CONSUMER INFORMATION GUIDE

JEEP® GRAND CHEROKEE/
GRAND CHEROKEE L

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This Consumer Information Guide has been prepared to help you become acquainted with important information pertaining to your vehicle.

This guide illustrates and describes the operation of features and equipment that are either standard or optional on this vehicle. This guide may also include a description of features and equipment that are no longer available or were not ordered on this vehicle. Please disregard any features and equipment described in this guide that are not available on this vehicle. FCA US LLC reserves the right to make changes in design and specifications and/or make additions to or improvements to its products without imposing any obligation upon itself to install them on products previously manufactured. For a complete list of information, please refer to your full Owner's Manual online. ALWAYS drive safely and pay attention to the road.

ALWAYS drive safely with your hands on the steering wheel. You have full responsibility and assume all risks related to the use of the features and applications in this vehicle. Only use the features and applications when it is safe to do so. Failure to do so may result in an accident involving serious injury or death.

SYMBOLS KEY

WARNING!	These statements apply to operating procedures that could result in a collision, bodily injury and/or death.
CAUTION!	These statements apply to procedures that could result in damage to your vehicle.
NOTE:	A suggestion which will improve installation, operation, and reliability. If not followed, may result in damage.
TIP:	General ideas/ solutions/suggestions on easier use of the product or functionality.
PAGE REFERENCE ARROW 	Follow this reference for additional information on a particular feature.
FOOTNOTE 	Supplementary and relevant information pertaining to the topic.

If you do not read the entire Owner's Manual, you may miss important information. Observe all Cautions and Warnings.

ROLLOVER WARNING

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

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



Rollover Warning Label

Failure to use the driver and passenger seat belts provided is a major cause of severe or fatal injury. In fact, the US government notes that the universal use of existing seat belts could cut the highway death toll by 10,000 or more each year and could reduce disabling injuries by two million annually. In a rollover crash, an unbelted person is significantly more likely to die than a person wearing a seat belt. Always buckle up.

SEATS

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

WARNING!

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

Head Restraints

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

WARNING!

- All occupants, including the driver, should not operate a vehicle or sit in a vehicle's seat until the head restraints are placed in their proper positions in order to minimize the risk of neck injury in the event of a crash.
- Head restraints should never be adjusted while the vehicle is in motion. Driving a vehicle with the head restraints improperly adjusted or removed could cause serious injury or death in the event of a collision.

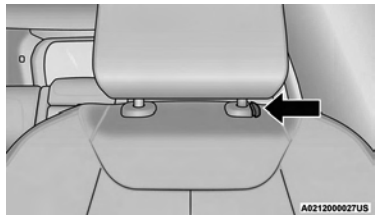
Front Head Restraints

Your vehicle is equipped with front four-way driver and passenger head restraints.

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

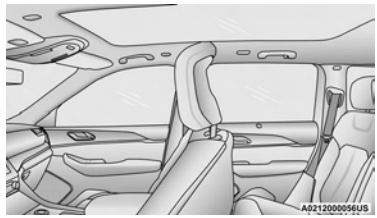
NOTE:

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

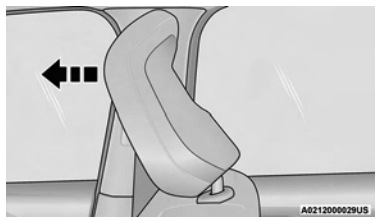


Head Restraint Adjustment Button

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



Upright Position



Forward Adjustment

WARNING!

- All occupants, including the driver, should not operate a vehicle or sit in a vehicle's seat until the head restraints are placed in their proper positions in order to minimize the risk of neck injury in the event of a crash.
- Head restraints should never be adjusted while the vehicle is in motion. Driving a vehicle with the head restraints improperly adjusted or removed could cause serious injury or death in the event of a collision.

Head Restraints — Second Row Captain's Chairs (If Equipped)

If the second row is equipped with captain's chairs, the head restraints are not adjustable or removable. They automatically fold forward when the seatback is folded, and do not return to their normal position when the seatback is raised. After returning the seatback to its upright position after a folding operation, raise the head restraint until it locks in place.

WARNING!

- All occupants, including the driver, should not operate a vehicle or sit in a vehicle's seat until the head restraints are placed in their proper positions in order to minimize the risk of neck injury in the event of a crash.
- Head restraints should never be adjusted while the vehicle is in motion. Driving a vehicle with the head restraints improperly adjusted or removed could cause serious injury or death in the event of a collision.

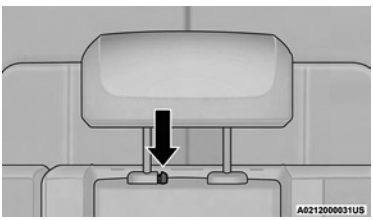
Head Restraints — Second Row Bench (If Equipped)

If the second row is equipped with a bench seat, the head restraints on the outboard seats are not adjustable or removable. They automatically fold forward when the seatback is folded, and do not return to their normal position when the seatback is raised. After returning the seatback to its upright position after a folding operation, raise the head restraint until it locks in place.

The center head restraint has one adjustment position, and can be adjusted up or down when the seat is occupied. Pull up on the head restraint to raise it. To lower the head restraint, push the adjustment button located on the base of the head restraint, and push downward on the head restraint until it locks into place.

NOTE:

The center head restraint is not removable.



Center Seat Head Restraint Adjustment Button

NOTE:

For information on child restraint tethering, see ⇨ page 11 .

WARNING!

- All occupants, including the driver, should not operate a vehicle or sit in a vehicle's seat until the head restraints are placed in their proper positions in order to minimize the risk of neck injury in the event of a crash.
- Head restraints should never be adjusted while the vehicle is in motion. Driving a vehicle with the head restraints improperly adjusted or removed could cause serious injury or death in the event of a collision.

Third Row Head Restraints — If Equipped

The third row head restraints are not adjustable or removable, but can be folded for improved visibility when the vehicle is in REVERSE, and there are no occupants in the seats.



Press the Headrest Fold button within the Controls menu of the Uconnect system to power fold the third row head restraints.

The head restraints will also automatically fold when the seatbacks are folded forward using the release handles on the backs of the seats from the cargo area.

NOTE:

- The head restraints must be raised manually when occupying the third row.
- Do not fold if there are passengers seated in the third row seats.

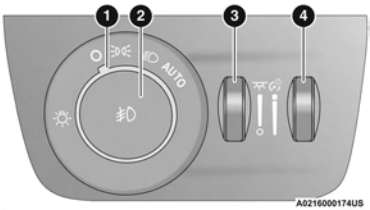
WARNING!

- All occupants, including the driver, should not operate a vehicle or sit in a vehicle's seat until the head restraints are placed in their proper positions in order to minimize the risk of neck injury in the event of a crash.
- Head restraints should never be adjusted while the vehicle is in motion. Driving a vehicle with the head restraints improperly adjusted or removed could cause serious injury or death in the event of a collision.

EXTERIOR LIGHTS

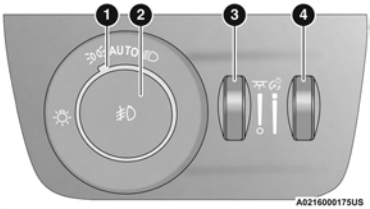
Headlight Switch

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



Headlight Switch

1 — Rotate Headlight Control
2 — Push Front Fog Light Control
3 — Ambient Light Dimmer Control
4 — Instrument Panel Dimmer Control



Headlight Switch (Vehicles Sold In Canada Only)

1 — Rotate Headlight Control
2 — Push Front Fog Light Control
3 — Ambient Light Dimmer Control
4 — Instrument Panel Dimmer Control

NOTE:

Vehicles sold in Canada are equipped with a headlight switch with an AUTO and ON detent but without an OFF detent. Headlights will be deactivated when the headlight switch is placed in the parking lights position. However, the Daytime Running Lights (DRLs) will be activated along with the front and rear marker lights. The DRLs may be deactivated when the parking brake is engaged.

To turn on the headlights, rotate the headlight switch clockwise. When the headlight switch is on, the parking lights, taillights, license plate light and instrument panel lights are also turned on. To turn off the headlights, rotate the headlight switch back to the O (off) position.

For vehicles sold in Canada, rotate the headlight switch clockwise from the parking lights and instrument panel lights position to the AUTO position for automatic headlights. Rotate to the second detent to turn on headlights, parking lights, and instrument panel lights operation.

NOTE:

- Your vehicle is equipped with plastic headlight and fog light (if equipped) lenses that are lighter and less susceptible to stone breakage than glass lights. Plastic is not as scratch resistant as glass and therefore different lens cleaning procedures must be followed.
- To minimize the possibility of scratching the lenses and reducing light output, avoid wiping with a dry cloth. To remove road dirt, wash with a mild soap solution followed by rinsing.

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

Automatic High Beams — If Equipped

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

NOTE:

- The Automatic High Beam Headlight system can be turned on or off by selecting or deselecting "Auto Dim High Beams" within Uconnect Settings.
- The headlight switch must also be turned to the AUTO position after Automatic High Beams is enabled within Uconnect Settings for the feature to activate.
- Automatic High Beams will only activate when the vehicle speed is above 22 mph (35 km/h).
- Broken, muddy, or obstructed headlights and taillights of vehicles in the field of view will cause headlights to remain on longer (closer to the vehicle). Also, dirt, film, and other obstructions on the windshield or camera lens will cause the system to function improperly.

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

Automatic Headlights

This system automatically turns the headlights on or off according to ambient light levels. To turn the system on, rotate the headlight switch counterclockwise to the AUTO position. When the system is on, the headlight time delay feature is also on. This means the headlights will stay on for up to 90 seconds after you place the ignition into the OFF position. The headlight time delay can be programmed to 0/30/60/90 seconds within the Uconnect system.

To turn the automatic system off, move the headlight switch out of the AUTO position.

NOTE:

The engine must be running before the headlights will come on in the automatic mode.

Headlights On Automatically With Wipers

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

NOTE:

When your headlights come on during the daytime, the vehicle will monitor outside brightness and decide if the instrument panel needs to be dimmed.

GETTING TO KNOW YOUR INSTRUMENT PANEL

WARNING LIGHTS AND MESSAGES

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

Red Warning Lights

Air Bag Warning Light



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

Brake Warning Light



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

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

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

The light will remain on until the cause is corrected.

NOTE:

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

If brake failure is indicated, immediate repair is necessary.

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

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

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

The light also will turn on when the parking brake is applied with the ignition switch in the ON/RUN position.

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

Seat Belt Reminder Warning Light



This warning light indicates when the driver or passenger seat belt is unbuckled. When the ignition is first placed in the ON/RUN or ACC/ON/RUN position and if the driver's seat belt is unbuckled, a chime will sound and the light will turn on. When driving, if the driver or front passenger seat belt remains unbuckled, the Seat Belt Reminder Light will flash or remain on continuously and a chime will sound.

Yellow Warning Lights

Tire Pressure Monitoring System (TPMS) Warning Light



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

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

CAUTION!

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

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

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

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

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

CAUTION!

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

ONBOARD DIAGNOSTIC SYSTEM — OBD II

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

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

CAUTION!

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

Onboard Diagnostic System (OBD II) Cybersecurity

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

WARNING!

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

AUXILIARY DRIVING SYSTEMS

Tire Pressure Monitoring System (TPMS)

The TPMS will warn the driver of a low tire pressure based on the vehicle recommended cold tire pressure.

The tire pressure will vary with temperature by about 1 psi (7 kPa) for every 12°F (6.5°C). This means that when the outside temperature decreases, the tire pressure will decrease. Tire pressure should always be set based on cold inflation tire pressure. This is defined as the tire pressure after the vehicle has not been driven for at least three hours, or driven less than 1 mile (1.6 km) after a three-hour period. The tire pressure will also increase as the vehicle is driven — this is normal and there should be no adjustment for this increased pressure.

See your Owner's Manual on how to properly inflate the vehicle's tires.

The TPMS will warn the driver of a low tire pressure if the tire pressure falls below the low pressure warning threshold for any reason, including low temperature effects, or natural pressure loss through the tire.

The TPMS will continue to warn the driver of low tire pressure as long as the condition exists, and will not turn off until the tire pressure is at or above recommended cold tire pressure. Once the low tire pressure warning has been illuminated, the tire pressure must be increased to the recommended cold tire pressure in order for the TPMS Warning Light to be turned off.

NOTE:

When filling warm tires, the tire pressure may need to be increased up to an additional 4 psi (28 kPa) above the recommended cold placard pressure in order to turn the TPMS Warning Light off.

The system will automatically update and the TPMS Warning Light will extinguish once the updated tire pressures have been received. The vehicle may need to be driven for up to 20 minutes above 15 mph (24 km/h) to receive this information.

For example, your vehicle has a recommended cold (parked for more than three hours) tire pressure of 36 psi (248 kPa). If the ambient temperature is 68°F (20°C) and the measured tire pressure is 28 psi (193 kPa), a temperature drop to 20°F (-7°C) will decrease the tire pressure to approximately 24 psi (165 kPa). This tire pressure is sufficiently low enough to turn on the TPMS Warning Light. Driving the vehicle may cause the tire pressure to rise to approximately 28 psi (193 kPa), but the TPMS Warning Light will still be on. In this situation, the TPMS Warning Light will turn off only after the tires have been inflated to the vehicle's recommended cold tire pressure value.

CAUTION!

- The TPMS has been optimized for the original equipment tires and wheels. TPMS pressures and warnings have been established for the tire size equipped on your vehicle. Undesirable system operation or sensor damage may result when using replacement equipment that is not of the same size, type, and/or style. The TPMS sensor is not designed for use on aftermarket wheels and

(Continued)

CAUTION!

