

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



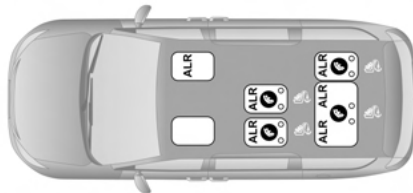
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### LATCH Label

Your vehicle is equipped with the child restraint anchorage system called LATCH, which stands for Lower Anchors and Tethers for Children. The LATCH system has three vehicle anchor points for installing LATCH-equipped child seats. There are two lower anchorages located at the back of the seat cushion where it meets the seatback and one top tether anchorage located behind the seating position. These anchorages are used to install LATCH-equipped child seats without using the vehicle's seat belts. Some seating positions may have a top tether anchorage but no lower anchorages. In these seating positions, the seat belt must be used with the top tether anchorage to install the child restraint. Please see the following table for more information.



## LATCH Positions For Installing Child Restraints In This Vehicle

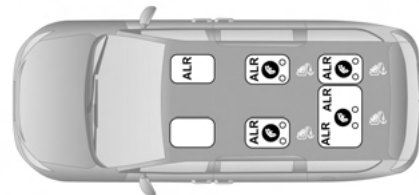
If applicable, refer to the "Hybrid Supplement" for additional information.



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### 7 Passenger Bench Seat LATCH Positions

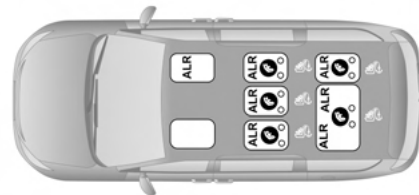
-  Lower Anchorage Symbol 2 anchorages per seating position
-  Top Tether Anchorage Symbol



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### 7 Passenger Stow 'n Go Seating LATCH Positions

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



M0503000160US

### 8 Passenger LATCH Positions

-  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 together 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 rear-facing or forward-facing child restraint. Booster seats may be attached to the LATCH anchorages if allowed by the booster seat manufacturer. See your booster seat owner's manual for more information.
Can two child restraints be attached using a common lower LATCH anchorage?	No	Never "share" a LATCH anchorage with two or more child restraints. If the center position does not have dedicated LATCH lower anchorages, use the seat belt to install a child seat in the center position next to a child seat using the LATCH anchorages in an outboard position.
Can the rear-facing child restraint touch the back of the front passenger seat?	Yes	The child seat may touch the back of the front passenger seat if the child restraint manufacturer also allows contact. See your child restraint owner's manual for more information.

### Frequently Asked Questions About Installing Child Restraints With LATCH

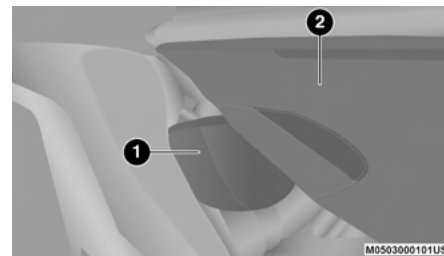
Can the rear head restraints be removed?	Yes	The 2nd row head restraints on bench and the center head restraint in the 8 passenger vehicle can be removed if they interfere with the installation of the child restraint. 2nd row Stow 'n Go head restraints are not removable. The 3rd row center head restraint is removable in all vehicles, but the 3rd row outboard head restraints are not removable. Refer to “Head Restraints” in “Getting To Know Your Vehicle” for further information.
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#### NOTE:

If the folding, non-adjustable head restraint interferes with the installation of the child restraint, the head restraint may be folded and the child seat installed in front of it.

#### WARNING!

Always make sure the head restraint is in its upright position when the seat is to be used by an occupant who is not in a child restraint. Sitting in a seat with the head restraint in its lowered position could result in serious injury or death in a collision.



**Car Seat With Head Restraint Folded**

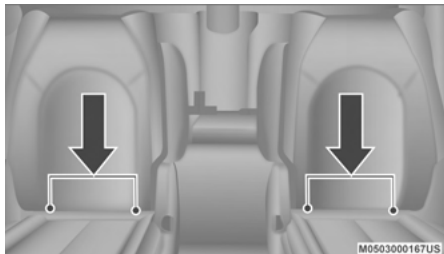
- 1 – Folded Headrest
- 2 – Child Restraint

## Locating The LATCH Anchorages

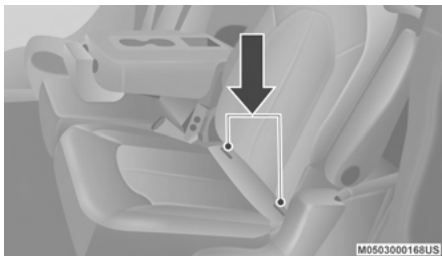
If applicable, refer to the “Hybrid Supplement” for additional information.



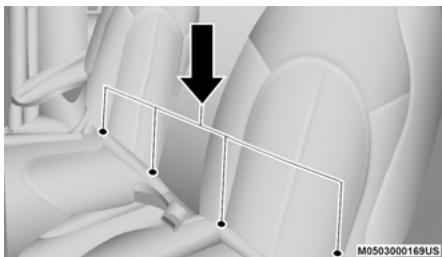
The lower anchorages are round bars that are found at the rear of the seat cushion where it meets the seatback, below the anchorage symbols on the seatback. They are just visible when you lean into the rear seat to install the child restraint. You will easily feel them if you run your finger along the gap between the seatback and seat cushion.



**LATCH Anchorages (Second Row Anchorages Shown)  
7 Passenger Stow 'n Go Seating**



**LATCH Anchorages (Second Row Anchorages Shown)  
8 Passenger Seating**



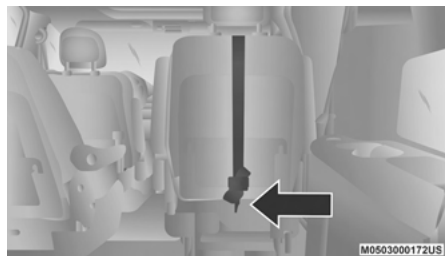
**LATCH Anchorages (Second Row Bench Anchorages  
Shown) 7 Passenger Bench Seating**

## Locating The Upper Tether Anchorages

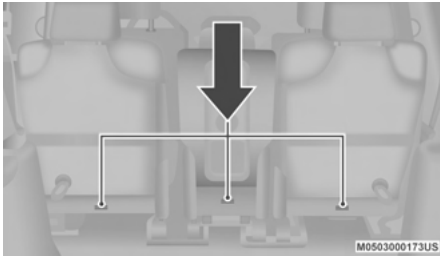
If applicable, refer to the “Hybrid Supplement” for additional information.



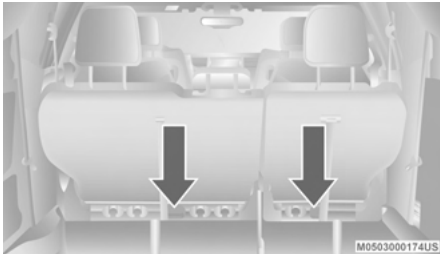
There are tether strap anchorages located behind all second row seating positions. The third row has a tether anchor on the 40% seat for the right outboard position and in the center of the 60% seat for either the center or left outboard seating position. All tether anchorages are located on the back of the seat, near the floor.



**Tether Strap Anchorages (Second Row 7 Passenger  
Stow 'n Go Anchorage Shown)**



**Tether Strap Anchorages (Second Row 8 Passenger Anchorage Shown)**



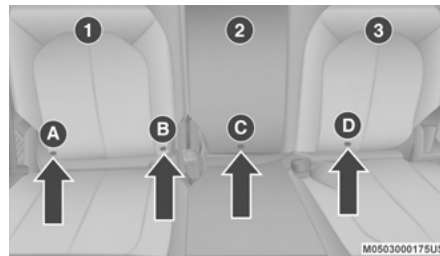
**Tether Strap Anchorages (Third Row 60/40 Anchorage Shown)**

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

This vehicle has 4 lower LATCH anchorages in the third row, rear seat. Anchorages A and B are used for the right outboard position behind the front passenger (1). Anchorages C and D are used for the center seating position (2). The left outboard position (3) does not have lower anchorages. Do not install a child restraint using anchorages B and C. This is not a LATCH position in your vehicle.



**Center Seat LATCH Positions**

If a child restraint installed in the center position blocks the seat belt webbing or buckle for the outboard position, do not use that outboard position. If a child seat in the center position blocks the outboard LATCH anchors or seat belt, do not install a child seat in that outboard position.

### WARNING!

- Use anchorages C and D to install a LATCH-compatible child restraint in the center seating position (2). Do not install a LATCH-compatible child restraint using anchorages B and C. This is not a LATCH-compatible position in your vehicle.
- Never use the same lower anchorage to attach more than one child restraint. Please refer to "To Install A LATCH-Compatible Child Restraint" for typical installation instructions.

**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 (if adjustable) to get a better fit. If the rear seat can be moved forward and rearward in the vehicle, you may wish to move it to its rear-most position to make room for the child seat. You may also move the front seat forward to allow more room for the child seat.
3. Attach the lower hooks or connectors of the child restraint to the lower anchorages in the selected seating position.

4. If the child restraint has a tether strap, connect it to the top tether anchorage. See the section “Installing Child Restraints Using the Top Tether Anchorage” for directions to attach a tether anchor.
5. Tighten all of the straps as you push the child restraint rearward and downward into the seat. Remove slack in the straps according to the child restraint manufacturer’s instructions.
6. Test that the child restraint is installed tightly by pulling back and forth on the child seat at the belt path. It should not move more than 1 inch (25.4 mm) in any direction.

### How To Stow An Unused Switchable-ALR (ALR) Seat Belt:

When using the LATCH attaching system to install a child restraint, stow all ALR seat belts that are not being used by other occupants or being used to secure child restraints. An unused belt could injure a child if they play with it and accidentally lock the seat belt retractor. Before installing a child restraint using the LATCH system, buckle the seat belt behind the child restraint and out of the child’s reach. If the buckled seat belt interferes with the child

restraint installation, instead of buckling it behind the child restraint, route the seat belt through the child restraint belt path and then buckle it. Do not lock the seat belt. Remind all children in the vehicle that the seat belts are not toys and that they should not play with them.

#### 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.
- Child restraint anchorages are designed to withstand only those loads imposed by correctly-fitted child restraints. Under no circumstances are they to be used for adult seat belts, harnesses, or for attaching other items or equipment to the vehicle.

## Installing Child Restraints Using The Vehicle Seat Belt

Child restraint systems are designed to be secured in vehicle seats by lap belts or the lap belt portion of a lap/shoulder belt.

### WARNING!

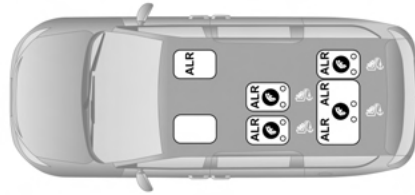
- Improper installation or failure to properly secure a child restraint can lead to failure of the restraint. The child could be badly injured or killed.
- Follow the child restraint manufacturer's directions exactly when installing an infant or child restraint.

The seat belts in the passenger seating positions are equipped with 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 in “Switchable Automatic Locking Retractors (ALR)” under “Occupant Restraint Systems” for additional information on ALR.

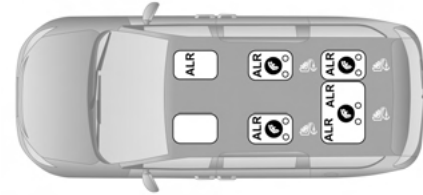
## Lap/Shoulder Belt Systems For Installing Child Restraints In This Vehicle

If applicable, refer to the “Hybrid Supplement” for additional information.




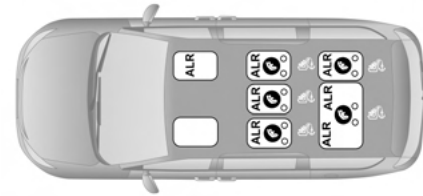
### 7 Passenger Bench Seat Automatic Locking Retractor (ALR) Locations

ALR = Switchable Automatic Locking Retractor  
 Top Tether Anchorage Symbol




### 7 Passenger Stow 'n Go Seating Automatic Locking Retractor (ALR) Locations

ALR = Switchable Automatic Locking Retractor  
 Top Tether Anchorage Symbol



### 8 Passenger Automatic Locking Retractor (ALR) Locations

ALR = Switchable Automatic Locking Retractor  
 Top Tether Anchorage Symbol

Frequently Asked Questions		
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 rear head restraints be removed?	Yes	The 2nd row head restraints on bench and the center head restraint in the 8 passenger vehicle can be removed if they interfere with the installation of the child restraint. 2nd row Stow 'n Go head restraints are not removable. The 3rd row center head restraint is removable in all vehicles, but the 3rd row outboard head restraints are not removable. Refer to "Head Restraints" in "Getting To Know Your Vehicle" for further information.
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.

