNING!**

ALWAYS obey traffic laws and pay attention to the road. Some Uconnect Access services, including 9-1-1 and Assist, will NOT work without an operable 1X (voice/data) or 3G (data) network connection.

#### NOTE:

• Your vehicle may be transmitting data as authorized by the subscriber.

Never place anything on or near the vehicle's 1X (voice/data) or 3G (data) and GPS antennas. You could prevent 1X (voice/data) or 3G (data) and GPS signal reception, which can prevent your vehicle from placing an emergency call. An operable 1X (voice/data) or 3G (data) network connection and a GPS signal is required for the 9-1-1 Call system to function properly.

#### General Information

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**NOTE:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

# **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.

#### **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.

# **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

# WARNING! (Continued)

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.

# **Outside Mirrors Folding Feature**

All outside mirrors are hinged and may be moved either forward or rearward to resist damage. The hinges have three detent positions:

- Full forward position
- Full rearward position
- Normal position

(Continued)

# Power Folding Outside Mirrors — 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). Press the switch once and the mirrors will fold in, press 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.



Power Folding Mirror Switch

# **Power Mirrors**

The power mirror switch is located on the driver's side door trim panel.

The power mirror controls consist of mirror select buttons and a four-way mirror control switch. To adjust a mirror, push the mirror select button for the mirror that you want to adjust. Using the mirror control switch, push on any of the four arrows for the direction that you want the mirror to move.



Power Mirror Switch

- 1 Mirror Direction Control
- 2 Mirror Selection

Power mirror preselected positions can be controlled by the optional Memory Seat Feature. Refer to "Driver Memory Seat" in "Understanding The Features Of Your Vehicle" for further information

# Outside Automatic Dimming Mirrors — If **Equipped**

The outside mirrors will automatically adjust for glare from vehicles behind you. This feature is controlled by the inside automatic dimming mirror. The mirrors will automatically adjust for headlight glare when the inside mirror adjusts.

# **Heated Mirrors** — If Equipped

These mirrors are heated to melt frost or ice. This feature can be activated whenever you turn on the rear window defroster (if equipped). Refer to "Rear Window Features" in "Understanding The Features Of Your Vehicle" for further information.

# Tilt Mirrors In Reverse (Available With Memory Seat Only) — If Equipped

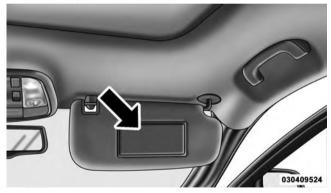
Tilt Mirrors in Reverse provides automatic outside mirror positioning which will aid the drivers view of the ground rearward of the front doors. Outside mirrors will move slightly downward from the present position when the vehicle is shifted into REVERSE. Outside mirrors will then return to the original position when the vehicle is shifted out of REVERSE position. Each stored memory seat setting will have an associated Tilt Mirrors in Reverse position.

**NOTE:** The Tilt Mirrors in Reverse feature is not turned on when delivered from the factory. The Tilt Mirrors in Reverse feature can be turned on and off using the Uconnect System. Refer to "Uconnect Settings/Customer Programmable Features" in "Understanding Your Instrument Panel" for further information.

# **Illuminated Vanity Mirrors**

To access an illuminated vanity mirror, flip down one of the visors.

Lift the cover to reveal the mirror. The light will turn on automatically.



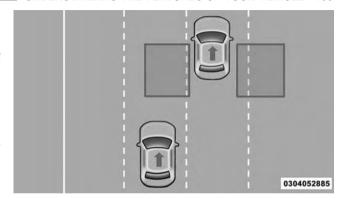
Illuminated Vanity Mirror

The sun visor "Slide-On-Rod" feature allows for additional flexibility in positioning the sun visor to block out the sun.

- 1. Fold down the sun visor.
- 2. Unclip the visor from the center clip.
- 3. Pull the sun visor toward the inside rearview mirror to extend it.

# BLIND SPOT MONITORING (BSM) — IF EQUIPPED

The Blind Spot Monitoring (BSM) system uses two radarbased sensors, located inside the rear bumper fascia, to detect highway licensable vehicles (automobiles, trucks, motorcycles, etc.) that enter the blind spot zones from the rear/front/side of the vehicle.



#### **Rear Detection Zones**

When the vehicle is started, the BSM warning light will momentarily illuminate in both outside rear view 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 and enters stand-by mode when the vehicle is in PARK.

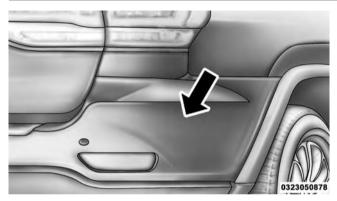
The BSM detection zone covers approximately one lane width on both sides of the vehicle 12 ft (3.8 m). The zone length starts at the outside rear view mirror and extends approximately 10 ft (3 m) beyond the rear bumper of the vehicle. The BSM system monitors the detection zones on both sides of the vehicle 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 BSM system detection zone DOES NOT change if your vehicle is towing a trailer. Therefore, visually verify the adjacent lane is clear for both your vehicle and trailer before making a lane change. If the trailer or other object (i.e., bicycle, sports equipment) extends beyond the side of your vehicle, this may result in the BSM warning light remaining illuminated the entire time the vehicle is in a forward gear.

The area on the rear fascia 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 area of the rear fascia where the radar sensors are located with foreign objects (bumper stickers, bicycle racks, etc.).



**Sensor Location** 

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" for further information.

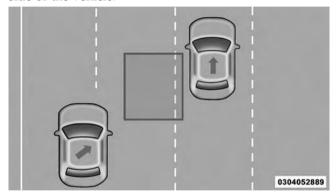


Warning Light Location

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**

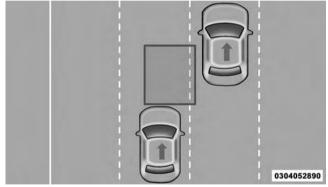
Vehicles that move into your adjacent lanes from either side of the vehicle.



**Side Monitoring** 

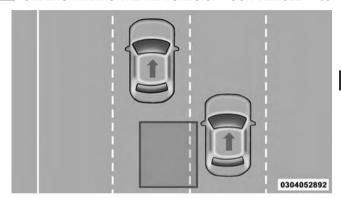
# **Entering From The Rear**

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).

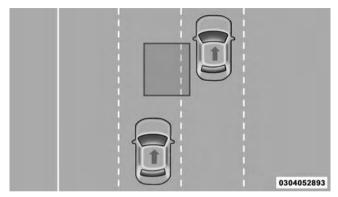


**Rear Monitoring** 

If you pass another vehicle slowly with a relative speed less than 10 mph (16 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 10 mph (16 km/h), the warning light will not illuminate.

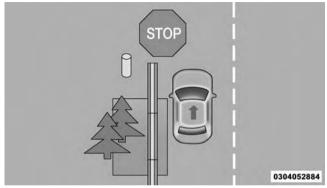


Overtaking/Approaching



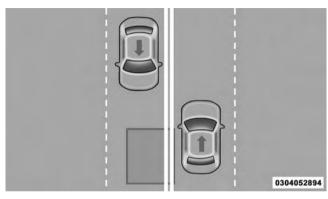
Overtaking/Passing

stationary objects such as guardrails, posts, walls, foliage, berms, etc. However, occasionally the system may alert on such objects. This is normal operation and your vehicle does not require service.



**Stationary Objects** 

The BSM system is designed not to issue an alert on The BSM system will not alert you of objects that are traveling in the opposite direction of the vehicle in adjacent lanes.



**Opposing Traffic** 

# **WARNING!**

The Blind Spot Monitoring system is only an aid to help detect objects in the blind spot zones. The BSM

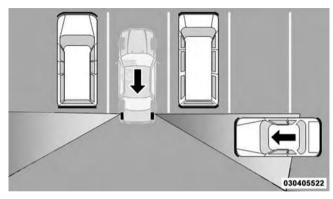
# WARNING! (Continued)

system is not designed to detect pedestrians, bicyclists, or animals. Even if your vehicle is equipped with the BSM system, always check your vehicles 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.

(Continued)



**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, the driver is alerted using both the visual and audible alarms, including reducing the radio volume.

### **WARNING!**

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.

Three selectable modes of operation are available in the Uconnect System. Refer to "Uconnect Settings/Customer Programmable Features" in "Understanding Your Instrument Panel" 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 3 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.

#### 144 UNDERSTANDING THE FEATURES OF YOUR VEHICLE

**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.

#### **General Information**

This vehicle has systems that operate on radio frequency that comply with Part 15 of the Federal Communications Commission (FCC) rules and with Industry Canada Standards RSS- GEN/210/220/310.

Operation is subject to the following two conditions:

- 1. The device may not cause harmful interference.
- 2. The device must accept any interference received, including interference that may cause undesired operation of the device.

Changes or modifications to any of these systems by other than an authorized service facility could void authorization to use this equipment.

#### **SEATS**

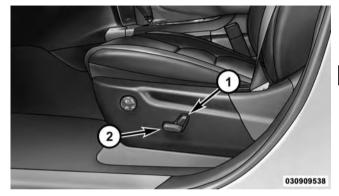
Seats are part of the Occupant Restraint System of the vehicle.

#### **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.

## Power Seats — If Equipped

Some models may be equipped with eight-way power driver and front passenger seats. The power seat switches are located on the outboard side of the seat. There are two switches that control the movement of the seat cushion and the seatback.



**Power Seat Switches** 

- 1 Seatback Switch
- 2 Seat Switch

## 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 up or down. Pull upward or push downward on the front of the seat switch. The front of the seat cushion will move in the direction of the switch. Release the switch when the desired position has been 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.

#### **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.

## 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. Pushing upward or downward on the switch will raise and lower the position of the support.



Power Lumbar Switch

# Manual Front Seats Forward/Rearward Adjustment

Some models may be equipped with a manual front passenger seat. The seat can be adjusted forward or rearward by using a bar located by the front of the seat cushion, near the floor.



Adjustment Bar

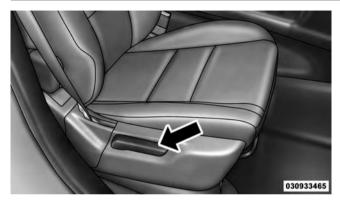
While sitting in the seat, lift up on the bar located under the seat cushion and move the seat forward or rearward. Release the bar once you have reached the desired position. Then, using body pressure, move forward and rearward on the seat to be sure that the seat adjusters have latched.

#### **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.

## Manual Front Passenger Seatback Adjustment — Recline

To adjust the seatback, lift the lever located on the outboard side of the seat, lean back to the desired position and release the lever. To return the seatback, lift the lever, lean forward and release the lever.



Recline Lever

#### **WARNING!**

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.

# Front Passenger Seat Fold-Flat Feature — If Equipped

To fold the seatback to the flat load-floor position, lift the recline lever and push the seatback forward. To return to the seating position, raise the seatback and lock it into place.



Fold-Flat Passenger Seat

#### **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.

#### **WARNING!**

 Adjusting a seat while the vehicle is moving is dangerous. The sudden movement of the seat could cause you to lose control. The seat belt might not be properly adjusted, and you could be severely injured or killed. Only adjust a seat while the vehicle is parked.

## WARNING! (Continued)

• Do not ride with the seatback reclined so that the seat belt is no longer resting against your chest. In a collision, you could slide under the seat belt and be severely injured or killed. Use the recliner only when the vehicle is parked.

## 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.

(Continued)

• 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 front heated seats control buttons are located within the climate or controls screen of the touchscreen.

You can choose from HI, LO or OFF heat settings. The indicator lights in each switch indicate the level of heat in use. Two indicator lights will illuminate for HI, one for LO and none for OFF.

- Press the heated seat button once to turn the HI setting ON.
- Press the heated seat button **a** second time to turn the LO setting ON.
- Press the heated seat button at third time to turn the heating elements OFF.

If the HI-level setting is selected, the system will automatically switch to LO-level after approximately 60 minutes of continuous operation. At that time, the display will change from HI to LO, indicating the change. The LO-level setting will turn OFF automatically after approximately 45 minutes.

#### NOTE:

- 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.

## Vehicles Equipped With Remote Start

On models that are equipped with remote start, the heated seats can be programmed to come on during a remote start.

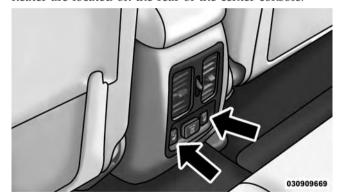
This feature can be programmed through the Uconnect system. Refer to "Uconnect Settings" in "Understanding Your Instrument Panel" for further information.

#### **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.

## Rear Heated Seats — If Equipped

On some models, the two rear outboard seats may be equipped with heated seats. There are two heated seat switches that allow the rear passengers to operate the seats independently. The heated seat switches for each heater are located on the rear of the center console.



Rear Heated Seat Switches

You can choose from HI, LO or OFF heat settings. Amber indicator lights in each switch indicate the level of heat in use. Two indicator lights will illuminate for HI, one for LO and none for OFF.



Push the switch once to select HI-level heating. Push the switch a second time to select LOlevel heating. Push the switch a third time to shut the heating elements OFF.

When the HI-level setting is selected, the heater will provide a boosted heat level during the first four minutes of operation. Then, the heat output will drop to the normal HI-level. If the HI-level setting is selected, the system will automatically switch to LO-level after approximately 60 minutes of continuous operation. At that time, the number of illuminated LEDs changes from two to one, indicating the change. The LO-level setting will turn OFF automatically after approximately 45 minutes.

#### **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 Ventilated Seats — If Equipped

Located in the seat cushion and seat back are 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 two speeds, HI and LO.

The front ventilated seats control buttons are located within the Uconnect system. You can gain access to the control buttons through the climate screen or the controls screen.

- Press the ventilated seat button **2** once to choose HI.
- Press the ventilated seat button **2** a second time to choose LO.
- Press the ventilated seat button **2** a third time to turn the ventilated seat 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 ventilated seats can be programmed to come on during a remote start.

This feature can be programmed through the Uconnect system. Refer to "Uconnect Settings" in "Understanding Your Instrument Panel" for further information.

#### **Head Restraints**

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

#### **WARNING!**

The head restraints for all occupants must be properly adjusted prior to operating the vehicle or occupying a seat. Head restraints should never be adjusted while the vehicle is in motion. Driving a vehicle with the head restraints improperly adjusted or removed could cause serious injury or death in the event of a collision.

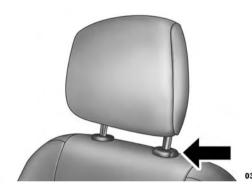
## Supplemental Active Head Restraints — Front Seats

Active Head Restraints are passive, deployable components, and vehicles with this equipment cannot be readily identified by any markings, only through visual inspection of the head restraint. The Active Head Restraints (AHR) will be split in two halves, with the front half being soft foam and trim, the back half being decorative plastic.

#### 156 UNDERSTANDING THE FEATURES OF YOUR VEHICLE

When AHRs deploy during a rear impact, the front half of the head restraint extends forward to reduce the gap between the back of the occupant's head and the AHR. This system is design to reduce the risk of injury to the driver or front passenger in certain types of rear impacts. Refer to "Occupant Restraints" in "Things To Know Before Starting Your Vehicle" for further information.

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.



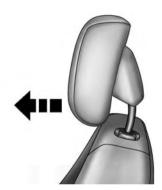
**Adjustment Button** 

For comfort the Active Head Restraints can be tilted forward and rearward. To tilt the head restraint closer to the back of your head, pull forward on the bottom of the head restraint. Push rearward on the bottom of the head restraint to move the head restraint away from your head.



022607494

Active Head Restraint (Normal Position)



030907533

Active Head Restraint (Tilted)

#### NOTE:

The head restraints should only be removed by qualified technicians, for service purposes only. If either of the head restraints require removal, see your authorized dealer.

#### 158 UNDERSTANDING THE FEATURES OF YOUR VEHICLE

• In the event of deployment of an Active Head Restraint, refer to "Occupant Restraints/Resetting Active Head Restraints (AHR)" in "Things To Know Before Starting Your Vehicle" for further information.

#### **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 collision.
- Do not place items over the top of the Active Head Restraint, such as coats, seat covers or portable DVD players. These items may interfere with the operation of the Active Head Restraint in the event of a collision and could result in serious injury or death.

## WARNING! (Continued)

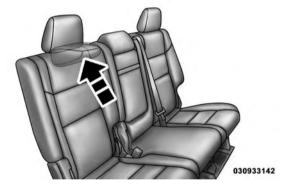
 Active Head Restraints may be deployed if they are struck by an object such as a hand, foot or loose cargo. To avoid accidental deployment of the Active Head Restraint ensure that all cargo is secured, as loose cargo could contact the Active Head Restraint during sudden stops. Failure to follow this warning could cause personal injury if the Active Head Restraint is deployed.

#### Head Restraints — Rear Seats

The head restraints on the outboard seats are not adjustable. They automatically fold forward when the rear seat is folded to a load floor position but do not return to their normal position when the rear seat is raised. After returning either seat to its upright position, raise the head restraint until it locks in place. The outboard head restraints are not removable.

(Continued)

The center head restraint has limited adjustment. Lift upward on the head restraint to raise it, or push downward on the head restraint to lower it.



Rear Head Restraint

#### **WARNING!**

Sitting in a seat with the head restraint in its lowered position could result in serious injury or death in a collision. Always make sure the outboard head restraints are in their upright positions when the seat is to be occupied.

**NOTE:** For proper routing of a Child Seat Tether, refer to "Occupant Restraints" in "Things to Know Before Starting Your Vehicle" for further information.

## 60/40 Split Rear Seat

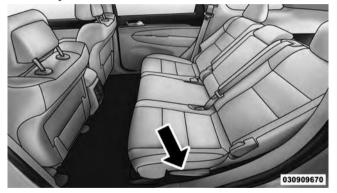
#### To Lower Rear Seat

Either side of the rear seat can be lowered to allow for extended cargo space and still maintain some rear seating room.

#### 160 UNDERSTANDING THE FEATURES OF YOUR VEHICLE

**NOTE:** Be sure that the front seats are fully upright and positioned forward. This will allow the rear seatback to fold down easily.

1. Pull upward on the release lever to release the seat.



Rear Seat Release

#### NOTE:

- Do not fold the 60% rear seat down with the left outboard or rear center seat belt buckled.
- Do not fold the 40% rear seat down with the right outboard seat belt buckled.
- 2. Fold the rear seat completely forward.



**Rear Seat Folded** 

#### To Raise Rear Seat

Raise the rear seatback and lock it into place. If interference from the cargo area prevents the seatback from fully locking, you will have difficulty returning the seat to its proper position.

#### **WARNING!**

- Be certain that the seatback is securely locked into position. If the seatback is not securely locked into position the seat will not provide the proper stability for child seats and/or passengers. An improperly latched seat could cause serious injury.
- The cargo area in the rear of the vehicle (with the rear seatbacks in the locked-up or folded down position) should not be used as a play area by children when the vehicle is in motion. They could be seriously injured in a collision. Children should be seated and using the proper restraint system.

## **Reclining Rear Seat**

To recline the seatback, lift the lever located on the outboard side of the seat, lean back and release the lever at the desired position. To return the seatback, lift the lever, lean forward and release the lever.

Rear Seat Release

030909670

#### **WARNING!**

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.

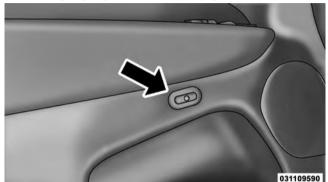
#### DRIVER MEMORY SEAT — IF EQUIPPED

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 driver seat, side mirrors, and power tilt and telescopic steering column (if equipped) and a set of desired radio station presets. Your Remote Keyless Entry (RKE) transmitter can also be programmed to recall the same positions when the UNLOCK button is pressed.

**NOTE:** Your vehicle is equipped with two RKE transmitters, one RKE transmitter can be linked to memory position 1 and the other transmitter can be linked to memory position 2.

The memory seat switch is located on the driver's door trim panel. The switch consists of three buttons:

 The (S) button, which is used to activate the memory save function. • The (1) and (2) buttons which are used to recall either of two pre-programmed memory profiles.



**Memory Seat Switch** 

## **Programming The Memory Feature**

NOTE: To create a new memory profile, perform the following:

- 1. Cycle the vehicles ignition to the ON/RUN position 3 (Do not start the engine).
- 2. Adjust all memory profile settings to desired preferences (i.e., seat, side mirror, power tilt and telescopic steering column [if equipped], and radio station presets).
- 3. Push and release the S (Set) button on the memory switch.
- 4. Within five seconds, push and release either of the memory buttons (1) or (2). The Driver Information Display (DID) will display which memory position has been set.

#### 164 UNDERSTANDING THE FEATURES OF YOUR VEHICLE

#### NOTE:

- Memory profiles can be set without the vehicle in PARK, but the vehicle must be in PARK to recall a memory profile.
- To set a memory profile to your RKE transmitter, refer to "Linking And Unlinking The Remote Keyless Entry Transmitter To Memory" in this section.

# Linking And Unlinking The Remote Keyless Entry Transmitter To Memory

Your RKE transmitters can be programmed to recall one of two pre-programmed memory profiles by pushing the UNLOCK button on the RKE transmitter.

**NOTE:** Before programming your RKE transmitters you must select the "Memory To FOB" feature through the Uconnect system screen. Refer to "Uconnect Settings" in "Understanding Your Instrument Panel" for further information.

To program your RKE transmitters, perform the following:

- 1. Cycle the vehicles ignition to 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. Within five seconds, 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 RKE transmitter within 10 seconds.

NOTE: Your RKE transmitters can be unlinked to your memory settings by pushing the SET (S) button, and within 10 seconds, followed by pushing the UNLOCK button on the RKE transmitter.

## **Memory Position Recall**

**NOTE:** The vehicle must be in PARK to recall memory positions. If a recall is attempted when the vehicle is not in PARK, a message will be displayed in the Driver Information Display (DID).

## Driver One Memory Position Recall

- To recall the memory settings for driver one using the memory switch, push MEMORY button number 1 on the memory switch.
- To recall the memory settings for driver one using the RKE transmitter, push the UNLOCK button on the RKE transmitter linked to memory position 1.

## Driver Two Memory Position Recall

- To recall the memory setting for driver two using the memory switch, push MEMORY button number 2 on the memory switch.
- To recall the memory settings for driver two using the RKE transmitter, push the UNLOCK button on the RKE transmitter 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 cancelled, the driver's seat and steering column (if equipped) stop moving. A delay of one second will occur before another recall can be selected.

## Easy Entry/Exit Seat

This feature provides automatic driver seat positioning to enhance driver mobility when entering and exiting the vehicle.

The distance the driver seat moves depends on where you have the driver seat positioned when you cycle the vehicle's ignition to the OFF position.

• When you cycle the vehicle's ignition to the OFF position, the driver seat will move about 2.4 inches (60 mm) rearward if the driver 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 cycle the vehicle's ignition to the ACC or RUN position.

• The Easy Entry/Easy Exit feature is disabled when the driver seat position is less than 0.9 of an inch (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.

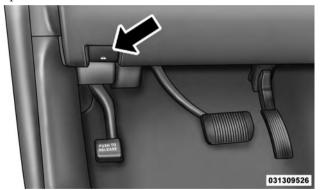
Each stored memory setting will have an associated Easy Entry and Easy Exit position.

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/Customer Programmable Features" in "Understanding Your Instrument Panel" for further information.

#### TO OPEN AND CLOSE THE HOOD

To open the hood, two latches must be released.

1. Pull the release lever located below the instrument panel and in front of the driver's door.



**Hood Release** 

2. Reach under the hood, move safety latch to the left and lift the hood.

UNDERSTANDING THE FEATURES OF YOUR VEHICLE 167



Safety Latch Location

#### **CAUTION!**

To prevent possible damage, do not slam the hood to close it. Use a firm downward push at the front center of the hood to ensure that both latches engage.

### **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.

#### LIGHTS

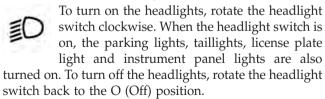
## **Headlight Switch**

The headlight switch is located on the left side of the instrument panel, next to the steering wheel. The headlight switch controls the operation of the headlights, parking lights, instrument panel lights, cargo lights and fog lights (if equipped).



031409529

#### **Headlight Switch**



#### NOTE:

- Your vehicle is equipped with plastic headlight and fog light (if equipped) lenses that are lighter and less susceptible to stone breakage than glass lights. 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.

## **CAUTION!**

Do not use abrasive cleaning components, solvents, steel wool or other abrasive materials to clean the lenses.

## Automatic Headlights — If Equipped

This system automatically turns the headlights on or off according to ambient light levels. To turn the system on, rotate the headlight switch to the A (AUTO) position.

When the system is on, the Headlight Delay feature is also on. This means the headlights will stay on for up to 90 seconds after you turn the ignition switch to the OFF position. To turn the automatic headlights off, turn the headlight switch out of the AUTO position.

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

## **Headlights On Automatically With Wipers**

If your vehicle is equipped with Automatic Headlights, it also has this customer-programmable feature. When your headlights are in the automatic mode and the engine is running, they will automatically turn on when the wiper system is on. This feature is programmable

through the Uconnect system screen. Refer to "Uconnect Settings" in "Understanding Your Instrument Panel" for further information.

If your vehicle is equipped with a "Rain Sensitive Wiper System" and it is activated, the headlights will automatically turn on after the wipers complete five wipe cycles within approximately one minute, and they will turn off approximately four minutes after the wipers completely stop. Refer to "Windshield Wipers And Washers" in this section for further information.

**NOTE:** When your headlights come on during the daytime, the instrument panel lights will automatically dim to the lower nighttime intensity.

## Automatic High Beam — 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. 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 using the Uconnect System. Refer to "Uconnect Settings" in "Understanding Your Instrument Panel" 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

#### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 171

Sensitivity Control (not recommended), toggle highbeam lever 6 full on/off cycles within 10 seconds of ignition ON. System will return to default setting upon ignition off.

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

## Daytime Running Lights — If Equipped

The Daytime Running Lights (low intensity) come on whenever the engine is running, and the transmission is not in the PARK position. The lights will remain on until the ignition is switched to the OFF or ACC position or the parking brake is engaged.

#### NOTE:

- If a turn signal is activated, the DRL lamp on the same side of the vehicle will turn off for the duration of the turn signal activation. Once the turn signal is no longer active, the DRL lamp will illuminate.
- The DRL function may be disabled through the Uconnect system. Refer to "Uconnect Settings" in "Understanding Your Instrument Panel" for further information.

The headlight switch must be used for normal nighttime driving.

# Automatic Headlight Leveling — HID Headlights Only

This feature prevents the headlights from interfering with the vision of oncoming drivers. Headlight leveling automatically adjusts the height of the headlight beam in reaction to changes in vehicle pitch.

## **Headlight Delay**

To aid in your exit, your vehicle is equipped with a headlight delay that will leave the headlights on for approximately 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 cancelled by either turning the headlight switch on then off, or by turning the ignition ON.

**NOTE:** If your vehicle is equipped with a touchscreen, this feature can be programmed through the Uconnect system. Refer to "Uconnect Settings" in "Understanding Your Instrument Panel" for further information.

If your vehicle is not equipped with a touchscreen, this feature can be programmed through the Driver Information Display (DID). Refer to "Driver Information Display (DID)" in "Understanding Your Instrument Panel" for further information.

## **Parking Lights And Panel Lights**

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

## Fog Lights — If Equipped

The fog lights are turned on by rotating the headlight switch to the parking light or headlight position and pushing in the headlight rotary control.



031409584

Fog Light Operation

The fog lights will operate only when the parking lights are on or when the vehicle headlights are on low beam. An indicator light located in the instrument cluster will illuminate when the fog lights are on. The fog lights will turn off when the switch is pushed a second time, when the headlight switch is rotated to the off position, or the high beam is selected.

#### 174 UNDERSTANDING THE FEATURES OF YOUR VEHICLE

## **Interior Lights**

Courtesy and dome lights are turned on when the front doors are opened or when the dimmer control (rotating wheel on the right side of the headlight switch) is rotated to its farthest upward position. If your vehicle is equipped with Remote Keyless Entry (RKE) and the UNLOCK button is pressed on the RKE transmitter the courtesy and dome lights will turn on. When a door is open and the interior lights are on, rotating the dimmer control all the way down, to the OFF detent, will cause all the interior lights to go out. This is also known as the "Party" mode because it allows the doors to stay open for extended periods of time without discharging the vehicle's battery.

The brightness of the instrument panel lighting can be regulated by rotating the dimmer control up (brighter) or down (dimmer). When the headlights are on you can supplement the brightness of the odometer, trip odometer, radio and overhead console by rotating the control

to its farthest position up until you hear a click. This feature is termed the "Parade" mode and is useful when headlights are required during the day.



031409585

**Dimmer Control** 

## **Lights-On Reminder**

If the headlights, parking lights, or cargo lights are left on after the ignition is turned OFF, a chime will sound when the driver's door is opened.

## **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 and any door is left ajar for 10 minutes or the dimmer control is rotated all the way up to the dome ON position for 10 minutes, the interior lights will automatically turn off.

**NOTE:** Battery saver mode is cancelled if the ignition is ON.

If the headlights remain on while the ignition is cycled OFF, 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.

## Front Map/Reading Lights — If Equipped

The front map/reading lights are mounted in the overhead console.



031433150

## Front Map/Reading Lights

Each light can be turned on by pushing a switch on either side of the console. These buttons are backlit for night time visibility. To turn the lights off, push the switch a

#### 176 UNDERSTANDING THE FEATURES OF YOUR VEHICLE

second time. The lights will also turn on when the UNLOCK button on the Remote Keyless Entry (RKE) is pushed.



Front Map/Reading Light Switches

## **Courtesy Lights**

031433151

The courtesy lights can be turned on by pushing the top corner of the lens. To turn the lights off, push the lens a second time.



031464435

**Courtesy Lights** 

## Ambient Light — If Equipped

The overhead console is equipped with an ambient light feature. This light casts illumination for improved visibility of the floor and center console area.



**Ambient Light** 

033333449

### **Multifunction Lever**

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



031563090

Multifunction Lever

## **Turn Signals**

Move the multifunction lever up or down and the arrows on each side of the instrument cluster 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**

Tap the 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.

#### Flash-To-Pass

You can signal another vehicle with your headlights by partially pulling the multifunction lever toward the steering wheel. This will cause the high beam headlights to turn on until the lever is released.

## High/Low Beam Switch

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

The windshield wiper/washer controls are located on the multifunction lever on the left side of the steering column. The front wipers are operated by rotating a switch, located on the end of the lever. For information on the rear wiper/washer, refer to "Rear Window Features" in "Understanding The Features Of Your Vehicle".



# Windshield Wiper Operation

Rotate the end of the lever to one of the first four detent positions for intermittent settings, the fifth detent for low wiper operation and the sixth detent for high wiper operation.



031563345

031563090

Windshield Wiper Operation

**Multifunction Lever** 

#### **CAUTION!**

Always remove any buildup of snow that prevents the windshield wiper blades from returning to the "park" position. If the windshield wiper switch is turned off, and the blades cannot return to the "park" position, damage to the wiper motor may occur.

# **Intermittent Wiper System**

Use one of the four intermittent wiper settings when weather conditions make a single wiping cycle, with a variable delay between cycles, desirable. At driving speeds above 10 mph (16 km/h), the delay can be regulated from a maximum of approximately 18 seconds between cycles (first detent), to a cycle every one second (fourth detent).



### **Intermittent Wiper Operation**

**NOTE:** If the vehicle is moving less than 10 mph (16 km/h), delay times will be doubled.

# Windshield Washer Operation

To use the washer, push on the end of the lever (toward the steering wheel) and hold while spray is desired. If the lever is pushed while in the intermittent setting, the wipers will turn on and operate for several wipe cycles after the end of the lever is released, and then resume the intermittent interval previously selected.



031563350

Windshield Washer Operation

If the end of the lever is pushed while the wipers are in the off position, the wipers will operate for several wipe cycles, then turn off.

#### **WARNING!**

Sudden loss of visibility through the windshield could lead to a collision. You might not see other vehicles or other obstacles. To avoid sudden icing of the windshield during freezing weather, warm the windshield with the defroster before and during windshield washer use.

#### Mist

Use the Mist feature when weather conditions make occasional usage of the wipers necessary. Rotate the end of the lever downward to the Mist position and release for a single wiping cycle.

#### 182 UNDERSTANDING THE FEATURES OF YOUR VEHICLE

**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.



031563345

**Mist Control** 

# 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 four settings to activate this feature.

The sensitivity of the system can be adjusted with the multifunction lever. Wiper delay position one is the least sensitive, and wiper delay position four is the most sensitive. Setting three should be used for normal rain conditions. Settings one and two can be used if the driver desires less wiper sensitivity. Setting four can be used if the driver desires more sensitivity. Place the wiper switch in the 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 feature can be turned on and off using the Uconnect System, refer to "Uconnect Settings" in "Understanding Your Instrument Panel" for further information.

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 turned ON, 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 automatic transmission is in the NEUTRAL position, the Rain Sensing system will not operate until the wiper switch is moved, vehicle speed is greater than 3 mph (5 km/h), or the shift lever/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.

#### **HEADLIGHT WASHERS — IF EQUIPPED**

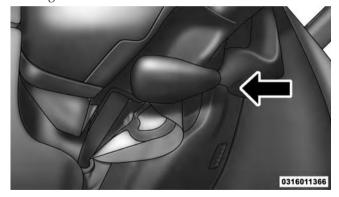
The multifunction lever operates the headlight washers when the ignition switch is in the ON position and the headlights are turned on. The multifunction lever is located on the left side of the steering column.

To use the headlight washers, push the multifunction lever inward (toward the steering column) and release it. The headlight washers will spray a timed high-pressure spray of washer fluid onto each headlight lens. In addition, the windshield washers will spray the windshield and the windshield wipers will cycle.

**NOTE:** After turning the ignition switch and headlights ON, the headlight washers will operate on the first spray of the windshield washer and then every eleventh spray after that.

#### TILT/TELESCOPING STEERING COLUMN

This feature allows you to tilt the steering column upward or downward. It also allows you to lengthen or shorten the steering column. The tilt/telescoping lever is located below the steering wheel at the end of the steering column.



Tilt/Telescoping Lever

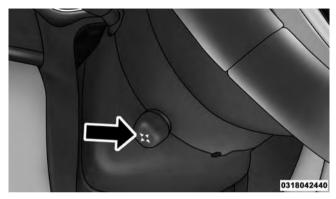
To unlock the steering column, push the lever downward (toward the floor). To tilt the steering column, move the steering wheel upward or downward as desired. To lengthen or shorten the steering column, pull the steering wheel outward or push it inward as desired. To lock the steering column in position, push the lever upward until fully engaged.

#### **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.

# POWER TILT/TELESCOPING STEERING COLUMN — IF EQUIPPED

This feature allows you to tilt the steering column upward or downward. It also allows you to lengthen or shorten the steering column. The power tilt/telescoping steering column lever is located below the multifunction lever on the steering column.



Power Tilt/Telescoping Steering Column

To tilt the steering column, move the lever up or down as desired. To lengthen or shorten the steering column, pull the lever toward you or push the lever away from you as desired.

**NOTE:** For vehicles equipped with Driver Memory Seat, you can use your Remote Keyless Entry (RKE) transmitter or the memory switch on the driver's door trim panel to return the tilt/telescopic steering column to preprogrammed positions. Refer to "Driver Memory Seat" in this section for further information.

#### **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.

The heated steering wheel control button is located within the Uconnect system. You can gain access to the control button through the climate screen or the controls screen.

- Press the heated steering wheel button  $\oplus$  once to turn the heating element ON.
- Press the heated steering wheel button # 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 through the Uconnect system. Refer to "Uconnect Settings" in "Understanding Your Instrument Panel" for further information.

#### **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 conditions must exercise care when using the steering wheel heater. It may cause burns even at low temperatures, especially if used for long periods.

(Continued)

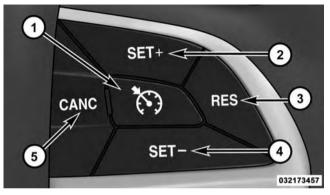
# WARNING! (Continued)

• 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.

#### ELECTRONIC SPEED CONTROL — IF EQUIPPED

When engaged, the Electronic Speed Control takes over accelerator operations at speeds greater than 25 mph (40 km/h).

The Electronic Speed Control buttons are located on the right side of the steering wheel.



#### **Electronic Speed Control Buttons**

1 - ON/OFF 4 - SET-/DECEL 2 - SET+/ACCEL 5 - CANCEL

3 — RESUME

**NOTE:** In order to ensure proper operation, the Electronic Speed Control System has been designed to shut down if multiple Speed Control functions are operated at the same time. If this occurs, the Electronic Speed Control System can be reactivated by pushing the Electronic Speed Control ON/OFF button and resetting the desired vehicle set speed.

#### To Activate

Push the ON/OFF button to activate the electronic speed control. CRUISE CONTROL READY will appear on the instrument cluster to indicate the electronic speed control is on. To turn the system off, push the ON/OFF button a second time. CRUISE CONTROL OFF will appear on the instrument cluster to indicate the electronic speed control is off. The system should be turned off when not in use.

#### **WARNING!**

Leaving the Electronic 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.

### To Set A Desired Speed

Turn the Electronic Speed Control ON. When the vehicle has reached the desired speed, push the SET (+) 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. A CRUISE indicator lamp, along with set speed will also appear and stay on in the instrument cluster when the speed is set.

#### To Deactivate

A soft tap on the brake pedal, pushing the CANCEL button, or normal brake pressure while slowing the vehicle will deactivate the Electronic Speed Control without erasing the set speed from memory.

Pushing the ON/OFF button or turning the ignition switch OFF erases the set speed from memory.

# 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 Vary The Speed Setting

# To Increase Speed

When the Electronic Speed Control is set, you can increase speed by pushing the SET + button.

The drivers preferred units can be selected through the instrument panel settings if equipped. Refer to "Understanding Your Instrument Panel" for more information. The speed increment shown is dependant 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 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 SET + 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 Electronic Speed Control is set, you can decrease speed by pushing the SET - button.

The drivers preferred units can be selected through the instrument panel settings if equipped. Refer to "Understanding Your Instrument Panel" for more information. The speed decrement shown is dependant 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.

### 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 Electronic Speed Control On Hills**

The transmission may downshift on hills to maintain the vehicle set speed.

**NOTE:** The Electronic 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 Electronic Speed Control.

#### **WARNING!**

Electronic 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 Electronic Speed Control in heavy traffic or on roads that are winding, icy, snow-covered or slippery.

# 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. Electronic 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 acceleration (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) electronic speed 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) electronic speed 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.

#### WARNING! (Continued)

- The ACC system:
  - 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 2 seconds in the stop position. If the target vehicle does not start moving within two seconds the ACC system will display a message that the system will release the brakes and that the

#### WARNING! (Continued)

brakes must be applied manually. An audible chime will sound when the brakes are released.

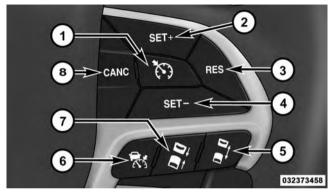
You should switch off the ACC system:

- 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, snowcovered, slippery, or have steep uphill or downhill slopes.
- When towing a trailer up or down steep slopes.
- When circumstances do not allow safe driving at a constant speed.

# Adaptive Cruise Control (ACC) Operation

The speed control buttons (located on the right side of the steering wheel) operates the ACC system.

(Continued)



# **Adaptive Cruise Control Buttons**

- 1 NORMAL (FIXED SPEED) CRUISE CONTROL ON/OFF
- 2 SET+/ACCEL
- 3 RESUME
- 4 SET-/DECEL
- 5 DISTANCE SETTING INCREASE
- 6 ADAPTIVE CRUISE CONTROL (ACC) ON/OFF
- 7 DISTANCE SETTING DECREASE
- 8 CANCEL

**NOTE:** Any chassis/suspension or tire size modifications to the vehicle will effect 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 20 mph (32 km/h).

When the system is turned on and in the READY state, the Driver Information Display (DID) displays "ACC Ready."

When the system is OFF, the DID displays "Adaptive Cruise Control (ACC) Off."

**NOTE:** You cannot engage ACC under the following conditions:

• When in Four-Wheel Drive Low.

#### 196 UNDERSTANDING THE FEATURES OF YOUR VEHICLE

- When you apply the brakes.
- When the parking brake is set.
- When the automatic transmission is in PARK, RE-VERSE or NEUTRAL.
- When the Vehicle speed is outside of the speed range.
- When the brakes are overheated.
- When the driver door is open.
- When the driver seat belt is unbuckled.

#### To Activate/Deactivate

Push and release the Adaptive Cruise Control (ACC) ON/OFF button. The ACC menu in the DID displays "ACC Ready."

# **ACC Ready**

0323001278

#### Adaptive Cruise Control Ready

To turn the system OFF, push and release the Adaptive Cruise Control (ACC) ON/OFF button again. At this time, the system will turn off and the DID will display "Adaptive Cruise Control (ACC) Off."

# Adaptive Cruise Control (ACC) Off

0323001263

**Adaptive Cruise Control Off** 

#### **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

# WARNING! (Continued)

want. You could lose control and have a collision. Always leave the system off when you are not using it.

### To Set A Desired ACC Speed

When the vehicle reaches the speed desired, push the SET + button or the SET - button and release. The DID will display the set speed.

If the system is Set when the vehicle speed is below 20 mph (32 km/h), the Set Speed shall be defaulted to 20 mph (32 km/h). If the system is Set when the vehicle speed is above 20 mph (32 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.

(Continued)

#### UNDERSTANDING THE FEATURES OF YOUR VEHICLE

not, the vehicle may continue to accelerate beyond the set speed. If this occurs:

- The message "DRIVER OVERRIDE" will display in the DID.
- 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.

- Remove your foot from the accelerator pedal. If you do The shift lever/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.

#### 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) Electronic Speed Control ON/OFF button is pushed.

- The ignition is turned OFF.
- You switch to Four-Wheel Drive Low.

#### To Resume

If there is a set speed in memory push the RES (resume) button and then remove your foot from the accelerator pedal. The DID will display the last set speed.

#### NOTE:

- If your vehicle stays at standstill for longer than two seconds, then the system will cancel and the brake force will be ramped-out. The driver will have to apply the brakes to keep the vehicle at a standstill.
- ACC cannot be resumed if there is a stationary vehicle in-front of your vehicle in close proximity.

#### **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.

### To Vary The Speed Setting

# To Increase Speed

While ACC is set, you can increase the set speed by pushing the SET + button.

The drivers preferred units can be selected through the instrument panel settings if equipped. Refer to "Understanding Your Instrument Panel" for more information.

#### 200 UNDERSTANDING THE FEATURES OF YOUR VEHICLE

The speed increment shown is dependant 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 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 DID.

# Metric Speed (km/h)

• Pushing the SET + 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 DID.

### To Decrease Speed

While ACC is set, the set speed can be decreased by pushing the  ${\sf SET}$  - button.

The drivers preferred units can be selected through the instrument panel settings if equipped. Refer to "Understanding Your Instrument Panel" for more information. The speed decrement shown is dependant 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 DID.

# 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 DID.

#### NOTE:

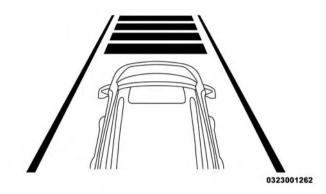
When you override and push the SET + button or SET
 buttons, the new Set Speed will be the current speed of the vehicle.

# UNDERSTANDING THE FEATURES OF YOUR VEHICLE 201

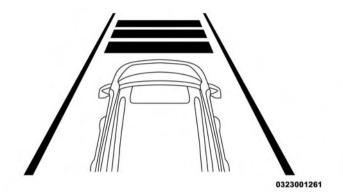
- When you use the SET button to decelerate, if the engine's braking power does not slow the vehicle sufficiently to reach the set speed, the brake system will automatically slow the vehicle.
- The ACC system applies the brake down to a full stop when following a target vehicle. If an ACC host vehicle follows a target vehicle to a standstill, the host vehicle will release the vehicle brakes two seconds after coming to a full stop.
- The ACC system maintains set speed when driving up hill and down hill. 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 up hill and down hill, the ACC system will cancel if the braking temperature exceeds normal range (overheated).

# **Setting The Following Distance In ACC**

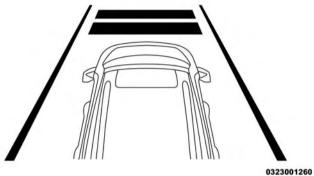
The specified following distance for ACC can be set by varying the distance setting between four bars (longest), three bars (long), two bars (medium) and one bar (short). Using this distance setting and the vehicle speed, ACC calculates and sets the distance to the vehicle ahead. This distance setting displays in the DID.



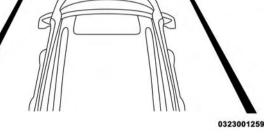
**Distance Setting 4 Bars (Longest)** 



Distance Setting 3 Bars (Long)



Distance Setting 2 Bars (Medium)



Distance Setting 1 Bar (Short)

To increase the distance setting, push the Distance Setting — Increase button and release. Each time the button is pushed, the distance setting increases by one bar (longer).

To decrease the distance setting, push the Distance Setting — Decrease button and release. Each time the button is pushed, the distance setting decreases by one bar (shorter).

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 DID displays the "Sensed Vehicle Indicator" icon, 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 the information on ACC Activation).

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 DID and a chime will sound while ACC continues to apply its maximum braking capacity.



**Brake Alert** 

**NOTE:** The "Brake!" Screen in the DID is a warning for the driver to take action and does not necessarily mean that the Forward Collision Warning system is applying the brakes autonomously.

#### **Overtake Aid**

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. This additional acceleration is triggered when the driver utilizes the left turn signal and will only be active when passing on the left hand side.

# **ACC Operation At Stop**

If 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, the ACC with Stop system will cancel and the brakes will release.

A cancel message will display on the DID and produce a warning chime. Driver intervention will be required at this moment.

While ACC with Stop is holding your vehicle at a standstill, if the driver seatbelt is unbuckled or the driver door is opened, the ACC with Stop system will cancel and the brakes will release. A cancel message will display on the DID and produce a warning chime. 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 DID displays the current ACC system settings. The DID 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 displays in the DID:

# 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 DID:

#### ACC SET

When ACC is set, the set speed will display in the 3 instrument cluster.

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 DID 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 DID 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 center of the vehicle behind the lower grille.

To keep the ACC System operating properly, it is important to note the following maintenance items:

• Always keep the sensor clean. Carefully wipe the sensor lens with a soft cloth. Be cautious not to damage the sensor lens.

- Do not remove any screws from the sensor. Doing so could cause an ACC system malfunction or failure and require a sensor realignment.
- If the sensor or front end of the vehicle is damaged due to a collision, see your authorized dealer for service.
- 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 and fog on the inside of glass. In these cases, the DID will display "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 rear view 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 DID 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**

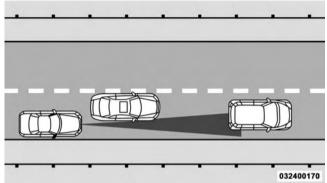
In certain driving situations, ACC may have detection issues. In these cases, ACC may brake late or unexpectedly. The driver needs to stay alert and may need to intervene.

### **Towing A Trailer**

Towing a trailer is not advised when using ACC.

# 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.



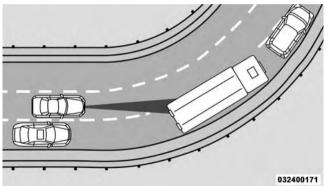
# Offset Driving Condition Example Turns And Bends

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

#### 212 UNDERSTANDING THE FEATURES OF YOUR VEHICLE

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

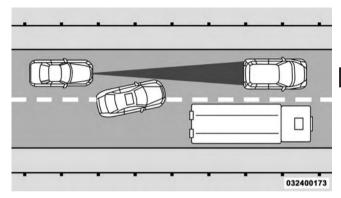
When driving on hills, ACC may not detect a vehicle in your lane. Depending on the speed, vehicle load, traffic conditions, and the steepness of the hills, ACC performance may be limited.



**ACC Hill Example** 

# 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.

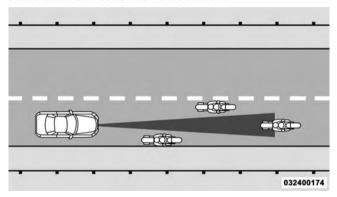


Lane Changing Example

#### 214 UNDERSTANDING THE FEATURES OF YOUR VEHICLE

#### Narrow Vehicles

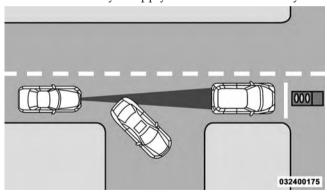
Some narrow vehicles traveling near the outer edges of the lane or edging into the lane are not detected until they have moved fully into the lane. There may not be sufficient distance to the vehicle ahead.



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

## **General Information**

This vehicle has systems that operate on radio frequency that comply with Part 15 of the Federal Communications Commission (FCC) rules and with Industry Canada Standards RSS- GEN/210/220/310.

Operation is subject to the following two conditions:

- 1. The device may not cause harmful interference.
- 2. The device must accept any interference received, including interference that may cause undesired operation of the device.

Changes or modifications to any of these systems by other than an authorized service facility could void authorization to use this equipment.

# Normal (Fixed Speed) Electronic Speed Control Mode

In addition to Adaptive Cruise Control mode, a Normal (Fixed Speed) Electronic Speed Control mode is available for cruising at fixed speeds. The Normal (Fixed Speed) Electronic Speed Control mode is designed to maintain a set cruising speed without requiring the driver to operate the accelerator. Electronic Speed Control can only be operated if the vehicle speed is above 20 mph (32 km/h).

To change between the different control modes, push the ADAPTIVE CRUISE CONTROL (ACC) ON/OFF button which turns the ACC and the NORMAL (Fixed Speed) ELECTRONIC SPEED CONTROL OFF. Pushing of the NORMAL (Fixed Speed) ELECTRONIC SPEED CONTROL ON/OFF button will result in turning ON (changing to) the Normal (Fixed Speed) Electronic Speed Control mode.

## **WARNING!**

In the normal 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.

## To Set A Desired Speed



Turn the Normal (Fixed Speed) Electronic Speed Control ON. When the vehicle has reached the desired speed, push the SET (+) or SET (-) button and release. Release the accel-

erator and the vehicle will operate at the selected speed.

Once a speed has been set a message (CRUISE CONTROL SET TO MPH/KM) will appear indicating what speed was set. This light will turn on when the electronic speed control is SET.

# To Vary The Speed Setting

# To Increase Speed

When the Normal (Fixed Speed) Electronic Speed Control is set, you can increase speed by pushing the SET + button.

The drivers preferred units can be selected through the instrument panel settings if equipped. Refer to "Understanding Your Instrument Panel" for more information. The speed increment shown is dependant 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 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 DID display.

## *Metric Speed (km/h)*

- Pushing the SET + 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 DID display.

# To Decrease Speed

When the Normal (Fixed Speed) Cruise Control is set, you can decrease speed by pushing the SET - button.

The drivers preferred units can be selected through the 3 instrument panel settings if equipped. Refer to "Understanding Your Instrument Panel" for more information. The speed decrement shown is dependant 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 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 DID display.

## 218 UNDERSTANDING THE FEATURES OF YOUR VEHICLE

## 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 DID display.

## To Cancel

The following conditions will cancel the Normal (Fixed Speed) Electronic Speed 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 shift lever/gear selector is removed from the Drive position.

# 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 Turn Off

The system will turn off and erase the set speed in memory if:

- The Normal (Fixed Speed) Electronic Speed Control ON/OFF button is pushed.
- The ignition is turned off.

- You engage Four-Wheel Drive Low.
- The Adaptive Cruise Control (ACC) On/Off button is pushed.

## FORWARD COLLISION WARNING (FCW) WITH MITIGATION — IF EQUIPPED

# Forward Collision Warning (FCW) With Mitigation Operation

The Forward Collision Warning (FCW) system with mitigation provides the driver with audible warnings, visual warnings (within the DID), 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 Controller (EBC), 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 3 visual warnings and may provide a 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 Forward Collision Warning with Mitigation event begins at a speed below 26 mph (42 km/h), the system may provide the maximum or partial braking 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 a standstill for two seconds and then release the brakes.



**FCW Message** 

When the system determines a collision with the vehicle in front of you is no longer probable, the warning message will be deactivated.

#### NOTE:

- The minimum speed for FCW activation is 1 mph (2 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 an ignition cycle, the Active Braking portion of FCW will be deactivated until the next ignition 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. If the vehicle enters 4WD Low Range, the FCW system will be automatically deactivated.

## **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

**NOTE:** 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.

The forward collision button is located in the Uconnect display in the controls settings.

To turn the FCW system OFF, push the forward collision button once to turn the system OFF.

To turn the FCW system back ON, push the forward collision button again to turn the system ON.

