XT4
Owner's Manual

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Contents

Introduction

This manual describes features that may or may not be on the vehicle because of optional equipment that was not purchased on the vehicle, model variants, country specifications, features/applications that may not be available in your region, or changes subsequent to the printing of this owner's manual.

Refer to the purchase documentation relating to your specific vehicle to confirm the features.

Keep this manual in the vehicle for quick reference.

Danger, Warning, and Caution

Warning messages found on vehicle labels and in this manual describe hazards and what to do to avoid or reduce them.

⚠ Danger

Danger indicates a hazard with a high level of risk which will result in serious injury or death.

⚠ Warning

Warning indicates a hazard that could result in injury or death.

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Caution

Caution indicates a hazard that could result in property or vehicle damage.

A circle with a slash through it is a safety symbol which means “Do not,” “Do not do this,” or “Do not let this happen.”

Symbols

The vehicle has components and labels that use symbols instead of text. Symbols are shown along with the text describing the operation or information relating to a specific component, control, message, gauge, or indicator.

: Shown when the owner's manual has additional instructions or information.

: Shown when the service manual has additional instructions or information.

: Shown when there is more information on another page — “see page.”

Vehicle Symbol Chart

Here are some additional symbols that may be found on the vehicle and what they mean. See the features in this manual for information.

: Air Conditioning System

: Air Conditioning Refrigerant Oil

: Airbag Readiness Light

: Antilock Brake System (ABS)

: Brake System Warning Light

: Dispose of Used Components Properly

: Do Not Apply High Pressure Water

: Engine Coolant Temperature

: Flame/Fire Prohibited

: Flammable

: Forward Collision Alert

: Fuse Block Cover Lock Location

: Fuses

: ISOFIX/LATCH System Child Restraints

: Keep Fuse Block Covers Properly Installed

: Lane Change Alert

: Lane Departure Warning

: Lane Keep Assist

: Malfunction Indicator Lamp

: Oil Pressure

: Park Assist

: Pedestrian Ahead Indicator

: Power

: Rear Cross Traffic Alert

: Registered Technician

: Remote Vehicle Start

 : Risk of Electrical Fire

 : Seat Belt Reminders

 : Side Blind Zone Alert

 : Stop/Start

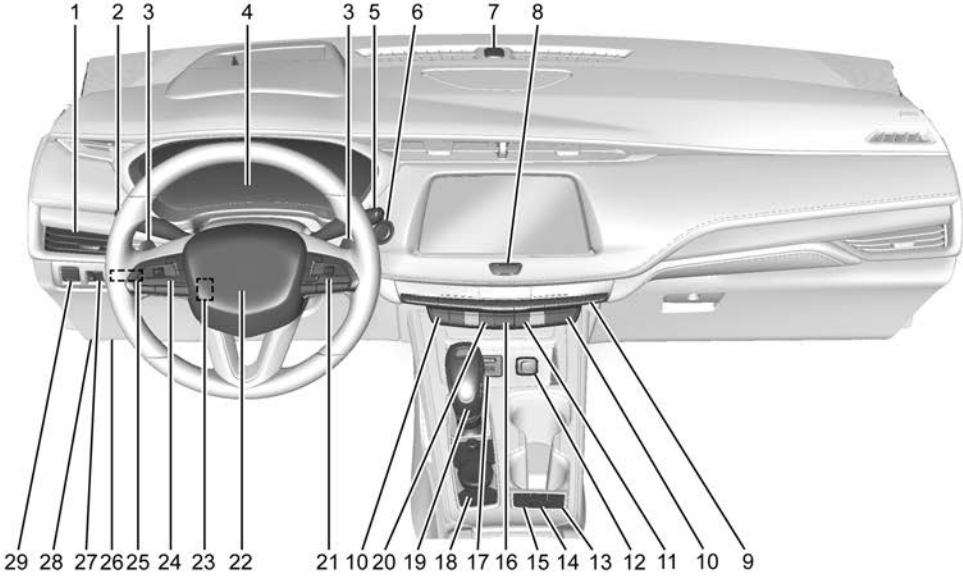
 : Tyre Pressure Monitor

 : Traction Control/StabiliTrak/ Electronic Stability Control (ESC)

 : Under Pressure

 : Vehicle Ahead Indicator

Instrument Panel Overview



1. *Air Vents* ⇨ *187*.
2. *Exterior Lamp Controls* ⇨ *127*.

   Indicator Lever. See *Turn and Lane-Change Signals* ⇨ *130*.

   IntelliBeam System Button (If Equipped). See *Exterior Lamp Controls* ⇨ *127*.
3. Tap Shift Controls. See *Manual Mode* ⇨ *220* (If Equipped).
4. *Instrument Cluster* ⇨ *99*.

   Driver Information Centre (DIC) Display. See *Driver Information Centre (DIC)* ⇨ *115*.
5. *Windscreen Wiper/Washer* ⇨ *92*.

   Rear Window Wiper/Washer ⇨ *94*.
6. ENGINE START/STOP Button. See *Ignition Positions* ⇨ *205*.
7. Light Sensor. See *Automatic Headlamp System* ⇨ *129*.
8. Home Button. See *Overview* ⇨ *135*.
9. *Dual Automatic Climate Control System* ⇨ *183*.
10. *Heated and Ventilated Front Seats* ⇨ *45* (If Equipped).
11. *Lane Keep Assist (LKA)* ⇨ *260* (If Equipped).
12. *Power Sockets* ⇨ *95*.
13. MODE Switch. See *Driver Mode Control* ⇨ *225*.
14. Auto Stop Disable Switch. See *Stop/Start System* ⇨ *208*.
15. *Traction Control/Electronic Stability Control* ⇨ *224*.
16. *Hazard Lights* ⇨ *130*.
17. *USB Port* ⇨ *143*.
18. Infotainment Controls. See *Overview* ⇨ *135*.
19. Shift Lever. See *Automatic Transmission* ⇨ *215*.
20. Park Assist Button. See *Assistance Systems for Parking or Reversing* ⇨ *241*.

    Automatic Parking Assist (APA) Button. See *Assistance Systems for Parking or Reversing* ⇨ *241*.
21. *Steering Wheel Controls* ⇨ *91*.

    Driver Information Centre (DIC) Controls. See *Driver Information Centre (DIC)* ⇨ *115*.
22. *Horn* ⇨ *92*.
23. *Steering Wheel Adjustment* ⇨ *91* (Out of View).
24. *Cruise Control* ⇨ *226*.

    Adaptive Cruise Control (Advanced) ⇨ *231* (If Equipped).

    Heated Steering Wheel ⇨ *91* (If Equipped).

    Forward Collision Alert (FCA) System ⇨ *250* (If Equipped).
25. *Head-Up Display (HUD)* ⇨ *118* (Out of View) (If Equipped).
26. Data Link Connector. See *Malfunction Indicator Lamp (Check Engine Light)* ⇨ *106* (Out of View).
27. *Instrument Panel Illumination Control* ⇨ *131*.
28. Bonnet Release. See *Bonnet* ⇨ *287* (Out of View).
29. *Electric Parking Brake* ⇨ *222*.

Keys, Doors, and Windows

Keys and Locks

Keys

⚠ Warning

Leaving children in a vehicle with a Remote Keyless Entry (RKE) transmitter is dangerous and children or others could be seriously injured or killed. They could operate the power windows or other controls or make the vehicle move. The windows will function with the RKE transmitter in the vehicle, and children or others could be caught in the path of a closing window. Do not leave children in a vehicle with an RKE transmitter.

The key inside the Remote Keyless Entry (RKE) transmitter can be used for all locks.

To remove the key, press the button near the bottom of the transmitter, and pull the key out. Never pull the key out without pressing the button.

If it becomes difficult to turn the key, inspect the key blade for debris.

See your dealer if a new key is needed.

Remote Keyless Entry (RKE) System

See *Declaration of Conformity* ⇨ *376*.

If there is a decrease in the Remote Keyless Entry (RKE) operating range:

- Check the distance. The transmitter may be too far from the vehicle.
- Check the location. Other vehicles or objects may be blocking the signal.
- Check the transmitter's battery. See “Battery Replacement” later in this section.
- If the transmitter is still not working correctly, see your dealer or a qualified technician for service.

Remote Keyless Entry (RKE) System Operation

The Keyless Access system allows for vehicle entry when the transmitter is within 1 m (3 ft). See “Keyless Access Operation” following.

The RKE transmitter functions may work up to 60 m (197 ft) away from the vehicle.

Other conditions can affect the performance of the transmitter. See *Remote Keyless Entry (RKE) System* ⇨ *7*.

With Power Tailgate Shown, Without Similar

: Press to lock all doors and the fuel flap. The indicators may flash and/or the horn may sound on the second press to indicate locking. See *Vehicle Personalisation* ⇨ *121*.

If the driver door is open when is pressed, all doors will lock and the driver door will immediately unlock, if Open Door Anti-Lockout is enabled. See *Vehicle Personalisation* ⇨ *121*. If the passenger door is open when is pressed, all doors lock.

Pressing may also arm the alarm system. See *Vehicle Alarm System* ⇨ *25*.

If equipped with remote folding mirrors, press and hold for one second to remotely fold the mirrors, if enabled. See *Vehicle Personalisation* ⇨ *121*.

: Press to unlock the driver door and the fuel door. Press again within five seconds to unlock all doors. The RKE transmitter can be programmed to unlock all doors on the first button press. See *Vehicle Personalisation* ⇨ *121*. The indicators may flash to indicate unlocking. See *Vehicle Personalisation* ⇨ *121*. When remotely unlocking the vehicle at night, the lights come on briefly to light your approach to the vehicle.

Pressing will disarm the alarm system. See *Vehicle Alarm System* ⇨ *25*.

If equipped with remote folding mirrors, press and hold for one second to remotely unfold the mirrors, if enabled. See *Vehicle Personalisation* ⇨ *121*.

Press and hold until the windows fully open. Windows will not operate unless remote window operation is enabled. See *Vehicle Personalisation* ⇨ *121*.

: Press and release and then immediately press and hold for at least four seconds to start the engine from outside the vehicle using the RKE transmitter. See *Remote Vehicle Start* ⇨ *13*.

: Press and release one time to initiate vehicle locator. The exterior lamps flash and the horn chirps three times. Press and hold for three seconds to sound the panic alarm. The horn sounds and the indicators flash for 30 seconds, or until is pressed again or the vehicle is started.

: If equipped, press twice quickly to open or close the tailgate.

Press once to stop the liftgate from moving.

Auto Door Relock : If a door is not opened or the vehicle is not started within three minutes of unlocking the vehicle and disarming the alarm system with the RKE transmitter, all doors are automatically locked and the vehicle alarm system is re-armed.

Keyless Access Operation

With the Keyless Access system, you can lock and unlock the doors and access the tailgate without removing the RKE transmitter from your pocket, handbag, briefcase, etc. The RKE transmitter should be within 1 m (3 ft) of the tailgate or door being opened.

Keyless Access can be programmed to unlock all doors on the first lock/unlock press from the driver door. Keyless Access can also be turned on or off. See *Vehicle Personalisation* ⇨ *121*.

If equipped with memory seats, RKE transmitters 1 and 2 are linked to seating positions of memory 1 or 2. See *Memory Seats* ⇨ *43*.

Keyless Unlocking/Locking from the Driver Door

When the doors are locked and the RKE transmitter is within 1 m (3 ft) of the driver door handle, pressing the lock/unlock button on the driver door handle will unlock the driver door. If the lock/unlock button is pressed again within five seconds, all passenger doors will unlock.

Driver Shown, Passenger Similar

Pressing the lock/unlock button will cause all doors to lock if any of the following occur:

- It has been more than five seconds since the first lock/unlock button press.
- Two lock/unlock button presses were used to unlock all doors.
- Any vehicle door has opened and all doors are now closed.

Keyless Unlocking/Locking from Passenger Doors

When the doors are locked and the RKE transmitter is within 1 m (3 ft) of the door handle, pressing the lock/unlock button on that door handle will unlock all doors. Pressing the lock/unlock button will cause all doors to lock if either of the following occurs:

- The lock/unlock button was used to unlock all doors.
- Any vehicle door has opened and all doors are now closed.

Disable/Enable Keyless Unlocking of Exterior Door Handles and Tailgate

If equipped, keyless unlocking of the exterior door handles and tailgate can be disabled and enabled.

Disabling Keyless Unlocking:

With the vehicle off, press and hold and on the RKE transmitter at the same time for approximately three seconds. The indicator lamps will flash four times quickly to indicate access is disabled. Using any exterior handle to unlock the doors or open the tailgate will cause the indicator lamps to flash four times quickly, indicating access is disabled. If disabled, disarm the alarm system before starting the vehicle.

Enabling Keyless Unlocking:

With the vehicle off, press and hold and on the RKE transmitter at the same time for approximately three seconds. The indicator lamps will flash twice quickly to indicate access is enabled.

Anti-Theft Locking from Any Door

When all doors are locked using the lock/unlock button, a second press of the button within five seconds will activate the Anti-theft Locking System.

Anti-Theft Unlocking from Any Door

When all doors are unlocked using the lock/unlock button, the Anti-theft Locking system will be deactivated.

Passive Locking

With Keyless Access, this vehicle will lock several seconds after all doors have been closed if the vehicle is off and at least one RKE transmitter has been removed or none remain in the interior.

The fuel door will also lock.