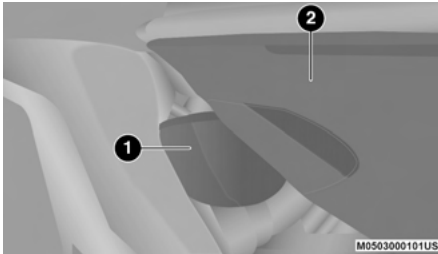
**NOTE:**

If the folding, non-adjustable head restraint interferes with the installation of the child restraint, the head restraint may be folded and the child seat installed in front of it.



**WARNING!**

Always make sure the head restraint is in its upright position when the seat is to be used by an occupant who is not in a child restraint. Sitting in a seat with the head restraint in its lowered position could result in serious injury or death in a collision.



**Car Seat With Head Restraint Folded**

- 1 — Folded Headrest  
2 — Child Restraint

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

Child restraint systems are designed to be secured in vehicle seats by lap belts or the lap belt portion of a lap/shoulder belt.

**WARNING!**

- Improper installation or failure to properly secure a child restraint can lead to failure of the restraint. The child could be badly injured or killed.
- Follow the child restraint manufacturer's directions exactly when installing an infant or child restraint.

1. 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 (if adjustable) to get a better fit. If the rear seat can be moved forward and rearward in the vehicle, you may wish to move it to its rear-most position to make room for the child seat. You may also move the front seat forward to allow more room for the child seat.

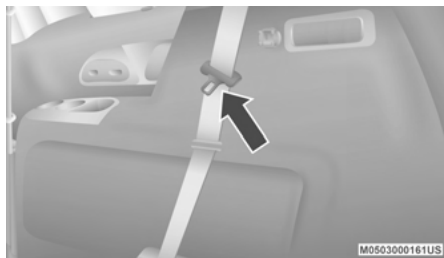
2. Pull enough of the seat belt webbing from the retractor to pass it through the belt path of the child restraint. Do not twist the belt webbing in the belt path.
3. Slide the latch plate into the buckle until you hear a "click."
4. Pull on the webbing to make the lap portion tight against the child 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.

- 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.
- 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.

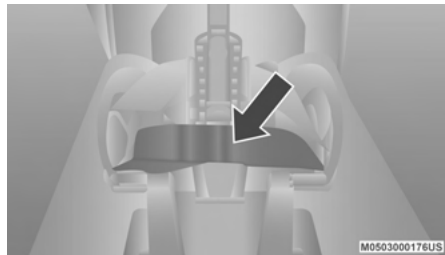
### Seat Belt Park Stitch — If Equipped

The rear outboard seat belts may be equipped with a park stitch to raise the latch plate for easier access to occupants. If the park stitch interferes with the tight installation of a child restraint, slide the latch plate over the stitching to shorten the lap portion of the belt and install the car seat following the steps above. When the car seat is removed from the vehicle, slide the latch plate above the park stitch to enable occupants to latch the seatbelt securely.



**Seat Belt Park Stitch Location**

If the park stitch interferes with the lock-off features of the child restraint, do not use the lock-off feature. Instead, switch the seat belt to the locking mode, as described in the steps above or move the car seat to a different seating position.



**Seat Belt Park Stitch**

## Installing Child Restraints Using the Top Tether Anchorage

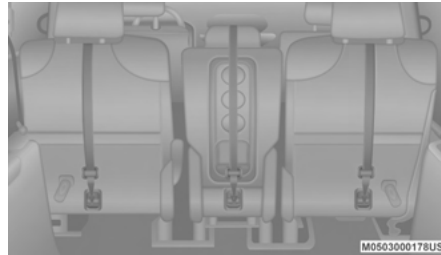
If applicable, refer to the “Hybrid Supplement” for additional information.

### WARNING!

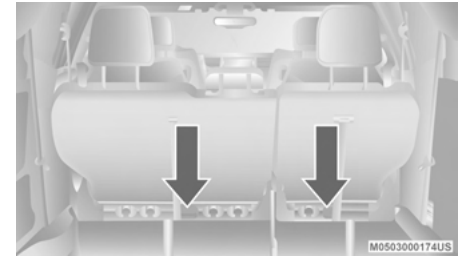
Do not attach a tether strap for a rear-facing car seat to any location in front of the car seat, including the seat frame or a tether anchorage. Only attach the tether strap of a rear-facing car seat to the tether anchorage that is approved for that seating position, located behind the top of the vehicle seat. See the section “Lower Anchors and Tethers for CHildren (LATCH) Restraint System” for the location of approved tether anchorages in your vehicle.



1. 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.



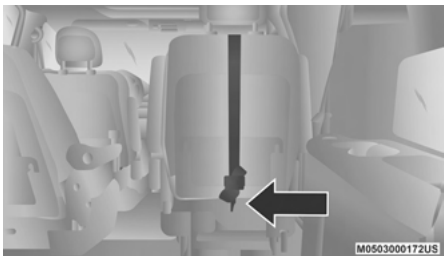
**Top Tether Anchorage Locations 2nd Row 8 Passenger**



**Top Tether Anchorage Locations 3rd Row**

2. 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 between the two posts. If not possible, lower the head restraint and pass the tether strap around the outboard side of the head restraint.
3. Attach the tether strap hook of the child restraint to the top tether anchorage as shown in the diagram.

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



**Rear Seat Tether Strap Attachment (Second Row 7 Passenger Stow 'n Go Anchorage Shown)**

### WARNING!

- 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 seat-backs as you remove slack in the strap.

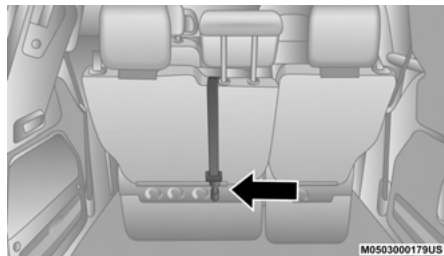
### Third Row Tether Attachment

The tether anchorage found on the back of the 60% seat in the third row may be used by either the left outboard or the center seating position. Only tether one child restraint to the tether anchorage at a time.

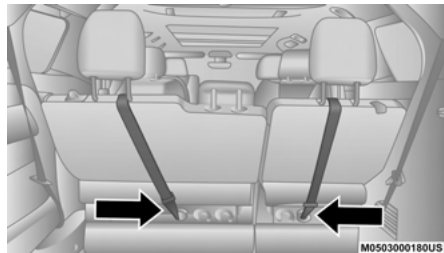
To connect the tether strap hook to the tether anchorage for either seating position on the 60% third row seat:

- Route the tether strap to provide the most direct path for the strap between the anchor and the child seat.
- If the car seat is in the center, raise the center head restraint and route the tether strap around the inboard (left) side of the head restraint support posts, as shown in the diagram.
- Attach the tether strap hook of the child restraint to the top tether anchorage as shown in the diagram.

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



**Center Tether Attachment - 3rd Row**



**Outboard Tether Attachments - 3rd Row**

**WARNING!**

Do not connect the tether strap for more than one child restraint to the tether anchorage on the 60% seat in the third row. This anchorage is intended for one child restraint at a time.

**Transporting Pets**

Air Bags deploying in the front seat could harm your pet. An unrestrained pet will be thrown about and possibly injured, or injure a passenger during panic braking or in a collision. Pets should be restrained in the rear seat (if equipped) in pet harnesses or pet carriers that are secured by seat belts.

**SAFETY TIPS****Transporting Passengers**

NEVER TRANSPORT PASSENGERS IN THE CARGO AREA.

**WARNING!**

- Do not leave children or animals inside parked vehicles in hot weather. Interior heat build-up may cause serious injury or death.
- It is extremely dangerous to ride in a cargo area, inside or outside of a vehicle. In a collision, people riding in these areas are more likely to be seriously injured or killed.
- Do not allow people to ride in any area of your vehicle that is not equipped with seats and seat belts.
- Be sure everyone in your vehicle is in a seat and using a seat belt properly.

**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.
- 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. After the bulb check, this light will illuminate with a single chime when a fault with the Air Bag System has been detected. It will stay on until the fault is removed. If the light comes on intermittently or remains on while driving, have an authorized dealer service the vehicle immediately.

Refer to “Occupant Restraint Systems” in “Safety” for further information.

### Defroster


Check operation by selecting the defrost mode and place the blower control on high speed. You should be able to feel the air directed against the windshield. See an authorized dealer for service if your defroster is inoperable.

### Floor Mat Safety Information

Always use floor mats designed to fit your vehicle. Only use a floor mat that does not interfere with the operation of the accelerator, brake or clutch pedals. Only use a floor mat that is securely attached using the floor mat fasteners so it cannot slip out of position and interfere with the accelerator, brake or clutch pedals or impair safe operation of your vehicle in other ways.


#### WARNING!

An improperly attached, damaged, folded, or stacked floor mat, or damaged floor mat fasteners may cause your floor mat to interfere with the accelerator, brake, or clutch pedals and cause a loss of vehicle control. To prevent SERIOUS INJURY or DEATH:

- ALWAYS securely attach  your floor mat using the floor mat fasteners. DO NOT install your floor mat upside down or turn your floor mat over. Lightly pull to confirm mat is secured using the floor mat fasteners on a regular basis.

(Continued)

**WARNING!** *(Continued)*

- ALWAYS REMOVE THE EXISTING FLOOR MAT FROM THE VEHICLE  before installing any other floor mat. NEVER install or stack an additional floor mat on top of an existing floor mat.
- ONLY install floor mats designed to fit your vehicle. NEVER install a floor mat that cannot be properly attached and secured to your vehicle. If a floor mat needs to be replaced, only use a FCA approved floor mat for the specific make, model, and year of your vehicle.
- ONLY use the driver's side floor mat on the driver's side floor area. To check for interference, with the vehicle properly parked with the engine off, fully depress the accelerator, the brake, and the clutch pedal (if present) to check for interference. If your floor mat interferes with the operation of any pedal, or is not secure to the floor, remove the floor mat from the vehicle and place the floor mat in your trunk.
- ONLY use the passenger's side floor mat on the passenger's side floor area.

*(Continued)***WARNING!** *(Continued)*

- ALWAYS make sure objects cannot fall or slide into the driver's side floor area when the vehicle is moving. Objects can become trapped under accelerator, brake, or clutch pedals and could cause a loss of vehicle control.
- NEVER place any objects under the floor mat (e.g., towels, keys, etc.). These objects could change the position of the floor mat and may cause interference with the accelerator, brake, or clutch pedals.
- If the vehicle carpet has been removed and re-installed, always properly attach carpet to the floor and check the floor mat fasteners are secure to the vehicle carpet. Fully depress each pedal to check for interference with the accelerator, brake, or clutch pedals then re-install the floor mats.
- It is recommended to only use mild soap and water to clean your floor mats. After cleaning, always check your floor mat has been properly installed and is secured to your vehicle using the floor mat fasteners by lightly pulling mat.

**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 the vehicle after overnight parking for fuel, coolant, oil, or other fluid leaks. Also, if gasoline fumes are detected or if fuel, or brake fluid leaks are suspected, the cause should be located and corrected immediately.

# STARTING AND OPERATING

## STARTING THE ENGINE

Before starting your vehicle, adjust your seat, adjust both inside and outside mirrors, and fasten your seat belts.

### WARNING!

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

Start the engine with the gear selector in the NEUTRAL (N) or PARK (P) position. Apply the brake before shifting to any driving range.

## Normal Starting

### NOTE:

Normal starting of either a cold or a warm engine is obtained without pumping or pressing the accelerator pedal.

### To Turn On The Engine Using 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.



### ENGINE START/STOP Button Functions — With Driver's Foot OFF The Brake Pedal (In PARK Or NEUTRAL Position)

The ENGINE START/STOP button operates similar to an ignition switch. It has three positions; OFF, ACC, and RUN. To change the ignition positions without starting the vehicle and to 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 (instrument cluster will display "ACC"),
- Push the ENGINE START/STOP button a second time to place the ignition to the RUN position (instrument cluster will display "ON/RUN"),
- Push the ENGINE START/STOP button a third time to return the ignition to the OFF position (instrument cluster will display "OFF").

#### NOTE:

Only press one pedal at a time while driving the vehicle. Torque performance of the vehicle could be reduced if both pedals are pressed at the same time. If pressure is detected on both pedals simultaneously, a warning message will display in the instrument cluster. Refer to "Instrument Cluster Display" in "Getting To Know Your Instrument Panel" for further information.

#### AutoPark

AutoPark is a supplemental feature to assist in placing the vehicle in PARK should the situations on the following pages occur. It is a back up system and should not be relied upon as the primary method by which the driver shifts the vehicle into PARK.

The conditions under which AutoPark will engage are outlined on the following pages.