Changing the FCW status to "Off" prevents the system from warning you of a possible collision with the vehicle in front of you.

**NOTE:** The FCW system state is kept in memory from one ignition cycle to the next. If the system is turned OFF, it will remain off when the vehicle is restarted.

# **Changing FCW And Active Braking Status**

The FCW Sensitivity And Active Braking Settings are programmable through the Uconnect System. Refer to "Uconnect Settings" in "Understanding Your Instrument Panel" for further information.

The default status of FCW is the "Medium" setting and the Active Braking is in the "On" setting. 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.

Changing the FCW status to "Far" setting allows the system to warn the driver of a possible collision with the vehicle in front using audible/visual warning when the latter is at a farther distance than "Medium" setting. This provides the most reaction time to avoid a possible collision.

Changing the FCW status to the "Near" setting, allows the system to warn the driver of a possible collision with the vehicle in front when the distance between the vehicle in the front is much closer. This setting provides less reaction time than the "Far" and "Medium" settings, which allows for a more dynamic driving experience. Changing the Active Braking status to "Off" prevents the system from providing autonomous braking, or additional brake support if the driver is not braking adequately in the event of a potential frontal collision.

## NOTE:

- The system will retain the last setting selected by the driver after ignition shut down.
- FCW may not react to irrelevant objects such as overhead objects, ground reflections, objects not in the path of the vehicle, stationary objects that are far away, oncoming traffic, or leading vehicles with the same or higher rate of speed.
- FCW will be disabled like ACC, with the unavailable screens.

# **FCW Limited Warning**

If the DID 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 drivable 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 your authorized dealer.

# Service FCW Warning

If the system turns off, and the DID 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.

# 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. If your vehicle is equipped with an Automatic Transmission, the vehicle brakes may be automatically applied and released when performing a reverse parking maneuver if the system detects a possible collision with an obstacle.

#### NOTE:

- The driver can override the automatic braking function by pushing the gas pedal, turning ParkSense off via ParkSense switch, or changing the gear while the automatic brakes are being applied.
- Automatic brakes will not be available if ESC is not available.

#### 224 UNDERSTANDING THE FEATURES OF YOUR VEHICLE

- Automatic brakes will not be available if there is a faulted condition detected with the ParkSense Park Assist system or the Braking System Module.
- The automatic braking function may only be applied if the vehicle deceleration is not enough to avoid colliding with a detected obstacle.
- The automatic braking function may not be applied fast enough for obstacles that move toward the rear of the vehicle from the left and/or right sides.
- The automatic braking function can be enabled/ disabled from the Customer-Programmable Features section of the Uconnect System.
- ParkSense will retain its last known configuration state for the automatic braking function through ignition cycles.

The automatic braking function is intended to assist the driver in avoiding possible collisions with detected obstacles when backing up in REVERSE gear.

### NOTE:

- The driver is always responsible for controlling the vehicle.
- The system is provided to assist the driver and not to substitute the driver.
- The driver must stay in full control of the vehicle's acceleration and braking and is responsible for the vehicle's movements.

Refer to ParkSense System Usage Precautions for limitations of this system and recommendations.

ParkSense will retain the last system state (enabled or disabled) from the last ignition cycle when the ignition is changed to the ON/RUN position.

ParkSense can be active only when the shift lever/gear selector is in REVERSE. If ParkSense is enabled at this shift lever/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 Driver Information Display (DID) 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 in (30 cm) up to 79 in (200 cm) from the rear fascia/bumper in the horizontal direction, depending on the location, type and orientation of the obstacle.

# ParkSense Warning Display

The ParkSense Warning screen will only be displayed if Sound and Display is selected from the Customer - Programmable Features section of the Uconnect System. Refer to "Uconnect Settings" in "Understanding Your Instrument Panel" for further information.

The ParkSense Warning screen is located within the DID. It provides visual warnings to indicate the distance between the rear fascia/bumper and the detected obstacle. Refer to "Driver Information Display (DID)" for further information.

# ParkSense Display

When the vehicle is in REVERSE and an obstacle has been detected, the warning display will turn ON indicating the system status.



0329086078US

Park Assist Ready

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.



0327084045

Single 1/2 Second Tone



Slow Tone

0327084047



0327084049

**Slow Tone** 





0327084053

**Fast Tone** 

**Fast Tone** 



**Continuous Tone** 

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:

230 UNDERSTANDING THE FEATURES OF YOUR VEHICLE

WARNING ALERTS						
Greater	79-59 in	59-47 in	47-39 in	39-25 in	25-12 in	Less than
than	(150-100	(150-120	(120-100	(100-65 cm)	(65-30 cm)	12 in (30
79 in (200	cm)	cm)	cm)			cm)
cm)						
None	Single 1/2	Slow	Slow	Fast	Fast	Continuous
	Second					
	Tone					
None	None	None	None	None	2nd	1st
					Flashing	Flashing
None	6th Solid	5th Solid	4th Solid	3rd	2nd	1st
				Flashing	Flashing	Flashing
None	None	None	None	None	2nd	1st
					Flashing	Flashing
No	Yes	Yes	Yes	Yes	Yes	Yes
	than 79 in (200 cm) None  None  None	than 79 in (200 cm)  None Single 1/2 Second Tone  None None None None None None None	Greater than (150-100 cm)         79-59 in (150-120 cm)         59-47 in (150-120 cm)           79 in (200 cm) cm)         cm)         cm)           None         Single 1/2 Second Tone         Slow           None         None         None           None         6th Solid         5th Solid           None         None         None	Greater than (150-100 cm)         59-47 in (150-120 cm)         47-39 in (120-100 cm)           79 in (200 cm) cm)         cm) cm)         cm)         cm)           None         Single 1/2 Slow Slow Slow Slow           None         None         None         None           None         None         None         None           None         None         None         None	Greater than (150-100 cm)         79-59 in (150-120 cm)         59-47 in (120-100 (120-100 cm)         39-25 in (100-65 cm)           None Single 1/2 Second Tone         Slow Slow Slow         Fast           None None None None None None None None	Greater than (150-100 cm)         79-59 in (150-120 cm)         59-47 in (150-120 cm)         47-39 in (120-100 (100-65 cm)         25-12 in (65-30 cm)           None Single 1/2 Second Tone         Slow Slow Slow Fast Fast         Fast Fast           None None None None Stability         None None Flashing           None None None None None Flashing         None Flashing Flashing           None None None None None Flashing         None None Flashing

NOTE: ParkSense will reduce the volume of the radio, if on, when the system is sounding an audio tone.

## **Adjustable Chime Volume Settings**

Rear chime volume settings can be selected from the Customer-Programmable Features section the Uconnect System, refer to "Uconnect Settings" in "Understanding Your Instrument Panel" for further information.

The chime volume settings include LOW, MEDIUM, and HIGH. The factory default volume setting is MEDIUM.

ParkSense will retain its last known configuration state through ignition cycles.

# **Enabling And Disabling ParkSense**

ParkSense can be enabled and disabled with the ParkSense switch.

PIJA OFF

When the ParkSense switch is pushed to disable the system, the instrument cluster will display the "PARKSENSE OFF" message for approximately five seconds. Refer to "Driver Information Display (DID)" in "Understanding Your Instrument Panel" for further information. When the

system is disabled, the DID will display the "PARKSENSE OFF" message for as long as the vehicle is in REVERSE.

shift lever/gear selector is moved to REVERSE and the

The ParkSense switch LED will be ON when ParkSense is disabled or requires service. The ParkSense switch LED will be OFF when the system is enabled. If the ParkSense switch is pushed, and the system 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 ParkSense Rear Park Assist System has detected a faulted condition, the instrument cluster will actuate a single chime, once per ignition cycle, and it will display the "PARKSENSE UNAVAILABLE WIPE REAR SENSORS" "PARKSENSE UNAVAILABLE SERVICE REQUIRED" message. Refer to "Driver Information Display (DID)" for further information. When the shift lever/gear selector is moved to REVERSE and the system has detected a faulted condition, the DID will display the "PARKSENSE UNAVAILABLE REAR SENSORS" WIPE "PARKSENSE UNAVAILABLE SERVICE REQUIRED" message for as long as the vehicle is in REVERSE. Under this condition, ParkSense will not operate.

If "PARKSENSE UNAVAILABLE WIPE REAR SEN-SORS" appears in the Driver Information Display (DID) 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 "PARKSENSE UNAVAILABLE SERVICE REQUIRED" appears in the DID, 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 turn ParkSense OFF, the instrument cluster will display "PARKSENSE OFF" Furthermore, once you turn ParkSense off, it remains off until you turn it on again, even if you cycle the ignition.
- When you move the shift lever to the REVERSE position and ParkSense is turned OFF, the DID will display "PARKSENSE OFF" message for as long as the vehicle is in REVERSE.

## UNDERSTANDING THE FEATURES OF YOUR VEHICLE 233

- 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.
- Use the ParkSense switch to turn the ParkSense system OFF if objects such as bicycle carriers, trailer hitches, etc. are placed within 12 in (30 cm) from the rear fascia/bumper. Failure to do so can result in the system misinterpreting a close object as a sensor problem, causing the "PARKSENSE UNAVAILABLE SERVICE REQUIRED" message to be displayed in the DID.

 ParkSense should be disabled when the liftgate is in the open position and the vehicle is in REVERSE. An open liftgate could provide 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.

## **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

# WARNING! (Continued)

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.

# PARKSENSE FRONT AND REAR PARK ASSIST — IF EQUIPPED

The ParkSense Park Assist system provides visual and audible indications of the distance between the rear and/or front fascia and a detected obstacle when backing up or moving forward, e.g. during a parking maneuver. If your vehicle is equipped with an Automatic Transmission, the vehicle brakes may be automatically applied and released when performing a reverse parking maneuver if the system detects a possible collision with an obstacle.

#### NOTE:

- The driver can override the automatic braking function by pushing the gas pedal, turning ParkSense off via ParkSense switch, or changing the gear while the automatic brakes are being applied.
- Automatic brakes will not be available if ESC is not available.
- Automatic brakes will not be available if there is a faulted condition detected with the ParkSense Park Assist system or the Braking System Module.
- The automatic braking function may only be applied if the vehicle deceleration is not enough to avoid colliding with a detected obstacle.
- The automatic braking function may not be applied fast enough for obstacles that move toward the rear of the vehicle from the left and/or right sides.

#### 236 UNDERSTANDING THE FEATURES OF YOUR VEHICLE

- The automatic braking function can be enabled/ disabled from the Customer-Programmable Features section of the Uconnect System.
- ParkSense will retain its last known configuration state for the automatic braking function through ignition cycles.

The automatic braking function is intended to assist the driver in avoiding possible collisions with detected obstacles when backing up in REVERSE gear.

## NOTE:

- The driver is always responsible for controlling the vehicle.
- The system is provided to assist the driver and not to substitute the driver.

• The driver must stay in full control of the vehicle's acceleration and braking and is responsible for the vehicle's movements.

tions of this system and recommendations.

ParkSense will retain the last system state (enabled or disabled) from the last ignition cycle when the ignition is changed to the ON/RUN position.

Refer to ParkSense System Usage Precautions for limita-

ParkSense can be active only when the shift lever is in REVERSE or DRIVE. If ParkSense is enabled at one of these shift lever positions, the system will remain active until the vehicle speed is increased to approximately 7 mph (11 km/h) or above. A display warning will appear in the Driver Information Display (DID) 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 in (30 cm) up to 79 in (200 cm) from the rear fascia/bumper in the horizontal direction, depending on the location, type and orientation of the obstacle.

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 in (30 cm) up to 47 in (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 will only be displayed if Sound and Display is selected from the Customer - Programmable Features section of the Uconnect System. Refer to "Uconnect Settings" in "Understanding Your Instrument Panel" for further information.

The ParkSense Warning screen is located within the Driver Information Display (DID). It provides visual warnings to indicate the distance between the rear fascia/bumper and/or front fascia/bumper and the detected obstacle. Refer to "Driver Information Display (DID)" for further information.

# ParkSense Display

When the vehicle is in REVERSE and an obstacle has been detected, the warning display will turn ON indicating the system status.



0329086077US

## Park Assist Ready

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 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.



0327084044

Single 1/2 Second Tone





0327084048

Slow Tone

Slow Tone For Rear Only



Fast Tone For Rear Only



0327084052

**Fast Tone** 



## **Continuous Tone**

The vehicle is close to the obstacle when the DID 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:

242 UNDERSTANDING THE FEATURES OF YOUR VEHICLE

WARNING ALERTS FOR REAR							
Rear Dis-	Greater	79-59 in	59-47 in	47-39 in	39-25 in	25-12 in	Less than
tance	than	(150-100	(150-120	(120-100	(100-65 cm)	(65-30 cm)	12 in (30
(in/cm)	79 in (200	cm)	cm)	cm)			cm)
	cm)						
Audible	None	Single 1/2	Slow	Slow	Fast	Fast	Continuous
Alert		Second					
Chime		Tone					
Arcs-Left	None	None	None	None	None	2nd	1st
						Flashing	Flashing
Arcs-Center	None	6th Solid	5th Solid	4th Solid	3rd	2nd	1st
					Flashing	Flashing	Flashing
Arcs-Right	None	None	None	None	None	2nd	1st
						Flashing	Flashing
Radio Vol-	No	Yes	Yes	Yes	Yes	Yes	Yes
ume Re-							
duced							

WARNING ALERTS FOR FRONT					
Front Distance	Greater than 47	47-39 in	39-25 in	25-12 in	Less than 12 in
(in/cm)	in (120 cm)	(120-100 cm)	(100-65 cm)	(65-30 cm)	(30 cm)
Audible Alert Chime	None	None	None	Fast	Continuous
Arcs-Left	None	None	None	2nd Flashing	1st Flashing
Arcs-Center	None	4th Solid	3rd Flashing	2nd Flashing	1st Flashing
Arcs-Right	None	None	None	2nd Flashing	1st Flashing
Radio Volume Reduced	No	No	No	Yes	Yes

**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 3 seconds when an obstacle has been detected, the vehicle is stationary, and brake pedal is applied.

# Adjustable Chime Volume Settings

Front and Rear chime volume settings can be selected from the Uconnect System. Refer to "Uconnect Settings" in "Understanding Your Instrument Panel" for further information.

The chime volume settings include LOW, MEDIUM, and HIGH. The factory default volume setting is MEDIUM.

ParkSense will retain its last known configuration state through ignition cycles.

# **Enabling And Disabling ParkSense**

ParkSense can be enabled and disabled with the ParkSense switch.

When the ParkSense switch is pushed to disable the system, the instrument cluster will display the "PARKSENSE OFF" message for approximately five seconds. Refer to "Driver Information Display (DID)" in "Understanding Your

Instrument Panel" for further information. When the shift lever/gear selector is moved to REVERSE and the system is disabled, the DID will display the "PARKSENSE OFF" message for as long as the vehicle is in REVERSE.

The ParkSense switch LED will be ON when ParkSense is disabled or requires service. The ParkSense switch LED will be OFF when the system is enabled. If the ParkSense

switch is pushed, and the system requires service, the ParkSense switch LED will blink momentarily, and then the LED will be ON.

# Service The ParkSense Park Assist System

During vehicle start up, when the ParkSense System has detected a faulted condition, the instrument cluster will actuate a single chime, once per ignition cycle, and it will display the "PARKSENSE UNAVAILABLE WIPE REAR SENSORS", "PARKSENSE UNAVAILABLE FRONT SENSORS", or the "PARKSENSE UNAVAIL-ABLE SERVICE REQUIRED" message for five seconds. When the shift lever/gear selector is moved to Reverse and the system has detected a faulted condition, the Driver Information Display (DID) will display a "PARKSENSE UNAVAILABLE WIPE REAR SENSORS", "PARKSENSE UNAVAILABLE WIPE FRONT SENSORS" or "PARKSENSE UNAVAILABLE SERVICE REQUIRED" pop up message for five seconds. After five seconds, a car

graphic will be displayed with "UNAVAILABLE" at either the front or rear sensor location depending on where the fault is detected. The system will continue to provide arc alerts for the side that is functioning properly. These arc alerts will interrupt the "PARKSENSE UNAVAILABLE WIPE REAR SENSORS", "PARKSENSE UNAVAILABLE WIPE FRONT SENSORS", or "PARKSENSE UNAVAILABLE SERVICE REQUIRED" messages if an object is detected within the five second pop-up duration. The car graphic will remain displayed for as long as the vehicle is in REVERSE. Refer to "Driver Information Display (DID)" for further information.

If "PARKSENSE UNAVAILABLE WIPE REAR SENSORS" or "PARKSENSE UNAVAILABLE WIPE FRONT SENSORS" appears in the Driver Information Display (DID) make sure the outer surface and the underside of the rear fascia/bumper and/or front 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 the "PARKSENSE UNAVAILABLE SERVICE RE-QUIRED" message appears in the DID, 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 bumper are free of snow, ice, mud, dirt and debris to keep the ParkSense system operating properly.

#### 246 UNDERSTANDING THE FEATURES OF YOUR VEHICLE

- Jackhammers, large trucks, and other vibrations could affect the performance of ParkSense.
- When you turn ParkSense off, the instrument cluster will display "PARKSENSE OFF." Furthermore, once you turn ParkSense off, it remains off until you turn it on again, even if you cycle the ignition.
- When you move the shift lever to the REVERSE position and ParkSense is turned off, the instrument cluster will display "PARKSENSE OFF" 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 objects such as bicycle carriers, trailer hitches, etc.
  are placed within 12 in (30 cm) from the rear fascia/
  bumper. Failure to do so can result in the system
  misinterpreting a close object as a sensor problem,
  causing the "PARKSENSE UNAVAILABLE SERVICE
  REQUIRED" message to be displayed in the instrument cluster.
- ParkSense should be disabled when the liftgate is in the open position. An opened liftgate could provide 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.

## **WARNING!**

• Drivers must be careful when backing up even when using ParkSense. Always check carefully

## WARNING! (Continued)

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.

(Continued)

# PARKVIEW REAR BACK UP CAMERA — IF EQUIPPED

Your vehicle may be equipped with the ParkView Rear Back Up Camera that allows you to see an on-screen image of the rear surroundings of your vehicle whenever the shift lever/gear selector is put into REVERSE. The image will be displayed on the Navigation/Multimedia radio display screen along with a caution note to "check entire surroundings" across the top of the screen. After five seconds this note will disappear. The ParkView camera is located on the rear of the vehicle above the rear License plate.

When the vehicle is shifted out of REVERSE (with camera delay turned OFF), the rear camera mode is exited and the navigation or audio screen appears again.

When the vehicle is shifted out of REVERSE (with camera delay turned ON), the rear view image with dynamic grid lines will be displayed for up to 10 seconds after

shifting out of "REVERSE" unless the forward vehicle speed exceeds 8 mph (13 km/h), the transmission is shifted into "PARK" or the ignition is switched to the OFF position.

**NOTE:** The ParkView Rear Back Up Camera has programmable modes of operation that may be selected through the Uconnect System. Refer to "Uconnect Settings" in "Understanding Your Instrument Panel" for further information.

When enabled, active guide lines are overlaid on the image to illustrate the width of the vehicle and its projected backup path based on the steering wheel position. A dashed center line overlay indicates the center of the vehicle to assist with parking or aligning to a hitch/receiver. "Different colored zones indicate the distance to the rear of the vehicle." The following table shows the approximate distances for each zone:

Zone	Distance to the rear of the vehicle		
Red	0 - 1 ft (0 - 30 cm)		
Yellow	1 ft - 6.5 ft (30 cm - 2 m)		
Green	6.5 ft or greater (2 m or greater)		

## **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.

#### 250 UNDERSTANDING THE FEATURES OF YOUR VEHICLE

**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.

### **OVERHEAD CONSOLE**

The overhead console contains courtesy/reading lights and storage for sunglasses. Universal Garage Door Opener (HomeLink), power liftgate and power sunroof switches may also be included, if equipped.



033333450

Overhead Console

# Front Map/Reading Lights — If Equipped

Lights are mounted in the overhead console. Each light can be turned on by pushing the switch on either side of the console. These buttons are backlit for night time visibility.



Front Map/Reading Lights

To turn the lights off, push the switch a second time. The lights also turn on when a door is opened. The lights will also turn on when the UNLOCK button on the RKE is pushed.



Front Map/Reading Light Switches

031433151

# **Courtesy Lights**

The courtesy lights can be turned on by pushing the top corner of the lens. To turn the lights off, push the lens a second time.



**Courtesy Lights** 

031464435

# **Sunglasses Bin Door**

At the front of the console a compartment is provided for the storage of a pair of sunglasses. The storage compartment access is a "push/push" design. Push the chrome pad on the door to open. Push the chrome pad on the door to close.



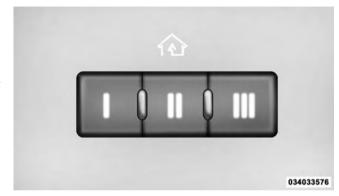
033333448

Sunglasses Bin Door

## GARAGE DOOR OPENER — IF EQUIPPED

HomeLink replaces up to three hand-held transmitters that operate devices such as garage door openers, motorized gates, lighting or home security systems. The HomeLink unit is powered by your vehicles 12 Volt battery.

The HomeLink buttons, located on the overhead console, designate the three different HomeLink channels. The HomeLink indicator is located above the center button.



HomeLink Buttons/Overhead Console

**NOTE:** HomeLink is disabled when the Vehicle Security Alarm is active.

# **Before You Begin Programming HomeLink**

Be sure that your vehicle is parked outside of the garage before you begin programming.

For more efficient programming and accurate transmission of the radio-frequency signal it is recommended that a new battery be placed in the hand-held transmitter of the device that is being programmed to the HomeLink system.

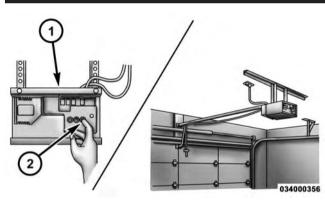
To erase the channels place the ignition in the ON/RUN position and push and hold the two outside HomeLink buttons (I and III) for up 20 seconds or until the red indicator flashes.

## NOTE:

- Erasing all channels should only be performed when programming HomeLink for the first time. Do not erase channels when programming additional buttons.
- If you have any problems, or require assistance, please call toll-free 1-800-355-3515 or, on the Internet at HomeLink.com for information or assistance.

# **Programming A Rolling Code**

For programming garage door openers that were manufactured after 1995. These garage door openers can be identified by the "LEARN" or "TRAIN" button located where the hanging antenna is attached to the garage door opener. It is NOT the button that is normally used to open and close the door. The name and color of the button may vary by manufacturer.



Training The Garage Door Opener

- 1 Door Opener
- 2 Training Button
- 1. Place the ignition in the ON/RUN position.

- 2. Place the hand-held transmitter 1 to 3 inches (3 to 8 cm) away from the HomeLink button you wish to program while keeping the HomeLink indicator light in view.
- 3. Push and hold the HomeLink button you want to program while you push and hold the hand-held transmitter button.
- 4. Continue to hold both buttons and observe the indicator light. The HomeLink indicator will flash slowly and then rapidly after HomeLink has received the frequency signal from the hand-held transmitter. Release both buttons after the indicator light changes from slow to rapid.
- 5. At the garage door opener motor (in the garage), locate the "LEARN" or "TRAINING" button. This can usually be found where the hanging antenna wire is attached to the garage door opener/device motor.

Firmly push and release the "LEARN" or "TRAIN-ING" button. On some garage door openers/devices there may be a light that blinks when the garage door opener/device is in the LEARN/TRAIN mode.

**NOTE:** You have 30 seconds in which to initiate the next step after the LEARN button has been pushed.

6. Return to the vehicle and push the programmed HomeLink button twice (holding the button for two seconds each time). If the garage door opener/device activates, programming is complete.

**NOTE:** If the garage door opener/device does not activate, push the button a third time (for two seconds) to complete the training.

To program the remaining two HomeLink buttons, repeat each step for each remaining button. DO NOT erase the channels.

# Reprogramming A Single HomeLink Button (Rolling Code)

To reprogram a channel that has been previously trained, follow these steps:

- 1. Cycle the ignition to the ON/RUN position.
- 2. Push and hold the desired HomeLink button until the indicator light begins to flash after 20 seconds. **Do not release the button.**
- 3. Without releasing the button proceed with "Programming A Rolling Code" step 2 and follow all remaining steps.

# **Programming A Non-Rolling Code**

For programming Garage Door Openers manufactured before 1995.

1. Place the ignition in the ON/RUN position.

- 2. Place the hand-held transmitter 1 to 3 inches (3 to 8 cm) away from the HomeLink button you wish to program while keeping the HomeLink indicator light in view.
- 3. Push and hold the Homelink button you want to program while you push and hold the hand-held transmitter button.
- 4. Continue to hold both buttons and observe the indicator light. The Homelink indicator will flash slowly and then rapidly after HomeLink has received the frequency signal from the hand-held transmitter. Release both buttons after the indicator light changes from slow to rapid.
- 5. Push and hold the programmed HomeLink button and observe the indicator light.
  - If the indicator light stays on constantly, programming is complete and the garage door/device should activate when the HomeLink button is pushed.

 To program the two remaining HomeLink buttons, repeat each step for each remaining button. DO NOT erase the channels.

# Reprogramming A Single HomeLink Button (Non-Rolling Code)

To reprogram a channel that has been previously trained, follow these steps:

- 1. Cycle the ignition to the ON/RUN position.
- 2. Push and hold the desired HomeLink button until the indicator light begins to flash after 20 seconds. **Do not release the button.**
- 3. Without releasing the button proceed with "Programming A Non-Rolling Code" step 2 and follow all remaining steps.

# **Canadian/Gate Operator Programming**

For programming transmitters in Canada/United States that require the transmitter signals to "time-out" after several seconds of transmission.

Canadian radio frequency laws require transmitter signals to time-out (or quit) after several seconds of transmission – which may not be long enough for HomeLink to pick up the signal during programming. Similar to this Canadian law, some U.S. gate operators are designed to time-out in the same manner.

It may be helpful to unplug the device during the cycling process to prevent possible overheating of the garage door or gate motor.

1. Cycle the ignition to the ON/RUN position.

- Place the hand-held transmitter 1 to 3 inches (3 to 8 cm) away from the HomeLink button you wish to program while keeping the HomeLink indicator light in view.
- 3. Continue to push and hold the HomeLink button, while you push and release ("cycle") your hand-held transmitter every two seconds until HomeLink has successfully accepted the frequency signal. The indicator light will flash slowly and then rapidly when fully trained.
- 4. Watch for the HomeLink indicator to change flash rates. When it changes, it is programmed. It may take up to 30 seconds or longer in rare cases. The garage door may open and close while you are programming.
- 5. Push and hold the programmed HomeLink button and observe the indicator light.

### NOTE:

- If the indicator light stays on constantly, programming is complete and the garage door/device should activate when the HomeLink button is pushed.
- To program the two remaining HomeLink buttons, repeat each step for each remaining button. DO NOT erase the channels.

If you unplugged the garage door opener/device for programming, plug it back in at this time.

# Reprogramming A Single HomeLink Button (Canadian/Gate Operator)

To reprogram a channel that has been previously trained, follow these steps:

1. Cycle the ignition to the ON/RUN position.

- 2. Push and hold the desired HomeLink button until the indicator light begins to flash after 20 seconds. Do not release the button.
- 3. Without releasing the button proceed with 1 "Canadian/Gate Operator Programming" step 2 and follow all remaining steps.

## **Using HomeLink**

To operate, push and release the programmed HomeLink button. Activation will now occur for the programmed device (i.e. garage door opener, gate operator, security system, entry door lock, home/office lighting, etc.) The hand-held transmitter of the device may also be used at any time.

# Security

It is advised to erase all channels before you sell or turn in your vehicle.

To do this, push and hold the two outside buttons for 20 If you have any problems, or require assistance, please seconds until the red indicator flashes. Note that all call toll-free 1-800-355-3515 or, on the Internet at channels will be erased. Individual channels cannot be HomeLink.com for information or assistance. erased.

The HomeLink Universal Transceiver is disabled when the Vehicle Security Alarm is active.

# Troubleshooting Tips

If you are having trouble programming HomeLink, here are some of the most common solutions:

- Replace the battery in the Garage Door Opener handheld transmitter.
- Push the LEARN button on the Garage Door Opener to complete the training for a Rolling Code.
- Did you unplug the device for programming and remember to plug it back in?

### WARNING!

- Vehicle exhaust contains carbon monoxide, a dangerous gas. Do not run your vehicle in the garage while programming the transceiver. Exhaust gas can cause serious injury or death.
- Your motorized door or gate will open and close while you are programming the universal transceiver. Do not program the transceiver if people, pets or other objects are in the path of the door or gate. Only use this transceiver with a garage door opener that has a "stop and reverse" feature as required by Federal safety standards. This includes most garage door opener models manufactured

(Continued)

# WARNING! (Continued)

after 1982. Do not use a garage door opener without these safety features. Call toll-free 1-800-355-3515 or, on the Internet at HomeLink.com for safety information or assistance.

## **General Information**

This device complies with Part 15 of the FCC Rules and with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference, and
- 2. This device must accept any interference received, including interference that may cause undesired operation.

**NOTE:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

# UNDERSTANDING THE FEATURES OF YOUR VEHICLE 261

## POWER SUNROOF — IF EQUIPPED

The power sunroof switch is located between the sun visors on the overhead console.



034141878

**Power Sunroof Switch** 

## **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.

## WARNING! (Continued)

• 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.

## **Opening Sunroof** — Express

Push the switch rearward and release it within one-half second and the sunroof will open automatically from any position. The sunroof will open fully and stop automatically. This is called "Express Open". During Express Open operation, any other actuation of the sunroof switch will stop the sunroof.

# Opening Sunroof — Manual Mode

To open the sunroof, push and hold the switch rearward to full open. Any release of the switch will stop the

(Continued)

movement. The sunroof and sunshade will remain in a partially opened condition until the sunroof switch is pushed again.

## Closing Sunroof — Express

Press 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.

# Closing Sunroof — Manual Mode

To close the sunroof, push and hold the switch in the forward 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.

## Pinch Protect Feature

This feature will detect an obstruction in the opening of the sunroof during 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 movement of the switch will stop the sunroof.

# **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.

# 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.

## **Sunroof Maintenance**

Use only a nonabrasive cleaner and a soft cloth to clean the glass panel.

## **Ignition Off Operation**

#### NOTE:

- The power sunroof switch can remain active in Accessory Delay for up to approximately ten minutes after the vehicles ignition is placed to the Off position. Opening either front door will cancel this feature.
- This feature is programmable using the Uconnect System. Refer to "Uconnect Settings" in "Understanding Your Instrument Panel" for further information.

### Relearn Procedure

For vehicles equipped with a single-pane sunroof, there is a relearn procedure that allows you to calibrate the sunroof when the "Auto Up" feature stops working. To reset the sunroof, follow these steps:

- 1. Set the ignition to the ACC ON/RUN position.
- 2. Ensure that the sunroof is in the Fully Closed position.
- 3. Press and hold the Close switch. The sunroof will hit the hard stop and move to the Vent position after 10 seconds.
- 4. Release the Close switch, then press and hold the Close switch again within 5 seconds to begin the teaching process. The sunroof will complete one full cycle and return to the Fully Closed position.

**NOTE:** If the Close switch is released anytime during the teach cycle, the procedure will need to be repeated starting from the first step.

5. Once the sunroof has stopped in the Fully Closed position, release the Close switch. The sunroof is now reset and ready to use.

## COMMANDVIEW SUNROOF WITH POWER SHADE — IF EQUIPPED

The CommandView sunroof switch is located to the left between the sun visors on the overhead console.

The power shade switch is located to the right between the sun visors on the overhead console.



034433149

CommandView Sunroof And Power Shade Switches

## **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

## WARNING! (Continued)

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.

(Continued)

# Opening Sunroof — Express

Push the switch rearward and release it within one-half second. The sunroof and sunshade will open automatically from any position. The sunroof and sunshade will open fully and stop automatically. This is called "Express Open." During Express Open operation, any other actuation of the sunroof switch will stop the sunroof.

## Opening Sunroof — Manual Mode

To open the sunroof, push and hold the switch rearward to full open. 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.

## Closing Sunroof — Manual Mode

To close the sunroof, push and hold the switch in the forward 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.

# **Opening Power Shade** — Express

Push the shade switch rearward and release it within one-half second and the shade will open automatically from any position. The shade will open and stop automatically at the half-open position. Push the shade switch rearward again and release it within one-half second and the shade will open automatically to the full-open position. This is called "Express Open". During Express Open operation, any movement of the shade switch will stop the shade.

## Opening Power Shade — Manual Mode

To open the shade, push and hold the switch rearward. The shade will open and stop automatically at the half-open position. Push and hold the shade switch rearward again and the shade will open automatically to the full-open position. Any release of the switch will stop the movement and the shade will remain in a partially opened condition until the switch is pushed again.

# Closing Power Shade — Express

Push the switch forward and release it within one-half second and the shade will close automatically from any position. If the sunroof is completely closed the shade will close fully and stop automatically. This is called "Express Close". During Express Close operation, any movement of the switch will stop the shade.

**NOTE:** If the sunroof is open, the shade will close to the half-open position. Pushing the shade close button again will automatically close both the sunroof and shade completely.

## Closing Power Shade — Manual Mode

To close the shade, push and hold the switch in the forward position. Any release of the switch will stop the movement and the shade will remain in a partially closed condition until the switch is pushed again.

# **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 movement of the switch will stop the sunroof.

**NOTE:** If the sunshade is in the closed position when the vent switch is pushed, the sunshade will automatically cycle to the halfway open position prior to the sunroof opening to the Vent position.

## Pinch Protect Feature

This feature will detect an obstruction in the opening of the sunroof during 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.

# 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 3 with the sunroof open, adjust the sunroof opening to minimize the buffeting or open any window.

## **Sunroof Maintenance**

Use only a non-abrasive cleaner and a soft cloth to clean the glass panel.

# **Ignition Off Operation**

## NOTE:

• The power sunroof switch can remain active in Accessory Delay for up to approximately ten minutes after the vehicles ignition is placed to the Off position. Opening either front door will cancel this feature.

• This feature is programmable using the Uconnect System. Refer to "Uconnect Settings" in "Understanding Your Instrument Panel" for further information.

#### **ELECTRICAL POWER OUTLETS**

Your vehicle is equipped with 12 Volt (13 Amp) power outlets that can be used to power cellular phones, small electronics and other low powered electrical accessories. The power outlets are labeled with either a "key" or a "battery" symbol to indicate how the outlet is powered. Power outlets labeled with a "key" are powered when the ignition is in the ON or ACC position, while the outlets labeled with a "battery" are connected directly to the battery and powered at all times.

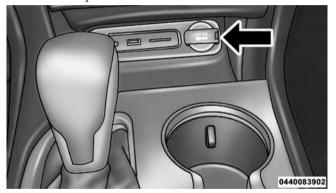
#### NOTE:

- All accessories connected to the "battery" powered outlets should be removed or turned off when the vehicle is not in use to protect the battery against discharge.
- To ensure proper cigar lighter operation, a MOPAR knob and element must be used.

## **CAUTION!**

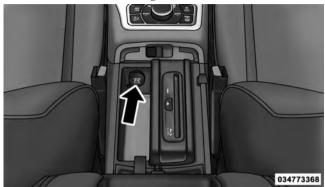
Power outlets are designed for accessory plugs only. Do not insert any other object in the power outlets as this will damage the outlet and blow the fuse. Improper use of the power outlet can cause damage not covered by your New Vehicle Limited Warranty.

The front power outlet is located inside the storage area on the center stack of the instrument panel. Push inward on the storage lid to open the compartment and gain access to this power outlet.



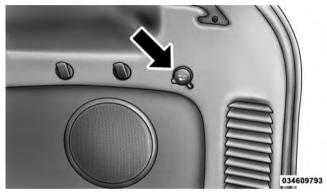
Front Power Outlet

In addition to the front power outlet, there is also a power outlet located in the storage area of the center console.



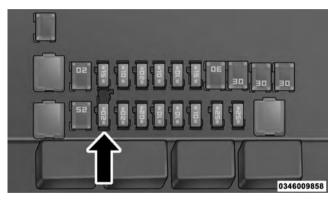
Center Console Outlet

The rear power outlet is located in the right rear cargo area.

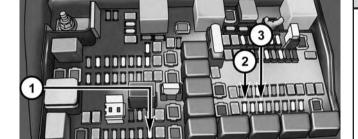


**Rear Power Outlet** 

**NOTE:** The rear power outlet can be switched from switched "ignition" only to constant "battery" powered all the time. See your local authorized dealer for details.



Power Outlet Right Rear Quarter Panel Fuse



#### **Power Outlet Fuse Locations**

034605063

- 1 F104 Fuse 20 Amp Yellow Power Outlet Console Bin
- 2 F90–F91 Fuse 20 Amp Yellow Power Outlet Right Rear Quarter Panel
- 3 F93 Fuse 20 Amp Yellow Cigar Lighter Instrument Panel

## **WARNING!**

To avoid serious injury or death:

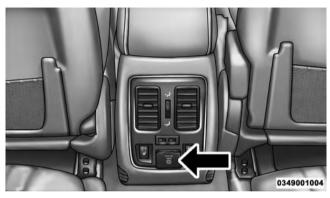
- Only devices designed for use in this type of outlet should be inserted into any 12 Volt outlet.
- Do not touch with wet hands.
- Close the lid when not in use and while driving the vehicle.
- If this outlet is mishandled, it may cause an electric shock and failure.

## **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 degrade the battery even more quickly. Only use these intermittently and with greater 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.

### POWER INVERTER — IF EQUIPPED

There is a 115 Volt, 150 Watt inverter outlet located on the back of the center console to convert DC current to AC current. This outlet can power cellular phones, electronics and other low power devices requiring power up to 150 Watts. Certain high-end video games consoles will exceed this power limit, as will most new computers and power tools.



Power Inverter

The power inverter is designed with built-in overload protection. If the power rating of 150 Watts is exceeded, the power inverter will automatically shut down. Once the electrical device has been removed from the outlet the inverter should automatically reset. To avoid overloading

the circuit, check the power ratings on electrical devices prior to using the inverter.

#### **WARNING!**

To avoid serious injury or death:

- 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.

## **CUPHOLDERS**

There are two cupholders for the front seat passengers located in the center console.



0351042347

Front Cupholders

There are two cupholders for the rear seat passengers located in the fold-down center armrest.



Rear Cupholders

## **STORAGE**

# **Glove Compartment**

The glove compartment is located on the right side of the instrument panel.



**Glove Compartment** 

To open the glove compartment, pull outward on the latch and lower the glove compartment door.



**Opened Glove Compartment** 

# **Door Storage**

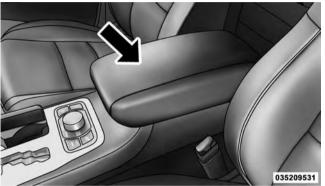
Large storage areas are built into the door panels for easy access.



**Door Panel Storage** 

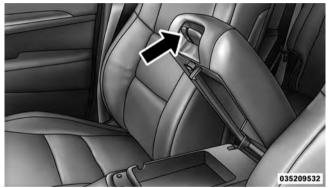
## **Console Features**

The center console contains both an upper and a lower storage area.



**Storage Compartment** 

To open the upper storage compartment, pull upward on the small latch located on the lid.



**Storage Compartment Latches** 

Lift upward on the larger of the latches to access the lower storage compartment.



**Lower Storage Compartment** 

Your vehicle may have an optional CD or DVD player located in the center console.



Lower Storage Compartment CD/DVD Player — If Equipped

## **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.

### **CARGO AREA FEATURES**

# Rechargeable Flashlight

The rechargeable flashlight is mounted on the left side of the cargo area. The flashlight snaps out of the bezel when needed. The flashlight features two bright LED light bulbs and is powered by rechargeable lithium batteries that recharge when snapped back into place.

Push in on the flashlight to release it.



**Push And Release** 

To operate the flashlight, push the switch once for high, twice for low, and a third time to return to off.



035410217

Three-Push Switch

# **Cargo Storage Bins**

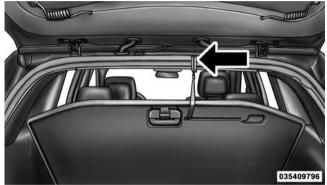
There are up to four removable storage bins located in the rear cargo area. There are two storage bins located on either side of the cargo area.

NOTE: If your vehicle is equipped with a rear sub- Two additional storage bins are located under the load woofer, the passenger side cargo area will not be available.

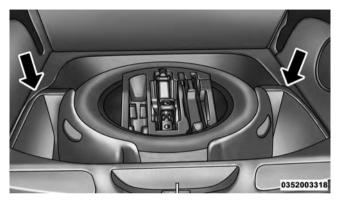


Rear Storage Bin

floor. To access the lower storage bins, raise the load floor and attach the tether hook (attached to the bottom of the load floor) to the liftgate opening.



**Tether Strap** 



**Lower Storage Bins** 

# Retractable Cargo Area Cover — If Equipped

**NOTE:** The purpose of this cover is for privacy, not to secure loads. It will not prevent cargo from shifting or protect passengers from loose cargo.

To cover the cargo area:

- 1. Grasp the cover at the center handle. Pull it over the cargo area.
- 2. Insert the pins on the ends of the cover into the slots in 3 the pillar trim cover.
- 3. The liftgate may be opened with the cargo cover in place.



Rear Cargo Cover

## **WARNING!**

In a collision, a loose cargo cover in the vehicle could cause injury. It could fly around in a sudden stop and strike someone in the vehicle. Do not store the cargo cover on the cargo floor or in the passenger compartment. Remove the cover from the vehicle when taken from its mounting. Do not store it in the vehicle.

## **Rear Cargo Tie-Downs**

The rear cargo tie-downs, located on the cargo area floor, should be used to safely secure loads when the vehicle is moving.



Rear Cargo Tie-Downs

## **WARNING!**

- To help protect against personal injury, passengers should not be seated in the rear cargo area. The rear cargo space is intended for load carrying purposes only, not for passengers, who should sit in seats and use seat belts.
- Cargo tie-down hooks are not safe anchors for a child seat tether strap. In a sudden stop or accident, a hook could pull loose and allow the child seat to come loose. A child could be badly injured. Use only the anchors provided for child seat tethers.

(Continued)

## WARNING! (Continued)

The weight and position of cargo and passengers can change the vehicle center of gravity and vehicle handling. To avoid loss of control resulting in personal injury, follow these guidelines for loading your vehicle:

- Do not carry loads which exceed the load limits described on the label attached to the left door or left door center pillar.
- Always place cargo evenly on the cargo floor. Put heavier objects as low and as far forward as possible.
- Place as much cargo as possible in front of the rear axle. Too much weight or improperly placed weight over or behind the rear axle can cause the rear of the vehicle to sway.

## WARNING! (Continued)

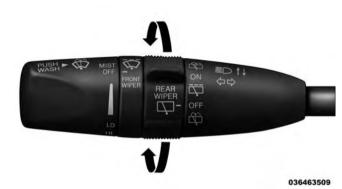
• Do not pile luggage or cargo higher than the top of the seatback. This could impair visibility or become a dangerous projectile in a sudden stop or accident.

## **REAR WINDOW FEATURES**

# Rear Window Wiper/Washer

The rear wiper/washer controls are located on the multifunction lever on the left side of the steering column. The rear wiper/washer is operated by rotating a switch, located at the middle of the lever.

(Continued)



### Rear Wiper/Washer Control

Rotate the center portion of the lever upward to the first detent for intermittent operation and to the second detent for continuous rear wiper operation.

Rotating the center portion upward once more will activate the washer pump which will continue to operate as long as the switch is held. Upon

release of the switch, the wipers will resume the continuous rear wiper operation. When this rotary control is in the OFF position, rotating it downward will activate the rear washer pump which will continue to operate as long as the switch is held. Once the switch is released it will **3** return to the OFF position and the wipers will cycle several times before returning to the parked position.

**NOTE:** As a protective measure, the pump will stop if the switch is held for more than 20 seconds. Once the switch is released the pump will resume normal operation.

If the rear wiper is operating when the ignition is turned OFF, the wiper will automatically return to the "park" position.

#### **Rear Window Defroster**

The rear window defroster button is located on the climate control panel. Push this button to turn on the rear window defroster and the heated outside mirrors (if equipped). An indicator in the button will illuminate when the rear window defroster is on. The rear window defroster automatically turns off after approximately 10 minutes. For an additional five minutes of operation, push the button a second time.

**NOTE:** To prevent excessive battery drain, use the rear window defroster only when the engine is operating.

### **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.

### **CAUTION!** (Continued)

- 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.

#### ROOF LUGGAGE RACK — IF EQUIPPED

The crossbars and siderails are designed to carry the weight on vehicles equipped with a luggage rack. The load must not exceed 150 lbs (68 kg), and should be uniformly distributed over the luggage rack crossbars.

**NOTE:** If not equipped with crossbars, your authorized dealer can order and install MOPAR crossbars built specifically for this roof rack system.

Distribute cargo weight evenly on the roof rack crossbars. The roof rack does not increase the total load carrying capacity of the vehicle. Be sure the total load of cargo

inside the vehicle plus that on the external rack does not exceed the maximum vehicle load capacity.

To move the crossbars, loosen the attachments, located at the upper edge of each crossbar, approximately eight turns using the anti-theft wrench provided with the MOPAR crossbars. Then, move the crossbar to the desired position, keeping the crossbars parallel to the rack frame. Once the crossbar is in the desired position, retighten the with the wrench to lock the crossbar into position.

#### NOTE:

• To help control wind noise when the crossbars are not in use, place the front and rear crossbars approximately 24 in (61 cm) apart. Optimal noise reduction can then be achieved by adjusting the front crossbar forward or aft using increments of 1 in (2.5 cm).

• If (or any metallic object) is placed over the satellite radio antenna (if equipped), you may experience interruption of satellite radio reception. For improved satellite radio reception, avoid placing the rear crossbar over the satellite radio antenna.

#### **CAUTION!**

• To prevent damage to the roof of your vehicle, do not carry any loads on the roof rack without the crossbars installed. The load should be secured and placed on top of the crossbars, not directly on the roof. If it is necessary to place the load on the roof, place a blanket or some other protection between the load and the roof surface.

(Continued)

### **CAUTION!** (Continued)

- To avoid damage to the roof rack and vehicle, do not exceed the maximum roof rack load capacity of 150 lb (68 kg). Always distribute heavy loads as evenly as possible and secure the load appropriately.
- Long loads which extend over the windshield, such as wood panels or surfboards, or loads with large frontal area should be secured to both the front and rear of the vehicle.
- Travel at reduced speeds and turn corners carefully when carrying large or heavy loads on the roof rack. Wind forces, due to natural causes or nearby truck traffic, can add sudden upward lift to a load. This is especially true on large flat loads and may result in damage to the cargo or your vehicle.

#### **WARNING!**

Cargo must be securely tied before driving your vehicle. Improperly secured loads can fly off the vehicle, particularly at high speeds, resulting in personal injury or property damage. Follow the roof rack cautions when carrying cargo on your roof rack.

# UNDERSTANDING YOUR INSTRUMENT PANEL

## **CONTENTS**

■ INSTRUMENT PANEL FEATURES	□ Engine Oil Life Reset
■ INSTRUMENT CLUSTER — PREMIUM296	□ DID Messages
■ WARNING AND INDICATOR LIGHTS	□ DID Selectable Menu Items
□ Red Telltale Indicator Lights	□ Screen Setup Driver Selectable Items
□ Yellow Telltale Indicator Lights	■ CYBERSECURITY
□ Green Telltale Indicator Lights	■ UCONNECT SETTINGS
□ Blue Telltale Indicator Light	□ Buttons On The Faceplate
$\hfill\Box$ White Telltale Indicator Light	$\hfill\Box$ Buttons On The Touchscreen
DRIVER INFORMATION DISPLAY (DID)	□ Customer Programmable Features —
□ DID Displays	Uconnect 5.0 Personal Settings

292 UNDERSTANDING YOUR INSTRUMENT PANEL	
□ Customer Programmable Features — Uconnect 8.4 Settings	□ Listen To An Audio Source While A Video Is Playing
■ UCONNECT RADIOS — IF EQUIPPED	□ Important Notes For Dual Video Screen System
■ UCONNECT MULTIMEDIA — VIDEO ENTERTAINMENT SYSTEM (VES) —	□ Blu-Ray Player Remote Control – If Equipped
IF EQUIPPED	□ Locking The Remote Control
□ Getting Started	$\hfill\Box$ Replacing The Remote Control Batteries
□ Blu-ray Disc Player	☐ Headphones Operation
□ DVD Player	□ Controls
□ Play Video Games	$\hfill\Box$ Replacing The Headphone Batteries
□ Dual Video Screen	☐ Unwired Stereo Headphone Lifetime Limited
□ Play A DVD Using The VES Player (If	Warranty
Equipped)	■ STEERING WHEEL AUDIO CONTROLS — IF EQUIPPED

AND LINDEDOTANDING VOLID INCTDUMENT DANIE

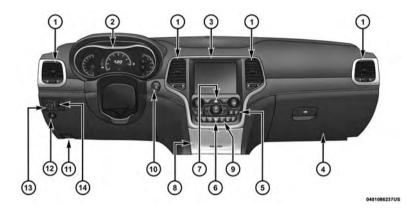
	UNDERSTANDING YOUR INSTRUMENT PANEL 293
□ Radio Operation	□ Introducing Uconnect
□ CD Player	□ Get Started
■ CD/DVD DISC MAINTENANCE427	□ Basic Voice Commands
■ RADIO OPERATION AND MOBILE PHONES428	□ Radio
□ Regulatory And Safety Information	□ Media
■ CLIMATE CONTROLS	□ Phone
□ General Overview	□ Voice Text Reply
□ Climate Control Functions	□ Climate (8.4A/8.4AN)
□ Automatic Temperature Control (ATC)438	□ Navigation (8.4A/8.4AN)
□ Operating Tips	□ Uconnect Access (8.4A/8.4AN)
■ PERSONALIZED MENU BAR	□ Vehicle Health Alert
■ UCONNECT VOICE RECOGNITION QUICK	□ Register (8.4A/8.4AN)
TIPS	□ Mobile App (8.4A/8.4AN)

LINDEDSTANDING VOLID INSTRUMENT DANIEL 202

□ Voice Texting (8.4A/8.4AN)	□ Do Not Disturb
□ Yelp (8.4A/8.4AN)	□ General Information
□ SiriusXM Travel Link (8.4A/8.4AN)	$\hfill\Box$ Additional Information
$\square$ Siri Eyes Free — If Equipped	

294 UNDERSTANDING YOUR INSTRUMENT PANEL

#### **INSTRUMENT PANEL FEATURES**

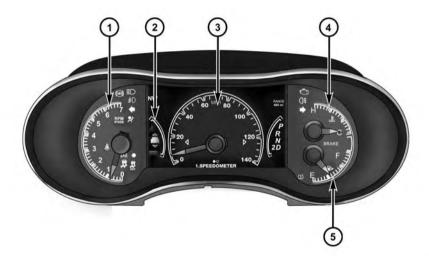


- 1 Air Outlet
- 2 Instrument Cluster
- 3 Radio
- 4 Glove Compartment
- 5 Climate Controls

- 6 Lower Switch Bank
- 7 Hazard Switch
- 8 Storage Bin (SD Card, AUX, USB Media Hub)
- 9 ESC Button
- 10 Ignition Switch

- 11 Hood Release
- 12 Fuel Door Release
- 13 Headlight Switch
- 14 Dimmer Control

#### **INSTRUMENT CLUSTER — PREMIUM**



0403083434

**Premium DID Instrument Cluster** 

#### 1. Tachometer

• Indicates the engine speed in revolutions per minute (RPM x 1000).

### 2. Driver Information Display (DID)

• The Driver Information Display (DID) features a driver-interactive display. Refer to "Driver Information Display (DID)" in "Understanding Your Instrument Panel" for further information.

### 3. Speedometer

• Indicates vehicle speed

### 4. Temperature Gauge

• The temperature gauge shows engine coolant temperature. Any reading within the normal range indicates that the engine cooling system is operating satisfactorily.

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

#### 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.

#### **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, see "Maintaining Your Vehicle". Follow the warnings under the Cooling System Pressure Cap paragraph.

### 5. 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 door is located.

#### WARNING AND INDICATOR LIGHTS

**IMPORTANT:** The warning / indicator light switches on in the instrument panel together with a dedicated message and/or acoustic signal when applicable. These indications are indicative and precautionary and as such must not be considered as exhaustive and/or alternative to the information contained in the Owner Manual, which you are advised to read carefully in all cases. 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 Telltale Indicator Lights**

### Seat Belt Reminder Warning Light

Red Telltale Light	What It Means
*	Seat Belt Reminder Warning Light When the ignition switch is first turned to ON/RUN, this light will turn on for four to eight seconds as a bulb check. During the bulb check, if the driver's seat belt is unbuckled, a chime will sound. After the bulb check or when driving, if the driver's seat belt remains unbuckled, the Seat Belt Reminder Light will flash or remain on continuously and a chime will sound. Refer to "Occupant Restraints" in "Things To Know Before Starting Your Vehicle" for further information.