If other electronic devices interfere with the RKE transmitter signal, the vehicle may not detect the RKE transmitter inside the vehicle.
If passive locking is enabled, the doors may lock with the RKE transmitter inside the vehicle. Do not leave the RKE transmitter in an unattended vehicle.

To customise the doors to automatically lock when exiting the vehicle, see *Vehicle Personalisation* ⇨ *121*.

Temporary Disable of Passive Locking

Temporarily disable passive locking by pressing and holding on the interior door switch with a door open for at least four seconds, or until three chimes are heard. Passive locking will then remain disabled until on the interior door is pressed, or until the vehicle is switched on.

Remote Left in Vehicle Alert

When the vehicle is turned off and an RKE transmitter is left in the vehicle, the horn will chirp three times after all doors are closed. To turn on or off, see *Vehicle Personalisation* ⇨ *121*.

Remote No Longer in Vehicle Alert

If the vehicle is on, with a door open, and then all doors are closed, the vehicle will check for RKE transmitter(s) inside. If an RKE transmitter is not detected, the Driver Information Centre (DIC) will display NO REMOTE DETECTED and the horn will chirp three times.

This occurs only once each time the vehicle is driven.

To turn on or off, see *Vehicle Personalisation* ⇨ *121*.

Keyless Tailgate Opening

Press the touch pad on the tailgate handle to open the tailgate if the RKE transmitter is within 1 m (3 ft).

Key Access

To access a vehicle with a weak transmitter battery, see *Door Locks* ⇨ *14*.

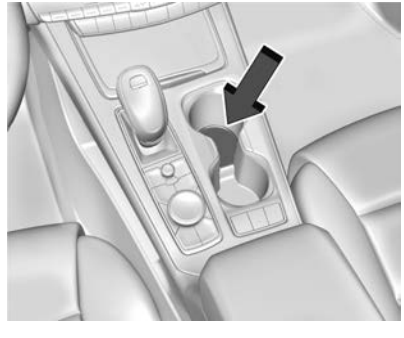
Programming Transmitters to the Vehicle

Only RKE transmitters programmed to this vehicle will work. If a transmitter is lost or stolen, a replacement can be purchased and programmed through your dealer. When the replacement transmitter is programmed to this vehicle, all remaining transmitters must also be reprogrammed. Any lost or stolen transmitters will no longer work once the new transmitter is programmed.

Starting the Vehicle with a Low Transmitter Battery

To improve vehicle security, the transmitter is equipped with a motion sensor. When starting the vehicle, if the transmitter has been idle for a while, move the transmitter slightly and try starting the vehicle. When starting the vehicle, if the transmitter battery is discharged or there is signal interference, the DIC may display NO REMOTE DETECTED, REPLACE BATTERY IN KEY, or NO REMOTE DETECTED PLACE KEY IN KEY POCKET THEN START YOUR VEHICLE. If the vehicle still does not start and the DIC displays the same warnings above, follow the steps shown below.

To start the vehicle:



1. Place the transmitter in the front cupholder.
2. With the vehicle in P (Park) or N (Neutral), press the brake pedal and ENGINE START/STOP.

Replace the transmitter battery as soon as possible.

Battery Replacement

⚠ Warning

Never allow children to play with the RKE transmitter. The transmitter contains a small battery, which can be a choking hazard. If swallowed, internal burns can occur, resulting in severe injury or death. Seek medical attention immediately if a battery is swallowed.

⚠ Warning

To avoid personal injury, do not touch metal surfaces on the RKE transmitter when it has been exposed to extreme heat. These surfaces can be hot to the touch at temperatures above 59 °C (138 °F).

Caution

When replacing the battery, do not touch any of the circuitry on the transmitter. Static from your body could damage the transmitter.

Caution

Always replace the battery with the correct type. Replacing the battery with an incorrect type could potentially create a risk of battery explosion. Dispose of used batteries according to instructions and local laws. Do not attempt to burn, crush, or cut the used battery, and avoid exposing the battery to environments with extremely low air pressures or high temperatures.

Caution

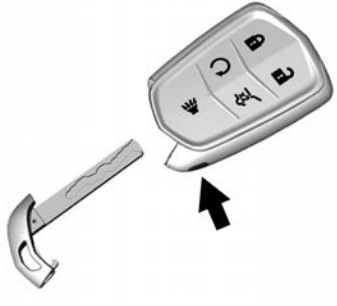
If the RKE transmitter is not reassembled properly, liquid could enter the housing and damage the circuitry, resulting in an RKE transmitter malfunction and/or

(Continued)

Caution (Continued)

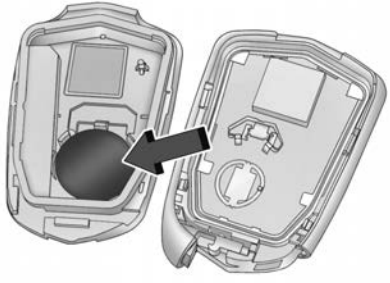
failure. To prevent damage, always follow the steps for RKE transmitter reassembly in this manual to ensure the transmitter is sealed properly whenever the RKE transmitter is opened.

Replace the battery if the DIC displays REPLACE BATTERY IN REMOTE KEY.



1. Press the button on the side of the transmitter near the bottom and pull the key out. Never pull the key out without pressing the button.

2. Separate the two halves of the transmitter using a flat tool inserted into the bottom centre of the transmitter. Do not use the key slot.



3. Remove the old battery. Do not use a metal object.
4. Insert the new battery on the back housing, positive side facing down. Replace with a CR2032 or equivalent battery.
5. Ensure that the silicone mat is correctly positioned with no gaps or wrinkles.
6. Set transmitter on a hard surface button side down and press the other half straight down to force the halves together.
7. Reinsert the key.

CE

Batteries in this product must not be disposed of with household waste. Batteries must be recycled at an appropriate facility. Contact local authorities for details on recycling.

Remote Vehicle Start

This feature allows the engine to be started from outside of the vehicle.

: This button is on the RKE transmitter for remote start.

The climate control system will determine the best mode and temperature setting for operation during the remote start. Once the vehicle is started with the ENGINE START/STOP button, the climate control system will begin to operate at the last customer-selected operating mode and temperature. The rear demist may come on during remote start based on cold ambient conditions. The rear fog indicator light does not come on during remote start.

If the vehicle has auto heated or ventilated seats they may come on during a remote start. See *Heated and Ventilated Front Seats* ⇨ *45*.

Laws in some local communities may restrict the use of remote starters. For example, some laws may require a person using remote start to have the vehicle in view. Check local regulations for any requirements.

Do not use remote start if the vehicle is low on fuel. The vehicle may run out of fuel.

Other conditions can affect the performance of the transmitter. See *Remote Keyless Entry (RKE) System* ⇨ *7*.

Starting the Engine Using Remote Start

1. Press and release on the RKE transmitter.
2. Immediately press and hold for at least four seconds or until the indicator lamps flash. The indicators flashing confirms the request to remote start the vehicle has been received.

   During the remote start the doors will be locked and the parking lamps will remain on as long as the engine is running.

   The engine will shut off after 15 minutes unless a time extension is made or the ignition is turned on.
3. With the RKE transmitter in the vehicle, press the brake pedal and start the vehicle to drive.

Extending Engine Run Time

The engine run time can also be extended by another 15 minutes, if during the first 15 minutes Steps 1and 2 are repeated while the engine is still running. An extension can be requested 30 seconds after starting. This provides a total of 30 minutes.

The remote start can only be extended once.

When the remote start is extended, the second 15-minute period is added on to the first 15 minutes for a total of 30 minutes.

A maximum of two remote starts, or a remote start with an extension, are allowed between ignition cycles.

The ignition must be turned on and then off before the remote start procedure can be used again.

Cancelling a Remote Start

To cancel a remote start, do any of the following:

- Press and hold until the parking lamps turn off.
- Turn on the hazard warning lights.
- Turn the vehicle on and then off.

Conditions in Which Remote Start Will Not Work

The remote start will not operate if any of the following occur:

- The RKE transmitter is in the vehicle.
- The vehicle is not turned off.
- The bonnet is not closed.
- The hazard warning flashers are on.
- There is an emission control system malfunction.
- The engine coolant temperature is too high.
- The oil pressure is low.
- Two remote vehicle starts or a start with an extension have already been used.
- The vehicle is not in P (Park).

Door Locks

⚠ Warning

Unlocked doors can be dangerous.

- Passengers, especially children, can easily open the doors and fall out of a moving vehicle. The doors can be unlocked and opened while the vehicle is moving. The chance of being thrown out of the vehicle in a crash is increased if the doors are

(Continued)

Warning (Continued)

not locked. So, all passengers should wear seat belts properly and the doors should be locked whenever the vehicle is driven.

- Young children who get into unlocked vehicles may be unable to get out. A child can be overcome by extreme heat and can suffer permanent injuries or even death from heat stroke. Always lock the vehicle whenever leaving it.
- Outsiders can easily enter through an unlocked door when you slow down or stop the vehicle. Locking the doors can help prevent this from happening.

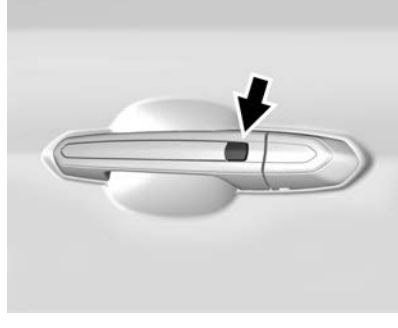
To lock/unlock the doors from outside the vehicle:

- Press or on the RKE transmitter. See *Remote Keyless Entry (RKE) System Operation* ⇨ *7*.
- Use the key in the key lock cylinder in the driver door. The key lock cylinder is covered with a cap.

To lock/unlock the doors from inside the vehicle:

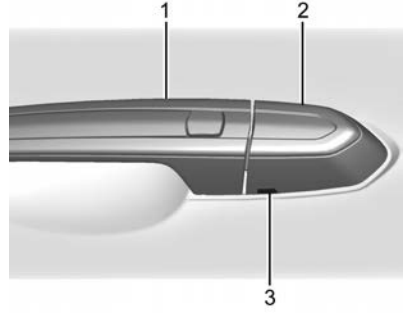
- Press or on the power door lock switch. See *Power Door Locks* ⇨ *16*.
- Push down on the door lock knob to lock a door.
- Pull the door handle once to unlock it. Pull the door handle again to unlatch it.

Keyless Access



The RKE transmitter must be within 1 m (3 ft) of the door or tailgate being opened. Press the button on the door handle to open. See "Keyless Access" in *Remote Keyless Entry (RKE) System Operation* ⇨ *7*.

Driver Door Key Lock Cylinder Access (In Case of Dead Battery)



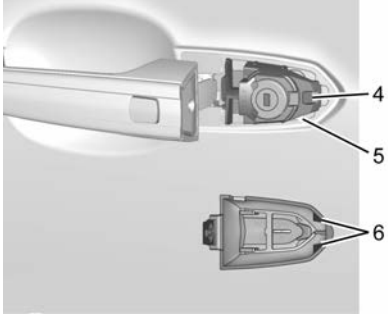
To access the driver door key lock cylinder:

1. Pull the door handle (1) to the open position and hold it open until the cap removal is complete.
2. Insert the key into the slot (3) on the bottom of the cap (2) and lift the key upward.
3. Move the cap (2) rearward and remove.

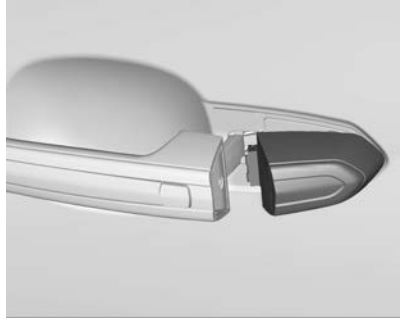
4. Use the key in the cylinder.

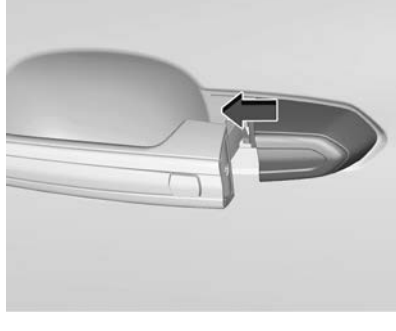
To replace the cap:

1. Pull the door handle (1) to the open position and hold it open until the cap installation is complete.



2. Insert the two tabs (6) at the back of the cap between the seal (5) and the metal base (4).



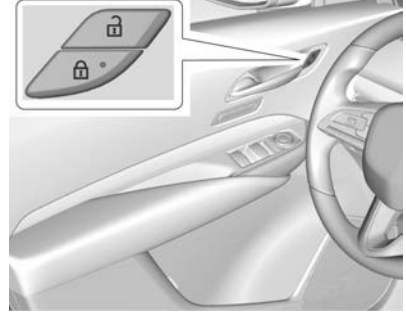


3. Slide the cap forward and press the forward edge to install the cap in place.
4. Release the door handle.
5. Check that the cap is secure.

Free-Turning Locks

The door key lock cylinder turns freely when either the wrong key is used, or the correct key is not fully inserted. The free-turning door lock feature prevents the lock from being forced open. To reset the lock, turn it to the vertical position with the correct key fully inserted. Remove the key and insert it again. If this does not reset the lock, turn the key halfway around in the cylinder and repeat the reset procedure.

Power Door Locks



: Press to lock the doors. The indicator light in the switch will illuminate when locked.

: Press to unlock the doors.

The fuel door is also locked or unlocked using these features.