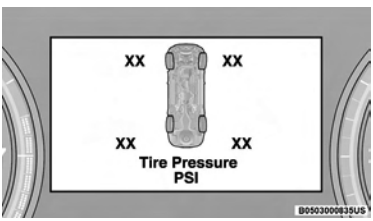
may contribute to a poor overall system performance or sensor damage. Customers are encouraged to use Original Equipment Manufacturer (OEM) wheels to ensure proper TPMS feature operation.

- Using aftermarket tire sealants may cause the Tire Pressure Monitoring System (TPMS) sensor to become inoperable. After using an aftermarket tire sealant it is recommended that you take your vehicle to an authorized dealership to have your sensor function checked.
- After inspecting or adjusting the tire pressure, always reinstall the valve stem cap. This will prevent moisture and dirt from entering the valve stem, which could damage the Tire Pressure Monitoring System sensor.

NOTE:

- The TPMS is not intended to replace normal tire care and maintenance, or to provide warning of a tire failure or condition.
- The TPMS should not be used as a tire pressure gauge while adjusting your tire pressure, unless equipped with Tire Fill Alert.
- Driving on a significantly underinflated tire causes the tire to overheat and can lead to tire failure. Underinflation also reduces fuel efficiency and tire tread life, and may affect the vehicle's handling and stopping ability.
- The TPMS is not a substitute for proper tire maintenance, and it is the driver's responsibility to maintain correct tire pressure using an accurate tire gauge, even if underinflation has not reached the level to trigger illumination of the TPMS Warning Light.
- Seasonal temperature changes will affect tire pressure, and the TPMS will monitor the actual tire pressure in the tire.

The Tire Pressure Monitoring System (TPMS) uses wireless technology with wheel rim-mounted electronic sensors to monitor tire pressure levels. Sensors, mounted to each wheel as part of the valve stem, transmit tire pressure readings to the receiver module.



Tire Pressure Monitoring System Display

NOTE:

It is particularly important for you to regularly check the tire pressure in all of your tires and to maintain the proper pressure.

The Tire Pressure Monitoring System (TPMS) consists of the following components:

- Receiver module
- Four Tire Pressure Monitoring System sensors
- Various Tire Pressure Monitoring System messages, which display in the instrument cluster, and a graphic displaying tire pressures
- TPMS Warning Light

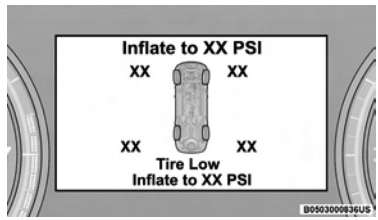
Tire Pressure Monitoring System Low Pressure Warnings



The TPMS Warning Light will illuminate in the instrument cluster, and an audible chime will be activated, when one or more of the four active road tire pressures are low. In addition, the instrument cluster will display an "Inflate to XX" message and a graphic display of the pressure value(s) with the low tire(s) in a different color.

NOTE:

Your system can be set to display pressure units in PSI, BAR, or kPa.



Low Tire Pressure Monitoring System Display

Should a low tire condition occur on any of the four active road tire(s), you should stop as soon as possible, and inflate the low tire(s) that is in a different color on the graphic display to the vehicle's recommended cold tire pressure displayed in the "Inflate to XX" message.

NOTE:

When filling warm tires, the tire pressure may need to be increased up to an additional 4 psi (28 kPa) above the recommended cold placard pressure in order to turn the TPMS Warning Light off.

The system will automatically update, the graphic display of the pressure value(s) will return to its original color and the TPMS Warning Light will extinguish once the updated tire pressure(s) have been received. The system will automatically update the graphic display of the pressure value(s) and will return to its original color. The TPMS Warning Light will extinguish once the updated tire pressure(s) have been received in the case when the ignition is ON. In the case when the ignition is OFF, the

ignition on the vehicle has to be turned ON and may need to be driven for up to 20 minutes above 15 mph (24 km/h) to receive this information for the pressure value(s) to be updated.

Service TPMS Warning

The Tire Pressure Monitoring System Warning Light will flash on and off for 75 seconds, and remain on solid when a system fault is detected. The system fault will also sound a chime. The instrument cluster display will display a "SERVICE TPM SYSTEM" message for a minimum of five seconds. This message is then followed by a graphic display, with "--" in place of the pressure value(s), indicating which Tire Pressure Monitoring System sensor(s) is not being received.

If the ignition switch is cycled, this sequence will repeat, providing the system fault still exists. If the system fault no longer exists, the Tire Pressure Monitoring System Warning Light will no longer flash, the "SERVICE TPM SYSTEM" message will not be present, and a pressure value will be displayed instead of dashes. A system fault can occur by any of the following:

- Jamming due to electronic devices or driving next to facilities emitting the same radio frequencies as the TPMS sensors.
- Lots of snow or ice around the wheels or wheel housings.
- Using tire chains on the vehicle.
- Using wheels/tires not equipped with TPMS sensors.

NOTE:

A TPMS sensor is not offered on any size spare tire. In either option of having a full size spare equipped or not, the tire pressure is not monitored or displayed on the cluster for the corresponding spare tire location. If you install the spare tire in place of a road tire that has a pressure below the low-pressure warning limit, upon the next ignition switch cycle, the Tire Pressure Monitoring System Warning Light will remain on, a chime will sound, and the instrument cluster display will still display a pressure value in the different color graphic display and an "Inflate to XX" message will be displayed. After driving the vehicle for up to 20 minutes above 15 mph (24 km/h), the Tire Pressure Monitoring System Warning Light will flash on and off for 75 seconds and then remain on solid. In addition, the instrument cluster display will display a "SERVICE TPM SYSTEM" message for five seconds and then display dashes (--) in place of the pressure value. For each subsequent ignition switch cycle, a chime will sound, the Tire Pressure Monitoring System Warning Light will flash on and off for 75 seconds and then remain on solid, and the instrument cluster display will display a "SERVICE TPM SYSTEM" message for five seconds and then display dashes (--) in place of the pressure value. Once you repair or replace the original road tire, and reinstall it on the vehicle in place of the spare tire, the TPMS will update automatically.

In addition, the Tire Pressure Monitoring System Warning Light will turn off and the graphic in the instrument cluster display will display a new pressure value instead of dashes (--), as long as no tire pressure is below the low-pressure warning limit in any of the four active road tires. The vehicle may need to be driven for up to 20 minutes above 15 mph (24 km/h) in order for the TPMS to receive this information.

TPMS Deactivation — If Equipped

The Tire Pressure Monitoring System (TPMS) can be deactivated by replacing all four wheel and tire assemblies (road tires) with wheel and tire assemblies that do not have TPMS sensors, such as when installing winter wheel and tire assemblies on your vehicle.

To deactivate the TPMS, first, replace all four wheel and tire assemblies (road tires) with tires not equipped with Tire Pressure Monitoring System sensors. Then, drive the vehicle for 20 minutes above 15 mph (24 km/h). The TPMS will chime, the TPMS Warning Light will flash on and off for 75 seconds and then remain on. The instrument cluster will display the "SERVICE TPM SYSTEM" message and then display dashes (--) in place of the pressure values.

Beginning with the next ignition cycle, the TPMS will no longer chime or display the "SERVICE TPM SYSTEM" message in the instrument cluster but dashes (--) will remain in place of the pressure values.

To reactivate the TPMS, replace all four wheel and tire assemblies (road tires) with tires equipped with TPMS sensors. Then, drive the vehicle for up to 20 minutes above 15 mph (24 km/h). The TPMS will chime, the TPMS Warning Light will flash on and off for 75 seconds and then turn off. The instrument cluster will display the "SERVICE TPM SYSTEM" message and then display pressure values in place of the dashes. On the next ignition cycle the "SERVICE TPM SYSTEM" message will no longer be displayed as long as no system fault exists.

Tire Fill Alert

This feature notifies the user when the placard tire pressure is attained while inflating or deflating the tire.

The customer may choose to disable or enable the Tire Fill Alert feature in the apps menu of the Uconnect system.

NOTE:

- The Tire Fill Alert system will only support inflating or deflating one tire at a time. The user is required to wait until the hazard lights STOP flashing or 26-30 seconds after the desired pressure is achieved in one wheel before switching to another.

- The Tire Fill Alert feature cannot be entered if an existing TPMS fault is set to "active" or if the system is in deactivation mode (if equipped).

The system will be activated when the system detects an increase in tire pressure while filling the tire. The ignition must be in the ON/RUN mode with the transmission in PARK for vehicles equipped with an automatic transmission. For vehicles equipped with a manual transmission, the parking brake must be applied.

NOTE:

It is not required to have the engine running to enter Tire Fill Alert mode.

The hazard lamps will come on to confirm the vehicle is in Tire Fill Alert mode. If the hazard lamps do not come on while inflating the tire, the Tire Pressure Monitoring System sensor may be in an inoperative position, preventing the TPMS sensor signal from being received. In this case, the vehicle may need to be moved slightly forward or backward.

When Tire Fill Alert mode is entered, the tire pressure display screen will be displayed in the instrument cluster.

Operation:

- The horn will chirp once to let the user know when to stop filling the tire, when it reaches recommended pressure.
- The horn will chirp three times if the tire is overfilled and will continue to chirp every five seconds if the user continues to inflate the tire.
- The horn will chirp once again when enough air is let out to reach proper inflation level.
- The horn will also chirp three times if the tire is then underinflated and will continue to chirp every five seconds if the user continues to deflate the tire.

Selectable Tire Fill Alert (STFA) — If Equipped

The Selectable Tire Fill Alert (STFA) system is an optional feature that is included as part of the normal Tire Fill Alert system. The system is designed to allow you to select a pressure to inflate or deflate the vehicle's front and rear axle tires to, and to provide feedback while inflating or deflating the vehicle's tires.

In the Selectable Tire Fill Alert application, which is located in the apps menu of the Uconnect system, you will be able to select a pressure setting for both the front and rear axle tire pressures by scrolling through a pressure range from ≥15 psi to XX in 1 psi increments for each axle setting.

XX = the vehicle's cold placard pressure values for the front and rear axles as shown on the vehicle placard pressure label.

You may also store pressure values chosen for each axle in the Uconnect system application as preset pressure values. Up to two sets of preset pressure values can be stored in the Uconnect system for the front and rear axle. Once you select the tire pressures for the front and rear axles that you want to inflate or deflate to, you can begin inflating or deflating one tire at a time.

NOTE:

The STFA system will only support inflating or deflating one tire at a time. The user is required to wait until the hazard lights STOP flashing or 26-30 seconds after the desired pressure is achieved in one wheel before switching to another.

The system will be activated when the TPMS receiver module detects a change in tire pressure. The ignition must be in the ON/RUN mode, with the transmission in PARK in vehicles with an automatic transmission, and in NEUTRAL with the parking brake engaged in vehicles with a manual transmission. The hazard lamps will come on to confirm the vehicle is in Tire Fill Alert mode.

When Tire Fill Alert mode is entered, the tire pressure screen will be displayed in the instrument cluster. If the hazard lamps do not come on while inflating or deflating the tire, the Tire Pressure Monitoring System sensor may be in an inoperative position, preventing the TPMS sensor signal from being received. In this case, the vehicle may need to be moved slightly forward or backward.

Horn chirps will indicate STFA status as tires are inflated/deflated. The horn will chirp under the following STFA states:

1. The horn will chirp once when the selected pressure is reached to let you know when to stop inflating or deflating the tire.
2. The horn will chirp three times if the tire is overinflated or over-deflated.
3. The horn will chirp once again when enough air is added or removed to reach proper selected pressure level.

OCCUPANT RESTRAINT SYSTEMS

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

Occupant Restraint Systems Features

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

Some of the safety features described in this section may be standard equipment on some models, or may be optional equipment on others. If you are not sure, ask an authorized dealer.

Important Safety Precautions

Please pay close attention to the information in this section. It tells you how to use your restraint system properly, to keep you and your passengers as safe as possible.

Here are some simple steps you can take to minimize the risk of harm from a deploying air bag:

1. Children 12 years old and under should always ride buckled up in the rear seat of a vehicle with a rear seat.
2. A child who is not big enough to wear the vehicle seat belt properly must be secured in the appropriate child restraint or belt-positioning booster seat in a rear seating position.
3. If a child from 2 to 12 years old (not in a rear-facing child restraint) must ride in the front passenger seat, move the seat as far back as possible and use the proper child restraint.
4. Never allow children to slide the shoulder belt behind them or under their arm.
5. You should read the instructions provided with your child restraint to make sure that you are using it properly.
6. All occupants should always wear their lap and shoulder belts properly.
7. The driver and front passenger seats should be moved back as far as practical to allow the front air bags room to inflate.
8. Do not lean against the door or window. If your vehicle has side air bags, and deployment occurs, the side air bags will inflate forcefully into the space between occupants and the door and occupants could be injured.
9. If the air bag system in this vehicle needs to be modified to accommodate a disabled person, see your Owner's Manual for customer service contact information.

WARNING!

- Never place a rear-facing child restraint in front of an air bag. A deploying passenger front air bag can cause death or serious injury to a child 12 years or younger, including a child in a rear-facing child restraint.
- Never install a rear-facing child restraint in the front seat of a vehicle. Only use a rear-facing child restraint in the rear seat. If the vehicle does not have a rear seat, do not transport a rear-facing child restraint in that vehicle.

Seat Belt Systems

Buckle up even though you are an excellent driver, even on short trips. Someone on the road may be a poor driver and could cause a collision that includes you. This can happen far away from home or on your own street.

Research has shown that seat belts save lives, and they can reduce the seriousness of injuries in a collision. Some of the worst injuries happen when people are thrown from the vehicle. Seat belts reduce the possibility of ejection and the risk of injury caused by striking the inside of the vehicle. Everyone in a motor vehicle should be belted at all times.

Enhanced Seat Belt Use Reminder System (BeltAlert)

Driver And Passenger BeltAlert — If Equipped



BeltAlert is a feature intended to remind the driver and outboard front seat passenger (if equipped with outboard front passenger seat BeltAlert) to buckle their seat belts. The BeltAlert feature is active whenever the ignition switch is in the START or ON/RUN position.