## Air Bag Warning Light

Red Telltale Light	What It Means
*	Air Bag Warning Light This 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 startup, stays on, or turns on while driving, have the system inspected at an authorized dealer as soon as possible. This light will illuminate with a single chime when a fault with the Air Bag Warning Light has been detected, it will stay on until the fault is cleared. If the light comes on intermittently or remains on while driving, have an authorized dealer service the vehicle immediately. Refer to "Occupant Restraints" in "Things To Know Before Starting Your Vehicle" for further information.

### **Brake Warning Light**

Red Telltale Light	What It Means
BRAKE	Brake Warning Light This 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 reservoir.
United States	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
Canada	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 two 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.

## Vehicle Security Warning Light — If Equipped

Red Telltale Light	What It Means	
•	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.	

### Oil Pressure Warning Light

Red Telltale Light	What It Means
~ <del>~</del>	Oil Pressure Warning Light This light indicates low engine oil pressure. If the light turns on while driving, stop the vehicle and shut off the engine as soon as possible. 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.

## **Engine Temperature Warning Light**

Red Warning Light	What It Means
T.	Engine Temperature Warning Light This light warns of an overheated engine condition. As engine coolant temperatures rise and the gauge approaches H, this indicator will illuminate and a single chime will sound after reaching a set threshold. Further overheating will cause a continuous chime sound for 4 minutes, or until the engine is allowed to cool, whichever comes first.  If the light turns on while driving, safely pull over and stop the vehicle. If the 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 "What To Do In Emergencies" for further information.

## Oil Temperature Warning Light

Red Telltale Light	What It Means
E,	Oil Temperature Warning Light This telltale indicates engine oil temperature is high. If the light turns on while driving, stop the vehicle and shut off the engine as soon as possible.

## **Charging System Warning Light**

Red Telltale Light	What It Means
<del></del>	Charging System Warning Light This light shows the status of the electrical charging system. If the light stays on or comes on while driving, turn off some of the vehicle's nonessential electrical devices or increase engine speed (if at idle). If the charging system light remains on, it means that the vehicle is experiencing a problem with the charging system. Obtain SERVICE IMMEDIATELY. See an authorized dealer.  If jump starting is required, refer to "Jump Starting Procedures" in "What To Do In Emergencies."

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

Red Telltale Light	What It Means
)43((	Electronic Throttle Control (ETC) Warning Light This light informs you of a problem with the Electronic Throttle Control (ETC) system. If a problem is detected while the engine is running, the light will either stay on or flash depending on the nature of the problem. Cycle the ignition key 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 engine running, your vehicle will usually be drivable; however, see an authorized dealer for service as soon as possible.  If the light continues to flash when the engine 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 first turned to ON/RUN 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.

### Electric Power Steering Fail Warning — If Equipped

Red Telltale Light	What It Means
⊖!	Electric Power Steering Fail Warning — If Equipped This light is used to manage the electrical warning of the EPS (Power Steering System). Refer to "Power Steering" in "Starting and Operating" for further information.

## Door Open Warning Light

Red Telltale Light	What It Means
<b>₽</b>	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.

## Liftgate Open Warning Light

Red Telltale Light	What It Means	
	Liftgate Open Warning Light This indicator will turn when the liftgate is open. NOTE:	
	If the vehicle is moving, there will also be a single chime.	

### Transmission Temperature Warning Light

Red Telltale Light	What It Means
0	Transmission Temperature Warning Light This light indicates that the transmission fluid temperature is running hot. This may occur with severe usage. If this light turns on, safely pull over and stop the vehicle. Then, shift the transmission into NEUTRAL and run the engine at idle or faster until the light turns off.

### **CAUTION!**

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

#### 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.

### **Hood Open Warning Light**

	Red Telltale Light	What It Means
	$\sim$	Hood Open Warning Light This indicator will illuminate when the hood is ajar/open and not fully closed.
		NOTE: If the vehicle is moving, a single chime will sound.

### **Yellow Telltale Indicator Lights**

### Engine Check/Malfunction Indicator Light (MIL)

Yellow Telltale Light	What It Means
<b>(</b>	Engine Check/Malfunction Indicator 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. The light will illuminate when the ignition is in the ON position before engine start. If the bulb does not come on when turning the key 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 sev- eral 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 ser- viced as soon as possible if this occurs.

#### **CAUTION!**

Prolonged driving with the Malfunction Indicator Light (MIL) on could cause damage to the engine 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.

#### **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.

### Electronic Stability Control (ESC) Indicator Light — If Equipped

Yellow Telltale Light	What It Means
<b>1</b>	<ul> <li>Electronic Stability Control (ESC) Indicator Light — If Equipped The "ESC Indicator Light" in the instrument cluster will come on when the ignition switch is turned to the ON/RUN position. 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 light remains on after several ignition cycles, and the ve- hicle has been driven several miles (kilometers) at speeds greater than 30 mph (48 km/h), see your authorized dealer as soon as possible to have the problem diagnosed and corrected.</li> <li>The "ESC Off Indicator Light" and the "ESC Indicator Light" come on momentarily each time the ignition switch is turned to ON/RUN.</li> <li>Each time the ignition is turned to ON/RUN, the ESC system will be ON, even if it was turned off previously.</li> <li>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.</li> </ul>

### Electronic Stability Control (ESC) OFF Indicator Light — If Equipped

Yellow Telltale Light	What It Means
A SOFF	Electronic Stability Control (ESC) OFF Indicator Light — If Equipped This light indicates the Electronic Stability Control (ESC) is off.

### Tire Pressure Monitoring Indicator Light

Yellow Telltale Light	What It Means
(I)	Tire Pressure Monitoring Indicator 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 in sequence.

**IMPORTANT:** Do not continue driving with one or more flat tires as handling may be compromised. Stop the vehicle, avoiding sharp braking and steering. Repair immediately using the dedicated tire repair kit and contact your authorized dealership 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 dealership to have your sensor function checked.

### Anti-Lock Brake (ABS) Indicator Light

Yellow Telltale Light	What It Means
(@)	Anti-Lock Brake (ABS) Indicator Light This light monitors the Anti-Lock Brake System (ABS). The light will turn on when the ignition switch is placed in the 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. However, the conventional brake system will continue to operate normally if the brake warning light is not on.  If the ABS light is on, the brake system should be serviced as soon as possible to restore the benefits of Anti-Lock Brakes. If the ABS light does not turn on when the ignition switch is placed in the ON/RUN position, have the light inspected by an authorized dealer.

## Loose Fuel Filler Cap Indicator Light — If Equipped

Yellow Telltale Light	What It Means
50	Loose Fuel Filler Cap Indicator Light — If Equipped  This light will illuminate when fuel filler cap is loose. Properly close the filler cap to disengage the light. If the light does not turn off, please see your authorized dealer.

### Low Fuel Indicator Light

Yellow Telltale Light	What It Means
<b>I</b>	Low Fuel Indicator Light When the fuel level reaches approximately 1.5 gal (5.8 L) this light will turn on, and remain on until fuel is added.

## Service Stop/Start System Indicator Light — If Equipped

Yellow Telltale Light	What It Means	
(A)!	Service Stop/Start System Indicator Light — If Equipped This telltale will turn on to indicate the Stop/Start system is not functioning properly and service is required.	

### Forward Collision Indicator Light — If Equipped

Yellow Telltale Light	What It Means
<b>≱!</b>	Forward Collision Indicator Light — If Equipped  This telltale will turn on to warn you of a possible collision with the vehicle in front of you.

## Forward Collision Warning Off Indicator Light — If Equipped

Yellow Telltale Light	What It Means
OFF	Forward Collision Off Indicator Light — If Equipped This light indicates the Forward Collision Warning is off.

### Low Washer Fluid Indicator Light — If Equipped

Yellow Telltale Light	What It Means
	Low Washer Fluid Indicator Light — If Equipped This indicator will illuminate when the windshield washer fluid is low.

## Adaptive Cruise Control Alert Indicator Light — If Equipped

Yellow Telltale Light	What It Means	
₹!	Adaptive Cruise Control Alert Indicator Light This light will turn on when the ACC is not operating and needs service. For further information, refer to "Adaptive Cruise Control (ACC)" in "Understanding The Features Of Your Vehicle."	

## Service 4WD Indicator Light — If Equipped

Yellow Telltale Light	What It Means
SERV 4WD	Service 4WD Indicator Light  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.

## 4WD Low Indicator Light — If Equipped

Yellow Telltale Light	What It Means
4WD LOW	4WD Low Indicator Light  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.

# Air Suspension Light — If Equipped

Yellow Telltale Light	What It Means
٨	Air Suspension Light This light will illuminate when the air suspension system is activated.
$\rightleftharpoons$	

# **Green Telltale Indicator Lights**

# Park/Headlight ON Indicator Light

Green Telltale Light	What It Means
₹0 0€	Park/Headlight ON Indicator Light This indicator will illuminate when the park lights or headlights are turned on.

# Front Fog Indicator Light — If Equipped

Green Telltale Light	What It Means
<b>≱</b> D	Front Fog Indicator Light — If Equipped This indicator will illuminate when the front fog lights are on.

# **Turn Signal Indicator Lights**

Green Tell- tale Light	What It Means
<b>44</b>	Turn Signal Indicator Lights  The instrument cluster directional arrow will flash independently for the LEFT or RIGHT turn signal as selected, as well as the exterior turn signal lamp(s) (front and rear) as selected when the multifunction lever is moved down (LEFT) or up (RIGHT).
44	<ul> <li>NOTE:</li> <li>A continuous chime will sound if the vehicle is driven more than 1 mile (1.6 km) with either turn signal on.</li> <li>Check for an inoperative outside light bulb if either indicator flashes at a rapid rate.</li> </ul>

# Stop/Start Active Indicator Light — If Equipped

Green Telltale Light	What It Means	
(A)	Stop/Start Active Indicator Light — If Equipped This telltale will illuminate when the Stop/Start function is in "Autostop" mode.	

## Cruise Control Engaged Indicator Light

Green Telltale Light	What It Means
গ	Cruise Control Engaged Indicator Light This light will turn on when the cruise control has been engaged.

# Adaptive Cruise Control (ACC) Distance Setting Display Light — If Equipped

Green Telltale Light	What It Means
	Adaptive Cruise Control (ACC) Distance Setting Display Light This will display the distance setting for the ACC system. Refer to "Adaptive Cruise Control (ACC)" in "Understanding The Features Of Your Vehicle" for further information.

# **Sport Mode Indicator Light**

Green Telltale Light	What It Means
P	Sport Mode Indicator Light This light will turn on when Sport Mode is active.

# **Blue Telltale Indicator Light**

# High Beam Indicator Light

Blue Telltale Light	What It Means
<b>≣</b> D	High Beam Indicator Light  This indicator shows that the high beam headlights are on. Push the multifunction control lever away from you to switch the headlights to high beam. Pull the lever toward you to switch the headlights back to low beam. Pull the lever toward you for a temporary high beam on, "flash to pass" scenario.

# White Telltale Indicator Light

# **Electronic Speed Control ON Indicator Light**

White Telltale Light	What It Means
(?)	Electronic Speed Control ON Indicator Light This light will turn on when the electronic speed control is ON.

# Adaptive Cruise Control (ACC) On Light — If Equipped

White Telltale Light	What It Means	
	Adaptive Cruise Control (ACC) On Light This light will turn on when the Adaptive Cruise Control is ON. Refer to "Adaptive Cruise Control (ACC)" in "Understanding The Features Of Your Vehicle" for further information.	

# Hill Decent Control (HDC) Indicator Light — If Equipped

White Telltale Light	What It Means
Ç.	Hill Decent Control (HDC) Indicator Light  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 30 mph (48 km/h). If these conditions are not met while attempting to use the HDC feature, the HDC indicator light will flash on/off.

# Selec Speed Control Indicator Light — If Equipped

White Telltale Light	What It Means
	Selec Speed Control Indicator Light This light will turn on when "Selec Speed Control" is activated. To activate "Selec Speed Control", assure the vehicle is Four Wheel Drive Low (4WD) and push the button on the Instrument Panel.
	<b>NOTE:</b> If the vehicle is not in 4WD Low, "To Enter Selec-Speed Shift to 4WD Low" will appear in the EVIC or DID.

## DRIVER INFORMATION DISPLAY (DID)

The Driver Information Display (DID) features a driverinteractive display that is located in the instrument cluster.



Driver Information Display (DID) Location

The DID Menu items consists of the following:

- Speedometer Main Gauge
- Vehicle Info
- Terrain If Equipped
- Driver Assist If Equipped
- Fuel Economy
- Trip
- Stop/Start If Equipped
- Audio
- Navigation If Equipped
- Stored Messages
- Screen Setup
- Speed Warning If Equipped

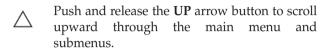
#### 334 UNDERSTANDING YOUR INSTRUMENT PANEL

The system allows the driver to select information by pushing the following buttons mounted on the steering wheel:

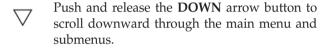


**DID Buttons** 

#### • UP Arrow Button



#### • DOWN Arrow Button



#### • RIGHT Arrow Button

Push and release the **RIGHT** arrow button to access the information screens or submenu screens of a main menu item.

#### • LEFT Arrow Button

Push and release the LEFT arrow button to access the information screens or submenu screens of a main menu item.

#### OK Button

The **OK** button may be used for the following: Selection

Reset (hold)

Clearing (push)

## **DID Displays**

The DID displays are located in the center portion of the cluster and consist of multiple sections:

- 1. Main Screen The inner ring of the display will illuminate in grey under normal conditions, yellow for non critical warnings, red for critical warnings, and white for on demand information.
- 2. Audio Information and Sub-menu Information Whenever there are submenus available, the position within the submenus is shown here.
- 3. Reconfigurable Telltales/Information

- 4. Telltales/Indicators
- 5. Gear Selector Status (PRNDL)
- 6. Selectable Information (Compass, Temp, Range to Empty, Trip A, Trip B, Average Fuel Economy, Current Fuel Economy)
- 7. Air Suspension Status If Equipped
- 8. AWD Status If Equipped
- 9. Selectable Gauge 1

The main display area will normally display the main menu or the screens of a selected feature of the main menu. The main display area also displays "pop up" messages that consist of approximately 60 possible warning or information messages. These pop up messages fall into several categories:

### • Five Second Stored Messages

When the appropriate conditions occur, this type of message takes control of the main display area for five seconds and then returns to the previous screen. Most of the messages of this type are then stored (as long as the condition that activated it remains active) and can be reviewed from the "Messages" main menu item. Examples of this message type are "Right Front Turn Signal Lamp Out" and "Low Tire Pressure."

## • Unstored Messages

This message type is displayed indefinitely or until the condition that activated the message is cleared. Examples of this message type are "Turn Signal On" (if a turn signal is left on) and "Lights On" (if driver leaves the vehicle).

#### Unstored Messages Until RUN

These messages deal primarily with the Remote Start feature. This message type is displayed until the ignition

is in the RUN state. Examples of this message type are "Remote Start Aborted - Door Ajar" and "Press Brake Pedal and Push Button to Start."

#### • Five Second Unstored Messages

When the appropriate conditions occur, this type of message takes control of the main display area for five seconds and then returns to the previous screen. An example of this message type is "Automatic High Beams On."

## **Engine Oil Life Reset**

#### Oil Change Required

Your vehicle is equipped with an engine oil change indicator system. The "Oil Change Required" message will display in the DID for five seconds after a single chime has sounded, to indicate the next scheduled oil change interval. The engine oil change indicator system

is duty cycle based, which means the engine oil change interval may fluctuate, dependent upon your personal driving style.

Unless reset, this message will continue to display each time you cycle the ignition to the ON/RUN position. To turn off the message temporarily, push and release the **OK** button. To reset the oil change indicator system (after performing the scheduled maintenance), refer to the following procedure.

#### Oil Change Reset Procedure

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

3. Without pushing the brake pedal, push and release 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.

#### Secondary Method For Oil Change Reset

- Without depressing the brake pedal, push and release the ENGINE START/STOP button and place the ignition to the ON/RUN position (do not start the engine).
- 2. Navigate to "Oil Life" submenu in "Vehicle Info" on DID.
- 3. Push and Hold the  $\mathbf{OK}$  button until the gauge resets to 100%

# 338 UNDERSTANDING YOUR INSTRUMENT PANEL

# **DID Messages**

Includes the following, but not limited to:

- Front Seatbelts Unbuckled
- Driver Seat Belt Unbuckled
- Passenger Seat Belt Unbuckled
- Traction Control Off
- Washer Fluid Low
- Oil Pressure Low
- Oil Change Due
- Fuel Low
- Service Anti-lock Brake System
- Service Electronic Throttle Control
- Service Power Steering

- Cruise Off
- Cruise ReadyACC Override

XX"

- Cruise Set To XXX MPH
- Tire Pressure Screen With Low Tire(s) "Inflate Tire to
- Service Tire Pressure System
- Speed Warning Set to XXX MPH
- Speed Warning Exceeded
- Parking Brake Engaged
- Brake Fluid Low
- Service Electronic Braking System
- Engine Temperature Hot

- Lights On
- Right Front Turn Signal Light Out
- Right Rear Turn Signal Light Out
- Left Front Turn Signal Light Out
- Left Rear Turn Signal Light Out
- Ignition or Accessory On
- Vehicle Not In Park
- Remote Start Active Push Start Button
- Remote Start Canceled Fuel Low
- Remote Start Canceled Too Cold
- Remote Start Canceled Door Open
- Remote Start Canceled Hood Open
- Remote Start Canceled Liftgate Open

- Remote Start Canceled Time Expired
- Remote Start Disabled Start To Reset
- Service Air Bag System
- Service Air Bag Warning Light
- Door Open
- Doors Open
- Liftgate Open
- Hood Open
- Shift Not Allowed
- Vehicle Speed Too High To Shift to D
- Vehicle Speed is Too High to Shift to R
- Vehicle Speed is Too High to Shift to P
- Service Transmission

#### 340 UNDERSTANDING YOUR INSTRUMENT PANEL

- Service Shifter
- Service Air Suspension System
- Normal Ride Height Achieved
- Aerodynamic Ride Height Achieved
- Off Road 1 Ride Height Achieved
- Off Road 2 Ride Height Achieved
- Entry/Exit Ride Height Achieved
- Selected Ride Height Not Permitted
- Service Air Suspension System Immediately
- Reduce Speed To Maintain Selected Ride Height
- Air Suspension System Cooling Down Please Wait
- Vehicle Cannot Be Lowered Door Open
- Air Suspension Temporarily Disabled

• Engine To Change Ride Height

The Reconfigurable Telltales section is divided into the white telltales area on the right, amber telltales in the middle, and red telltales on the left.

#### **DID Selectable Menu Items**

Push and release the UP  $\triangle$  or DOWN  $\nabla$  arrow buttons until the desired Selectable Menu icon/title is highlighted in the DID.

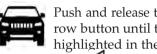
#### Speedometer



Push and release the UP  $\triangle$  or DOWN  $\nabla$  arrow button until the Speedometer icon is displayed in the DID. Push and release the LEFT  $\triangleleft$  or RIGHT  $\triangleright$  arrow button to se-

lect the analog or digital type of speedometer display. Push and release the OK button to toggle units (mph or km/h) of the speedometer.

#### Vehicle Info (Customer Information Features)



Push and release the UP  $\triangle$  or DOWN  $\nabla$  arrow button until the Vehicle Info icon/title is highlighted in the DID. Push and release the LEFT or RIGHT arrow button to scroll

through the information submenus and push and release the **OK** button to select or reset the resettable submenus:

Tire Pressure

**Coolant Temperature** 

Transmission Temperature

Oil Temperature

Oil Pressure

Oil Life

#### **Battery Voltage**

## Selec-Terrain — If Equipped



Push and release the UP  $\triangle$  or **DOWN**  $\nabla$  arrow button until the Terrain display icon/title is highlighted in the DID. Push and release the RIGHT or LEFT arrow button to display the Selec-Terrain, Air Suspension, Drivetrain, and

Wheel Articulation.

## Driver Assist — If Equipped



Push and release the UP  $\triangle$  or DOWN  $\nabla$  arrow button until the Driver Assist display icon/title is highlighted in the DID. For further information, refer to "Adaptive

Cruise Control (ACC) — If Equipped" in "Understanding The Features Of Your Vehicle."

## **Fuel Economy**

Push and release the UP  $\triangle$  or DOWN  $\nabla$  arrow button until the Fuel Economy Menu icon/title is highlighted. Push and hold the OK button to reset feature. Push the LEFT or RIGHT arrow button to select the different Fuel Economy sections. The Fuel Economy screen may be on the same screen as the Current Fuel Economy.

- Current MPG or L/100 km
- Average MPG or L/100 km
- Range To Empty

#### Trip



Push and release the UP  $\triangle$  or DOWN  $\nabla$  arrow button until the Trip icon/title is highlighted in the DID, then press and release the LEFT or RIGHT arrow button to select Trip A or Trip B.

The Trip A and Trip B information will display the following:

- Distance
- Average Fuel Economy
- Elapsed Time

Hold the **OK** button to reset all the information.

## Stop/Start — If Equipped



Push and release the UP  $\triangle$  or DOWN  $\nabla$  arrow button until the Stop/Start icon/title is highlighted in the DID. The screen will display the Stop/Start status.

#### Audio



Push and release the UP  $\triangle$  or DOWN  $\nabla$  arrow button until the Audio Menu icon/title is highlighted in the DID.

## Navigation — If Equipped

Push and release the  $UP \triangle$  or  $DOWN \nabla$  arrow button



until the Navigation Menu icon/title is highlighted in the DID. This feature allows you to see the turn-by-turn display when destination is set in Head Unit.

#### **Stored Messages**

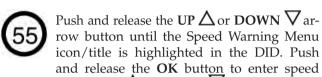
Push and release the UP \( \triangle \) or DOWN \( \sqrt{ arrow button} \) until the Messages Menu icon/title is highlighted in the DID. This feature shows the number of stored warning messages. Pushing the RIGHT \( \triangle \) arrow button will allow

you to see what the stored messages are.

## Screen Setup

Push and release the UP  $\triangle$  or DOWN  $\nabla$  arrow button until the Screen Setup Menu icon/title is highlighted in the DID. Push and release the OK button to enter the submenus and follow the prompts on the screen as needed. 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.

## Speed Warning — If Equipped



warning. Use the UP  $\triangle$  or DOWN  $\nabla$  arrow button to select a desired speed, then push and release the OK button to set the speed. The Manual Speed Assist (MSA) Speed Warning telltale will display in the DID, and a chime will sound with a pop up warning message when the set speed is exceeded.

# Screen Setup Driver Selectable Items

## Gear Display

- Full (default setting)
- Single

#### **Current Gear**

- On
- Off (default setting)

## Gear Display — If Equipped

- Standard (PRND)
- Single Character

### **Upper Left**

- None
- Compass (default setting)
- Outside Temp
- Time
- Range
- Fuel Economy Average

- Fuel Economy Current
- Trip A
- Trip B

#### **Upper Right**

- None
- Compass
- Outside Temp (default setting)
- Time
- Range To Empty (RTE)
- Fuel Economy Average
- Fuel Economy Current
- Trip A
- Trip B

## Defaults (Restores All Settings To Default Settings)

- Cancel
- Restore

#### Favorite Menus — Equipped

- Speedometer
- Vehicle Info
- Terrain (show/hide)
- Driver Assist (show/hide)
- Fuel Economy (show/hide)
- Trip (show/hide)
- Stop/Start
- Audio (show/hide)
- Stored Messages

#### 346 UNDERSTANDING YOUR INSTRUMENT PANEL

- Screen Setup
- Speed Warning

The menu with (show/hide) means user can press OK button to choose show or hide this menu on the DID display.

#### **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 US LLC, 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.

(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.

#### 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:
  - Routinely check www.driveuconnect.com/softwareupdate to learn about available Uconnect software updates.
  - 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 "Privacy Practices – If Equipped with Uconnect 8.4 radio" in "All About Uconnect Access" in your Owner's Manual Radio Supplement and "Onboard Diagnostic System (OBD II) Cybersecurity" in "Maintaining Your Vehicle".

#### **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 that allow you to access and change the customer programmable features. Many features can vary by vehicle.



Uconnect 5.0 Buttons On Touchscreen And Buttons On Faceplate

- 1 Uconnect Buttons On The Touchscreen
- 2 Uconnect Buttons On The Faceplate



Uconnect 8.4A/8.4AN Buttons On Faceplate And Buttons On Touchscreen

- 1 Uconnect Buttons On The Touchscreen
- 2 Uconnect Buttons On The Faceplate

#### **Buttons On The Faceplate**

Buttons on the faceplate are located below the Uconnect system in the center of the instrument panel. In addition, there is a Scroll/Enter control knob located on the right side of the Climate Controls in the center of the instrument panel. Turn the control knob to scroll through menus and change settings (i.e., 30, 60, 90), push the center of the control knob one or more times to select or change a setting (i.e., ON, OFF).

Your Uconnect system may also have Screen Off and Back buttons located below the Uconnect system.

Push the Screen Off button to turn off the Uconnect touchscreen. Push the Screen Off button a second time to turn the touchscreen on.

Push the Back button to exit out of a Menu or certain option on the Uconnect system.

#### **Buttons On The Touchscreen**

Buttons on the touchscreen are accessible on the Uconnect display.

# Customer Programmable Features — Uconnect 5.0 Personal Settings

Push the MORE button on the faceplate to display the menu setting screen. In this mode the Uconnect system allows you to access programmable features that may be equipped such as Display, Voice, Clock & Date, Safety & Assistance, Lights, Doors & Locks, Auto-On Comfort, Engine Off Options, Compass Settings, Audio, Phone/Bluetooth, Sirius Setup, Restore Settings, Clear Personal Data, and System Information.

**NOTE:** Only one touchscreen area may be selected at a time.

When making a selection, press the button on the touchscreen to enter the desired mode. Once in the desired mode, press and release the preferred setting and make your selection. Once the setting is complete, either press the Back Arrow/Done button on the touchscreen or the Back button on the faceplate 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 right side of the screen will allow you to toggle up or down through the available settings.

**NOTE:** All settings should be changed with the ignition in the "Run" position.

## Display

After pressing the "Display" button on the touchscreen the following settings will be available.

#### • Display Mode

When in this display you may select the "Auto" or "Manual" display settings. To change Mode status, press

and release the "Auto" or "Manual" button on the touchscreen. Then press the arrow back button on the touchscreen.

NOTE: When Day or Night 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

When in this display, you may select the overall screen brightness with the headlights on. Adjust the brightness with the "+" and "-" setting buttons on the touchscreen or by selecting any point on the scale between the "+" and "-" buttons on the touchscreen.

**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" positions.

## • Display Brightness With Headlights OFF

When in this display, you may select the overall screen brightness with the headlights off. Adjust the brightness with the "+" and "-" setting buttons on the touchscreen or by selecting any point on the scale between the "+" and "-" buttons on the touchscreen.

**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" positions.

## Set Language

When in this display, you may select one of multiple languages (English/Français/Español) for all display nomenclature, including the trip functions and the navigation system (if equipped). Press the "Set Language" button on the touchscreen, then press the desired language button on the touchscreen.

## • Touchscreen Beep

When in this display, you may turn on or shut off the sound heard when a button on the touchscreen is pressed. Press the "Touchscreen Beep" button on the touchscreen then select from "on" or "off."

#### Units

After pressing the "Units" button on the touchscreen you may select each unit of measure independently displayed in the Driver Information Display (DID), and navigation system (if equipped). The following selectable units of measure are listed below:

#### Speed

Select from: "MPH" or "km/h."

#### • Distance

Select from: "mi" or "km."

#### • Fuel Consumption

Select from: "MPG" (US), "MPG" (UK), "L/100 km" or "km/L."

#### • Pressure

Select from: "psi," "kPa," or "bar."

### • Temperature

Select from: "°C," or "°F."

#### Voice

After pressing the "Voice" button on the touchscreen the following settings will be available:

## • Voice Response Length

When in this display, you may change the Voice Response Length settings. To change the Voice Response Length, press the "Voice Response Length" button on the touchscreen and select from "Brief" or "Long."

#### Show Command List

When in this display, you may change the Show Command List settings. To change the Show Command List settings, press the "Show Command List" button on the touchscreen and select from "Always," "With Help" or "Never."

#### Clock & Date

After pressing the "Clock & Date" button on the touchscreen the following settings will be available:

#### • Set Time & Format

When in this display, you may set the time and format manually. Press the "Set Time" button then choose from a "12 hour" or "24 hour format." Press the corresponding arrow above and below the current time to adjust, then select "AM" or "PM."

#### Set Date

When in this display, you may set the date manually. Press the "Set Date" button then press the corresponding arrows above and below the current date to adjust.

#### Safety/Assistance

After pressing the "Safety/Assistance" button on the touchscreen the following settings will be available:

#### ParkSense

The ParkSense system will scan for objects behind the vehicle when the transmission shift lever/gear selector is in REVERSE and the vehicle speed is less than 11 mph (18 km/h). It will provide an alert (audible and/or visual) to indicate the proximity to other objects. The system can be enabled with Sound Only, or Sound and Display. To change the ParkSense status, press and release the "Sound Only" or "Sounds and Display" button. Refer to "ParkSense" in "Understanding The Features Of Your Vehicle" for system function and operating information.

#### • Tilt Mirrors In Reverse

When this feature is selected, the exterior sideview mirrors will tilt downward when the ignition is in the RUN position and the transmission shift lever/gear selector is in the REVERSE position. The mirrors will move back to their previous position when the transmission is shifted out of REVERSE. To make your selection, press the "Tilt Mirrors In Reverse" button on the touch-screen and make your selection.

#### • ParkView Backup Camera Active Guidelines

Your vehicle may be equipped with the ParkView Rear Back Up Camera Active Guidelines that allows you to see active guidelines over the ParkView Back up camera display whenever the shift lever/gear selector is put into REVERSE. The image will be displayed on the radio touchscreen display along with a caution note to "check entire surroundings" across the top of the screen. After five seconds, this note will disappear. To make your

selection, press the "ParkView Backup Camera Active Guidelines" button on the touchscreen and make your selection.

#### • ParkView Backup Camera Delay

When the vehicle is shifted out of REVERSE (with camera delay turned OFF), the rear camera mode is exited and the navigation or audio screen appears again. When the vehicle is shifted out of REVERSE (with camera delay turned ON), the rear view image with dynamic grid lines will be displayed for up to 10 seconds after shifting out of "RE-VERSE" unless the forward vehicle speed exceeds 8 mph (12 km/h), the transmission is shifted into PARK or the ignition is switched to the OFF position. To set the ParkView Backup Camera Delay push the MORE button on the faceplate, the "settings" button on the touchscreen, then the "Safety & Driving Assistance" button on the touchscreen. Press the "Parkview Backup camera Delay" button on the touchscreen to turn the ParkView Delay ON or OFF.

### • Rain Sensing Auto Wipers

When this feature is selected, the system will automatically activate the windshield wipers if it senses moisture on the windshield. To make your selection, press the "Rain Sensing" button on the touchscreen and make your selection.

#### • Hill Start Assist — If Equipped

When this feature is selected, the Hill Start Assist (HSA) system is active. Refer to "Electronic Brake Control System" in "Starting And Operating" for system function and operating information. To make your selection, press the "Hill Start Assist" button on the touchscreen and make your selection.

## • Paddle Shifters — If Equipped

When this feature is selected, the paddle shifters can be enabled or disabled. Select the "Enable" or "Disable" button on the touchscreen.

## • Steering Feel Options — If Equipped

The Steering Feel Options feature will allow you to adjust the steering effort and feel. Press the "Sport" button on the touchscreen to provide the greatest amount of steering feel, requiring the highest amount of steering effort. Press the "Normal" button on the touchscreen to provide greater steering feel, requiring greater steering effort. Press the "Comfort" button on the touchscreen to provide a balance of steering feel and steering effort.

# • Forward Collision Warning — If Equipped

The Front Collision Warning (FCW) feature provides an audible and/or visual warning to potential forward collisions. The feature can be can be set to Far, Medium or Near. The default status of FCW is the Far setting. This means the system will warn you of a possible collision with the vehicle in front of you when you are farther away. This gives you the most reaction time. To change the setting for more dynamic driving, select the Near setting. This warns you of a possible collision when you are much closer to the vehicle in front of you. To change the FCW status, press and release the "Near", "Medium" or "Far" button.

For further information, refer to "Adaptive Cruise Control (ACC)" in "Understanding The Features Of Your Vehicle".

# • Forward Collision Warning (FCW) Active Braking — If Equipped

The FCW system includes Advanced Brake Assist (ABA). When this feature is selected, the ABA applies additional brake pressure when the driver requests insufficient brake pressure to avoid a potential frontal collision. The ABA system becomes active at 5 mph (8 km/h). To make your selection, press the "Forward Collision Warning (FCW) with Mitigation - Active Braking" button on the touchscreen, indicating that the setting had been selected.

For further information, refer to "Forward Collision Warning (FCW) With Mitigation" in "Understanding The Features Of Your Vehicle."

## • Lane Departure Warning (LDW) — If Equipped

The Lane Departure Warning (LDW) sets the distance at which the steering wheel will provide feedback for potential lane departures. The LDW sensitivity can be set to provide either an early, medium or late warning zone start point. To make your selection, touch the "Lane Departure Warning" soft-key, until a check-mark appears next to setting, indicating that the setting had been selected. Touch the back arrow soft-key to return to the previous menu.

# • Lane Departure Warning (LDW) Strength — If Equipped

When this feature is selected, it sets the strength of the steering wheel feedback for potential lane departures. The amount of directional torque the steering system can apply to the steering wheel to correct for vehicle lane departure can be set at Low, Medium or High. To make your selection, touch the "Lane Departure Warning" soft-key until a check-mark appears next to setting, indicating that the setting had been selected. Touch the back arrow soft-key to return to the previous menu.

#### • Rear ParkSense Chime Volume

The Rear ParkSense Chime Volume settings can be selected from the DID or Uconnect System — if equipped. The chime volume settings include LOW, MEDIUM, and HIGH. The factory default volume setting is MEDIUM. To make your selection, press the "ParkSense Rear Chime Volume" button on the touchscreen, indicating that the

setting had been selected. ParkSense will retain its last known configuration state through ignition cycles.

#### • Rear ParkSense Braking Assist

To make your selection, press the "Rear ParkSense Braking Assist" button on the touchscreen, indicating that the setting had been selected.

**NOTE:** When this feature is selected, the ParkSense system will detect objects located behind the vehicle and utilize autonomous braking to help stop the vehicle (only enabled when ParkSense is also on). Refer to "ParkSense Rear Braking Assist" in "Understanding The Features Of Your Vehicle" for system function and operating information.

## • Blind Spot Alert

When this feature is selected, the Blind Spot Alert feature Provides alerts, visual and/or audible, to indicate objects in your blind spot. The Blind Spot Alert feature can be activated in "Lights" mode. When this mode is selected, the Blind Spot Monitor (BSM) system is activated and will only show a visual alert in the exterior mirrors. When "Lights & Chime" mode is activated, the Blind Spot Monitor (BSM) will show a visual alert in the exterior mirrors as well as an audible alert when the turn signal is on. When "Off" is selected, the Blind Spot Monitor (BSM) system is deactivated. To change the

**NOTE:** If your vehicle has experienced any damage in the area where the sensor is located, even if the fascia is not damaged, the sensor may have become misaligned. Take your vehicle to an authorized dealer to verify sensor alignment. Having a sensor that is misaligned will result in the BSM not operating to specification.

Blind Spot Alert status, press the "Off," "Lights" or

"Lights & Chime" button on the touchscreen.

## Lights

After pressing the "Lights" button on the touchscreen the following settings will be available.

#### • Headlights Off Delay

When this feature is selected, it allows the adjustment of the amount of time the headlights remain on after the engine is shut off. To change the Headlights Off Delay setting, press the "Headlight Off Delay" button on the touchscreen, and choose either 0 sec, 30 sec, 60 sec or 90 seconds.

#### • Headlight Illumination On Approach

When this feature is selected, it allows the adjustment of the amount of time the headlights remain on after the doors are unlocked with the Remote Keyless Entry (RKE) transmitter. To change the Illuminated Approach status, press the "Illuminated Approach" button and choose either 0 sec, 30 sec, 60 sec or 90 seconds.

# • Headlights With Wipers — If Equipped

When this feature is selected, and the headlight switch is in the AUTO position, the headlights will turn on approximately 10 seconds after the wipers are turned on. The headlights will also turn off when the wipers are turned off if they were turned on by this feature. To make your selection, press the "Lights w/Wipers" button on the touchscreen and make your selection.

# • Auto High Beams — If Equipped

When this feature is selected, the high beam headlights will activate/deactivate automatically under certain conditions. To make your selection, press the "Auto High Beams" button on the touchscreen and make your selection. Refer to "Automatic High Beam Headlamp Control — If Equipped" in "Understanding The Features Of Your Vehicle" for further information.

# • Daytime Running Lights — If Equipped

When this feature is selected, the headlights will turn on whenever the engine is running. To make your selection, press the "Daytime Running Lights" button on the touchscreen and make your selection.

## • Flash Lights w/Lock

When this feature is selected, the exterior lights will flash when the doors are locked or unlocked with the Remote Keyless Entry (RKE) transmitter or the Passive Entry Feature. To make your selection, press the "Flash Lights w/Lock" button on the touchscreen and select from "On" or "Off."

#### Doors & Locks

After pressing the "Doors & Locks" button on the touchscreen the following settings will be available.

#### • Auto Door Locks

When this feature is selected, all doors will lock automatically when the vehicle reaches a speed of 15 mph (24 km/h). To make your selection, press the "Auto Door Locks" button on the touchscreen and select from "On" or "Off."

#### • Auto Unlock On Exit

When this feature is selected, all doors will unlock when the vehicle is stopped and the transmission is in the PARK or NEUTRAL position and the driver's door is opened. To make your selection, press the "Auto Unlock On Exit" button on the touchscreen and select from "On" or "Off."

## • Flash Lights w/Lock

When this feature is selected, the exterior lights will flash when the doors are locked or unlocked with the Remote Keyless Entry (RKE) transmitter or the Passive Entry Feature. To make your selection, press the "Flash Lights w/Lock" button on the touchscreen and select from "On" or "Off."

#### • Horn w/Lock

When this feature is selected, the horn will sound when the Key Fob Lock button is pressed. To make your selection, press the "Sound Horn With Lock" button on the touchscreen and select from "Off," "1st Press," or "2nd Press."

## • Horn w/Remote Start — If Equipped

When this feature is selected, the horn will sound when the remote start is activated. To make your selection, press the "Horn w/Remote Start" button on the touchscreen and select from "On" or "Off."

#### • Remote Door Unlock

When "Remote Door Unlock" is selected, you may choose from "Driver" or "All." Select "All" to have all doors unlock with the first push of the Key Fob. Select "Driver" to have the only the driver door open with the first push of the key fob.

**NOTE:** Passive Entry — If Equipped. If "All" is selected, all doors will unlock no matter which Passive Entry door handle is grasped. If "Driver" is selected, only the driver's door will unlock when the driver's door is grasped.

## • *Passive Entry*

This feature allows you to lock and unlock the vehicle's door(s) without having to press the Remote Keyless Entry (RKE) transmitter lock or unlock buttons. To make your selection, press the "Passive Entry" button on the

touchscreen and select from "On" or "Off. Refer to "Keyless Enter-N-Go" in "Things To Know Before Starting Your Vehicle" for further information.

# • Memory Linked to Fob — If Equipped

This feature provides automatic driver seat positioning to enhance driver mobility when entering and exiting the 4 vehicle. To make your selection, press the "Memory Linked to Fob" button on the touchscreen and select from "On" or "Off."

**NOTE:** The seat will return to the memorized seat location if "Memory Linked to Fob" is set to (ON) when the Remote Keyless Entry (RKE) transmitter is used to unlock the door. Refer to "Driver Memory Seat" in "Understanding The Features Of Your Vehicle" for further information.

# • Power Lift Gate Alert — If Equipped

This feature plays an alert when the power lift gate is raising or lowering. To make your selection, press the "Power Lift Gate Alert" button on the touchscreen and select from "On" or "Off."

## Auto Comfort Systems — If Equipped

After pressing the "Auto-On Comfort & Remote Start" button on the touchscreen the following settings will be available:

# • Auto-On Driver Heated/Ventilated Seat & Steering Wheel With Vehicle Start — If Equipped

When this feature is selected the driver's heated seat and heated steering wheel will automatically turn ON when temperatures are below  $40^{\circ}$  F (4.4° C). When temperatures are above  $80^{\circ}$  F (26.7° C) the driver vented seat will

turn ON. To make your selection, press the "Auto Heated Seats" button on the touchscreen, then select either "Off," "Remote Start" or "All Starts."

# **Engine Off Options**

After pressing the "Engine Off Options" button on the touchscreen the following settings will be available.

## • Easy Exit Seats — If Equipped

When this feature is selected, the Driver's seat will automatically move rearward once the engine is shut off. To make your selection, press the "Easy Exit Seats" button on the touchscreen and make your selection.

## • Headlight Off Delay

When this feature is selected, the driver can choose to have the headlights remain on for 0, 30, 60, or 90 seconds when exiting the vehicle. Press the "Headlight Off Delay" button on the touchscreen and choose from "0," "30," "60," or "90" seconds to select your desired time interval.

# • Engine Off Power Delay

When this feature is selected, the power window switches, radio, Uconnect phone system (if equipped), DVD video 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. Press the "Engine Off Power Delay" button on the touchscreen and choose from "0 sec," "45 sec," "5 min" or "10 min" to select your desired time interval.

## • Auto Entry/Exit — If Equipped

When this feature is selected, it automatically lowers the vehicle ride height position when shifted into park. Press the "Auto Entry/Exit" button on the touchscreen and choose from "On" or "Off."

## Compass Settings — If Equipped

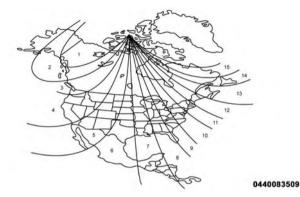
After pressing the "Compass Settings" button on the touchscreen the following settings will be available:

**NOTE:** Before compass calibration is performed, the compass variance zone should be set for best results.

#### • Compass Variance

Press "Compass Variance" on the touchscreen to change this setting. You will then be able to select a compass variance of 1 through 15 per the compass variance zone map figure.

Compass Variance is the difference between Magnetic North and Geographic North. To compensate for the differences the variance should be set for the zone where the vehicle is being driven, illustrated in the zone map. Once properly set, the compass will automatically compensate for the differences when calibrated, and provide the most accurate compass headings.



Compass Variance Zone Map

## • Compass Calibration

Press "Compass Calibration" on the touchscreen to enter calibration. To start calibration of the compass, press the "YES" button on the touchscreen and complete one or more 360-degree turns (in an area free from large metal or

metallic objects). A message will appear on the touchscreen when the compass has been successfully calibrated.

**NOTE:** Keep magnetic materials away from the top of the instrument panel, such as Mobile Phones, Laptops and Radar Detectors. This is where the compass module is located, and it can cause interference with the compass sensor, and it may give false readings.

#### Audio

After pressing the "Audio" button on the touchscreen the following settings will be available:

## • Equalizer

When in this display you may adjust the Bass, Mid and Treble settings. Adjust the settings with the "+" and "-" buttons on the touchscreen or by selecting any point on the scale between the "+" and "-" buttons on the touchscreen.

#### • Balance/Fade

This 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.

## • Speed Adjusted Volume

This feature increases or decreases volume relative to vehicle speed. To change the Speed Adjusted Volume press the "Speed Adjusted Volume" button on the touch-screen and select from "Off," "1," "2" or "3" buttons on the touch-screen.

# • Surround Sound — If Equipped

This feature provides simulated surround sound mode. To make your selection, press the "Surround Sound" button on the touchscreen, select "On" or "Off."

# • AUX Volume Offset — If Equipped

This feature provides the ability to tune the audio level for portable devices connected through the AUX input. To make your selection, press the "AUX Volume Offset" button on the touchscreen, select "On" or "Off."

## • Loudness — If Equipped

This feature improves sound quality at lower volumes. To make your selection, press the "Loudness" button on the touchscreen, select "On" or "Off."

#### Phone/Bluetooth

After pressing the "Phone/Bluetooth" button on the touchscreen the following settings will be available:

#### • Paired Devices

This feature shows which phones are paired to the Phone/Bluetooth system. For further information, refer to your Uconnect Supplement Manual.

# SiriusXM Setup — If Equipped

After pressing the "SiriusXM Setup" button on the touchscreen, the following settings will be available:

## • Channel Skip

SiriusXM can be programmed to designate a group of channels that are the most desirable to listen to or to exclude undesirable channels while scanning. To make your selection, press the "Channel Skip" button on the touchscreen, select the channels you would like to skip followed by pressing the back arrow button on the touchscreen.

#### • Subscription Information

New vehicle purchasers or lessees will receive a free limited time subscription to SiriusXM Satellite Radio with your radio. Following the expiration of the free services, it will be necessary to access the information on the Subscription Information screen to re-subscribe.

Press the "Subscription Info" button on the touchscreen to access the Subscription Information screen.

Write down the SIRIUS ID numbers for your receiver. To reactivate your service, either call the number listed on the screen or visit the provider online.

**NOTE:** SiriusXM Travel Link is a separate subscription and is available for U.S. residents only.

## **Restore Settings**

After pressing the "Restore Settings" button on the touchscreen the following settings will be available:

## • Restore Settings

When this feature is selected it will reset the Display, Clock, Audio, and Radio Settings to their default settings. To restore the settings to their default setting, press the Restore Settings button. A pop-up will appear asking "Are you sure you want to reset your settings to default?"

select "Yes" to restore, or "Cancel" to exit. Once the settings are restored, a pop up appears stating "settings reset to default."

#### Clear Personal Data

After pressing the "Clear Personal Data Settings" button on the touchscreen the following settings will be available:

#### • Clear Personal Data

When this feature is selected it will remove personal data including Bluetooth devices and presets. To remove personal information, press the "Clear Personal Data" button and a pop-up will appear asking "Are you sure you want to clear all personal data?" select "Yes" to Clear, or "Cancel" to exit. Once the data has been cleared, a pop up appears stating "Personal data cleared".

## **System Information**

After pressing the "System Information" button on the touchscreen the following information will be available:

## • System Information

When System Information is selected, a System Information screen will appear displaying the system software version.

## **Customer Programmable Features — Uconnect** 8.4 Settings

Press the "Apps **①**" button, then press the "Settings" button on the touchscreen to display the menu setting screen. In this mode the Uconnect system allows you to access programmable features that may be equipped such as Display, Voice, Clock, Safety & Driving Assistance, Lights, Doors & Locks, Auto-On Comfort, Engine Off Options, Audio, Phone/ Bluetooth, SiriusXM Setup, Restore Settings, Clear Personal Data, and System Information.

#### NOTE:

- Only one touchscreen area may be selected at a time.
- Depending on the vehicles options, feature settings may vary.

When making a selection, press the button on the touch-

screen to enter the desired mode. Once in the desired mode, press and release the preferred setting "option" until a check-mark appears next to the setting, showing that setting has been selected. Once the setting is complete, either press the Back Arrow button on the touch-screen 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 button on the right side of the screen will allow you to toggle up or down through the available settings.

# Display

After pressing the "Display" button on the touchscreen the following settings will be available.

## • Display Mode

When in this display you may select one of the auto display settings. To change Mode status, select from "Day," "Night" or "Auto" until a check-mark appears next to the setting, showing that setting has been selected.

**NOTE:** When Day or Night 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

When in this display, you may select the brightness with the headlights on. Adjust the brightness with the "+" and "-" setting buttons on the touchscreen or by selecting any point on the scale between the "+" and "-" buttons on the touchscreen.

**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" positions.

# • Display Brightness With Headlights OFF

When in this display, you may select the brightness with the headlights off. Adjust the brightness with the "+" and "-" setting buttons on the touchscreen or by selecting any point on the scale between the "+" and "-" buttons on the touchscreen.

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" positions.

#### • Set Theme

This feature will allow you to choose a background 4 theme for the display screen. The theme will change the background color, highlight color, and button color of the display screen.

# • Set Language

When in this display, you may select one of multiple languages (English/Français/Español) for all display nomenclature, including the trip functions and the navigation system (if equipped). Press the "Set Language" button on the touchscreen, then select the desired language button on the touchscreen.

#### 370 UNDERSTANDING YOUR INSTRUMENT PANEL

## • Touchscreen Beep

When in this display, you may turn on or shut off the sound heard when button on the touchscreen is pressed. Press the "Touchscreen Beep" button on the touchscreen until a check-mark appears next to the setting, showing that setting has been selected.

#### • Controls Screen Time-Out

When in this display, you may turn on or shut off the ability for the controls screen to time out. Press the "Controls Screen Time-Out" button on the touchscreen until a check-mark appears next to the setting, showing that setting has been selected.

# • Navigation Turn-By-Turn Displayed In Cluster — If Equipped

When this feature is selected, To make your selection, press the "Navigation Turn-By-Turn Displayed In Cluster" button on the touchscreen, until a check-mark appears next to the setting, showing that setting has been selected.

#### Units

After pressing the "Units" button on the touchscreen you may select each unit of measure independently displayed in the Driver Information Display (DID), and navigation system (if equipped). The following selectable units of measure are listed below:

# Speed

Select from: "MPH" or "km/h."

#### • Distance

Select from: "mi" or "km."

#### • Fuel Consumption

Select from: "MPG" (US), "MPG" (UK), "L/100 km" or "km/L."

#### • Pressure

Select from: "psi," "kPa," or "bar."

## • Temperature

Select from: "°C," or "°F."

#### Voice

After pressing the "Voice" button on the touchscreen the following settings will be available:

## • Voice Response Length

When in this display, you may change the Voice Response Length settings. To change the Voice Response Length, press the "Brief" or "Detailed" button on the touchscreen until a check-mark appears next to the setting, showing that setting has been selected.

#### • Show Command List

When in this display, you may choose to Always, With Help, or Never display the Teleprompter with possible options while in a voice session. To change the Show Command List settings, press the "Always," "With Help," or "Never" button on the touchscreen until a check-mark appears next to the setting, showing that setting has been selected.

#### Clock

After pressing the "Clock" button on the touchscreen the following settings will be available:

## • Sync Time With GPS

This feature will allow the radio to sync time with a GPS signal. To change the Sync Time setting, press the "Sync time with GPS" button on the touchscreen until a checkmark appears next to the setting, showing that setting has been selected.

#### • Set Time Hours

This feature will allow you to adjust the hours. The "Sync time with GPS" button on the touchscreen must be unchecked. To make your selection, press the "+" or "–" buttons on the touchscreen to adjust the hours up or down.

#### • Set Time Minutes

This feature will allow you to adjust the minutes. The "Sync time with GPS" button on the touchscreen must be unchecked. To make your selection, press the "+" or "–" buttons on the touchscreen to adjust the minutes up or down.

#### • Time Format

This feature will allow you to select the time format display setting. Press the "Time Format" button on the touchscreen until a check-mark appears next to the "12 hrs" or "24 hrs" setting, showing that setting has been selected.

# • Show Time In Status Bar — If Equipped

This feature will allow you to turn on or shut off the digital clock in the status bar. To change the Show Time Status setting press the "Show Time in Status Bar" button on the touchscreen until a check-mark appears next to setting, indicating that the setting has been selected.

## Safety & Driving Assistance

After pressing the "Safety & Driving Assistance" button on the touchscreen the following settings will be available:

## • Forward Collision Warning — If Equipped

The Front Collision Warning (FCW) feature provides an audible and/or visual warning to potential forward collisions. The feature can be can be set to Far, Medium or Near. The default status of FCW is the Far setting. This means the system will warn you of a possible collision with the vehicle in front of you when you are farther away. This gives you the most reaction time. To change the setting for more dynamic driving, select the Near setting. This warns you of a possible collision when you are much closer to the vehicle in front of you. To change the FCW status, press and release the "Near", "Medium" or "Far" button.

For further information, refer to "Adaptive Cruise Control (ACC)" in "Understanding The Features Of Your Vehicle".

• Paddle Shifters — If Equipped

When this feature is selected, the paddle shifters can be enabled or disabled. Select the "Enable" or "Disable" 4 button on the touchscreen.

• Forward Collision Warning (FCW) Active Braking — If Equipped

The FCW system includes Advanced Brake Assist (ABA). When this feature is selected, the ABA applies additional brake pressure when the driver requests insufficient brake pressure to avoid a potential frontal collision. The ABA system becomes active at 5 mph (8 km/h). To make your selection, press the "Forward Collision Warning (FCW) with Mitigation - Active Braking" button on the touchscreen, until a check-mark appears next to setting, indicating that the setting had been selected. For further information, refer to "Forward Collision Warning (FCW) With Mitigation" in "Understanding The Features Of Your Vehicle."