#### WARNING!

- Driver inattention could lead to failure to place the vehicle in PARK. ALWAYS DO A VISUAL CHECK that your vehicle is in PARK by verifying that a solid (not blinking) "P" is indicated in the instrument cluster display and near the gear selector. If the "P" indicator is blinking, your vehicle is not in PARK. As an added precaution, always apply the parking brake when exiting the vehicle.
- AutoPark is a supplemental feature. It is not designed to replace the need to shift your vehicle into PARK. It is a back up system and should not be relied upon as the primary method by which the driver shifts the vehicle into PARK.

**ALWAYS DO A VISUAL CHECK** that your vehicle is in PARK by looking for the "P" in the Instrument Cluster Display and on the shifter. As an added precaution, always apply the parking brake.

If the vehicle is not in PARK and the driver attempts to turn off the engine, if certain conditions are met, the vehicle will AutoPark, automatically shifting the vehicle's transmission to the PARK position. The rotary shifter will automatically reset itself to the PARK position. The vehicle's ignition will then move to the OFF position (Engine off). When AutoPark is activated the instrument cluster will display the message "AutoPark Engaged"

AutoPark will engage when all of these conditions are met:

- Vehicle is equipped with a rotary selector
- Vehicle is not in PARK
- Vehicle speed is 1.2 mph (1.9 km/h) or less
- Driver has pushed the ENGINE START/STOP BUTTON

If the vehicle is not in PARK and the driver exits the vehicle with the engine running, if certain conditions are met, the vehicle will AutoPark, automatically shifting the vehicle's transmission to the PARK position. The Electric Park Brake SAFE HOLD feature will also activate in some conditions. Please reference SAFE HOLD pages for additional information regarding this function.

<b>CAUTION!</b>
Engine will remain running.

AutoPark will engage when all of these conditions are met:

- Vehicle is equipped with a rotary selector
- Vehicle is not in PARK
- Vehicle speed is 1.2 mph (1.9 km/h) or less
- Driver's door is ajar
- Driver's seat belt is unbuckled
- Brake pedal is not depressed

The MESSAGE "AutoPark Engaged" will display in the instrument cluster.

#### AutoPark In Stop/Start Autostop Mode

- AutoPark will engage when all of these conditions are met:
- Vehicle is equipped with a rotary shifter
- Vehicle is not in PARK
- Vehicle speed is 1.2 mph (1.9 km/h) or less
- Driver's door is ajar
- Driver's seat belt is unbuckled or Brake Pedal is not depressed

The MESSAGE "AutoPark Engaged" will display in the instrument cluster.

<b>WARNING!</b>
<ul style="list-style-type: none"> <li>● Never use the PARK position as a substitute for the parking brake. Always apply the parking brake fully when exiting the vehicle to guard against vehicle movement and possible injury or damage.</li> <li>● Your vehicle could move and injure you and others if it is not in PARK. Check by trying to move the transmission gear selector out of PARK with the brake pedal released. Make sure the transmission is in PARK before exiting the vehicle.</li> </ul>



(Continued)

**WARNING!** *(Continued)*

- The transmission may not engage PARK if the vehicle is moving. Always bring the vehicle to a complete stop before shifting to PARK, and verify that the transmission gear position indicator solidly indicates PARK (P) without blinking. Ensure that the vehicle is completely stopped, and the PARK position is properly indicated, before exiting the vehicle.
- 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.

*(Continued)***WARNING!** *(Continued)*

- Unintended movement of a vehicle could injure those in or near the vehicle. As with all vehicles, you should never exit a vehicle while the engine is running. Before exiting a vehicle, always come to a complete stop, then apply the parking brake, shift the transmission into PARK, and turn the ignition OFF. When the ignition is in the OFF mode, the transmission is locked in PARK, securing the vehicle against unwanted movement.
- When exiting the vehicle, always make sure the ignition is in the OFF mode, remove the key fob from the vehicle, and lock the vehicle.
- Never leave children alone in a vehicle, or with access to an unlocked vehicle. Allowing children to be in a vehicle unattended is dangerous for a number of reasons. A child or others could be seriously or fatally injured. Children should be warned not to touch the parking brake, brake pedal or the transmission gear selector.

*(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 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, NEUTRAL, or DRIVE when the engine is above idle speed.
- Before shifting into any gear, make sure your foot is firmly pressing the brake pedal.

### To Turn On The Engine Using 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.

To release the parking brake manually, the ignition switch must be in the ON/RUN position. Press on the brake pedal, then push the park brake switch momentarily.

### If the driver shifts into PARK while moving, the vehicle may Park.

PARK will engage **ONLY** when vehicle speed is 1.2 mph (1.9 km/h) or less.

The MESSAGE “Vehicle Speed is Too High to Shift to P” will display in the Instrument Cluster Display if vehicle speed is above 1.2 mph (1.9 km/h). The gear position indicator will blink continuously until the selector is returned to the proper position, or the requested shift can be completed.

### WARNING!

If vehicle speed is not below 1.2 mph (1.9 km/h) when the driver shifts into PARK, the transmission will default to NEUTRAL until the vehicle speed drops below 1.2 mph (1.9 km/h) and the above condition are met, enabling AutoPark. A vehicle left in the NEUTRAL position can roll. As an added precaution, always apply the parking brake when exiting the vehicle.

### Cold Weather Operation (Below $-22^{\circ}\text{F}$ Or $-30^{\circ}\text{C}$ )

To ensure reliable starting at these temperatures, use of an externally powered electric engine block heater (available from your authorized dealer) is recommended.

### After Starting — Warming Up The Engine

The idle speed is controlled automatically and it will decrease as the engine warms up.

### 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.
- Do not attempt to push or tow your vehicle to get it started. Vehicles equipped with an automatic transmission cannot be started this way. Unburned fuel could enter the catalytic converter and once the engine has started, ignite and damage the converter and vehicle.
- If the vehicle has a discharged battery, booster cables may be used to obtain a start from a booster battery or the battery in another vehicle. This type of start can be dangerous if done improperly. Refer to “Jump Starting Procedure” in “In Case Of Emergency” for further information.

## To Turn Off The Engine Using ENGINE START/STOP Button

1. Place the gear selector in PARK, then push and release the ENGINE START/STOP button.
2. The ignition switch will return to the OFF position.
3. If the gear selector is not in PARK, the ENGINE START/STOP button must be held for two seconds or three short pushes in a row with the vehicle speed above 5 mph (8 km/h) before the engine will shut off. The ignition switch position will remain in the ACC position until the gear selector is in PARK and the button is pushed twice to the OFF position. If the gear selector is not in PARK and the ENGINE START/STOP button is pushed once, the instrument cluster will display a "Vehicle Not In Park" message and the engine will remain running. Never leave a vehicle out of the PARK position, or it could roll.

### NOTE:

If the ignition switch is left in the ACC or RUN (engine not running) position and the transmission is in PARK, the system will automatically

time out after 30 minutes of inactivity and the ignition will switch to the OFF position.

## ENGINE BLOCK HEATER — IF EQUIPPED

The engine block heater warms the engine and permits quicker starts in cold weather.

Connect the cord to a 110-115 Volt AC electrical outlet with a grounded, three-wire extension cord.

For ambient temperatures below 0° F (-18° C), the engine block heater is recommended. For ambient temperatures below -20° F (-29° C), the engine block heater is required.

The engine block heater cord is routed under the hood, behind to the passenger's side headlamp. Follow the steps below to properly use the engine block heater:

1. Locate the engine block heater cord (behind the passenger's side headlamp).
2. Undo the hook-and-loop strap that secures the heater cord in place.
3. Pull the cord to the front of the vehicle and plug it into a grounded, three-wire extension cord.

4. After the vehicle is running, reattach the cord to the hook-and-loop strap and properly stow away behind the passenger's side headlamp.

### NOTE:

- The engine block heater cord is a factory installed option. If your vehicle is not equipped, heater cords are available from your authorized Mopar dealer.
- The engine block heater will require 110 Volts AC and 6.5 Amps to activate the heater element.
- The engine block heater must be plugged in at least one hour to have an adequate warming effect on the engine.

### WARNING!

Remember to disconnect the engine block heater cord before driving. Damage to the 110-115 Volt electrical cord could cause electrocution.

## ENGINE BREAK-IN RECOMMENDATIONS

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

Drive moderately during the first 300 miles (500 km). After the initial 60 miles (100 km), speeds up to 50 or 55 mph (80 or 90 km/h) are desirable.

While cruising, brief full-throttle acceleration within the limits of local traffic laws contributes to a good break-in. Wide-open throttle acceleration in low gear can be detrimental and should be avoided.

The engine oil installed in the engine at the factory is a high-quality energy conserving type lubricant. Oil changes should be consistent with anticipated climate conditions under which vehicle operations will occur. For the recommended viscosity and quality grades, refer to “Dealer Service” in “Servicing And Maintenance”.

### CAUTION!

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

### NOTE:

A new engine may consume some oil during its first few thousand miles (kilometers) of operation. This should be considered a normal part of the break-in and not interpreted as a problem.

## PARK BRAKE

### Electric Park Brake (EPB)

Your vehicle is equipped with an Electric Park Brake System (EPB) that offers simple operation, and some additional features that make the park brake more convenient and useful.

The park brake is primarily intended to prevent the vehicle from rolling while parked. Before leaving the vehicle, make sure that the park brake is applied. Also, be certain to leave the transmission in PARK.

You can engage the park brake in two ways;

- Manually, by applying the park brake switch.
- Automatically, by enabling the Auto Park Brake feature in the customer programmable features section of the Uconnect Settings.

The park brake switch is located in the integrated center stack.



**Electric Park Brake Switch**

To apply the park brake manually, push the switch momentarily. You may hear a slight whirring sound from the back of the vehicle while the park brake engages. Once the park brake is fully engaged, the BRAKE warning lamp in the instrument cluster and an indicator on the switch will illuminate. If your foot is on the brake pedal while you apply the park brake, you may notice a small amount of brake pedal movement. The park brake can be applied even when the ignition switch is OFF, however, it can only be released when the ignition switch is in the ACC or ON/RUN position.

**NOTE:**

The EPB fault lamp will illuminate if the EPB switch is held for longer than 180 seconds. The light will extinguish upon releasing the switch.

If the Auto Park Brake feature is enabled, the parking brake will automatically engage whenever the transmission is placed into PARK. Once the park brake is engaged, the BRAKE warning lamp in the instrument cluster and the LED indicator on the switch will illuminate. If your foot is on the brake pedal, you may notice a small amount of brake pedal movement while the parking brake is engaging.

The park brake will release automatically when the ignition is cycled to the ON/RUN position, the transmission is in DRIVE or REVERSE, and the driver seat belt is buckled and an attempt is made to drive the vehicle away by pressing the accelerator pedal.

To release the parking brake manually, the ignition switch must be in the ON/RUN position. Press on the brake pedal, then push the park brake switch momentarily. You may hear a slight whirring sound from the back of the vehicle while the parking brake disengages. You may also notice a small amount of movement in the brake pedal. Once the park brake is fully

disengaged, the BRAKE warning lamp in the instrument cluster and the LED indicator on the switch will extinguish.

**NOTE:**

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 park brake before placing the gear selector in PARK, otherwise the load on the transmission locking mechanism may make it difficult to move the gear selector out of PARK. The park 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 exiting the vehicle, always make sure the ignition is in the OFF mode, remove the key fob from the vehicle, and lock your 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 transmission gear selector.
- Do not leave the key fob in or near the vehicle, (or in a location accessible to children), and do not leave the ignition in the ACC or ON/RUN mode. A child could operate power windows, other controls, or move the vehicle.
- 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.

*(Continued)*

**WARNING!** *(Continued)*

- Driving the vehicle with the parking brake engaged, or repeated use of the parking brake to slow the vehicle may cause serious damage to the brake system.

**CAUTION!**

If the Brake System Warning Light remains on with the parking brake released, a brake system malfunction is indicated. Have the brake system serviced by an authorized dealer immediately.

If exceptional circumstances should make it necessary to engage the park brake while the vehicle is in motion, push on the electric park brake switch for as long as engagement is desired. The BRAKE warning lamp will illuminate, and a continuous chime will sound. The rear stop lamps will also be illuminated automatically while the vehicle remains in motion. To disengage the park brake while the vehicle is in motion, release the switch. If the vehicle is brought to a complete stop using the park brake, when the vehicle reaches approximately 3 mph (4.8 km/h), the park brake will remain engaged.

In the unlikely event of a malfunction of the Electric Park Brake system, a yellow EPB fault lamp will illuminate. This may be accompanied by the BRAKE warning lamp flashing. In this case, urgent service of the electric park brake system is required. Do not rely on the park brake to hold the vehicle stationary.

**Auto Park Brake**

The Electric Park Brake can be programmed to be applied automatically whenever the vehicle is at a standstill and the automatic transmission is placed in PARK. Auto Park Brake is enabled and disabled by customer selection through the “Customer Programmable Features” section of the “Uconnect Settings”.