Initial Indication

If the driver is unbuckled when the ignition switch is first in the START or ON/RUN position, a chime will signal for a few seconds. If the driver or outboard front seat passenger (if equipped with outboard front passenger seat BeltAlert) is unbuckled when the ignition switch is first in the START or ON/RUN position the Seat Belt Reminder Light will turn on and remain on until both outboard front seat belts are buckled. The outboard front passenger seat BeltAlert is not active when an outboard front passenger seat is unoccupied.

BeltAlert Warning Sequence

The BeltAlert warning sequence is activated when the vehicle is moving above a specified vehicle speed range and the driver or outboard front seat passenger is unbuckled (if equipped with outboard front passenger seat BeltAlert) (the outboard front passenger seat BeltAlert is not active when the outboard front passenger seat is unoccupied). The BeltAlert warning sequence starts by blinking the Seat Belt Reminder Light and sounding an intermittent chime. Once the BeltAlert warning sequence has completed, the Seat Belt Reminder Light will remain on until the seat belts are buckled. The BeltAlert warning sequence may repeat based on vehicle speed until the driver and occupied outboard front seat passenger seat belts are buckled. The driver should instruct all occupants to buckle their seat belts.

Change Of Status

If the driver or outboard front seat passenger (if equipped with outboard front passenger seat BeltAlert) unbuckles their seat belt while the vehicle is traveling, the BeltAlert warning sequence will begin until the seat belts are buckled again.

The outboard front passenger seat BeltAlert is not active when the outboard front passenger seat is unoccupied. BeltAlert may be triggered when an animal or other items are placed on the outboard front passenger seat or when the seat is folded flat (if equipped). It is recommended that pets be restrained in the rear seat (if equipped) in pet harnesses or pet carriers that are secured by seat belts, and cargo is properly stowed.

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

NOTE:

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

Lap/Shoulder Belts

All seating positions in your vehicle are equipped with lap/shoulder belts.

The seat belt webbing retractor will lock only during very sudden stops or collisions. This feature allows the shoulder part of the seat belt to move freely with you under normal conditions. However, in a collision the seat belt will lock and reduce your risk of striking the inside of the vehicle or being thrown out of the vehicle.

WARNING!

- Relying on the air bags alone could lead to more severe injuries in a collision. The air bags work with your seat belt to restrain you properly. In some collisions, the air bags won't deploy at all. Always wear your seat belt even though you have air bags.
- In a collision, you and your passengers can suffer much greater injuries if you are not properly buckled up. You can strike the interior of your vehicle or other passengers, or you can be thrown out of the vehicle. Always be sure you and others in your vehicle are buckled up properly.
- It is dangerous to ride in a cargo area, inside or outside of a vehicle. In a collision, people riding in these areas are more likely to be seriously injured or killed.
- Do not allow people to ride in any area of your vehicle that is not equipped with seats and seat belts.
- Be sure everyone in your vehicle is in a seat and using a seat belt properly. Occupants, including the driver, should always wear

(Continued)

WARNING!

their seat belts whether or not an air bag is also provided at their seating position to minimize the risk of severe injury or death in the event of a crash.

- Wearing your seat belt incorrectly could make your injuries in a collision much worse. You might suffer internal injuries, or you could even slide out of the seat belt. Follow these instructions to wear your seat belt safely and to keep your passengers safe, too.
- Two people should never be belted into a single seat belt. People belted together can crash into one another in a collision, hurting one another badly. Never use a lap/shoulder belt or a lap belt for more than one person, no matter what their size.

WARNING!

- A lap belt worn too high can increase the risk of injury in a collision. The seat belt forces won't be at the strong hip and pelvic bones, but across your abdomen. Always wear the lap part of your seat belt as low as possible and keep it snug.
- A twisted seat belt may not protect you properly. In a collision, it could even cut into you. Be sure the seat belt is flat against your body, without twists. If you can't straighten a seat belt in your vehicle, take it to an authorized dealer immediately and have it fixed.
- A seat belt that is buckled into the wrong buckle will not protect you properly. The lap portion could ride too high on your body, possibly causing internal injuries. Always buckle your seat belt into the buckle nearest you.
- A seat belt that is too loose will not protect you properly. In a sudden stop, you could move too far forward, increasing the possibility of injury. Wear your seat belt snugly.
- A seat belt that is worn under your arm is dangerous. Your body could strike the inside surfaces of the vehicle in a collision, increasing head and neck injury. A seat belt worn under the arm can cause internal injuries. Ribs aren't as strong as shoulder bones. Wear the seat belt over your shoulder so that your strongest bones will take the force in a collision.
- A shoulder belt placed behind you will not protect you from injury during a collision. You are more likely to hit your head in a collision if you do not wear your shoulder belt. The lap and shoulder belt are meant to be used together.
- A frayed or torn seat belt could rip apart in a collision and leave you with no protection. Inspect the seat belt system periodically, checking for cuts, frays, or loose parts.

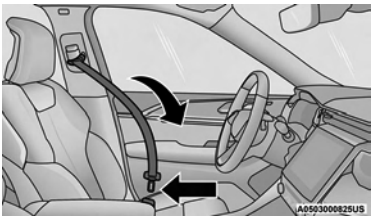
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WARNING!

Damaged parts must be replaced immediately. Do not disassemble or modify the seat belt system. If your vehicle is involved in a collision, or if you have questions regarding seat belt or retractor conditions, take your vehicle to an authorized FCA dealer or authorized FCA Certified Collision Care Program facility for inspection.

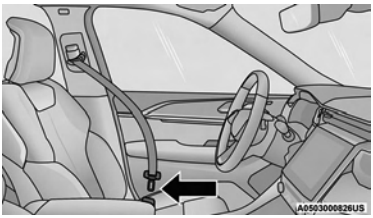
Lap/Shoulder Belt Operating Instructions

1. Enter the vehicle and close the door. Sit back and adjust the seat.
2. The seat belt latch plate is above the back of the front seat, and next to your arm in the rear seat (for vehicles equipped with a rear seat). Grab the latch plate and pull out the seat belt. Slide the latch plate up the webbing as far as necessary to allow the seat belt to go around your lap.



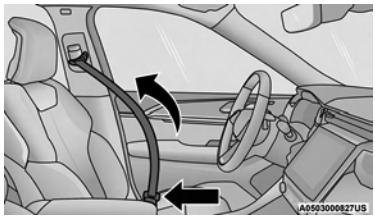
Pulling Out The Latch Plate

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



Inserting Latch Plate Into Buckle

4. Position the lap belt so that it is snug and lies low across your hips, below your abdomen. To remove slack in the lap belt portion, pull up on the shoulder belt. To loosen the lap belt if it is too tight, tilt the latch plate and pull on the lap belt. A snug seat belt reduces the risk of sliding under the seat belt in a collision.



Positioning The Lap Belt

5. Position the shoulder belt across the shoulder and chest with minimal, if any slack so that it is comfortable and not resting on your neck. The retractor will withdraw any slack in the shoulder belt.
6. To release the seat belt, push the red button on the buckle. The seat belt will automatically retract to its stowed position. If necessary, slide the latch plate down the webbing to allow the seat belt to retract fully.

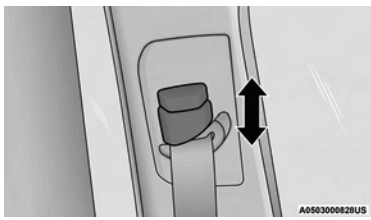
Lap/Shoulder Belt Untwisting Procedure

Use the following procedure to untwist a twisted lap/shoulder belt.

1. Position the latch plate as close as possible to the anchor point.
2. At about 6 to 12 inches (15 to 30 cm) above the latch plate, grab and twist the seat belt webbing 180 degrees to create a fold that begins immediately above the latch plate.
3. Slide the latch plate upward over the folded webbing. The folded webbing must enter the slot at the top of the latch plate.
4. Continue to slide the latch plate up until it clears the folded webbing and the seat belt is no longer twisted.

Adjustable Upper Shoulder Belt Anchorage

In the driver and outboard front passenger seats, the top of the shoulder belt can be adjusted upward or downward to position the seat belt away from your neck. Push or squeeze the anchorage button to release the anchorage, and move it up or down to the position that serves you best.



Adjustable Upper Anchorage

As a guide, if you are shorter than average, you will prefer the shoulder belt anchorage in a lower position, and if you are taller than average, you will prefer the shoulder belt anchorage in a higher position. After you release the anchorage button, try to move it up or down to make sure that it is locked in position.

NOTE:

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

WARNING!

- Wearing your seat belt incorrectly could make your injuries in a collision much worse. You might suffer internal injuries, or you could even slide out of the seat belt. Follow these instructions to wear your seat belt safely and to keep your passengers safe, too.
- Position the shoulder belt across the shoulder and chest with minimal, if any slack so that it is comfortable and not resting on your neck. The retractor will withdraw any slack in the shoulder belt.
- Misadjustment of the seat belt could reduce the effectiveness of the safety belt in a crash.
- Always make all seat belt height adjustments when the vehicle is stationary.

Seat Belt Extender

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

WARNING!

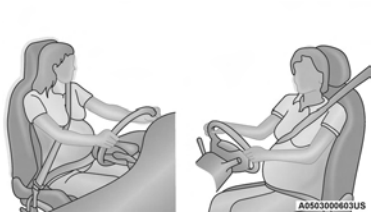
- ONLY use a Seat Belt Extender if it is physically required in order to properly fit the original seat belt system. DO NOT USE the Seat Belt Extender if, when worn, the distance between the front edge of the Seat Belt Extender buckle and the center of the occupant's body is LESS than 6 inches.
- Using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

(Continued)

WARNING!

(Continued)

Seat Belts And Pregnant Women



Seat Belts And Pregnant Women

Seat belts must be worn by all occupants including pregnant women: the risk of injury in the event of an accident is reduced for the mother and the unborn child if they are wearing a seat belt.

Position the lap belt snug and low below the abdomen and across the strong bones of the hips. Place the shoulder belt across the chest and away from the neck. Never place the shoulder belt behind the back or under the arm.

Seat Belt Pretensioner

The front outboard seat belt system is equipped with pretensioning devices that are designed to remove slack from the seat belt in the event of a collision. These devices may improve the performance of the seat belt by removing slack from the seat belt early in a collision. Pretensioners work for all size occupants, including those in child restraints.

NOTE:

These devices are not a substitute for proper seat belt placement by the occupant. The seat belt still must be worn snugly and positioned properly.

The pretensioners are triggered by the Occupant Restraint Controller (ORC). Like the air bags, the pretensioners are single use items. A deployed pretensioner or a deployed air bag must be replaced immediately.

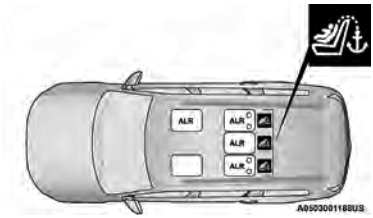
Energy Management Feature

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

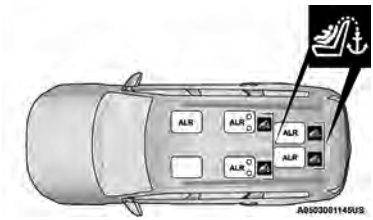
Switchable Automatic Locking Retractor (ALR)

The seat belts in the passenger seating positions are equipped with a Switchable Automatic Locking Retractor (ALR) which is used to secure a child restraint system ➪ page 33 .

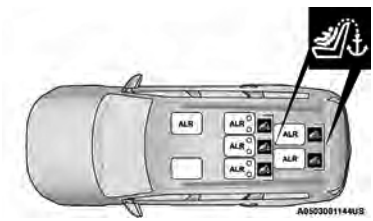
The figure provided illustrates the locking feature for each seating position.



Five Passenger Automatic Locking Retractor (ALR) Locations



Captain's Chairs Second Row (Six Passenger) Automatic Locking Retractor (ALR) Locations



60/40 Second Row (Seven Passenger) Automatic Locking Retractor (ALR) Locations

If the passenger seating position is equipped with an ALR and is being used for normal usage, only pull the seat belt webbing out far enough to comfortably wrap around the occupant's midsection so as to not activate the ALR. If the ALR is activated, you will hear a clicking sound as the seat belt retracts. Allow the webbing to retract completely in this case and then carefully pull out only the amount of webbing necessary to comfortably wrap around the occupant's midsection. Slide the latch plate into the buckle until you hear a "click".

In Automatic Locking Mode, the shoulder belt is automatically pre-locked. The seat belt will still retract to remove any slack in the shoulder belt. Use the Automatic Locking Mode anytime a child restraint is installed in a seating position that has a seat belt with this feature. Children 12 years old and under should always be properly restrained in the rear seat of a vehicle with a rear seat.

WARNING!

- Never place a rear-facing child restraint in front of an air bag. A deploying passenger front air bag can cause death or serious injury to a child 12 years or younger, including a child in a rear-facing child restraint.
- Never install a rear-facing child restraint in the front seat of a vehicle. Only use a rear-facing child restraint in the rear seat. If the vehicle does not have a rear seat, do not transport a rear-facing child restraint in that vehicle.

How To Engage The Automatic Locking Mode

1. Buckle the combination lap and shoulder belt.
2. Grab the shoulder portion and pull downward until the entire seat belt is extracted.
3. Allow the seat belt to retract. As the seat belt retracts, you will hear a clicking sound. This indicates the seat belt is now in the Automatic Locking Mode.

How To Disengage The Automatic Locking Mode

Unbuckle the combination lap/shoulder belt and allow it to retract completely to disengage the Automatic Locking Mode and activate the vehicle sensitive (emergency) locking mode.

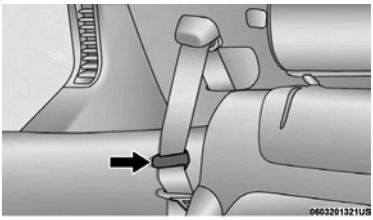
WARNING!