# • Lane Departure Warning (LDW) — If Equipped

The Lane Departure Warning (LDW) sets the distance at which the steering wheel will provide feedback for potential lane departures. The LDW sensitivity can be set to provide either an early, medium or late warning zone start point. To make your selection, touch the "Lane Departure Warning" soft-key, until a check-mark appears next to setting, indicating that the setting had been selected. Touch the back arrow soft-key to return to the previous menu.

# • Lane Departure Warning (LDW) Strength — If Equipped

When this feature is selected, it sets the strength of the steering wheel feedback for potential lane departures. The amount of directional torque the steering system can

apply to the steering wheel to correct for vehicle lane departure can be set at Low, Medium or High. To make your selection, touch the "Lane Departure Warning" soft-key until a check-mark appears next to setting, indicating that the setting had been selected. Touch the back arrow soft-key to return to the previous menu.

#### • ParkSense

The ParkSense system will scan for objects behind the vehicle when the transmission shift lever is in REVERSE and the vehicle speed is less than 11 mph (18 km/h). It will provide an alert (audible and/or visual) to indicate the proximity to other objects. The system can be enabled with Sound Only, or Sound and Display. To change the ParkSense status, press and release the "Sound" or "Sound and Display" button. Refer to "ParkSense" in "Understanding The Features Of Your Vehicle" for system function and operating information.

#### **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.

#### • Front ParkSense Chime Volume

The Front ParkSense Chime Volume settings can be selected from the Driver Information Display (DID) or Uconnect System — if equipped. The chime volume settings include LOW, MEDIUM, and HIGH. The factory

default volume setting is MEDIUM. To make your selection, press the "ParkSense Front Chime Volume" button on the touchscreen, until a check-mark appears next to setting, indicating that the setting had been selected. ParkSense will retain its last known configuration state through ignition cycles.

#### • Rear ParkSense Chime Volume

The Rear ParkSense Chime Volume settings can be selected from the DID or Uconnect System — if equipped. The chime volume settings include LOW, MEDIUM, and HIGH. The factory default volume setting is MEDIUM. To make your selection, press the "ParkSense Rear Chime Volume" button on the touchscreen, until a check-mark appears next to setting, indicating that the setting had been selected. ParkSense will retain its last known configuration state through ignition cycles.

## • Rear ParkSense Braking Assist

To make your selection, press the "Rear ParkSense Braking Assist" button on the touchscreen, until a check-mark appears next to setting, indicating that the setting had been selected.

**NOTE:** When this feature is selected, the ParkSense system will detect objects located behind the vehicle and utilize autonomous braking to help stop the vehicle (only enabled when ParkSense is also on). Refer to "ParkSense Rear Braking Assist" in "Understanding The Features Of Your Vehicle" for system function and operating information.

#### • Tilt Side Mirrors In Reverse

When this feature is selected, the exterior side view mirrors will tilt downward when the ignition is in the RUN position and the transmission shift lever is in the REVERSE position. The mirrors will move back to their previous position when the transmission is shifted out of REVERSE. To make your selection, press the "Tilt Side Mirrors In Reverse" button on the touchscreen, until a check-mark appears next to setting, indicating that the setting had been selected.

## • Blind Spot Alert

When this feature is selected, the Blind Spot Alert feature Provides alerts, visual and/or audible, to indicate objects in your blind spot. The Blind Spot Alert feature can be activated in "Lights" mode. When this mode is selected, the Blind Spot Monitor (BSM) system is activated and will only show a visual alert in the exterior mirrors. When "Lights & Chime" mode is activated, the Blind Spot Monitor (BSM) will show a visual alert in the exterior mirrors as well as an audible alert when the turn signal is on. When "Off" is selected, the Blind Spot Monitor (BSM) system is deactivated. To change the Blind Spot Alert status, press the "Off," "Lights" or "Lights & Chime" button on the touchscreen.

NOTE: If your vehicle has experienced any damage in the area where the sensor is located, even if the fascia is not damaged, the sensor may have become misaligned. Take your vehicle to an authorized dealer to verify sensor alignment. Having a sensor that is misaligned will result in the BSM not operating to specification.

## • ParkView Backup Camera Active Guidelines

Your vehicle may be equipped with the ParkView Rear Back Up Camera Active Guidelines that allows you to see active guidelines over the ParkView Back up camera display whenever the shift lever is put into REVERSE. The image will be displayed on the radio touchscreen display along with a caution note to "check entire surroundings" across the top of the screen. After five seconds, this note will disappear. To change the mode status, press the "ParkView Backup Camera Active Guidelines" button on the touchscreen, until a check-mark appears next to setting, indicating that the setting had been selected.

## • ParkView Backup Camera Delay

When the vehicle is shifted out of REVERSE (with camera delay turned OFF), the rear camera mode is exited and the navigation or audio screen appears again. When the vehicle is shifted out of REVERSE (with camera delay turned ON), the rear view image with dynamic grid lines will be displayed for up to 10 seconds after shifting out of "REVERSE" unless the forward vehicle speed exceeds 8 mph (12 km/h), the transmission is shifted into "PARK" or the ignition is switched to the OFF position. To set the ParkView Backup Camera Delay press the "Controls" button on the touchscreen, the "settings" button on the touchscreen, then the "Safety & Driving Assistance" button on the touchscreen. Press the "Parkview Backup camera Delay" button on the touchscreen to turn the ParkView Delay ON or OFF.

## • Rain Sensing Auto Wipers

When this feature is selected, the system will automatically activate the windshield wipers if it senses moisture on the windshield. To make your selection, press the "Rain Sensing" button on the touchscreen, until a checkmark appears next to setting, indicating that the setting had been selected.

## • Hill Start Assist — If Equipped

When this feature is selected, the Hill Start Assist (HSA) system is active. Refer to "Electronic Brake Control System" in "Starting And Operating" for system function and operating information. To make your selection, press the "Hill Start Assist" button on the touchscreen, until a check-mark appears next to setting, indicating that the setting had been selected.

## • Steering Feel Options — If Equipped

The Steering Feel Options feature will allow you to adjust the steering effort and feel. Press the "Sport" button on the touchscreen to provide the greatest amount of steering feel, requiring the highest amount of steering effort. Press the "Normal" button on the touchscreen to provide greater steering feel, requiring greater steering effort. Press the "Comfort" button on the touchscreen to provide a balance of steering feel and steering effort.

# Lights

After pressing the Lights button on the touchscreen the following settings will be available.

# • Headlight Off Delay

When this feature is selected, it allows adjustment of the amount of time the headlights remain on after the engine is shut off. To change the Headlights Off Delay setting, press the "+" or "-" button on the touchscreen to select your desired time interval, and choose either 0 sec, 30 sec, 60 sec or 90 seconds.

## • Headlight Illumination On Approach

When this feature is selected, the headlights will activate and remain on for 0, 30, 60, or 90 seconds when the doors are unlocked with the Remote Keyless Entry (RKE) transmitter. To change the Illuminated Approach status, press the "+" or "-" button on the touchscreen to select your desired time interval.

## • Headlights With Wipers — If Equipped

When this feature is selected, and the headlight switch is in the AUTO position, the headlights will turn on approximately 10 seconds after the wipers are turned on. The headlights will also turn off when the wipers are turned off if they were turned on by this feature. To make your selection, press the Headlights With Wipers button on the touchscreen, until a check-mark appears next to setting, showing that setting has been selected.

# • Auto Dim High Beams — If Equipped

When this feature is selected, the high beam headlights will activate/deactivate automatically under certain conditions. To make your selection, press the "Auto High Beams" button on the touchscreen, until a check-mark appears next to setting, showing that setting has been selected. Refer to "Automatic High Beam Headlamp Control — If Equipped" in "Understanding The Features Of Your Vehicle" for further information.

# • Daytime Running Lights — If Equipped

When this feature is selected, the headlights will turn on whenever the vehicle is set in motion. To make your selection, press the "Daytime Running Lights" button on the touchscreen, until a check-mark appears next to setting, showing that setting has been selected.

#### • Flash Lights With Lock

When this feature is selected, the exterior lights will flash when the doors are locked or unlocked with the Remote Keyless Entry (RKE) transmitter. This feature may be selected with or without the sound horn on lock feature selected. To make your selection, press the "Flash Lights with Lock" button on the touchscreen, until a check-mark appears next to setting, showing that setting has been selected.

#### Doors & Locks

After pressing the Doors & Locks button on the touchscreen the following settings will be available.

#### • Auto Door Locks

When this feature is selected, all doors will lock automatically when the vehicle reaches a speed of 15 mph (24 km/h). To make your selection, press the "Auto Door Locks" button on the touchscreen, until a check-mark appears next to setting, showing that setting has been selected.

#### Auto Unlock On Exit

When this feature is selected, all doors will unlock when the vehicle is stopped, the transmission is in the PARK or NEUTRAL position and the driver's door is opened. To make your selection, press the "Auto Unlock on Exit" button on the touchscreen, until a check-mark appears next to setting, showing that setting has been selected.

# • Flash Lights With Lock

When this feature is selected, the exterior lights will flash when the doors are locked or unlocked with the Remote Keyless Entry (RKE) transmitter, or when using the passive entry feature. This feature may be selected with or without the sound horn on lock feature selected. To make your selection, press the "Flash Lights with Lock" button on the touchscreen, until a check-mark appears next to setting, indicating that the setting has been selected.

#### Sound Horn With Lock

When this feature is selected, the horn will sound when the door locks are activated. To make your selection, press either the "Off," "1st Press," or "2nd Press" button on the touchscreen, until a check-mark appears next to setting, showing that setting has been selected.

#### Sound Horn With Remote Start

When this feature is selected, the horn will sound when the remote start is activated. To make your selection, press the "Sound Horn with Remote Start" button on the touchscreen until a check-mark appears next to setting, showing that setting has been selected.

## • 1st Press Of Key Fob Unlocks

When "Driver Door" is selected with 1st Press Of Key Fob Unlocks, only the driver's door will unlock with the first press of the Remote Keyless Entry (RKE) transmitter UNLOCK button. You must press the RKE transmitter UNLOCK button twice to unlock the passenger's doors. When "All Doors" is selected for 1st Press Of Key Fob Unlocks, all doors will unlock on the first press of the RKE transmitter UNLOCK button.

NOTE: 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, touching the handle more than once will only result in the driver's door opening. If "Driver Door" is selected, once the driver door is opened, the interior door lock/ unlock switch can be used to unlock all doors (or use RKE transmitter).

## • Passive Entry

This feature allows you to lock and unlock the vehicles door(s) without having to press the Remote Keyless Entry (RKE) transmitter lock or unlock buttons. To make your selection, press the "Passive Entry" button on the touchscreen, until a check-mark appears next to setting,

showing that setting has been selected. Refer to "Keyless Enter-N-Go" in "Things To Know Before Starting Your Vehicle".

# Personal Settings Linked to Key Fob — If Equipped

This feature provides automatic recall of all settings stored to a memory location (driver's seat, exterior mirrors, steering column position and radio station presets) to enhance driver mobility when entering and exiting the vehicle. To make your selection, press the "Personal Settings Linked to Key Fob" button on the touchscreen, until a check-mark appears next to setting, showing that setting has been selected.

**NOTE:** The seat will return to the memorized seat location (if Recall Memory with Remote Key Unlock is set to ON) when the Remote Keyless Entry (RKE) transmitter is used to unlock the door. Refer to "Driver Memory Seat" in "Understanding The Features Of Your Vehicle" for further information.

# • Power Lift Gate Chime — If Equipped

This feature plays an alert when the power lift gate is raising or lowering. To make your selection, press the "Power Lift Gate Chime" button on the touchscreen, until a check-mark appears next to setting, showing that setting has been selected.

#### Auto-On Comfort — If Equipped

After pressing the "Auto-On Comfort" button on the touchscreen the following settings will be available:

# • Auto-On Driver Heated/Ventilated Seat & Steering Wheel With Vehicle Start — If Equipped

When this feature is selected the driver's heated seat will automatically turn on when temperatures are below 40° F (4.4° C). When temperatures are above  $80^{\circ}$  F (26.7° C) the driver vented seat will turn on. To make your selection, press the "Auto-On Driver Heated/Ventilated Seat & Steering Wheel With Vehicle Start" button on the touchscreen, then select either "Off," "Remote Start" or "All Starts" until a check-mark appears next to setting, showing that setting has been selected.

## **Engine Off Options**

After pressing the Engine Off Options button on the touchscreen the following settings will be available.

# • Easy Entry/Exit Seat — If Equipped

This feature provides automatic driver seat positioning to enhance driver mobility when entering and exiting the vehicle. To make your selection, press the "Easy Exit Seat" button on the touchscreen until a check-mark appears next to setting, showing that setting has been selected.

## • Engine Off Power Delay

When this feature is selected, the power window switches, radio, Uconnect phone system (if equipped), DVD video 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. To change the Engine Off Power Delay status press the press the "+" or "-" button to choose from "0 seconds," "45 seconds," "5 minutes," or "10 minutes."

## • Headlight Off Delay

When this feature is selected, the driver can choose to have the headlights remain on for 0, 30, 60, or 90 seconds when exiting the vehicle. To change the Headlight Off Delay status press the "+" or "-" button on the touch-screen to select your desired time interval.

## • Auto Entry/Exit Suspension — If Equipped

When this feature is selected, the driver can choose to automatically lower the vehicle from ride height position when the vehicle is shifted to park. To change the mode status press the "Auto Entry/Exit Suspension" button on

the touchscreen until a check-mark appears next to setting, showing that setting has been selected.

#### Audio

After pressing the "Audio" button on the touchscreen the following settings will be available.

#### • BalancelFade

This feature allows you to adjust the Balance and Fade settings. Press and drag the speaker icon, use the arrows to adjust, or tap the 'C' icon to readjust to the center.

#### • Equalizer

This feature allows you to adjust the Bass, Mid and Treble settings. Adjust the settings with the "+" and "-" setting buttons on the touchscreen or by selecting any point on the scale between the "+" and "-" buttons on the touchscreen.

**NOTE:** Bass/Mid/Treble allow you to simply slide your finger up or down to change the setting as well as press directly on the desired setting.

## • Speed Adjusted Volume

This feature increases or decreases volume relative to vehicle speed. To change the Speed Adjusted Volume press the "Off," "1," "2" or "3" button on the touchscreen.

## • Surround Sound — If Equipped

This feature provides simulated surround sound mode. To make your selection, press the "Surround Sound" button on the touchscreen, select "On" or "Off."

# • AUX Volume Offset — If Equipped

This feature provides the ability to tune the audio level for portable devices connected through the AUX input. To make your selection, press the AUX Volume Offset button on the touchscreen, choose a level from -3 to +3.

# • Loudness — If Equipped

Loudness improves sound quality at lower volumes. To make your selection, press the "Loudness" button on the touchscreen, then choose "Yes" or "No."

#### Phone/Bluetooth

After pressing the "Phone/Bluetooth" button on the touchscreen the following settings will be available:

#### • Paired Phones

This feature shows which phones are paired to the Phone/Bluetooth system. For further information, refer to the "Uconnect Supplement Manual."

#### Paired Audio Sources

This feature shows which audio devices are paired to the Phone/Bluetooth system. For further information, refer to the "Uconnect Supplement Manual."

# SiriusXM Setup — If Equipped

After pressing the "SiriusXM Setup" button on the touchscreen, the following settings will be available:

#### • Tune Start

Tune Start begins playing the current song from the beginning when you tune to a music channel using one of the twelve presets, so you can enjoy the complete song. This feature occurs the first time the preset is selected during that current song. Tune Start works in the background, so you will not even realize it's on, except that you will miss the experience of joining your favorite song with only a few seconds left to play. To make your selection, press the "Tune Start" button on the touch-screen, select "On" or "Off."

#### • Channel Skip

SiriusXM can be programmed to designate a group of channels that are the most desirable to listen to or to

exclude undesirable channels while scanning. To make your selection, press the "Channel Skip" button on the touchscreen, select the channels you would like to skip followed by pressing the back arrow button on the touchscreen.

## • Subscription Information

New vehicle purchasers or lessees will receive a free limited time subscription to SiriusXM Satellite Radio with your radio. Following the expiration of the free services, it will be necessary to access the information on the Subscription Information screen to re-subscribe.

Press the "Subscription Info" button on the touchscreen to access the Subscription Information screen.

Write down the SIRIUS ID numbers for your receiver. To reactivate your service, either call the number listed on the screen or visit the provider online.

**NOTE:** SiriusXM Travel Link is a separate subscription and is available for U.S. residents only.

## **Restore Settings**

After pressing the "Restore Settings" button on the touchscreen the following settings will be available:

# • Restore Settings

When this feature is selected it will reset the Display, Clock, Audio, and Radio Settings to their default settings. To restore the settings to their default setting, press the "Restore Settings" button on the touchscreen and pop-up will appear asking "Are you sure you want to reset your settings to default?" select "OK" to restore, or "Cancel" to exit. Once the settings are restored, a pop-up appears stating "settings reset to default."

#### Clear Personal Data

After pressing the "Clear Personal Data" button on the touchscreen the following settings will be available:

#### • Clear Personal Data

When this feature is selected it will remove personal data including Bluetooth devices and presets. To remove personal information, press the "Clear Personal Data" button and a pop-up will appear asking "Are you sure you want to clear all personal data?" select "OK" to Clear, or "Cancel" to exit. Once the data has been cleared, a pop up appears stating "Personal data cleared."

# **System Information**

After pressing the "System Information" button on the touchscreen the following settings will be available:

# • System Information

When System Information is selected, a System Information screen will appear displaying the system software version.

#### **UCONNECT RADIOS** — IF EQUIPPED

For detailed information about your Uconnect radio, refer to your Uconnect Supplement Manual.

#### iPod/USB/MP3 CONTROL — IF EQUIPPED

This feature allows an iPod or external USB device to be plugged into the USB port.

iPod control supports Mini, 4G, Photo, Nano, 5G iPod and iPhone devices. Some iPod software versions may not fully support the iPod control features. Please visit Apple's website for software updates.

For further information, refer to the Uconnect Supplement Manual.

# UCONNECT MULTIMEDIA — VIDEO ENTERTAINMENT SYSTEM (VES) — IF EQUIPPED

Your rear seat Video Entertainment System (VES) is designed to give your family years of enjoyment. You can play your favorite CDs or DVDs, listen to audio over the wireless headphones, or plug and play a variety of standard video games or audio devices. Please review this Owner's Manual to become familiar with its features and operation.

## **Getting Started**

• Screen(s) located in the rear of front seats: Open the LCD screen cover by lifting up on cover.



044874385

# Video Entertainment System (VES) Screen

- Cycle the ignition to the ON or ACC position.
- Your vehicle may be equipped with a Blu-Ray Disc Player. If equipped with a Blu-Ray Disc Player, the icon will be present on the Player.

- Turn on the Rear Seat Entertainment system by pressing the Power button on the remote control.
- When the Video Screen(s) are open and a DVD/Blu-Ray Disc is inserted into the VES player, the screen(s) turn(s) ON automatically, the headphone transmitters turn ON and playback begins.
- For Dual Video Screen System, Rear 1 on the Remote Control and Headphones refers to Screen 1 (driver's side) and Rear 2 on the Remote Control and Headphones refers to Screen 2 (passenger's side).
- The system can be controlled by the front seat occupants using either the touch-screen- radio, or by the rear seat occupants using the remote control.

## **Blu-ray Disc Player**

# Play A Blu-Ray Disc

The Blu-Ray player is located in the center console.



**Blu-Ray Player Location** 

1. Insert a Blu-ray disc into the VES disc player with the label facing as indicated on the Blu-ray player. The radio automatically selects the appropriate mode after the disc is recognized and displays the menu screen, the language screen, or starts playing the first track.

- 2. To watch a Blu-ray disc on Rear 1 for driver's side rear passengers, ensure the Remote Control and Headphone switch is on Rear 1.
- 3. To watch a Blu-ray disc on Rear 2 for passenger side rear passengers, ensure the Remote Control and Headphone switch is on Rear 2.

#### NOTE:

- To view a Blu-ray disc on the radio press the MEDIA soft-key on the radio touchscreen, then touch the disc soft-key. Press the Play soft-key, then the FULL SCREEN soft-key.
- Viewing a Blu-ray disc on the Touch-Screen radio screen is not available in all states/provinces, and the vehicle must be stopped, and the shift lever must be in the PARK position for vehicles with automatic transmission. In vehicles with manual transmission the parking brake must be engaged.

## **DVD Player**

#### Play A DVD

- 1. Insert a DVD into the VES disc player with the label facing as indicated on the DVD player. The radio automatically selects the appropriate mode after the disc is recognized and displays the menu screen, or starts playing the first track.
- 2. To watch a DVD on Rear 1 for driver's side rear passengers, ensure the Remote Control and Headphone switch is on Rear 1.
- 3. To watch a DVD on Rear 2 for passenger side rear passengers, ensure the Remote Control and Headphone switch is on Rear 2.

#### NOTE:

- To view a DVD on the radio press the MEDIA soft-key on the radio touchscreen, then touch the disc soft-kev. Press the Play soft-key, then the FULL SCREEN softkey.
- Viewing a DVD on the Touch-Screen radio screen is 4 not available in all states/provinces, and the vehicle must be stopped, and the shift lever must be in the PARK position for vehicles with automatic transmission. In vehicles with manual transmission the parking brake must be engaged.

# Using The Remote Control

1. Press the MODE/SOURCE button on the Remote Control.

#### 392 UNDERSTANDING YOUR INSTRUMENT PANEL

2. While looking at Rear 1 or 2, highlight disc by either pressing Up/Down/Left/Right buttons or by repeatedly pressing the SOURCE button, then press ENTER/OK.



Select Disc Mode On The VES Screen

**NOTE:** The VES will retain the last setting when turned off.

# Using The Touch-Screen Radio Controls

- 1. Press the Media soft-key on the Uconnect radio touch-screen.
- 2. Touch the Rear Media soft-key to display the Rear VES Controls. If a channel list is displayed, press the HIDE LIST soft-key to display the Rear VES Controls screen.



#### **Rear VES Soft-Key**

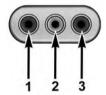
3. Touch the 1 or 2 soft-key and then the disc soft-key in the MEDIA column.

#### NOTE:

• Touching the screen on a Touch-Screen radio while a DVD is playing brings up basic remote control functions for DVD play such as scene selection, Play, Pause, FF, RW, and Stop. Pressing the X in the upper corner will turn off the remote control screen functions.

## **Play Video Games**

Connect the video game console to the Auxiliary RCA/ HDMI input jacks located on the side of each seat.



Audio/Video RCA/HDMI **Jacks** (AUX/HDMI Jacks) on the side of each seat enable the monitor to display video directly from a video camera, connect video games for display on the screen, or play music directly from an MP3 player.

When connecting an external source to the AUX/HDMI input, be sure to follow the standard color coding for the VES jacks:

- 1. Video in (yellow)
- 2. Left audio in (white)
- 3. Right audio in (red)

**NOTE:** Certain high-end video game consoles will exceed the power limit of the vehicle's Power Inverter. Refer to the Power Inverter section in your vehicle's Owner's Manual for more information.

Ensure the Remote Control and Headphone switch is on Channel 1.

# **Using The Remote Control**

1. Press the MODE/SOURCE button on the Remote Control.

2. While looking at the video screen, highlight VES AUX

1 or 2 (depending which AUX input the gaming console is plugged into), by either pressing Up/Down/Left/Right buttons or by repeatedly pressing the MODE button, then press ENTER on the Remote Control.

## Using The Touch-Screen Radio Controls

- 1. Press the MENU hard-key on the radio faceplate.
- 2. Touch the Rear VES soft-key to display the Rear VES Controls. If a channel list is displayed, press the HIDE LIST soft-key to display the Rear VES Controls screen.



# Rear VES Soft-Key

3. Touch the 1 soft-key and then touch either AUX 1 or AUX 2 in the VES column (depending which AUX input is used). To exit press the back arrow soft-key at the top of the screen.

#### **Dual Video Screen**

**NOTE:** Typically there are two different ways to operate the features of the Video Entertainment System (VES).

- The Remote Control
- The Touch-Screen Radio (If Equipped)

# Play A DVD Using The VES Player (If Equipped)

1. Insert the DVD with the label facing up. The VES player automatically selects the appropriate mode after the disc is recognized and starts playing the DVD.

**NOTE:** The VES player has basic DVD control function such as Menu, Play, Pause, FF, RW and Stop.

2. To watch a DVD on Rear 1 for driver's side passengers, ensure the Remote Control and Headphone switch is on Rear 1.

3. To watch a DVD on Rear 2 for passenger's side passengers, ensure the Remote Control and Headphone switch is on Rear 2.

# **Using The Remote Control**

- 1. Press the MODE/SOURCE button on the Remote Control.
- 2. While looking at Rear 1 or 2, highlight VES DISC by either pressing Up/Down/Left/Right buttons or by repeatedly pressing the MODE/SOURCE button, then press ENTER/OK on the Remote Control.



# Select VES DISC Mode On The VES Screen NOTE:

- Rear 1 select mode information is shown on the left side of the screen.
- Rear 2 select mode information is shown on the right side of the screen.

• The VES will retain the last setting when turned off.

# **Using The Touch-Screen Radio Controls**

- 1. Press the MENU hard-key on the radio faceplate.
- 2. Touch the Rear VES soft-key to display the Rear VES Controls. If a channel list is displayed, touch the HIDE LIST soft-key to display the Rear VES Controls screen.



Rear VES Soft-key

3. Touch the 1 or 2 soft-key and then the DISC soft-key in the VES column. To exit touch the back arrow soft-key at the top left of the screen.

# Select Channel/Screen 1 And DISC In The VES Column NOTE:

 To view a DVD on the radio press the RADIO/MEDIA hard-key, on the radio faceplate, then touch the DISC tab soft-key and then the VIEW VIDEO soft-key.  Viewing a DVD on the Touch-Screen radio screen is not available in all states/provinces, and the vehicle must be stopped, and the shift lever must be in the PARK position for vehicles with automatic transmission. In vehicles with manual transmission the parking brake must be engaged.

# Listen To An Audio Source While A Video Is Playing

Ensure the Remote Control and Headphone switch are on the same channel. If watching a video on Rear 1 , then Rear 2 could be used for audio. If watching a video on Rear 2, then Rear 1 could be used for audio.

# **Using The Remote Control**

 Press the MODE/SOURCE button on the Remote Control and the Mode Select Screen will display, unless a video is playing then only a small banner will appear on the bottom of the screen. 2. While looking at the video screen, either press Up/ Down/Left/Right on the Remote Control to highlight the desired audio source or repeatedly press the MODE/SOURCE button on the remote until the desired audio source appears on the screen.



Select FM Mode On The VES Screen

# Using The Touch-Screen Radio Controls

- 1. Press the MENU hard-key on the radio faceplate.
- 2. Touch the Rear VES soft-key to display the Rear VES Controls. If a channel list is displayed, press the HIDE LIST soft-key to display the Rear VES Controls screen.



Rear VES Soft-Key

3. To listen to an audio source on Rear 2 while a video is playing on Rear 1, touch the 2 soft-key and choose an audio source. To exit touch the back arrow soft-key at the top left of the left screen.

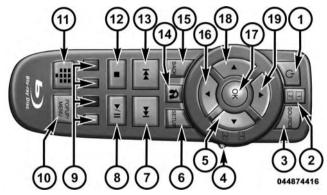


Select Rear 2 And HDD In The Media Column

# Important Notes For Dual Video Screen System

- VES is able to transmit two channels of stereo audio and video simultaneously.
- The Blu-Ray DVD Player can play CDs, DVDs and Blu-Ray Discs.
- The DVD Player can play CDs and DVDs.
- In split screen mode the left side equates to Rear 1 and the right side equates to rear 2.
- Selecting a video source on Rear 1, the video source will display on Rear 1 and can be heard on Rear 1.
- Selecting a video source on Rear 2, the video source will display on Rear 2 and can be heard on Rear 2.
- Rear 1 and Rear 2 of the Video Entertainment System can play two separate discs by utilizing the touchscreen radio, DVD player and Blu-Ray Disc Player.
- Audio can be heard through the headphones even when the screen(s) are closed.

# Blu-Ray Player Remote Control – If Equipped



Blu-Ray Player Remote Control

#### **Controls And Indicators**

1. Power – Turns the screen and wireless headphone transmitter for the selected Channel on or off. To hear

- audio while the screen is closed, press the Power button to turn the headphone transmitter on.
- 2. Channel Selector Indicators When a button is pressed, the currently affected channel or channel button is illuminated momentarily.
- 3. SOURCE Press to enter Source Selection screen.
- 4. Channel/Screen Selector Switch Indicates which channel is being controlled by the remote control. When the selector switch is in the Rear 1 position, the remote controls the functionality of headphone Channel 1 (right side of the screen). When the selector switch is in the Rear 2, position the remote controls the functionality of headphone Channel 2 (left side of the screen).
- 5. ► Press to navigate menus.
- 6. SETUP Press to access the BLU-RAY Setup menu screen. When a disc is loaded in the BLU-RAY player

(if equipped) and the VES mode is selected and the disc is stopped, press the SETUP button to access the BLU-RAY Setup menu.

- 7. ▶▶ Press and hold to fast forward through the current audio track or video chapter.
- 8. ► / || (Play/Pause) Begin/resume or pause disc play.
- 9. Four Colored Buttons Press to access Blu-Ray disc features. 10. POPUP/MENU - Press to bring up repeat and
- shuffle options.
- 11. KEYPAD Press to navigate chapters or titles.
- 12. (Stop) Stops disc play.
- 13. ◀◀ Press and hold to fast rewind through the current audio track or video chapter.
- 14. Mutes headphone audio.

- 15. BACK Press to exit out of menus or return to source selection screen.
- 16. ▼ Press to navigate menus.
- 17. OK Press to select the highlighted option in a menu.
- 18. ◀ Press to navigate menus.
- 19. ▲ Press to navigate menus.

# **Locking The Remote Control**

All remote control functionality can be disabled as a parental control feature.

• To disable the Remote Control from making any changes, push the Video Lock button on the DVD player (if equipped). If the vehicle is not equipped with a DVD player, follow the radio's instructions to turn Video Lock on. The radio and the video screen(s) indicate when Video Lock is active.

• Pushing the Video Lock again or turning the ignition OFF turns Video Lock OFF and allows remote control operation of the VES.

# Replacing The Remote Control Batteries

The remote control requires two AAA batteries for operation. To replace the batteries:

- Locate the battery compartment on the back of the remote, then slide the battery cover downward.
- Replace the batteries, making sure to orient them according to the polarity diagram shown.
- Replace the battery compartment cover.

# **Headphones Operation**

The headphones receive two separate channels of audio using an infrared transmitter from the video screen.

Front seat occupants receive some headphone audio coverage to allow them to adjust the headphone volume for the young rear seat occupants that may not be able to 4 do so for themselves.

If no audio is heard after increasing the volume control, verify that the screen is turned on and in the down position and that the channel is not muted and the headphone channel selector switch is on the desired channel. If audio is still not heard, check that fully charged batteries are installed in the headphones.



04490013

**VES Headphones** 

- 1 Power Button
- 2 Volume Control
- 3 Channel Selection Switch

#### **Controls**

The headphone power indicator and controls are located on the right ear cup.

**NOTE:** The rear video system must be turned on before sound can be heard from the headphones. To conserve battery life, the headphones will automatically turn off approximately three minutes after the rear video system is turned off.

# Changing the Audio Mode for Headphones

1. Ensure the Remote Control channel/screen selector switch is in the same position as the headphone selector switch.

#### NOTE:

- When both switches are on Channel 1, the Remote is controlling Channel 1 and the headphones are tuned to the audio of the VES Channel 1.
- When both switches are on Channel 2, the Remote is controlling Channel 2 and the headphones are tuned to the audio of the VES Channel 2.
- 2. Press the MODE/SOURCE button on the remote control.
- 3. If the video screen is displaying a video source (such as a DVD Video), pressing DISPLAY shows the status on a popup banner at the bottom of the screen. Pressing the MODE/SOURCE button will advance to the next mode. When the mode is in an audio only source (such as FM), the Mode Selection menu appears on screen.

- 4. When the Mode Selection menu appears on screen, use the cursor buttons on the remote control to navigate to the available modes and press the OK button to select the new mode.
- 5. To cancel out of the Mode Selection menu, press the BACK button on the remote control.

# **Replacing The Headphone Batteries**

Each set of headphones requires two AAA batteries for operation. To replace the batteries:

- Locate the battery compartment on the left ear cup of the headphones, and then slide the battery cover downward.
- Replace the batteries, making sure to orient them according to the polarity diagram shown.
- Replace the battery compartment cover.

# **Unwired Stereo Headphone Lifetime Limited Warranty**

Who Does This Warranty Cover? This warranty covers the initial user or purchaser ("you" or "your") of this particular Unwired Technology LLC ("Unwired") wireless headphone ("Product"). The warranty is not transferable.

**How Long Does the Coverage Last?** This warranty lasts as long as you own the Product.

What Does This Warranty Cover? Except as specified below, this warranty covers any Product that in normal use is defective in workmanship or materials.

What Does This Warranty Not Cover? This warranty does not cover any damage or defect that results from misuse, abuse or modification of the Product other than by Unwired. Foam earpieces, which will wear over time through normal use, are specifically not covered (replacement foam is available for a nominal charge). UNWIRED

TECHNOLOGY IS NOT LIABLE FOR ANY INJURIES OR DAMAGES TO PERSONS OR PROPERTY RESULT-ING FROM THE USE OF, OR ANY FAILURE OR DE-FECT IN, THE PRODUCT, NOR IS UNWIRED LIABLE FOR ANY GENERAL, SPECIAL, DIRECT, INDIRECT, INCIDENTAL, CONSEQUENTIAL, EXEMPLARY, PU-NITIVE OR OTHER DAMAGES OF ANY KIND OR NATURE WHATSOEVER. Some states and jurisdictions may not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you. This warranty gives you specific legal rights. You may also have other rights, which vary from jurisdiction to jurisdiction.

What Will Unwired Do? Unwired, at its option, will repair or replace any defective Product. Unwired reserves the right to replace any discontinued Product with a comparable model. THIS WARRANTY IS THE SOLE WARRANTY FOR THIS PRODUCT, SETS FORTH YOUR EXCLUSIVE REMEDY REGARDING DEFECTIVE

icon will be visible on the VES screen. When in shared

mode, the same audio source is heard in the shared

headphone channel 1 or channel 2.

PRODUCTS, AND IS IN LIEU OF ALL OTHER WAR-RANTIES (EXPRESS OR IMPLIED), INCLUDING ANY WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

If you have any questions or comments regarding your Unwired wireless headphones, please phone 1-888-293-3332 email orcustomersupport@unwiredtechnology.com.

You may register your Unwired wireless headphones by phone at 1-888-293-3332.

# **System Information**

### Shared Modes

This allows the VES to output radio sources to the headphones and the radio to output VES sources to the vehicle speakers. When the radio and VES channel 1 or 2 are in the same (shared) mode, a VES icon will be visible on the radio's display for that channel, and the shared If the radio functions (FM, AM, or SAT) are in the shared mode with the VES, only the radio is able to control the radio functions. In this case, VES can share the radio mode, but not change stations until the radio mode is changed to a mode that is different from the VES selected radio mode. When shared, the radio has priority for all radio modes (FM, AM). The VES has the ability to switch tuner (AM/FM), SEEK, TUNE, and recall presets in radio modes as long as it is not in shared mode.

When in shared disc both the radio and the VES have control of the video functions. The VES has the ability to control the following video modes:

**NOTE:** CD: Ability to Fast Forward, Rewind, and Track Up/Down.

The VES can even control radio modes or video modes while the radio is turned off. The VES can access the radio modes or disc modes by navigating to those modes on the VES and activating a radio mode or disc mode.

# **Information Mode Display**

When information mode is active, the current mode setting for both audio channels is displayed. In addition to the items called out by number, the remaining information displays the current status of the source (such as station frequency, name, preset or track number, song title, artist name, album name, etc.).



Information Mode Video Screen Display

- 1. Channel 1 Mode Displays the current source for Channel 1.
- 2. Channel 1 Audio Only/Mute Audio: The audio only icon is not used on Channel 1, in a single screen system. Mute: when the Mute icon is displayed, the audio for Channel 1 has been muted using the remote control's MUTE button.
- 3. Channel 2 Audio Only/Mute Audio: Only in a single screen system: The audio only icon is displayed on Channel 2 when Channel 1 is in a video mode. Mute: when the Mute icon is displayed, the audio for Channel 2 has been muted using the remote control's MUTE button.
- 4. Channel 2 Mode Displays the current source for Channel 2.

- 5. Channel 2 ENTER Button Action When the ENTER button on the remote control is pressed with the 9INPUT FILE #9 button visible on the screen, the screen shows a numeric entry keypad which allows you to enter a specific track number on data discs and HDD (see Numeric Keypad Menu section of this manual). Also, Enter Button Action – "INPUT TRK #" to enter a specific track number on audio discs.
- 6. Remote Locked Out—When the icon is displayed, the remote control functions are disabled.
- 7. Clock Displays the time.
- 8. Channel 1 Shared Status When the icon is displayed, the audio for Channel 1 is also shared with the radio and playing through the cabin speakers.

# Numeric Keypad Menu



Numeric Keypad Menu

When the display for either Channel 1 or Channel 2 shows DIRECT TUNE, pressing the remote control's ENTER button activates a numeric keypad menu. This screen makes it easy to enter a specific tuner frequency, satellite channel, or track number. To enter the desired digit:

- Press the remote control's navigation buttons (▲, ▼,
   , ◄) to navigate to the desired digit.
- 2. When the digit is highlighted, press the remote control's ENTER button to select the digit. Repeat these steps until all digits are entered.
- 3. To delete the last digit, navigate to the Del button and press the remote control's ENTER button.
- 4. After all of the digits are entered, navigate to the Go button and press the remote control's ENTER button.

#### Station List Menu

When listening to Satellite audio, pressing the remote control's POP UP/MENU button displays a list of all available channels. Navigate this list using the remote control's navigation buttons ( $\blacktriangle$ ,  $\blacktriangledown$ ) to find the desired station, press the remote control's ENTER/OK button to tune to that station. To jump through the list more quickly, navigate to the Page Up and Page Down icons on the screen.

#### Disc Menu

When listening to a CD Audio or CD Data disc, pressing the remote control's POP UP/MENU button displays a list of all commands which control playback of the disc. Using the options you can activate or cancel Scan play and Random play.

# **Options Menu**



Options Menu

When watching a video source (DVD Video with the disc in Play mode, Aux Video, etc.), pressing the "Options" soft-key activates the Options Settings menu. From this menu you can adjust Audio, Subtitles, Angle and Title.

# **Display Settings**



# Video Screen Display Settings

When watching a video source (DVD Video with the disc in Play mode, Aux Video, etc.), pressing the remote control's SETUP button activates the Display Settings menu. These settings control the appearance of the video on the screen. The factory default settings are already set for optimum viewing, so there is no need to change these settings under normal circumstances.

To change the settings, press the remote control's navigation buttons ( $\blacktriangle$ ,  $\blacktriangledown$ ) to select an item, then press the remote control's navigation buttons ( $\blacktriangleright$ ,  $\blacktriangleleft$ ) to change the value for the currently selected item. To reset all values back to the original settings, select the Default Settings menu option and press the remote control's ENTER/OK button.

Disc Features control the remote DVD player's (if equipped) settings of DVD being watched in the remote player.

# Listening To Audio With The Screen Closed

To listen to only audio portion of the channel with the screen closed:

• Set the audio to the desired source and channel.

- Close the video screen.
- To change the current audio mode, press the remote control's MODE/SOURCE button. This will automatically select the next available audio mode without using the Mode/Source Select menu.
- When the screen is reopened, the video screen will automatically turn back on and show the appropriate display menu or media.

If the screen is closed and there is no audio heard, verify that the headphones are turned on (the ON indicator is illuminated) and the headphone selector switch is on the desired channel. If the headphones are turned on, press the remote control's power button to turn audio on. If audio is still not heard, check that fully charged batteries are installed in the headphones.

#### **Disc Formats**

The Blu-ray Disc player is capable of the playing the following types of 4.7 in (12 cm) diameter discs:

- DVD-Video discs (MPEG-2 video compression) (see notes about DVD Region Codes)
- DVD-Audio discs (2 channel audio output only)
- Audio Compact Discs (CDs)
- CD Data discs with MP3 and WMA compressed audio format files
- Video CDs (MPEG-1 video compression)

The Blu-Ray player is capable of the playing the following types of discs (12 mm or 8 mm diameter):

- BD: BDMV (Profile 1.1), BDAV (Profile 1.1),
- DVD: DVD-Video, DVD-Audio, AVCREC, AVCHD, DVD-VR

#### 414 UNDERSTANDING YOUR INSTRUMENT PANEL

- CD: CD-DA, VCD, CD-TEXT
- DVD/CD: MP3, WMA, AAC, DivX (versions 3 6) profile 3.0

# **DVD Region Codes**

The VES DVD player and many DVD discs are coded by geographic region. These region codes must match in order for the disc to play. If the region code for the DVD disc does not match the region code for the player, the disc will not play and will be ejected.

# **DVD Audio Support**

When a DVD-Audio disc is inserted in the VES DVD player, the DVD-Audio title on the disc is played by default (most DVD-Audio discs also have a Video title, but the Video title is ignored). All multi-channel program material is automatically mixed down to two channels, which may result in a lowered apparent volume level. If

you increase the volume level to account for this change in level, remember to lower the volume before changing the disc or to another mode.

#### **Recorded Discs**

The VES DVD player will play CD-R and CD-RW discs recorded in CD-Audio or Video-CD format, or as a CD-ROM containing MP3 or WMA files. The player will also play DVD-Video content recorded to a DVD-R or DVD-RW disc. DVD-ROM discs (either pressed or recorded) are not supported.

If you record a disc using a personal computer, there may be cases where the VES DVD player may not be able to play some or the entire disc, even if it is recorded in a compatible format and is playable on other players. To help avoid playback problems, use the following guidelines when recording discs.

- Open sessions are ignored. Only sessions that are closed are playable.
- For multi-session CDs that contain only multiple CD-Audio sessions, the player will renumber the tracks so each track number is unique.
- For CD Data (or CD-ROM) discs, always use the ISO-9660 (Level 1 or Level 2), Joliet, or Romeo format. Other formats (such as UDF, HFS, or others) are not supported.
- The player recognizes a maximum of 512 files and 99 folders per CD-R and CD-RW disc.
- Mixed media recordable DVD formats will only play the Video\_TS portion of the disc.

If you are still having trouble writing a disc that is playable in the VES DVD player, check with the disc recording software publisher for more information about burning playable discs.

The recommended method for labeling recordable discs (CD-R, CD-RW, and DVD-R) is with a permanent marker. Do not use adhesive labels as they may separate from the disc, become stuck, and cause permanent damage to the DVD player.

#### Compressed Audio Files (MP3 and WMA)

The DVD player is capable of playing MP3 (MPEG-1 Audio Layer 3) and WMA (Windows Media Audio) files from a CD Data disc (usually a CD-R or CD-RW).

- The DVD player always uses the file extension to determine the audio format, so MP3 files must always end with the extension ".mp3" or ".MP3" and WMA files must always end with the extension ".wma" or ".WMA". To prevent incorrect playback, do not use these extensions for any other types of files.
- For MP3 files, only version 1 ID3 tag data (such as artist name, track title, album, etc.) are supported.

#### 416 UNDERSTANDING YOUR INSTRUMENT PANEL

- Any file that is copy protected (such as those downloaded from many online music stores) will not play.
   The DVD player will automatically skip the file and begin playing the next available file.
- Other compression formats such as AAC, MP3 Pro, Ogg Vorbis, and ATRAC3 will not play. The DVD player will automatically skip the file and begin playing the next available file.
- If you are creating your own files, the recommended fixed bit rate for MP3 files is between 96 and 192Kbps and the recommended fixed bit rate for WMA files is between 64 and 192Kbps. Variable bit rates are also supported. For both formats, the recommended sample rate is either 44.1kHz or 48kHz.
- To change the current file, use the remote control's or DVD player's ▲ button to advance to the next file, or the ▼ button to return to the start of the current or previous file.

• To change the current directory, use the remote control's PROG UP and Down buttons or Rewind/skip back and fast fwd/skip forward.

#### **Disc Errors**

If the DVD player is unable to read the disc, a "Disc Error" message is displayed on the VES and Radio displays and the disc is automatically ejected. A dirty, damaged, or incompatible disc format are all potential causes for a "Disc Error" message.

If a disc has a damaged track which results in audible or visible errors that persists for 2.0 seconds, the DVD player will attempt to continue playing the disc by skipping forward 1.0 to 3.0 seconds at a time. If the end of the disc is reached, the DVD player will return to the beginning of the disc and attempt to play the start of the first track.

The DVD player may shut down during extremely hot conditions, such as when the vehicle's interior temperature is above 120°F. When this occurs, the DVD player will display "VES High Temp" and will shut off the VES displays until a safe temperature is reached. This shutdown is necessary to protect the optics of the DVD player.

# Display

# Other Language Setup



DVD Player Language Menu

#### 418 UNDERSTANDING YOUR INSTRUMENT PANEL

All of the Language settings have a special "Other" setting to accommodate languages other than Japanese or English. These languages are selected using a special four-digit code.

To enter a new language code, activate the DVD Setup Menu. To enter DVD Setup Menu stop the DVD, enter radio disc mode, then DVD setup and follow these additional instructions:

- Using the remote control Up and Down cursor buttons, highlight the Language item you want to edit, and then press the remote control ENTER/OK button.
- Using the remote control Down cursor button, select the "Other" setting, then press the remote control's Right cursor button to begin editing the setting.
- Using the remote control Up and Down cursor buttons, select a digit for the current position. After

selecting the digit, press the remote control's Right cursor button to select the next digit. Repeat this digit selection sequence for all four digits.

 When the entire four-digit code is entered, press the remote control's ENTER/OK button. If the language code is not valid, the numbers all change back to "☆".
 If the digits are visible after this step, then the language code is valid.

Here is an abbreviated list of language codes. For more language codes, please contact the dealer where the vehicle was purchased.

Language	Code	Language	Code
Dutch	2311	French	1517
German	1304	Italian	1819
Portuguese	2519	Spanish	1418

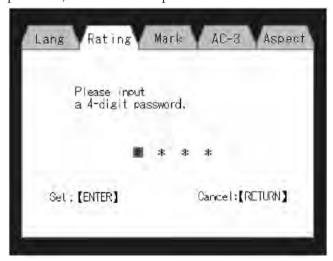
# Rating and Password Setup

The Rating and Password settings work together to control the types of DVDs that your family watches. Most DVD-Video discs have a rating (from 1 to 8) assigned to them where lower numbers are designated for all audiences and higher numbers are designated for more adult audiences.

When a DVD-Video disc is loaded, its rating is compared to the setting in the DVD player. If the rating of the disc is higher than the setting in the player, a Password screen is displayed. In order to watch the disc, the rear passenger must enter the correct password using the password entry method described below.

To play all discs without requiring a password, set the DVD player's rating to Level 8. Setting the rating to Level 1 always requires the password to play any DVD disc. Not all DVD discs encode a Rating, so it is still possible that discs designed for adult audiences can still play without requiring a password.

The default rating is Level 8 (play all discs without a password) and the default password is 0000.



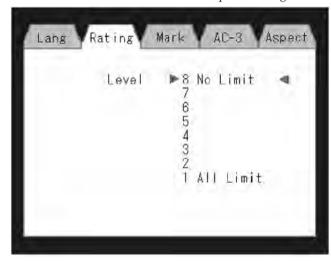
**DVD Password Entry** 

#### 420 UNDERSTANDING YOUR INSTRUMENT PANEL

To set the password, activate the DVD Setup Menu and follow these additional instructions:

- Using the remote control Left and Right cursor buttons, select the Rating tab.
- Highlight "Change Password", and then press the remote control's ENTER/OK button.
- Enter the current password. Select a digit, use the remote control Up and Down cursor buttons to set the value for the current digit, and then press the remote control's Right cursor button to select the next digit. Repeat this digit selection sequence for all four digits.
- After the four-digit password is entered, press the remote control's ENTER/OK button. If the password is correct, the set password screen is displayed.
- Using the remote control's Up and Down cursor buttons to set the value for the current digit and the remote control's Right cursor button to select digits, enter the new password.

• After the four-digit password is entered, press the remote control's ENTER/OK button to accept the change.



DVD Player Level Menu

To set the rating, activate the DVD Setup Menu and follow these additional instructions:

- Using the remote control's Left and Right cursor buttons, select the Rating tab.
- Highlight "Change Rating", and then press the remote control's ENTER/OK button.
- Enter the current password. Select a digit, use the remote control's Up and Down cursor buttons to set the value for the current digit, and then press the remote control's Right cursor button to select the next digit. Repeat this digit selection sequence for all four digits.
- After the four-digit password is entered, press the remote control's ENTER/OK button. If the password is correct, the Rating Level menu is displayed.

 Using the remote control's Up and Down cursor buttons, select the new rating level, and then press the remote control's ENTER/OK button to accept the change.

# **Product Agreement**

#### Software

The software built into this product, are composed of multiple software components, and there are the copyrights of our company or third parties in each software component. Also, in this product, the following open source software has been installed.

- The licensed software for our company is based on GNU GENERAL PUBLIC LICENSE V2.0 ("GPL").
- The licensed software for our company is based on GNU LESSER GENERAL PUBLIC LICENSE V2.1 ("LGPL").

#### 422 UNDERSTANDING YOUR INSTRUMENT PANEL I

- The software which has the copyrights of a third party and is distributed as free software. Please refer the contract details which are disclosed in following website, for example, concerning these above software.
  - www.gnu.org/licenses/old-licenses/gpl-2.0standalone.html
  - www.gnu.org/licenses/lgpl-2.1-standalone.html
  - www.freetype.org/FTL.TXT

You have the right of acquisition, modification, and distribution of the source code of the GPL/LGPL software. These are distributed in the hope that it will be useful by itself. However, including the absence of an implied warranty on the "suitability for a particular purpose" or "merchantability", the warranty of any kind will not be made. You may download Source Code from the following website at no charge. www.embedded-carmultimedia.jp/linux/oss/download/MP\_632\_34W840

**NOTE:** please refrain from contact about the contents of the source code of open source. The source code of the software in which there are the copyrights of our company or third parties, is not subject to distribution.

kernel2.6.16.29	FreeType2 2.2.1	gcc sh4eb-3.4.5	glibc-2.3.5	boot_loader sh- ipl+g 1.00
libgcc_s-3.4.5	bash-3.0-31	busybox-1.00	MAKEDEV-1.1.0	module-init-tools- 3.1.0
libtermcap-2.0.8	mtd-utils-20050619	initscripts-8.11.1-1	libstdc++-3.4.5-10	libiconv-1.11
coreutils-6.9	dosfstools-2.10-3	directfb 1.0.0-rc1	kxml 1.21	binutils-sh4eb- 2.16.91.0.2
v2lin 0.1				

• THIS PRODUCT IS LICENSED UNDER THE VC-1 PATENT PORTFOLIO LICENSE FOR THE PERSONAL AND NON-COMMERCIAL USE OF A CONSUMER TO (i) ENCODE VIDEO IN COMPLIANCE WITH THE VC-1 STANDARD ("VC-1 VIDEO") AND/OR (ii) DECODE VC-1 VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL AND NON-COMMERCIAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED TO PROVIDE VC-1 VIDEO. NO

LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION MAY BE OBTAINED FROM MPEG LA, L.L.C. SEE WWW.MPEGLA.COM

• THIS PRODUCT IS LICENSED UNDER THE AVC PATENT PORTFOLIO LICENSE FOR THE PERSONAL AND NON-COMMERCIAL USE OF A CONSUMER TO (i) ENCODE VIDEO IN COMPLIANCE WITH THE AVC STANDARD ("AVC VIDEO")

AND/OR (ii) DECODE AVC VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL AND NON-COMMERCIAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED TO PROVIDE AVC VIDEO. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION MAY BE OBTAINED FROM MPEG LA, L.L.C. SEE WWW.MPEGLA.COM

#### **Patents**

#### Cinavia Notice

This product uses Cinavia technology to limit the use of unauthorized copies of some commercially-produced film and videos and their soundtracks. When a prohibited use of an unauthorized copy is detected, a message will be displayed and playback or copying will be interrupted. More information about Cinavia technology is provided at the Cinavia Online Consumer Information

Center at http://www.cinavia.com. To request additional information about Cinavia by mail, send a postcard with your mailing address to: Cinavia Consumer Information Center, P.O. Box 86851, San Diego, CA, 92138, USA.

This product incorporates proprietary technology under license from Verance Corporation and is protected by U.S. Patent 7,369,677 and other U.S. and worldwide patents issued and pending as well as copyright and trade secret protection for certain aspects of such technology. Cinavia is a trademark of Verance Corporation. Copyright 2004-2010 Verance Corporation. All rights reserved by Verance. Reverse engineering or disassembly is prohibited.