Delayed Locking

This feature delays the locking of the doors until five seconds after all doors are closed.

Delayed locking can only be turned on when Open Door Anti-Lockout has been turned off.

When is pressed on the power door lock switch while the door is open, a chime will sound three times indicating delayed locking is active.

The doors will lock automatically five seconds after all doors are closed. If a door is reopened before that time, the five-second timer will reset when all doors are closed again.

Press on the door lock switch again or press on the RKE transmitter to lock the doors immediately.

This feature can also be programmed. See *Vehicle Personalisation* ⇨ *121*.

Automatic Door Locks

The vehicle is programmed so that when the doors are closed, the ignition is switched on, and the vehicle is shifted out of P (Park), the doors will lock.

If a vehicle door is unlocked and then opened and closed, the doors will lock either when your foot is removed from the brake or the vehicle speed becomes faster than 13 km/h (8 mph).

To unlock the doors:

- Press on the power door lock switch.
- Shift the gearbox into P (Park).

Automatic door locking can be programmed. See *Vehicle Personalisation* ⇨ *121*.

Lockout Protection

If the ignition is on or in ACC/ ACCESSORY and the power door lock switch is pressed with the driver door open, all the doors will lock and only the driver door will unlock.

If the vehicle is switched off and locking is requested while a door is open, when all doors are closed, the vehicle will check for RKE transmitter inside. If an RKE transmitter is detected and the number of RKE transmitters inside has not reduced, the driver door will unlock and the horn will chirp three times.

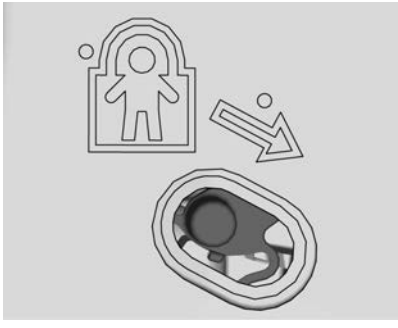
Lockout Protection can be manually overridden with the driver door open by pressing and holding on the power door lock switch.

Open Door Anti-Lockout

If Open Door Anti-Lockout is turned on and the vehicle is turned off, the driver door is open, and locking is requested, all the doors will lock and the driver door will remain unlocked. The Open Door Anti-Lockout feature can be turned on or off. See *Vehicle Personalisation* ⇨ *121*.

Safety Locks

The rear door safety locks prevent passengers from opening the rear doors from inside the vehicle.



The safety lock is on the inside edge of the rear doors. To use the safety lock:

1. Move the lever down to the lock position.
2. Close the door.
3. Do the same for the other rear door.

To open a rear door when the safety lock is on:

1. Unlock the door by activating the inside handle, by pressing the power door unlock switch, or by using the RKE transmitter.
2. Open the door from the outside.

When the safety lock is enabled, adults and older children will not be able to open the rear door from the inside. Cancel the safety locks to enable the doors to open from the inside.

To cancel the safety lock:

1. Unlock the door and open it from the outside.
2. Move the lever up to unlock. Do the same for the other door.

Doors

Tailgate

⚠ Warning

Exhaust gases can enter the vehicle if it is driven with the tailgate or boot/hatch open, or with any objects that pass through the seal between the body and the boot/hatch or tailgate. Engine exhaust contains carbon monoxide (CO) which cannot be seen or smelled. It can cause unconsciousness and even death.

(Continued)

Warning (Continued)

If the vehicle must be driven with the tailgate or boot/hatch open:

- Close all of the windows.
- Fully open the air outlets on or under the instrument panel.
- Adjust the climate control system to a setting that brings in only outside air and set the fan speed to the highest setting. See “Climate Control Systems” in the Index.
- If the vehicle is equipped with a power tailgate, disable the power tailgate function.

See *Engine Exhaust ⇨ 211*.

Caution

To avoid damage to the tailgate or tailgate glass, make sure the area above and behind the tailgate is clear before opening it.

Manual Tailgate

To open the tailgate, press on the power door lock switch or press on the RKE transmitter twice to unlock all doors. Press the touch pad on the underside of the tailgate handle and lift up.

Use the pull cup to lower and close the tailgate. Do not press the touch pad while closing the tailgate. This will cause the tailgate to be unlatched.

For Keyless Access, the RKE transmitter must be within 1 m (3 ft) of the tailgate to automatically unlock it. See *Remote Keyless Entry (RKE) System Operation* ⇨ *7*.

The tailgate has an electric latch. If the battery is disconnected or has low voltage, the tailgate will not open. The tailgate will resume operation when the battery is reconnected and charged.

Always close the tailgate before driving.

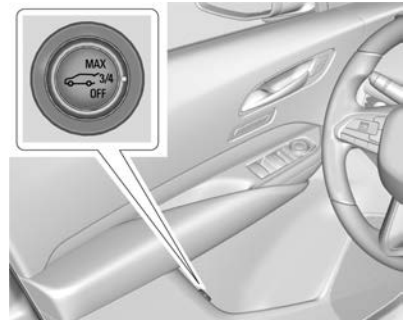
Power Tailgate Operation

⚠ Warning

You or others could be injured if caught in the path of the power tailgate. Make sure there is no one in the way of the tailgate as it is opening and closing.

Caution

Driving with an open and unsecured tailgate may result in damage to the power tailgate components.



The power tailgate switch is on the driver door. The vehicle must be in P (Park).

The modes are:

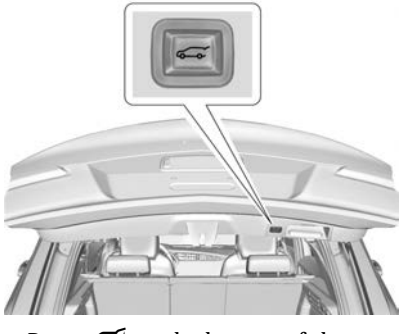
MAX : Opens to maximum height.

3/4 : Opens to a reduced height that can be set from 3/4 to fully open. Use to prevent the tailgate from opening into overhead obstructions such as a garage door or roof-mounted cargo. The tailgate can be manually opened all the way.

OFF : Opens manually only.

To power open or close the tailgate, select MAX or 3/4 mode.

- Press twice quickly on the RKE transmitter until the tailgate moves.
- Press on the driver door. The driver door must either be unlocked or locked without the security armed.
- Press the touch pad on the underside of the tailgate handle after unlocking all doors. A locked vehicle can be opened if the RKE transmitter is within 1 m (3 ft) of the touch pad.



- Press on the bottom of the tailgate next to the pull cup to close.

Press any tailgate button, or the touch pad, or on the RKE transmitter while the tailgate is moving to stop it. Press any tailgate button again or press twice quickly on the RKE transmitter to restart the operation in the reverse direction. Pressing the touch pad on the tailgate handle will restart the motion, but only in the opening direction.

Caution

Manually forcing the tailgate to open or close during a power cycle can damage the vehicle. Allow the power cycle to complete.

The power tailgate may be temporarily disabled under extreme low temperatures, or after repeated power cycling over a short period of time. If this occurs, the tailgate can still be operated manually.

If the vehicle is shifted out of P (Park) while the power function is in progress, the tailgate will continue to completion. If the vehicle is accelerated before the tailgate has completed moving, the tailgate may stop or reverse direction. Check for Driver Information Centre (DIC) messages and make sure the tailgate is closed and latched before driving.

Falling Tailgate Detection

If the power tailgate automatically closes after a power opening cycle, it indicates that the system is reacting to excess weight on the tailgate or a possible support strut failure.
A repetitive chime will sound while the falling tailgate detection feature is operating. Remove any excess weight. If the tailgate continues to automatically close after opening, see your dealer for service before using the power tailgate.

Interfering with the power tailgate motion or manually closing the tailgate too quickly after power opening may resemble a support strut failure. This could also activate the falling tailgate detection feature. Allow the tailgate to complete its operation and wait a few seconds before manually closing the tailgate.

Obstacle Detection Features

If the tailgate encounters an obstacle during a power open or close cycle, the tailgate will automatically reverse direction and move a short distance away from the obstacle. After removing the obstruction, the power tailgate operation can be used again. If the tailgate encounters multiple obstacles on the same power cycle, the power function will deactivate. After removing the obstructions, manually close the tailgate. This will allow normal power operation functions to resume.

If the vehicle is locked while the tailgate is closing, and an obstacle is encountered that prevents the tailgate from completely closing, the horn will sound as an alert that the tailgate did not close.

Setting the 3/4 Mode

To change the position the tailgate stops at when opening:

1. Select MAX or 3/4 mode and power open the tailgate.
2. Stop the tailgate movement at the desired height by pressing any tailgate button. Manually adjust the liftgate position if needed.
3. Press and hold next to the pull cup handle on the bottom of the tailgate until the indicators flash and a beep sounds. This indicates the setting has been recorded.

The liftgate cannot be set below a minimum programmable height. If there is no light flash or sound, then the height adjustment may be too low.

Manual Operation

Select OFF to manually operate the tailgate. See “Manual Tailgate” at the beginning of this section.

Caution

Attempting to move the tailgate too quickly and with excessive force may result in damage to the vehicle.

Operate the tailgate manually with a smooth motion and moderate speed. The system includes a feature which limits the manual closing speed to protect the components.

Hands-Free Operation

If equipped, the tailgate may be operated with a kicking motion under the left-hand corner of the rear bumper at the location of the projected logo.

The RKE transmitter must be within 1 m (3 ft) of the rear bumper to operate the power tailgate hands-free.

The hands-free feature will not work while the tailgate is moving. To stop the tailgate while in motion use one of the tailgate switches.

Length of Kick Zone

Kick Zone Direction

To operate, kick your foot straight up in one swift motion under the left-hand corner of the rear bumper at the location of the projected logo, then pull it back.

Caution

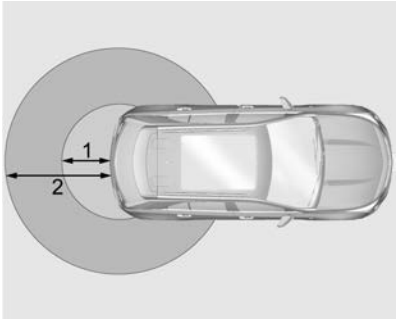
Splashing water may cause the tailgate to open. Keep the RKE transmitter away from the rear bumper detection area or turn the tailgate mode to OFF when cleaning or working near the rear bumper to avoid accidental opening.

- Do not sweep your foot side to side.
- Do not keep your foot under the bumper; the tailgate will not activate.
- Do not touch the tailgate until it has stopped moving.
- This feature may be temporarily disabled under some conditions. If the tailgate does not respond to the kick, open or close the tailgate by another method or start the vehicle. The feature will be re-enabled.

When closing the tailgate using this feature, there will be a short delay. The tail lights will flash and a chime will sound. Step away from the tailgate before it starts moving.

Projected Logo

If equipped with this feature, a vehicle logo will be projected for one minute onto the ground near the rear bumper when an RKE transmitter is detected within approximately 2 m (6 ft). The projected logo may not be visible under brighter daytime conditions.



1. 1 m (3 ft) Hands-Free Operation Detection Zone
2. 2 m (6 ft) Projected Logo Detection Zone

The projected logo shows where the kicking motion is to take place.

The projected logo will only be available for this RKE transmitter after it has been out of range for at least 20 seconds.

If an RKE transmitter is again detected within approximately 2 m (6 ft) of the tailgate, or another hands-free operation has been detected, the one-minute timer will be reset.

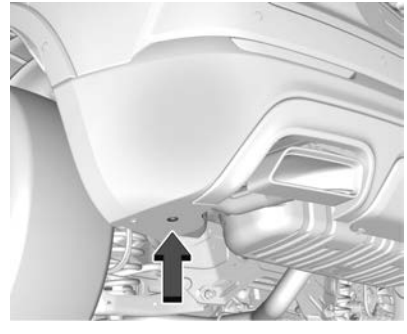
The projected logo will not work under these conditions:

- The vehicle battery is low.
- The transmission is not in P (Park).
- Hands Free Tailgate Control is set to Off in vehicle personalisation. See *Vehicle Personalisation* ⇨ *121*.
- The power tailgate is turned off.
- The vehicle remains parked for 72 hours or more, with no RKE transmitter use or Keyless Access operation. To re-enable, press any button on the RKE transmitter or open and close a vehicle door.

The projected logo will not work for a single RKE transmitter when a transmitter:

- Has been left within approximately 5 m (15 ft) of the tailgate for several minutes.
- Has been left inside the vehicle and all vehicle doors are closed.
- Has approached the area outside of the tailgate five times within 10 minutes.

Lens Cleaning



Use a soft, damp cloth to clean the recessed lens.

Hands-Free Tailgate and Projected Logo Availability

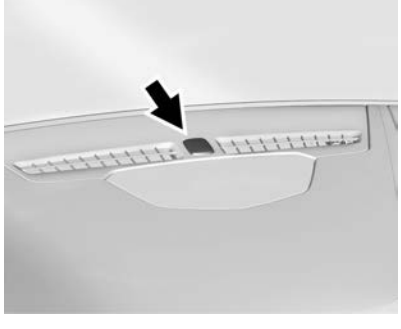
Action	Hands-Free Tailgate	Projected Logo
RKE transmitter entering projected logo detection zone	Operative	On for one minute
RKE transmitter left inside projected logo detection zone for minimum of 10 minutes	Operative	Off until RKE transmitter button is pressed or a door is opened and closed
RKE transmitter brought in and out of projected logo detection zone five times or more within 10 minutes	Operative	Off for one hour or until RKE transmitter button press or a door is opened and closed
Vehicle remains parked for more than 72 hours	Operative	Off until RKE transmitter button is pressed or a door is opened and closed
Vehicle battery is low	Non-operative	Off
Transmission is not in P (Park)	Non-operative	Off
Power tailgate is turned off	Non-operative	Off
Hands-free tailgate is disabled in vehicle personalisation	Non-operative	Off

Vehicle Security

This vehicle has theft-deterrent features; however, they do not make the vehicle impossible to steal.