- The seat belt assembly must be replaced if the switchable Automatic Locking Retractor (ALR) feature or any other seat belt function is not working properly when checked according to the procedures in the Service Manual.
- Failure to replace the seat belt assembly could increase the risk of injury in collisions.
- Do not use the Automatic Locking Mode to restrain occupants who are wearing the seat belt or children who are using booster seats. The locked mode is only used to install rear-facing or forward-facing child restraints that have a harness for restraining the child.

Third Row Stow Clip — If Equipped

Six And Seven Passenger Only

Your vehicle may be equipped with a stow clip on the lower trim behind the third row. This clip is used to hold the seat belt out of the path of the third row seat back when it is being folded and opened. Only place the seat belt webbing in this clip while folding and opening the seat. Do not leave the webbing behind the clip when using the belt to restrain an occupant.



Third Row Stow Clip

WARNING!

Do not place the seat belt webbing behind the third row stow clip when using the seat belt to restrain an occupant. The seat belt will not be positioned properly on the occupant and they could be more seriously injured in an accident as a result.

Supplemental Restraint Systems (SRS)

Some of the safety features described in this section may be standard equipment on some models, or may be optional equipment on others. If you are not sure, ask an authorized dealer.

The air bag system must be ready to protect you in a collision. The Occupant Restraint Controller (ORC) monitors the internal circuits and interconnecting wiring associated with the electrical Air Bag System Components. Your vehicle may be equipped with the following Air Bag System Components:

Air Bag System Components

- Occupant Restraint Controller (ORC)
- Air Bag Warning Light
- Steering Wheel and Column
- Instrument Panel
- Knee Impact Bolsters
- Driver and Front Passenger Air Bags
- Seat Belt Buckle Switch
- Supplemental Side Air Bags
- Supplemental Knee Air Bags
- Front and Side Impact Sensors
- Seat Belt Pretensioners
- Seat Track Position Sensors
- Occupant Classification System

Air Bag Warning Light

The Occupant Restraint Controller (ORC) monitors the readiness of the electronic parts of the air bag system whenever the ignition switch is in the START or ON/RUN position. If the ignition switch is in the OFF position or in the ACC position, the air bag system is not on and the air bags will not inflate.

The ORC contains a backup power supply system that may deploy the air bag system even if the battery loses power or it becomes disconnected prior to deployment.

The ORC turns on the Air Bag Warning Light in the instrument panel for approximately four to eight seconds for a self-check when the ignition switch is first in the ON/RUN position. After the self-check, the Air Bag Warning Light will turn off. If the ORC detects a malfunction in any part of the system, it turns on the Air Bag Warning Light, either momentarily or continuously. A single chime will sound to alert you if the light comes on again after initial startup.

The ORC also includes diagnostics that will illuminate the instrument panel Air Bag Warning Light if a malfunction is detected that could affect the air bag system. The diagnostics also record the nature of the malfunction. While the air bag system is designed to be maintenance free, if any of the following occurs, have an authorized dealer service the air bag system immediately.

- The Air Bag Warning Light does not come on during the four to eight seconds when the ignition switch is first in the ON/RUN position.
- The Air Bag Warning Light remains on after the four to eight-second interval.
- The Air Bag Warning Light comes on intermittently or remains on while driving.

NOTE:

If the speedometer, tachometer, or any engine related gauges are not working, the Occupant Restraint Controller (ORC) may also be disabled. In this condition the air bags may not be ready to inflate for your protection. Have an authorized dealer service the air bag system immediately.

WARNING!

Ignoring the Air Bag Warning Light in your instrument panel could mean you won't have the air bag system to protect you in a collision. If the light does not come on as a bulb check when the ignition is first turned on, stays on after you start the vehicle, or if it comes on as you drive, have an authorized dealer service the air bag system immediately.

Redundant Air Bag Warning Light

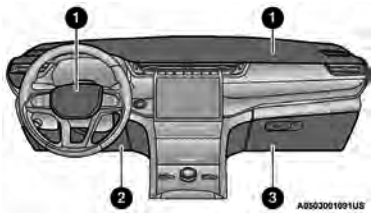


If a fault with the Air Bag Warning Light is detected, which could affect the Supplemental Restraint System (SRS), the Redundant Air Bag Warning Light will illuminate on the instrument panel. The Redundant Air Bag Warning Light will stay on until the fault is cleared. In addition, a single chime will sound to alert you that the Redundant Air Bag Warning Light has come on and a fault has been detected. If the Redundant Air Bag Warning Light comes on intermittently or remains on while driving have an authorized dealer service the vehicle immediately.

For additional information regarding the Redundant Air Bag Warning Light, see Warning Lights and Messages in your Owner Manual.

Front Air Bags

This vehicle has front air bags and lap/shoulder belts for both the driver and front passenger. The front air bags are a supplement to the seat belt restraint systems. The driver front air bag is mounted in the center of the steering wheel. The passenger front air bag is mounted in the instrument panel, above the glove compartment. The words "SRS AIRBAG" or "AIRBAG" are embossed on the air bag covers.



Front Air Bag/Knee Bolster Locations

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

WARNING!

- Being too close to the steering wheel or instrument panel during front air bag deployment could cause serious injury, including death. Air bags need room to inflate. Sit back, comfortably extending your arms to reach the steering wheel or instrument panel.
- Never place a rear-facing child restraint in front of an air bag. A deploying passenger front air bag can cause death or serious injury to a child 12 years or younger, including a child in a rear-facing child restraint.
- Never install a rear-facing child restraint in the front seat of a vehicle. Only use a rear-facing child restraint in the rear seat. If the vehicle does not have a rear seat, do not transport a rear-facing child restraint in that vehicle.

(Continued)

Driver And Passenger Front Air Bag Features

The Advanced Front Air Bag system has multi-stage driver and front passenger air bags. This system provides output appropriate to the severity and type of collision as determined by the Occupant Restraint Controller (ORC), which may receive information from the front impact sensors (if equipped) or other system components.

The first stage inflator is triggered immediately during an impact that requires air bag deployment. A low energy output is used in less severe collisions. A higher energy output is used for more severe collisions.

This vehicle may be equipped with a driver and/or front passenger seat belt buckle switch that detects whether the driver or front passenger seat belt is buckled. The seat belt buckle switch may adjust the inflation rate of the Advanced Front Air Bags.

This vehicle may be equipped with driver and/or front passenger seat track position sensors that may adjust the inflation rate of the Advanced Front Air Bags based upon seat position.

This vehicle is equipped with a right front passenger Occupant Classification System ("OCS") that is designed to provide Passenger Advanced Front Air Bag output appropriate to the occupant's seated weight input, as determined by the OCS.

WARNING!

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

Front Air Bag Operation

Front Air Bags are designed to provide additional protection by supplementing the seat belts. Front air bags are not expected to reduce the risk of injury in rear, side, or rollover collisions. The front air bags will not deploy in all frontal collisions, including some that may produce substantial vehicle damage — for example, some pole collisions, truck underrides, and angle offset collisions.

On the other hand, depending on the type and location of impact, front air bags may deploy in crashes with little vehicle front-end damage but that produce a severe initial deceleration.

Because air bag sensors measure vehicle deceleration over time, vehicle speed and damage by themselves are not good indicators of whether or not an air bag should have deployed.

Seat belts are necessary for your protection in all collisions, and also are needed to help keep you in position, away from an inflating air bag.

When the Occupant Restraints Controller (ORC) detects a collision requiring the front air bags, it signals the inflator units. A large quantity of non-toxic gas is generated to inflate the front air bags.

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

Occupant Classification System (OCS) — Front Passenger Seat

The Occupant Classification System (OCS) is part of a Federally regulated safety system for this vehicle. It is designed to provide Passenger Advanced Front Air Bag output appropriate to the occupant's seated weight, as determined by the OCS.

The Occupant Classification System (OCS) consists of the following:

- Occupant Restraint Controller (ORC)
- Occupant Classification Module (OCM) and Sensor located in the front passenger seat
- Air Bag Warning Light

Occupant Classification Module (OCM) And Sensor

The Occupant Classification Module (OCM) is located underneath the front passenger seat. The Sensor is located beneath the passenger seat cushion foam. Any weight on the seat will be sensed by the Sensor. The OCM uses input from the Sensor to determine the front passenger's most probable classification. The OCM communicates this information to the ORC. The ORC may reduce the inflation rate of the Passenger Advanced Front Air Bag deployment based on occupant classification. In order for the OCS to operate as designed, it is important for the front passenger to be seated properly and properly wearing the seat belt.

The OCS will NOT prevent deployment of the Passenger Advanced Front Air Bag. The OCS may reduce the inflation rate of the Passenger Advanced Front Air Bag if the OCS estimates that:

- The front passenger seat is unoccupied or has very light objects on it; or
- The front passenger seat is occupied by a small passenger, including a child; or
- The front passenger seat is occupied by a rear-facing child restraint; or
- The front passenger is not properly seated or his or her weight is taken off of the seat for a period of time.

Front Passenger Seat Occupant Status	Front Passenger Air Bag Output
Rear-facing child restraint	Reduced-power deployment
Child, including a child in a forward-facing child restraint or booster seat*	Reduced-power deployment OR full-power deployment
Properly seated adult	Full-power deployment OR reduced-power deployment
Unoccupied seat	Reduced-power deployment

* It is possible for a child to be classified as an adult, allowing a full-power Passenger Advanced Front Air Bag deployment. Never allow children to ride in the front passenger seat and never install a child restraint system, including a rear-facing child restraint, in the front passenger seat.

WARNING!

- Never place a rear-facing child restraint in front of an air bag. A deploying passenger front air bag can cause death or serious injury to a child 12 years or younger, including a child in a rear-facing child restraint.

(Continued)

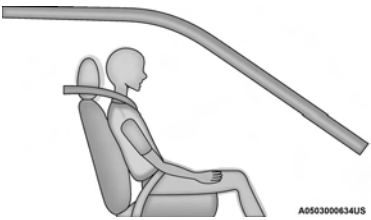
WARNING!

- Never install a rear-facing child restraint in the front seat of a vehicle. Only use a rear-facing child restraint in the rear seat. If the vehicle does not have a rear seat, do not transport a rear-facing child restraint in that vehicle.
- Children 12 years or younger should always ride buckled up in the rear seat of a vehicle with a rear seat.

The OCS determines the front passenger's most probable classification. The OCS estimates the seated weight on the front passenger seat and where that weight is located. The OCS communicates the classification status to the ORC. The ORC uses the classification to determine whether the Passenger Advanced Front Air Bag inflation rate should be adjusted.

In order for the OCS to operate as designed, it is important for the front passenger to be seated properly and properly wearing the seat belt. Properly seated passengers are:

- Sitting upright
- Facing forward
- Sitting in the center of the seat with their feet comfortably on or near the floor
- Sitting with their back against the seatback and the seatback in an upright position



Seated Properly

Lighter Weight Passengers (Including Small Adults)

When a lighter weight passenger, including a small adult, occupies the front passenger seat, the OCS may reduce the inflation rate of the Passenger Advanced Front Air Bag. This does not mean that the OCS is working improperly.

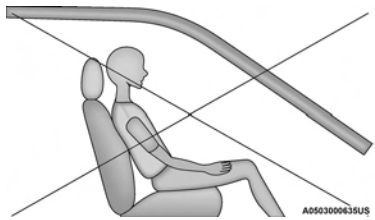
Do not decrease OR increase the front passenger's seated weight on the front passenger seat

The front passenger's seated weight must be properly positioned on the front passenger seat. Failure to do so may result in serious injury or death. The OCS determines the most probable classification of the occupant that it detects. The OCS will detect the front passenger's decreased or increased seated weight, which may result in an adjusted inflation rate of the Passenger Advanced Front Air Bag in a collision. This does not mean that the OCS is working improperly. Decreasing the front passenger's seated weight on the front passenger seat may result in a reduced-power deployment of the Passenger Advanced Front Air Bag. Increasing the front passenger's seated weight on the front passenger seat may result in a full-power deployment of the Passenger Advanced Front Air Bag.

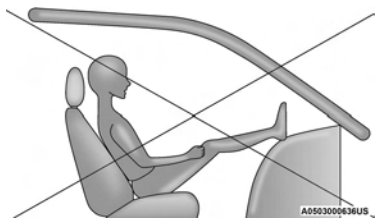
Examples of improper front passenger seating include:

- The front passenger's weight is transferred to another part of the vehicle (like the door, arm rest or instrument panel).
- The front passenger leans forward, sideways, or turns to face the rear of the vehicle.
- The front passenger's seatback is not in the full upright position.
- The front passenger carries or holds an object while seated (e.g., backpack, box, etc.).
- Objects are lodged under the front passenger seat.
- Objects are lodged between the front passenger seat and center console.
- Accessories that may change the seated weight on the front passenger seat are attached to the front passenger seat.
- Anything that may decrease or increase the front passenger's seated weight.

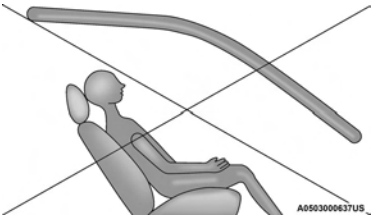
The OCS determines the front passenger's most probable classification. If an occupant in the front passenger seat is seated improperly, the occupant may provide an output signal to the OCS that is different from the occupant's properly seated weight input, for example:



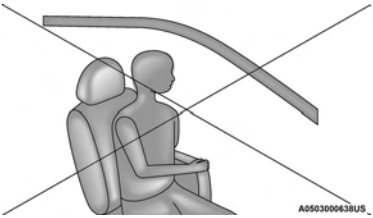
Not Seated Properly



Not Seated Properly



Not Seated Properly



Not Seated Properly

WARNING!