Manufactured under license from Dolby Laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories.

This product incorporates copyright protection technology that is protected by U.S. patents and other

intellectual property rights. Use of this copyright protection technology must be authorized by Rovi Corporation, and is intended for home and other limited viewing use only unless otherwise authorized by Rovi Corporation. Reverse engineering or disassembly is prohibited.

• Manufactured under license under U.S. Patent Nos: 5,956,674; 5,974,380; 6,487,535 & other U.S. and worldwide patents issued & pending. DTS, the Symbol, & DTS and the Symbol together are registered trademarks & DTS 2.0 Channel is a trademark of DTS, Inc. Product includes software. © DTS, Inc. All Rights Reserved.

#### **About Divx Video:**

DivX is a digital video format created by DivX, LLC, a subsidiary of Rovi Corporation. This is an official DivX Certified device that plays DivX video. Visit divx.com for more information and software tools to convert your files into DivX videos.

#### About Divx Video-On-Demand:

This DivX Certified device must be registered in order to play purchased DivX Video-on-Demand (VOD) movies. To obtain your registration code, locate the DivX VOD section in your device setup menu. Go to vod.divx.comfor more information on how to complete your registration.

DivX, DivX Certified and associated logos are trademarks of Rovi Corporation or its subsidiaries and are used under license.

#### Trademark

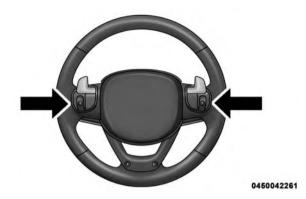
- Blu-ray Disc, Blu-ray and the logos are trademarks of the Blu-ray Disc Association.
- Java is a registered trademark of Oracle and/or its affiliates.

#### **CAUTION!**

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

# STEERING WHEEL AUDIO CONTROLS — IF EQUIPPED

The remote sound system controls are located on the rear surface of the steering wheel. Reach behind the wheel to access the switches.



# Remote Sound System Controls (Back View Of Steering Wheel)

The right-hand control is a rocker-type switch with a push-button in the center and controls the volume and mode of the sound system. Pushing the top of the rocker switch will increase the volume, and pushing the bottom of the rocker switch will decrease the volume.

Pushing the center button will make the radio switch between the various modes available (AM/FM/SXM/CD/AUX/VES, etc.).

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.

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.

# **CD Player**

Pushing the top of the switch once will go to the next track on the CD. Pushing the bottom of the switch once will go to the beginning of the current track, or to the beginning of the previous track if it is within one second after the current track begins to play.

If you push the switch up or down twice, it plays the second track; three times, it will play the third, etc.

### **CD/DVD DISC MAINTENANCE**

To keep a CD/DVD in good condition, take the following precautions:

- 1. Handle the disc by its edge; avoid touching the surface.
- 2. If the disc is stained, clean the surface with a soft cloth, wiping from center to edge.

#### 428 UNDERSTANDING YOUR INSTRUMENT PANEL

- 3. Do not apply paper or tape to the disc; avoid scratching the disc.
- 4. Do not use solvents such as benzene, thinner, cleaners, or anti-static sprays.
- 5. Store the disc in its case after playing.
- 6. Do not expose the disc to direct sunlight.
- 7. Do not store the disc where temperatures may become too high.

**NOTE:** If you experience difficulty in playing a particular disc, it may be damaged (e.g., scratched, reflective coating removed, a hair, moisture or dew on the disc) oversized, or have protection encoding. Try a known good disc before considering disc player service.

#### 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).

# Regulatory And Safety Information

#### USA/CANADA

Exposure to Radio Frequency Radiation

The radiated output power of the internal wireless radio is far below the FCC radio frequency exposure limits.

Nevertheless, the wireless radio will be used in such a manner that the radio is 20 cm or further from the human body.

The internal wireless radio operates within guidelines found in radio frequency safety standards and recommendations, which reflect the consensus of the scientific community.

The radio manufacturer believes the internal wireless radio is safe for use by consumers. The level of energy emitted is far less than the electromagnetic energy emitted by wireless devices such as mobile phones. However, the use of wireless radios may be restricted in some situations or environments, such as aboard airplanes. If you are unsure of restrictions, you are encouraged to ask for authorization before turning on the wireless radio.

This device complies with Part 15 of the FCC Rules and with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference.
- 2. This device must accept any interference received, including interference that may cause undesired operation

#### NOTE:

- This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.
- If this equipment does cause harmful interference to radio or television reception, which can be determined

by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Increase the separation between the equipment and receiver.
- Consult the dealer or an experienced radio technician for help.

#### **CLIMATE CONTROLS**

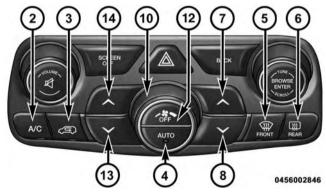
The air conditioning and heating system is designed to make you comfortable in all types of weather. This system can be operated through either the controls on the instrument panel or through the Uconnect system display.

When the Uconnect system is in different modes (Radio, Player, Settings, More, etc.) the driver and passenger temperature settings will be indicated at the top of the display.

#### **General Overview**

# **Buttons On The Faceplate**

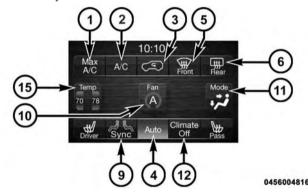
The buttons on the faceplate are located below the Uconnect screen.



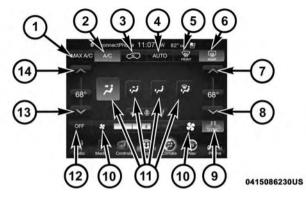
Automatic Climate Controls — Buttons On The Faceplate

#### **Buttons On The Touchscreen**

The buttons on the touchscreen are accessible on the Uconnect system screen.



Uconnect 5.0 Automatic Temperature Controls — Buttons
On The Touchscreen



Uconnect 8.4 Automatic Temperature Controls — Buttons On The Touchscreen

Button Descriptions (Applies To Both The Buttons On The Faceplate And The Buttons On The Touchscreen)

#### 1. MAX A/C Button

Press and release to change the current setting, the indicator illuminates when MAX A/C is ON. Performing

this function again will cause the MAX A/C operation to switch into manual mode and the MAX A/C indicator will turn off.

#### 2. A/C Button

Press and release to change the current setting, the indicator illuminates when A/C is ON. Performing this function again will cause the A/C operation to switch into manual mode and the A/C indicator will turn off.

#### 3. Recirculation Button

Press and release to change the current setting, the indicator illuminates when ON.

### 4. AUTO Operation Button

Automatically controls the interior cabin temperature by adjusting airflow distribution and amount. Performing this function will cause the system to switch between manual mode and automatic modes. Refer to "Automatic Operation" for more information.

#### 5. Front Defrost Button

Press and release to change the current airflow setting to Defrost mode. The indicator illuminates when this feature is ON. Air comes from the windshield and side window demist outlets. When the defrost button is selected, the blower level will increase. Use Defrost mode with maximum temperature settings for best windshield and side window defrosting and defogging. Performing this function will cause the ATC to switch into manual mode. If the front defrost mode is turned off the climate system will return the previous setting.

## 6. Rear Defrost Button

Press and release this button to turn on the rear window defroster and the heated outside mirrors (if equipped). An indicator will illuminate when the rear window defroster is on. The rear window defroster automatically turns off after 10 minutes.

## **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.

## 7. Passenger Temperature Control Up Button

Provides the passenger with independent temperature control. Push the button on the faceplate for warmer temperature settings or on the touchscreen, press and slide the temperature bar towards the red arrow button on the touchscreen for warmer temperature settings.

**NOTE:** Pressing this button while in Sync mode will automatically exit Sync.

## 8. Passenger Temperature Control Down Button

Provides the passenger with independent temperature control. Push the button on the faceplate for cooler temperature settings or on the touchscreen, press and slide the temperature bar towards the blue arrow button on the touchscreen for cooler temperature settings.

**NOTE:** Pressing this button while in Sync mode will automatically exit Sync.

### 9. SYNC

Press the Sync button on the touchscreen to toggle the Sync feature On/Off. The Sync indicator is illuminated when this feature is enabled. Sync is used to synchronize

the passenger temperature setting with the driver temperature setting. Changing the passenger temperature setting while in Sync will automatically exit this feature.

#### 10. Blower Control

Blower control is used to regulate the amount of air forced through the climate system. There are seven blower speeds available. Adjusting the blower will cause automatic mode to switch to manual operation. The speeds can be selected using either the blower control knob on the faceplate or buttons on the touchscreen as follows:

## Blower Control Knob On The 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.

#### Button On The 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.

#### 11. Modes

The airflow distribution mode can be adjusted so air comes from the instrument panel outlets, floor outlets, and demist outlets. The Mode settings are as follows:

#### • 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

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

Air comes from the floor outlets. A slight amount of air is directed through the defrost and side window demister outlets.

#### • Mix Mode



Air comes from the floor, defrost and side window demist outlets. This mode works best in cold or snowy conditions.

#### 12. Climate Control OFF Button

Press and release this button to turn the Climate Control ON/OFF.

## 13. Driver Temperature Control Down Button

Provides the driver with independent temperature control. Push the button on the faceplate for cooler temperature settings or on the touchscreen, press and slide the temperature bar towards the blue arrow button on the touchscreen for cooler temperature settings.

**NOTE:** In Sync mode, this button will also automatically adjust the passenger temperature setting at the same time.

## 14. Driver Temperature Control Up Button

Provides the driver with independent temperature control. Push the button on the faceplate for warmer temperature settings or on the touchscreen, press and slide the temperature bar towards the red arrow button on the touchscreen for warmer temperature settings.

**NOTE:** In Sync mode, this button will also automatically adjust the passenger temperature setting at the same time.

## 15. Temperature Control (5.0 Radio Only)

Press the temperature button on the touchscreen to regulate the temperature of the air inside the passenger compartment. Moving the temperature bar into the red area, indicates warmer temperatures. Moving the temperature bar into the blue area indicates cooler temperatures.

#### **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 adjust 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 behind the radiator and through the condenser. Fabric front fascia protectors may reduce airflow to the condenser, reducing air conditioning performance.

#### 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 on the touchscreen 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 prior settings and the MAX A/C indicator will turn off.

#### Recirculation



When outside air contains smoke, odors, or high humidity, or if rapid cooling is desired, you may wish to recirculate interior air by pressing the Recirculation control button. The tion indicator will illuminate when this button is

recirculation indicator will illuminate when this button is selected. Press the button a second time to turn off the Recirculation mode and allow outside air into the vehicle.

NOTE: 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, the Recirculation mode is not allowed in Defrost mode to improve window clearing operation. Recirculation will be disabled automatically if this mode is selected. Attempting to use Recirculation while in this

mode will cause the LED in the control button to blink

## **Automatic Temperature Control (ATC)**

### **Automatic Operation**

and then turn off.

1. Push the AUTO button on the faceplate or press the "AUTO" button on the touchscreen.

- Adjust the temperature you would like the system to maintain by adjusting the driver and passenger temperature buttons on the faceplate or buttons on the touchscreen. 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 temperature. You will experience the greatest efficiency by simply allowing the system to function automatically.

#### NOTE:

It is not necessary to move the temperature settings.
 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 Uconnect customerprogrammable feature. Refer to the "Uconnect System Settings" in this section of the manual.

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

The system allows for manual selection of blower speed, air distribution mode, A/C status and recirculation control.

The blower fan speed can be set to any fixed speed by adjusting the blower control. The fan will now operate at a fixed speed until additional speeds are selected. This allows the front occupants to control the volume of air circulated in the vehicle and cancel the Auto mode.

The operator can also select the direction of the airflow by selecting one of the available mode settings. A/C operation and Recirculation control can also be manually selected in Manual operation.

**NOTE:** Each of these features operates independently from each other. If any feature is controlled manually, temperature control will continue to operate automatically.

## **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. A solution of 50% OAT (Organic Additive Technology) coolant that meets the requirements of FCA Material Standard MS.90032 and 50% water is recommended. Refer to "Maintenance Procedures" in "Maintaining Your Vehicle" for proper coolant selection.

## Winter Operation

Use of the air Recirculation mode during winter months is not recommended because it may cause window fogging.

## **Vacation Storage**

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.

## Window Fogging

Interior fogging on the windshield can be quickly removed by turning the mode selector to Defrost. The Defrost/Floor mode can be used to maintain a clear windshield and provide sufficient heating. If side window fogging becomes objectionable, increase blower speed to improve airflow and clearing of the side windows. Vehicle windows tend to fog on the inside in mild but rainy or humid weather.

#### NOTE:

- Recirculate without A/C should not be used for long periods, as fogging may occur.
- Automatic Temperature Controls (ATC) will automatically adjust the climate control settings to reduce or eliminate window fogging on the front windshield.
  When this occurs, recirculation will be unavailable.

#### **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.

#### A/C Air Filter

The climate control system filters outside air containing dust, pollen and some odors. Strong odors cannot be totally filtered out. Refer to "Maintenance Procedures" in "Maintaining Your Vehicle" for filter replacement instructions.

## **Control Setting Suggestions For Various Weather Conditions**

WEATHER	CONTROL SETTINGS
Hot weather and vehicle interior is very hot	Set the mode control to . A/C on, and blower on high. Roll down the windows for a minute to flush out the hot air. Once comfort is achieved adjust controls for comfort.
Warm Weather	Turn A/C on and set the mode control to the position.
Cool Sunny	Operate in position.
Cool & Humid conditions	Set the mode control to and turn on A/C to keep windows clear.
Cold Weather	Set the mode control to the position. If windshield fogging starts to occur, move the control towards the position.

#### PERSONALIZED MENU BAR

The Uconnect features and services in the main menu bar are easily changed for your convenience. Simply follow these steps:



#### Uconnect 8.4A/8.4AN Main Menu

1. Press the "Apps **①**" button to open the App screen.

2. Press and hold, then drag the selected App to replace an existing shortcut in the main menu bar.

The replaced shortcut will now be an active App/shortcut on the main menu bar.

# UCONNECT VOICE RECOGNITION QUICK TIPS Introducing Uconnect

Start using Uconnect Voice Recognition with these helpful quick tips. It provides the key Voice Commands and tips you need to know to control your Uconnect 8.4A/8.4AN system.



**Uconnect 8.4AN** 

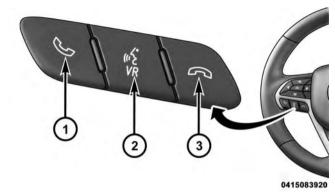
If you see the icon on your touchscreen, you have the Uconnect 8.4AN system. If not, you have a Uconnect 8.4A system.

#### **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 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 positioned on the rearview mirror 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.



#### **Uconnect Voice Command Buttons**

- 1 Push To Initiate Or To Answer A Phone Call, Send Or Receive A Text
- 2 For All Radios: Push To Begin Radio Or Media functions. For  $8.4\mathrm{A}/8.4\mathrm{AN}$  Only: Push To Begin Navigation, Apps And Climate Functions.
- 3 Push To End Call

#### **Basic Voice Commands**

The basic Voice Commands below can be given at any point while using your Uconnect system.

Push the VR button . 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

Notice the visual cues that inform you of your voice recognition system's status. Cues appear on the touch-screen.



Uconnect 8.4A/8.4AN

#### Radio

Use your voice to quickly get to the AM, FM or SiriusXM Satellite Radio stations you would like to hear. (Subscription or included SiriusXM Satellite Radio trial required.)

Push the VR button . After the beep, say:

- Tune to ninety-five-point-five FM
- Tune to Satellite Channel Hits 1

TIP: At any time, if you are not sure of what to say or want to learn a Voice Command, push the VR button and say "Help." The system will provide you with a list of commands.



Uconnect 8.4A/8.4AN Radio

#### Media

Uconnect offers connections via USB, SD, Bluetooth and auxiliary ports (If Equipped). Voice operation is only available for connected USB and iPod devices. (Remote CD player optional and not available on all vehicles.)

Push the VR button . 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 iPod
- 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 iPod or USB device. Your Voice Command must match **exactly** how the artist, album, song and genre information is displayed.



Uconnect 8.4A/8.4AN Media

#### **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 . 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 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."



Uconnect 8.4A/8.4AN Phone

## **Voice Text Reply**

Uconnect will announce **incoming** text messages. Push the Phone button and say **Listen**. (Must have compatible mobile phone paired to Uconnect system.)

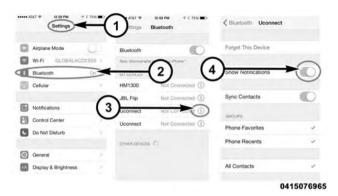
- 1. Once an incoming text message is read to you, push the Phone button . After the beep, say: "Reply."
- 2. Listen to the Uconnect prompts. After the beep, repeat one of the pre-defined messages and follow the system prompts.

PRE-DEFINED VOICE TEXT REPLY RESPONSES			
Yes.	Stuck in traffic.	See you later.	
No.	Start without me.	I'll be late.	
Okay.	Where are you?	I will be <num-< td=""></num-<>	
Call me.	Are you there yet?	ber> minutes late.	

PRE-DEFINED VOICE TEXT REPLY RESPONSES			
I'll call you	I need	See you in	
later.	directions.	<number> of</number>	
I'm on my way.	Can't talk right	minutes.	
I'm lost.	now.	Thanks.	

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.

Apple iPhone iOS 6 or later supports reading **incoming** text messages only. To enable this feature on your Apple iPhone, follow these 4 simple steps:



#### iPhone Notification Settings

- 1 Select "Settings"
- 2 Select "Bluetooth"
- 3 Select the (i) for the paired vehicle
- 4 Turn on "Show Notifications"

**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 (8.4A/8.4AN)

Too hot? Too cold? Adjust vehicle temperatures handsfree and keep everyone comfortable while you keep 4 moving ahead. (If vehicle is equipped with climate control.)

Push the VR button . After the beep, say one of the following commands:

- Set driver temperature to 70 degrees
- Set passenger temperature to 70 degrees

#### 452 UNDERSTANDING YOUR INSTRUMENT PANEL

**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.



Uconnect 8.4A/8.4AN Climate

## Navigation (8.4A/8.4AN)

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. (Navigation is optional on the Uconnect 8.4A system. See your dealer to activate navigation at any time.)

- 1. To enter a destination, push the VR button ( After the beep, say:
  - For the 8.4A Uconnect System, say: "Enter state."
  - For the 8.4AN Uconnect System, 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 . After Uconnect Access (8.4A/8.4AN) the beep, say: "Find nearest coffee shop."



Uconnect 8.4A/8.4AN Navigation

#### **WARNING!**

ALWAYS obey traffic laws and pay attention to the road. Some Uconnect Access services, including 9-1-1 and Assist, will NOT work without an operable 1X (voice/data) or 3G (data) network connection.

**NOTE:** Your vehicle may be transmitting data as authorized by the subscriber.

An included trial and/or subscription is required to take advantage of the Uconnect Access services in the next section of this guide. To register with Uconnect Access, press the Apps button on the 8.4-inch touchscreen to get started. Detailed registration instructions can be found on the next page.

#### 454 UNDERSTANDING YOUR INSTRUMENT PANEL

**NOTE:** Uconnect Access is available only on equipped vehicles purchased within the continental United States, Alaska and Hawaii. Services can only be used where coverage is available; see coverage map for details.

3 9-1-1 Call €

▲ Security Alarm Notification

Remote Door Lock/Unlock

▲ Stolen Vehicle Assistance

O Remote Vehicle Start\*\*

Remote Horn and Lights

Yelp Search

Voice Texting

A Roadside Assistance Call

🛜 WiFi Hotspot\*\*\*

\*\*If vehicle is equipped.

\*\*\*Extra charges apply.

#### **Vehicle Health Alert**

Your vehicle will send you an email alert if it senses a problem under the hood with one of your vehicles key systems. For further information go to the Mopar Owner Connect website moparownerconnect.com.

## Register (8.4A/8.4AN)

To unlock the full potential of Uconnect Access in your vehicle, you first need to register with Uconnect Access.

1. Push the ASSIST button on your rearview mirror.



**Signing up is easy!** Simply follow the steps above. Or, press the "Apps \( \bigcup ''\) button on the touchscreen to "Register By Web" to complete the process using your smartphone or computer.

For further information please visit DriveUconnect.com.

## Mobile App (8.4A/8.4AN)

You're only a few steps away from using remote commands and playing your favorite music in your vehicle.

0401020352

#### **Assist Button**

- 2. Press the "Uconnect Care" button on the touchscreen.
- 3. A helpful Uconnect Care Agent will register your vehicle and handle all of the details.



0415083930

Mobile App

To link your internet radio accounts:

- 1. Download the Uconnect Access App to your mobile device.
- 2. Press the Via Mobile icon on the navigation bar at the bottom of the app.

- 3. Press the app you'd like to connect to your vehicle.
- 4. Enter your login information for the selected app and press Link.
- 5. Next time you're in your vehicle, enable Bluetooth, pair your phone and select the Via Mobile app you want to play from the Uconnect touchscreen to stream your personalized music.

#### NOTE:

- You can also complete this process on the web. Simply visit moparownerconnect.com log in and click Set Up Via Mobile Profile (under Quick Links).
- Once you download the app to your compatible mobile device, you will also be able to start your vehicle and lock/unlock its doors from virtually anywhere.

#### UNDERSTANDING YOUR INSTRUMENT PANEL 457

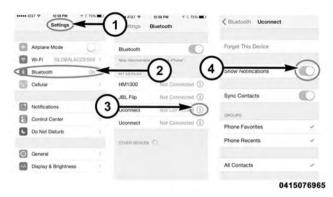
## Voice Texting (8.4A/8.4AN)

- 1. To send a message, push the Phone button . After the beep, say the following command: "Send message to John Smith."
- 2. Listen to the prompt. After the beep, dictate the message you would like to send. Wait for Uconnect to process your message.
- 3. The Uconnect system will repeat your message and provide a variety of options to add to, delete, send or hear the message again. After the beep, tell Uconnect what you'd like to do. For instance, if you're happy with your message, after the beep, say: "Send."

You must be registered with Uconnect Access and have a compatible MAP – enabled smartphone to use your voice to send a personalized text message. For details about MAP, visit UconnectPhone.com.

Apple iPhone iOS6 or later supports reading incoming text messages only. To enable this feature on your Apple iPhone, follow these 4 simple steps:

#### 458 UNDERSTANDING YOUR INSTRUMENT PANEL



## iPhone Notification Settings

- 1 Select "Settings"
- 2 Select "Bluetooth"
- 3 Select the (i) for the paired vehicle
- 4 Turn on "Show Notifications"

#### TIP:

- Voice Texting 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.
- Messages are limited to 140 characters.
- The Messaging button on the touchscreen must be illuminated to use the feature.

## Yelp (8.4A/8.4AN)

Once registered with Uconnect Access, you can use your voice to search for the most popular places or things around you.

- 1. Press the "Apps **①**" button on the touchscreen.
- 2. Press the "Yelp" button on the touchscreen.
- 3. Once the YELP home screen appears on the touch-screen, push the VR button www, then say: "YELP search."
- 4. Listen to the system prompts and after the beep, tell Uconnect the place or business that you'd like Uconnect to find.

**TIP:** Once you perform a search, you can reorganize the results by selecting either the Best Match, Rating or Distance tab on the top of the touchscreen display.



Yelp

## SiriusXM Travel Link (8.4A/8.4AN)

Need to find a gas station, view local movie listings, check a sports score or the 5 - day weather forecast? SiriusXM Travel Link is a suite of services that brings a wealth of information right to your Uconnect 8.4AN system. (Not available for 8.4A system.)

Push the VR button . After the beep, say one of the following commands:

- Show fuel prices
- Show 5 day weather forecast
- · Show extended weather

**TIP:** Traffic alerts are not accessible with Voice Command.



SiriusXM Travel Link

## Siri Eyes Free — If Equipped

If your vehicle is equipped with Siri Eyes Free, you can use your voice to send text messages, schedule meetings, set reminders, and more. For further information go to the Mopar Owner Connect website moparownerconnect.com.

#### 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.

**NOTE:** Only the first 25 characters can been seen on the touchscreen while typing a custom message.

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:

- Reply with text message is not compatible with iPhones.
- Auto reply with text message is only available on phones that supporting Bluetooth MAP.

#### **General Information**

This device complies with FCC rules Part 15 and Industry Canada RSS-210. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference.
- 2. This device must accept any interference that may be received including interference that may cause undesired operation.

#### NOTE:

- The transmitter has been tested and it complies with FCC and IC rules. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device
- The term IC before the certification/registration number only signifies that Industry Canada technical specifications were met.

## **Additional Information**

© 2015 FCA US LLC. All rights reserved. Mopar and Uconnect are registered trademarks and Mopar Owner Connect is a trademark of FCA US LLC. Android is a trademark of Google Inc. SiriusXM and all related marks and logos are trademarks of SiriusXM Radio Inc. Yelp, Yelp logo, Yelp burst and related marks are registered trademarks of Yelp.

**Uconnect System Support:** 

(24 hours a day 7 days a week) for U.S. residents call:1-877-855-8400 or visit DriveUconnect.com.

Canadian residents (English) call:1-800-465-2001 Canadian residents (French) call:1-800-387-9983 or visit DriveUconnect.ca.

Mon. – Fri., 8:00 am – 8:00 pm, ET

Sat., 9:00 am – 5:00 pm, ET

Sun., Closed

Uconnect Access Services Support: 1-855-792-4241 Please have your Uconnect Security PIN ready when you call.

## STARTING AND OPERATING

## **CONTENTS**

■ STARTING PROCEDURES		□ Possible Reasons The Engine Does Not Autostop
□ Automatic Transmission	.471	•
□ Keyless Enter-N-Go	.472	□ To Start The Engine While In Autostop  Mode
□ Normal Starting	.472	□ To Manually Turn Off The Stop/Start System479
□ Extreme Cold Weather (Below -22°F Or -30°C)	.474	$\hfill\Box$ To Manually Turn On The Stop/Start System479
□ If Engine Fails To Start	.474	□ System Malfunction
□ After Starting		ENGINE BLOCK HEATER — IF EQUIPPED 480
■ STOP/START SYSTEM — IF EQUIPPED	.476	AUTOMATIC TRANSMISSION
□ Automatic Mode		□ Key Ignition Park Interlock

466 STARTING AND OPERATING	
$\hfill\Box$ Brake/Transmission Shift Interlock System $\hfill$ 482	■ QUADRA-LIFT — IF EQUIPPED
□ Fuel Economy (ECO) Mode	□ Description
$\hfill\Box$ Eight–Speed Automatic Transmission	□ Air Suspension Modes
■ FOUR-WHEEL DRIVE OPERATION	$\hfill\Box$ Driver Information Display (DID) Messages508
☐ Quadra-Trac I Operating Instructions/Precautions	□ Operation
— If Equipped	■ ON-ROAD DRIVING TIPS
□ Quadra-Trac II Operating Instructions/Precautions — If Equipped	■ OFF-ROAD DRIVING TIPS
□ Shift Positions	□ Quadra-Lift — If Equipped
□ Shifting Procedures	□ When To Use 4WD LOW Range — If Equipped
□ Quadra-Drive II System — If Equipped 500	□ Driving Through Water
■ SELEC-TERRAIN — IF EQUIPPED	□ Driving In Snow, Mud And Sand
□ Description	□ Hill Climbing
$\hfill\Box$ Driver Information Display (DID) Messages502	

□ Traction Downhill	□ Hill Start Assist (HSA)
□ After Driving Off-Road	□ Traction Control System (TCS)
■ ELECTRIC POWER STEERING	□ Electronic Stability Control (ESC)
■ FUEL SAVER TECHNOLOGY 5.7L ENGINE ONLY	□ Electronic Roll Mitigation (ERM)536
— IF EQUIPPED	□ Trailer Sway Control (TSC)
■ PARKING BRAKE	□ Ready Alert Braking (RAB)537 <b>5</b>
■ BRAKE SYSTEM523	□ Rainy Brake Support (RBS)
■ ELECTRONIC BRAKE CONTROL SYSTEM524	□ Dynamic Steering Torque (DST)
□ Electronic Brake Force Distribution (EBD)524	☐ Hill Descent Control (HDC) — If Equipped538
□ Brake System Warning Light	□ Selec Speed Control (SSC) — If Equipped541
□ Anti-Lock Brake System (ABS)	■ TIRE SAFETY INFORMATION
□ Anti-Lock Brake Warning Light	□ Tire Markings
□ Brake Assist System (BAS)	☐ Tire Identification Number (TIN)

STARTING AND OPERATING 467

□ Replacement Tires
■ TIRE CHAINS (TRACTION DEVICES)
■ TIRE ROTATION RECOMMENDATIONS571
■ TIRE PRESSURE MONITOR SYSTEM (TPMS)572
□ Premium System
☐ Tire Pressure Monitoring Low Pressure
Warnings
□ Service Tpm System Warning
□ General Information
■ FUEL REQUIREMENTS
□ 3.6L Engine — If Equipped
□ 5.7L Engine — If Equipped
□ Reformulated Gasoline

468 STARTING AND OPERATING I

□ Gasoline/Oxygenate Blends	Trailer Hitch Classification
□ E-85 Usage In Non-Flex Fuel Vehicles	Trailer Towing Weights
□ MMT In Gasoline	(Maximum Trailer Weight Ratings) 595
□ Materials Added To Fuel	Trailer Hitch Receiver Cover Removal (Summit Models) — If Equipped
□ Fuel System Cautions	Trailer And Tongue Weight
□ Carbon Monovido Warnings 584	Towing Requirements
ADDING FLIFI 585	Towing Tips
□ Emergency Fuel Filler Door Release 587	SNOW PLOW
■ VEHICLE LOADING	RECREATIONAL TOWING (BEHIND
	MOTORHOME, ETC.)
■ TRAILER TOWING	Towing This Vehicle Behind Another Vehicle606
□ Common Towing Definitions	Recreational Towing – Two-Wheel Drive Models

STARTING AND OPERATING 469

470 STARTING AND OPERATING	
□ Recreational Towing — Quadra-Trac I (Single-Speed Transfer Case) Four-Wheel Drive Models	□ Recreational Towing — Quadra–Trac II /Quadra–Drive II Four-Wheel Drive Models608

#### STARTING PROCEDURES

Before starting your vehicle, adjust your seat, adjust the inside and outside mirrors, fasten your seat belt, and if present, instruct all other occupants to buckle their seat belts.

#### **WARNING!**

- Before exiting a vehicle, always shift the automatic transmission into PARK and apply the parking brake. 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. 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

## WARNING! (Continued)

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

#### **Automatic Transmission**

The shift lever must be in the NEUTRAL or PARK position before you can start the engine. Apply the brakes before shifting into any driving gear.

#### **CAUTION!**

Damage to the transmission may occur if the following precautions are not observed:

- Do not shift from REVERSE, PARK, or NEUTRAL into any forward gear when the engine is above idle speed.
- Shift into PARK only after the vehicle has come to a complete stop.
- Shift into or out of REVERSE only after the vehicle has come to a complete stop and the engine is at idle speed.
- Before shifting into any gear, make sure your foot is firmly on the brake pedal.

## **Keyless Enter-N-Go**



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 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 shift lever/gear selector in PARK, then push and release the ENGINE START/STOP button.
- 2. The ignition switch will return to the OFF position.
- 3. If the shift lever/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 switch position will remain in the ACC position until the shift lever/gear selector is in PARK and the button is pushed twice to the OFF

position. If the shift lever/gear selector is not in PARK and the ENGINE START/STOP button is pushed once, the Driver Information Display (DID) 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 ignition switch is left in the ACC or RUN (engine not running) position and the transmission is in 5 PARK, the system will automatically time out after 30 minutes of inactivity and the ignition will switch to the OFF position.

# 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 four positions, OFF, ACC, RUN and START. To change the ignition positions without starting the vehicle and use the accessories follow these steps:

- Starting with the ignition in the OFF position,
- Push the ENGINE START/STOP button once to place the ignition to the ACC position (DID will display "ACC"),
- Push the ENGINE START/STOP button a second time to place the ignition to the RUN position (DID will display "ON/RUN"),

• Push the ENGINE START/STOP button a third time to return the ignition to the OFF position (DID will display "OFF").

## Extreme Cold Weather (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.

## If Engine Fails To Start

### **WARNING!**

• Never pour fuel or other flammable liquid into the throttle body air inlet opening in an attempt to start the vehicle. This could result in flash fire causing serious personal injury.

## 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" in "What To Do In Emergencies" for further information.

## Clearing A Flooded Engine (Using ENGINE START/STOP Button)

If the engine fails to start after you have followed the "Normal Starting" or "Extreme Cold Weather" procedures, it may be flooded. To clear any excess fuel:

- 1. Press and hold the brake pedal.
- 2. Press the accelerator pedal all the way to the floor and 5 hold it.
- 3. Push and release the ENGINE START/STOP button once.

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.

## **After Starting**

The idle speed is controlled automatically and it will decrease as the engine warms up.

#### STOP/START SYSTEM — IF EQUIPPED

The Stop/Start function is developed to reduce fuel consumption. The system will stop the engine automatically during a vehicle stop if the required conditions are met. Releasing the brake pedal or pressing the accelerator pedal will automatically re-start the engine.

#### **Automatic Mode**

The Stop/Start feature is enabled after every normal customer engine start. At that time, the system will go into STOP/START READY and if all other conditions are met, can go into a STOP/START AUTOSTOP ACTIVE "Autostop" mode.

## To Activate The Autostop Mode, The Following Must Occur:

- The system must be in STOP/START READY state. A STOP/START READY message will be displayed in the Driver Information Display (DID) within the Stop/ Start section. Refer to "Driver Information Display (DID)" in "Understanding Your Instrument Panel" for further information.
- The vehicle must be completely stopped.
- The shifter must be in a forward gear and the brake pedal depressed.

The engine will shut down, the tachometer will move to the zero position and the Stop/Start telltale will illuminate indicating you are in Autostop. Customer settings will be maintained upon return to an engine running condition.

## Possible Reasons The Engine Does Not Autostop

Prior to engine shut down, the system will check many safety and comfort conditions to see if they are fulfilled. Detailed information about the operation of the Stop/Start system may be viewed in the DID Stop/Start Screen. In the following situations the engine will not stop:

- Driver's seat belt is not buckled.
- Driver's door is not closed.
- Battery temperature is too warm or cold.
- Battery charge is low.
- The vehicle is on a steep grade.
- Cabin heating or cooling is in process and an acceptable cabin temperature has not been achieved.

- HVAC is set to full defrost mode at a high blower speed.
- HVAC set to MAX A/C.
- Engine has not reached normal operating temperature.
- The transmission is not in a forward gear.
- Hood is open.
- Vehicle is in 4LO transfer case mode.
- Brake pedal is not pressed with sufficient pressure.

## Other Factors Which Can Inhibit Autostop Include:

- Fuel level.
- Accelerator pedal input.
- Engine temp too high.
- 5 MPH threshold not achieved from previous AU-TOSTOP.

#### 478 STARTING AND OPERATING

- Steering angle beyond threshold.
- ACC is on and speed is set.

It may be possible for the vehicle to be driven several times without the STOP/START system going into a STOP/START READY state under more extreme conditions of the items listed above.

## To Start The Engine While In Autostop Mode

While in a forward gear, the engine will start when the brake pedal is released or the throttle pedal is depressed. The transmission will automatically re-engage upon engine restart.

## Conditions That Will Cause The Engine To Start Automatically While In Autostop Mode:

- The transmission selector is moved out of DRIVE.
- To maintain cabin temperature comfort.
- HVAC is set to full defrost mode.
- HVAC system temperature or fan speed is manually adjusted.
- Battery voltage drops too low.
- Low brake vacuum (e.g. after several brake pedal applications).
- STOP/START OFF switch is pressed.
- A STOP/START system error occurs.
- 4WD system is put into 4LO mode.

## To Manually Turn Off The Stop/Start System



#### STOP/START Off Switch

- 1. Push the STOP/START Off switch (located on the switch bank). The light on the switch will illuminate.
- 2. The "STOP/START OFF" message will appear in Driver Information Display (DID). Refer to "Driver

- Information Display (DID)" in "Understanding Your Instrument Panel" for further information.
- 3. At the next vehicle stop (after turning off the STOP/START system) the engine will not be stopped.
- 4. The STOP/START system will reset itself back to an ON condition every time the ignition is turned off and back on.

## To Manually Turn On The Stop/Start System

Push the STOP/START Off switch (located on the switch bank). The light on the switch will turn off.

## System Malfunction

If there is a malfunction in the STOP/START system, the system will not shut down the engine. A "SERVICE STOP/START SYSTEM" message will appear in the Driver Information Display (DID). Refer to "Driver Information Display (DID)" in "Understanding Your Instrument Panel" for further information.

If the "SERVICE STOP/START SYSTEM" message appears in the DID, have the system checked by your authorized dealer.

#### **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 must be plugged in at least one hour to have an adequate warming effect on the engine.

## The engine block heater cord is located:

- 3.6L Engine Coiled and strapped to the engine oil dipstick tube.
- 5.7L Engine Bundled and fastened to the injector harness.

#### **WARNING!**

Remember to disconnect the engine block heater cord before driving. Damage to the 110-115 Volt electrical cord could cause electrocution.

#### **AUTOMATIC TRANSMISSION**

#### **WARNING!**

• 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 apply the parking brake, shift the transmission into PARK, and make sure the keyless ignition node is in the "OFF" mode. Remove the Key Fob from the vehicle, and lock the vehicle. When the keyless ignition is in the OFF mode, the transmission is locked in PARK, securing the vehicle against unwanted movement.
- 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

## WARNING! (Continued)

warned not to touch the parking brake, brake pedal or the transmission gear selector.

- 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.
- 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!**

Damage to the transmission may occur if the following precautions are not observed:

- Shift into or out of PARK or REVERSE only after the vehicle has come to a complete stop.
- Do not shift between PARK, REVERSE, NEU-TRAL, or DRIVE when the engine is above idle speed.
- Before shifting into any gear, make sure your foot is firmly pressing the brake pedal.

**NOTE:** You must press and hold the brake pedal while shifting out of PARK.

## **Key Ignition Park Interlock**

This vehicle is equipped with a Key Ignition Park Interlock which requires the transmission to be in PARK before the engine can be turned off. 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 switch is in the OFF position.

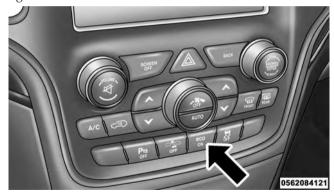
## **Brake/Transmission Shift Interlock System**

This vehicle is equipped with a Brake Transmission Shift Interlock System (BTSI) that holds the shift lever 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.

## Fuel Economy (ECO) Mode

The Fuel Economy (ECO) mode can improve the vehicle's overall fuel economy during normal driving conditions. Push the "ECO" switch in the center stack of the instrument panel to activate or disable ECO mode. An amber light on the switch indicates when ECO mode is disabled.



**Fuel Economy Mode Switch** 

When the Fuel Economy (ECO) Mode is engaged, the vehicle control systems will change the following:

- The transmission will upshift sooner and downshift later
- The overall driving performance will be more conservative.
- Some ECO mode functions may be temporarily inhibited based on temperature and other factors.

## Active Noise Cancellation — Summit Models Only

Your vehicle is equipped with an Active Noise Cancellation System. This system uses four microphones embedded in the headliner to detect undesirable exhaust noise. An onboard frequency generator creates counteracting sound waves through the audio system to help keep the vehicle quiet.

## **Eight-Speed Automatic Transmission**

The transmission gear range (PRND) is displayed both on the shift lever and in the Driver Information Display (DID). To select a gear range, press the lock button on the shift lever and move the lever rearward or forward. You must also press the brake pedal to shift the transmission out of PARK, or to shift from NEUTRAL into DRIVE or REVERSE when the vehicle is stopped or moving at low speeds (refer to "Brake/Transmission Shift Interlock System" in this section). Select the DRIVE range for normal driving.

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).

The electronically-controlled transmission provides a

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 shift lever provides PARK, REVERSE, NEUTRAL, DRIVE and MANUAL (AutoStick) shift positions. Manual shifts can be made using the AutoStick shift control (refer to "AutoStick" in this section for further information). Toggling the shift lever forward (-) or rearward (+) while in the MANUAL (AutoStick) position (beside the DRIVE position), or tapping the shift paddles (+/-), will manually select the transmission gear, and will display the current gear in the instrument cluster.



Shift Lever

## **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 5 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. 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.

#### 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.
- 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 leaving 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

## WARNING! (Continued)

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 apply the parking brake, shift the transmission into PARK, turn the engine OFF, and remove the Key Fob. When the ignition is in the OFF mode, the transmission is locked in PARK, securing the vehicle against unwanted movement.

## WARNING! (Continued)

- 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 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.
- Before moving the shift lever out of PARK, you must start the engine, and also press the brake pedal. Otherwise, damage to the shift lever could result.

The following indicators should be used to ensure that you have engaged the transmission into the PARK position:

- When shifting into PARK, press the lock button on the shift lever and push the lever all the way forward until it stops and is fully seated.
- Look at the transmission gear position display and verify that it indicates the PARK position (P).

• With brake pedal released, verify that the shift lever 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 leave 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 all forward 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 AutoStick shift control (refer to "AutoStick" in this section for further information) to select a lower gear. Under these conditions, using a lower gear 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.

#### MANUAL (M)

The MANUAL (M, +/-) position (beside the DRIVE 5 position) enables full manual control of transmission shifting (also known as AutoStick mode; refer to "AutoStick" in this section for further information). Toggling the shift lever forward (-) or rearward (+) while in the MANUAL (AutoStick) position will manually select the transmission gear, and will display the current gear in the instrument cluster.

## 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 your authorized dealer).

1. Stop the vehicle.

- 2. Shift the transmission into PARK, if possible. If not, shift the transmission to NEUTRAL.
- 3. Press 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 your authorized dealer at your earliest possible convenience. Your authorized dealer has diagnostic equipment to determine if the problem could recur.

If the transmission cannot be reset, authorized dealer service is required.

#### AutoStick

AutoStick is a driver-interactive transmission feature providing manual shift control, giving you more control of the vehicle. AutoStick allows you to maximize engine braking, eliminate undesirable upshifts and downshifts, and improve overall vehicle performance. This system can also provide you with more control during passing, city driving, cold slippery conditions, mountain driving, trailer towing, and many other situations.

## Operation

To activate AutoStick mode, move the shift lever into the MANUAL (M) position (beside the DRIVE position), or tap one of the shift paddles on the steering wheel. Tapping the (-) shift paddle to enter AutoStick mode will downshift the transmission to the next lower gear, while tapping (+) to enter AutoStick mode will retain the current gear. The current transmission gear will be displayed in the instrument cluster. In AutoStick mode, you can use the shift lever (in the MANUAL position), or the shift paddles, to manually shift the transmission. Tapping the shift lever forward (-) while in the MANUAL (M) position, or tapping the (-) shift paddle on the steering wheel, will downshift the transmission to the next lower gear. Tapping the lever rearward (+) (or tapping the (+) shift paddle) will command an upshift.

**NOTE:** The shift paddles may be disabled (or re-enabled, 5 as desired) using the Uconnect Personal Settings.

In AutoStick, the transmission will shift up or down when (+/-) is manually selected by the driver (using the shift lever, or the shift paddles), unless an engine lugging or overspeed condition would result. It will remain in the selected gear until another upshift or downshift is chosen, except as described below.

• The transmission will automatically downshift as the vehicle slows (to prevent engine lugging) and will display the current gear.

- The transmission will automatically downshift to first gear when coming to a stop. After a stop, the driver should manually upshift (+) the transmission as the vehicle is accelerated.
- You can start out, from a stop, in first or second gear (or third gear, in 4LO range, Snow mode, or Sand mode). Tapping (+) (at a stop) will allow starting in second gear. Starting out in second gear can be helpful in snowy or icy conditions.
- If a requested downshift would cause the engine to over-speed, that shift will not occur.
- The system will ignore attempts to upshift at too low of a vehicle speed.
- Holding the (-) paddle depressed will downshift the transmission to the lowest gear possible at the current speed.
- Transmission shifting will be more noticeable when AutoStick is enabled.

• The system may revert to automatic shift mode if a fault or overheat condition is detected.

**NOTE:** When Selec-Speed or Hill Descent Control is enabled, AutoStick is not active.

To disengage AutoStick, return the shift lever to the DRIVE position, or press and hold the (+) shift paddle (if the shift lever is already in DRIVE) until "D" is once again indicated in the instrument cluster. You can shift in or out of AutoStick at any time without taking your foot off the accelerator pedal.

## **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.

#### FOUR-WHEEL DRIVE OPERATION

## **Quadra-Trac I Operating Instructions/Precautions** — If Equipped

The Quadra-Trac I is a single-speed (HI range only) transfer case, which provides convenient full-time fourwheel drive. No driver interaction is required. The Brake Traction Control (BTC) System, which combines standard ABS and Traction Control, provides resistance to any wheel that is slipping to allow additional torque transfer to wheels with traction.

**NOTE:** The Quadra-Trac I system is not appropriate for conditions where 4WD LOW range is recommended. Refer to "Off-Road Driving Tips" in "Starting And Operating" for further information.

## **Quadra-Trac II Operating Instructions/Precautions** — If Equipped

The Quadra-Trac II transfer case is fully automatic in the normal driving 4WD AUTO mode. The Quadra-Trac II transfer case provides three mode positions:

- 4WD HI
- NEUTRAL.
- 4WD LOW

This transfer case is fully automatic in the 4WD HI mode.

When additional traction is required, the 4WD LOW position can be used to lock the front and rear driveshafts together and force the front and rear wheels to rotate at the same speed. The 4WD LOW position is intended for loose, slippery road surfaces only. Driving in the 4WD LOW position on dry, hard-surfaced roads may cause increased tire wear and damage to driveline components. When operating your vehicle in 4WD LOW, the engine speed is approximately three times that of the 4WD HI position 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 cause damage to the transfer case.

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.

#### **WARNING!**

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

## WARNING! (Continued)

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.

## **Shift Positions**

For additional information on the appropriate use of each 4WD system mode position, see the information below:

#### **4WD AUTO**

This range is used on surfaces such as ice, snow, gravel, sand, and dry hard pavement.

NOTE: Refer to "Selec-Terrain – If Equipped" in "Starting And Operating" for further information on the various positions and their intended usages.

#### **NEUTRAL**

This range disengages the driveline from the powertrain. It is to be used for flat towing behind another vehicle. Refer to "Recreational Towing" in "Starting And Operating" for further information.

## WARNING!

You or others could be injured or killed if you leave the vehicle unattended with the power transfer unit in the NEUTRAL (N) position without first fully engaging the parking brake. The NEUTRAL (N) position disengages both the front and rear driveshafts from the powertrain and will allow the vehicle

## WARNING! (Continued)

to roll, even if the automatic transmission is in PARK (or manual transmission is in gear). The parking brake should always be applied when the driver is not in the vehicle.

#### **4WD LOW**

This range is for low speed four-wheel drive. It provides an additional gear reduction which allows for increased torque to be delivered to both the front and rear wheels while providing maximum pulling power for loose, slippery road surfaces only. Do not exceed 25 mph (40 km/h).

**NOTE:** Refer to "Selec-Terrain – If Equipped" for further information on the various positions and their intended usages.

## **Shifting Procedures**

#### 4WD HI To 4WD LOW

With the vehicle at speeds of 0 to 3 mph (0 to 5 km/h), the ignition switch in the ON position or the engine running, shift the transmission into "N", and push the "4WD LOW" button once on the transfer case switch. The "4WD LOW" indicator light in the instrument cluster will begin to flash and remain on solid when the shift is complete.



0582003299

**Transfer Case Switch** 

NOTE: If shift conditions/interlocks are not met, or a transfer case motor temperature protection condition exists, a "For 4x4 Low Slow Below 3 mph (5 km/h) Put Trans in "N" Press 4 Low" message will flash from the Driver Information Display (DID). Refer to "Driver Information Display (DID)" in "Understanding Your Instrument Panel" for further information.

#### 4WD LOW To 4WD HI

With the vehicle at speeds of 0 to 3 mph (0 to 5 km/h), the ignition switch in the ON position or the engine running, shift the transmission into NEUTRAL, and push the "4WD LOW" button once on the transfer case switch. The "4WD LOW" indicator light in the instrument cluster will flash and go out when the shift is complete.

#### NOTE:

- If shift conditions/interlocks are not met, or a transfer case motor temperature protection condition exists, a "For 4x4 High Slow Below 3 mph (5 km/h) Put Trans in N push 4 Low" message will flash from the Driver Information Display (DID). Refer to "Driver Information Display (DID)" in "Understanding Your Instrument Panel" for further information.
- Shifting into or out of 4WD LOW 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 0 to 3 mph (0 to 5 km/h). If the vehicle is moving faster than 3 mph (5 km/h), the transfer case will not allow the shift.

Shifting Into NEUTRAL (N)

## **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 NEUTRAL (N) 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.

- 1. Bring the vehicle to a complete stop, with the engine running.
- 2. Press and hold the brake pedal.
- 3. Shift the transmission into NEUTRAL.
- 4. If vehicle is equipped with Quadra-Lift air suspension, ensure the vehicle is set to Normal Ride Height.
- 5. Using a ballpoint pen or similar object, push and hold the recessed transfer case NEUTRAL (N) button (located by the selector switch) for four seconds. The light behind the NEUTRAL (N) symbol will blink, indicating shift in progress. The light will stop blinking (stay on solid) when the shift to NEUTRAL (N) is complete. A "NEUTRAL" message will appear in the Driver Information Display (DID). Refer to "Driver Information Display (DID)" in "Understanding Your Instrument Panel" for further information.



0582003302

#### NEUTRAL (N) Switch

- 6. After the shift is completed and the NEUTRAL (N) light stays on, release the NEUTRAL (N) button.
- 7. Shift the transmission into REVERSE.
- 8. Release the brake pedal for five seconds and ensure that there is no vehicle movement.

**NOTE:** If shift conditions/interlocks are not met, a "To Tow Vehicle Safely, Read Neutral Shift Procedure in Owners Manual" message will flash from the Driver Information Display (DID). Refer to "Driver Information Display (DID)" in "Understanding Your Instrument Panel" for further information.

## Shifting Out Of NEUTRAL (N)

Use the following procedure to prepare your vehicle for normal usage.

- 1. Bring the vehicle to a complete stop.
- 2. Firmly apply the parking brake.
- 3. Start the engine.
- 4. Press and hold the brake pedal.
- 5. Shift the transmission into NEUTRAL.

6. Using a ballpoint pen or similar object, push and hold the recessed transfer case NEUTRAL (N) button (located by the selector switch) for one second.



0582003302

#### NEUTRAL (N) Switch

7. When the NEUTRAL (N) indicator light turns off, release the NEUTRAL (N) button.

8. After the NEUTRAL (N) button has been released, the transfer case will shift to the position indicated by the selector switch.

## Quadra-Drive II System — If Equipped

The optional Quadra-Drive II System features two torque transfer couplings. The couplings include an Electronic Limited-Slip Differential (ELSD) rear axle and the Quadra-Trac II transfer case. The optional ELSD axle is fully automatic and requires no driver input to operate. Under normal driving conditions, the unit functions as a standard axle, balancing torque evenly between left and right wheels. With a traction difference between left and right wheels, the coupling will sense a speed difference. As one wheel begins to spin faster than the other, torque will automatically transfer from the wheel that has less traction, to the wheel that has traction. While the transfer case and axle coupling differ in design, their operation is similar. Follow the Quadra-Trac II transfer case shifting information, preceding this section, for shifting this system.

#### SELEC-TERRAIN — IF EQUIPPED

## **Description**

Selec-Terrain combines the capabilities of the vehicle control systems, along with driver input, to provide the best performance for all terrains.



0582003301

Selec-Terrain Switch

Selec-Terrain consists of the following positions:

- Snow Tuning set for additional stability in inclement weather. Use on and off road on loose traction surfaces such as snow. When in Snow mode (depending on certain operating conditions), the transmission may use second gear (rather than first gear) during launches, to minimize wheel slippage. If equipped with air suspension, the default ride height for Snow is 5 NRH.
- Auto Fully automatic full time four-wheel drive operation can be used on and off road. Balances traction with seamless steering feel to provide improved handling and acceleration over two-wheel drive vehicles. If equipped with air suspension, the level will change to NRH.

- Sand Off road calibration for use on low traction surfaces such as sand or wet grass. Driveline is maximized for traction. Some binding may be felt on less forgiving surfaces. The electronic brake controls are set to limit traction control management of throttle and wheel spin. If equipped with air suspension, the default ride height for Sand is NRH.
- Mud Off road calibration for use on low traction surfaces such as mud. Driveline is maximized for traction. Some binding may be felt on less forgiving surfaces. The electronic brake controls are set to limit traction control management of throttle and wheel spin. If equipped with air suspension, the level will change to Off Road 1.
- Rock Off road calibration only available in 4WD Low range. The vehicle is raised (if equipped with Air Suspension) for improved ground clearance. Traction based tuning with improved steer-ability for use on

high traction off-road surfaces. Use for low speed obstacles such as large rocks, deep ruts, etc. If equipped with air suspension, the vehicle level will change to Off-Road 2. If the Selec-Terrain switch is in ROCK mode, and the transfer case is switched from 4WD Low to 4WD High, the Selec-Terrain system will return to AUTO.