Vehicle Alarm System

This vehicle has an anti-theft alarm system.



The indicator light, on the instrument panel near the windscreen, indicates the status of the system.

Off : Alarm system is disarmed.

On Solid : Vehicle is secured during the delay to arm the system.

Fast Flash : Vehicle is unsecured. A door, the hood, or the tailgate is open.

Slow Flash : Alarm system is armed.

Arming the Alarm System

1. Close the tailgate and the hood. Turn off the vehicle.
2. Lock the vehicle in one of three ways:
   - Use the RKE transmitter.
   - Use the Keyless Access system.
   - With a door open, press the inside .
3. After 30 seconds the alarm system will arm, and the indicator light will begin to slowly flash indicating the alarm system is operating. Pressing on the RKE transmitter a second time will bypass the 30-second delay and immediately arm the alarm system.

The vehicle alarm system will not arm if the doors are locked with the key.

If the driver door is opened without first unlocking with the RKE transmitter, the horn will chirp and the lights will flash to indicate pre-alarm. If the vehicle is not started, or the door is not unlocked by pressing on the RKE transmitter during the 10-second pre-alarm, the alarm will be activated.

The alarm will also be activated if a passenger door, the tailgate, or the hood is opened without first disarming the system. When the alarm is activated, the indicators flash and the horn sounds for about 30 seconds. The alarm system will then re-arm to monitor for the next unauthorised event.

Disarming the Alarm System

To disarm the alarm system or turn off the alarm if it has been activated:

- Press on the RKE transmitter.
- Unlock the vehicle using the Keyless Access system.
- Start the vehicle.

To avoid setting off the alarm by accident:

- Lock the vehicle after all occupants have left the vehicle and all doors are closed.

- Always unlock a door with the RKE transmitter or use the Keyless Access system.

Unlocking the driver door with the key will not disarm the system or turn off the alarm.

How to Detect a Tamper Condition

If is pressed and the horn chirps and the lights flash three times, the alarm was activated while the alarm system was armed.

If the alarm system has been activated, a message will appear on the DIC.

Power Sounder, Inclination Sensor and Intrusion Sensor

In addition to the standard theft-deterrent system features, this system may also have an inclination sensor, an intrusion sensor, and power sounder.

The power sounder provides an audible alarm that is different from the vehicle's horn. It has its own power source, and can sound an alarm when the vehicle's battery is compromised.

If the vehicle battery must be disconnected, first deactivate the power sounder. See “Vehicle Storage” under Battery in *Battery* ⇨ *303*.

The inclination sensor can set off the alarm if it senses movement of the vehicle, such as a change in vehicle orientation.

The intrusion sensor monitors the vehicle interior, and can set off the alarm if it senses an unauthorised entry into the vehicle's interior. Do not allow passengers or pets to remain in the vehicle when the intrusion sensor is activated.

Before arming the theft-deterrent system and activating the intrusion sensor:

- Make sure all doors and windows are completely closed.
- Secure any loose items such as a sunvisors.
- Make sure there are no obstructions blocking the sensors in the front overhead console.

Inclination and Intrusion Sensors Disable Switch

It is recommended that the inclination and intrusion sensors be deactivated if pets are left in the vehicle or if the vehicle is being transported.

With the vehicle turned off, press in the overhead console. The indicator lamp will come on momentarily, indicating that the sensor has been disabled until the next time the alarm system is armed.

Steering Column Lock

If equipped, the steering column lock is a theft-deterrent device. This feature locks the steering column when the vehicle is turned off and the driver door is opened, or when the driver door is opened and then the vehicle is turned off. The steering column unlocks when the vehicle is turned on.

The Driver Information Centre (DIC) may display one of these messages:

- A message to service the steering column lock indicates that an issue has been detected with the column lock feature and the vehicle should be serviced.
- A message that the steering column is locked indicates that the engine is running, but the steering column is still locked. It is normal for the column to be locked during a remote start, but the column should unlock after the brake pedal is depressed and the vehicle is started. No message will display during a remote start.
- A message that the steering wheel must be turned and the vehicle must be started again indicates that the column lock mechanism is engaged, the column locking device was unable to unlock the steering column, and the vehicle did not start. If this happens, immediately turn the steering wheel from side to side to disengage the column lock. If this does not unlock the steering column, turn the vehicle off and open the driver door to reset the system. Then turn the vehicle on and immediately turn the steering wheel from side to side for about 15 seconds. In some cases, significant force may be needed to disengage the column.

To prevent the steering column lock from engaging, straighten the front wheels before turning off the vehicle.

Anti-theft Locking System

⚠ Warning

Do not use the system if there are people in the vehicle! The doors cannot be unlocked or opened from the inside.

The vehicle is equipped with an anti-theft locking function in addition to the standard door locks.

The anti-theft locking system is engaged whenever you press on the Remote Keyless Entry (RKE) transmitter twice within five seconds with all doors closed and the vehicle switched off. The anti-theft lock can also be engaged using the Keyless Access system. See “Keyless Access Operation” under *Remote Keyless Entry (RKE) System Operation ⇨ 7*.

When the doors are secured with the anti-theft locking system, they cannot be unlocked or opened using the controls or handles inside the vehicle.

Press on the transmitter once to open the anti-theft lock and unlock the driver door. Pressing the button again within five seconds will unlock all of the doors.

Immobiliser Operation

This vehicle has a passive theft-deterrent system.

The system does not have to be manually armed or disarmed.

The vehicle is automatically immobilised when the vehicle is turned off.

The immobilisation system is disarmed when the ignition is on or in ACC/ACCESSORY and a valid transmitter is present in the vehicle.

The security light, in the instrument cluster, comes on if there is a problem with arming or disarming the theft-deterrent system.

The system has one or more RKE transmitters matched to an immobiliser control unit in your vehicle. Only a correctly matched RKE transmitter will start the vehicle. If the transmitter is ever damaged, you may not be able to start your vehicle.

When trying to start the vehicle, the security light may come on briefly when the ignition is turned on.

If the engine does not start and the security light stays on, there is a problem with the system. Turn the ignition off and try again.

If the vehicle will not change ignition modes (ACC/ACCESSORY, on, off), and the RKE transmitter appears to be undamaged, try another transmitter. Or, you may try placing the transmitter in the front cupholder located in the centre console. See *Remote Keyless Entry (RKE) System Operation* ⇨ *7*.

If the ignition mode will not change with the other transmitter or in the front cupholder, your vehicle needs service. If the ignition does change modes, the first transmitter may be faulty. See your dealer who can service the theft-deterrent system and have a new RKE transmitter programmed to the vehicle.

It is possible for the immobiliser system to learn new or replacement RKE transmitters. Up to eight transmitters can be programmed for the vehicle. To program additional transmitters, see “Programming Transmitters to the Vehicle” under *Remote Keyless Entry (RKE) System Operation* ⇨ *7*.

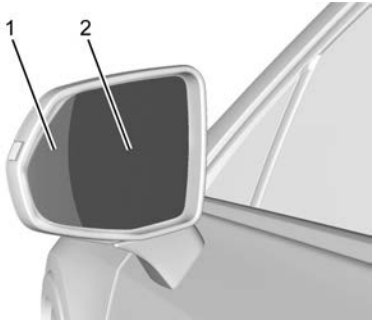
Do not leave the key or device that disarms or deactivates the theft-deterrent system in the vehicle. Do not modify or remove the system. The system may not work properly, and it could void the warranty.

Exterior Mirrors

Convex Mirrors

⚠ Warning

A convex mirror can make things, like other vehicles, look farther away than they really are. If you cut too sharply into the next lane, you could collide with a vehicle that is driving next to you. Check the inside mirror or glance over your shoulder before changing lanes.

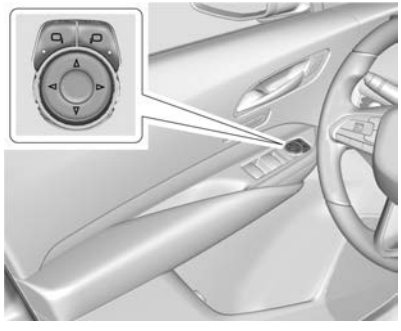


1. Wide View Side
2. Convex Side

The driver door mirror has two sides. The outboard side provides a wider field of vision when viewing lanes that are next to the vehicle. The inboard side is convex shaped, which is curved so more can be seen from the driver seat.

The passenger side mirror is convex shaped.

Power Mirrors



To adjust each mirror:

1. Press ▭◂ or ▸▭ to choose the driver or passenger side mirror. The indicator light will illuminate.
2. Press the arrows on the control pad to move the mirror in the desired direction.
3. Adjust each outside mirror so that a little of the vehicle and the area behind it can be seen.
4. Press ▭◂ or ▸▭ again to deselect the mirror.

Memory Mirrors

The vehicle may have memory mirrors. See *Memory Seats* ⇨ *43*.

Lane Change Alert (LCA)

The vehicle may have LCA. See *Lane Change Alert (LCA)* ⇨ *256*.

Side Blind Zone Alert (SBZA)

The vehicle may have Side Blind Zone Alert. See *Side Blind Zone Alert (SBZA)* ⇨ *256*.

Indicator

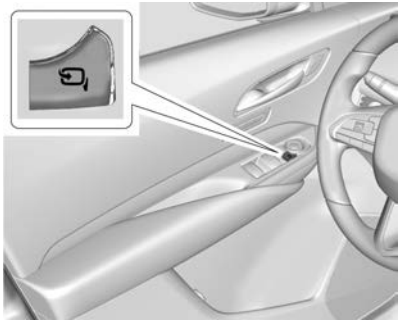
The vehicle may have an indicator on the mirror housings. See *Turn and Lane-Change Signals* ⇨ *130*.

Folding Mirrors

Manual Folding Mirrors

If equipped, manually fold the mirrors inward toward the vehicle to prevent damage when going through an automatic car wash. Push the mirror outward to return it to the original position.

Power Folding Mirrors



If equipped, press to power fold the mirrors. Press again to unfold.

Resetting the Power Folding Mirrors

Reset the power folding mirrors if:

- The mirrors are accidentally obstructed while folding.
- They are accidentally manually folded/unfolded.
- The mirrors do not stay in the unfolded position.
- The mirrors vibrate at normal driving speeds.

Fold and unfold the mirrors one time using the mirror controls to reset them to their normal position. A noise may be heard during the resetting of the power folding mirrors. This sound is normal after a manual folding operation.

Remote Mirror Folding

If equipped, press and hold on the RKE transmitter for approximately one second to automatically fold the exterior mirrors. Press and hold on the RKE transmitter for approximately one second to unfold. See *Remote Keyless Entry (RKE) System Operation* ⇨ *7*.

This feature is turned on or off through vehicle personalisation. See *Vehicle Personalisation* ⇨ *121*.

Heated Mirrors

REAR **:** Press to heat the mirrors.

See “Rear Window Demister” under *Dual Automatic Climate Control System* ⇨ *183*.

Automatic Dimming Mirror

If the vehicle has the automatic dimming mirror, the driver outside mirror automatically adjusts for the glare of headlamps behind you.

Reverse Tilt Mirrors

If equipped with reverse tilt mirrors and memory seats, the passenger and/or driver mirror tilts to a preselected position when the vehicle is in R (Reverse). This allows the kerb to be seen when parallel parking.

The mirror(s) may move from their tilted position when:

- The vehicle is shifted out of R (Reverse), or remains in R (Reverse) for about 30 seconds.
- The vehicle is turned off.
- The vehicle is driven in R (Reverse) above a set speed.

To turn this feature on or off, see *Vehicle Personalisation* ⇨ *121*.

Interior Mirrors

Interior Rearview Mirrors

Adjust the rearview mirror for a clear view of the area behind the vehicle.

Do not spray glass cleaner directly on the mirror. Use a soft towel dampened with water.

Manual Rearview Mirror

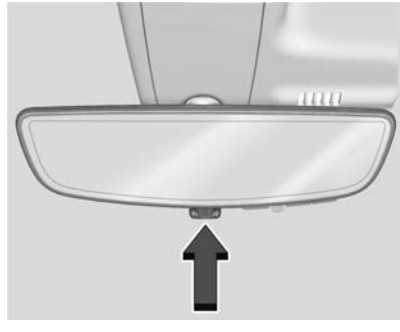
If equipped, push the tab forward for daytime use and pull it rearward for nighttime use to avoid glare of the headlamps from behind.

Automatic Dimming Rearview Mirror

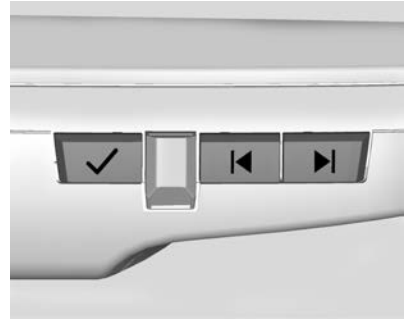
If equipped, automatic dimming reduces the glare of headlamps from behind. The dimming feature comes on when the vehicle is started.