- If a child restraint system, child, small teenager or adult in the front passenger seat is seated improperly, the occupant may provide an output signal to the OCS that is different from the occupant's properly seated weight input. This may result in serious injury or death in a collision.
- Always wear your seat belt and sit properly, with the seatback in an upright position, your back against the seatback, sitting upright, facing forward, in the center of the seat, with your feet comfortably on or near the floor.
- Do not carry or hold any objects (e.g., backpacks, boxes, etc.) while seated in the front passenger seat. Holding an object may provide an output signal to the OCS that is different than the occupant's properly seated weight input, which may result in serious injury or death in a collision.
- Placing an object on the floor under the front passenger seat may prevent the OCS from working properly, which may result in serious injury or death in a collision. Do not place any objects on the floor under the front passenger seat.

The Air Bag Warning Light in the instrument panel will turn on whenever the OCS is unable to classify the front passenger seat status. A malfunction in the OCS may affect the operation of the air bag system.

If the Air Bag Warning Light does not come on, or stays on after you start the vehicle, or it comes on as you drive, take the vehicle to an authorized dealer for service immediately.

The passenger seat assembly contains critical OCS components that may affect the Passenger Advanced Front Air Bag inflation. In order for the OCS to properly classify the seated weight of a front seat passenger, the OCS components must function as designed. Do not make any modifications to the front passenger seat components, assembly, or to the seat cover. If the seat, trim cover, or cushion needs service for any reason, take the vehicle to an authorized dealer. Only FCA US LLC approved seat accessories may be used.

The following requirements must be strictly followed:

- Do not modify the front passenger seat assembly or components in any way.
- Do not use prior or future model year seat covers or cushions not designated by FCA US LLC for the specific model being repaired. Always use the correct seat cover and cushion specified for the vehicle.
- Do not replace the seat cover or cushion with an aftermarket seat cover or cushion.
- Do not add a secondary seat cover or mat.
- At no time should any Supplemental Restraint System (SRS) component or SRS related component or fastener be modified or replaced with any part except those which are approved by FCA US LLC.

WARNING!

- Unapproved modifications or service procedures to the passenger seat assembly, its related components, seat cover or cushion may inadvertently change the air bag deployment in case of a frontal collision. This could result in death or serious injury to the front passenger if the vehicle is involved in a collision. A modified vehicle may not comply with required Federal Motor Vehicle Safety Standards (FMVSS) and/or Canadian Motor Vehicle Safety Standards (CMVSS).
- If it is necessary to modify the air bag system for persons with disabilities, contact an authorized dealer.

Knee Impact Bolsters

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

WARNING!

- Do not drill, cut, or tamper with the knee impact bolsters in any way.
- Do not mount any accessories to the knee impact bolsters such as alarm lights, stereos, citizen band radios, etc.

Supplemental Driver And Front Passenger Knee Air Bags

This vehicle is equipped with a Supplemental Driver Knee Air Bag mounted in the instrument panel below the steering column and a Supplemental Passenger Knee Air Bag mounted in the instrument panel below the glove compartment. The Supplemental Knee Air Bags provide enhanced protection during a frontal impact by working together with the seat belts, pretensioners, and front air bags.

Supplemental Side Air Bags

Supplemental Seat-Mounted Side Air Bags (SABs)

This vehicle is equipped with Supplemental Seat-Mounted Side Air Bags (SABs).

Supplemental Seat-Mounted Side Air Bags (SABs) are located in the outboard side of the front seats. The SABs are marked with "SRS AIRBAG" or "AIRBAG" on a label or on the seat trim on the outboard side of the seats.

The SABs may help to reduce the risk of occupant injury during certain side impacts, in addition to the injury reduction potential provided by the seat belts and body structure.



Front Supplemental Seat-Mounted Side Air Bag Label

When the SAB deploys, it opens the seam on the outboard side of the seatback's trim cover. The inflating SAB deploys through the seat seam into the space between the occupant and the door. The SAB moves at a very high speed and with such a high force that it could injure occupants if they are not seated properly, or if items are positioned in the area where the SAB inflates. Children are at an even greater risk of injury from a deploying air bag.

WARNING!

Do not use accessory seat covers or place objects between you and the Side Air Bags; the performance could be adversely affected and/or objects could be pushed into you, causing serious injury.

Supplemental Side Air Bag Inflatable Curtains (SABICs)

This vehicle is equipped with Supplemental Side Air Bag Inflatable Curtains (SABICs).

Supplemental Side Air Bag Inflatable Curtains (SABICs) are located above the side windows. The trim covering the SABICs is labeled "SRS AIRBAG" or "AIRBAG."



Supplemental Side Air Bag Inflatable Curtain (SABIC) Label Location

SABICs may help reduce the risk of head and other injuries to front and rear seat outboard occupants in certain side impacts, in addition to the injury reduction potential provided by the seat belts and body structure.

The SABIC deploys downward, covering the side windows. An inflating SABIC pushes the outside edge of the headliner out of the way and covers the window. The SABICs inflate with enough force to injure occupants if they are not belted and seated properly, or if items are positioned in the area where the SABICs inflate. Children are at an even greater risk of injury from a deploying air bag.

The SABICs may help reduce the risk of partial or complete ejection of vehicle occupants through side windows in certain side impact events.

WARNING!

- Do not mount equipment, or stack luggage or other cargo up high enough to block the deployment of the SABICs. The trim covering above the side windows where the SABIC and its deployment path are located should remain free from any obstructions.
- In order for the SABICs to work as intended, do not install any accessory items in your vehicle which could alter the roof. Do not add an aftermarket sunroof to your vehicle. Do not add roof racks that require permanent attachments (bolts or screws) for installation on the vehicle roof. Do not drill into the roof of the vehicle for any reason.

Side Impacts

The Side Air Bags are designed to activate in certain side impacts. The Occupant Restraint Controller (ORC) determines whether the deployment of the Side Air Bags in a particular impact event is appropriate, based on the sever-

ity and type of collision. The side impact sensors aid the ORC in determining the appropriate response to impact events. The system is calibrated to deploy the Side Air Bags on the impact side of the vehicle during impacts that require Side Air Bag occupant protection. In side impacts, the Side Air Bags deploy independently; a left side impact deploys the left Side Air Bags only and a right-side impact deploys the right Side Air Bags only. Vehicle damage by itself is not a good indicator of whether or not Side Air Bags should have deployed.

The Side Air Bags will not deploy in all side collisions, including some collisions at certain angles, or some side collisions that do not impact the area of the passenger compartment. The Side Air Bags may deploy during angled or offset frontal collisions where the front air bags deploy.

Side Air Bags are a supplement to the seat belt restraint system. Side Air Bags deploy in less time than it takes to blink your eyes.

WARNING!

- Occupants, including children, who are up against or very close to Side Air Bags can be seriously injured or killed. Occupants, including children, should never lean on or sleep against the door, side windows, or area where the side air bags inflate, even if they are in an infant or child restraint.
- Seat belts (and child restraints where appropriate) are necessary for your protection in all collisions. They also help keep you in position, away from an inflating Side Air Bag. To get the best protection from the Side Air Bags, occupants must wear their seat belts properly and sit upright with their backs against the seats. Children must be properly restrained in a child restraint or booster seat that is appropriate for the size of the child.

WARNING!

- Side Air Bags need room to inflate. Do not lean against the door or window. Sit upright in the center of the seat.
- Being too close to the Side Air Bags during deployment could cause you to be severely injured or killed.
- Relying on the Side Air Bags alone could lead to more severe injuries in a collision. The Side Air Bags work with your seat belt to restrain you properly. In some collisions, Side Air Bags won't deploy at all. Always wear your seat belt even though you have Side Air Bags.

NOTE:

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

Rollover Events

Side Air Bags and seat belt pretensioners are designed to activate in certain rollover events. The Occupant Restraint Controller (ORC) determines whether deployment in a particular rollover event is appropriate, based on the severity and type of collision. Vehicle damage by itself is not a good indicator of whether or not Side Air Bags and seat belt pretensioners should have deployed.

The Side Air Bags and seat belt pretensioners will not deploy in all rollover events. The rollover sensing system determines if a rollover event may be in progress and whether deployment is appropriate. In the event the vehicle experiences a rollover or near rollover event, and deployment is appropriate, the rollover sensing system will deploy the side air bags and seat belt pretensioners on both sides of the vehicle.

The SABICs may help reduce the risk of partial or complete ejection of vehicle occupants through side windows in certain rollover or side impact events.

Air Bag System Components

NOTE:

The Occupant Restraint Controller (ORC) monitors the internal circuits and interconnecting wiring associated with electrical Air Bag System Components listed below:

- Occupant Restraint Controller (ORC)
- Air Bag Warning Light
- Steering Wheel and Column
- Instrument Panel
- Knee Impact Bolsters
- Driver and Front Passenger Air Bags
- Seat Belt Buckle Switch
- Supplemental Side Air Bags
- Supplemental Knee Air Bags
- Front and Side Impact Sensors
- Seat Belt Pretensioners
- Seat Track Position Sensors
- Occupant Classification System

If A Deployment Occurs

The front air bags are designed to deflate immediately after deployment.

NOTE:

Front and/or side air bags will not deploy in all collisions. This does not mean something is wrong with the air bag system.

If you do have a collision which deploys the air bags, any or all of the following may occur:

- The air bag material may sometimes cause abrasions and/or skin reddening to the occupants as the air bags deploy and unfold. The abrasions are similar to friction rope burns or those you might get sliding along a carpet or gymnasium floor. They are not caused by con-

tact with chemicals. They are not permanent and normally heal quickly. However, if you haven't healed significantly within a few days, or if you have any blistering, see your doctor immediately.

- As the air bags deflate, you may see some smoke-like particles. The particles are a normal by-product of the process that generates the non-toxic gas used for air bag inflation. These airborne particles may irritate the skin, eyes, nose, or throat. If you have skin or eye irritation, rinse the area with cool water. For nose or throat irritation, move to fresh air. If the irritation continues, see your doctor. If these particles settle on your clothing, follow the garment manufacturer's instructions for cleaning.

Do not drive your vehicle after the air bags have deployed. If you are involved in another collision, the air bags will not be in place to protect you.

WARNING!

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

NOTE:

- Air bag covers may not be obvious in the interior trim, but they will open during air bag deployment.
- After any collision, the vehicle should be taken to an authorized dealer immediately.

Enhanced Accident Response System

In the event of an impact, if the communication network remains intact, and the power remains intact, depending on the nature of the event, the Occupant Restraint Controller (ORC) will determine whether to have the Enhanced Accident Response System perform the following functions:

- Cut off fuel to the engine (if equipped)
- Cut off battery power to the electric motor (if equipped)
- Flash hazard lights as long as the battery has power
- Turn on the interior lights, which remain on as long as the battery has power or for 15 minutes from the intervention of the Enhanced Accident Response System
- Unlock the power door locks

Your vehicle may also be designed to perform any of these other functions in response to the Enhanced Accident Response System:

- Turn off the Fuel Filter Heater, Turn off the HVAC Blower Motor, Close the HVAC Circulation Door
- Cut off battery power to the:
  - ○ Engine
  - ○ Electric Motor (if equipped)
  - ○ Electric power steering
  - ○ Brake booster
  - ○ Electric park brake
  - ○ Automatic transmission gear selector
  - ○ Horn
  - ○ Front wiper

NOTE:

After an accident, remember to cycle the ignition to the STOP (OFF/LOCK) position and remove the key from the ignition switch to avoid draining the battery. Carefully check the vehicle for fuel leaks in the engine compartment and on the ground near the engine compartment and fuel tank before resetting the system and starting the engine. If there are no fuel leaks or damage to the vehicle electrical devices (e.g. headlights) after an accident, reset the system by following the procedure described here. If you have any doubt, contact an authorized dealer.

Enhanced Accident Response System Reset Procedure

In order to reset the Enhanced Accident Response System functions after an event, the ignition switch must be changed from ignition ON/RUN to ignition OFF. Carefully check the vehicle for fuel leaks in the engine compartment and on the ground near the engine compartment and fuel tank before resetting the system and starting the engine.

After an accident, if the vehicle will not start after performing the reset procedure, the vehicle must be towed to an authorized dealer to be inspected and to have the Enhanced Accident Response System reset.

After an air bag deployment event occurs activating the Enhanced Accident Response System, a " *Service Hybrid Electric Vehicle System*" message will be displayed on the instrument cluster. The vehicle is not drivable in this state.

In order to reset the Enhanced Accident Response and High Voltage Battery systems, the vehicle must be towed to an authorized dealer to be inspected and have the Enhanced Accident Response System reset.

In order to reset the hazard flashers, interior lights, power door locks, HVAC blower motor, the ignition switch must be cycled from the ON/RUN position to ignition OFF position."

Maintaining Your Air Bag System

WARNING!

- Modifications to any part of the air bag system could cause it to fail when you need it. You could be injured if the air bag system is not there to protect you. Do not modify the components or wiring, including adding any kind of badges or stickers to the steering wheel hub trim cover or the upper passenger side of the instrument panel. Do not modify the front fascia/bumper, vehicle body structure, or add aftermarket side steps or running boards.
- It is dangerous to try to repair any part of the air bag system yourself. Be sure to tell anyone who works on your vehicle that it has an air bag system.
- Do not attempt to modify any part of your air bag system. The air bag may inflate accidentally or may not function properly if modifications are made. Take your vehicle to an authorized dealer for any air bag system service. If your seat, including your trim cover and cushion, needs to be serviced in any way (including removal or loosening/tightening of seat attachment bolts), take the vehicle to an authorized dealer. Only manufacturer approved seat accessories may be used. If it is necessary to modify the air bag system for persons with disabilities, contact an authorized dealer.

Event Data Recorder (EDR)

This vehicle is equipped with an event data recorder (EDR). The main purpose of an EDR is to record, in certain crash or near crash-like situations, such as an air bag deployment or hitting a road obstacle, data that will assist in understanding how a vehicle's systems performed. The EDR is designed to record data related to vehicle dynamics and safety systems for a short period of time, typically 30 seconds or less. The EDR in this vehicle is designed to record such data as:

- How various systems in your vehicle were operating;
- Whether or not the driver and passenger safety belts were buckled/fastened;
- How far (if at all) the driver was depressing the accelerator and/or brake pedal; and,
- How fast the vehicle was traveling.