**SafeHold**

SafeHold is a safety feature of the Electric Park Brake System that will engage the park brake automatically if the vehicle is left unsecured. If the automatic transmission is not in PARK, the seat belt is unbuckled, the driver door is open, the vehicle is at a standstill, and there is no attempt to depress the brake pedal or accelerator pedal, the park brake will automatically engage to prevent the vehicle from rolling.

SafeHold can be temporarily bypassed by pushing the Electric Park Brake Switch while the driver door is open and brake pedal is pressed. Once manually bypassed, SafeHold will be enabled again once the vehicle reaches 12 mph (20 km/h) or the ignition is cycled to the OFF position and back to ON again.

**Brake Service Mode**

We recommend having your brakes serviced by an authorized dealer. You should only make repairs for which you have the knowledge and the right equipment. You should only enter Brake Service Mode during brake service.

When servicing your rear brakes, it may be necessary for you or your technician to push the rear piston into the rear caliper bore. With the Electric Park Brake system, this can only be done after retracting the Electric Park Brake actuator. Fortunately, actuator retraction can be done easily by entering the “Brake Service” through the “Uconnect Settings” in your vehicle. This menu based system will guide you through the steps necessary to retract the EPB actuator in order to perform rear brake service.



Brake Service Mode has requirements that must be met in order to be activated:

- The vehicle must be at a standstill.
- The park brake must be unapplied.
- The transmission must be in PARK or NEUTRAL.

While in service mode, the Electric Park Brake fault lamp will flash continuously while the ignition switch is ON.

When brake service work is complete, the following steps must be followed to reset the parking brake system to normal operation:

- Ensure the vehicle is at a standstill.
- Press the brake pedal with moderate force.
- Apply the Electric Park Brake Switch.

### WARNING!

You can be badly injured working on or around a motor vehicle. Do only that 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.

## AUTOMATIC TRANSMISSION

### WARNING!

- Never use the PARK position as a substitute for the parking brake. Always apply the parking brake fully when exiting the vehicle to guard against vehicle movement and possible injury or damage.
- Your vehicle could move and injure you and others if it is not in PARK. Check by trying to move the transmission gear selector out of PARK with the brake pedal released. Make sure the transmission is in PARK before exiting the vehicle.
- The transmission may not engage PARK if the vehicle is moving. Always bring the vehicle to a complete stop before shifting to PARK, and verify that the transmission gear position indicator solidly indicates PARK (P) without blinking. Ensure that the vehicle is completely stopped, and the PARK position is properly indicated, before exiting the vehicle.

*(Continued)*

### WARNING! *(Continued)*

- It is dangerous to shift out of PARK or NEUTRAL if the engine speed is higher than idle speed. If your foot is not firmly pressing the brake pedal, the vehicle could accelerate quickly forward or in reverse. You could lose control of the vehicle and hit someone or something. Only shift into gear when the engine is idling normally and your foot is firmly pressing the brake pedal.
- Unintended movement of a vehicle could injure those in or near the vehicle. As with all vehicles, you should never exit a vehicle while the engine is running. Before exiting a vehicle, always come to a complete stop, then apply the parking brake, shift the transmission into PARK, and turn the ignition OFF. When the ignition is in the OFF mode, the transmission is locked in PARK, securing the vehicle against unwanted movement.

*(Continued)*

**WARNING!** *(Continued)*

- When exiting the vehicle, always make sure the ignition is in the OFF mode, remove the key fob from the vehicle, and lock the vehicle.
- Never leave children alone in a vehicle, or with access to an unlocked vehicle. Allowing children to be in a vehicle unattended is dangerous for a number of reasons. A child or others could be seriously or fatally injured. Children should be warned not to touch the parking brake, brake pedal or the transmission gear selector.
- Do not leave the key fob in or near the vehicle (or in a location accessible to children), and do not leave the ignition in the ACC or ON/RUN mode. A child could operate power windows, other controls, or move the vehicle.

**CAUTION!**

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, NEUTRAL, 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.

**Ignition Park Interlock**

This vehicle is equipped with an Ignition Park Interlock which requires the transmission to be in PARK before the ignition can be turned to the OFF mode. This helps the driver avoid inadvertently leaving the vehicle without placing the transmission in PARK. This system also locks the transmission in PARK whenever the ignition is in the OFF mode.

**NOTE:**

The transmission is NOT locked in PARK when the ignition is in the ACC mode (even though the engine will be off). Ensure that the transmission is in PARK, and the ignition is **OFF** (not in ACC mode) before exiting the vehicle.

**Brake/Transmission Shift Interlock System**

This vehicle is equipped with a Brake Transmission Shift Interlock system (BTSI) that holds the transmission gear selector in PARK unless the brakes are applied. To shift the transmission out of PARK, the engine must be running and the brake pedal must be pressed. The brake pedal must also be pressed to shift from NEUTRAL into DRIVE or REVERSE when the vehicle is stopped or moving at low speeds.

**Nine-Speed Automatic Transmission**

The transmission is controlled using a rotary electronic gear selector located on the center console. The transmission gear selector has PARK, REVERSE, NEUTRAL, DRIVE, and LOW shift positions. Using the LOW position manually downshifts the transmission to a lower gear based on vehicle speed. The transmission gear range (PRNDL) is displayed both above the gear selector and in the instrument cluster. To select a gear range, simply rotate the gear selector.

Push down on the gear selector and then rotate it, to access the L position. You must also press the brake pedal to shift the transmission out of PARK (or NEUTRAL, when stopped or moving at low speeds). To shift past multiple gear ranges at once (such as PARK to DRIVE), simply rotate the gear selector to the appropriate detent. Select the DRIVE range for normal driving.

#### NOTE:

In the event of a mismatch between the gear selector position and the actual transmission gear (for example, driver selects PARK while driving), the position indicator will blink continuously until the selector is returned to the proper position, or the requested shift can be completed.

The electronically-controlled transmission adapts its shift schedule based on driver inputs, along with environmental and road conditions. The transmission electronics are self-calibrating; therefore, the first few shifts on a new vehicle may be somewhat abrupt. This is a normal condition, and precision shifts will develop within a few hundred miles (kilometers).

The nine-speed transmission has been developed to meet the needs of current and future FWD/AWD vehicles. Software and calibration is refined to optimize the customer's driving experience and fuel economy. By design, some vehicle and driveline combinations utilize 9th gear only in very specific driving situations and conditions.

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.



**Transmission Gear Selector**

## Gear Ranges

Do not depress the accelerator pedal when shifting from PARK or NEUTRAL into another gear range.

#### NOTE:

After selecting any gear range, wait a moment to allow the selected gear to engage before accelerating. This is especially important when the engine is cold.

## PARK (P)

This range supplements the parking brake by locking the transmission. The engine can be started in this range. Never attempt to use PARK while the vehicle is in motion. Apply the parking brake when exiting the vehicle in this range.

When parking on a level surface, you may shift the transmission into PARK first, and then apply the parking brake.

When parking on a hill, apply the parking brake before shifting the transmission to PARK. As an added precaution, turn the front wheels toward the curb on a downhill grade and away from the curb on an uphill grade.

When exiting the vehicle, always:

- Apply the parking brake.
- Shift the transmission into PARK.
- Turn the ignition OFF.
- Remove the key fob from the vehicle.

### WARNING!

- Never use the PARK position as a substitute for the parking brake. Always apply the parking brake fully when exiting the vehicle to guard against vehicle movement and possible injury or damage.
- Your vehicle could move and injure you and others if it is not in PARK. Check by trying to move the transmission gear selector out of PARK with the brake pedal released. Make sure the transmission is in PARK before exiting the vehicle.
- The transmission may not engage PARK if the vehicle is moving. Always bring the vehicle to a complete stop before shifting to PARK, and verify that the transmission gear position indicator solidly indicates PARK (P) without blinking. Ensure that the vehicle is completely stopped, and the PARK position is properly indicated, before exiting the vehicle.

*(Continued)*

### WARNING! *(Continued)*

- It is dangerous to shift out of PARK or NEUTRAL if the engine speed is higher than idle speed. If your foot is not firmly pressing the brake pedal, the vehicle could accelerate quickly forward or in reverse. You could lose control of the vehicle and hit someone or something. Only shift into gear when the engine is idling normally and your foot is firmly pressing the brake pedal.
- Unintended movement of a vehicle could injure those in or near the vehicle. As with all vehicles, you should never exit a vehicle while the engine is running. Before exiting a vehicle, always come to a complete stop, then apply the parking brake, shift the transmission into PARK, and turn the ignition OFF. When the ignition is in the OFF mode, the transmission is locked in PARK, securing the vehicle against unwanted movement.
- When exiting the vehicle, always make sure the ignition is in the OFF mode, remove the key fob from the vehicle, and lock the vehicle.

*(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 transmission gear selector.
- Do not leave the key fob in or near the vehicle (or in a location accessible to children), and do not leave the ignition in the ACC or ON/RUN mode. A child could operate power windows, other controls, or move the vehicle.

### CAUTION!

- Before moving the transmission gear selector out of PARK, you must start the engine, and also press the brake pedal. Otherwise, damage to the gear selector could result.
- DO NOT race the engine when shifting from PARK or NEUTRAL into another gear range, as this can damage the drivetrain.

The following indicators should be used to ensure that you have properly engaged the transmission into the PARK position:

- Look at the transmission gear position display and verify that it indicates the PARK position (P), and is not blinking.
- With brake pedal released, verify that the gear selector will not move out of PARK.

### REVERSE (R)

This range is for moving the vehicle backward. Shift into REVERSE only after the vehicle has come to a complete stop.

### NEUTRAL (N)

Use this range when the vehicle is standing for prolonged periods with the engine running. The engine may be started in this range. Apply the park brake and shift the transmission into PARK if you must exit the vehicle.

### WARNING!

Do not coast in NEUTRAL and never turn off the ignition to coast down a hill. These are unsafe practices that limit your response to changing traffic or road conditions. You might lose control of the vehicle and have a collision.

### CAUTION!

Towing the vehicle, coasting, or driving for any other reason with the transmission in NEUTRAL can cause severe transmission damage.

Refer to “Recreational Towing” in “Starting And Operating” and “Towing A Disabled Vehicle” in “In Case Of Emergency” 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.

If the transmission temperature exceeds normal operating limits, the transmission controller may modify the transmission shift schedule, reduce engine torque, and/or expand the range of torque converter clutch engagement. This is done to prevent transmission damage due to overheating.

If the transmission becomes extremely hot, the “Transmission Temperature Warning Light” will illuminate, a warning message will appear in the instrument cluster, and the transmission may operate differently until the transmission cools down.

During cold temperatures, transmission operation may be modified depending on engine and transmission temperature as well as vehicle speed. This feature improves warm up time of the engine and transmission to achieve maximum efficiency. Engagement of the torque converter clutch, and shifts into 8th or 9th gear, are inhibited until the transmission fluid is warm refer to the “Note” under “Torque Converter Clutch” in this section. Normal operation will resume once the transmission temperature has risen to a suitable level.

### LOW (L)

Use this range for engine braking when descending very steep grades. In this range, the transmission will downshift for increased engine braking. To access the LOW position, push down on the gear selector and rotate it fully clockwise.

### 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 a fixed gear, or may remain in NEUTRAL. The Malfunction Indicator Light (MIL) may be illuminated. Limp Home Mode may allow the vehicle to be driven to an authorized dealer for service without damaging the transmission.

In the event of a momentary problem, the transmission can be reset to regain all forward gears by performing the following steps:

1. Stop the vehicle.
2. Shift the transmission into PARK, if possible. If not, shift the transmission to NEUTRAL.
3. Push and hold the ignition switch until the engine turns OFF.
4. Wait approximately 30 seconds.
5. Restart the engine.
6. Shift into the desired gear range. If the problem is no longer detected, the transmission will return to normal operation.

#### NOTE:

Even if the transmission can be reset, we recommend that you visit an authorized dealer at your earliest possible convenience. An authorized dealer has diagnostic equipment to assess the condition of your transmission. If the transmission cannot be reset, authorized dealer service is required.

### Torque Converter Clutch

A feature designed to improve fuel economy has been included in the automatic transmission on your vehicle. A clutch within the torque converter engages automatically at calibrated speeds. This may result in a slightly different feeling or response during normal operation in the upper gears. When the vehicle speed drops or during some accelerations, the clutch automatically disengages.

#### NOTE:

The torque converter clutch will not engage until the engine and/or transmission is warm (usually after 1 to 3 miles [2 to 5 km] of driving). Because the engine speed is higher when the torque converter clutch is not engaged, it may seem as if the transmission is not shifting properly when the vehicle is cold. This is normal. The torque converter clutch will function normally once the powertrain is sufficiently warm.