Rear Camera Mirror

If equipped, this automatic dimming mirror provides a wide angle camera view of the area behind the vehicle.



Pull the tab to turn on the display. Push the tab to turn it off. When off the mirror is automatic dimming. Adjust the mirror for a clear view of the area behind the vehicle while the display is off.

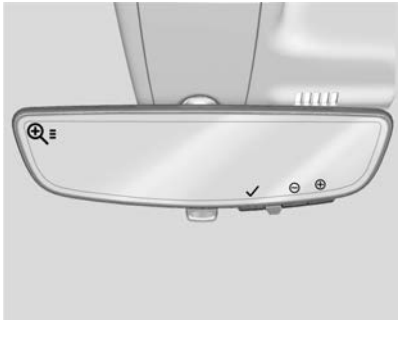


Press ✓ to scroll through the adjustment options.

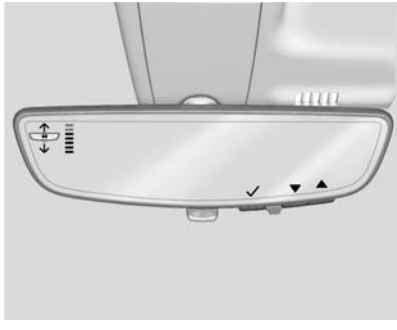
Press ⏮ and ⏭ to adjust the settings using the indicators on the mirror. The indicators will remain visible for five seconds after the last button activation, and the settings will remain saved.

The adjustment options are:

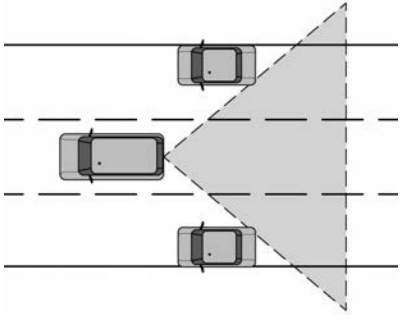
- Brightness



- Zoom



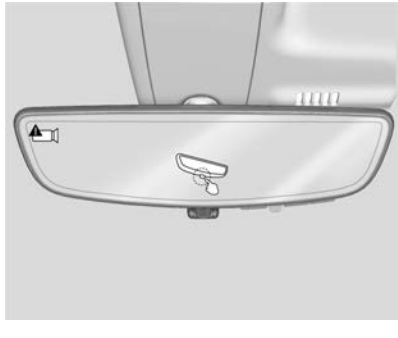
- Tilt



⚠ Warning

The Rear Camera Mirror (RCM) has a limited view. Portions of the road, vehicles, and other objects may not be seen. Do not drive or park the vehicle using only this camera. Objects may appear closer than they are. Check the outside mirrors or glance over your shoulder when making lane changes or merging. Failure to use proper care may result in injury, death, or vehicle damage.

Troubleshooting



See your retailer for service if a blue screen and ⚠ are displayed in the mirror, and the display shuts off. Also, push the tab as indicated to return to the automatic dimming mode.

The Rear Camera Mirror may not work properly or display a clear image if:

- There is glare from the sun or headlights. This may obstruct objects from view. If needed, push the tab to turn off the display.
- Dirt, snow, or other debris blocks the camera lens. Clean the lens with a soft damp cloth or, if equipped, with the Rear Camera Washer. See *Rear Window Wiper/Washer* ⇨ *94*.

- The camera's mounting on the vehicle has been damaged, and/or the position or the mounting angle of the camera has changed.

Windows

⚠ Warning

Never leave a child, a helpless adult or a pet alone in a vehicle, especially with the windows closed in warm or hot weather. They can be overcome by the extreme heat and suffer permanent injuries or even death from heat stroke.

The vehicle aerodynamics are designed to improve fuel economy performance. This may result in a pulsing sound when either rear window is down and the front windows are up. To reduce the sound, open either a front window or the sunroof, if equipped.

Power Windows

⚠ Warning

Children could be seriously injured or killed if caught in the path of a closing window. Never leave the Remote Keyless Entry (RKE) transmitter in a vehicle with children. When there are children in the rear seat, use the window lockout switch to prevent operation of the windows. See *Keys* ⇨ *6*.

The power windows work when the ignition is on, in ACC/ACCESSORY, or when Retained Accessory Power (RAP) is active. See *Retained Accessory Power (RAP)* ⇨ *209*.

Using the window switch, press to open or pull to close the window.

The windows may be temporarily disabled if they are used repeatedly within a short time.

Window Lockout

This feature stops the rear passenger window switches from working.

- Press to engage the rear window lockout feature. The indicator light is on when engaged.
- Press again to disengage.

Window Express Movement

All windows can be opened without holding the window switch. Press the switch down fully and quickly release to express open the window.

If equipped, pull the window switch up fully and quickly release to express close the window.

Briefly press or pull the window switch in the same direction to stop that window's express movement.

Window Automatic Reversal System

The express-close feature will reverse window movement if it comes in contact with an object. Extreme cold or ice could cause the window to auto-reverse. The window will operate normally after the object or condition is removed.

Automatic Reversal System Override

⚠ Warning

If automatic reversal system override is active, the window will not reverse automatically. You or others could be injured and the window could be damaged. Before using automatic reversal system override, make sure that all people and obstructions are clear of the window path.

When the engine is on, override the automatic reversal system by pulling and holding the window switch if conditions prevent it from closing.

Programming the Power Windows

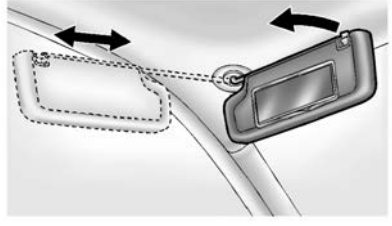
Programming may be necessary if the vehicle battery has been disconnected or discharged. If the window is unable to express-up, program each express-close window:

1. Close all doors.
2. Turn the ignition on or to ACC/ ACCESSORY.
3. Partially open the window to be programmed. Then close it and continue to pull the switch briefly after the window has fully closed.
4. Open the window and continue to press the switch briefly after the window has fully opened.

Remote Window Operation

If equipped, this feature allows all windows to be opened remotely. If enabled in vehicle personalisation, press and hold on the RKE transmitter. See *Vehicle Personalisation* ⇨ *121*.

Sun Visors



Pull the sun visor down to block glare. Detach the sun visor from the centre mount to pivot to the side window and, if equipped, extend along the rod.

Roof

Sunroof

If equipped, the ignition must be on or in ACC/ACCESSORY, or Retained Accessory Power (RAP) must be active to operate the sunroof. See *Ignition Positions* ⇨ *205* and *Retained Accessory Power (RAP)* ⇨ *209*.

1. Sunroof Switch
2. Sunshade Switch

Sunroof Express Operation : Press and release (1) to vent. Press and release again to move to the partially opened comfort stop position. Press and release again to express-open to the fully opened position. Press and release (1) at any time to stop movement. Press and release (1) to express-close. Press and release (1) at any time to stop movement.

Sunroof Manual Operation : The sunroof can change to manual mode by holding (1) while opening. The sunroof will now open for as long as (1) is held depressed. Press and release (1) again to change back to express operation.

Power Sunshade Express Operation : Press and release (2) to express-open the sunshade. Press and release (2) at any time to stop movement. Press and release (2) to express-close the sunshade. Press and release (2) at any time to stop movement.

Power Sunshade Manual Operation : The sunshade can change to manual mode by holding (2) depressed while opening. The sunshade will now open for as long as (2) is held depressed. Press and release (2) again to change back to express operation.

The sunroof cannot be opened or closed if the vehicle has an electrical failure.

Automatic Reversal System

The sunroof and power sunshade have an automatic reversal system that is only active when the sunroof and power sunshade, if equipped, are operated in express-close mode.

If an object is in the path of the express-closing, the reversal system will detect an object, stop, and open the sunroof or power sunshade slightly.

If frost or other conditions prevent closing, override the feature by closing the sunroof or power sunshade in manual mode. To stop movement, release the switch.

Dirt and debris may collect on the sunroof seal or in the track. This could cause an issue with sunroof operation or noise. It could also plug the water drainage system. Periodically open the sunroof and remove any obstacles or loose debris. Wipe the sunroof seal and roof sealing area using a clean cloth, mild soap, and water. Do not remove grease from the sunroof.

Seats and Restraints

Head Restraints

Front Seats

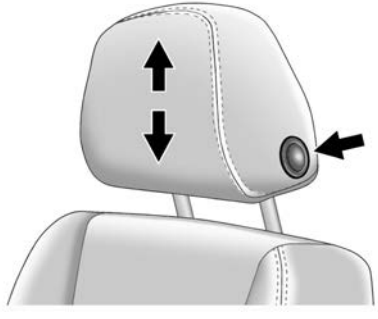
⚠ Warning

With head restraints that are not installed and adjusted properly, there is a greater chance that occupants will suffer a neck/spinal injury in a crash. Do not drive until the head restraints for all occupants are installed and adjusted properly.

The vehicle's front seats have adjustable head restraints in the outboard seating positions.

Adjust the head restraint so that the top of the restraint is at the same height as the top of the occupant's head. This position reduces the chance of a neck injury in a crash.

The height of the head restraint can be adjusted.



To raise or lower the head restraint, press the button located on the side of the head restraint, and pull up or push the head restraint down, and release the button. Pull and push on the head restraint after the button is released to make sure that it is locked in place.

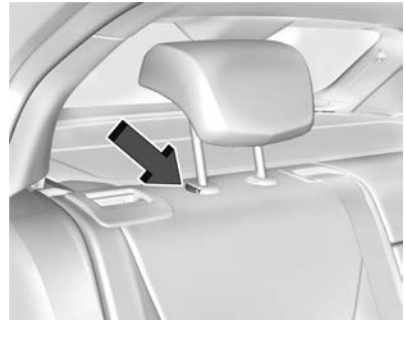
The front seat outboard head restraints are not removable.

Rear Seats

Adjusting the Rear Head Restraint

The vehicle's rear seats have adjustable head restraints in all three seating positions.

The height of the head restraint can be adjusted. Pull the head restraint up to raise it. Try to move the head restraint to make sure that it is locked in place.



To lower the head restraint, press the button, located on the top of the seat backrest, and push the head restraint

down. Try to move the head restraint after the button is released to make sure that it is locked in place.

Front Seats

Seat Adjustment

⚠ Warning

You can lose control of the vehicle if you try to adjust a driver seat while the vehicle is moving. Adjust the driver seat only when the vehicle is not moving.

To adjust the seat position:

1. Pull the handle at the front of the seat cushion to unlock the seat.
2. Move the seat forward or rearward and release the handle.
3. Try to move the seat back and forth to be sure it is locked in place.

Seat Height Adjuster

Move the lever up or down to raise or lower the seat.

Power Seat Adjustment

⚠ Warning

You can lose control of the vehicle if you try to adjust a driver seat while the vehicle is moving. Adjust the driver seat only when the vehicle is not moving.

⚠ Warning

The power seats will work with the ignition off. Children could operate the power seats and be injured. Never leave children alone in the vehicle.

To adjust a power seat, if equipped:

- Move the seat forward or rearward by sliding the control forward or rearward.
- Raise or lower the front part of the seat cushion by moving the front of the control up or down.
- Raise or lower the entire seat by moving the rear of the control up or down.

Reclining Seat Backrests

⚠ Warning

Sitting in a reclined position when the vehicle is in motion can be dangerous. Even when fastened, the seat belts cannot do their job.

The shoulder belt will not be against your body. Instead, it will be in front of you. In a crash, you could go into it, receiving neck or other injuries.

The lap belt could go up over your abdomen. The belt forces would be there, not at your pelvic bones. This could cause serious internal injuries.

For proper protection when the vehicle is in motion, have the seatback upright. So sit well back in the seat and wear the seat belt properly.

Do not have a backrest reclined if the vehicle is moving.

Manual Reclining Seatbacks

⚠ Warning

If either seatback is not locked, it could move forward in a sudden stop or crash. That could cause injury to the person sitting there. Always push and pull on the seatbacks to be sure they are locked.

To recline a manual seatback:

1. Lift the lever.
2. Move the backrest to the desired position, and then release the lever to lock the backrest in place.
3. Push and pull on the backrest to make sure it is locked.

To return the seat backrest to the upright position:

1. Lift the lever fully without applying pressure to the seatback, and the seatback will return to the upright position.
2. Push and pull on the backrest to make sure it is locked.

Power Reclining Seatbacks

To adjust a power seatback, if available:

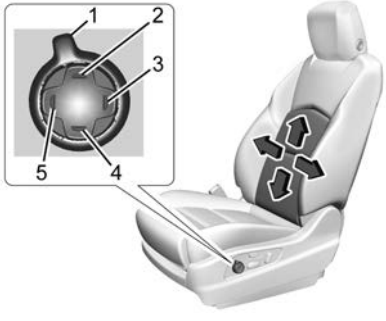
- Tilt the top of the control rearward to recline.
- Tilt the top of the control forward to raise.

Lumbar Adjustment

Lumbar and Bolster Support

Base Seat Adjustment

If equipped, slide the control forward or rearward to increase or decrease support.