These data can help provide a better understanding of the circumstances in which crashes and injuries occur.

NOTE:

EDR data are recorded by your vehicle only if a non-trivial crash situation occurs; no data are recorded by the EDR under normal driving conditions and no personal data (e.g., name, gender, age, and crash location) are recorded. However, other parties, such as law enforcement, could combine the EDR data with the type of personally identifying data routinely acquired during a crash investigation.

To read data recorded by an EDR, special equipment is required, and access to the vehicle or the EDR is needed. In addition to the vehicle manufacturer, other parties, such as law enforcement, that have the special equipment, can read the information if they have access to the vehicle or the EDR.

Child Restraints

Everyone in your vehicle needs to be buckled up at all times, including babies and children. Every state in the United States, and every Canadian province, requires that small children ride in proper restraint systems. This is the law, and you can be prosecuted for ignoring it.

Children 12 years or younger should ride properly buckled up in a rear seat, if available. According to crash statistics, children are safer when properly restrained in the rear seats rather than in the front.

WARNING!

In a collision, an unrestrained child can become a projectile inside the vehicle. The force required to hold even an infant on your lap could become so great that you could not hold the child, no matter how strong you are. The child and others could be badly injured or killed. Any child riding in your vehicle should be in a proper restraint for the child's size.

There are different sizes and types of restraints for children from newborn size to the child almost large enough for an adult safety belt. Always check the child seat Owner's Manual to make sure you have the correct seat for your child. Carefully read and follow all the instructions and warnings in the child restraint Owner's Manual and on all the labels attached to the child restraint.

Before buying any restraint system, make sure that it has a label certifying that it meets all applicable Safety Standards. You should also make sure that you can install it in the vehicle where you will use it.

NOTE:

- For additional information, refer to http://www.nhtsa.gov/parents-and-caregivers or call: 1–888–327–4236
- Canadian residents should refer to Transport Canada's website for additional information: https://tc.canada.ca/en/road-transportation/child-car-seat-safety

Summary Of Recommendations For Restraining Children In Vehicles

	Child Size, Height, Weight Or Age	Recommended Type Of Child Restraint
Infants and Toddlers	Children who are two years old or younger and who have not reached the height or weight limits of their child restraint	Either an Infant Carrier or a Convertible Child Restraint, facing rearward in a rear seat of the vehicle
Small Children	Children who are at least two years old or who have outgrown the height or weight limit of their rear-facing child restraint	Forward-Facing Child Restraint with a five-point Harness, facing forward in a rear seat of the vehicle
Larger Children	Children who have outgrown their forward-facing child restraint, but are too small to properly fit the vehicle's seat belt	Belt Positioning Booster Seat and the vehicle seat belt, seated in a rear seat of the vehicle
Children Too Large for Child Restraints	Children 12 years old or younger, who have outgrown the height or weight limit of their booster seat	Vehicle Seat Belt, seated in a rear seat of the vehicle

Infant And Child Restraints

Safety experts recommend that children ride rear-facing in the vehicle until they are two years old or until they reach either the height or weight limit of their rear-facing child restraint. Two types of child restraints can be used rear-facing: infant carriers and convertible child seats.

The infant carrier is only used rear-facing in the vehicle. It is recommended for children from birth until they reach the weight or height limit of the infant carrier. Convertible child seats can be used either rear-facing or forward-facing in the vehicle. Convertible child seats often have a higher weight limit in the rear-facing direction than infant carriers do, so they can be used rear-facing by children who have outgrown their infant carrier but are still less than at least two years old. Children should remain rear-facing until they reach the highest weight or height allowed by their convertible child seat.

WARNING!

- Never place a rear-facing child restraint in front of an air bag. A deploying passenger front air bag can cause death or serious injury to a child 12 years or younger, including a child in a rear-facing child restraint.
- Never install a rear-facing child restraint in the front seat of a vehicle. Only use a rear-facing child restraint in the rear seat. If the vehicle does not have a rear seat, do not transport a rear-facing child restraint in that vehicle.

Older Children And Child Restraints

Children who are two years old or who have outgrown their rear-facing convertible child seat can ride forward-facing in the vehicle. Forward-facing child seats and convertible child seats used in the forward-facing direction are for children who are over two years old or who have outgrown the rear-facing weight or height limit of their rear-facing convertible child seat. Children should remain in a forward-facing child seat with a harness for as long as possible, up to the highest weight or height allowed by the child seat.

All children whose weight or height is above the forward-facing limit for the child seat should use a belt-positioning booster seat until the vehicle's seat belts fit properly. If the child cannot sit with knees bent over the vehicle's seat cushion while the child's back is against the seatback, they should use a belt-positioning booster seat. The child and belt-positioning booster seat are held in the vehicle by the seat belt.

WARNING!

- Improper installation can lead to failure of an infant or child restraint. It could come loose in a collision. The child could be badly injured or killed. Follow the child restraint manufacturer's directions exactly when installing an infant or child restraint.
- After a child restraint is installed in the vehicle, do not move the vehicle seat forward or rearward because it can loosen the child restraint attachments. Remove the child restraint before adjusting the vehicle seat position. When the vehicle seat has been adjusted, reinstall the child restraint.

(Continued)

WARNING!

- When your child restraint is not in use, secure it in the vehicle with the seat belt or LATCH anchorages, or remove it from the vehicle. Do not leave it loose in the vehicle. In a sudden stop or accident, it could strike the occupants or seatbacks and cause serious personal injury.

Children Too Large For Booster Seats

Children who are large enough to wear the shoulder belt comfortably, and whose legs are long enough to bend over the front of the seat when their back is against the seatback, should use the seat belt in a rear seat. Use this simple 5-step test to decide whether the child can use the vehicle's seat belt alone:

1. Can the child sit all the way back against the back of the vehicle seat?
2. Do the child's knees bend comfortably over the front of the vehicle seat while the child is still sitting all the way back?
3. Does the shoulder belt cross the child's shoulder between the neck and arm?
4. Is the lap part of the belt as low as possible, touching the child's thighs and not the stomach?
5. Can the child stay seated like this for the whole trip?

If the answer to any of these questions was "no," then the child still needs to use a booster seat in this vehicle. If the child is using the lap/shoulder belt, check seat belt fit periodically and make sure the seat belt buckle is latched. A child's squirming or slouching can move the belt out of position. If the shoulder belt contacts the face or neck, move the child closer to the center of the vehicle, or use a booster seat to position the seat belt on the child correctly.

WARNING!

Never allow a child to put the shoulder belt under an arm or behind their back. In a crash, the shoulder belt will not protect a child properly, which may result in serious injury or death. A child must always wear both the lap and shoulder portions of the seat belt correctly.

Recommendations For Attaching Child Restraints

Restraint Type	Combined Weight of the Child + Child Restraint	Use Any Attachment Method Shown With An "X" Below			
		LATCH – Lower Anchors Only	Seat Belt Only	LATCH – Lower Anchors + Top Tether Anchor	Seat Belt + Top Tether Anchor
Rear-Facing Child Restraint	Up to 65 lb (29.5 kg)	X	X		
Rear-Facing Child Restraint	More than 65 lb (29.5 kg)		X		
Forward-Facing Child Restraint	Up to 65 lb (29.5 kg)			X	X
Forward-Facing Child Restraint	More than 65 lb (29.5 kg)				X

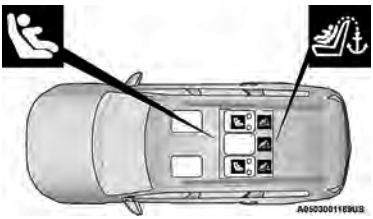
Lower Anchors And Tethers For CHildren (LATCH) Restraint System



LATCH Label

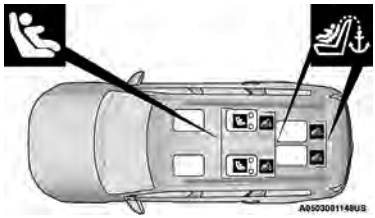
Your vehicle is equipped with the child restraint anchorage system called LATCH, which stands for Lower Anchors and Tethers for CHildren. The LATCH system has three vehicle anchor points for installing LATCH-equipped child seats. There are two lower anchorages located at the back of the seat cushion 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



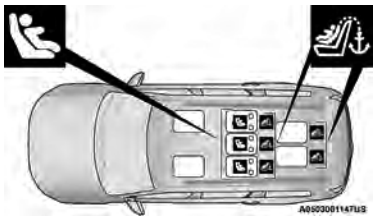
Second Row LATCH Positions (Five Passenger)

Lower Anchorage Symbol (2 Anchorages Per Seating Position)
Top Tether Anchorage Symbol



Captain's Chairs Second Row LATCH Positions (Six Passenger)

Lower Anchorage Symbol (2 Anchorages Per Seating Position)
Top Tether Anchorage Symbol



60/40 Second Row LATCH Positions (Seven Passenger)

Lower Anchorage Symbol (2 Anchorages Per Seating Position)
Top Tether Anchorage Symbol

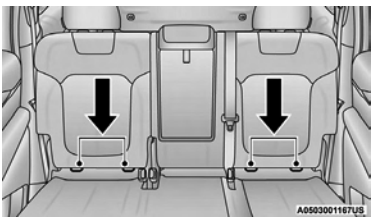
Frequently Asked Questions About Installing Child Restraints With LATCH		
What is the weight limit (child's weight + weight of the child restraint) for using the LATCH anchorage system to attach the child restraint?	65 lb (29.5 kg)	Use the LATCH anchorage system until the combined weight of the child and the child restraint is 65 lb (29.5 kg). Use the seat belt and tether anchor instead of the LATCH system once the combined weight is more than 65 lb (29.5 kg).

Frequently Asked Questions About Installing Child Restraints With LATCH		
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 a child seat be installed in the center position using the inner LATCH lower anchorages from the outboard seating positions?	Five Passenger — No	Five Passenger — Use the seat belt and tether anchor to install a child seat in the center seating position. Seven Passenger – Use the provided lower anchorages in the second row center seating position.
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.
Can the rear head restraints be removed?	No	

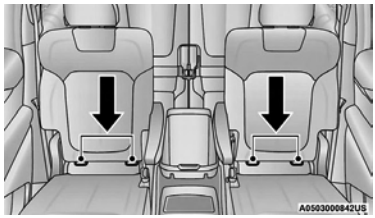
Locating The LATCH Anchorages



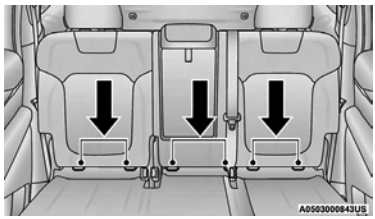
The lower anchorages are round bars that are found at the rear of the seat cushion where it meets the seatback. The anchorages are under a flap with the anchorage symbols on it. Pull the top of the flap away from the seatback to access the lower anchorages.



Five Passenger Second Row Lower Anchorages



Six Passenger Second Row Lower Anchorages



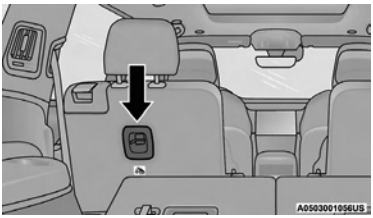
Seven Passenger Second Row Lower Anchorages

Locating The Upper Tether Anchorages

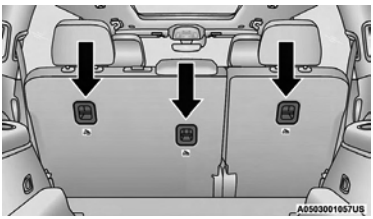


Five, Six, And Seven Passenger Vehicles: Second Row Upper Tether Anchorage Locations

There are tether strap anchorages behind each rear seating position located on the back of the seat.



Six Passenger Top Tether Strap Anchorage (Captain's Chair)



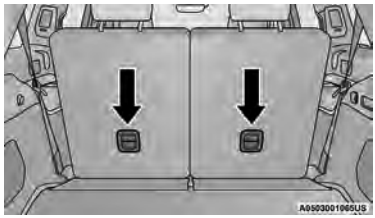
Five And Seven Passenger Top Tether Strap Anchorage (2nd Row Bench)

Six And Seven Passenger Vehicles: Third Row Upper Tether Anchorage Locations

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



Pulling Down The Carpet Floor Panel To Access Top Tether Anchorage (3rd Row Bench)



Tether Anchorages (3rd Row Bench)

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

Five Passenger Second Row Seating:

WARNING!

- Do not install a child restraint in the center position using the LATCH system. This position is not approved for installing child seats using the LATCH attachments. You must use the seat belt and tether anchor to install a child seat in the center seating position.
- Never use the same lower anchorage to attach more than one child restraint. For typical installation instructions, see ⇨ page 31 .

Six Passenger Second Row Seating:

WARNING!

This vehicle does not have a center seating position. Do not use the center lower LATCH anchorages to install a child seat in the center of the back seat.

Seven Passenger Second Row Seating:

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!

Never use the same lower anchorage to attach more than one child restraint. For typical installation instructions, see ⇨ page 31 .

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 ⇨ page 28 to check what type of seat belt each seating position has.

1. Loosen the adjusters on the lower straps and on the tether strap of the child seat so that you can more easily attach the hooks or connectors to the vehicle anchorages.
2. Place the child seat between the lower anchorages for that seating position. If the second row seat can be reclined, you may recline the seat and/or raise the head restraint (if adjustable) to get a better fit. 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 ⇨ page 33 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!

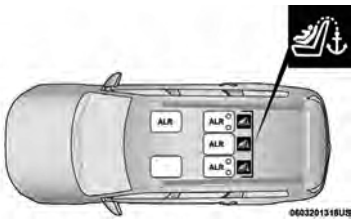
- Improper installation or failure to properly secure a child restraint can lead to failure of the restraint. The child could be badly injured or killed.
- Follow the child restraint manufacturer's directions exactly when installing an infant or child restraint.