### ACTIVE NOISE CANCELLATION

Your vehicle is equipped with an Active Noise Cancellation System. This system is designed to address exhaust and engine noise. The system relies on four microphones embedded in the headliner, which monitor exhaust and engine noise, and assists an onboard frequency generator, which creates counteracting sound waves in the audio system's speakers. This helps keep the vehicle quiet at idle and during drive.

## 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 reduces assist or prevents the vehicle from providing assist, you will still have the ability to steer the vehicle manually.

### 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 Steering icon is displayed and the "POWER STEERING SYSTEM OVER TEMP" message is displayed on the instrument cluster screen, they indicate that extreme steering maneuvers may have occurred which caused an over temperature condition in the power steering system. Once driving conditions are safe, pull over and let the vehicle idle for a few moments until the icon and message turn off.

Refer to "Instrument Cluster Display" in "Getting To Know Your Instrument Panel" for further information.



If the "SERVICE POWER STEERING" OR "POWER STEERING ASSIST OFF - SERVICE SYSTEM" message and a steering wheel icon are displayed on the instrument cluster screen, it indicates that the vehicle needs to be taken to the dealer for service. It is likely the vehicle has lost power steering assistance. Refer to "Warning Lights And Messages" in "Getting To Know 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.
- The power steering system is fully electric; it requires no power steering fluid.
- If the condition persists, see an authorized dealer for service.

## 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, pressing the accelerator pedal or shifting out of DRIVE (D) will automatically re-start the engine.

This vehicle has been upgraded with a heavy duty starter, enhanced battery, and other upgraded engine parts to handle the additional engine starts.

### Auto Stop/Start



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.

### To Activate Auto STOP/START, The Following Must Occur:

- The system must be in STOP/START READY state. A STOP/START READY message will be displayed in the instrument cluster within the Stop/Start section. Refer to "Instrument Cluster Display" in "Getting To Know 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 throughout the Auto Stop/Start process.

### Possible Reasons The Engine Does Not Autostop

Prior to engine shut down, the system will check many safety and comfort conditions for Stop/Start and ensure they are fulfilled. Detailed information about the operation of the Stop/Start system may

be viewed in the instrument cluster display Stop/Start screen. In the following situations the engine will not stop:

- If Stop/Start is manually disabled by the Stop/Start OFF button.
- Driver's seat belt is not buckled.
- Driver's door is not closed.
- Battery temperature is too warm or cold.
- Battery charge is low. During this time a message will display "Stop/Start Not Ready Battery Charging".
- 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.
- Brake pedal is not pressed with sufficient pressure.

### Other Factors Which Can Inhibit Autostop Include:

- Accelerator pedal input.
- Engine temp too high.
- 5 mph threshold not achieved from previous AUTOSTOP.
- 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 Auto Stop/Start

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 Auto Stop/Start:

- 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. During this time a message will display "Stop/Start Not Ready Battery Charging".
- Low brake vacuum (e.g. after several brake pedal applications).
- Stop/Start OFF switch is pushed.
- A Stop/Start system error occurs.

## To Manually Turn Off The Stop/Start System



**Stop/Start OFF Button**

1. Push the Stop/Start OFF switch (located on the instrument panel). The light on the switch will illuminate.
2. The "STOP/START OFF" message will appear in the instrument cluster display. Refer to "Instrument Cluster Display" in "Getting To Know 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.

## Automatic Shutdown

This vehicle is equipped with an automatic shutdown feature. If the vehicle is left in READY mode (vehicle running) with the gear selector in PARK for one hour after the driver exits, this feature will automatically turn the vehicle off. Notifications have been added into this feature to raise awareness of the timed event:

- In the interior of the vehicle, the instrument cluster will display "Ready To Drive", and will be accompanied by three audible chimes while exiting. These interior warnings will occur regardless of whether the key fob remains in the vehicle or is removed.
- For the exterior of the vehicle, the horn will sound three times if the fob is removed from the vehicle and the vehicle is in the "READY" mode.

Please consider this feature when intentionally running the vehicle for extended periods of time over one hour. To restart the vehicle, follow the normal vehicle starting process.

### NOTE:

If the vehicle is left in the ACC or RUN (engine not running) position and the transmission is in PARK, the system will automatically time out

(shut down) after an initial 30 minutes of inactivity, followed by the additional amount of time for power accessory delay selected in the radio settings menu. Once the vehicle times out, it will switch to the OFF position.

### To Manually Turn On The Stop/Start System

After turning off the Stop/Start system, push the Stop/Start OFF switch again (located on the instrument panel). The light on the switch will turn off.

### System Malfunction

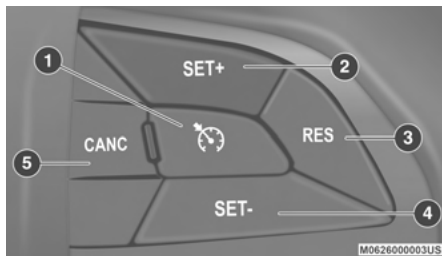
If there is a malfunction in the Stop/Start system, the system will not shut down the engine. A “SERVICE STOP/START SYSTEM” message will appear in the instrument cluster display and the Stop/Start telltale will remain yellow. Refer to “Instrument Cluster Display” in “Getting To Know Your Instrument Panel” for further information.

If the “SERVICE STOP/START SYSTEM” message appears in the instrument cluster display, have the system checked by your authorized dealer.

## SPEED CONTROL — IF EQUIPPED

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

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



Speed Control Buttons

- 1 — On/Off
- 2 — SET (+)/Accel
- 3 — RES/Resume
- 4 — SET (-)/Decel
- 5 — CANC/Cancel

### NOTE:

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

### WARNING!

Speed Control can be dangerous where the system cannot maintain a constant speed. Your vehicle could go too fast for the conditions, and you could lose control and have an accident. Do not use Speed Control in heavy traffic or on roads that are winding, icy, snow-covered or slippery.

## To Activate

Push the on/off button to activate the Speed Control. The cruise indicator light in the instrument cluster display will illuminate. To turn the system off, push the on/off button a second time. The cruise indicator light will turn off. The system should be turned off when not in use.

### WARNING!

Leaving the Speed Control system on when not in use is dangerous. You could accidentally set the system or cause it to go faster than you want. You could lose control and have an accident. Always leave the system off when you are not using it.

## To Set A Desired Speed

Turn the Speed Control on.

### NOTE:

The vehicle should be traveling at a steady speed and on level ground before pushing the SET (+) or SET (-) button.

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.

## To Vary The Speed Setting

### To Increase Speed

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

The driver's preferred units can be selected through the instrument panel settings. Refer to "Instrument Cluster Display" in "Getting To Know Your Instrument Panel" for more information. The speed increment shown is dependent on the chosen speed unit of U.S. (mph) or Metric (km/h):

#### *U.S. Speed (mph)*

- Pushing the SET (+) button once will result in a 1 mph 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 Speed Control is set, you can decrease speed by pushing the SET (-) button. The driver's preferred units can be selected through the instrument panel settings. Refer to "Instrument Cluster Display" in "Getting To Know Your Instrument Panel" for more information. The speed increment shown is dependent on the chosen speed unit of U.S. (mph) or Metric (km/h):

#### *U.S. Speed (mph)*

- Pushing the 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.

### **To Resume Speed**

To resume a previously set speed, push the RES button and release. Resume can be used at any speed above 20 mph (32 km/h).

### **To Deactivate**

A soft tap on the brake pedal, pushing the CANC (cancel) button, or normal brake pressure while slowing the vehicle will deactivate the Speed

Control without erasing the set speed from memory.

Pushing the on/off button or placing the ignition in the OFF position erases the set speed from memory.

## **ADAPTIVE CRUISE CONTROL (ACC) — IF EQUIPPED**

Adaptive Cruise Control (ACC) increases the driving convenience provided by cruise control while traveling on highways and major roadways. However, it is not a safety system and not designed to prevent collisions. **Speed Control function performs differently. Please refer to the proper section within this chapter.**

ACC will allow you to keep cruise control engaged in light to moderate traffic conditions without the constant need to reset your cruise control. ACC utilizes a radar sensor and a forward facing camera designed to detect a vehicle directly ahead of you.

### **NOTE:**

- If the sensor does not detect a vehicle ahead of you, ACC will maintain a fixed set speed.
- If the ACC sensor detects a vehicle ahead, ACC will apply limited braking or accelerate (not to exceed the original set speed) automatically to maintain a preset following distance, while matching the speed of the vehicle ahead.

The Cruise Control system has two control modes:

- Adaptive Cruise Control mode for maintaining an appropriate distance between vehicles.
- Normal (Fixed Speed) Cruise Control mode for cruising at a constant preset speed. For additional information, refer to “Normal (Fixed Speed) Cruise Control Mode” in this section.

### **NOTE:**

Normal (Fixed Speed) Cruise Control will not react to preceding vehicles. Always be aware of the mode selected.

You can change the mode by using the Cruise Control buttons. The two control modes function differently. Always confirm which mode is selected.

### WARNING!

- Adaptive Cruise Control (ACC) is a convenience system. It is not a substitute for active driving involvement. It is always the driver's responsibility to be attentive of road, traffic, and weather conditions, vehicle speed, distance to the vehicle ahead; and, most importantly, brake operation to ensure safe operation of the vehicle under all road conditions. Your complete attention is always required while driving to maintain safe control of your vehicle. Failure to follow these warnings can result in a collision and death or serious personal injury.

*(Continued)*

### 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 approximately 3 minutes in the stop position. If the target vehicle does not start moving within 3 minutes the parking brake will be activated, and the ACC system will be cancelled.

*(Continued)*

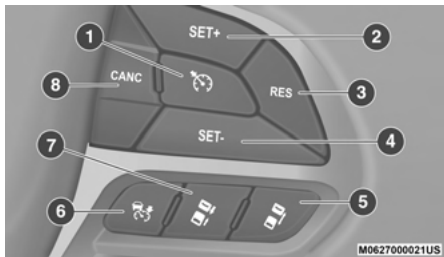
### WARNING! *(Continued)*

You should switch off the ACC system:

- When driving in fog, heavy rain, heavy snow, sleet, heavy traffic, and complex driving situations (i.e., in highway construction zones).
- When entering a turn lane or highway off ramp; when driving on roads that are winding, icy, snow-covered, slippery, or have steep uphill or downhill slopes.
- When towing a trailer up or down steep slopes.
- 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.



**Adaptive Cruise Control Buttons**

- 1 – Normal (Fixed Speed) Cruise Control On/Off
- 2 – SET (+)/Accel
- 3 – RES/Resume
- 4 – SET (-)/Decel
- 5 – Distance Setting Increase
- 6 – Adaptive Cruise Control (ACC) On/Off
- 7 – Distance Setting Decrease
- 8 – CANC/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 instrument cluster displays “ACC Ready.”

When the system is OFF, the instrument cluster display “Adaptive Cruise Control (ACC) Off.”

### NOTE:

You cannot engage ACC under the following conditions:

- When you apply the brakes.
- When the parking brake is applied.
- When the automatic transmission is in PARK, REVERSE or NEUTRAL.
- When the vehicle speed is outside of the speed range.
- When the brakes are overheated.

- When the driver door is open at low speed.
- When the driver seat belt is unbuckled at low speed.

## To Activate/Deactivate

Push and release the Adaptive Cruise Control (ACC) on/off button. The ACC menu in the instrument cluster displays “ACC Ready.”

# ACC Ready

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 instrument cluster display will show “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 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 instrument cluster display will show 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.

Remove your foot from the accelerator pedal, after the ACC has been set. If you do not, the vehicle may continue to accelerate beyond the set speed. If this occurs:

- The message “ACC DRIVER OVERRIDE” will display in the instrument cluster display.
- The system will not be controlling the distance between your vehicle and the vehicle ahead. The vehicle speed will only be determined by the position of the accelerator pedal.

### To Cancel

The following conditions cancel the system:

- The brake pedal is applied.
- The CANC (cancel) button is pushed.
- An Anti-Lock Brake System (ABS) event occurs.

- The gear selector is removed from the DRIVE position.
- The Electronic Stability Control/Traction Control System (ESC/TCS) activates.
- The vehicle parking brake is applied.
- Driver seat belt is unbuckled at low speeds.
- Driver door is opened at low speeds.

### To Turn Off

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

- The Adaptive Cruise Control (ACC) on/off button is pushed.
- The Normal (Fixed Speed) Cruise Control on/off button is pushed.
- The ignition is placed in the OFF position.

### 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 instrument cluster display will display the last set speed.

**NOTE:**

- If your vehicle stays at standstill for longer than two seconds, then the driver will either have to push the RES (resume) button, or apply the accelerator pedal to reengage the ACC to the existing set speed.
- ACC cannot be resumed if there is a stationary vehicle in-front of your vehicle in close proximity.