**NOTE:** Activate the Hill Descent Control or Selec Speed Control for steep downhill control. See "Electronic Brake Control System" in this section for further information.

## **Driver Information Display (DID) Messages**

When the appropriate conditions exist, a message will appear in the DID display. Refer to "Driver Information Display (DID)" in "Understanding Your Instrument Panel" for further information.

## QUADRA-LIFT — IF EQUIPPED

# **Description**

The Quadra-Lift air suspension system provides full time load leveling capability along with the benefit of vehicle height adjustment by the push of a button.



Selec-Terrain Switch

- 1 Up Button
- 2 Down Button
- 3 Entry/Exit Mode Indicator Lamp (Customer Selectable)
- 4 Normal Ride Height Indicator Lamp (Customer Selectable)
- 5 Off-Road 1 Indicator Lamp (Customer Selectable)
- 6 Off-Road 2 Indicator Lamp (Customer Selectable)

- Normal Ride Height (NRH) This is the standard position of the suspension and is meant for normal driving.
- Off-Road 1 (OR1) (Raises the vehicle approximately 1.1 in (28 mm) This is the primary position for all off-road driving until OR2 is needed. A smoother and more comfortable ride will result. Push the "Up" button once from the NRH position while the vehicle speed is below 38 mph (61 km/h). When in the OR1 position, if the vehicle speed remains between 40 mph (64 km/h) and 50 mph (80 km/h) for greater than 20 seconds or if the vehicle speed exceeds 50 mph (80 km/h), the vehicle will be automatically lowered to NRH. Refer to "Off-Road Driving Tips" in "Starting And Operating" for further information.
- Off-Road 2 (OR2) (Raises the vehicle approximately
   2.2 in (55 mm) This position is intended for off-roading use only where maximum ground clearance is

required. To enter OR2, push the "Up" button twice from the NRH position or once from the OR1 position while vehicle speed is below 20 mph (32 km/h). While in OR2, if the vehicle speed exceeds 25 mph (40 km/h) the vehicle height will be automatically lowered to OR1. Refer to "Off-Road Driving Tips" in "Starting And Operating" for further information.

• Aero Mode (Lowers the vehicle approximately 0.6 in

(15 mm) – This position provides improved aerodynamics by lowering the vehicle. The vehicle will automatically enter Aero Mode when the vehicle speed remains between 52 mph (83 km/h) and 56 mph (90 km/h) for greater than 20 seconds or if the vehicle speed exceeds 56 mph (90 km/h). The vehicle will return to NRH from Aero Mode if the vehicle speed remains between 20 mph (32 km/h) and 25 mph (40 km/h) for greater than 20 seconds or if the vehicle

speed falls below 20 mph (32 km/h). The vehicle will enter Aero Mode, regardless of vehicle speed if the vehicle is in "SPORT" mode.

• Entry/Exit Mode (Lowers the vehicle approximately 1.6 in (40 mm) - This position lowers the vehicle for easier passenger entry and exit as well as lowering the rear of the vehicle for easier loading and unloading of cargo. To enter Entry/Exit Mode, push the "Down" button once from (NRH) while the vehicle speed is below 25 mph (40 km/h). Once the vehicle speed goes below 15 mph (24 km/h) the vehicle height will begin to lower. If the vehicle speed remains between 15 mph (24 km/h) and 25 mph (40 km/h) for greater than 60 seconds, or the vehicle speed exceeds 25 mph (40 km/h) the Entry/Exit Mode change will be cancelled. To exit Entry/Exit Mode, press the "Up" button once while in Entry/Exit Mode or drive the vehicle over 15 mph (24 km/h).

**NOTE:** Automatic lowering of the vehicle into Entry/ Exit Mode can be enabled through the Uconnect Touch-Screen Radio. If this feature is enabled, the vehicle will only lower if the shift lever is in "PARK", the terrain switch is in "AUTO", the transfer-case is in "AUTO" and the vehicle level should be either in Normal or Aero Mode. The Vehicle will not automatically lower if the air suspension level is in Off Rd 2 or Off Rd 1. If the vehicle is equipped with Intrusion Theft Module (ITM), the lowering will be suppressed when the ignition is switched Off and the Door is Open to prevent setting the alarm Off.

The Selec-Terrain switch will automatically change the vehicle to the proper height based on the position of the Selec-Terrain switch. The height can be changed from the default Selec-Terrain setting by normal use of the air suspension buttons. Refer to "Selec-Terrain" in "Starting And Operating" for further information.

The system requires that the engine be running for all changes. When lowering the vehicle all of the doors, including the liftgate, must be closed. If a door is opened at any time while the vehicle is lowering the change will not be completed until the open door(s) is closed.

The Quadra-Lift air suspension system uses a lifting and lowering pattern which keeps the headlights from incorrectly shining into oncoming traffic. When raising the vehicle, the rear of the vehicle will move up first and then the front. When lowering the vehicle, the front will move down first and then the rear.

After the engine is turned off, it may be noticed that the air suspension system operates briefly, this is normal. The system is correcting the position of the vehicle to ensure a proper appearance.

To assist with changing a spare tire, the Quadra-Lift air suspension system has a feature which allows the automatic leveling to be disabled. Refer to "Uconnect Settings" in "Understanding Your Instrument Panel" for further information.

**NOTE:** If equipped with a touch screen radio all enabling/disabling of air suspension features must be done through the radio. Refer to "Uconnect Access Settings" in "Understanding Your Instrument Panel" for further information.

## **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 spare tire, the air suspension system has a feature which allows the automatic leveling to be disabled. Refer to "Uconnect Settings" in "Understanding Your Instrument Panel" for further information.

**NOTE:** This mode is intended to be enabled with engine running.

# **Transport Mode**

To assist with flat bed towing, the air suspension system has a feature which will put the vehicle into Entry/Exit height and disable the automatic load leveling system. Refer to "Uconnect Settings" in "Understanding Your Instrument Panel" 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 "Uconnect Settings" in "Understanding Your Instrument Panel" for further information.

**NOTE:** This mode is intended to be enabled with engine **5** running.

If equipped with a touch screen radio all enabling/ disabling of air suspension features must be done through the radio. Refer to "Uconnect Settings" in "Understanding Your Instrument Panel" for further information.

# **Driver Information Display (DID) Messages**

When the appropriate conditions exist, a message will appear in the DID display. Refer to "Driver Information Display (DID)" in "Understanding Your Instrument Panel" for further information.

# Operation

The indicator lamps 3 through 6 will illuminate to show the current position of the vehicle. Flashing indicator lamps will show a position which the system is working to achieve. When raising, if multiple indicator lamps are flashing on the "Up" button, the highest flashing indicator lamp is the position the system is working to achieve. When lowering, if multiple indicators are flashing on the "Up" button the lowest solid indicator lamp is the position the system is working to achieve.

Pressing the "UP" button once will move the suspension one position higher from the current position, assuming all conditions are met (i.e. engine running, speed below

threshold, etc). The "UP" button can be pressed multiple times, each press will raise the requested level by one position up to a maximum position of OR2 or the highest position allowed based on current conditions (i.e. vehicle speed, etc).

Pressing the "DOWN" button once will move the suspension one position lower from the current level, assuming all conditions are met (i.e. engine running, doors closed, speed below threshold, etc). The "DOWN" button can be pressed multiple times. Each press will lower the requested level by one position down to a minimum of Park Mode or the lowest position allowed based on current conditions (i.e. vehicle speed, etc.)

Automatic height changes will occur based on vehicle speed and the current vehicle height. The indicator lamps and DID messages will operate the same for automatic changes and user requested changes.

- Off-Road 2 (OR2) Indicator lamps 4, 5, and 6 will be illuminated when the vehicle is in OR2.
- Off-Road 1 (OR1) Indicator lamps 4 and 5 will be illuminated when the vehicle is in OR1.
- Normal Ride Height (NRH) Indicator lamp 4 will be illuminated when the vehicle is in this position.
- Entry/Exit Mode Indicator lamp 3 will be illuminated when the vehicle is in Entry/Exit Mode. If Entry/Exit Mode is requested while vehicle speed is between 15 mph (24 km/h) and 25 mph (40 km/h), indicator lamp 4 will remain on solid and indicator lamp 3 will flash as the system waits for the vehicle to reduce speed. If vehicle speed is reduced to, and kept below, 15 mph (24 km/h) indicator lamp 4 will turn off and indicator lamp 3 will flash until Entry/Exit Mode is achieved at which point indicator lamp 3 will go solid. If during the height change to Entry/Exit Mode, the vehicle speed exceeds 15 mph (24 km/h), the
- height change will be paused until the vehicle speed either goes below 15 mph (24 km/h) and the height change continues to Entry/Exit Mode, or exceeds 25 mph (40 km/h) and the vehicle height will return to NRH. Entry/Exit Mode may be selected while the vehicle is not moving provided that the engine is still running and all doors remain closed.
- Transport Mode No indicator lamps will be illumi- 5 nated. Customer driving will disable Transport Mode.
- Tire/Jack Mode indicator lamps 3 and 6 will be illuminated. Customer driving will disable Tire/Jack Mode.
- Wheel Alignment Mode indicator lamps 3 and 4 will be illuminated. Customer driving will disable Wheel Alignment Mode.

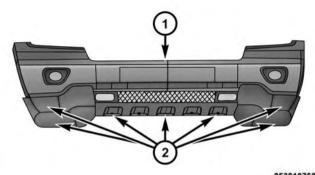
#### **ON-ROAD DRIVING TIPS**

Utility vehicles have higher ground clearance and a narrower track to make them capable of performing in a wide variety of off-road applications. Specific design characteristics give them a higher center of gravity than ordinary vehicles.

An advantage of the higher ground clearance is a better view of the road, allowing you to anticipate problems. They are not designed for cornering at the same speeds as conventional two-wheel drive vehicles any more than low-slung sports cars are designed to perform satisfactorily in off-road conditions. If at all possible, avoid sharp turns or abrupt maneuvers. As with other vehicles of this type, failure to operate this vehicle correctly may result in loss of control or vehicle rollover.

#### **OFF-ROAD DRIVING TIPS**

**NOTE:** Prior to off-road driving with non-Summit models that are also equipped with an Off Road Package, remove the lower fascia to prevent damage. The lower fascia is attached to the lower part of the front fascia with seven quarter turn fasteners and can be removed by hand. The front license plate bracket must be removed first if equipped.



053810760

Front Air Dam

- 1 Front Bumper
- 2 Front Air Dam Fasteners

NOTE: On Summit models the lower front fascia is not removable.

#### Lower Front Fascia Removal:

- 1. Remove the seven quarter turn fasteners.
- 2. Starting on one side of the vehicle, disengage lower fascia from the upper fascia. Grasp the portion inside the wheel well. Pulling it downwards and toward you, separate the tabs from the slots in the upper fascia.
- 3. Continue working your way across the vehicle, separating the remaining tabs from the slots in the upper fascia.

**NOTE:** Do not allow the lower fascia to freely hang from the tabs in the opposite corner as damage to lower and upper fascia may result.

4. Store the lower fascia in a safe location.

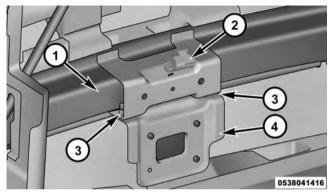
**NOTE:** It is recommend to also remove the radar sensor on vehicle equipped to Adaptive Cruise Control (ACC). This radar sensor is specifically calibrated to your vehicle and is not interchangeable with other radar sensors.

# Radar Sensor Removal Procedure (If Equipped With Adaptive Cruise Control [ACC]):

- 1. With the lower fascia removed, which provides access to the sensor and bracket, disconnect the wiring harness from the sensor.
- 2. Using a suitable tool, disconnect the wire clip from the bracket.
- 3. Using a suitable tool, remove the two fasteners that hold the sensor bracket to the bumper beam.

**NOTE:** It is recommended to scribe location to assist in reinstallation.

4. Locate the protective connector on the rear of the bumper beam.



**Bumper Beam** 

- 1 Inside Bumper Beam
- 2 Protective Connector Location
- 3 Sensor Bracket Fasteners
- 4 Sensor Bracket

**NOTE:** Only models with the Off Road Package are equipped with the a protective connector.

- 5. Remove the plug from the protective connector and install on the sensor.
- 6. Insert the wiring harness connector into the protective connector.
- 7. Store sensor and bracket in a safe place.

**NOTE:** All cruise control functions will be disabled when the radar sensor is disconnected.

# Radar Sensor Installation Procedure (If Equipped With Adaptive Cruise Control [ACC]):

- 1. Disconnect the wiring harness connector from the protective connector on the bumper beam.
- 2. Remove plug from radar sensor and install in protective connector.
- 3. Using the previously scribed marks, reinstall the radar sensor and bracket using the two fasteners.

**NOTE:** Some alignment may be required upon fascia installation to align sensor with fascia.

Install the wiring harness connector into the radar sensor.

**NOTE:** If you receive a fault, see your authorized dealer they may need to perform a sensor alignment.

#### **Lower Front Fascia Installation**

**NOTE:** This will only work if you have a helper.

- 1. Starting at the center of the vehicle, engage a sufficient number of tabs to support the weight of the lower fascia (typically one or two tabs) into the upper fascia.
- 2. Working your way outward, engage the tabs into the slots on one side of the vehicle.
- 3. Return to the center of the vehicle and repeat Step 2 to the opposite side of the vehicle.

#### NOTE:

- It may be necessary to apply additional force to individual tabs to make sure they are fully engaged.
- Do not use any tools to apply additional force to the tabs as damage to the upper and lower fascias may result.
- 4. Reinstall the seven quarter turn fasteners.

# Quadra-Lift — If Equipped

When off-roading, it is recommended that the lowest useable vehicle height that will clear the current obstacle or terrain be selected. The vehicle height should then be raised as required by the changes in terrain.

The Selec-Terrain switch will automatically change the vehicle to the optimized height based on the Selec-Terrain switch position. The vehicle height can be changed from the default height for each Selec-Terrain

mode by normal use of the air suspension switches. Refer to "Quadra-Lift – If Equipped" in "Starting And Operating" for further information.

# When To Use 4WD LOW Range — If Equipped

When off-road driving, shift to 4WD LOW for additional traction. This range should be limited to extreme situations such as deep snow, mud, or sand where additional low speed pulling power is needed. Vehicle speeds in excess of 25 mph (40 km/h) should be avoided when in 4WD LOW range.

## **WARNING!**

Do not drive in 4WD-LOW Range on dry pavement; driveline damage may result. 4WD-LOW Range locks front and rear drivelines together and does not allow for differential action between the front to rear

(Continued)

# WARNING! (Continued)

driveshafts. Driving in 4WD-LOW on pavement will cause driveline binding; use only on wet or slippery surfaces.

## **Driving Through Water**

Although your vehicle is capable of driving through water, there are a number of precautions that must be considered before entering the water.

**NOTE:** Your vehicle is capable of water fording in up to 20 inches (51 cm) of water, while crossing small rivers or streams. To maintain optimal performance of your vehicle's heating and ventilation system it is recommended to switch the system into recirculation mode during water fording.

### **CAUTION!**

When driving through water, do not exceed 5 mph (8 km/h). Always check water depth before entering, as a precaution, and check all fluids afterward. Driving through water may cause damage that may not be covered by the New Vehicle Limited Warranty.

Driving through water more than a few inches/ centimeters deep will require extra caution to ensure safety and prevent damage to your vehicle. If you must drive through water, try to determine the depth and the bottom condition (and location of any obstacles) prior to entering. Proceed with caution and maintain a steady controlled speed less than 5 mph (8 km/h) in deep water to minimize wave effects.

## **Flowing Water**

If the water is swift flowing and rising (as in storm run-off), avoid crossing until the water level recedes and/or the flow rate is reduced. If you must cross flowing water avoid depths in excess of 9 inches (23 cm). The flowing water can erode the streambed, causing your vehicle to sink into deeper water. Determine exit point(s) that are downstream of your entry point to allow for drifting.

## **Standing Water**

Avoid driving in standing water deeper than 20 inches (51 cm), and reduce speed appropriately to minimize wave effects. Maximum speed in 20 inches (51 cm) of water is less than 5 mph (8 km/h).

#### Maintenance

After driving through deep water, inspect your vehicle fluids and lubricants (engine oil, transmission oil, axle, transfer case) to assure the fluids have not been contaminated. Contaminated fluid (milky, foamy in appearance) should be flushed/changed as soon as possible to prevent component damage.

## **Driving In Snow, Mud And Sand**

In heavy snow, when pulling a load, or for additional control at slower speeds, shift the transmission to a low gear and shift the transfer case to 4WD LOW if necessary. Refer to "Four-Wheel Drive Operation" in "Starting and Operating" for further information. Do not shift to a lower gear than necessary to maintain forward motion. Over-revving the engine can spin the wheels and traction will be lost.

Avoid abrupt downshifts on icy or slippery roads, because engine braking may cause skidding and loss of control.

# Hill Climbing

**NOTE:** Before attempting to climb a hill, determine the conditions at the crest and/or on the other side.

Before climbing a steep hill, shift the transmission to a lower gear and shift the transfer case to 4WD LOW. Use first gear and 4WD LOW for very steep hills.

If you stall or begin to lose forward motion while climbing a steep hill, allow your vehicle to come to a stop and immediately apply the brakes. Restart the engine, and shift into REVERSE. Back slowly down the hill, allowing the compression braking of the engine 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!**

If the engine stalls, you lose forward motion, or cannot make it to the top of a steep hill or grade, never attempt to turn around. To do so may result in tipping and rolling the vehicle. Always back carefully straight down a hill in REVERSE gear. Never back down a hill in NEUTRAL using only the brake.

Remember, never drive diagonally across a hill always drive straight up or down.

If the wheels start to slip as you approach the crest of a hill, ease off the accelerator and maintain forward motion by turning the front wheels slowly. This may provide a fresh "bite" into the surface and will usually provide traction to complete the climb.

#### **Traction Downhill**

When descending mountains or hills, use Hill Descent or Selec-Speed Control to avoid repeated heavy braking.

If not equipped with Hill Descent or Selec-Speed Control use the following procedure:

Shift the transmission into a low gear, and the transfer case into 4WD LOW range. Let the vehicle go slowly down the hill with all four wheels turning against engine compression drag. This will permit you to control the vehicle speed and direction.

When descending mountains or hills, repeated braking can cause brake fade with loss of braking control. Avoid repeated heavy braking by downshifting the transmission whenever possible.

## 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 necessarv.

• 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.

#### **ELECTRIC POWER STEERING**

The electric power steering system will give you good vehicle response and increased ease of maneuverability in tight spaces. The system will vary its assist to provide light efforts while parking and good feel while driving. If the electric steering system experiences a fault that prevents it from providing assist, you will still have the ability to steer the vehicle manually.

Alternate electric power steering efforts can be selected through the Uconnect System. Refer to "Customer Programmable Features" within "Uconnect Settings" in "Understanding Your Instrument Panel" for further information.

### **WARNING!**

Continued operation with reduced assist could pose a safety risk to yourself and others. Service should be obtained as soon as possible.



If the Electric Power Steering warning icon is displayed and the "SERVICE POWER STEER-ING" or the "POWER STEERING ASSIST OFF

– SERVICE SYSTEM" message is displayed within the Driver Information Display (DID), this indicates the vehicle needs to be taken to the dealer for service. Refer to "Driver Information Display (DID)" in "Understanding Your Instrument Panel" for further information.

## NOTE:

- Even if the power steering assistance is no longer operational, it is still possible to steer the vehicle. Under these conditions there will be a substantial increase in steering effort, especially at low speeds and during parking maneuvers.
- If the condition persists, see your authorized dealer for service.

# FUEL SAVER TECHNOLOGY 5.7L ENGINE ONLY — 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.

#### PARKING BRAKE

Before leaving the vehicle, make sure that the parking brake is fully applied and place the shift lever in the PARK position.

The foot operated parking brake is located below the lower left corner of the instrument panel. To apply the park brake, firmly push the park brake pedal fully. To release the parking brake, press the park brake pedal a second time and let your foot up as you feel the brake disengage.



Parking Brake

When the parking brake is applied with the ignition switch in the ON position, the "Brake" Warning Light in the instrument cluster will illuminate.

#### 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 shift lever in PARK, otherwise the load on the transmission locking mechanism may make it difficult to move the shift lever 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.
- When leaving the vehicle, always remove the Key Fob from the ignition 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 shift lever.
- 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.

## 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.
- 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 allow the vehicle to roll and cause damage or injury.

## **CAUTION!**

If the "Brake" 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.

#### **BRAKE SYSTEM**

Your vehicle is equipped with dual hydraulic brake systems. If either of the two hydraulic systems loses normal capability, the remaining system will still function. However, there will be some loss of overall braking effectiveness. You may notice increased pedal travel during application, greater pedal force required to slow or stop, and potential activation of the "Brake System Warning Light."

In the event power assist is lost for any reason (i.e., repeated brake applications with the engine off) the brakes will still function. However, the effort required to brake the vehicle will be much greater than that required with the power system operating.

### **ELECTRONIC BRAKE CONTROL SYSTEM**

Your vehicle is equipped with an advanced Electronic Brake Control system (EBC). 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), Ready Alert Braking (RAB), Rain Brake Support (RBS), Dynamic Steering Torque (DST), Hill Descent Control (HDC), and Selec-Speed Control (SSC).

# **Electronic Brake Force Distribution (EBD)**

This 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.

# **Brake System Warning Light**

The red "Brake System Warning Light" will turn on when the ignition switch is turned to the ON position 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 switch is turned to the ON position, have the light repaired as soon as possible.

## 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 begins 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.

(Continued)

## WARNING! (Continued)

- Pumping of the Anti-Lock Brakes will diminish their effectiveness and may lead to a collision. Pumping makes the stopping distance longer. Just press firmly on your brake pedal when you need to slow down or stop.
- The ABS cannot prevent the natural laws of physics from acting on the vehicle, nor can it increase braking or steering efficiency beyond that afforded by the condition of the vehicle brakes and tires or the traction afforded.
- The ABS cannot prevent collisions, including those resulting from excessive speed in turns, following another vehicle too closely, or hydroplaning.
- The capabilities of an ABS equipped vehicle must never be exploited in a reckless or dangerous manner that could jeopardize the user's safety or the safety of others.

ABS is designed to function with the OEM tires. Modification may result in degraded ABS performance.

## **Anti-Lock Brake Warning Light**

The amber "Anti-Lock Brake Warning Light" will turn on when the ignition switch is turned to the ON position 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 "Brake System Warning Light" is not 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 switch is turned to the ON position, have the light repaired as soon as possible.

# **Brake Assist System (BAS)**

The 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.

## Hill Start Assist (HSA)

The 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.
- Park brake must be off.
- 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 gear).
- HSA will work in REVERSE gear and all forward gears. The system will not activate if the transmission

is in PARK or NEUTRAL. For vehicles equipped with a manual transmission if the clutch is pressed HSA will remain active.

## **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 leaving your vehicle. Also, be certain to leave the transmission in PARK.

# WARNING! (Continued)

• Failure to follow these warnings may cause the vehicle to roll down the incline and could collide with another vehicle, object or person, and cause serious or fatal injury. Always remember to use the parking brake while parking on a hill and that the driver is responsible for braking the vehicle.

# Disabling And Enabling HSA

This feature can be turned on or turned off. To change the current setting, proceed as follows:

• For vehicles equipped with the Driver Information Display (DID), refer to "Driver Information Display (DID)" in "Understanding Your Instrument Panel" for further information.

#### 530 STARTING AND OPERATING

- If disabling HSA using Uconnect Settings, refer to "Uconnect Settings" in "Understanding Your Instrument Panel" for further information.
- For vehicles not equipped with the DID, perform the following steps:
- 1. Center the steering wheel (front wheels pointing straight forward).
- 2. Shift the transmission into PARK.
- 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 twenty 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 slighty more than one-half turn to the right.
- 8. Turn the ignition switch to the OFF position and then back to the ON position. 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 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 torque to be applied to the wheel that is not spinning. BLD may remain enabled even if TCS and ESC are in a reduced mode.

## **Electronic Stability Control (ESC)**

This 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 excessive 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.

## 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.

# **ESC Operating Modes**

NOTE: Depending upon model and mode of operation, the ESC system may have multiple operating modes.

(Continued)

## 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 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 pushed may be required to return to ESC On.

#### NOTE:

- 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 Electronic Vehicle Information Center (EVIC). To turn ESC ON again, momentarily push the "ESC Off" switch.

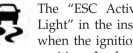
**NOTE:** System may switch from ESC Full Off to Partial mode when vehicle exceeds a predetermined speed. When the vehicle speed slows below the predetermined speed the system will return to ESC Full Off.

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 Off" mode is intended for off-highway or off-road use only.

# 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 switch is turned to the ON position. 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 your 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 switch is turned ON.
- Each time the ignition is turned ON, the ESC system will be ON even if it was turned off previously.
- The ESC system will make buzzing or clicking sounds **5** 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.

# **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 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.

# Trailer Sway Control (TSC)

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 that 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 this section 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.

## **WARNING!**

If TSC activates while driving, slow the vehicle down, stop at the nearest safe location, and adjust the trailer load to eliminate trailer sway.

# Ready Alert Braking (RAB)

Ready Alert Braking may reduce the time required to reach full braking during emergency braking situations.

It anticipates when an emergency braking situation may occur by monitoring how fast the throttle is released by the driver. The EBC will prepare the brake system for a panic stop.

# Rainy Brake Support (RBS)

Rainy Brake Support may improve braking performance in wet conditions. It will periodically apply a small amount of brake pressure to remove any water buildup on the front brake rotors. It functions when the windshield wipers are in LO or HI speed. When Rainy Brake Support is active, there is no notification to the driver and no driver interaction is required.

# **Dynamic Steering Torque (DST)**

Dynamic Steering Torque is a feature of the ESC and EPS modules that provides torque at the steering wheel for certain driving conditions in which the ESC module is detecting vehicle instability. The torque that the steering wheel receives is only meant to help the driver realize

optimal steering behavior in order to reach/maintain vehicle stability. The only notification the driver receives that the feature is active is the torque applied to the steering wheel.

**NOTE:** The DST feature is only meant to help the driver realize the correct course of action through small torques on the steering wheel, which means the effectiveness of the DST feature is highly dependent on the drivers sensitivity and overall reaction to the applied torque. It is very important to realize that this feature will not steer the vehicle, meaning the driver is still responsible for steering the vehicle.

## Hill Descent Control (HDC) — If Equipped

HDC is intended for low speed off road driving while in 4WD Low 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:

- Driveline is in 4WD Low Range
- Vehicle speed is below 5 mph (8 km/h).
- Parking brake is released.
- 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)
- 7 th = 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 anytime.

#### **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 4WD Low Range.

- The parking brake is applied.
- 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 which offer 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.

# Selec Speed Control (SSC) — If Equipped

SSC is intended for off road driving in 4WD Low Range only. SSC maintains vehicle speed by actively controlling engine torque and brakes.

SSC 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 SSC**

SSC is enabled by pushing the SSC switch, but the following conditions must also be met to enable SSC:

• Driveline is in 4WD Low Range.

# 542 STARTING AND OPERATING

- Vehicle speed is below 5 mph (8 km/h)
- Parking brake is released.
- Driver door is closed.
- Driver is not applying throttle.

# **Activating SSC**

Once SSC is enabled it will activate automatically once the following conditions are met:

- the following conditions are met:
- Driver releases throttle. Driver releases brake.
- Transmission is in any selection other than P.
- Vehicle speed is below 20 mph (32 km/h)

The set speed for SSC is selectable by the driver, and can be adjusted by using the gear shift +/-. Additionally, the SSC set speed may be reduced when climbing a grade

and the level of set speed reduction depends on the magnitude of grade. The following summarizes the SSC set speeds:

# SSC Target Set Speeds1st = .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 mph (8 km/h)
- 9th = 5.6 mph (9 km/h) If Equipped

• REVERSE = .6 mph (1 km/h)

- NEUTRAL = 1.2 mph (2 km/h)
- PARK = SSC remains enabled but not active

#### NOTE:

- During SSC the +/- shifter input is used for SSC target speed selection but will not affect the gear chosen by the transmission. While actively controlling SSC the transmission will shift appropriately for the driverselected set speed and corresponding driving conditions.
- SSC performance is influenced by the Terrain Select mode. This difference may be notable to the driver and may be perceived as a varying level of aggressiveness.

# **Driver Override:**

The driver may override SSC activation with throttle or brake application at any time.

# **Deactivating SSC**

SSC will be deactivated but remain available if any of the following conditions occur:

- Driver overrides SSC 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 shifted to PARK.

# Disabling SSC

SSC will deactivate and be disabled if any of the following conditions occur:

- The driver pushes the SSC switch.
- The driveline is shifted out of 4WD Low Range.
- The parking brake is applied.
- Driver door opens.

#### 544 STARTING AND OPERATING

- 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) (SSC exits immediately).

#### Feedback To The Driver:

The instrument cluster has an SSC icon and the SSC switch has an LED which offer feedback to the driver about the state SSC is in.

- The cluster icon and switch lamp will illuminate and remain on solid when SSC is enabled or activated. This is the normal operating condition for SSC.
- The cluster icon and switch lamp will flash for several seconds then extinguish when the driver pushes the SSC switch but enable conditions are not met.

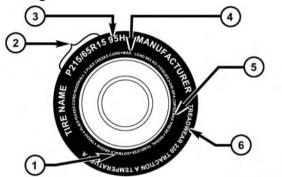
- The cluster icon and switch lamp will flash for several seconds then extinguish when SSC disables due to excess speed.
- The cluster icon and switch lamp will flash then extinguish when SSC deactivates due to overheated brakes.

## **WARNING!**

SSC is only intended to assist the driver in controlling vehicle speed when driving in off road conditions. The driver must remain attentive to the driving conditions and is responsible for maintaining a safe vehicle speed.

#### TIRE SAFETY INFORMATION

#### Tire Markings



- 1 U.S. DOT Safety Standards 4 Maximum Load Code (TIN)
- 2 Size Designation
- 3 Service Description

- 5 Maximum Pressure
- 6 Treadwear, Traction and Temperature Grades

054903773

#### NOTE:

- P (Passenger) Metric tire sizing is based on U.S. design standards. P-Metric tires have the letter "P" molded into the sidewall preceding the size designation. Example: P215/65R15 95H.
- European Metric tire sizing is based on European design standards. Tires designed to this standard have the tire size molded into the sidewall beginning with the section width. The letter "P" is absent from this tire size designation. Example: 215/65R15 96H.
- LT (Light Truck) Metric tire sizing is based on U.S. design standards. The size designation for LT-Metric tires is the same as for P-Metric tires except for the letters "LT" that are molded into the sidewall preceding the size designation. Example: LT235/85R16.

#### 546 STARTING AND OPERATING

- Temporary spare tires are designed for temporary emergency use only. Temporary high pressure compact spare tires have the letter "T" or "S" molded into the sidewall preceding the size designation. Example: T145/80D18 103M.
- High flotation tire sizing is based on U.S. design standards and it begins with the tire diameter molded into the sidewall. Example: 31x10.5 R15 LT.

# **Tire Sizing Chart**

# **EXAMPLE:**

Example Size Designation: P215/65R15XL 95H, 215/65R15 96H, LT235/85R16C, T145/80D18 103M, 31x10.5 R15 LT		
P = Passenger car tire size based on U.S. design standards, or		
"blank" = Passenger car tire based on European design standards, or		
LT = Light truck tire based on U.S. design standards, or		
T or S = Temporary spare tire or		
31 = Overall diameter in inches (in)		
215, 235, 145 = Section width in millimeters (mm)		
65, 85, 80 = Aspect ratio in percent (%)		
<ul> <li>Ratio of section height to section width of tire, or</li> </ul>		
10.5 = Section width in inches (in)		
R = Construction code		
- "R" means radial construction, or		
- "D" means diagonal or bias construction		
15, 16, 18 = Rim diameter in inches (in)		

#### **EXAMPLE:**

# **Service Description:**

95 = Load Index

- A numerical code associated with the maximum load a tire can carry

H = Speed Symbol

- A symbol indicating the range of speeds at which a tire can carry a load corresponding to its load index under certain operating conditions
- The maximum speed corresponding to the speed symbol should only be achieved under specified operating conditions (i.e., tire pressure, vehicle loading, road conditions, and posted speed limits)

#### Load Identification:

Absence of the following load identification symbols on the sidewall of the tire indicates a Standard Load (SL) tire:

- XL = Extra load (or reinforced) tire, or
- LL = Light load tire or
- C, D, E, F, G = Load range associated with the maximum load a tire can carry at a specified pressure

Maximum Load - Maximum load indicates the maximum load this tire is designed to carry

Maximum Pressure – Maximum pressure indicates the maximum permissible cold tire inflation pressure for this tire

# Tire Identification Number (TIN)

The TIN may be found on one or both sides of the tire, however, the date code may only be on one side. Tires with white sidewalls will have the full TIN, including the date code, located on the white sidewall side of the tire.

Look for the TIN on the outboard side of black sidewall tires as mounted on the vehicle. If the TIN is not found on the outboard side, then you will find it on the inboard side of the tire.

# EXAMPLE: DOT MA L9 ABCD 0301 DOT = Department of Transportation - This symbol certifies that the tire is in compliance with the U.S. Department of Transportation tire safety standards and is approved for highway use MA = Code representing the tire manufacturing location (two digits) L9 = Code representing the tire size (two digits) ABCD = Code used by the tire manufacturer (one to four digits) 03 = Number representing the week in which the tire was manufactured (two digits) - 03 means the 3rd week

#### **EXAMPLE:**

# DOT MA L9 ABCD 0301

- 01 = Number representing the year in which the tire was manufactured (two digits)
  - 01 means the year 2001
  - Prior to July 2000, tire manufacturers were only required to have one number to represent the year in which the tire was manufactured. Example: 031 could represent the 3rd week of 1981 or 1991

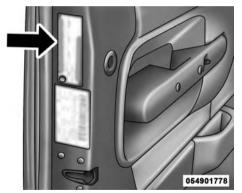
# **Tire Terminology And Definitions**

Term	Definition
B-Pillar	The vehicle B-Pillar is the structural member of the body located behind the front door.
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. Inflation pressure is measured in units of PSI (pounds per square inch) or kPa (kilopascals).
Maximum Inflation Pressure	The maximum inflation pressure is the maximum permissible cold tire inflation pressure for this tire. The maximum inflation pressure is molded into the sidewall.
Recommended Cold Tire Inflation Pressure	Vehicle manufacturer's recommended cold tire inflation pressure as shown on the tire placard.
Tire Placard	A label permanently attached to the vehicle describing the vehicle's loading capacity, the original equipment tire sizes and the recommended cold tire inflation pressures.

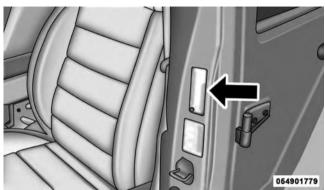
# **Tire Loading And Tire Pressure**

# Tire And Loading Information Placard Location

**NOTE:** The proper cold tire inflation pressure is listed on the driver's side B-Pillar or the rear edge of the driver's side door.

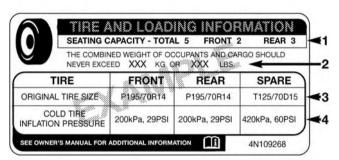


**Example Tire Placard Location (Door)** 



**Example Tire Placard Location (B-Pillar)** 

# Tire And Loading Information Placard



811b5a9a

#### Tire And Loading Information Placard

This placard tells you important information about the:

- 1. Number of people that can be carried in the vehicle.
- 2. Total weight your vehicle can carry.

- 3. Tire size designed for your vehicle.
- 4. Cold tire inflation pressures for the front, rear, and spare tires.

# Loading

The vehicle maximum load on the tire must not exceed the load carrying capacity of the tire on your vehicle. You will not exceed the tire's load carrying capacity if you 5 adhere to the loading conditions, tire size, and cold tire inflation pressures specified on the Tire and Loading Information placard in "Vehicle Loading" in the "Starting And Operating" section of this manual.

**NOTE:** Under a maximum loaded vehicle condition. gross axle weight ratings (GAWRs) for the front and rear axles must not be exceeded. For further information on GAWRs, vehicle loading, and trailer towing, refer to "Vehicle Loading" in the "Starting And Operating" section of this manual.

#### 554 STARTING AND OPERATING

the weight referenced here.

To determine the maximum loading conditions of your vehicle, locate the statement "The combined weight of occupants and cargo should never exceed XXX lbs or XXX kg" on the Tire and Loading Information placard. The combined weight of occupants, cargo/luggage and trailer tongue weight (if applicable) should never exceed

#### Steps For Determining Correct Load Limit

- Locate the statement "The combined weight of occupants and cargo should never exceed XXX lbs or XXX kg" on your vehicle's placard.
- 2. Determine the combined weight of the driver and passengers that will be riding in your vehicle.
- 3. Subtract the combined weight of the driver and passengers from XXX lbs or XXX kg.

- 4. The resulting figure equals the available amount of cargo and luggage load capacity. For example, if "XXX" amount equals 1,400 lbs (635 kg) and there will be five 150 lb (68 kg) passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lbs (294 kg) (since 5 x 150 lbs (68 kg) = 750 lbs (340 kg), and 1400 lbs (635 kg) 750 lbs (340 kg) = 650 lbs [294 kg]).
- 5. Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity calculated in step 4.

#### NOTE:

• If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. The following table shows examples on how to calculate total load, cargo/luggage, and towing capacities of your vehicle with varying seating configurations and number and size of occupants. This table is for illustration purposes only and may not be accurate for the seating and load carry capacity of your vehicle.

• For the following example, the combined weight of occupants and cargo should never exceed 865 lbs (392 kg).

811a4d11

# **WARNING!**

Overloading of your tires is dangerous. Overloading can cause tire failure, affect vehicle handling, and increase your stopping distance. Use tires of the recommended load capacity for your vehicle. Never overload them.

#### 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 and Vehicle Stability
- Economy
- Tread Wear

• Ride Comfort

# 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.
- 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.

(Continued)

# WARNING! (Continued)

- 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.

Both under-inflation 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.

# **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 judgement when determining proper inflation. Tires may look properly inflated even when they are underinflated.
- Inspect tires for signs of tire wear or visible damage.

## **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.

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 =  $32^{\circ}F$  (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 your 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).

# **Tire Types**

# All Season Tires — If Equipped

All Season tires provide traction for all seasons (Spring, Summer, Fall 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. 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**

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.

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.

# 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.

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.

See the tire pressure monitoring section for more information.

# Spare Tires — If Equipped

NOTE: For vehicles equipped with Tire Service Kit instead of a spare tire, please refer to "Tire Service Kit" in "What To Do In Emergencies" for further information.

# **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.

# 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.

#### **WARNING!**

Compact 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.

# 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 is identified by a label located on the limited-use spare wheel. This label contains the driving limitations for this spare. This tire may look like the original 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!**

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 limit-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.

# **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 "What To Do In Emergencies" for further information.

#### **WARNING!**

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.

#### **Tread Wear Indicators**

Tread wear indicators are in the original equipment tires to help you in determining when your tires should be replaced.



055007576

Tire Tread

- 1 Worn Tire
- 2 New Tire

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.

#### Life Of Tire

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.

• 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 maintenance schedule is highly recommended.

#### **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.

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 Indicator". 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. See the Tire Sizing Chart example found in the "Tire Safety Information" section of this manual for more information relating to the Load Index and Speed Symbol of a tire.

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 your 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!**

 Do not use a tire, wheel size or 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

(Continued)

# WARNING! (Continued)

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.

# TIRE CHAINS (TRACTION DEVICES)

Use of traction devices require sufficient tire-to-body 5 clearance. Follow these recommendations to guard against damage.

- Traction device must be of proper size for the tire, as recommended by the traction device manufacturer.
- Install on Rear Tires Only
- Due to limited clearance, Thule XG-12 Pro or equivalent is recommended on P245/70/R17, P265/60R18 or 265/50R20 tires.

#### **WARNING!**

Using tires of different size and type (M+S, Snow) between front and rear axles can cause unpredictable handling. You could lose control and have a collision.

#### **CAUTION!**

To avoid damage to your vehicle or tires, observe the following precautions:

 Because of restricted traction device clearance between tires and other suspension components, it is important that only traction devices in good condition are used. Broken devices can cause serious damage. Stop the vehicle immediately if noise occurs that could indicate device breakage. Remove the damaged parts of the device before further use.

# **CAUTION!** (Continued)

- Install device as tightly as possible and then retighten after driving about ½ mile (0.8 km).
- Do not exceed 30 mph (48 km/h).
- Drive cautiously and avoid severe turns and large bumps, especially with a loaded vehicle.
- Do not drive for a prolonged period on dry pavement.
- Observe the traction device manufacturer's instructions on the method of installation, operating speed, and conditions for use. Always use the suggested operating speed of the device manufacturer's if it is less than 30 mph (48 km/h).
- Do not use traction devices on a compact spare tire.

(Continued)

#### TIRE ROTATION RECOMMENDATIONS

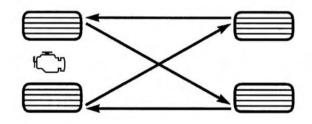
The tires on the front and rear of your vehicle operate at different loads and perform different steering, handling, and braking functions. For these reasons, they wear at unequal rates.

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 On/Off-Road 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 Schedule" 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.

**NOTE:** The premium Tire Pressure Monitor System will automatically locate the pressure values displayed in the correct vehicle position following a tire rotation.

The suggested rotation method is the "rearward-cross" shown in the following diagram.



055703771

Tire Rotation

# TIRE PRESSURE MONITOR SYSTEM (TPMS)

The Tire Pressure Monitoring System (TPMS) will warn the driver of a low tire pressure based on the vehicle recommended cold tire placard pressure.

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 for at least three hours, or driven less than 1 mile (1.6 km) after a three-hour period. Refer to "Tires - General Information" in "Starting and Operating" 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 threshold for any reason, including low temperature effects, or 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 recommended cold tire placard pressure. Once the low tire pressure warning has been illuminated, the tire pressure must be increased to the recommended cold tire pressure in order for the Tire Pressure Monitoring Telltale Light to be turned off. The system will automatically update and the Tire Pressure Monitoring Telltale Light will extinguish once the updated tire pressures have been received. The vehicle may need to be driven for up to 20 minutes above 15 mph (24 km/h) to receive this information.

For example, your vehicle has a recommended cold (parked for more than three hours) tire placard pressure

of 33 psi (227 kPa). If the ambient temperature is 68°F (20°C) and the measured tire pressure is 28 psi (193 kPa), a temperature drop to 20°F (-7°C) will decrease the tire pressure to approximately 24 psi (165 kPa). This tire pressure is sufficiently low enough to turn ON the Tire Pressure Monitoring Telltale Light. Driving the vehicle may cause the tire pressure to rise to approximately 28 psi (193 kPa), but the Tire Pressure Monitoring Telltale Light will still be ON. In this situation, the Tire Pressure Monitoring Telltale Light will turn OFF only after the tires have been inflated to the vehicle's recommended cold tire pressure value.

#### **CAUTION!**

• The TPMS has been optimized for the original equipment tires and wheels. TPMS pressures and warnings have been established for the tire size

# **CAUTION!** (Continued)

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 vour 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 Tire Pressure Monitoring Sensor.

(Continued)

#### NOTE:

- The TPMS is not intended to replace normal tire care and maintenance, or to provide warning of a tire failure or condition.
- 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 gauge, even if under-inflation has not reached the level to trigger illumination of the Tire Pressure Monitoring Telltale Light.

 Seasonal temperature changes will affect tire pressure, and the TPMS will monitor the actual tire pressure in the tire.

# **Premium System**

The Tire Pressure Monitor 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.



Tire Pressure Monitor Display

**NOTE:** It is particularly important, for you to regularly check the tire pressure in all of your tires and to maintain the proper pressure.

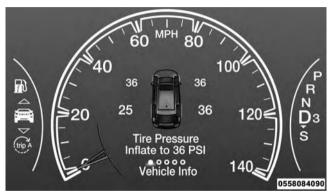
The Tire Pressure Monitor System (TPMS) consists of the following components:

- Receiver Module
- Four Tire Pressure Monitoring Sensors
- Various Tire Pressure Monitoring System Messages, which display in the Driver Information Display (DID), and a graphic displaying tire pressures
- Tire Pressure Monitoring Telltale Light

# **Tire Pressure Monitoring Low Pressure Warnings**

The Tire Pressure Monitoring Telltale Light will illuminate in the instrument cluster, and an audible chime will be activated, when one or more of the four active road tire pressures are low. In addition, the DID will display a "Tire Low" message, an "Inflate to XXX" message and a graphic display of the pressure value(s) with the low tire(s) displayed in a different color. Refer to "Driver Information Display (DID)" in "Understanding Your Instrument Panel" for further information.

**NOTE:** Your system can be set to display pressure units in PSI, BAR or kPa.



Low Tire Pressure Monitor Display

Should a low tire condition occur on any of the four active road tire(s), you should stop as soon as possible, and inflate the low tire(s) that is in a different color on the graphic display to the vehicle's recommended cold tire pressure displayed in the "Inflate to XXX" message.

**NOTE:** When filling warm tires, the tire pressure may need to be increased up to an additional 4 psi (30 kPa) above the recommended cold placard pressure in order to turn the Tire Pressure Monitoring Telltale Light off. The system will automatically update, the graphic display of the pressure value(s) will return to its original color and the Tire Pressure Monitoring Telltale Light will extinguish once the updated tire pressure(s) have been received. The vehicle may need to be driven for up to 20 minutes above 15 mph (24 km/h) to receive this information.

# **Service Tpm System Warning**

The Tire Pressure Monitoring Telltale Light will flash on and off for 75 seconds, and remain on solid when a system fault is detected. The system fault will also sound a chime. The DID will display a "SERVICE TPM SYSTEM" message for a minimum of five seconds. This message is then followed by a graphic display, with "--" in place of the pressure value(s), indicating which Tire Pressure Monitoring Sensor(s) 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 Telltale Light will no longer flash, the "SERVICE TPM SYSTEM" message will not be present, and a pressure value will be displayed instead of dashes. A system fault can occur by any of the following:

- 1. Jamming due to electronic devices or driving next to facilities emitting the same Radio Frequencies as the TPM sensors.
- 2. Installing some form of aftermarket window tinting that affects radio wave signals.
- 3. Lots of snow or ice around the wheels or wheel housings.
- 4. Using tire chains on the vehicle.
- 5. Using wheels/tires not equipped with TPM sensors.

**NOTE:** There is no tire pressure monitoring sensor in the spare tire. The TPMS will not be able to monitor the tire pressure. If you install the 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 Telltale Light will remain ON, a chime will sound, and the DID will still display a pressure value in the different color graphic display and an "Inflate to XXX kPa" message will be displayed. After driving the vehicle for up to 20 minutes above 15 mph (24 km/h), the Tire Pressure Monitoring Telltale Light will flash on and off for 75 seconds and then remain on solid. In addition, the DID will display a "SERVICE TPM SYSTEM" message for 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 Telltale Light will flash on and off for 75 seconds and then remain on solid, and the DID will display a "SERVICE TPM SYSTEM" message for 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 spare tire, the TPMS will update automatically.

In addition, the Tire Pressure Monitoring Telltale Light will turn OFF and the graphic in the DID 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.

#### **General Information**

This device complies with Part 15 of the FCC rules and RSS-210 of Industry Canada. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

**NOTE:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### **FUEL REQUIREMENTS**

# 3.6L Engine — If Equipped



This engine is designed to meet all emissions regulations and provide excellent fuel economy and performance when using high-quality unleaded "Regular" gasoline having an octane rating of 87 as speci-

fied by the (R+M)/2 method. The use of higher octane "Premium" gasoline will not provide any benefit over "Regular" gasoline in these engines.

While operating on gasoline with an octane number of 87, hearing a light knocking sound from the engine is not a cause for concern. However, if the engine is heard making a heavy knocking sound, see your dealer immediately. Use of gasoline with an octane number lower than 87 can cause engine failure and may void or not be covered by the New Vehicle Limited Warranty.

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.

# 5.7L Engine — If Equipped



This engine is designed to meet all emissions regulations and provide satisfactory fuel economy and performance when using high-quality unleaded gasoline having an octane range of 87 to 89 as specified by

the (R+M)/2 method. The use of 89 octane "Plus" gasoline is recommended for optimum performance and fuel economy.

While operating on gasoline with an octane number of 87, hearing a light knocking sound from the engine is not a cause for concern. However, if the engine is heard

making a heavy knocking sound, see your dealer immediately. Use of gasoline with an octane number lower than 87 can cause engine failure and may void or not be covered by the New Vehicle Limited Warranty.

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.

#### **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.

# Gasoline/Oxygenate Blends

Some fuel suppliers blend unleaded gasoline with oxygenates such as ethanol.

#### **CAUTION!**

DO NOT use gasoline containing methanol or gasoline containing more than 15% ethanol (E-15). Use of these blends may result in starting and drivability problems, damage critical fuel system components, cause emissions to exceed the applicable standard, and/or cause the "Malfunction Indicator Light" to illuminate. Please observe pump labels as they should clearly communicate if a fuel contains greater than 15% ethanol (E-15).

Problems that result from using gasoline containing more than 15% ethanol (E-15) or gasoline containing methanol

are not the responsibility of the manufacturer and may void or not be covered under New Vehicle Limited Warranty.

# E-85 Usage In Non-Flex Fuel Vehicles

Non-Flex Fuel Vehicles (FFV) are compatible with gasoline containing up to 15% ethanol (E-15). 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.

#### **MMT In Gasoline**

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 emissions 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 the gasoline contains MMT. MMT is prohibited in Federal and California reformulated gasoline.

Methylcyclopentadienyl Manganese Tricarbonyl (MMT)

#### **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. Designated TOP TIER Detergent Gasoline contains a higher level of detergents to further aide in minimizing engine and fuel system deposits. When available the usage of Top Tier Detergent gasoline is recommended. Visit www.toptiergas.com for a list of TOP TIER Detergent Gasoline Retailers.

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.

# **Fuel System Cautions**

#### **CAUTION!**

Follow these guidelines to maintain your vehicle's performance:

- The use of leaded gasoline is prohibited by Federal law. Using leaded gasoline can impair engine performance and damage the emissions control system.
- An out-of-tune engine or certain fuel or ignition malfunctions can cause the catalytic converter to overheat. If you notice a pungent burning odor or some light smoke, your engine may be out of tune or malfunctioning and may require immediate service. Contact your authorized dealer for service assistance.

# **CAUTION!** (Continued)

• The use of fuel additives, which are now being sold as octane enhancers, is not recommended. Most of these products contain high concentrations of methanol. Fuel system damage or vehicle performance problems resulting from the use of such fuels or additives is not the responsibility of the manufacturer and may void or not be covered under the New Vehicle Limited Warranty.

**NOTE:** Intentional tampering with the emissions control system can result in civil penalties being assessed against vou.

(Continued)

# **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.

# WARNING! (Continued)

• 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.

(Continued)

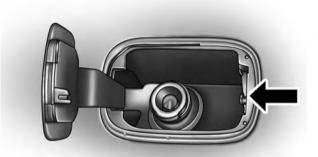
#### **ADDING FUEL**

1. Press the fuel filler door release switch (located under the headlamp switch).



Fuel Filler Door Release Switch

2. Open the fuel filler door.



Fuel Filler Door

NOTE: In certain cold conditions, ice may prevent the fuel door from opening. If this occurs, lightly push on the fuel door to break the ice buildup and re-release the fuel door using the inside release button. Do not pry on the door.

#### 586 STARTING AND OPERATING

- 3. There is no fuel filler cap. A flapper door inside the pipe seals the system.
- 4. Insert the fuel nozzle fully into the filler pipe, the nozzle opens and holds the flapper door while refueling.
- 5. Fill the vehicle with fuel, when the fuel nozzle "clicks" or shuts off the fuel tank is full.

6. Wait 5 seconds before removing the fuel nozzle to

- allow fuel to drain from nozzle.
- 7. Remove the fuel nozzle and close the fuel door.

# **Emergency Gas Can Refueling**

- Most gas cans will not open the flapper door.
- A funnel is provided to open the flapper door to allow emergency refueling with a gas can.

- Retrieve funnel from the spare tire storage area.
- Insert funnel into same filler pipe opening as the fuel nozzle.
- Ensure funnel is inserted fully to hold flapper door open.
- Pour fuel into funnel opening.
- Remove funnel from filler pipe, clean off prior to putting back in the spare tire storage area.

#### CAUTION!

To avoid fuel spillage and overfilling, do not "top off" the fuel tank after filling.