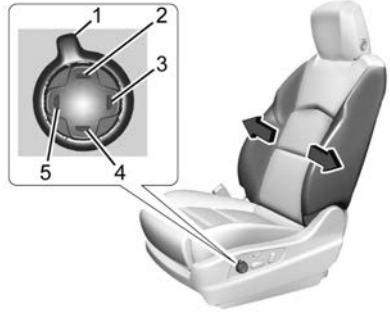


Up-level Seat Adjustment

To adjust lumbar support, if equipped:

- Press and release or hold Feature Select (1) to scroll to lumbar support on the infotainment display.
- Press Forward (5) or Rearward (3) to adjust lumbar forward or rearward.
- Press Up (2) or Down (4) to adjust lumbar up or down.

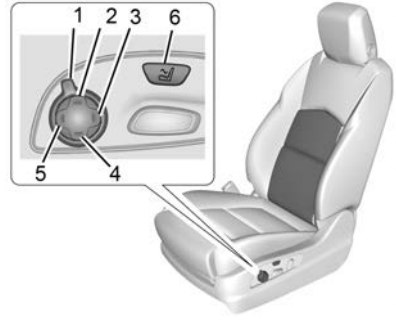
To adjust bolster support, if equipped:



Up-level Seat Adjustment

- Press and release or hold Feature Select (1) to scroll to bolster support on the infotainment display.
- Press Forward (5) or Rearward (3) to adjust bolster support inward or outward.

Massage



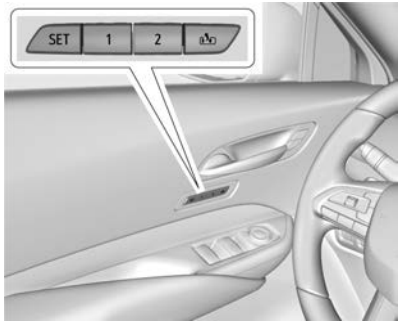
If equipped, the ignition must be on to use the massage feature.

To activate and adjust massage:

1. Turn the function select (1) to scroll to massage options on the infotainment display.
2. Press up (2) or down (4) adjust the massage type.
3. Press forward (5) or rearward (3) to adjust the intensity.
4. To switch massage off or to activate massage at last massage type and intensity settings, press the massage on/off control (6).

The massage feature will turn off after approximately 20 minutes. Press the massage on/off control (6) to restart the massage function.

Memory Seats



Overview

If equipped, the memory seat feature allows drivers to save their unique driving positions and a shared exit position. See “Saving Seating Positions” later in this section. The saved positions can be recalled manually by all drivers, see “Manually Recalling Seating Positions” later in this section, and drivers with RKE transmitters 1 and 2 can also recall them automatically. See “Auto Seat Entry Memory Recall” or “Auto Seat Exit Memory Recall” later in this section. To enable automatic recalls, turn on Seat Entry Memory and/or Seat Exit Memory. See “Enable Automatic Recalls” under “Vehicle Personalisation Settings” later in this section. The memory recalls may be cancelled at any time during the recall. See “Cancel Memory Seating Recalls” later in this section.

Identifying Driver Number

The vehicle identifies the current driver by their RKE transmitter number 1–8. The current RKE transmitter number may be identified by Driver Information Centre (DIC) welcome message, “You are driver x for memory recalls.” This message is displayed the first few times the vehicle is turned on when a different RKE transmitter is used. For Seat Entry Memory to work properly, save positions to the 1 or 2 memory button matching the driver number of this welcome message. To aid in identifying transmitter IDs, it is recommended to only carry one RKE transmitter when entering the vehicle. Perform the following if the welcome message is not displayed:

1. Move all keys and RKE transmitters away from the vehicle.
2. Start the vehicle with another RKE transmitter. A DIC welcome message should display indicating the driver number of the other RKE transmitter. Turn the vehicle off and remove the other key or RKE transmitter from the vehicle.
3. Start the vehicle with the initial key or RKE transmitter. The DIC welcome message should display the driver number of the initial RKE transmitter.

Saving Seating Positions

Read these instructions completely before saving memory positions.

To save preferred driving positions to 1 and 2:

1. Turn the vehicle on or to ACC/ ACCESSORY. A DIC welcome message may indicate the driver number of the current RKE transmitter. See “Identifying Driver Number” previously in this section.

2. Adjust all available memory features to the desired driving position.
3. Press and release SET; a beep will sound.
4. Immediately upon releasing SET, press and hold memory button 1 or 2 matching the current Driver's RKE transmitter number until two beeps sound. If too much time passes between releasing SET and pressing 1 or 2, the two beeps will not sound indicating memory positions were not saved. Repeat Steps 3 and 4 to try again.
5. Repeat Steps 1–4 for the other RKE transmitter 1 or 2 using the other 1 or 2 memory button.

If you are the only driver, it is recommended to save the preferred driving position to both 1 and 2.

To save the common exit seating position to ⍈ that is used by all drivers for Manually Recalling Seating Positions and Auto Seat Exit Memory Recall features, repeat Steps 1–4 using ⍈, the exit button.

Manually Recalling Seating Positions

Press and hold 1, 2, or ⍈ button until the recall is complete, to recall the positions previously saved to that button.

Manual Memory recall movement for 1, 2 or ⍈ buttons may be initiated and will complete to the saved memory position if the vehicle is in or out of P (Park).

Enable Automatic Recalls under Vehicle Personalisation Settings

- For Seat Entry Memory that begins movement to the preferred driving position of the 1 or 2 button when the vehicle is turned on, select the Settings menu, then Vehicle, then Seating Position, then Seat Entry Memory, and then Select ON or OFF. See “Auto Seat Entry Memory Recall” later in this section.
- For Seat Exit Memory that begins movement to the preferred exit position of the ⍈ button when the vehicle is turned off and the driver door is open or opened, select the Settings menu, then Vehicle, then Seating Position, then Seat Exit Memory, and then Select ON or OFF. See “Auto Seat Exit Memory Recall” later in this section.
- See *Vehicle Personalisation* ⇨ *121* for additional setting information.

Auto Seat Entry Memory Recall

Seat Entry Memory will automatically begin movement to the seating positions of the 1 or 2 button corresponding to the driver's RKE Transmitter number 1 or 2 detected by the vehicle when:

- The vehicle is turned ON.
- Seating positions have been previously saved to the same 1 or 2 button. See “Saving Seating Positions” previously in this section.
- Seat Entry Memory is enabled. See “Enable Automatic Recalls” under “Vehicle Personalisation Settings” previously in this section.
- The gear lever is in P (Park).

Seat Entry Memory Recall will continue if the vehicle is changed out of P (Park) prior to reaching the saved memory position.

If the saved memory seat position does not automatically recall, verify the recall is enabled. See “Enable Automatic Recalls” under “Vehicle Personalisation Settings” previously in this section.

If the memory seat recalls to the wrong position, the driver's RKE transmitter number 1 or 2 may not match the memory button number positions they were saved to. Try the other RKE transmitter or try saving the positions to the other 1 or 2 memory button. See “Saving Seating Positions” previously in this section.

Automatic Seat Entry Memory recalls are only available for driver's RKE Transmitter numbers 1 and 2. RKE transmitters 3–8 will not provide Seat Entry Memory recalls.

Auto Seat Exit Memory Recall

Seat Exit Memory will begin movement to the seating position of the button when:

- The vehicle is turned off and the driver door is open or opened within a short time.
- A seating position has been previously been saved to the memory button. See “Saving Seating Positions” previously in this section.
- Seat Exit Memory is enabled. See “Enable Automatic Recalls” under “Vehicle Personalisation Settings” previously in this section.
- The gear lever is in P (Park).

Seat Exit Memory recall will continue if the vehicle is changed out of P (Park) prior to reaching the saved memory position.

Seat Exit Memory is not linked to the driver's RKE transmitter. The seating position saved to is used for all drivers.

Cancel Memory Seating Recalls

- During any memory recall:

  Press a power seat control

  Press SET memory button
- During Manual memory recall:

  Release 1, 2, or memory button
- During Auto Seat Entry Memory Recall:

  Turn vehicle off

  Press SET, 1, 2, or memory buttons
- During Auto Seat Exit Memory Recall:

  Press SET, 1, 2, or memory buttons

Obstructions

If something has blocked the seat while recalling a memory position, the recall may stop. Remove the obstruction and try the recall again. If the memory position still does not recall, see your dealer.

Heated and Ventilated Front Seats

⚠ Warning

If temperature change or pain to the skin cannot be felt, the seat heater may cause burns. To reduce the risk of burns, use care when using the seat heater, especially for long periods of time. Do not place anything on the seat that insulates against heat, such as a blanket,

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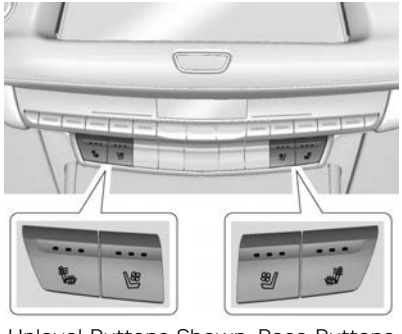
Warning (Continued)

cushion, cover, or similar item. This may cause the seat heater to overheat. An overheated seat heater may cause a burn or may damage the seat.



Uplevel Buttons Shown, Base Buttons Similar

If equipped, the buttons are near the climate controls on the centre stack. To operate, the engine must be running.

Press or to heat the driver or passenger cushion and backrest.

Press or to ventilate the driver or passenger seat.

Press the button once for the highest setting. With each press of the button, the seat will change to the next lower setting, and then to the off setting. The indicator lights above the buttons indicate three for the highest setting and one for the lowest. If the front heated seats are on high, the level may automatically be lowered after approximately 30 minutes.

A ventilated seat has a fan that pulls or pushes air through the seat. The air is not cooled.

The passenger seat may take longer to heat up.

Auto Heated and Ventilated Seats

If the vehicle is equipped with auto heated or ventilated seats, and the engine is running, this feature will automatically activate the heated or ventilated seats at the level required by the vehicle's interior temperature.

The active high, medium, low, or off heated or ventilated seat level will be indicated by the manual heated and ventilated seat buttons on the centre console. Use the manual heated and ventilated seat buttons on the centre console to turn auto heated or ventilated seats off. If the passenger seat is unoccupied, the auto heated or ventilated seats feature will not activate that seat. The auto heated and ventilated seats feature can be programmed to always be enabled when the vehicle is on. If equipped with a heated steering wheel, the auto heated steering wheel activation will follow the heated seat auto activation and the heated steering wheel indicator will follow the status of the steering wheel heat.

See *Vehicle Personalisation* ⇨ *121*.

Remote Start Heated and Ventilated Seats

If equipped, the heated seats will turn on automatically during a remote start if it is cold outside and the ventilated seats will turn on automatically if it is hot outside. If equipped, the heated steering wheel will turn on automatically during a remote start if it is cold outside. The

heated and ventilated seat indicators and heated steering wheel indicator may come on during this operation.

The heated and ventilated seats and heated steering wheel may cancel when the vehicle is started. These functions can be selected manually after the ignition is switched on and the engine is running.

The temperature performance of an unoccupied seat may be reduced. This is normal.

The heated or ventilated seats will not turn on during a remote start unless they are enabled in the vehicle personalisation menu. See *Remote Vehicle Start* ⇨ *13* and *Vehicle Personalisation* ⇨ *121*.

Rear Seats

Rear Seat Reminder

If equipped, the message REAR SEAT REMINDER LOOK IN REAR SEAT displays under certain conditions indicating there may be an item or passenger in the rear seat. Check before exiting the vehicle.

This feature will activate when a second row door is opened while the vehicle is on, or up to 10 minutes before the vehicle is turned on. There will be an alert when the vehicle is turned off. The alert does not directly detect objects in the rear seat; instead, under certain conditions, it detects when a rear door is opened and closed, indicating that there may be something in the rear seat.

The feature is active only once each time the vehicle is turned on and off, and will require reactivation by opening and closing the second row doors. There may be an alert even when there is nothing in the rear seat; for example, if a child entered the vehicle through the rear door and left the vehicle without the vehicle being turned off.

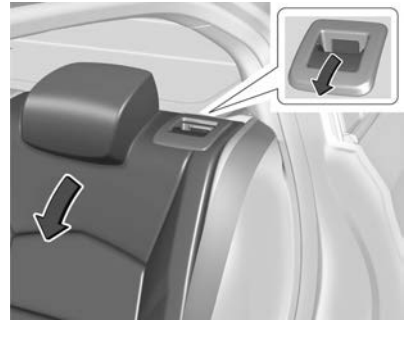
The feature can be turned on or off. See *Vehicle Personalisation* ⇨ *121*.

Manually Folding the Backrests

Caution

Folding a rear seat with the seat belts still fastened may cause damage to the seat or the seat belts. Always unfasten the seat belts and return them to their normal stowed position before folding a rear seat.

1. Place the front backrests in the upright position. See *Reclining Seat Backrests* ⇨ *40*.
2. Lower the rear head restraint. See *Head Restraints* ⇨ *38*.



3. Pull on the lever on the top of the backrest to unlock it and fold the backrest forward.

   For outboard backrests, a tab near the backrest lever moves forward when the backrest is unlocked.

Raising the Seatbacks

⚠ Warning

If either seatback is not locked, it could move forward in a sudden stop or crash. That could cause injury to the person sitting there. Always push and pull on the seatbacks to be sure they are locked.

⚠ Warning

A seat belt that is improperly routed, not properly attached, or twisted will not provide the protection needed in a crash. The person wearing the belt could be seriously injured. After raising the rear backrest, always check to be

(Continued)

Warning (Continued)

sure that the seat belts are properly routed and attached, and are not twisted.