**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 driver's preferred units can be selected through the instrument cluster. Refer to "Instrument Cluster Display" in "Getting To Know Your Instrument Panel" for more information. The speed increment shown is dependent on the chosen speed unit of U.S. (mph) or Metric (km/h):

*U.S. Speed (mph)*

- Pushing the 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 instrument cluster 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 instrument cluster display.

**To Decrease Speed**

While ACC is set, the set speed can be decreased by pushing the SET (-) button.

The driver's preferred units can be selected through the instrument cluster. Refer to "Instrument Cluster Display" in "Getting To Know Your Instrument Panel" for more information. The speed decrement shown is dependent on the chosen speed unit of U.S. (mph) or Metric (km/h):

*U.S. Speed (mph)*

- Pushing the SET (-) button once will result in a 1 mph decrease in set speed. Each subsequent tap of the button results in a decrease of 1 mph.
- If the button is continually pushed, the set speed will continue to decrease in 5 mph decrements until the button is released. The decrease in set speed is reflected in the instrument cluster display.



### Metric Speed (km/h)

- Pushing the SET (-) button once will result in a 1 km/h decrease in set speed. Each subsequent tap of the button results in a decrease of 1 km/h.
- If the button is continually pushed, the set speed will continue to decrease in 10 km/h decrements until the button is released. The decrease in set speed is reflected in the instrument cluster display.

### NOTE:

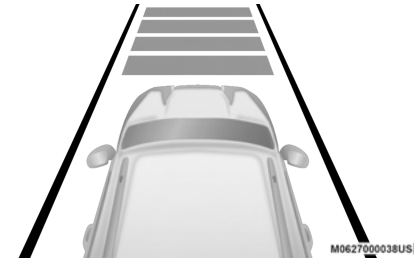
- When you override and push the SET (+) button or SET (-) buttons, the new set speed will be the current speed of the vehicle.
- When you use the SET (-) button to decelerate, if the powertrain braking power does not slow the vehicle sufficiently to reach the set speed, the brake system will automatically slow the vehicle.
- The ACC system decelerates the vehicle to a full stop when following a target vehicle. If an ACC host vehicle follows a target vehicle to a standstill, after two seconds the driver will either have to push the RES (resume) button,

or apply the accelerator pedal to reengage the ACC to the existing set speed.

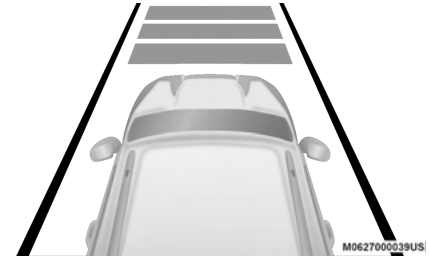
- The ACC system maintains set speed when driving up hill and down hill. However, a slight speed change on moderate hills is normal. In addition, downshifting may occur while climbing uphill or descending downhill. This is normal operation and necessary to maintain set speed. When driving up hill and 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 instrument cluster display.



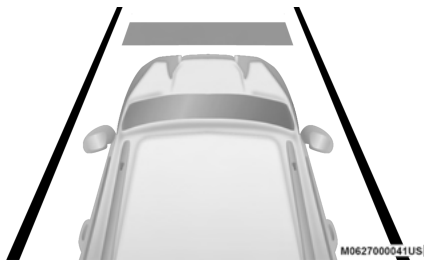
Distance Setting 4 Bars (Longest)



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 instrument cluster 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 instrument cluster display and a chime will sound while ACC continues to apply its maximum braking capacity.

# !BRAKE!

**Brake Alert**

M0627000008US

**NOTE:**

The “BRAKE!” Screen in the instrument cluster display 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, and 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 driver will either have to push the RES (resume) button, or apply the accelerator pedal to reengage the ACC. The vehicle will accelerate to the existing set speed.

### NOTE:

After the ACC system holds your vehicle at a standstill for approximately three consecutive minutes, the parking brake will be activated, and the ACC system will be cancelled.

While the ACC system is holding your vehicle at a standstill, if the driver seatbelt is unbuckled or the driver door is opened, the parking brake will be activated, and the ACC system will be cancelled.

### WARNING!

When the ACC system is resumed, the driver must ensure that there are no pedestrians, vehicles or objects in the path of the vehicle. Failure to follow these warnings can result in a collision and death or serious personal injury.

## Adaptive Cruise Control (ACC) Menu

The instrument cluster displays the current ACC system settings. The instrument cluster display is located in the center of the instrument cluster. The information it displays depends on ACC system status.

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

### *Adaptive Cruise Control Off*

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

### *Adaptive Cruise Control Ready*

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

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

### *ACC SET*

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

The ACC screen may display once again if any ACC activity occurs, which may include any of the following:

- System Cancel
- Driver Override
- System Off
- ACC Proximity Warning
- ACC Unavailable Warning

The instrument cluster display will return to the last display selected after five seconds of no ACC display activity

## Display Warnings And Maintenance

### “Wipe Front Radar Sensor In Front Of Vehicle” Warning

The “ACC/FCW Unavailable Wipe Front Radar Sensor” warning will display and also a chime will indicate when conditions temporarily limit system performance.

This most often occurs at times of poor visibility, such as in snow or heavy rain. The ACC system may also become temporarily blinded due to obstructions, such as mud, dirt or ice. In these cases, the instrument cluster display will show “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 an 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 an authorized dealer.

### “Clean Front Windshield” Warning

The “ACC/FCW Limited Functionality Clean Front Windshield” warning will display and also a chime will indicate when conditions temporarily limit system performance. This most often occurs at times of poor visibility, such as in snow or heavy rain and fog. The ACC system may also become temporarily blinded due to obstructions, such as mud, dirt, or ice on windshield, driving directly into the sun and fog on the inside of glass. In these cases, the instrument cluster display will show “ACC/FCW Limited Functionality Clean Front Windshield” and the system will have degraded performance.

The “ACC/FCW Limited Functionality Clean Front Windshield” message can sometimes be displayed while driving in adverse weather conditions. The ACC/FCW system will recover after the vehicle has left these areas. Under rare conditions, when the camera is not tracking any vehicles or objects in its path this warning may temporarily occur.

If weather conditions are not a factor, the driver should examine the windshield and the camera located on the back side of the inside 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 an authorized dealer.

### Service ACC/FCW Warning

If the system turns off, and the instrument cluster displays “ACC/FCW Unavailable Service Required” or “Cruise/FCW Unavailable Service Required”, there may be an internal system fault or a temporary malfunction that limits ACC functionality. Although the vehicle is still drivable under normal conditions, ACC will be temporarily unavailable. If this occurs, try activating ACC again later, following an ignition cycle. If the problem persists, see an authorized dealer.

### Precautions While Driving With ACC

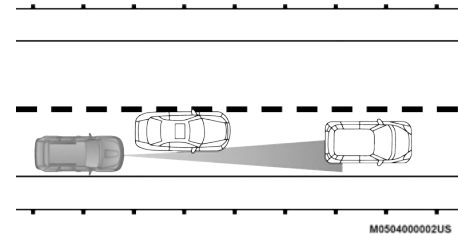
In certain driving situations, ACC may have detection issues. In these cases, ACC may brake late or unexpectedly. The driver needs to stay alert and may need to intervene.

### 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

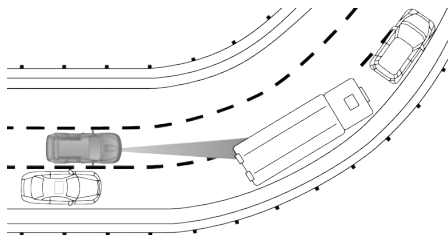
M050400002US

### Turns And Bends

When driving on a curve with ACC engaged, the system may decrease the vehicle speed and acceleration for stability reasons, with no target vehicle detected. Once the vehicle is out of the curve the system will resume your original Set Speed. This is a part of normal ACC system functionality.

#### NOTE:

On tight turns ACC performance may be limited.



Turn Or Bend Example

M0504000001US

### 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.

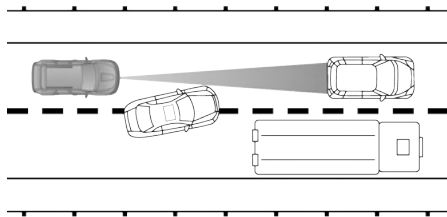


ACC Hill Example

032400172

### 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.

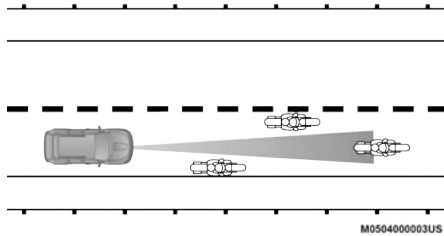


Lane Changing Example

M0504000004US

## Narrow Vehicles

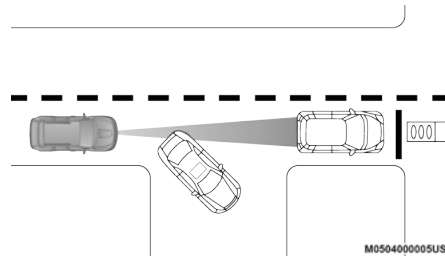
Some narrow vehicles traveling near the outer edges of the lane or edging into the lane are not detected until they have moved fully into the lane. There may not be sufficient distance to the vehicle ahead.



**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

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 Innovation, Science and Economic Development 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.

Le présent appareil est conforme aux CNR d'Innovation, Science and Economic Development applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1. l'appareil ne doit pas produire de brouillage, et

- l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

La operación de este equipo está sujeta a las siguientes dos condiciones:

- es posible que este equipo o dispositivo no cause interferencia perjudicial y
- este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

#### NOTE:

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

#### Normal (Fixed Speed) Cruise Control Mode

In addition to Adaptive Cruise Control mode, a Normal (Fixed Speed) Cruise Control mode is available for cruising at fixed speeds. The Normal (Fixed Speed) Cruise Control mode is designed to maintain a set cruising speed without requiring the driver to operate the accel-

erator. Cruise 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) Cruise Control off. Pushing the Normal (Fixed Speed) Cruise Control on/off button will result in turning on (changing to) the Normal (Fixed Speed) Cruise Control mode.

#### WARNING!

In the Normal (Fixed Speed) Cruise Control mode, the system will not react to vehicles ahead. In addition, the proximity warning does not activate and no alarm will sound even if you are too close to the vehicle ahead since neither the presence of the vehicle ahead nor the vehicle-to-vehicle distance is detected. Be sure to maintain a safe distance between your vehicle and the vehicle ahead. Always be aware which mode is selected.

#### To Set A Desired Speed



Turn the Normal (Fixed Speed) Cruise 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. This light will turn on when the system is turned on via the on/off control. It turns green when the cruise control is set.

#### To Vary The Speed Setting

##### To Increase Speed

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

The driver's preferred units can be selected through the instrument cluster. Refer to "Instrument Cluster Display" in "Getting To Know Your Instrument Panel" for more information. The speed increment shown is dependent on the speed of U.S. (mph) or Metric (km/h) units:

*U.S. Speed (mph)*

- Pushing the 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 instrument cluster 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 instrument cluster display.

**To Decrease Speed**

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

The driver's preferred units can be selected through the instrument cluster. Refer to "Instrument Cluster Display" in "Getting To Know Your Instrument Panel" for more information. The speed decrement shown is dependent on the speed of U.S. (mph) or Metric (km/h) units:

*U.S. Speed (mph)*

- Pushing the SET (-) button once will result in a 1 mph decrease in set speed. Each subsequent tap of the button results in a decrease of 1 mph.

- If the button is continually pushed, the set speed will continue to decrease in 5 mph decrements until the button is released. The decrease in set speed is reflected in the instrument cluster display.

*Metric Speed (km/h)*

- Pushing the SET (-) button once will result in a 1 km/h decrease in set speed. Each subsequent tap of the button results in a decrease of 1 km/h.
- If the button is continually pushed, the set speed will continue to decrease in 10 km/h decrements until the button is released. The decrease in set speed is reflected in the instrument cluster display.

**To Cancel**

The following conditions will cancel the Normal (Fixed Speed) Cruise Control without clearing the memory:

- The brake pedal is applied.
- The CANC (cancel) button is pushed.
- The Electronic Stability Control/Traction Control System (ESC/TCS) activates.

- The vehicle parking brake is applied.
- The braking temperature exceeds normal range (overheated).
- The gear selector is removed from the DRIVE position.

**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) Cruise Control on/off button is pushed.
- The ignition is placed in the OFF position.
- The Adaptive Cruise Control (ACC) on/off button is pushed.

## PARKSENSE REAR PARK ASSIST — IF EQUIPPED

The ParkSense Rear Park Assist system provides visual and audible indications of the distance between the rear fascia and a detected obstacle when backing up (e.g. during a parking maneuver). 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 pressing 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 not provide enough vehicle deceleration to avoid colliding with a detected obstacle depending on vehicle speed, road conditions, and brake capability.
- The automatic braking function may not be applied fast enough for moving obstacles that approach 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.