#### **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.

# **Emergency Fuel Filler Door Release**

If you are unable to open the fuel filler door, use the fuel filler door emergency release.

- 1. Open the liftgate.
- 2. Push the inboard edge of the left storage bin to the center, this will pop up the outboard edge.
- 3. Grab popped up outboard edge with other hand to disengage snaps.
- 4. Remove the storage bin.
- 5. Pull the release cable to open the fuel door, push the release cable back to the home position to re-seat the fuel door latch to the closed position.



Release Cable

**NOTE:** If the fuel door does not latch after the manual release cable has been activated, the actuator latch should be manually returned to the closed position.

#### **VEHICLE LOADING**

#### **Certification Label**

As required by National Highway Traffic Safety Administration regulations, your vehicle has a certification label affixed to the driver's side door or pillar.

This label contains the month and year of manufacture, Gross Vehicle Weight Rating (GVWR), Gross Axle Weight Rating (GAWR) front and rear, and Vehicle Identification Number (VIN). A Month-Day-Hour (MDH) number is included on this label and indicates the Month, Day and Hour of manufacture. The bar code that appears on the bottom of the label is your VIN.

# **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 insure 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.

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/Vehicle Certification Label" in "Starting And Operating" for further information.

# **Gross Trailer Weight (GTW)**

The GTW is the weight of the trailer plus the weight of all cargo, consumables and equipment (permanent or temporary) loaded in or on the trailer in its "loaded and ready for operation" condition.

The recommended way to measure GTW is to put your fully loaded trailer on a vehicle scale. The entire weight of the trailer must be supported by the scale.

#### **WARNING!**

If the gross trailer weight is 5,000 lbs (2 267 kg) or more, it is mandatory 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 permissible 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 "Vehicle Loading/Vehicle Certification Label" in "Starting And Operating" for further information.

# **WARNING!**

It is important that you do not exceed the maximum front or rear GAWR. A dangerous driving condition can result if either rating is exceeded. You could lose control of the vehicle and have a collision.

#### Tongue Weight (TW)

The tongue weight is the downward force exerted on the hitch ball by the trailer. The recommended tongue weight is 10% to 15% of the vehicle's GTW for a conventional hitch. You must consider this as part of the load on your vehicle.

#### Frontal Area

The frontal area is the maximum height multiplied by the maximum width of the front of a trailer.

# **Trailer Sway Control**

The trailer sway control 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 Trailer Sway Control (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 Gross Axle Weight Rating (GAWR) requirements.

#### **WARNING!**

- An improperly adjusted Weight Distributing Hitch system may reduce handling, stability, 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.

#### **Trailer Hitch Classification**

The following chart provides the industry standard for the maximum trailer weight a given trailer hitch class can tow and should be used to assist you in selecting the correct trailer hitch for your intended towing condition.

, o				
Trailer Hitch Classification Definitions				
Class	Max. Trailer Hitch Industry Standards			
Class I - Light Duty	2,000 lbs (907 kg)			
Class II - Medium Duty	3,500 lbs (1 587 kg)			
Class III - Heavy Duty	5,000 lbs (2 267 kg)			
Class IV - Extra Heavy Duty	10,000 lbs (4 535 kg)			

Refer to the "Trailer Towing Weights (Maximum Trailer Weight Ratings)" chart for the Maximum Gross Trailer Weight (GTW) towable for your given drivetrain.

All trailer hitches should be professionally installed on your vehicle.

# **Trailer Towing Weights (Maximum Trailer Weight** Ratings)

The following chart provides the maximum trailer weight ratings towable for your given drivetrain:

Engine	Model	Frontal Area	Max. GTW (Gross Trailer Wt.)	Max. Trailer Tongue Wt. (See Note)	
3.6L (Std Cooling)	4x2	55 sq ft (5.11 sq m)	3,500 lbs (1588 kgs)	350 lbs (158 kgs)	
3.6L (Std Cooling)	4x4	55 sq ft (5.11 sq m)	3,500 lbs (1588 kgs)	350 lbs (158 kgs)	
3.6L (HD Cooling)	4x2	55 sq ft (5.11 sq m)	6,200 lbs (2812 kg)	620 lbs (281 kg)	
3.6L (HD Cooling)	4x4	55 sq ft (5.11 sq m)	6,200 lbs (2812 kg)	620 lbs (281 kg)	
5.7L (Std Cooling)	4x4	55 sq ft (5.11 sq m)	5,000 lbs (2268kgs)	500 lbs (227 kgs)	
5.7L (HD Cooling)	4x4	55 sq ft (5.11 sq m)	7,200 lbs (3266 kg)	720 lbs (327 kg)	
Refer to local laws for maximum trailer towing speeds.					

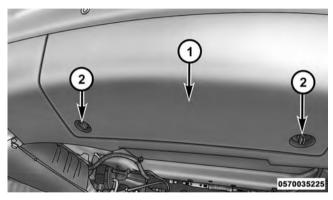
**NOTE:** The trailer tongue weight must be considered as part of the combined weight of occupants and cargo, and should never exceed the weight referenced on the Tire and Loading Information placard. Refer to "Tire Safety Information" in "Starting and Operating" for further information. The addition of passengers and cargo may require reducing trailer tongue load and Gross Trailer Weight (GTW). Redistributing cargo (to the trailer) may be necessary to avoid exceeding Rear Gross Axle Weight Rating (GAWR) of 3,700 lbs (1 678 kg).

# Trailer Hitch Receiver Cover Removal (Summit Models) — If Equipped

Your vehicle may be equipped with a trailer hitch receiver cover, this must be removed to access the trailer hitch receiver (if equipped). This hitch receiver cover is located at the bottom center of the rear fascia.

1. Turn the two locking retainers located at the bottom of the hitch receiver cover a 1/4 turn counterclockwise.

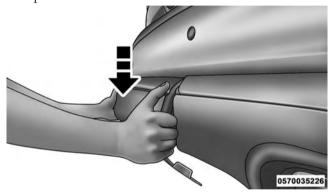
**NOTE:** Use a suitable tool such as a coin in the slot of the locking retainer if needed for added leverage.



Hitch Receiver Cover

- 1 Hitch Receiver Cover
- 2 Locking Retainers

2. Pull the bottom of the cover outward (towards you), pull downwards to disengage the tabs located at the top of the hitch receiver cover.



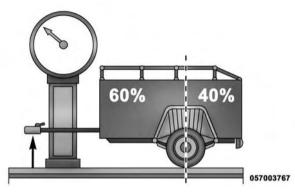
Hitch Receiver Cover

To reinstall the hitch receiver cover after towing repeat the procedure in reverse order.

NOTE: Be sure to engage all tabs of the hitch receiver cover in the bumper fascia prior to installation.

# **Trailer And Tongue Weight**

Always load a trailer with 60% of the weight in the front of the trailer. This places 10% of the GTW on the tow hitch of your vehicle. Loads balanced over the wheels or heavier in the rear can cause the trailer to sway severely side to side which will cause loss of control of the vehicle and trailer. Failure to load trailers heavier in front is the cause of many trailer collisions. Never exceed the maximum tongue weight stamped on your trailer hitch.



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 "Tire Safety Information/Tire and Loading Information Placard" in "Starting And Operating" for further information

# **Towing Requirements**

To promote proper break-in of your new vehicle drivetrain components, the following guidelines are recommended.

#### **CAUTION!**

• 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.

(Continued)

# CAUTION! (Continued)

• 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.

Perform the maintenance listed in the "Maintenance Schedule". Refer to "Maintenance Schedule" for the proper maintenance intervals. When towing a trailer, never exceed the GAWR or GCWR ratings.

#### **WARNING!**

Improper towing can lead to a collision. Follow these guidelines to make your trailer towing as safe as possible:

- 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.

(Continued)

# WARNING! (Continued)

- 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.
- 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:

#### 1. GVWR

# WARNING! (Continued)

- 2. GTW
- 3. GAWR
- 4. Tongue weight rating for the trailer hitch utilized.

#### **Towing Requirements — Tires**

- Do not attempt to tow a trailer while using a compact spare tire.
- Proper tire inflation pressures are essential to the safe and satisfactory operation of your vehicle. Refer to "Tires – General Information" in "Starting And Operating" 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 - General Information" in "Starting And Operating" for the proper inspection procedure.
- When replacing tires, refer to "Tires General Information" in "Starting And Operating" 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**

#### **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.

# WARNING! (Continued)

• 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.

(Continued)

#### 602 STARTING AND OPERATING

- 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 1,653 lbs (749 kg).

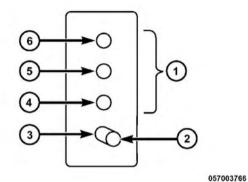
Towing Requirements — Trailer Lights And Wiring

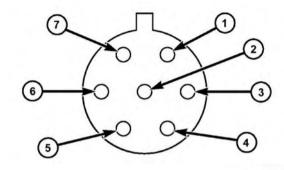
Whenever you pull a trailer, regardless of the trailer size, stoplights and turn signals on the trailer are required for motoring safety.

The Trailer Tow Package may include a four- and sevenpin wiring harness. Use a factory approved trailer harness and connector.

**NOTE:** Do not cut or splice wiring into the vehicles 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.





Seven-Pin Connector

057003765

#### **Four-Pin Connector**

1 — Female Pins

4 — Park

2 — Male Pin 3 — Ground

- 5 Left Stop/Turn
- 6 Right Stop/Turn
- 3 Right Stop/Turn 4 — Electric Brakes

2 — Backup Lamps

1 — Battery

- 5 Ground
- 6 Left Stop/Turn
- 7 Running Lamps

# **Towing Tips**

Before setting out on a trip, practice turning, stopping and backing the trailer up in an area 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, you can use the Paddle Shift switches or manual gate of shifter to manually select a lower gear.

**NOTE:** Using a lower gear while operating the vehicle under heavy loading conditions, will improve performance and extend transmission life by reducing excessive shifting and heat buildup. This action will also provide better engine braking.

#### Paddle Shift Mode

- When using the Paddle Shift switches, select the highest gear that allows for adequate performance and avoids frequent downshifts. For example, choose "5" if the desired speed can be maintained. Choose "4" or "3" if needed to maintain the desired speed.
- To prevent excess heat generation, avoid continuous driving at high RPM. Reduce vehicle speed as necessary to avoid extended driving at high RPM. Return to a higher gear or vehicle speed when grade and road conditions allow.

# Electronic Speed Control — If Equipped

- Do not use in 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

When stopped for short periods of time, shift the transmission into NEUTRAL and increase engine idle speed.

# **Highway Driving**

Reduce speed.

# Air Conditioning

Turn off temporarily.

#### **SNOW PLOW**

Snow plows, winches, and other aftermarket equipment should **not** be added to the front end of your vehicle. The airbag crash sensors may be affected by the change in the front end structure. The airbags could deploy unexpectedly or could fail to deploy during a collision.

#### **WARNING!**

Do not add a snow plow, winches, or any other aftermarket equipment to the front of your vehicle. This could adversely affect the functioning of the airbag system and you could be injured.

606 STARTING AND OPERATING

# RECREATIONAL TOWING (BEHIND MOTORHOME, ETC.)

# **Towing This Vehicle Behind Another Vehicle**

Towing Condition	Wheels OFF the Ground	Two-Wheel Drive Models	Four-Wheel Drive Models Without 4–LO Range	Four-Wheel Drive Models With 4–LO Range
Flat Tow	NONE	NOT ALLOWED	NOT ALLOWED	• Transmission in PARK • Transfer case in NEUTRAL (N) • Tow in forward direction
Dolly Tow	Front	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED
	Rear	OK	NOT ALLOWED	NOT ALLOWED
On Trailer	ALL	OK	OK	OK

#### NOTE:

- When recreational towing your vehicle, always follow applicable state and provincial laws. Contact state and provincial Highway Safety offices for additional details.
- Vehicles equipped with Quadra-Lift must be placed in Transport Mode before tying them down (from the body) on a trailer or flatbed truck. Refer to "Quadra-Lift – If Equipped" in "Starting and Operating" 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:

- 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. Shift the transmission into PARK.
- 4. Turn the ignition switch to the OFF position.
- 5. Properly secure the rear wheels to the dolly, following the dolly manufacturer's instructions.

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.

# Recreational Towing — Quadra-Trac I (Single-Speed Transfer Case) Four-Wheel Drive Models

**Recreational towing is not allowed.** These models do not have a NEUTRAL (N) position in the transfer case.

**NOTE:** This vehicle may be towed on a flatbed or vehicle trailer provided all four wheels are **OFF** the ground.

#### **CAUTION!**

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.

# Recreational Towing — Quadra—Trac II /Quadra—Drive II Four-Wheel Drive Models

The transfer case must be shifted into NEUTRAL (N) and the transmission must be in PARK for recreational towing. The NEUTRAL (N) selection button is adjacent to the transfer case selector switch. Shifts into and out of transfer case NEUTRAL (N) can take place with the selector switch in any mode position.

#### **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 a forward direction. Towing this vehicle backwards can cause severe damage to the transfer case.
- The transmission must be in PARK for recreational towing.
- Before recreational towing, perform the procedure outlined under "Shifting into NEUTRAL (N)" to be certain that the transfer case is fully in NEUTRAL (N). Otherwise, internal damage will result.

(Continued)

# **CAUTION!** (Continued)

- 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.
- Do not use a bumper-mounted clamp-on tow bar on your vehicle. The bumper face bar will be damaged.

Shifting Into NEUTRAL (N)

#### **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)

(Continued)

# WARNING! (Continued)

position disengages both the front and rear driveshafts 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.

Use the following procedure to prepare your vehicle for recreational towing.

# **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, with the engine running.

- 2. Press and hold the brake pedal.
- 3. Shift the transmission into NEUTRAL.
- 4. If vehicle is equipped with Quadra-Lift air suspension, ensure the vehicle is set to Normal Ride Height.
- 5. Using a ballpoint pen or similar object, press and hold the recessed transfer case NEUTRAL (N) button (located by the selector switch) for four seconds. The light behind the N symbol will blink, indicating shift in progress. The light will stop blinking (stay on solid) when the shift to NEUTRAL (N) is complete. A "FOUR WHEEL DRIVE SYSTEM IN NEUTRAL" message will appear in the Driver Information Display (DID). Refer to "Driver Information Display (DID)" in "Understanding Your Instrument Panel" for further information.



0582003302

### NEUTRAL (N) Switch

- 6. After the shift is completed and the NEUTRAL (N) light stays on, release the NEUTRAL (N) button.
- 7. Shift the transmission into REVERSE.
- 8. Release the brake pedal for five seconds and ensure that there is no vehicle movement.

- 9. Shift the transmission back into NEUTRAL.
- 10. With the transmission and transfer case in NEU-TRAL, press and hold the ENGINE START/STOP button until the engine turns off. Turning the engine off will automatically place the transmission in PARK.
- 11. Press the ENGINE STOP/START button again (without pressing the brake pedal), if needed, to turn the ignition switch to the OFF position.
- 12. Firmly apply the parking brake.
- 13. Attach the vehicle to the tow vehicle using a suitable tow bar.
- 14. Release the parking brake.

### NOTE:

- Steps 1 through 4 are requirements that must be met before pressing 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 pressing the NEUTRAL (N) button or are no longer met during the shift, then the NEUTRAL (N) indicator light will flash continuously until all requirements are met or until the NEUTRAL (N) button is released.
- The ignition switch must be in the ON/RUN 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/RUN position, 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 Quadra-Lift 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. Start the engine.
- 4. Press and hold the brake pedal.
- 5. Shift the transmission into NEUTRAL.

6. Using a ballpoint pen or similar object, press and hold the recessed transfer case NEUTRAL (N) button (located by the selector switch) for one second.



0582003302

NEUTRAL (N) Switch

- 7. When 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.
- 8. Shift the transmission into PARK. Turn the engine OFF.
- 9. Release the brake pedal.
- 10. Disconnect vehicle from the tow vehicle.
- 11. Start the engine.
- 12. Press and hold the brake pedal.
- 13. Release the parking brake.
- 14. Shift the transmission into DRIVE, release the brake pedal, and check that the vehicle operates normally.

### NOTE:

- Steps 1 through 5 are requirements that must be met before pressing 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 pressing 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 switch must be in the ON/RUN 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/RUN position, 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.

# **CONTENTS**

■ HAZARD WARNING FLASHERS	□ Road Tire Installation
■ IF YOUR ENGINE OVERHEATS	■ JUMP-STARTING
WHEEL AND TIRE TORQUE	□ Preparations For Jump-Start
SPECIFICATIONS	□ Jump-Starting Procedure
□ Torque Specifications	■ FREEING A STUCK VEHICLE
JACKING AND TIRE CHANGING	■ EMERGENCY TOW HOOKS — IF EQUIPPED636
□ Jack Location	■ MANUAL PARK RELEASE
□ Spare Tire Stowage	■ TOWING A DISABLED VEHICLE
□ Preparations For Jacking	□ Two-Wheel Drive Models
□ Jacking Instructions	□ Four-Wheel Drive Models

### HAZARD WARNING FLASHERS

The Hazard Warning flasher switch is located on the switch bank just above the climate controls.



Push the switch to turn on the Hazard Warning flasher. 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 discharge the battery.

### 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, 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/Csystem 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.

### **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!**

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.

# WHEEL AND TIRE TORQUE SPECIFICATIONS

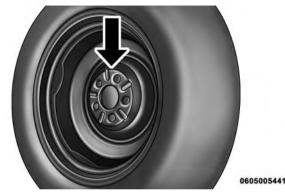
Proper lug nut/bolt torque is very important to ensure that the wheel is properly mounted to the vehicle. Any time a wheel has been removed and reinstalled on the vehicle the lug nuts/bolts should be torqued using a properly calibrated torque wrench.

# **Torque Specifications**

Lug Nut/Bolt Torque	**Lug Nut/ Bolt Size	Lug Nut/ Bolt Socket Size

<sup>\*\*</sup>Use only your Authorized Dealer recommended lug nuts/bolts and clean or remove any dirt or oil before tightening.

Inspect the wheel mounting surface prior to mounting the tire and remove any corrosion or loose particles.



Wheel Mounting Surface

Tighten the lug nuts/bolts in a star pattern until each nut/bolt has been tightened twice.

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.

### JACKING AND TIRE CHANGING





0605006372

**Torque Patterns** 

# WARNING!

To avoid the risk of forcing the vehicle off the jack, do not tighten the lug nuts fully until the vehicle has been lowered. Failure to follow this warning may result in personal injury.

## **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.
- 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.

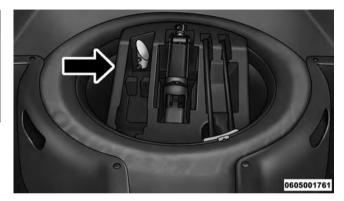
(Continued)

# WARNING! (Continued)

• 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 Location**

The scissor-type jack and tire changing tools are located in rear cargo area, below the load floor.



**Jack Storage Location** 

**NOTE:** The funnel for the Cap-Less Fuel System is located on top of the spare tire. If your vehicle is out of fuel and an auxiliary fuel can is needed, insert the funnel into the filler neck and proceed to fill the vehicle. For vehicles not equipped with a spare tire, the fuel filler funnel is stored in the left storage bin under the load floor. For more information on the Cap-Less Fuel System refer to "Adding Fuel" in "Starting And Operating" in this manual.

# **Spare Tire Stowage**

The spare tire is stowed under the load floor in the rear cargo area and is secured to the body with a special wing nut.

# **Preparations For Jacking**

### **CAUTION!**

Always lift or jack the vehicle from the correct jacking points. Failure to follow this information could cause damage to the vehicle or underbody components.

1. Park the vehicle on a firm, level surface. Avoid ice or slippery surfaces.

# **WARNING!**

Do not attempt to change a tire on the side of the vehicle closest to moving traffic, pull far enough off the road to avoid being hit when operating the jack or changing the wheel.

2. Turn on the Hazard Warning flasher.

- 3. Set the parking brake.
- 4. Place the shift lever into PARK.
- 5. Turn the ignition OFF.
- 6. Block both the front and rear of the wheel diagonally



opposite of the jacking position. For example, if changing the right front tire, block the left rear wheel.

**NOTE:** Passengers should not remain in the vehicle when the vehicle is being jacked.

7. For vehicles equipped with Quadra-Lift, refer to "Quadra-Lift — If Equipped" in "Starting And Operating" for further information on disabling automatic leveling.

# **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 flasher.
- Chock the wheel diagonally opposite the wheel to be raised.
- Set the parking brake firmly and set an automatic transmission in PARK.
- Never start or run the engine with the vehicle on a jack.

(Continued)

# WARNING! (Continued)

- 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.



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 tire, jack, and tools from storage.
- 2. Loosen (but do not remove) the wheel lug nuts by turning them to the left, one turn, while the wheel is still on the ground.

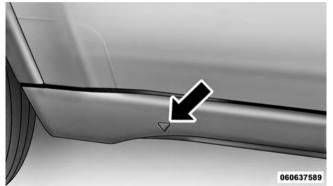
3. Assemble the jack and jacking tools.



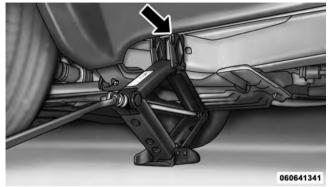
Jack And Tool Assembly

**Jacking Locations** 

4. For the front axle, place the jack on the body flange just behind the front tire as indicated by the triangular lift point symbol on the sill molding. Do not raise the vehicle until you are sure the jack is fully engaged.



Lift Point Symbol On Sill Molding

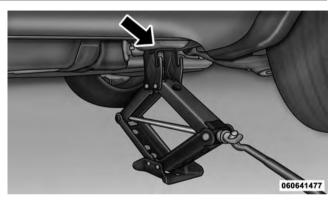


Front Jacking Location

5. For a rear tire, place the jack in the slot on the rear tie-down bracket, just forward of the rear tire (as indicated by the triangular lift point symbol on the sill molding). Do not raise the vehicle until you are sure the jack is fully engaged.



Lift Point Symbol On Sill Molding



**Rear Jacking Location** 

 Raise the vehicle by turning the jack screw clockwise. Raise the vehicle only until the tire just clears the surface and enough clearance is obtained to install the spare tire. Minimum tire lift provides maximum stability.

# **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.

- 7. Remove the lug nuts and wheel.
- 8. Position the spare wheel/tire on the vehicle and install the lug nuts with the cone-shaped end toward the wheel. Lightly tighten the nuts.

# **CAUTION!**

Be sure to mount the spare tire with the valve stem facing outward. The vehicle could be damaged if the spare tire is mounted incorrectly.



**Mounting Spare Tire** 

# **WARNING!**

To avoid the risk of forcing the vehicle off the jack, do not tighten the lug nuts fully until the vehicle has been lowered. Failure to follow this warning may result in serious injury.

- 9. Lower the vehicle by turning the jack screw counter-clockwise, and remove the jack and wheel blocks.
- 10. Finish tightening the lug nuts. Push down on the 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 correct lug nut torque refer to Torque Specifications in this section. If in doubt about the correct tightness, have them checked with a torque wrench by your authorized dealer or at a service station.
- 11. Lower the jack to the fully closed position and return it and the tools to the proper positions in the foam tray.
- 12. Remove the small center cap and securely store the road wheel in the cargo area.



# Stowed Spare

13. Have the aluminum road wheel and tire repaired as soon as possible, properly secure the spare tire with the special wing nut torqued to 3.7 ft-lbs (5 N·m), reinstall the jack and tool kit foam tray, and latch the rear load floor cover.

**NOTE:** Do not drive with the spare tire installed for more than 50 miles (80 km) at a max speed of 50 mph (80 km/h).

# **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.

### **Road Tire Installation**

- Mount the road tire on the axle.
- 2. Install the remaining lug nuts with the cone shaped end of the nut toward the wheel. Lightly tighten the lug nuts.

### **WARNING!**

To avoid the risk of forcing the vehicle off the jack, do not tighten the lug nuts fully until the vehicle has been lowered. Failure to follow this warning may result in personal injury.

- 3. Lower the vehicle to the ground by turning the jack handle counterclockwise.
- 4. Refer to Torque Specifications for proper lug nut 6 torque.
- 5. After 25 miles (40 km) check the lug nut torque with a torque wrench to ensure that all lug nuts are properly seated against the wheel.

### **JUMP-STARTING**

If your vehicle has a discharged battery it can be jumpstarted 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.

# **WARNING!**

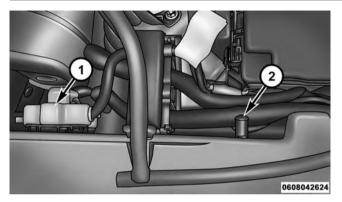
Do not attempt jump-starting if the battery is frozen. It could rupture or explode and cause personal injury.

# **CAUTION!**

Do not use a portable battery booster pack or any other booster source with a system voltage greater than 12 Volts or damage to the battery, starter motor, alternator or electrical system may occur. **NOTE:** When using a portable battery booster pack follow the manufacturer's operating instructions and precautions.

# **Preparations For Jump-Start**

The battery in your vehicle is located under the passenger's front seat. There are remote locations located under the hood to assist in jump-starting.



### **Remote Battery Posts**

- 1 Remote Positive (+) Post (covered with protective cap)
- 2 Remote Negative (-) Post

### **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.
- Batteries contain sulfuric acid that can burn your skin or eyes and generate hydrogen gas which is flammable and explosive. Keep open flames or sparks away from the battery.

**NOTE:** Be sure that the disconnected ends of the cables do not touch while still connected to the either vehicle.

1. Set the parking brake, shift the automatic transmission into PARK and turn the ignition to LOCK.

- 2. Turn off the heater, radio, and all unnecessary electrical accessories.
- 3. Remove the protective cover over the remote positive (+) battery post. Pull upward on the cover to remove it.
- 4. If using another vehicle to jump-start the battery, park the vehicle within the jumper cables reach, set the parking brake and make sure the ignition is OFF.

# **WARNING!**

Do not allow vehicles to touch each other as this could establish a ground connection and personal injury could result.

(Continued)

# **Jump-Starting Procedure**

# WARNING!

Failure to follow this jump-starting procedure could result in personal injury or property damage due to battery explosion.

# **CAUTION!**

Failure to follow these procedures could result in damage to the charging system of the booster vehicle or the discharged vehicle.

**NOTE:** Make sure at all times that unused ends of jumper cables are not contacting each other or either vehicle while making connections.

# **Connecting The Jumper Cables**

- 1. Connect the positive (+) end of the jumper cable to the remote positive (+) post of the discharged vehicle.
- 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 the remote negative (-) post of the vehicle with the discharged battery.

# **WARNING!**

Do not connect the jumper cable to the negative (-) post of the discharged battery. The resulting electrical spark could cause the battery to explode and

# WARNING! (Continued)

could result in personal injury. Only use the specific ground point, do not use any other exposed metal parts.

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.

### **CAUTION!**

Do not run the booster vehicle engine above 2000 rpm since it provides no charging benefit, wastes fuel and can damage booster vehicle engine.

(Continued)

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 remote negative (-) post of the discharged vehicle.
- 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 remote positive (+) post of the discharged vehicle.
- 5. Reinstall the protective cover over the remote positive (+) post of the discharged vehicle.

If frequent jump-starting is required to start your vehicle you should have the battery and charging system tested at your 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.

### 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. Push and hold the lock button on the shift lever. Then shift back and forth between DRIVE and REVERSE while gently pressing the accelerator.

**NOTE:** Shifts between DRIVE and REVERSE can only be achieved at wheel speeds of 5 mph (8 km/h) or less. Whenever the transmission remains in NEUTRAL for more than two seconds, you must push the brake pedal to engage DRIVE or REVERSE.

Use the least amount of accelerator pedal pressure that will maintain the rocking motion without spinning the wheels or racing the engine. NOTE: Push the "ESC Off" switch (if necessary), to place the Electronic Stability Control (ESC) system in "Partial Off" mode, before rocking the vehicle. Refer to "Electronic Brake Control" in "Starting And Operating" for further information. Once the vehicle has been freed, push the "ESC Off" switch again to restore "ESC On" mode.

# **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.

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.

**WARNING!** 

# **CAUTION!**

• 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.

# **CAUTION!** (Continued)

• 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).

### EMERGENCY TOW HOOKS — IF EQUIPPED

If your vehicle is equipped with tow hooks, there will be one in the rear and two mounted on the front of the vehicle. The rear hook will be located on the driver's side of the vehicle.

**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.

(Continued)

# **WARNING!**

- Do not use a chain for freeing a stuck vehicle. Chains may break, causing serious injury or death.
- Stand clear of vehicles when pulling with tow hooks. Tow straps may become disengaged, causing serious injury.

### **CAUTION!**

Tow hooks are for emergency use only, to rescue a vehicle stranded off road. Do not use tow hooks for tow truck hookup or highway towing. You could damage your vehicle.

(Continued)

### MANUAL PARK RELEASE

### WARNING!

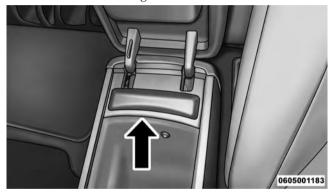
Always secure your vehicle by fully applying the parking brake, before activating the Manual Park Release. Activating the Manual Park Release will allow your vehicle to roll away if it is not secured by the parking brake or by proper connection to a tow vehicle. Activating the Manual Park Release on an unsecured vehicle could lead to serious injury or death for those in or around the vehicle.

In order to move the vehicle in cases where the transmission will not shift out of PARK (such as a dead battery), a Manual Park Release is available.

Follow these steps to use the Manual Park Release:

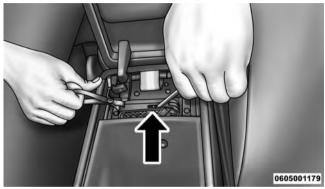
1. Firmly apply the parking brake.

2. Open the center console and locate the Manual Park Release cover, remove it by snapping the cover away from the console hinges.



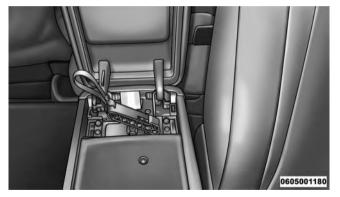
Manual Park Release Cover

3. Using a screwdriver or similar tool, push the metal latch in towards the tether strap.



Release Latch

4. While the metal latch is in the open position, simultaneously pull upwards on the tether strap until the lever clicks and latches in the released position. The transmission is now out of PARK and the vehicle can be moved.



Released Position

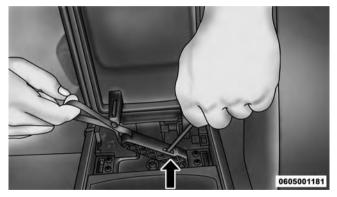
### **CAUTION!**

Closing the armrest while the Manual Park Release is activated may damage the Manual Park Release mechanism, the transmission, and/or the armrest.

NOTE: To prevent the vehicle from rolling unintentionally, firmly apply the parking brake.

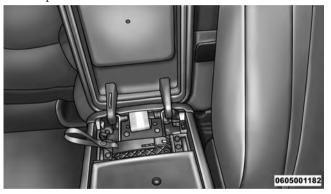
To Disengage the Manual Park Release Lever:

1. To disengage the Manual Park Release apply tension upward while pushing the release latch towards the tether to unlock the lever.



Release Latch

2. Once the tension has been released and the lever has been unlocked be sure it is stowed properly and locks into position.



**Stowed Position** 

**NOTE:** Be sure to replace the cover by snapping it back in place.

### 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" in the "Starting and Operating" section.

NOTE: Vehicles equipped with Quadra-Lift must be placed in Transport mode, before tying them down (from the body) on a trailer or flatbed truck. Refer to the section on Quadra-Lift 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.

Towing Condition	Wheels OFF the Ground	Two-Wheel Drive Models	Four-Wheel Drive Models Without 4–LO Range	Four-Wheel Drive Models With 4–LO Range
Flat Tow	NONE	NOT ALLOWED	NOT ALLOWED	See Instructions     Transmission in PARK     Transfer case in NEUTRAL (N)     Tow in forward direction
Dolly Tow	Front	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED
	Rear	OK	NOT ALLOWED	NOT ALLOWED
On Trailer	ALL	OK	OK	OK

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 must be in the ON/RUN position, not the ACC position.

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. Refer to "Manual Park Release" in this section 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).

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), 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 faster than 30 mph (48 km/h) or farther than 30 miles (48 km) with rear wheels on the ground 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, vehicles with a two-speed transfer case 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. Refer to "Recreational Towing" in "Starting And Operating" for detailed instructions.

Vehicles equipped with a single-speed transfer case have no NEUTRAL position, and therefore **must** be towed with all four wheels **OFF** the ground.

### **CAUTION!**

- Front or rear wheel lifts must not be used. 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.

# **MAINTAINING YOUR VEHICLE**

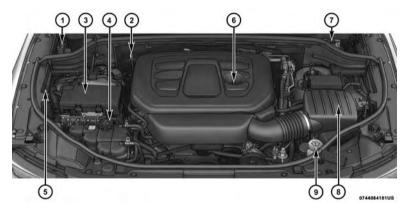
# **CONTENTS**

□ Engine Oil Filter
□ Engine Air Cleaner Filter
□ Accessory Drive Belt Inspection
□ Maintenance-Free Battery
□ Air Conditioner Maintenance
□ Body Lubrication
□ Windshield Wiper Blades
□ Adding Washer Fluid
□ Exhaust System
□ Cooling System

□ Brake System	□ Halogen Headlamps — If Equipped711
□ Front/Rear Axle Fluid	□ Front Turn Signal
□ Transfer Case	□ Front Fog Lamps
□ Automatic Transmission	□ Rear Tail, Stop, and Turn Signal Lamps713
□ Appearance Care And Protection From	□ Rear Liftgate Mounted Tail Lamp
Corrosion	□ Center High-Mounted Stop Lamp (CHMSL)715
■ FUSES698	□ Rear License Lamp
□ Power Distribution Center	■ FLUID CAPACITIES
■ VEHICLE STORAGE	■ FLUIDS, LUBRICANTS, AND GENUINE
■ REPLACEMENT BULBS	PARTS
■ BULB REPLACEMENT	□ Engine
□ High Intensity Discharge Headlamps (HID) — If Equipped	□ Chassis

648 MAINTAINING YOUR VEHICLE

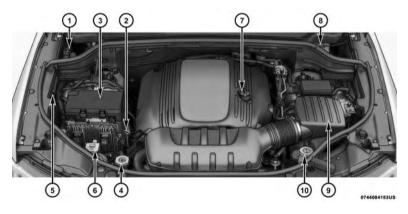
#### **ENGINE COMPARTMENT — 3.6L**



- 1 Remote Jump Start Positive Terminal
- 2 Engine Oil Dipstick
- 3 Power Distribution Center (Fuses)
- 4 Coolant Pressure Cap (Reservoir)
- 5 Remote Jump Start Negative Terminal

- 6 Engine Oil Fill
- 7 Brake Fluid Reservoir
- 8 Air Cleaner Filter
- 9 Washer Fluid Reservoir

#### **ENGINE COMPARTMENT — 5.7L**



- 1 Remote Jump Start Positive Terminal
- 2 Engine Oil Dipstick
- 3 Power Distribution Center (Fuses)
- 4 Coolant Pressure Cap (Radiator)
- 5 Remote Jump Start Negative Terminal

- 6 Engine Coolant Reservoir
- 7 Engine Oil Fill
- 8 Brake Fluid Reservoir
- 9 Air Cleaner Filter
- 10- Washer Fluid Reservoir

# 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 automatic 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 your 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 engine 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!**

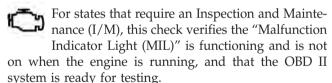
- ONLY an authorized service technician should connect equipment to the OBD II connection port in order to diagnose or service your vehicle.
- If unauthorized equipment is connected to the OBD II connection port, such as a driver-behavior tracking device, it may:
  - Be possible that vehicle systems, 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 "Privacy Practices — If Equipped With Uconnect 8.4 Radio" and "Uconnect CyberSecurity" in "All About Uconnect Access" in your

Owner's Manual Radio Supplement and "Cybersecurity" in "Understanding Your Instrument Panel" in your Owner's Manual on the DVD.

# **EMISSIONS INSPECTION AND MAINTENANCE PROGRAMS**

In some localities, it may be a legal requirement to pass an inspection of your vehicle's emissions control system. Failure to pass could prevent vehicle registration.



Normally, the OBD II system will be ready. The OBD II system may not be ready if your vehicle was recently serviced, recently had a dead battery or a battery replacement. If the OBD II system should be determined not ready for the I/M test, your vehicle may fail the test.

Your vehicle has a simple ignition actuated test, which you can use prior to going to the test station. To check if your vehicle's OBD II system is ready, you must do the following:

1. Cycle the ignition switch to the ON position, but do not crank or start the engine.

**NOTE:** If you crank or start the engine, you will have to start this test over.

- 2. As soon as you cycle the ignition switch to the ON position, you will see the "Malfunction Indicator Light (MIL)" symbol come on as part of a normal bulb check.
- 3. Approximately 15 seconds later, one of two things will happen:
- The MIL will flash for about 10 seconds and then return to being fully illuminated until you turn OFF the ignition or start the engine. This means that your vehicle's OBD II system is **not ready** and you should **not** proceed to the I/M station.

• The MIL will not flash at all and will remain fully illuminated until you place the ignition in the off position or start the engine. This means that your vehicle's OBD II system is ready and you can proceed to the I/M station.

If your OBD II system is not ready, you should see your authorized dealer or repair facility. If your vehicle was recently serviced or had a battery failure or replacement, you may need to do nothing more than drive your vehicle as you normally would in order for your OBD II system to update. A recheck with the above test routine 7 may then indicate that the system is now ready.

Regardless of whether your vehicle's OBD II system is ready or not, if the MIL is illuminated during normal vehicle operation you should have your vehicle serviced before going to the I/M station. The I/M station can fail your vehicle because the MIL is on with the engine running.

#### REPLACEMENT PARTS

Use of genuine MOPAR parts for normal/scheduled maintenance and repairs is highly recommended to ensure the designed performance. Damage or failures caused by the use of non-MOPAR parts for maintenance and repairs will not be covered by the New Vehicle Limited Warranty.

#### **DEALER SERVICE**

Your 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.

#### **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.

#### **MAINTENANCE PROCEDURES**

The pages that follow contain the **required** maintenance services determined by the engineers who designed your vehicle.

Besides those maintenance items specified in the fixed "Maintenance Schedule", there are other components which may require servicing or replacement in the future.

#### **CAUTION!**

- Failure to properly maintain your vehicle or perform repairs and service when necessary could result in more costly repairs, damage to other components or negatively impact vehicle performance. Immediately have potential malfunctions examined by an authorized dealer or qualified repair center.
- Your vehicle has been built with improved fluids that protect the performance and durability of your vehicle and also allow extended maintenance intervals. Do not use chemical flushes in these components as the chemicals can damage your engine,

#### **CAUTION!** (Continued)

transmission, or air conditioning. Such damage is not covered by the New Vehicle Limited Warranty. If a flush is needed because of component malfunction, use only the specified fluid for the flushing procedure.

#### **Engine Oil**

# Checking Oil Level

To assure 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

(Continued)

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 the crankcase will cause aeration or loss of oil pressure. This could damage your engine.

# **Change Engine Oil**

The oil change indicator system will remind you that it is time to take your vehicle in for scheduled maintenance. Refer to the "Maintenance Schedule" for further information.

**NOTE:** Under no circumstances should oil change intervals exceed 10,000 miles (16,000 km), twelve 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.

# 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.

#### **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 Selection**

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-6395.

# Engine Oil Viscosity — 3.6L Engine

MOPAR SAE 0W-20 engine oil approved to FCA Material Standard MS-6366 such as Pennzoil, Shell Helix or equivalent is recommended for all operating temperatures. This engine oil improves low temperature starting and vehicle fuel economy.

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.

**NOTE:** MOPAR SAE 5W-30 engine oil approved to FCA Material Standard MS-6395 such as Pennzoil, Shell Helix or equivalent may be used when SAE 0W-20 engine oil meeting MS-6333 is not available.

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 — 5.7L Engine

MOPAR SAE 5W-20 engine oil approved to FCA Material Standard MS-6395 such as Pennzoil, Shell Helix or equivalent is recommended for all operating temperatures. This engine oil improves low temperature starting and vehicle fuel economy.

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.

**NOTE:** Vehicles equipped with a 5.7L engine must use SAE 5W-20 oil. Failure to do so may result in improper operation of the Fuel Saver Technology. Refer to "Fuel Saver Technology – If Equipped" in "Starting And Operating" for further information.

Lubricants that do not have both, the engine oil certification mark and the correct SAE viscosity grade number should not be used.

# **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.

# 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 your 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 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 assure most efficient service. MOPAR engine oil filters are a high quality oil filter and are recommended.

#### **Engine Air Cleaner Filter**

Refer to the "Maintenance Schedule" in the "Maintenance Schedules" section for the proper maintenance intervals.

#### **WARNING!**

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.

# **Engine Air Cleaner Filter Selection**

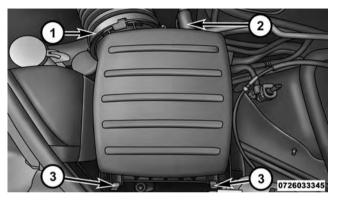
The quality of replacement engine air cleaner filters varies considerably. Only high quality filters should be used to assure most efficient service. MOPAR engine air cleaner filters are a high quality filter and are recommended.

# Gasoline Engine Air Cleaner Filter Inspection and Replacement

Inspect engine air cleaner filter for dirt and or debris, if you find evidence of either dirt or debris you should change your air cleaner filter.

# Engine Air Cleaner Filter Removal

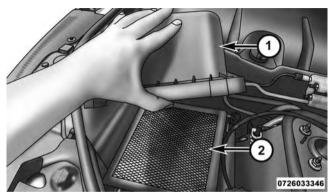
1. Release the spring clips from the air cleaner cover.



Air Cleaner Filter Cover

- 1 Clean Air Hose Clamp
- 2 Air Hose
- 3 Spring Clips

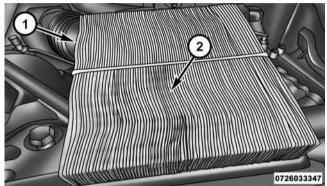
2. Lift the air cleaner cover to access the air cleaner filter. 3. Remove the air cleaner filter element from the housing



Open Air Cleaner Filter Assembly

- 1 Air Cleaner Cover
- 2 Air Cleaner Filter

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. Latch the spring clips and lock the air cleaner cover to the housing assembly.

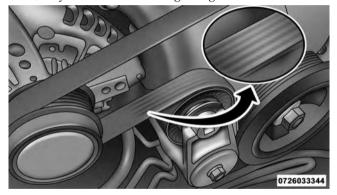
# **Accessory Drive Belt Inspection**

#### 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 switch position. 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.

When inspecting accessory drive belts, small cracks that run across ribbed surface of belt from rib to rib, are considered normal. These are not a reason to replace belt.

However, cracks running along 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.



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 **7** new belt is installed)
- Noise (objectionable squeal, squeak, or rumble is heard or felt while drive belt is in operation)

Some conditions can be caused by a faulty component such as a belt pulley. Belt pulleys should be carefully inspected for damage and proper alignment.

Belt replacement on some models requires the use of special tools, we recommend having your vehicle serviced at an authorized dealer.

# **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!**

• 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

(Continued)

### WARNING! (Continued)

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 Procedures" in "What To Do In Emergencies" 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.

#### **CAUTION!**

- 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.

#### **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.

#### **WARNING!**

- Use only refrigerants and compressor lubricants approved by the manufacturer for your air conditioning system. Some unapproved refrigerants are flammable and can explode, injuring you. Other unapproved refrigerants or lubricants can cause the system to fail, requiring costly repairs. Refer to Warranty Information Book, located on the DVD, for further warranty information.
- The air conditioning system contains refrigerant under high pressure. To avoid risk of personal injury or damage to the system, adding refrigerant or any repair requiring lines to be disconnected should be done by an experienced technician.

#### **CAUTION!**

Do not use chemical flushes in your air conditioning system as the chemicals can damage your air conditioning components. Such damage is not covered by the New Vehicle Limited Warranty.

# Refrigerant Recovery And Recycling R134a — If Equipped

R-134a Air Conditioning Refrigerant is a hydrofluorocarbon (HFC) that is endorsed by the Environmental Protection Agency and is an ozone-saving product. However, the manufacturer recommends that air conditioning service be performed by 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 HFO 1234yf — If Equipped

HFO 1234yf Air Conditioning Refrigerant is a hydrofluoolefine HFO that is endorsed by the Environmental Protection Agency and is an ozone-saving product with a low GWP (Global Warming Potential). However, the manufacturer recommends that air conditioning service be performed by authorized dealer or other service facilities using recovery and recycling equipment.

**NOTE:** Use only manufacturer approved A/C system PAG compressor oil and refrigerants.

### Air Conditioning Filter Replacement (A/C Air Filter)

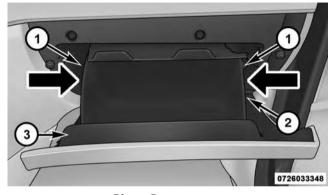
Refer to the "Maintenance Schedule" for the proper maintenance intervals

#### WARNING!

Do not remove the A/C air filter while the vehicle is running, or while the ignition is in the ACC or ON/RUN mode. With the A/C air filter removed and the blower operating, the blower can contact hands and may propel dirt and debris into your eyes, resulting in personal injury.

The A/C air filter is located in the fresh air inlet behind the glove compartment. Perform the following procedure to replace the filter:

1. Open the glove compartment and remove all contents.



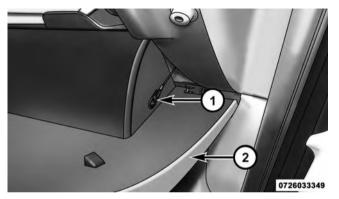
**Glove Compartment** 

- Glove Compartment Travel Stops
- 2 Glove Compartment Tension Tether
- 3 Glove Compartment Door

- 2. There are glove compartment travel stops on both sides of the glove compartment door, partially close the glove compartment door and push inward to release the glove compartment travel stop on one side and repeat this procedure for the opposite side.
- 3. Pull the right hand side of the glove compartment door toward the rear of the vehicle to disengage the glove compartment door from its hinges.

**NOTE:** When disengaging the glove compartment door from its hinges, there will be some resistance.

4. With the glove compartment door loose, remove the glove compartment tension tether and tether clip by sliding the clip toward the face of the glove compartment door and lifting the clip out of glove compartment door.

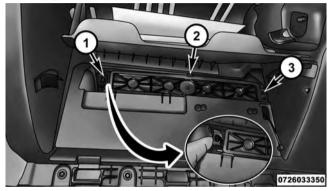


**Right Side Of Glove Compartment** 

- 1 Glove Compartment Tension Tether
- 2 Glove Compartment Door

5. Remove the filter cover by disengaging the retaining tab and mid way snap that secures the filter cover to the HVAC housing. Disengage the mid way snap by

pulling the door outward. Unhinge the filter cover on the right side to fully remove the cover.



A/C Air Filter Cover

- 1 Retaining Tab
- 2 Mid Way Snap
- 3 Filter Cover Hinge

- 6. Remove the A/C air filter by pulling it straight out of the housing.
- 7. Install the A/C air filter with the arrow on the filter pointing toward the floor. When installing the filter cover, make sure the retaining tabs fully engage the cover.

#### **CAUTION!**

The A/C air filter is identified with an arrow to indicate airflow direction through the filter. Failure to properly install the filter will result in the need to replace it more often.

8. Reinstall the glove compartment door on the glove compartment door hinge and 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.

9. Push the door to the near closed position to reengage the glove compartment travel stops.

**NOTE:** Ensure the glove compartment door hinges and glove compartment travel stops are fully engaged.

# **Body Lubrication**

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 assure 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. The external lock cylinders should be lubricated twice a year, preferably in the Fall 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 neces-

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

sary.

- 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.

# Front Wiper Blade Removal/Installation

#### **CAUTION!**

Do not allow the wiper arm to spring back against the glass without the wiper blade in place or the glass may be damaged.

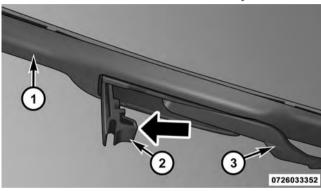
1. Lift the wiper arm to raise the wiper blade off of the glass, until the wiper arm is in the full up position.



Wiper Blade With Release Tab In Locked Position

- 1 Wiper
- 2 Release Tab
- 3 Wiper Arm
- 2. To disengage the wiper blade from the wiper arm, flip up the release tab on the wiper blade and while

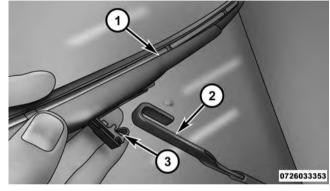
holding the wiper arm with one hand, slide the wiper blade down towards the base of the wiper arm.



Wiper Blade With Release Tab In Unlocked Position

- 1 Wiper Blade
- 2 Release Tab
- 3 Wiper Arm

3. 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 toward the right side of the vehicle to separate the wiper blade from the wiper arm).



Wiper Blade Removed From Wiper Arm

- 1 Wiper Blade
- 2 Wiper Arm
- 3 Release Tab
- 4. Gently lower the wiper arm onto the glass.

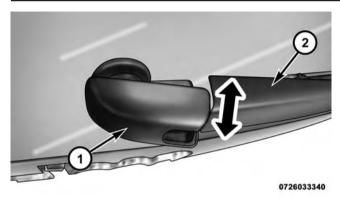
# **Installing The Front Wipers**

- 1. Lift the wiper arm off of the glass, until the wiper arm is in the full up position.
- 2. Position the wiper blade near the hook on the tip of the wiper arm with the wiper release tab open and the blade side of the wiper facing up and away from the windshield.
- 3. Insert the hook on the tip of the arm through the opening in the wiper blade under the release tab.
- 4. Slide the wiper blade up into the hook on the wiper arm and rotate the wiper blade until it is flush against the wiper arm. Fold down the latch release tab and snap it into its locked position. Latch engagement will be accompanied by an audible click.
- 5. Gently lower the wiper blade onto the glass.

#### Rear Wiper Blade Removal/Installation

1. Lift the rear wiper arm pivot cap away from the glass to allow the rear wiper blade to be raised off of the glass.

**NOTE:** The rear wiper arm cannot be fully raised off the glass unless the wiper arm pivot cap is unsnapped first. Attempting to fully raise the rear wiper arm without unsnapping the wiper arm pivot cap may damage the vehicle.



Wiper Pivot Cap In Unlocked Position

- 1 Wiper Arm Pivot Cap
- 2 Wiper Arm
- 2. Lift the rear wiper arm fully off the glass.



Wiper Blade In Folded Out Position

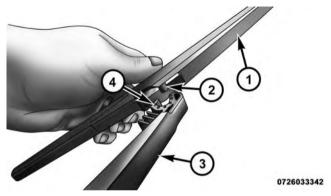
0726033341

- 1 Wiper Arm Pivot Cap
- 2 Wiper Arm
- 3 Wiper Blade

3. To remove the wiper blade from the wiper arm, grasp the bottom end of the wiper blade nearest to wiper arm with your right hand. With your left hand hold the wiper arm as you pull the wiper blade away from the wiper arm past its stop far enough to unsnap the wiper blade pivot pin from the receptacle on the end of the wiper arm.

**NOTE:** Resistance will be accompanied by an audible snap.

4. Still grasping the bottom end of the wiper blade, move the wiper blade upward and away from the wiper arm to disengage.



Wiper Blade Removed From Wiper Arm

- 1 Wiper Blade
- 2 Wiper Blade Pivot Pin
- 3 Wiper Arm
- 4 Wiper Arm Receptacle
- 5. Gently lower the tip of the wiper arm onto the glass.

# **Installing The Rear Wiper**

1. Lift the rear wiper arm pivot cap away from the glass to allow the rear wiper blade to be raised off of the glass.

**NOTE:** The rear wiper arm cannot be fully raised off the glass unless the wiper arm pivot cap is unsnapped first. Attempting to fully raise the rear wiper arm without unsnapping the wiper arm pivot cap may damage the vehicle.

- 2. Lift the rear wiper arm fully off the glass.
- 3. Insert the wiper blade pivot pin into the opening on the end of the wiper arm. Grab the bottom end of the wiper arm with one hand, and press the wiper blade flush with the wiper arm until it snaps into place.
- 4. Lower the wiper blade onto the glass and snap the wiper arm pivot cap back into place.

#### **Adding Washer Fluid**

This vehicle is equipped with a Driver Information Display (DID), the DID will indicate when the washer fluid level is low. When the sensor detects a low fluid level, the windshield will light on the vehicle graphic outline and the "WASHER FLUID LOW" message will be displayed.