To raise the seat backrest:

1. Push the seatback rearward until it locks in the upright position.

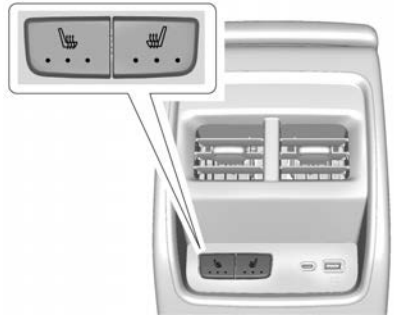
   For outboard seats, a tab near the backrest lever retracts when the backrest is locked in place.

2. Make sure the rear seat belts are in the belt guide and are not twisted or caught between the seat cushion and the backrest.

Heated Rear Seats

⚠ Warning

If temperature change or pain to the skin cannot be felt, the seat heater may cause burns. See the Warning under *Heated and Ventilated Front Seats* ⇨ *45*.



If equipped, the rear heated seat buttons are on the rear of the centre console.

With the engine running, press or to heat the left outboard or right outboard seat. Press the button once for the highest setting. With each press of the button, the seat will change to the next lower setting, and then to the off setting. The indicator lights on the buttons indicate three for the highest setting and one for the lowest.

If the heated rear seats are at the highest setting, the level may be lowered automatically after approximately 30 minutes.

Seat Belts

This section describes how to use seat belts properly, and some things not to do.

⚠ Warning

Do not let anyone travel where a seat belt cannot be worn properly. In a crash, if you or your passenger(s) are not wearing seat belts, injuries can be much worse than if you are wearing seat belts. You can be seriously injured or killed by hitting things inside the vehicle harder or by being ejected from the vehicle. In addition, anyone who is not buckled up can strike other passengers in the vehicle.

(Continued)

Warning (Continued)

It is extremely dangerous to ride in a cargo area, inside or outside of a vehicle. In a collision, passengers riding in these areas are more likely to be seriously injured or killed. Do not allow passengers to travel in any area of the vehicle that is not equipped with seats and seat belts.

Always wear a seat belt, and check that all passenger(s) are restrained properly too.

This vehicle has indicators as a reminder to fasten the seat belts. See *Seat Belt Reminders ⇨ 103*.

Why Seat Belts Work

When riding in a vehicle, you travel as fast as the vehicle does. If the vehicle stops suddenly, you keep going until something stops you. It could be the windscreen, the instrument panel, or the seat belts!

When you wear a seat belt, you and the vehicle slow down together. There is more time to stop because you stop over a longer distance and, when worn properly, your strongest bones take the force of the seat belts. That is why wearing seat belts makes such good sense.

Questions and Answers About Seat Belts

Q: Will I be trapped in the vehicle after a crash if I am wearing a seat belt?

A: You *could* be — whether you are wearing a seat belt or not. Your chances of being conscious during and after a crash, so you *can* unbuckle and get out, are *much* greater if you are belted.

Q: If my vehicle has airbags, why should I have to wear seat belts?

A: Airbags are supplemental systems only. They work *with* the seat belts — not instead of them. Whether or not an airbag is provided, all occupants still have to buckle up to get the most protection.

Also the law in nearly every region requires seat belts to be worn.

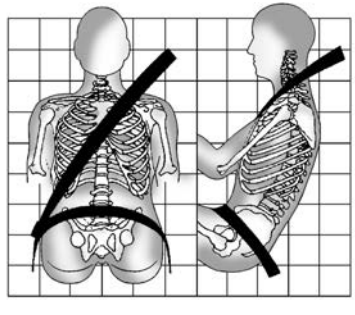
How to Wear Seat Belts Properly

Follow these rules for everyone's protection.

There are additional things to know about seat belts and children, including smaller children and infants. If a child will be riding in the vehicle, see *Older Children* ⇨ *65* or *Infants and Young Children* ⇨ *66*. Review and follow the rules for children in addition to the following rules.

It is very important for all occupants to buckle up. Statistics show that unbelted people are hurt more often in crashes than those who are wearing seat belts.

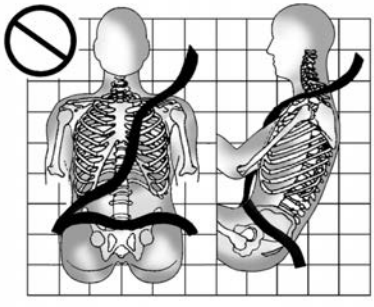
There are important things to know about wearing a seat belt properly.

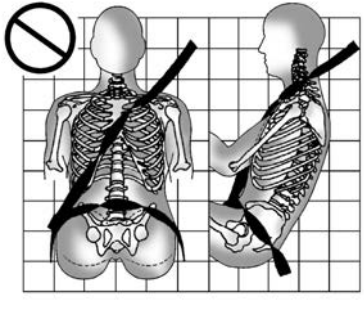


- Sit up straight and always keep your feet on the floor in front of you (if possible).
- Wear the lap part of the belt low and snug on the hips, just touching the thighs. In a crash, this applies force to the strong pelvic bones and you would be less likely to slide under the lap belt. If you slid under it, the belt would apply force on your abdomen. This could cause serious or even fatal injuries.
- Wear the shoulder belt over the shoulder and across the chest. These parts of the body are best able to take belt restraining forces. The shoulder belt locks if there is a sudden stop or crash.

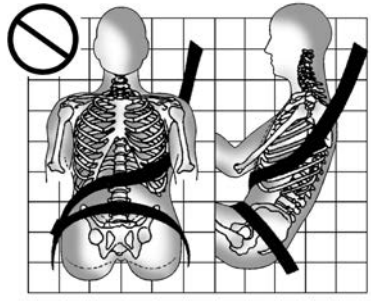
⚠ Warning

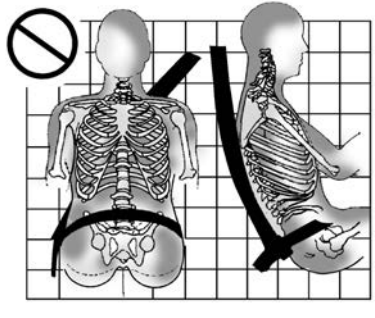
You can be seriously injured, or even killed, by not wearing your seat belt properly.



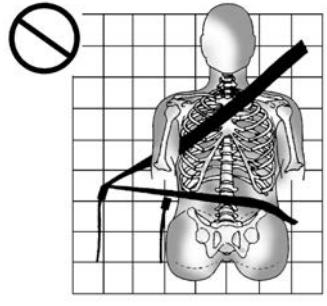


Never allow the lap or shoulder belt to become loose or twisted.

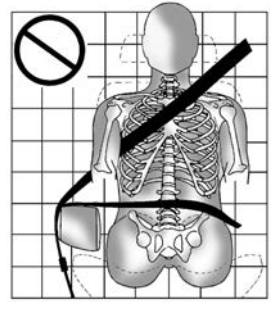




Never wear the shoulder belt under both arms or behind your back.



Always use the correct buckle for your seating position.



Never route the lap or shoulder belt over an armrest.

⚠ Warning

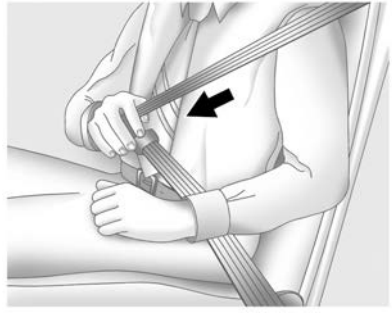
The seat belt can be pinched if it is routed under plastic trim on the seat, such as trim around the rear backrest folding handle or side airbag. In a crash, pinched seat belts might not provide adequate protection. Never allow seat belts to be routed under plastic trim pieces.

Lap-Shoulder Belt

All seating positions in the vehicle have a lap-shoulder belt.

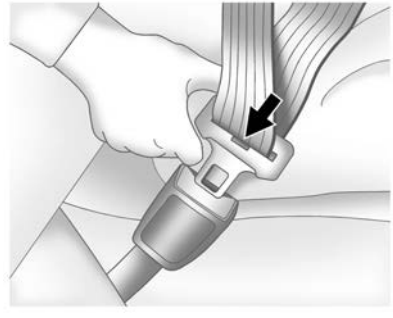
The following instructions explain how to wear a lap-shoulder belt properly.

1. Adjust the seat, if the seat is adjustable, so you can sit up straight. To see how, see "Seats" in the Index.



2. Pick up the latch plate and pull the belt across you. Do not let it get twisted.

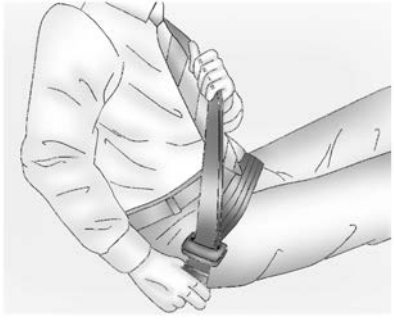
   The lap-shoulder belt may lock if you pull the belt across you very quickly. If this happens, let the belt go back slightly to unlock it. Then pull the belt across you more slowly.



3. Push the latch plate into the buckle until it clicks.

   Pull up on the latch plate to make sure it is secure.

   Position the release button on the buckle so that the seat belt could be quickly unbuckled if necessary.
4. If equipped with a shoulder belt height adjuster, move it to the height that is right for you. See “Shoulder Belt Height Adjuster” later in this section for instructions on use and important safety information.



5. To make the lap part tight, pull up on the shoulder belt.

To unlatch the belt, push the button on the buckle. The belt should return to its stowed position.

Always stow the seat belt slowly. If the seat belt webbing returns quickly to the stowed position, the retractor may lock and cannot be pulled out. If this happens, pull the seat belt straight out firmly to unlock the webbing, and then release it. If the webbing is still locked in the retractor, see your retailer.

Before a door is closed, be sure the seat belt is out of the way. If a door is slammed against a seat belt, damage can occur to both the seat belt and the vehicle.

Shoulder Belt Height Adjuster

The vehicle has a shoulder belt height adjuster for the driver and front outboard passenger seating positions.

Adjust the height so that the shoulder portion of the belt is on the shoulder and not falling off of it. The belt should be close to, but not contacting, the neck. Improper shoulder belt height adjustment could reduce the effectiveness of the seat belt in a crash. See *How to Wear Seat Belts Properly* ⇨ *50*.

Press and hold the release button while raising or lowering the height adjuster to the desired position.

After the height adjuster is set to the desired position, try to move it down without pressing the release button to make sure it has locked into position.

Seat Belt Pretensioners

This vehicle has seat belt pretensioners for front row and second row outboard occupants. Although the seat belt pretensioners

cannot be seen, they are part of the seat belt assembly. They can help tighten the seat belts during the early stages of a moderate to severe frontal, near frontal, or rear crash if the threshold conditions for pretensioner activation are met. Seat belt pretensioners can also help tighten the seat belts in a side crash or roll-over event.

Pretensioners work only once. If the pretensioners activate in a crash, the pretensioners and probably other parts of the vehicle's seat belt system will need to be replaced. See *Replacing Seat Belt System Parts after a Crash* ⇨ *55*.

Do not sit on the outboard seat belt while entering or exiting the vehicle or at any time while sitting in the seat. Sitting on the seat belt can damage the webbing and hardware.

Seat Belt Use During Pregnancy

Seat belts work for everyone, including pregnant women. Like all occupants, they are more likely to be seriously injured if they do not wear seat belts.

A pregnant woman should wear a lap-shoulder belt, and the lap portion should be worn as low as possible, below the rounding, throughout the pregnancy.

The best way to protect the foetus is to protect the mother. When a seat belt is worn properly, it is less likely that the foetus will be hurt in a crash. For pregnant women, as for anyone, the key to making seat belts effective is to wear them properly.

Safety System Check

Periodically check the seat belt reminder, seat belts, buckles, latch plates, retractors, shoulder belt height adjusters (if equipped) and seat belt anchorages to make sure they are all in working order. Look for any other loose or damaged seat belt system parts that might keep a seat belt system from performing properly. See your dealer to have it repaired. Torn, frayed or twisted seat belts may not protect you in a crash. Torn or frayed seat belts can rip apart under impact forces. If a belt is torn or frayed, have it replaced immediately. If a belt is twisted, it may be possible to untwist it by reversing the latch plate on the webbing. If the twist cannot be corrected, ask your retailer to fix it.

Make sure the seat belt reminder light is working. See *Seat Belt Reminders* ⇨ *103*.

Keep seat belts clean and dry. See *Seat Belt Care* ⇨ *55*.

Seat Belt Care

Keep belts clean and dry.

Seat belts should be properly cared for and maintained.

Seat belt hardware should be kept dry and free of dust or debris. As necessary, exterior hard surfaces and seat belt webbing may be lightly cleaned with mild soap and water. Ensure there is not excessive dust or debris in the mechanism. If dust or debris exists in the system please see the dealer. Parts may need to be replaced to ensure proper functionality of the system.

⚠ Warning

Do not bleach or dye seat belt webbing. It may severely weaken the webbing. In a crash, they might not be able to provide adequate protection. Clean and rinse seat belt webbing only with mild soap and lukewarm water. Allow the webbing to dry.

Replacing Seat Belt System Parts after a Crash

⚠ Warning

A crash can damage the seat belt system in the vehicle. A damaged seat belt system may not properly protect the person using it, resulting in serious injury or even death in a crash. To help make sure the seat belt systems are working properly after a crash, have them inspected and any necessary replacements made as soon as possible.