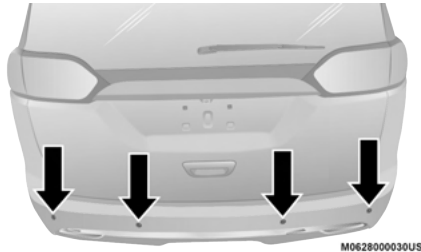
Refer to “ParkSense System Usage Precautions” for limitations of this system and recommendations.

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 gear selector is in REVERSE. If ParkSense is enabled at this gear selector position, the system will remain active until the vehicle speed is increased to approximately 7 mph (11 km/h) or above. When in REVERSE and above the system's operating speed, a warning will appear within the instrument cluster display indicating the vehicle speed is too fast. The system will become active again if the vehicle speed is decreased to speeds less than approximately 6 mph (9 km/h).

## ParkSense Sensors

The four ParkSense sensors, located in the rear fascia/bumper, monitor the area behind the vehicle that is within the sensors' field of view. The sensors can detect obstacles from approximately 12 inches (30 cm) up to 79 inches (200 cm) from the rear fascia/bumper in the horizontal direction, depending on the location, type and orientation of the obstacle.



**Rear Sensor Locations**

## ParkSense Visual Alert

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 "Multimedia" for further information.

The ParkSense Warning screen is located within the instrument cluster display. It provides visual warnings to indicate the distance between the rear fascia/bumper and the detected obstacle. Refer to "Instrument Cluster Display" in "Getting To Know Your Instrument Panel" for further information.

## ParkSense Display

When the vehicle is in REVERSE and an obstacle has been detected, the warning display will turn on indicating the system status, and remain on until the vehicle is moved out of REVERSE.

The system will indicate a detected obstacle by showing a single arc in one or more regions based on the obstacle's distance and location relative to the vehicle.

If an obstacle is detected in the center rear region, the display will show a single solid arc in the center rear region and will produce a one-half second tone. As the vehicle moves closer to the obstacle, the display will show the single arc moving closer to the vehicle and the sound tone will change from slow, to fast, to continuous.

If an obstacle is detected in the left and/or right rear region, the display will show a single flashing arc in the left and/or right rear region and will produce a fast sound 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 fast to continuous.



M0629000042US

**Single 1/2 Second Tone/Solid Arc**



M0629000040US

**Slow Tone/Solid Arc**



M0629000038US

**Fast Tone/Flashing Arc**



M0629000041US

**Slow Tone/Solid Arc**



M0629000039US

**Fast Tone/Flashing Arc**



M0629000037US

**Continuous Tone/Flashing Arc**

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:

WARNING ALERTS							
Rear Distance (inches/cm)	Greater than 79 inches (200 cm)	79-59 inches (200-150 cm)	59-47 inches (150-120 cm)	47-39 inches (120-100 cm)	39-25 inches (100-65 cm)	25-12 inches (65-30 cm)	Less than 12 inches (30 cm)
Arcs – Left	None	None	None	None	None	2nd Flashing	1st Flashing
Arcs – Center	None	6th Solid	5th Solid	4th Solid	3rd Flashing	2nd Flashing	1st Flashing
Arcs – Right	None	None	None	None	None	2nd Flashing	1st Flashing
Audible Alert Chime	None	Single 1/2-Second Tone (for rear center only)	Slow (for rear center only)	Slow (for rear center only)	Fast (for rear center only)	Fast	Continuous
Radio Volume Reduced	No	Yes	Yes	Yes	Yes	Yes	Yes

**NOTE:**

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

## Enabling And Disabling ParkSense



ParkSense can be enabled and disabled with the ParkSense switch, located on the switch panel below the Uconnect display.

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 “Instrument Cluster Display” in “Getting To Know Your Instrument Panel” for further information. When the gear selector is moved to REVERSE and the system is disabled, the instrument cluster display will show 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 requires service, the ParkSense switch LED will blink momentarily, and then the LED will be on.

### NOTE:

When KeySense feature is present, the ParkSense System will reject customer input to turn the system off via the hard switch. The instrument cluster display will show "KeySense in Use Selected Feature Cannot be Disabled" message.

## 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” or the “PARKSENSE UNAVAILABLE SERVICE REQUIRED” message. Refer to “Instrument Cluster Display” in “Getting To Know Your Instrument Panel” for further information. When the gear selector is moved to REVERSE and the system has detected a faulted condition, the instrument cluster display will show the "PARKSENSE UNAVAILABLE WIPE REAR SENSORS" or "PARKSENSE UNAVAILABLE SERVICE REQUIRED" message for five seconds while the vehicle is in REVERSE. Under this condition, ParkSense will not operate and “PARKSENSE OFF” message will be displayed. If “PARKSENSE UNAVAILABLE WIPE REAR SENSORS” appears in the instrument cluster display, make sure the outer surface and the underside of the rear fascia/bumper is clean and clear of snow, ice, mud, dirt, or other obstruction and then cycle the ignition. If the message continues to appear, see an authorized dealer.

If “PARKSENSE UNAVAILABLE SERVICE REQUIRED” appears in the instrument cluster display, see an authorized dealer.

## Cleaning The ParkSense System

Clean the ParkSense sensors with water, car wash soap, and a soft cloth. Do not use rough or hard cloths. Do not scratch or poke the sensors. Otherwise, you could damage the sensors.

## ParkSense System Usage Precautions

### NOTE:

- Ensure that the rear bumper is free of snow, ice, mud, dirt, and debris to keep the ParkSense system operating properly.
- Jackhammers, large trucks, and other vibrations could affect the performance of ParkSense.
- When you 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 gear selector to the REVERSE position and ParkSense is turned off, the instrument cluster display will show “PARKSENSE OFF” message for as long as the vehicle is in REVERSE.

- ParkSense, when on, will reduce the volume of the radio when it is sounding a tone.
- Clean the ParkSense sensors regularly, taking care not to scratch or damage them. The sensors must not be covered with ice, snow, slush, mud, dirt, or debris. Failure to do so can result in the system not working properly. The ParkSense system might not detect an obstacle behind the fascia/bumper, or it could provide a false indication that an obstacle is behind the fascia/bumper.
- ParkSense should be disabled when the lift-gate is in the open position.
- Use the ParkSense switch to turn the ParkSense system off if objects such as bicycle carriers, trailer hitches, etc. are placed within 12 inches (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 display.

### WARNING!

- Drivers must be careful when backing up even when using ParkSense. Always check carefully behind your vehicle, look behind you, and be sure to check for pedestrians, animals, other vehicles, obstructions, and blind spots before backing up. You are responsible for safety and must continue to pay attention to your surroundings. Failure to do so can result in serious injury or death.
- Before using ParkSense, it is strongly recommended that the ball mount and hitch ball assembly is disconnected from the vehicle when the vehicle is not used for towing. Failure to do so can result in injury or damage to vehicles or obstacles because the hitch ball will be much closer to the obstacle than the rear fascia when the loudspeaker sounds the continuous tone. Also, the sensors could detect the ball mount and hitch ball assembly, depending on its size and shape, giving a false indication that an obstacle is behind the vehicle.

### CAUTION!

- ParkSense is only a parking aid and it is unable to recognize every obstacle, including small obstacles. Parking curbs might be temporarily detected or not detected at all. Obstacles located above or below the sensors will not be detected when they are in close proximity.
- The vehicle must be driven slowly when using ParkSense in order to be able to stop in time when an obstacle is detected. It is recommended that the driver looks over his/her shoulder when using ParkSense.

## 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 pressing 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 not provide enough vehicle deceleration to avoid colliding with a detected obstacle depending on vehicle speed, road conditions, and brake capability.
- The automatic braking function may not be applied fast enough for moving obstacles that approach 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.

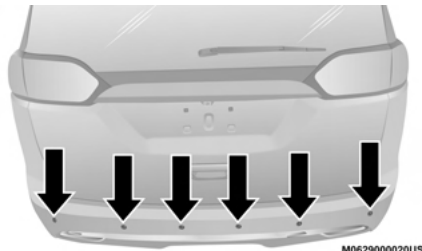
ParkSense can be active only when the gear selector is in REVERSE or DRIVE. If ParkSense is enabled at one of these gear selector positions, the system will remain active until the vehicle speed is increased to approximately 7 mph (11 km/h) or above. When in REVERSE and above the system's operating speed, a warning will appear in the instrument cluster display indicating the vehicle speed is too fast. The



system will become active again if the vehicle speed is decreased to speeds less than approximately 6 mph (9 km/h).

### ParkSense Sensors

The six ParkSense sensors, located in the rear fascia/bumper, monitor the area behind the vehicle that is within the sensors' field of view. The sensors can detect obstacles from approximately 12 inches (30 cm) up to 79 in (200 cm) from the rear fascia/bumper in the horizontal direction, depending on the location, type and orientation of the obstacle.



Rear Sensor Locations

The six ParkSense sensors, located in the front fascia/bumper, monitor the area in front of the vehicle that is within the sensors' field of view. The sensors can detect obstacles from approximately 12 inches (30 cm) up to 47 in (120 cm) from the front fascia/bumper in the horizontal direction, depending on the location, type and orientation of the obstacle.

### ParkSense Visual Alert

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 "Multimedia" for further information.

The ParkSense Warning screen is located within the instrument cluster display. It provides visual warnings to indicate the distance between the rear fascia/bumper and/or front fascia/bumper and the detected obstacle. Refer to "Instrument Cluster Display" in "Getting To Know Your Instrument Panel" for further information.

### ParkSense Display

#### Rear Park Assist

When the vehicle is in REVERSE, the warning display will turn on indicating the system status.

The system will indicate a detected obstacle by showing a single arc in one or more regions based on the obstacle's distance and location relative to the vehicle.

If an obstacle is detected in the center rear region, the display will show a single solid arc in the center rear region and will produce a one-half second tone. As the vehicle moves closer to the obstacle, the display will show the single arc moving closer to the vehicle and the sound tone will change from slow, to fast, to continuous.

If an obstacle is detected in the left and/or right rear region, the display will show a single flashing arc in the left and/or right rear region and will produce a fast sound 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 fast to continuous.



M0629000022US

**Single 1/2 Second Tone/Solid Arc**



M0629000027US

**Slow Tone For Rear Only/Solid Arc**



M0629000025US

**Fast Tone/Flashing Arc**



M0629000026US

**Slow Tone/Solid Arc**



M0629000026US

**Fast Tone For Rear Only/Flashing Arc**



M0629000024US

**Continuous Tone/Flashing Arc**

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:

WARNING ALERTS							
Rear Distance (inches/cm)	Greater than 79 inches (200 cm)	79-59 inches (200-150 cm)	59-47 inches (150-120 cm)	47-39 inches (120-100 cm)	39-25 inches (100-65 cm)	25-12 inches (65-30 cm)	Less than 12 inches (30 cm)
Arcs – Left	None	None	None	None	None	2nd Flashing	1st Flashing
Arcs – Center	None	6th Solid	5th Solid	4th Solid	3rd Flashing	2nd Flashing	1st Flashing
Arcs – Right	None	None	None	None	None	2nd Flashing	1st Flashing
Audible Alert Chime	None	Single 1/2-Second Tone (for rear center only)	Slow (for rear center only)	Slow (for rear center only)	Fast (for rear center only)	Fast	Continuous
Radio Volume Reduced	No	Yes	Yes	Yes	Yes	Yes	Yes

**NOTE:**

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

### Front Park Assist

When the vehicle is in DRIVE the ParkSense Warning screen will be displayed when an obstacle is detected.

The system will indicate a detected obstacle by showing a single arc in one or more regions based on the obstacle's distance and location relative to the vehicle.

If an obstacle is detected in the center front region, the display will show a single arc in the center front region. As the vehicle moves closer to the obstacle, the display will show the single arc moving closer to the vehicle. A fast sound tone will be produced when reaching the second flashing arc and will change to a continuous sound tone when the first flashing arc appears.

If an obstacle is detected in the left and/or right front region, the display will show a single flashing arc in the left and/or right front region and will produce a fast sound 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 fast to continuous.



M0629000027US

**Slow Tone For Rear Only/Solid Arc**

M0629000025US

**Fast Tone/Flashing Arc**

M0629000026US

**Fast Tone For Rear Only/Flashing Arc**

M0629000024US

**Continuous Tone/Flashing Arc**

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:

WARNING ALERTS					
Front Distance (inches/cm)	Greater than 47 inches (120 cm)	47-39 inches (120-100 cm)	39-25 inches (100-65 cm)	25-12 inches (65-30 cm)	Less than 12 inches (30 cm)
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
Audible Alert Chime	None	None	None	Fast	Continuous
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 three 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 Customer-Programmable Features section of the Uconnect System, refer to “Uconnect Settings” in “Multimedia” for further information.