The fluid reservoir for the windshield washers and the rear window washer is shared. The fluid reservoir is located in the engine compartment, be sure to check the fluid level at regular intervals. Fill the reservoir with windshield washer solvent only (not radiator antifreeze). 7 When refilling the washer fluid reservoir, take some washer fluid and apply it to a cloth or towel and wipe clean the wiper blades, 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.

#### **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.

#### **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.

#### **WARNING!**

- 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, refer to "Safety Tips/Exhaust Gas" in "Things To Know Before Starting Your Vehicle" for further information.
- 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!**

- The catalytic converter requires the use of unleaded fuel only. Leaded gasoline will destroy the effectiveness of the catalyst as an emissions control device and may seriously reduce engine performance and cause serious damage to the engine.
- Damage to the catalytic converter can result if your vehicle is not kept in proper operating condition. In the event of engine malfunction, particularly involving engine misfire or other apparent loss of performance, have your vehicle serviced promptly. Continued operation of your vehicle with a severe malfunction could cause the converter to overheat. resulting in possible damage to the converter and vehicle.

Under normal operating conditions, the catalytic converter will not require maintenance. However, it is important to keep the engine properly tuned to assure 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 7 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 dam- Cooling System age:

- Do not shut off the engine or interrupt the ignition, when the transmission is in gear and the vehicle is in motion.
- Do not try to start the engine by pushing or towing the vehicle.
- Do not idle the engine with any spark plug wires disconnected or removed, such as when diagnostic testing, or for prolonged periods during very rough idle or malfunctioning operating conditions.

#### **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.

### **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, the system should be drained, flushed, and refilled with fresh OAT coolant (conforming to MS.90032) by an authorized dealer. Check the front of the A/C condenser

for any accumulation of bugs, leaves, etc. If dirty, clean by gently spraying water from a garden hose vertically down the face of the condenser.

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.

With the engine at normal operating temperature (but not running), check the cooling system pressure cap for proper vacuum sealing by draining a small amount of engine coolant (antifreeze) from the radiator drain cock. If the cap is sealing properly, the engine coolant (antifreeze) will begin to drain from the coolant recovery bottle, 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 your local 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).

Refer to the "Maintenance Schedule" for the proper maintenance intervals.

#### Selection Of Coolant

Refer to "Fluids, Lubricants, And Genuine Parts" in "Maintaining Your Vehicle" for further information.

#### **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

#### **CAUTION!** (Continued)

rust inhibitors or antirust products, as they may not be compatible with the 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.

# **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 ten 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.

(Continued)

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):

- We recommend using MOPAR Antifreeze/Coolant 10 Year/150,000 Mile 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 your 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.

#### 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 your 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 recovery tank.

The cap should be inspected and cleaned if there is any accumulation of foreign material on the sealing surfaces.

#### **WARNING!**

• 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.

# WARNING! (Continued)

• Do not use a pressure cap other than the one specified for your vehicle. Personal injury or engine damage may result.

# Disposal Of Used Engine Coolant

Used ethylene glycol-based engine 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 engine 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.

(Continued)

#### Coolant Level

The coolant bottle provides a quick visual method for determining that the coolant level is adequate. With the engine OFF and cold, the level of the engine coolant (antifreeze) in the bottle should be between the ranges indicated on the bottle.

The radiator normally remains completely full, so there is no need to remove the radiator/coolant pressure cap unless checking for engine coolant (antifreeze) freeze point or replacing coolant. Advise your service attendant of this. As long as the engine operating temperature is satisfactory, the coolant bottle need only be checked once a month.

When additional engine coolant (antifreeze) is needed to maintain the proper level, only OAT coolant that meets the requirements of FCA Material Standard MS.90032 should be added to the coolant bottle. Do not overfill.

#### Points To Remember

**NOTE:** When the vehicle is stopped after a few miles/ kilometers of operation, you may observe vapor coming from the front of the engine compartment. This is normally a result of moisture from rain, snow, or high humidity accumulating on the radiator and being vaporized when the thermostat opens, allowing hot engine coolant (antifreeze) to enter the radiator.

If an examination of your engine compartment shows no evidence of radiator or hose leaks, the vehicle may be safely driven. The vapor will soon dissipate.

- 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.

#### 686 MAINTAINING YOUR VEHICLE

- 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 thermostat. Other designs may

result in unsatisfactory engine coolant (antifreeze) performance, poor gas mileage, and increased emissions.

# **Brake System**

In order to assure brake system performance, all brake system components should be inspected periodically. Refer to the "Maintenance Schedule" for the proper maintenance intervals.

#### **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.

The brake master cylinder has a plastic reservoir. On the outboard side of the reservoir, there is a "MAX" dot and a "MIN" dot. The fluid level must be kept within these two dots. Do not add fluid above the MAX mark, because leakage may occur at the 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, Lubricants, and Genuine Parts" in "Maintaining Your Vehicle" for further information.

#### **WARNING!**

- Use only manufacturer's recommended brake fluid. Refer to "Fluids, Lubricants, And Genuine Parts" in "Maintaining Your Vehicle" for further information. Using the wrong type of brake fluid can severely damage your brake system and/or impair its performance. The proper type of brake fluid for your vehicle is also identified on the original factory installed hydraulic master cylinder reservoir.
- 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

(Continued)

# WARNING! (Continued)

cause it to boil unexpectedly during hard or prolonged braking, resulting in sudden brake failure. This could result in a 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.

#### Front/Rear Axle Fluid

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, Lubricants, and Genuine Parts" in "Maintaining Your Vehicle" for further information.

#### Front Axle Fluid Level Check

The front axle oil level needs to be no lower than 1/8 in (3 mm) below the bottom of the fill hole.

The front axle fill and drain plugs should be tightened to 22 to 29 ft lbs (30 to 40 N·m).

#### **CAUTION!**

Do not overtighten the plugs as it could damage them and cause them to leak.

#### Rear Axle Fluid Level Check

The rear axle oil level needs to be no lower than 1/8 in (3 mm) below the bottom of the fill hole.

The rear axle fill and drain plugs should be tightened to 22 to 29 ft lbs (30 to 40 N·m).

#### **CAUTION!**

Do not overtighten the plugs as it could damage them and cause them to leak.

#### Selection Of Lubricant

Use only the manufacturer's recommended fluid. Refer to "Fluids, Lubricants, and Genuine Parts" in "Maintaining Your Vehicle" for further information.

#### **Transfer Case**

#### Fluid Level Check

For normal service, periodic fluid level checks are not required. When the vehicle is serviced for other reasons the exterior surfaces of the transfer case assembly should be inspected. If oil leakage is suspected inspect the fluid

level. Refer to "Fluids, Lubricants, and Genuine Parts" in "Maintaining Your Vehicle" for further information.

# Adding Fluid

Add fluid at the filler hole, until it runs out of the hole, when the vehicle is in a level position.

#### Drain

First remove fill plug, then remove drain plug. Recommended tightening torque for drain and fill plugs is 15 to 25 ft lbs (20 to 34 N·m).

# **CAUTION!**

When installing plugs, do not overtighten. You could damage them and cause them to leak.

#### **Selection Of Lubricant**

Use only the manufacturer's recommended fluid. Refer to "Fluids, Lubricants, and Genuine Parts" in "Maintaining Your Vehicle" 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, Lubricants, And Genuine Parts" in this section for fluid specifications. It is important to maintain the transmission fluid at the correct level using the recommended fluid.

**NOTE:** No chemical flushes should be used in any transmission; only the approved lubricant should be used.

#### **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.

# **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.

#### **CAUTION!**

Do not use chemical flushes in your transmission as the chemicals can damage your transmission components. Such damage is not covered by the New Vehicle Limited Warranty.

#### Fluid Level Check

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. Your authorized dealer can check your transmission fluid level using special service tools.

If you notice fluid leakage or transmission malfunction, visit your authorized dealer immediately to have the transmission fluid level checked. Operating the vehicle with an improper fluid level can cause severe transmission damage.

#### **CAUTION!**

If a transmission fluid leak occurs, visit your authorized dealer immediately. Severe transmission damage may occur. Your authorized dealer has the proper tools to adjust the fluid level accurately.

# Fluid And Filter Changes

Under normal operating conditions, the fluid installed at  $\mathbf{I}$ 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.

# **Appearance Care And Protection From Corrosion**

# Protection Of Body And Paint From Corrosion

Vehicle body care requirements vary according to geographic locations and usage. Chemicals that make roads passable in snow and ice, and chemicals 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.

# Washing

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.

- If insects, tar, or other similar deposits have accumulated on your vehicle, use MOPAR Super Kleen Bug and Tar Remover to remove.
- 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.
- 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.

# **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.

#### 694 MAINTAINING YOUR VEHICLE

- 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.
- Use MOPAR Touch Up Paint on scratches as soon as possible. Your authorized dealer has touch up paint to match the color of your vehicle.

#### Wheel And Wheel Trim Care

- All wheels and wheel trim, especially aluminum and chrome plated wheels, should be cleaned regularly with a mild soap and water to prevent corrosion.
- To remove heavy soil and/or excessive brake dust, use MOPAR Wheel Cleaner.

**NOTE:** If your vehicle is equipped with Dark Vapor or Black Satin Chrome 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. USE ONLY MILD SOAP AND WATER WITH A SOFT CLOTH. Used on a regular basis this is all that is required to maintain this finish.

# **CAUTION!**

Do not use scouring pads, steel wool, a bristle brush, or metal polishes. Do not use oven cleaner. These products may damage the wheel's protective finish. Avoid automatic car washes that use acidic solutions or harsh brushes that may damage the wheel's protective finish. Only MOPAR Wheel Cleaner or equivalent is recommended.

# 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.

#### **Interior Care**

Use MOPAR Total Clean to clean fabric upholstery and carpeting.

Use MOPAR Total Clean to clean vinyl upholstery.

MOPAR Total Clean is specifically recommended for leather upholstery.

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.

#### **WARNING!**

Do not use volatile solvents for cleaning purposes. Many are potentially flammable, and if used in closed areas they may cause respiratory harm.

#### **CAUTION!**

Direct contact of air fresheners, insect repellents, suntan lotions, or hand sanitizers to the plastic, painted, or decorated surfaces of the interior may cause permanent damage. Wipe away immediately.

# **CAUTION!**

Damage caused by these type of products may not be covered by your New Vehicle Limited Warranty.

#### **CAUTION!**

Do not use Alcohol and Alcohol-based and/or Keton based cleaning products to clean leather seats, as damage to the seat may result.

# **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.

#### Glass Surfaces

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 instrument that may scratch the elements.

All glass surfaces should be cleaned on a regular basis

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.

# **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.

#### 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 MOPAR Total Clean, 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.

#### **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.).

#### **FUSES**

#### **WARNING!**

• When replacing a blown fuse, always use an appropriate replacement fuse with the same amprating as the original fuse. Never replace a fuse

# WARNING! (Continued)

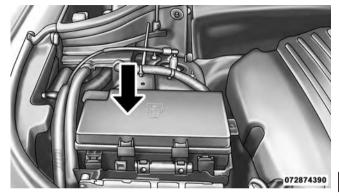
with another fuse of higher amp rating. Never replace a blown fuse with metal wires or any other material. Failure to use proper fuses may result in serious personal injury, fire and/or property damage.

- 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, gearbox system) or steering system blows, contact an authorized dealer.

(Continued)

#### **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.



**Power Distribution Center** 

Cavity	Cartridge Fuse	Micro Fuse	Description
F03	60 Amp Yellow	_	Radiator Fan
F05	40 Amp Green	_	Compressor for Air Suspension - If
			Equipped

700 MAINTAINING YOUR VEHICLE

Cavity	Cartridge Fuse	Micro Fuse	Description
F06	40 Amp Green	-	Anti-lock Brakes/Electronic Stability Con-
			trol Pump
F07	30 Amp Pink	_	Starter Solenoid
F09	30 Amp Pink	_	Diesel Fuel Heater (Diesel engine only) /
			Brake Vacuum Pump
F10	40 Amp Green	_	Body Controller / Exterior Lighting #2
F11	30 Amp Pink	_	Trailer Tow Electric Brake - If Equipped
F12	40 Amp Green	_	Body Controller #3 / Power Locks
F13	40 Amp Green	_	Blower Motor Front
F14	40 Amp Green	_	Body Controller #4 / Exterior Lighting #1
F17	30 Amp Pink	_	Headlamp Washer- If Equipped
F19	20 Amp Blue	_	Headrest Solenoid- If Equipped
F20	30 Amp Pink	_	Passenger Door Module
F22	20 Amp Blue	_	Engine Control Module
F23	30 Amp Pink	_	Interior Lights #1
		-	

Cavity	Cartridge Fuse	Micro Fuse	Description
F24	30 Amp Pink	_	Driver Door Module
F25	30 Amp Pink	_	Front Wipers
F26	30 Amp Pink	_	Anti-lock Brakes/Stability Control Module/Valves
F28	20 Amp Blue	_	Trailer Tow Backup Lights - If Equipped
F29	20 Amp Blue	_	Trailer Tow Parking Lights - If Equipped
F30	30 Amp Pink	_	Trailer Tow Receptacle - If Equipped
F32	30 Amp Pink	_	Drive Train Control Module
F34	30 Amp Pink	_	Slip Differential Control
F35	30 Amp Pink	_	Sunroof - If Equipped
F36	30 Amp Pink	_	Rear Defroster
F37	25 Amp Clear	_	Rear Blower Motor - If Equipped
F38	30 Amp Pink	_	Power Inverter 115V AC - If Equipped
F39	30 Amp Pink	_	Power Liftgate - If Equipped

702 MAINTAINING YOUR VEHICLE

	Cavity	Cartridge Fuse	Micro Fuse	Description
	F40	_	10 Amp Red	Daytime Running Lights/Headlamp Lev-
				eling
	F42	_	20 Amp Yellow	Horn
	F44	_	10 Amp Red	Diagnostic Port
	F49	_	10 Amp Red	Integrated Central Stack / Climate Control
	F50	_	20 Amp Yellow	Air Suspension Control Module - If
				Equipped
	F51	_	15 Amp Blue	Ignition Node Module / Keyless Ignition
				/ Steering Column Lock
	F52	_	5 Amp Tan	Battery Sensor
	F53	_	20 Amp Yellow	Trailer Tow – Left Turn/Stop Lights - If
				Equipped
	F56	_	15 Amp Blue	Additional Content (Diesel engine only)
	F57	_	20 Amp Yellow	NOx Sensor
	F58	_	15 Amp Blue	HID Headlamps LH - If Equipped
٠		•	*	•

Cavity	Cartridge Fuse	Micro Fuse	Description
F59	_	10 Amp Red	Purging Pump (Diesel engine only)
F60	_	15 Amp Blue	Transmission Control Module
F61	-	10 Amp Red	Transmission Control Module/PM Sensor (Diesel engine only)
F62	_	10 Amp Red	Air Conditioning Clutch
F63	_	20 Amp Yellow	Ignition Coils (Gas), Urea Heater (Diesel)
F64	_	25 Amp Clear	Fuel Injectors / Powertrain
F66	-	10 Amp Red	Sunroof / Passenger Window Switches / Rain Sensor
F67	-	15 Amp Blue	CD / DVD / Bluetooth Hands-free Module - If Equipped
F68	_	20 Amp Yellow	Rear Wiper Motor
F69	_	15 Amp Blue	Spotlight Feed - If Equipped
F70	_	20 Amp Yellow	Fuel Pump Motor
F71	_	30 Amp Green	Audio Amplifier

704 MAINTAINING YOUR VEHICLE

Cavity	Cartridge Fuse	Micro Fuse	Description
F72	_	10 Amp Red	PCM (If Equipped)
F73	_	15 Amp Blue	HID Headlamp RH - If Equipped
F75	_	10 Amp Red	Dual Batt Control (If Equipped)
F76	-	10 Amp Red	Anti-lock Brakes/Electronic Stability Control
F77	-	10 Amp Red	Drivetrain Control Module/Front Axle Disconnect Module
F78	-	10 Amp Red	Engine Control Module / Electric Power Steering
F80	_	10 Amp Red	Universal Garage Door Opener / Compass / Anti-Intrusion Module
F81	_	20 Amp Yellow	Trailer Tow Right Turn/Stop Lights
F82	_	10 Amp Red	Steering Column Control Module/ Cruise Control / DTV
F83	_	10 Amp Red	Fuel Door

Cavity	Cartridge Fuse	Micro Fuse	Description
F84	_	15 Amp Blue	Switch Bank/Instrument Cluster
F85	_	10 Amp Red	Airbag Module
F86	_	10 Amp Red	Airbag Module
F87	-	10 Amp Red	Air Suspension – If Equipped / Trailer Tow / Steering Column Control Module
F88	_	15 Amp Blue	Instrument Panel Cluster
F90/F91	_	20 Amp Yellow	Power Outlet (Rear seats) Selectable
F92	_	10 Amp Red	Rear Console Lamp - If Equipped
F93	_	20 Amp Yellow	Cigar Lighter
F94	_	10 Amp Red	Shifter / Transfer Case Module
F95	_	10 Amp Red	Rear Camera / ParkSense
F96	-	10 Amp Red	Rear Seat Heater Switch / Flashlamp Charger - If Equipped
F97	-	20 Amp Yellow	Rear Heated Seats & Heated Steering Wheel - If Equipped

706 MAINTAINING YOUR VEHICLE

Cavity	Cartridge Fuse	Micro Fuse	Description
F98	_	20 Amp Yellow	Front Heated Seats - If Equipped
F99	_	10 Amp Red	Climate Control / Driver Assistance Systems Module / DSRC
F100	_	10 Amp Red	Active Damping - If Equipped
F101	_	15 Amp Blue	Electrochromatic Mirror/Smart High Beams - If Equipped
F103	_	10 Amp Red	Cabin Heater (Diesel Engine Only)/Rear HVAC
F104	_	20 Amp Yellow	Power Outlets (Instrument Panel/Center Console)
	•	•	•

#### **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.
- 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.

#### VEHICLE STORAGE

If you are leaving your vehicle dormant for more than 21 days you may want to take steps to protect your battery. You may:

- Disconnect the negative cable from the battery.
- Anytime 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.

# REPLACEMENT BULBS

# Interior Bulbs

	Bulb Number
Glove Box Lamp	194
Grab Handle Lamp	L002825W5W
Overhead Console Reading Lamps	VT4976
Rear Cargo Lamp	214–2
Visor Vanity Lamp	V26377
Underpanel Courtesy Lamps	906
Instrument Cluster (General Illumination)	103
Telltale/Hazard Lamp	74

# **Exterior Bulbs**

	Bulb Number
Headlamps (Low Beam) - If Equipped	H11
Premium Headlamps (Low/High Beam)	D3S (Serviced at Authorized Dealer)
Headlamps (High Beam) - If Equipped	9005
Premium Park/Turn Signal Lamp	LED - (Service at Authorized Dealer)
Premium Daytime Running Lamp (DRL)	LED - (Service at Authorized Dealer)
Front Fog Lamps	H11
Front Side Marker - If Equipped	W5W
Premium Front Side Marker - If Equipped	LED - (Service at Authorized Dealer)
Front Park/Turn Lamp - If Equipped	7444NA (WY27/8W)
Rear Body Side Turn Signal Lamps	7440NA (WY21W)
Auxiliary Liftgate Tail Lamps	LED - (Service at Authorized Dealer)
Liftgate Backup Lamps	921 (W16W)
Rear License Lamps	LED - (Service at Authorized Dealer)
Rear Body Side Stop Lamps	3157KRD LCP

	Bulb Number
Rear Body Side Tail Lamps	LED - (Service at Authorized Dealer)
CHMSL - Center High Mounted Stop Lamp	LED - (Service at Authorized Dealer)

**NOTE:** Numbers refer to commercial bulb types that can be purchased from your authorized dealer. If a bulb needs to be replaced, visit your authorized dealer or refer to the applicable Service Manual.

#### **BULB REPLACEMENT**

**NOTE:** Lens fogging can occur under certain atmospheric conditions. This will usually clear as atmospheric conditions change to allow the condensation to change back into a vapor. Turning the lamps on will usually accelerate the clearing process.

# High Intensity Discharge Headlamps (HID) — If Equipped

The headlamps are a type of high voltage discharge tube. High voltage can remain in the circuit even with the headlamp switch off and the key removed. **Because of** 

this, you should not attempt to service a headlamp bulb yourself. If a headlamp bulb fails, take your vehicle to an authorized dealer for service.

#### **WARNING!**

A transient high voltage occurs at the bulb sockets of High Intensity Discharge (HID) headlamps when the headlamp switch is turned ON. It may cause serious electrical shock or electrocution if not serviced properly. See your authorized dealer for service.

NOTE: On vehicles equipped with High Intensity Discharge (HID) headlamps, when the headlamps are turned on, there is a blue hue to the lamps. This diminishes and becomes more white after approximately 10 seconds, as the system charges.

# Halogen Headlamps — If Equipped

- 1. Open the hood.
- 2. Turn the low or high beam bulb one-quarter turn counterclockwise to remove from housing.
- 3. Disconnect the electrical connector and replace the bulb.

## **CAUTION!**

Do not touch the new bulb with your fingers. Oil contamination will severely shorten bulb life. If the bulb comes in contact with any oily surface, clean the bulb with rubbing alcohol.

# Front Turn Signal

- 1. Open the hood.
- 2. Turn the turn signal bulb one-quarter turn counterclockwise to remove from housing.
- 3. Disconnect the electrical connector and replace the bulb.

## **CAUTION!**

Do not touch the new bulb with your fingers. Oil contamination will severely shorten bulb life. If the bulb comes in contact with any oily surface, clean the bulb with rubbing alcohol.

# **Front Fog Lamps**

- 1. Reach through the cutout in the splash shield and disconnect the wiring harness from the fog lamp connector.
- 2. Firmly grasp the bulb by the two latches and squeeze them together to unlock the bulb from the back of the front fog lamp housing.
- 3. Pull the bulb straight out from the keyed opening in the housing.

#### **CAUTION!**

• Do not touch the new bulb with your fingers. Oil contamination will severely shorten bulb life. If the bulb comes in contact with any oily surface, clean the bulb with rubbing alcohol.

(Continued)

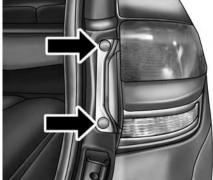
# **CAUTION!** (Continued)

- 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 socket or the lamp wiring.
- 4. Align the index tabs of the front fog lamp bulb with the slots in the collar of the bulb opening on the back of the front fog lamp housing.
- 5. Insert the bulb into the housing until the index tabs are engaged in the slots of the collar.
- 6. Firmly and evenly push the bulb straight into the lamp housing until both tabs snap firmly into place and are fully engaged.
- 7. Connect the wiring harness to the front fog lamp connector.

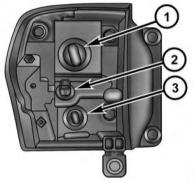
# Rear Tail, Stop, and Turn Signal Lamps

- 1. Raise the liftgate.
- 2. Remove the two push-pins from the tail lamp housing.
- 3. Grasp the tail lamp and pull firmly rearward to disengage the lamp from the aperture panel.

Tail Lamp Push Pins



4. Twist socket counter clockwise and remove from lamp.



0733003303

Rear Of Tail Lamp

- 1 Rear Stop Lamp Bulb Socket
- 2 LED Tail Connector Do Not Remove
- 3 Rear Turn Signal Bulb Socket

073374396

#### 714 MAINTAINING YOUR VEHICLE

- 5. Pull the bulb to remove it from the socket.
- 6. Replace the bulb, reinstall the socket, and reattach the lamp assembly.

# **Rear Liftgate Mounted Tail Lamp**

- 1. Raise the liftgate.
- 2. Use a fiber stick or flat blade screw driver to pry the lower trim from the liftgate.
- 3. Continue removing the trim.
- 4. Disconnect the two trim panel lights.



073374394

Rear Liftgate Tail Lamps

5. Tail lamps are now visible. Rotate socket(s) counter clockwise.

# Rear Of Liftgate Tail Lamp

- 1 Auxiliary LED Tail Connector Do Not Remove 2 — Backup Bulb Socket
- 6. Remove/replace bulb(s).
- 7. Reinstall the socket(s)
- 8. Reverse process to reinstall the liftgate trim.

# **Center High-Mounted Stop Lamp (CHMSL)**

The center high mounted stop lamp is LED. Service at Authorized Dealer.



073374395

Center High-Mounted Stop Lamp

# **Rear License Lamp**

1. The rear license lamps are LED. Service at Authorized Dealer

# **FLUID CAPACITIES**

	U.S.	Metric
Fuel (Approximate)		
3.6L and 5.7L Engines	25 Gallons	94.0 Liters
Engine Oil With Filter		
3.6L Engine (SAE 5W20, API Certified)	6 Quarts	5.6 Liters
5.7L Engine (SAE 5W-20, API Certified)	7 Quarts	6.6 Liters
Cooling System*		
3.6L Engine (MOPAR Antifreeze/Engine Coolant 10 Year/150,000 Mile Formula or equivalent)	10.4 Quarts	9.9 Liters
5.7 Liter Engine (MOPAR Antifreeze/Engine Coolant 10 Year/ 150,000 Mile Formula or equivalent) – Without Trailer Tow Package	15.4 Quarts	14.6 Liters
5.7 Liter Engine (MOPAR Antifreeze/Engine Coolant 10 Year/ 150,000 Mile Formula or equivalent) – With Trailer Tow Package	16 Quarts	15.2 Liters
* Includes heater and coolant recovery bottle filled to MAX level.		

# FLUIDS, LUBRICANTS, AND GENUINE PARTS

# **Engine**

Component	Fluid, Lubricant, or Genuine Part
Engine Coolant	We recommend you use MOPAR Antifreeze/Coolant 10 Year/150,000 Mile Formula OAT (Organic Additive Technology).
Engine Oil – 3.6L Engine	We recommend you use API Certified SAE 5W-20 Engine Oil, meeting the requirements of FCA Material Standard MS-6395 such as MOPAR, Pennzoil, and Shell Helix. Refer to your engine oil filler cap for correct SAE grade.
Engine Oil – 5.7L Engine	We recommend you use API Certified SAE 5W-20 Engine Oil, meeting the requirements of FCA Material Standard MS-6395 such as MOPAR, Pennzoil, and Shell Helix. Refer to your engine oil filler cap for correct SAE grade.

#### 718 MAINTAINING YOUR VEHICLE

Component	Fluid, Lubricant, or Genuine Part
Engine Oil Filter	We recommend you use MOPAR Engine Oil Filter or
	equivalent.
Spark Plugs – 3.6L Engine	We recommend you use MOPAR Spark Plugs.
Spark Plugs – 5.7L Engine	We recommend you use MOPAR Spark Plugs.
Fuel Selection – 3.6L Engine	87 Octane, 0-15% Ethanol.
Fuel Selection – 5.7L Engine	89 Octane Recommended - 87 Octane Acceptable, 0-15%
	Ethanol.

#### **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

# **CAUTION!** (Continued)

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

(Continued) (Continued)

## CAUTION! (Continued)

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.

## Chassis

Component	Fluid, Lubricant, or Genuine Part
Automatic Transmission	Use only Mopar ZF 8&9 Speed ATF Automatic Transmission Fluid or equivalent. Failure to use the correct fluid may affect the function or performance of your transmission.
Transfer Case – Single-Speed (Quadra-Trac I)	We recommend you use Automatic Transmission Fluid 3353.
Transfer Case – Two-Speed (Quadra-Trac II)	We recommend you use MOPAR ATF+4 Automatic Transmission Fluid.
Axle Differential (Front)	We recommend you use MOPAR GL-5 Synthetic Axle Lubricant SAE 75W-85.
Axle Differential (Rear) – With Electronic Limited-Slip Differential (ELSD)	We recommend you use MOPAR GL-5 Synthetic Axle Lubricant SAE 75W-85 with friction modifier additive.
Axle Differential (Rear) – Without Electronic Limited-Slip Differential (ELSD)	We recommend you use MOPAR GL-5 Synthetic Axle Lubricant SAE 75W-85.
Brake Master Cylinder	We recommend you use MOPAR DOT 3 Brake Fluid, SAE J1703 should be used. If DOT 3, SAE J1703 brake fluid is not available, then DOT 4 is acceptable.

## **MAINTENANCE SCHEDULES**

CO	N	CEN	PTI
$\mathbf{v}$	T 1		ULD

■ MAINTENANCE SCHEDULE	□ Maintenance Chart
INDICATE OF THE OFFICE OFFICE OF THE OFFICE	= Manteriance Chart

#### MAINTENANCE SCHEDULE

Your vehicle is equipped with an automatic oil change indicator system. The oil change indicator system will remind you that it is time to take your vehicle in for scheduled maintenance.

Based on engine operation conditions, the oil change indicator message will illuminate. This means that service is required for your vehicle. Operating conditions such as frequent short-trips, trailer tow, extremely hot or cold ambient temperatures, and E85 fuel usage will influence when the "Oil Change Required" message is displayed. Severe Operating Conditions can cause the change oil message to illuminate as early as 3,500 miles (5,600 km) since last reset. Have your vehicle serviced as soon as possible, within the next 500 miles (805 km).

Your authorized dealer will reset the oil change indicator message after completing the scheduled oil change.

**NOTE:** Under no circumstances should oil change intervals exceed 10,000 miles (16,000 km), twelve 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.

#### Severe Duty All Models

Change Engine Oil at 4,000 miles (6,500 km) if the vehicle is operated in a dusty and off road environment or is operated predominately at idle or only very low engine RPM's. This type of vehicle use is considered Severe Duty.

#### Once A Month Or Before A Long Trip:

- Check engine oil level
- Check windshield washer fluid level
- Check the tire inflation pressures and look for unusual wear or damage

- Check the fluid levels of the coolant reservoir, brake master cylinder and fill as needed.
- Refer to the Maintenance Schedules on the following pages for required maintenance.

• Check function of all interior and exterior lights

#### Required Maintenance

#### At Every Oil Change Interval As Indicated By Oil Change Indicator System:

- Change oil and filter.
- Rotate the tires. Rotate at the first sign of irregular wear, even if it occurs before the oil indicator system turns on.
- Inspect battery and clean and tighten terminals as required.
- Inspect brake pads, shoes, rotors, drums, hoses and park brake.
- Inspect engine cooling system protection and hoses.
- Inspect exhaust system.
- Inspect engine air cleaner if using in dusty or off-road conditions.

#### **Maintenance Chart**

Mileage or time passed (whichever comes first)	0	30,000	40,000	50,000	000'09	70,000	80,000	000'06	100,000	110,000	120,000	130,000	140,000	150,000
Or Years:	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Or Kilometers:	32,000	48,000	64,000	80,000	96,000	112,000	128,000	144,000	160,000	176,000	192,000	208,000	224,000	240,000
Additional Inspections				•				•						
Inspect the CV joints.		Х			Х			Х			Х			Х
Inspect front suspension, tie rod ends, and replace if necessary.	Х		Х		Х		Х		Х		Х		Х	
Inspect the front and rear axle fluid, change if using your vehicle for police, taxi, fleet, off-road or frequent trailer towing.	Х		Х		Х		Х		Х		Х		Х	
Inspect the brake linings, parking brake function.	Х		Х		Х		Х		Х		Х		Х	
Inspect transfer case fluid.		Х			Х			Х						Χ

Mileage or time passed (whichever comes first)	20,000	30,000	40,000	50,000	60,000	70,000	80,000	90,000	100,000	110,000	120,000	130,000	140,000	150,000
Or Years:	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Or Kilometers:	32,000	48,000	64,000	80,000	96,000	112,000	128,000	144,000	160,000	176,000	192,000	208,000	224,000	240,000
Additional Maintenance														
Replace engine air filter.		Χ			Χ			Χ			Χ			Χ
Replace the air conditioning filter.	Х		Х		Χ		X		Χ		Х		Χ	
Replace spark plugs.**									Х					
Flush and replace the engine coolant at 10 years or 150,000 miles (240,000 km) whichever comes first.									Х					Х
Change transfer case fluid.											Х			
Inspect and replace PCV valve if necessary.									Χ					

\*\* The spark plug change interval is mileage based only, yearly intervals do not apply.

#### **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 effect vehicle handling and performance. This could cause an accident.

#### (

## IF YOU NEED CONSUMER ASSISTANCE

## **CONTENTS**

SUGGESTIONS FOR OBTAINING SERVICE FOR YOUR VEHICLE	□ Customer Assistance For The Hearing Or Spe Impaired (TDD/TTY)	
$\hfill\Box$ Prepare For The Appointment	□ Service Contract	731
□ Prepare A List	■ WARRANTY INFORMATION	733
$\hfill\Box$ Be Reasonable With Requests	■ MOPAR PARTS	733
I IF YOU NEED ASSISTANCE	■ REPORTING SAFETY DEFECTS	733
□ FCA US LLC Customer Center	☐ In The 50 United States And	700
$\hfill\Box$ FCA Canada Inc. Customer Center	Washington, D.C	
□ In Mexico Contact	□ In Canada	
□ Puerto Rico And U.S. Virgin Islands	■ PUBLICATION ORDER FORMS	734

720 II TOO NEED CONCOMER ACCIONANCE	
■ DEPARTMENT OF TRANSPORTATION UNIFORM TIRE QUALITY GRADES	
TIME QUILLITT GRADES	□ Temperature Grades
□ Treadwear	•

728 IF YOU NEED CONSUMER ASSISTANCE

#### SUGGESTIONS FOR OBTAINING SERVICE FOR YOUR VEHICLE

#### **Prepare For The Appointment**

If you are having warranty work done, be sure to have the right papers with you. Take your warranty folder. All work to be performed may not be covered by the warranty. Discuss additional charges with the service manager. Keep a maintenance log of your vehicle's service history. This can often provide a clue to the current problem.

## **Prepare A List**

Make a written list of your vehicle's problems or the specific work you want done. If you've had an accident or work done that is not on your maintenance log, let the service advisor know.

### Be Reasonable With Requests

If you list a number of items and you must have your vehicle by the end of the day, discuss the situation with the service advisor and list the items in order of priority. At many authorized dealers, you may obtain a rental vehicle at a minimal daily charge. If you need a rental, it is advisable to make these arrangements when you call for an appointment.

#### IF YOU NEED ASSISTANCE

The manufacturer and its authorized dealer are vitally interested in your satisfaction. We want you to be happy with our products and services.

Warranty service must be done by an authorized dealer. 9 We strongly recommend that you take the vehicle to an authorized dealer. They know your vehicle the best, and are most concerned that you get prompt and high quality service. The manufacturer's authorized dealer have the

#### 730 IF YOU NEED CONSUMER ASSISTANCE

facilities, factory-trained technicians, special tools, and the latest information to ensure the vehicle is fixed correctly and in a timely manner.

This is why you should always talk to an authorized dealer service manager first. Most matters can be resolved with this process.

- If for some reason you are still not satisfied, talk to the general manager or owner of the authorized dealer. They want to know if you need assistance.
- If an authorized dealer is unable to resolve the concern, you may contact the manufacturer's customer center.

Any communication to the manufacturer's customer center should include the following information:

- Owner's name and address
- Owner's telephone number (home and office)

- Authorized dealer name
- Vehicle Identification Number (VIN)
- Vehicle delivery date and mileage

#### **FCA US LLC Customer Center**

P.O. Box 21-8004

Auburn Hills, MI 48321–8004

Phone: (877) 426-5337

#### FCA Canada Inc. Customer Center

P.O. Box 1621

Windsor, Ontario N9A 4H6

Phone: (800) 465-2001 English / (800) 387-9983 French

#### **In Mexico Contact**

Av. Prolongacion Paseo de la Reforma, 1240

Sante Fe C.P. 05109

Mexico, D. F.

In Mexico City: 5081-7568

Outside Mexico City: 1-800-505-1300

#### Puerto Rico And U.S. Virgin Islands

Customer Service Chrysler International Services LLC

P.O. Box 191857

San Juan 00919-1857

Tel.: (787) 782-5757

Fax: (787) 782-3345

# Customer Assistance For The Hearing Or Speech Impaired (TDD/TTY)

To assist customers who have hearing difficulties, the manufacturer has installed special TDD (Telecommunication Devices for the Deaf) equipment at its customer center. Any hearing or speech impaired customer, who has access to a TDD or a conventional teletypewriter (TTY) in the United States, can communicate with the manufacturer by dialing 1-800-380-CHRY.

Canadian residents with hearing difficulties that require assistance can use the special needs relay service offered by Bell Canada. For TTY teletypewriter users, dial 711 and for Voice callers, dial 1-800-855-0511 to connect with a Bell Relay Service operator.

#### **Service Contract**

You may have purchased a service contract for a vehicle to help protect you from the high cost of unexpected repairs after the manufacturer's New Vehicle Limited Warranty expires. The manufacturer stands behind only the manufacturer's service contracts. If you purchased a manufacturer's service contract, you will receive Plan Provisions and an Owner Identification Card in the mail within three weeks of the vehicle delivery date. If you have any questions about the service contract, call the manufacturer's Service Contract National Customer Hotline at 1-800-521-9922 (Canadian residents, call (800) 465-2001 English / (800) 387-9983 French).

The manufacturer will not stand behind any service contract that is not the manufacturer's service contract. It is not responsible for any service contract other than the manufacturer's service contract. If you purchased a service contract that is not a manufacturer's service contract, and you require service after the manufacturer's New Vehicle Limited Warranty expires, please refer to the contract documents, and contact the person listed in those documents.

We appreciate that you have made a major investment when you purchased the vehicle. An authorized dealer has also made a major investment in facilities, tools, and training to assure that you are absolutely delighted with the ownership experience. You will be pleased with their sincere efforts to resolve any warranty issues or related concerns.

#### **WARNING!**

Engine exhaust (internal combustion engines only), some of its constituents, and certain vehicle components contain, or emit, chemicals known to the State of California to cause cancer and birth defects, or other reproductive harm. In addition, certain fluids contained in vehicles and certain products of component wear contain, or emit, chemicals known to the State of California to cause cancer and birth defects, or other reproductive harm.

#### WARRANTY INFORMATION

See the Warranty Information Booklet, located on the DVD, for the terms and provisions of FCA US LLC warranties applicable to this vehicle and market.

#### **MOPAR PARTS**

MOPAR fluids, lubricants, parts, and accessories are available from an authorized dealer. They are recommended for your vehicle in order to help keep the vehicle operating at its best.

#### REPORTING SAFETY DEFECTS

#### In The 50 United States And Washington, D.C.

If you believe that your vehicle has a defect that could cause a crash or cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying the manufacturer.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your authorized dealer, and the manufacturer.

To contact NHTSA, you may either call the Auto Safety Hotline toll free at 1-888-327-4236 (TTY: 1-800-424-9153), or go to http://www.safercar.gov; or write to: Administrator, NHTSA, 1200 New Jersey Avenue, SE., West Building, Washington, D.C. 20590.

You can also obtain other information about motor vehicle safety from http://www.safercar.gov.

#### In Canada

If you believe that your vehicle has a safety defect, you should contact the Customer Service Department immediately. Canadian customers who wish to report a safety

defect to the Canadian government should contact Transport Canada, Motor Vehicle Defect Investigations and Recalls at 1-800-333-0510 or go to http://www.tc.gc.ca/roadsafety/

#### **PUBLICATION ORDER FORMS**

To order the following manuals, you may use either the website or the phone numbers listed below. Visa, Mastercard, American Express, and Discover orders are accepted. If you prefer mailing your payment, please call for an order form.

**NOTE:** A street address is required when ordering manuals (no P.O. Boxes).

#### Service Manuals

These comprehensive Service Manuals provide the information that students and professional technicians need in diagnosing/troubleshooting, problem solving, maintaining, servicing, and repairing FCA US LLC vehicles. A complete working knowledge of the vehicle, system, and/or components is written in straightforward language with illustrations, diagrams, and charts.

#### **Diagnostic Procedure Manuals**

Diagnostic Procedure Manuals are filled with diagrams, charts and detailed illustrations. These practical manuals make it easy for students and technicians to find and fix problems on computer-controlled vehicle systems and features. They show exactly how to find and correct problems the first time, using step-by-step troubleshooting and drivability procedures, proven diagnostic tests and a complete list of all tools and equipment.

#### Owner's Manuals

These Owner's Manuals have been prepared with the assistance of service and engineering specialists to acquaint you with specific FCA US LLC vehicles. Included are starting, operating, emergency and maintenance procedures as well as specifications, capabilities and safety tips.

Call toll free at:

- 1-800-890-4038 (U.S.)
- 1-800-387-1143 (Canada)

Or

Visit us on the Worldwide Web at:

www.techauthority.com

### DEPARTMENT OF TRANSPORTATION UNIFORM TIRE QUALITY GRADES

The following tire grading categories were established by the National Highway Traffic Safety Administration. The specific grade rating assigned by the tire's manufacturer in each category is shown on the sidewall of the tires on your vehicle.

All passenger vehicle tires must conform to Federal safety requirements in addition to these grades.

#### Treadwear

The Treadwear grade is a comparative rating, based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For **q** example, a tire graded 150 would wear one and one-half times as well on the government course as a tire graded 100. The relative performance of tires depends upon the actual conditions of their use, however, and may depart

significantly from the norm due to variations in driving habits, service practices, and differences in road characteristics and climate.

#### **Traction Grades**

The Traction grades, from highest to lowest, are AA, A, B, and C. These grades represent the tire's ability to stop on wet pavement, as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.

#### **WARNING!**

The traction grade assigned to this tire is based on straight-ahead braking traction tests, and does not include acceleration, cornering, hydroplaning, or peak traction characteristics.

### **Temperature Grades**

The temperature grades are A (the highest), B, and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat, when tested under controlled conditions on a specified indoor laboratory test wheel. Sustained high temperature can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure. The grade C corresponds to a level of performance, which all passenger vehicle tires must meet under the Federal Motor Vehicle Safety Standard No. 109. Grades B and A represent higher levels of performance on the laboratory test wheel, than the minimum required by law.

#### **WARNING!**

The temperature grade for this tire is established for a tire that is properly inflated and not overloaded. Excessive speed, under-inflation, or excessive loading, either separately or in combination, can cause heat buildup and possible tire failure.

## **INDEX**

INDEX

Maintaining Your Air Bag System ..........82

Check Engine Light (Malfunction Indicator Light) . .652 

Install A LATCH-Compatible Child Restraint . . . . 99

Child Restraints

	В
	В
	В
	В

214110/ 114110111100110111 11110110111 11111111
Break-In Recommendations, New Vehicle
Bulb Replacement
Bulbs, Light
Camera, Rear
Capacities, Fluid

Widster Cymraer	007
Parking	521
Warning Light	301
Brake/Transmission Interlock	482
Break-In Recommendations, New Vehicle	109
Bulb Replacement	3, 710

Caps, Filler

INDFX 743

Detroster, Rear Window	Off-Road
Defroster, Windshield	DVD Player (Video Entertainment System)
Dipsticks	
Oil (Engine)	Economy (Fuel) Mode
Disabled Vehicle Towing	Electrical Outlet, Auxiliary (Power Outlet)
Disposal	Electric Rear Window Defrost
Antifreeze (Engine Coolant)	Electric Remote Mirrors
Door Ajar	Electronic Brake Control System
Door Ajar Light	Anti-Lock Brake System
Door Locks	Electronic Roll Mitigation536
Child-Protection Door Lock — Rear Doors	Traction Control System
Door Locks	Electronic Speed Control
Door Locks, Automatic	(Cruise Control)
Door Opener, Garage	Electronic Stability Control (ESC)
Driver Information Display	Electronic Throttle Control Warning Light
DID	Emergency, In Case Of
Instrument Cluster Display	Freeing Vehicle When Stuck

Off Dar J

E10

744 INDEX

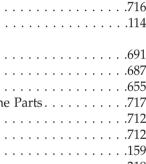
Defusitor Door Windows

746 INDEX	
Hazard Warning	Four Wheel Drive Operation
Turn Signal	Freeing A Stuck Vehicle
Flooded Engine Starting	Front Axle (Differential)
Fluid, Brake	Fuel
Fluid Capacities	Adding
Fluid Leaks	Additives
Fluid Level Checks	Clean Air
Automatic Transmission	Economy Mode
Brake	Ethanol
Engine Oil	Gasoline
Fluids, Lubricants And Genuine Parts	Light

Thooded Elighte Starting
Fluid, Brake
Fluid Capacities
Fluid Leaks
Fluid Level Checks
Automatic Transmission
Brake
Engine Oil
Fluids, Lubricants And Genuine Parts
Fog Lights
Fog Light Service
Folding Rear Seat
Forward Collision Warning

																			.720
																			.716
																			.114
3																			
r	ni	is	si	O1	n														.691
																			.687
																			.655
A	۱r	ıd	1	G	eı	nı	u	in	e	Ι	Pa	ır	ts						.717
																			.712
																			710

•		•	•	•	•	•	•	•	•	
•		•	•	•	•	•	•	•	•	•
	ts									
•	•		•	•	•	•	•	•	•	



Flooded Engine Starting	Front Axle (Differential)
Fluid, Brake	Fuel
Fluid Capacities	Adding
Fluid Leaks	Additives
Fluid Level Checks	Clean Air
Automatic Transmission	Economy Mode
Brake	Ethanol
Engine Oil	Gasoline
Fluids, Lubricants And Genuine Parts	Light
Fog Lights	Materials Added
Fog Light Service	Methanol
Folding Rear Seat	Octane Rating
Forward Collision Warning	Requirements
Four-Way Hazard Flasher	Tank Capacity
Four Wheel Drive	Fueling
Operation	Fuses
Systems	

Economy M
Ethanol
Gasoline
Light
Materials A
Methanol .
Octane Rati
Requiremen
Tank Capac
ueling
11909

my Mode			
ol			
ne			
ials Added			
nol			
e Rating .			
rements			
Capacity			

ı Air
omy Mode
nol
line
rials Added
anol
ne Rating
irements
Capacity

Key Fob

Interior Appearance Care	5
Intermittent Wipers (Delay Wipers)	
Introduction	4

Interior
Intermit
Introduc
Invertor

748 INDEX	
Interior Appearance Care	5
Intermittent Wipers (Delay Wipers)	

8	INDEX									
te	rior Ap <sub>l</sub>	pearance	Care.	 	 			 	.695	

Vanity Mirror	Memory Seats And Radio
Warning (Instrument Cluster Description)304, 326	Methanol
Loading Vehicle	Mirrors
Tires	Electric Powered
Locks	Electric Remote
Automatic Door	Exterior Folding
Child Protection	Heated
Door	Outside
Power Door	Rearview
Lubrication, Body	Vanity
Lug Nuts	Modifications/Alterations, Vehicle
	Monitor, Tire Pressure System
Maintenance Free Battery	MOPAR Parts
Maintenance Procedures	MTBE/ETBE
Maintenance Schedule	Multi-Function Control Lever

750 INDEX

Malfunction Indicator Light (Check Engine) . . .311, 652

	INDEX 751
Octane Rating, Gasoline (Fuel)	Onboard Diagnostic System
Off-Pavement Driving (Off-Road)	Opener, Garage Door (HomeLink)
Off-Road Driving (Off-Pavement)	Operating Precautions
Oil, Engine	Operator Manual (Owner's Manual)
Capacity	Outside Rearview Mirrors
Change Interval	Overhead Console
Dipstick	Overheating, Engine
Disposal	Owner's Manual (Operator Manual) 6, 734
Filter	
Filter Disposal	Paddle Shifters
Identification Logo	Paint Care
Materials Added To	Panic Alarm
Pressure Warning Light	Parking Brake
Recommendation	ParkSense System, Rear
Synthetic	Passing Light
Viscosity	Passive Entry
Oil Filter, Change	Personalized Menu Bar
Oil Filter, Selection	Pets
Oil Pressure Light	Placard, Tire And Loading Information

Power	Preparation For Jacking
Brakes	
Distribution Center (Fuses)	Seat Belts
Door Locks	Programming Transmitters (Remote Keyless Entry)23
Inverter	
Lift Gate	Quadra-Lift
Mirrors	Quadra-Trac
Outlet (Auxiliary Electrical Outlet)	
Seats	Radial Ply Tires
Steering	Radiator Cap (Coolant Pressure Cap)
Sunroof	Radio Frequency
Tilt/Telescoping Steering Column	General Information
Windows	Radio Operation
Power Seats	Radio Remote Controls
Forward	Radio (Sound Systems)
Rearward	Rain Sensitive Wiper System
	Rear Axle (Differential)
Power Steering Fluid	Rear Camera

754 INDEX
Safety Defects, Reporting
Safety, Exhaust Gas
Safety Information, Tire
Safety Tips
Schedule, Maintenance
Seat Belt
Adjustable Upper Shoulder Belt A
Automatic Locking Retractor (AL
Energy Management Feature
Lap/Shoulder Belt Operation
Lap/Shoulder Belts
Lap/Shoulder Belt Untwisting

Safety, Exhaust Gas	Adjustable Up
Safety Information, Tire	Child Restrain
Safety Tips	Extender
Schedule, Maintenance	Front Seat
Seat Belt	Inspection
Adjustable Upper Shoulder Belt Anchorage 60	Operating Inst
Automatic Locking Retractor (ALR)	Pregnant Wom
Energy Management Feature	Pretensioners
Lap/Shoulder Belt Operation	Rear Seat
Lap/Shoulder Belts	Reminder
Lap/Shoulder Belt Untwisting	Untwisting Pro
Pregnant Women	Seats
Seat Belt Extender	Adjustment .
Seat Belt Pretensioner	Easy Entry
Seat Belt Reminder	Heated
Seat Belt Maintenance	Memory

111

Extender
Front Seat
Inspection
Operating Instructions
Pregnant Women
Pretensioners
Rear Seat
Reminder
Untwisting Procedure
eats
Adjustment
Easy Entry
Heated

Adjustable Upper Shoulder Anchorage . . . . . . . . . . . . . . . . 60 

Steering       .519         Tilt Column       .184, 185         Wheel, Heated       .187         Wheel, Tilt       .184, 185         Steering Wheel Audio Controls       .426         Steering Wheel Mounted Sound System Controls       .426         Storage       .278, 707         Storage, Vehicle       .440, 707         Storing Your Vehicle       .707         Sunglasses Storage       .252         Sun Roof       .261, 265         Sun Visor Extension       .135         Supplemental Restraint System - Air Bag       .69         Suspension, Air       .503         Sway Control, Trailer       .536         Synthetic Engine Oil       .658         System, Remote Starting       .28	Telescoping Steering Column       .184, 185         Temperature Control, Automatic (ATC)       .438         Tie Down Hooks, Cargo       .284         Tilt Steering Column       .184, 185         Tire And Loading Information Placard       .552, 553         Tire Markings       .545         Tires       .114, 557, 563, 735         Aging (Life Of Tires)       .567         Air Pressure       .557         Chains       .569         Changing       .629         Compact Spare       .564         Flat Changing       .629         General Information       .557, 563         High Speed       .560         Inflation Pressures       .558         Life Of Tires       .567         Load Capacity       .552, 553         Pressure Monitor System (TPMS)       .572
--	--

INDFX 757

758 INDEX	
Maintenance	General Information
Shifting	Siri Eyes Free
Transmitter Battery Service (Remote Keyless Entry)26	Uconnect Access
Transmitter, Garage Door Opener (HomeLink) 253	Vehicle Health Alert
Transmitter Programming	Uconnect Settings
(Remote Keyless Entry)	Customer Programmable Features 35, 37, 47, 359
Transmitter, Remote Keyless Entry (RKE)	Passive Entry Programming
Transporting Pets	Uconnect Settings
Tread Wear Indicators	Uconnect Voice Command
Turn Signals	Uniform Tire Quality Grades
	Universal Transmitter
Uconnect	Unleaded Gasoline
Customer Programmable Features	Untwisting Procedure, Seat Belt
Operation	
Screen Activated Features	Vanity Mirrors
Uconnect Settings	Vehicle Identification Number (VIN) 8
Uconnect 8.4A/8.4AN Voice Recognition	Vehicle Loading
Additional Information	Vehicle Modifications/Alterations
Do Not Disturb	Vehicle Security Alarm (Security Alarm)

# INSTALLATION OF RADIO TRANSMITTING EQUIPMENT

Special design considerations are incorporated into this vehicle's electronic system to provide immunity to radio frequency signals. Mobile two-way radios and telephone equipment must be installed properly by trained personnel. The following must be observed during installation.

The positive power connection should be made directly to the battery and fused as close to the battery as possible. The negative power connection should be made to body sheet metal adjacent to the negative battery connection. This connection should not be fused.

Antennas for two-way radios should be mounted on the roof or the rear area of the vehicle. Care should be used in mounting antennas with magnet bases. Magnets may affect the accuracy or operation of the compass on vehicles so equipped.

The antenna cable should be as short as practical and routed away from the vehicle wiring when possible. Use only fully shielded coaxial cable.

Carefully match the antenna and cable to the radio to ensure a low Standing Wave Ratio (SWR).

Mobile radio equipment with output power greater than normal may require special precautions.

All installations should be checked for possible interference between the communications equipment and the vehicle's electronic systems.



#### STICK WITH THE SPECIALISTS®





irst Edition Rev 1 Printed in U.S.A.