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 on ⇨ page 16 for additional information on ALR.

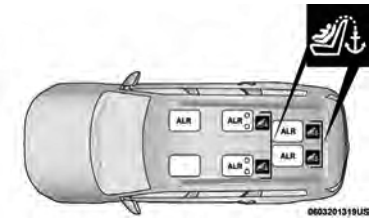
Please see the table below and the following sections for more information.

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



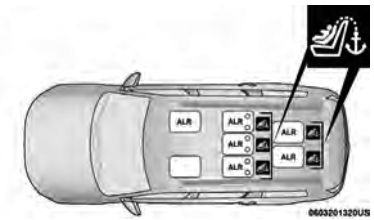
Five Passenger Automatic Locking Retractor (ALR) Locations

ALR — Switchable Automatic Locking Retractor
Top Tether Anchorage Symbol



Captain's Chairs Second Row (Six Passenger) Automatic Locking Retractor (ALR) Locations

ALR — Switchable Automatic Locking Retractor
Top Tether Anchorage Symbol



60/40 Second Row (Seven Passenger) Automatic Locking Retractor (ALR) Locations

ALR — Switchable Automatic Locking Retractor
Top Tether Anchorage Symbol

Frequently Asked Questions About Installing Child Restraints With Seat Belts		
What is the weight limit (child's weight + weight of the child restraint) for using the Tether Anchor with the seat belt to attach a forward-facing child restraint?	Weight limit of the Child Restraint	Always use the tether anchor when using the seat belt to install a forward-facing child restraint, up to the recommended weight limit of the child restraint.
Can the rear-facing child restraint touch the back of the front passenger seat?	Yes	Contact between the front passenger seat and the child restraint is allowed, if the child restraint manufacturer also allows contact.
Can the rear head restraints be removed?	No	
Can the buckle stalk be twisted to tighten the seat belt against the belt path of the child restraint?	No	Do not twist the buckle stalk in a seating position with an ALR retractor.

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

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. If the second row seat can be reclined, you may recline the seat and/or raise the head restraint (if adjustable) to get a better fit. If the rear seat can be moved forward and rearward in the vehicle, you may wish to move it to its rear-most position to make room for the child seat. You may also move the front seat forward to allow more room for the child seat.
2. Pull enough of the seat belt webbing from the retractor to pass it through the belt path of the child restraint. Do not twist the belt webbing in the belt path.
3. Slide the latch plate into the buckle until you hear a "click."
4. Pull on the webbing to make the lap portion tight against the child seat.
5. To lock the seat belt, pull down on the shoulder part of the belt until you have pulled all the seat belt webbing out of the retractor. Then, allow the webbing to retract back into the retractor. As the webbing retracts, you will hear a clicking sound. This means the seat belt is now in the Automatic Locking mode.
6. Try to pull the webbing out of the retractor. If it is locked, you should not be able to pull out any webbing. If the retractor is not locked, repeat step 5.
7. Finally, pull up on any excess webbing to tighten the lap portion around the child restraint while you push the child restraint rearward and downward into the vehicle seat.
8. If the child restraint has a top tether strap and the seating position has a top tether anchorage, connect the tether strap to the anchorage and tighten the tether strap. See ⇨ page 33 for directions to attach a tether anchor.
9. Test that the child restraint is installed tightly by pulling back and forth on the child seat at the belt path. It should not move more than 1 inch (25.4 mm) in any direction.

Any seat belt system will loosen with time, so check the belt occasionally, and pull it tight if necessary.

Installing Child Restraints Using The Top Tether Anchorage

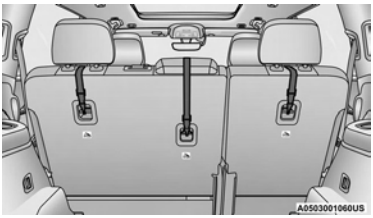
WARNING!

Do not attach a tether strap for a rear-facing car seat to any location in front of the car seat, including the seat frame or a tether anchorage. Only attach the 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 ⇨ page 28 for the location of approved tether anchorages in your vehicle.



Five Passenger

1. Look behind the seating position where you plan to install the child restraint to find the tether anchorage. If the seat can be moved, 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.
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.



Second Row Bench Seat Top Tether Strap Mounting (Five And Seven Passenger Seating)

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

WARNING!

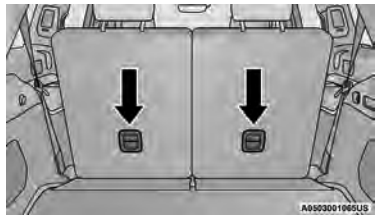
- An incorrectly anchored tether strap could lead to increased head motion and possible injury to the child. Use only the anchorage position directly behind the child seat to secure a child restraint top tether strap.
- If your vehicle is equipped with a split rear seat, make sure the tether strap does not slip into the opening between the seatbacks as you remove slack in the strap.

Six And Seven Passenger

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.
2. To access the top tether strap anchorages behind the rear seat, pull the carpeted floor panel away from the seat back, this will expose the top tether strap anchorages.

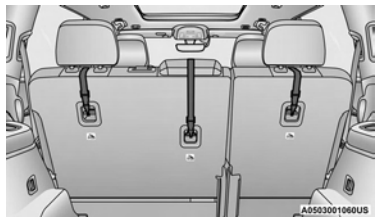


Pulling Down The Carpet Floor Panel To Access Top Tether Strap Anchorage (3rd Row Bench)

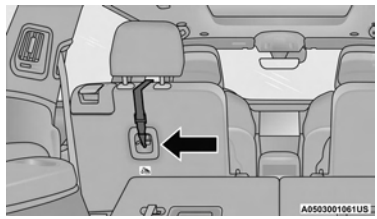


Third Row Top Tether Strap Anchorage (Located On Seatback)

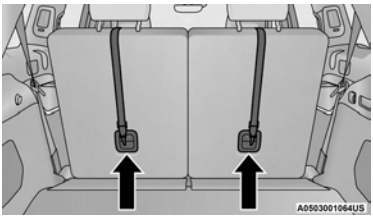
3. Route the tether strap to provide the most direct path for the strap between the anchor and the child seat. If your vehicle is equipped with adjustable rear head restraints, raise the head restraint, and where possible, route the tether strap under the head restraint and between the two posts. If not possible, lower the head restraint and pass the tether strap around the outboard side of the head restraint.
4. For the center seating position, route the tether strap over the seatback and headrest then attach the hook to the tether anchor located on the back of the seat.
5. Attach the tether strap hook of the child restraint to the top tether anchorage as shown in the diagram.



Second Row Bench Seat Top Tether Strap Mounting (Five And Seven Passenger Seating)



Captain's Chair Top Tether Strap Mounting (Six Passenger)



Third Row Seating Top Tether Strap Mounting

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

WARNING!

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

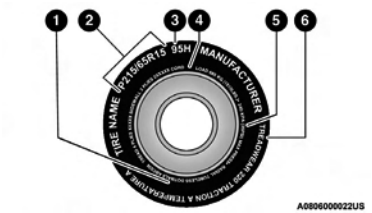
SERVICING AND MAINTENANCE

TIRES

Tire Safety Information

Tire safety information will cover aspects of the following information: Tire Markings, Tire Identification Numbers, Tire Terminology and Definitions, Tire Pressures, and Tire Loading.

Tire Markings



Tire Markings

1 — US DOT Safety Standards Code (TIN)
2 — Size Designation
3 — Service Description
4 — Maximum Load
5 — Maximum Pressure
6 — Treadwear, Traction and Temperature Grades

NOTE:

- P (Passenger) — Metric tire sizing is based on US design standards. P-Metric tires have the letter "P" molded into the sidewall preceding the size designation. Example: P215/65R15 95H.
- European — Metric tire sizing is based on European design standards. Tires designed to this standard have the tire size molded into the sidewall beginning with the section width. The letter "P" is absent from this tire size designation. Example: 215/65R15 96H.
- LT (Light Truck) — Metric tire sizing is based on US design standards. The size designation for LT-Metric tires is the same as for P-Metric tires except for the letters "LT" that are molded into the sidewall preceding the size designation. Example: LT235/85R16.
- Temporary spare tires are designed for temporary emergency use only. Temporary high pressure compact spare tires have the letter "T" or "S" molded into the sidewall preceding the size designation. Example: T145/80D18 103M.
- High flotation tire sizing is based on US design standards and it begins with the tire diameter molded into the sidewall. Example: 31x10.5 R15 LT.

EXAMPLE:
Example Size Designation: P215/65R15XL 95H, 215/65R15 96H, LT235/85R16C, T145/80D18 103M, 31x10.5 R15 LT
P = Passenger car tire size based on US design standards, or **"....blank...."** = Passenger car tire based on European design standards, or **LT** = Light truck tire based on US design standards, or **T or S** = Temporary spare tire or **31** = Overall diameter in inches (in) **215, 235, 145** = Section width in millimeters (mm) **65, 85, 80** = Aspect ratio in percent (%) • Ratio of section height to section width of tire, or **10.5** = Section width in inches (in)
R = Construction code • "R" means radial construction, or • "D" means diagonal or bias construction
15, 16, 18 = Rim diameter in inches (in)
Service Description:
95 = Load Index • A numerical code associated with the maximum load a tire can carry
H = Speed Symbol • A symbol indicating the range of speeds at which a tire can carry a load corresponding to its load index under certain operating conditions • The maximum speed corresponding to the speed symbol should only be achieved under specified operating conditions (i.e., tire pressure, vehicle loading, road conditions, and posted speed limits)
Load Identification: Absence of the following load identification symbols on the sidewall of the tire indicates a Standard Load (SL) tire: • **XL** = Extra load (or reinforced) tire, or • **LL** = Light load tire or • **C, D, E, F, G** = Load range associated with the maximum load a tire can carry at a specified pressure
Maximum Load – Maximum load indicates the maximum load this tire is designed to carry
Maximum Pressure – Maximum pressure indicates the maximum permissible cold tire inflation pressure for this tire

Tire Identification Number (TIN)

The TIN may be found on one or both sides of the tire; however, the date code may only be on one side. Tires with white sidewalls will have the full TIN, including the date code, located on the white sidewall side of the tire. Look for the TIN on the outboard side of black sidewall tires as mounted on the vehicle. If the TIN is not found on the outboard side, then you will find it on the inboard side of the tire.

EXAMPLE:
DOT MA L9 ABCD 0301
DOT = Department of Transportation • This symbol certifies that the tire is in compliance with the US Department of Transportation tire safety standards and is approved for highway use
MA = Code representing the tire manufacturing location (two digits)
L9 = Code representing the tire size (two digits)
ABCD = Code used by the tire manufacturer (one to four digits)
03 = Number representing the week in which the tire was manufactured (two digits) • 03 means the 3rd week

EXAMPLE:
01 = Number representing the year in which the tire was manufactured (two digits) • 01 means the year 2001 • Prior to July 2000, tire manufacturers were only required to have one number to represent the year in which the tire was manufactured. Example: 031 could represent the 3rd week of 1981 or 1991

Tire Terminology And Definitions

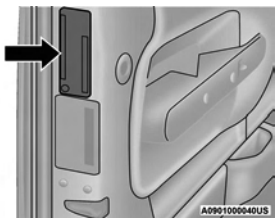
Term	Definition
B-pillar	The vehicle B-pillar is the structural member of the body located behind the front door.
Cold Tire Inflation Pressure	Cold tire inflation pressure is defined as the tire pressure after the vehicle has not been driven for at least three hours, or driven less than 1 mile (1.6 km) after sitting for a minimum of three hours. Inflation pressure is measured in units of psi (pounds per square inch) or kPa (kilopascals).
Maximum Inflation Pressure	The maximum inflation pressure is the maximum permissible cold tire inflation pressure for this tire. The maximum inflation pressure is molded into the sidewall.
Recommended Cold Tire Inflation Pressure	Vehicle manufacturer's recommended cold tire inflation pressure as shown on the tire placard.
Tire Placard	A label permanently attached to the vehicle describing the vehicle's loading capacity, the original equipment tire sizes and the recommended cold tire inflation pressures.

Tire Loading And Tire Pressure

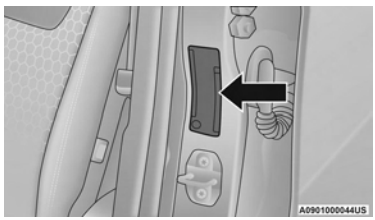
NOTE:

The proper cold tire inflation pressure is listed on the driver's side B-pillar or the rear edge of the driver's side door.

Check the inflation pressure of each tire, including the spare tire (if equipped), at least monthly and inflate to the recommended pressure for your vehicle.



Example Tire Placard Location (Door)



Example Tire Placard Location (B-pillar)

Tire And Loading Information Placard



Tire And Loading Information Placard

This placard tells you important information about the:

1. Number of people that can be carried in the vehicle.
2. Total weight your vehicle can carry.
3. Tire size designed for your vehicle.

4. Cold tire inflation pressures for the front, rear, and spare tires.

Loading

The vehicle maximum load on the tire must not exceed the load carrying capacity of the tire on your vehicle. You will not exceed the tire's load carrying capacity if you adhere to the loading conditions, tire size, and cold tire inflation pressures specified on the Tire And Loading Information Placard.

NOTE:

Under a maximum loaded vehicle condition, Gross Axle Weight Rating (GAWR) for the front and rear axles must not be exceeded.

To determine the maximum loading conditions of your vehicle, locate the statement "The combined weight of occupants and cargo should never exceed XXX kg or XXX lbs" on the Tire And Loading Information Placard. The combined weight of occupants, cargo/luggage and trailer tongue weight (if applicable) should never exceed the weight referenced here.