If the Uconnect System is equipped, chime volume settings will not be accessible from the instrument cluster display.

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, located on the switch panel below the Uconnect display.

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 "Instrument Cluster Display" in "Getting To Know Your Instrument Panel" for further information. When the gear selector is moved to REVERSE and the system is disabled, the instrument cluster display will show 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 requires service, the ParkSense switch LED will blink momentarily, and then the LED will be on.

### NOTE:

When KeySense feature is present, the ParkSense System will reject customer input to turn the system off via the hard switch. The instru-

ment cluster display will show "KeySense in Use Selected Feature Cannot be Disabled" message.

## 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 WIPE FRONT SENSORS", or the "PARKSENSE UNAVAILABLE SERVICE REQUIRED" message for five seconds. When the gear selector is moved to REVERSE and the system has detected a faulted condition, the instrument cluster display will show 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 vehicle graphic will be displayed with a "WIPE OFF" or "SERVICE" overlay, depending on the location and fault type. 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 vehicle graphic will remain displayed for as long as the vehicle is in REVERSE.

Refer to "Instrument Cluster Display" in "Getting To Know Your Instrument Panel" for further information.

If "PARKSENSE UNAVAILABLE WIPE REAR SENSORS" or "PARKSENSE UNAVAILABLE WIPE FRONT SENSORS" appears in the instrument cluster display 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 REQUIRED" message appears in the instrument cluster display, see an authorized dealer.

## Cleaning The ParkSense System

Clean the ParkSense sensors with water, car wash soap and a soft cloth. Do not use rough or hard cloths. Do not scratch or poke the sensors. Otherwise, you could damage the sensors.

## ParkSense System Usage Precautions

### NOTE:

- Ensure that the front and rear bumper are free of snow, ice, mud, dirt, and debris to keep the ParkSense system operating properly.
- Construction equipment, 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 key.
- When you move the gear selector to the REVERSE position and ParkSense is turned off, the instrument cluster will display “PARKSENSE OFF” for five seconds while 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 appropriate fascia/bumper, or it could provide a false indication that an obstacle is behind or in front of the appropriate 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 inches (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 lift-gate is in the open position.
- There may be a delay in the object detection rate if the object is moving. This may cause the automatic braking application to be delayed.

### WARNING!

- Drivers must be careful when backing up even when using ParkSense. Always check carefully behind your vehicle, look behind you, and be sure to check for pedestrians, animals, other vehicles, obstructions, and blind spots before backing up. You are responsible for safety and must continue to pay attention to your surroundings. Failure to do so can result in serious injury or death.
- Before using ParkSense, it is strongly recommended that the ball mount and hitch ball assembly is disconnected from the vehicle when the vehicle is not used for towing. Failure to do so can result in injury or damage to vehicles or obstacles because the hitch ball will be much closer to the obstacle than the rear fascia when the loudspeaker sounds the continuous tone. Also, the sensors could detect the ball mount and hitch ball assembly, depending on its size and shape, giving a false indication that an obstacle is behind the vehicle.

**CAUTION!**

- ParkSense is only a parking aid and it is unable to recognize every obstacle, including small obstacles. Parking curbs might be temporarily detected or not detected at all. Obstacles located above or below the sensors will not be detected when they are in close proximity.
- The vehicle must be driven slowly when using ParkSense in order to be able to stop in time when an obstacle is detected. It is recommended that the driver looks over his/her shoulder when using ParkSense.

**PARKSENSE ACTIVE PARK ASSIST SYSTEM — IF EQUIPPED**

The ParkSense Active Park Assist system is intended to assist the driver during parallel and perpendicular parking maneuvers by identifying a proper parking space, providing audible/visual instructions, and controlling the steering wheel. The ParkSense Active Park Assist system is defined as “semi-automatic” since the driver maintains control of the accelerator, gear selector and brakes. Depending on the driver's parking maneuver selection, the ParkSense Active Park Assist system is capable of maneu-

vering a vehicle into a parallel or a perpendicular parking space on either side (i.e., driver side or passenger side).

**NOTE:**

- The driver is always responsible for controlling the vehicle, responsible for any surrounding objects, and must intervene as required.
- The system is provided to assist the driver and not to substitute the driver.
- During a semi-automatic maneuver, if the driver touches the steering wheel after being instructed to remove their hands from the steering wheel, the system will cancel, and the driver will be required to manually complete the parking maneuver.
- The system may not work in all conditions (e.g. environmental conditions such as heavy rain, snow, etc., or if searching for a parking space that has surfaces that will absorb the ultrasonic sensor waves).

- New vehicles from the dealership must have at least 30 miles (48 km) accumulated before the ParkSense Active Park Assist system is fully calibrated and performs accurately. This is due to the system's dynamic vehicle calibration to improve the performance of the feature. The system will also continuously perform the dynamic vehicle calibration to account for differences such as over or under inflated tires and new tires.

**Enabling And Disabling The ParkSense Active Park Assist System**

The ParkSense Active Park Assist system can be enabled and disabled with the ParkSense Active Park Assist switch, located on the switch panel below the Uconnect display.

To enable the ParkSense Active Park Assist system, push the ParkSense Active Park Assist switch once (LED turns on).

To disable the ParkSense Active Park Assist system, push the ParkSense Active Park Assist switch again (LED turns off).



The ParkSense Active Park Assist system will turn off automatically for any of the following conditions:

- The parking maneuver is completed.
- Vehicle speed greater than 18 mph (30 km/h) when searching for a parking space.
- Vehicle speed greater than 5 mph (7 km/h) during active steering guidance into the parking space.
- Touching the steering wheel during active steering guidance into the parking space.
- Pushing the ParkSense Front and Rear Park Assist switch.
- The driver's door is opened.
- The liftgate is opened.
- Electronic Stability Control/Anti-Lock Braking System intervention.
- The ParkSense Active Park Assist system will allow a maximum of eight shifts between DRIVE and REVERSE. If the maneuver cannot be completed within eight shifts, the system will cancel and the instrument cluster display will instruct the driver to complete the maneuver manually.

The ParkSense Active Park Assist system will only operate and search for a parking space when the following conditions are present:

- The gear position is in DRIVE.
- The ignition is in the RUN position.
- The ParkSense Active Park Assist switch is activated.
- The driver's door is closed.
- The liftgate is closed.
- Vehicle speed is less than 15 mph (25 km/h).

**NOTE:**

If the vehicle is driven above approximately 15 mph (25 km/h), the instrument cluster display will instruct the driver to slow down. If the vehicle is driven above approximately 18 mph (30 km/h), the system will cancel. The driver must then reactivate the system by pushing the ParkSense Active Park Assist switch.

- The outer surface and the underside of the front and rear fascias/bumpers are clean and clear of snow, ice, mud, dirt or other obstruction.

When pushed, the LED on the ParkSense Active Park Assist switch will blink momentarily, and then the LED will turn off if any of the above conditions are not present.

**Parallel Parking Space Assistance Operation/Display**

When the ParkSense Active Park Assist system is enabled the "Active ParkSense Searching - Push OK for Perpendicular Park" message will appear in the instrument cluster display. You may switch to perpendicular parking if you desire. Push the OK button on the left side steering wheel switch to change your parking space setting.

**NOTE:**

- When searching for a parking space, use the turn signal indicator to select which side of the vehicle you want to perform the parking maneuver. The ParkSense Active Park Assist system will automatically search for a parking space on the passenger's side of the vehicle if the turn signal is not activated.
- The driver needs to make sure that the selected parking space for the maneuver remains free and clear of any obstructions (e.g. pedestrians, bicycles, etc.).

- The driver is responsible to ensure that the selected parking space is suitable for the maneuver and free/clear of anything that may be overhanging or protruding into the parking space (e.g., ladders, tailgates, etc. from surrounding objects/vehicles).
- When seeking for a parking space, the driver should drive as parallel or perpendicular (depending on the type of maneuver) to other vehicles as possible.
- The feature will only indicate the last detected parking space (example: if passing multiple available parking spaces, the system will only indicate the last detected parking space for the maneuver).

Active ParkSense Searching

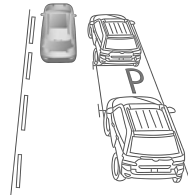


Active ParkSense Searching

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When an available parking space has been found, and the vehicle is not in position, you will be instructed to move forward to position the vehicle for a parallel parking sequence.

Parking Space Found



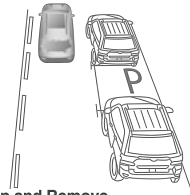
Keep Moving Forward

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Parking Space Found – Keep Moving Forward

Once the vehicle is in position, the system will instruct the driver to stop the vehicle's movement and remove hands from the steering wheel.

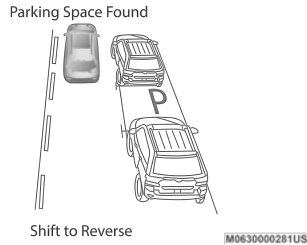
Parking Space Found

Stop and Remove  
Hands From Wheel

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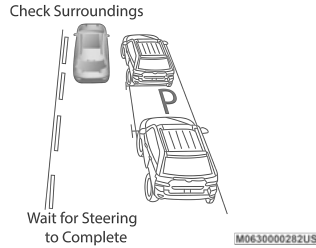
Parking Space Found – Stop And Remove  
Hands From Wheel

Once the vehicle is at a standstill with the driver's hands removed from the steering wheel, the system will then instruct the driver to place the gear selector into the REVERSE position.



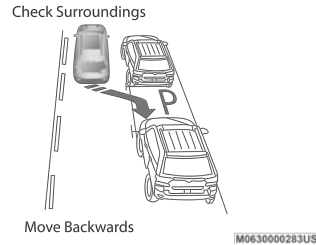
### Parking Space Found – Shift To Reverse

When the driver places the gear selector into the REVERSE position, the system may instruct the driver to wait for steering to complete.



### Check Surroundings – Wait For Steering To Complete

The system will then instruct the driver to check their surroundings and move backward.



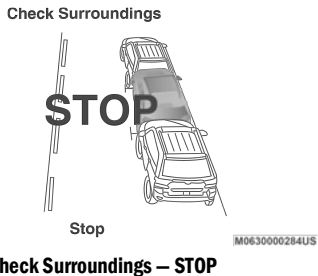
### Check Surroundings – Move Backward

### NOTE:

- It is the driver's responsibility to use the brake and accelerator during the semi-automatic parking maneuver.
- When the system instructs the driver to remove their hands from the steering wheel, the driver should check their surroundings and begin to back up slowly.
- The ParkSense Active Park Assist system will allow a maximum of eight shifts between DRIVE or REVERSE. If the maneuver cannot be completed within eight shifts, the system will cancel and the instrument cluster display will instruct the driver to complete the maneuver manually.
- The system will cancel the maneuver if the vehicle speed exceeds 5 mph (7 km/h) during active steering guidance into the parking space. The system will provide a warning to the driver at 3 mph (5 km/h) that tells them to slow down. The driver is then responsible for completing the maneuver if the system is canceled.

- If the system is canceled during the maneuver for any reason, the driver must take full control of the vehicle.

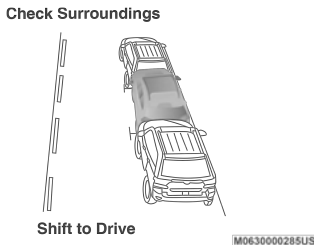
When the vehicle has reached the end of its backward movement, the system will instruct the driver to check their surroundings and stop the vehicle's movement.



#### NOTE:

It is the driver's responsibility to use the brake and stop the vehicle. The driver should check their surroundings and be prepared to stop the vehicle either when instructed to, or when driver intervention is required.

Once the vehicle is in a standstill condition, the driver will be instructed to place the gear selector into the DRIVE position.



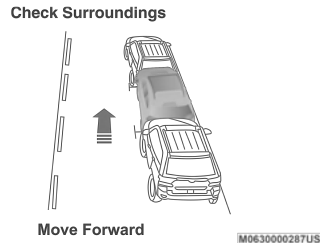
#### Check Surroundings – Shift To Drive

When the driver places the gear selector into the DRIVE position, the system may instruct the driver to wait for steering to complete.



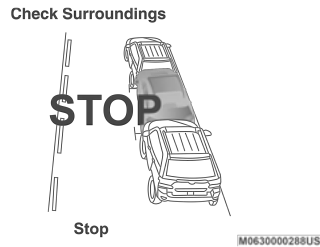
#### Check Surroundings – Wait For Steering To Complete

The system will then instruct the driver to check their surroundings and move forward.



#### Check Surroundings – Move Forward

When the vehicle has reached the end of its forward movement, the system will instruct the driver to check their surroundings and stop the vehicle's movement.



#### Check Surroundings – STOP