Steps For Determining Correct Load Limit—

(1) Locate the statement "The combined weight of occupants and cargo should never exceed XXX kg or XXX lbs." on your vehicle's placard.

(2) Determine the combined weight of the driver and passengers that will be riding in your vehicle.

(3) Subtract the combined weight of the driver and passengers from XXX kg or XXX lbs.

(4) The resulting figure equals the available amount of cargo and luggage load capacity. For example, if "XXX" amount equals 1400 lbs. and there will be five 150 lb passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lbs. (1400-750 (5x150) = 650 lbs.)

(5) Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity calculated in Step 4.

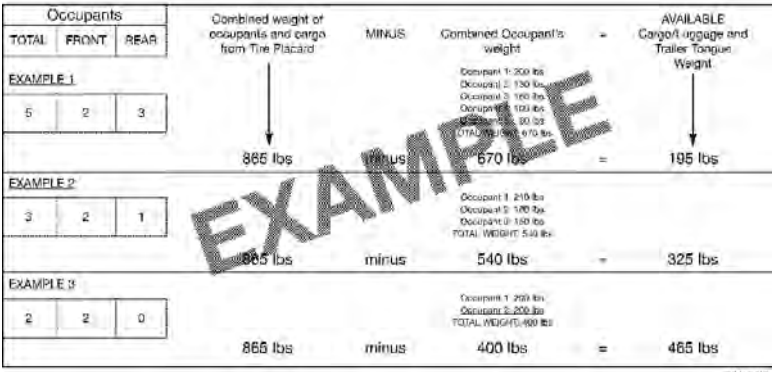
(6) If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult this manual to determine how this reduces the available cargo and luggage load capacity of your vehicle.

Metric Example For Load Limit

For example, if "XXX" amount equals 635 kg and there will be five 68 kg passengers in your vehicle, the amount of available cargo and luggage load capacity is 295 kg (635-340 (5x68) = 295 kg) as shown in step 4.

NOTE:

- If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. The following table shows examples on how to calculate total load, cargo/luggage, and towing capacities of your vehicle with varying seating configurations and number and size of occupants. This table is for illustration purposes only and may not be accurate for the seating and load carry capacity of your vehicle.
- For the following example, the combined weight of occupants and cargo should never exceed 865 lbs (392 kg).



WARNING!

Overloading of your tires is dangerous. Overloading can cause tire failure, affect vehicle handling, and increase your stopping distance. Use tires of the recommended load capacity for your vehicle. Never overload them.

Tires — General Information

Tire Pressure

Proper tire inflation pressure is essential to the safe and satisfactory operation of your vehicle. Four primary areas are affected by improper tire pressure:

- Safety
- Fuel Economy
- Tread Wear
- Ride Comfort and Vehicle Stability

Safety

WARNING!

- Improperly inflated tires are dangerous and can cause collisions.
- Underinflation increases tire flexing and can result in overheating and tire failure.
- Overinflation reduces a tire's ability to cushion shock. Objects on the road and chuckholes can cause damage that result in tire failure.
- Overinflated or underinflated tires can affect vehicle handling and can fail suddenly, resulting in loss of vehicle control.
- Unequal tire pressures can cause steering problems. You could lose control of your vehicle.
- Unequal tire pressures from one side of the vehicle to the other can cause the vehicle to drift to the right or left.
- Always drive with each tire inflated to the recommended cold tire inflation pressure.

Both underinflation and overinflation affect the stability of the vehicle and can produce a feeling of sluggish response or over responsiveness in the steering.

NOTE:

- Unequal tire pressures from side to side may cause erratic and unpredictable steering response.
- Unequal tire pressure from side to side may cause the vehicle to drift left or right.

Fuel Economy

Underinflated tires will increase tire rolling resistance resulting in higher fuel consumption.

Tread Wear

Improper cold tire inflation pressures can cause abnormal wear patterns and reduced tread life, resulting in the need for earlier tire replacement.

Ride Comfort And Vehicle Stability

Proper tire inflation contributes to a comfortable ride. Overinflation produces a jarring and uncomfortable ride.

Tire Inflation Pressures

The proper cold tire inflation pressure is listed on the driver's side B-pillar or rear edge of the driver's side door.

NOTE:

The recommended pressures may be different for the front and rear axles.

At least once a month:

- Check and adjust tire pressure with a good quality pocket-type pressure gauge. Do not make a visual judgment when determining proper inflation. Tires may look properly inflated even when they are under-inflated.

- Inspect tires for signs of tire wear or visible damage.

CAUTION!

After inspecting or adjusting the tire pressure, always reinstall the valve stem cap. This will prevent moisture and dirt from entering the valve stem, which could damage the valve stem.

Inflation pressures specified on the placard are always "cold tire inflation pressure". Cold tire inflation pressure is defined as the tire pressure after the vehicle has not been driven for at least three hours, or driven less than 1 mile (1.6 km) after sitting for a minimum of three hours. The cold tire inflation pressure must not exceed the maximum inflation pressure molded into the tire sidewall.

Check tire pressures more often if subject to a wide range of outdoor temperatures, as tire pressures vary with temperature changes.

Tire pressures change by approximately 1 psi (7 kPa) per 12°F (7°C) of air temperature change. Keep this in mind when checking tire pressure inside a garage, especially in the Winter.

Example: If garage temperature = 68°F (20°C) and the outside temperature = 32°F (0°C) then the cold tire inflation pressure should be increased by 3 psi (21 kPa), which equals 1 psi (7 kPa) for every 12°F (7°C) for this outside temperature condition.

Tire pressure may increase from 2 to 6 psi (13 to 40 kPa) during operation. DO NOT reduce this normal pressure buildup or your tire pressure will be too low.

Tire Pressures For High Speed Operation

The manufacturer advocates driving at safe speeds and within posted speed limits. Where speed limits or conditions are such that the vehicle can be driven at high speeds, maintaining correct tire inflation pressure is very important. Increased tire pressure and reduced vehicle loading may be required for high-speed vehicle operation. Refer to an authorized tire dealer or original equipment vehicle dealer for recommended safe operating speeds, loading and cold tire inflation pressures.

WARNING!

High speed driving with your vehicle under maximum load is dangerous. The added strain on your tires could cause them to fail. You could have a serious collision. Do not drive a vehicle loaded to the maximum capacity at continuous speeds above 75 mph (120 km/h).

Radial Ply Tires

WARNING!

Combining radial ply tires with other types of tires on your vehicle will cause your vehicle to handle poorly. The instability could cause a collision. Always use radial ply tires in sets of four. Never combine them with other types of tires.

Tire Repair

If your tire becomes damaged, it may be repaired if it meets the following criteria:

- The tire has not been driven on when flat.
- The damage is only on the tread section of your tire (sidewall damage is not repairable).
- The puncture is no greater than ¼ of an inch (6 mm).

Consult an authorized tire dealer for tire repairs and additional information.

Damaged Run Flat tires, or Run Flat tires that have experienced a loss of pressure should be replaced immediately with another Run Flat tire of identical size and service description (Load Index and Speed Symbol). Replace the tire pressure sensor as well as it is not designed to be reused.

Run Flat Tires — If Equipped

Run Flat tires allow you the capability to drive 50 miles (80 km) at 50 mph (80 km/h) after a rapid loss of inflation pressure. This rapid loss of inflation is referred to as the Run Flat mode. A Run Flat mode occurs when the tire inflation pressure is of/or below 14 psi (96 kPa). Once a Run Flat tire reaches the Run Flat mode it has limited driving capabilities and needs to be replaced immediately. A Run Flat tire is not repairable. When a Run Flat tire is changed after being driven in a Run Flat mode 14 psi (96 kPa) condition, please replace the TPMS sensor as it is not designed to be reused.

NOTE:

TPMS sensor must be replaced after driving the vehicle on a flat tire condition.

It is not recommended driving a vehicle loaded at full capacity or to tow a trailer while a tire is in the Run Flat mode.

Tire Spinning

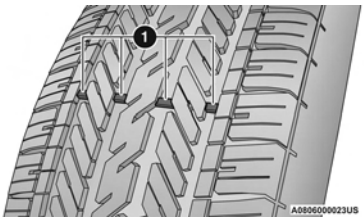
When stuck in mud, sand, snow, or ice conditions, do not spin your vehicle's wheels above 30 mph (48 km/h) or for longer than 30 seconds continuously without stopping.

WARNING!

Fast spinning tires can be dangerous. Forces generated by excessive wheel speeds may cause tire damage or failure. A tire could explode and injure someone. Do not spin your vehicle's wheels faster than 30 mph (48 km/h) for more than 30 seconds continuously when you are stuck, and do not let anyone near a spinning wheel, no matter what the speed.

Tread Wear Indicators

Tread wear indicators are in the original equipment tires to help you in determining when your tires should be replaced.



Tire Tread

1 — Tread Wear Indicators

These indicators are molded into the bottom of the tread grooves. They will appear as bands when the tread depth becomes 1/16 of an inch (1.6 mm). When the tread is worn to the tread wear indicators, the tire should be replaced.

For further information ⇨ page 41 .

Life Of Tire

The service life of a tire is dependent upon varying factors including, but not limited to:

- Driving style
- Tire pressure - Improper cold tire inflation pressures can cause uneven wear patterns to develop across the tire tread. These abnormal wear patterns will reduce tread life, resulting in the need for earlier tire replacement.
- Distance driven
- Performance tires, tires with a speed rating of V or higher, and Summer tires typically have a reduced tread life. Rotation of these tires per the vehicle scheduled maintenance is highly recommended.

WARNING!

Tires and the spare tire should be replaced after six years, regardless of the remaining tread. Failure to follow this warning can result in sudden tire failure. You could lose control and have a collision resulting in serious injury or death.

NOTE:

Wheel valve stem must be replaced as well when installing new tires due to wear and tear in existing tires.

Keep dismounted tires in a cool, dry place with as little exposure to light as possible. Protect tires from contact with oil, grease, and gasoline.

Replacement Tires

The tires on your new vehicle provide a balance of many characteristics. They should be inspected regularly for wear and correct cold tire inflation pressures. The manufacturer strongly recommends using tires equivalent to the originals in size, quality and performance when replacement is needed ⇨ page 41 . Refer to the Tire And Loading Information Placard or the Vehicle Certification Label for the size designation of your tire. The Load Index and Speed Symbol for your tire will be found on the original equipment tire sidewall.

See the Tire Sizing Chart example found in the "Tire Safety Information" section of this manual for more information relating to the Load Index and Speed Symbol of a tire.

It is recommended to replace the two front tires or two rear tires as a pair. Replacing just one tire can seriously affect your vehicle's handling. If you ever replace a wheel, make sure that the wheel's specifications match those of the original wheels.

It is recommended you contact an authorized tire dealer or original equipment dealer with any questions you may have on tire specifications or capability. Failure to use equivalent replacement tires may adversely affect the safety, handling, and ride of your vehicle.

WARNING!

- Do not use a tire, wheel size, load rating, or speed rating other than that specified for your vehicle. Some combinations of unapproved tires and wheels may change suspension dimensions and performance characteristics, resulting in changes to steering, handling, and braking of your vehicle. This can cause unpredictable handling and stress to steering and suspension components. You could lose control and have a collision resulting in serious injury or death. Use only the tire and wheel sizes with load ratings approved for your vehicle.
- Never use a tire with a smaller load index or capacity, other than what was originally equipped on your vehicle. Using a tire with a smaller load index could result in tire overloading and failure. You could lose control and have a collision.
- Failure to equip your vehicle with tires having adequate speed capability can result in sudden tire failure and loss of vehicle control.

CAUTION!

Replacing original tires with tires of a different size may result in false speedometer and odometer readings.

DEPARTMENT OF TRANSPORTATION UNIFORM TIRE QUALITY GRADES

The following tire grading categories were established by the National Highway Traffic Safety Administration. The specific grade rating assigned by the tire's manufacturer in each category is shown on the sidewall of the tires on your vehicle.

All passenger vehicle tires must conform to Federal safety requirements in addition to these grades.

Treadwear

The Treadwear grade is a comparative rating, based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear one and one-half times as well on the government course as a tire graded 100. The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices, and differences in road characteristics and climate.

Traction Grades

The Traction grades, from highest to lowest, are AA, A, B, and C. These grades represent the tire's ability to stop on wet pavement, as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.

WARNING!

The traction grade assigned to this tire is based on straight-ahead braking traction tests, and does not include acceleration, cornering, hydroplaning, or peak traction characteristics.

Temperature Grades

The Temperature grades are A (the highest), B, and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat, when tested under controlled conditions on a specified indoor laboratory test wheel.

Sustained high temperature can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure. The grade C corresponds to a level of performance, which all passenger vehicle tires must meet under the Federal Motor Vehicle Safety Standard No. 109. Grades B and A represent higher levels of performance on the laboratory test wheel, than the minimum required by law.

WARNING!
The temperature grade for this tire is established for a tire that is properly inflated and not overloaded. Excessive speed, underinflation, or excessive loading, either separately or in combination, can cause heat buildup and possible tire failure.

REPORTING SAFETY DEFECTS

In The 50 United States And Washington, D.C.

If you believe that your vehicle has a defect that could cause a crash or cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying FCA US LLC.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, an authorized dealer or FCA US LLC.

To contact NHTSA, you may call the Vehicle Safety Hotline toll free at 1-888-327-4236 (TTY: 1-800-424-9153); or go to http://www.safercar.gov; or write to: Administrator, NHTSA, 1200 New Jersey Avenue, SE., West Building, Washington, D.C. 20590. You can also obtain other information about motor vehicle safety from http://www.safercar.gov.

In Canada

If you believe that your vehicle has a safety defect, you should contact the Customer Service Department immediately. Canadian customers who wish to report a safety defect to the Canadian government should contact Transport Canada, Motor Vehicle Defect Investigations and Recalls at 1-800-333-0510 or go to wwwapps.tc.gc.ca/Saf-Sec-Sur/7/PCDB-BDPP.

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