After a minor crash, replacement of seat belts may not be necessary. But the seat belt assemblies that were used during any crash may have been stressed or damaged. See your retailer to have the seat belt assemblies inspected or replaced.

New parts and repairs may be necessary even if the seat belt system was not being used at the time of the crash.

Have the seat belt pretensioners checked if the vehicle has been in a crash, or if the airbag readiness light stays on after you start the vehicle or while you are driving. See *Airbag Readiness Light* ⇨ *104*.

⚠ Warning

Safety procedures must be followed at all times when disposing of the vehicle or vehicle parts. Disposal should be performed only by an authorised service centre, to help protect the environment and your health.

Airbag System

The vehicle has the following airbags:

- A frontal airbag for the driver
- A frontal airbag for the front outboard passenger
- A knee airbag for the driver.
- A knee airbag for the front outboard passenger.
- A seat-mounted side impact airbag for the driver

- A seat-mounted side impact airbag for the front outboard passenger
- A roof-rail airbag for the driver and the passenger seated directly behind the driver
- A roof-rail airbag for the front outboard passenger and the passenger seated directly behind the front outboard passenger

All vehicle airbags have the word AIRBAG on the trim or on a label near the deployment opening.

For frontal airbags, the word AIRBAG is on the centre of the steering wheel for the driver and on the instrument panel for the front outboard passenger.

For knee airbags, the word AIRBAG is on the lower part of the instrument panel.

For seat-mounted side impact airbags, the word AIRBAG is on the side of the backrest or side of the seat closest to the door.

For roof-rail airbags, the word AIRBAG is on the ceiling or trim.

Airbags are designed to supplement the protection provided by seat belts. Even though today's airbags are also designed to help reduce the risk of injury from the force of an inflating bag, all airbags must inflate very quickly to do their job.

Here are the most important things to know about the airbag system:

⚠ Warning

You can be severely injured or killed in a crash if you are not wearing your seat belt, even with airbags. Airbags are designed to work with seat belts, not replace them. Also, airbags are not designed to inflate in every crash. In some crashes seat belts are the only restraint. See *When Should an Airbag Inflate?* ⇨ *58*.

Wearing your seat belt during a crash helps reduce your chance of hitting things inside the vehicle or being ejected from it. Airbags are “supplemental restraints” to the seat belts. Everyone in the vehicle

(Continued)

Warning (Continued)

should wear a seat belt properly, whether or not there is an airbag for that person.

⚠ Warning

Because airbags inflate with great force and faster than the blink of an eye, anyone who is up against, or very close to, an airbag when it inflates can be seriously injured or killed. Do not sit unnecessarily close to any airbag, as you would be if sitting on the edge of the seat or leaning forward. Seat belts help keep you in position before and during a crash. Always wear a seat belt, even with airbags. The driver should sit as far back as possible while still maintaining control of the vehicle. The seat belts and the front outboard passenger airbags are most effective when you are sitting well back and upright in the seat with both feet on the floor.

(Continued)

Warning (Continued)

Occupants should not lean on or sleep against the door or side windows in seating positions with seat-mounted side impact airbags and/or roof-rail airbags.

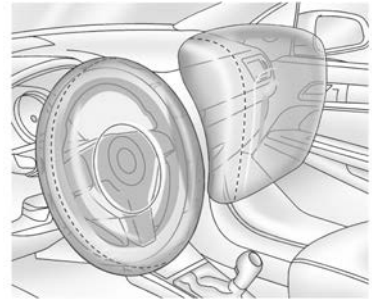
⚠ Warning

Children who are up against, or very close to, any airbag when it inflates can be seriously injured or killed. Always secure children properly in the vehicle. To read how, see *Older Children* ⇨ *65* or *Infants and Young Children* ⇨ *66*.

There is an airbag readiness light on the instrument cluster, which shows the airbag symbol.

The system checks the airbag electrical system for malfunctions. The light tells you if there is an electrical problem. See *Airbag Readiness Light* ⇨ *104*.

Where Are the Airbags?



The driver frontal airbag is in the centre of the steering wheel.

The front outboard passenger frontal airbag is in the passenger side instrument panel.

The driver knee airbag is below the steering column. The front outboard passenger knee airbag is below the glove box.

Driver Side Shown, Passenger Side Similar

The driver and front outboard passenger seat-mounted side impact airbags are in the sides of the seatbacks closest to the door.

Driver Side Shown, Passenger Side Similar

The roof-rail airbags for the driver, front outboard passenger, and second row outboard passengers are in the ceiling above the side windows.

⚠ Warning

If something is between an occupant and an airbag, the airbag might not inflate properly or it might force the object into that person causing severe injury or even death. The path of an inflating airbag must be kept clear. Do not

(Continued)

Warning (Continued)

put anything between an occupant and an airbag, and do not attach or put anything on the steering wheel hub or on or near any other airbag covering.

Do not use seat accessories that block the inflation path of a seat-mounted side impact airbag.

Never secure anything to the roof of a vehicle with roof-rail airbags by routing a rope or tie-down through any door or window opening. If you do, the path of an inflating roof-rail airbag will be blocked.

When Should an Airbag Inflate?

This vehicle is equipped with airbags. See *Airbag System* ⇨ *55*. Airbags are designed to inflate if the impact exceeds the specific airbag system's deployment threshold. Deployment thresholds are used to predict how severe a crash is likely to be in time for the airbags to inflate and help

restrain the occupants. The vehicle has electronic sensors that help the airbag system determine the severity of the impact. Deployment thresholds can vary with specific vehicle design.

Frontal airbags are designed to inflate in moderate to severe frontal or near frontal crashes to help reduce the potential for severe injuries, mainly to the driver's or front outboard passenger's head and chest.

Whether the frontal airbags will or should inflate is not based primarily on how fast the vehicle is travelling. It depends on what is hit, the direction of the impact, and how quickly the vehicle slows down.

Frontal airbags may inflate at different crash speeds depending on whether the vehicle hits an object straight on or at an angle, and whether the object is fixed or moving, rigid or deformable, narrow or wide.

Frontal airbags are not intended to inflate during vehicle rollovers, rear impacts, or many side impacts.

In addition, the vehicle has advanced technology frontal airbags. Advanced technology frontal airbags adjust the restraint according to crash severity.

Knee airbags are designed to inflate in moderate to severe frontal or near-frontal impacts. Knee airbags are not designed to inflate during vehicle rollovers, in rear impacts, or in many side impacts.

Seat-mounted side impact airbags are designed to inflate in moderate to severe side crashes depending on the location of the impact. Seat-mounted side impact airbags are not designed to inflate in frontal impacts, near frontal impacts, rollovers, or rear impacts. A seat-mounted side impact airbag is designed to inflate on the side of the vehicle that is struck.

Roof-rail airbags are designed to inflate in moderate to severe side crashes depending on the location of the impact. In addition, these roof-rail airbags are designed to inflate during a rollover or in a severe frontal impact. Roof-rail airbags are not designed to inflate in rear impacts. Both roof-rail airbags will inflate when either side of the vehicle is struck, if the sensing system predicts that the vehicle is about to roll over on its side, or in a severe frontal impact.

In any particular crash, no one can say whether an airbag should have inflated simply because of the vehicle damage or the repair costs.

What Makes an Airbag Inflate?

In a deployment event, the sensing system sends an electrical signal triggering a release of gas from the inflator. Gas from the inflator fills the airbag causing the bag to break out of the cover. The inflator, the airbag, and related hardware are all part of the airbag module.

For airbag locations, see *Where Are the Airbags?* ⇨ *57*.

How Does an Airbag Restrain?

In moderate to severe frontal or near frontal collisions, even belted occupants can contact the steering wheel or the instrument panel. In

moderate to severe side collisions, even belted occupants can contact the inside of the vehicle.

Airbags supplement the protection provided by seat belts by distributing the force of the impact more evenly over the occupant's body.

Rollover capable roof-rail airbags are designed to help contain the head and chest of occupants in the outboard seating positions in the first and second rows. The rollover capable roof-rail airbags are designed to help reduce the risk of full or partial ejection in rollover events, although no system can prevent all such ejections.

But airbags would not help in many types of collisions, primarily because the occupant's motion is not toward those airbags. See *When Should an Airbag Inflate?* ⇨ *58*.

Airbags should never be regarded as anything more than a supplement to seat belts.

What Will You See after an Airbag Inflates?

After frontal, knee, and seat-mounted side impact airbags inflate, they quickly deflate, so quickly that some people may not even realise the airbags inflated. Roof-rail airbags may still be at least partially inflated for some time after deployment. Some components of the airbag module may be hot for several minutes. For location of the airbags, see *Where Are the Airbags?* ⇨ *57*.

The parts of the airbag that come into contact with you may be warm, but not too hot to touch. There may be some smoke and dust coming from the vents in the deflated airbags. Airbag inflation does not prevent the driver from seeing out of the windscreen or being able to steer the vehicle, nor does it prevent people from leaving the vehicle.

⚠ Warning

When an airbag inflates, there may be dust in the air. This dust could cause breathing problems for people with a history of asthma or other breathing trouble. To avoid this, everyone should leave the vehicle as soon as it is safe to do so. If you have breathing problems but cannot get out of the vehicle after an airbag inflates, then get fresh air by opening a window or a door. If you experience breathing problems following an airbag deployment, you should seek medical attention.

The vehicle has a feature that may automatically unlock the doors, turn on the interior lamps and hazard warning lights, and shut off the fuel system after the airbags inflate. The feature may also activate, without airbag inflation, after an event that exceeds a predetermined threshold. After turning the ignition off and then on again, the fuel system will return to normal operation; the doors can be

locked, the interior lamps can be turned off, and the hazard warning flashers can be turned off using the controls for those features. If any of these systems are damaged in the crash they may not operate as normal.

⚠ Warning

A crash severe enough to inflate the airbags may have also damaged important functions in the vehicle, such as the fuel system, brake and steering systems, etc. Even if the vehicle appears to be drivable after a moderate crash, there may be concealed damage that could make it difficult to safely operate the vehicle.

Use caution if you should attempt to restart the engine after a crash has occurred.

In many crashes severe enough to inflate the airbag, windscreens are broken by vehicle deformation. Additional windscreen breakage may also occur from the front outboard passenger airbag.

- Airbags are designed to inflate only once. After an airbag inflates, you will need some new parts for the airbag system. If you do not get them, the airbag system will not be there to help protect you in another crash. A new system will include airbag modules and possibly other parts. The service manual for the vehicle covers the need to replace other parts.
- The vehicle has a crash sensing and diagnostic module which records information after a crash. See *Vehicle Data Recording and Privacy* ⇨ *380*.
- Let only qualified technicians work on the airbag systems. Improper service can mean that an airbag system will not work properly. See your dealer for service.

Airbag On-Off Switch

If the instrument panel has the switch pictured in the following illustration, the vehicle has an airbag on-off switch that you can use to manually turn the front outboard passenger airbag on or off. No other airbag is affected by the airbag on-off switch.

This switch should only be turned to the OFF position if the person in the front outboard passenger position belongs to a category indicated in this section:

Infant. An infant (less than 1 year old) must travel in the front seat because:

- *My vehicle has no rear seat;*
- *My vehicle has a rear seat too small to accommodate a rear-facing infant seat; or*
- *The infant has a medical condition which, according to the infant's physician, makes it necessary for the*

infant to ride in the front seat so that the driver can constantly monitor the child's condition.

Child age 1 to 12. A child age 1 to 12 must travel in the front seat because:

- *My vehicle has no rear seat;*
- *Although children ages 1 to 12 ride in the rear seat(s) whenever possible, children ages 1 to 12 sometimes must travel in the front because no space is available in the rear seat(s) of my vehicle; or*
- *The child has a medical condition which, according to the child's physician, makes it necessary for the child to travel in the front seat so that the driver can constantly monitor the child's condition.*

Medical Condition. A passenger has a medical condition which, according to his or her physician:

- *Causes the passenger airbag to pose a special risk for the passenger; and*
- *Makes the potential harm from the passenger airbag in a crash greater than the potential harm from turning off the airbag and allowing the passenger, even if belted, to hit the instrument panel or windscreen in a crash.*

⚠ Warning

If the front outboard passenger frontal airbag is turned off for a person who does not belong to a category indicated in this section, that person will not have the extra protection of an airbag. In a crash, the airbag will not be able to inflate and help protect the person sitting there. Do not turn off the front outboard passenger frontal airbag unless the person sitting there belongs to a category indicated in this section.

To turn off the front outboard passenger frontal airbag, insert the ignition key into the airbag on-off switch, push in, and move the switch to the OFF position.

The airbag off light will come on and stay on to let you know the front outboard passenger airbag is turned off. See *Airbag On-Off Light* ⇨ *105*. The front outboard passenger airbag will remain turned off until you turn it back on again.

⚠ Warning

If the airbag readiness light ever comes on and stays on, it means that something may be wrong with the airbag system. For example, the front outboard passenger frontal airbag could inflate even though the airbag on-off switch is turned off.

To help avoid injury to yourself or others, have the vehicle serviced right away. See *Airbag Readiness Light* ⇨ *104* for more information, including important safety information.

To turn the front outboard passenger airbag on again, insert the ignition key into the airbag on-off switch, push in, and move the switch to the ON position.

The front outboard passenger frontal airbag is now enabled, and may inflate. See *Airbag On-Off Light* ⇨ *105*.

Servicing the Airbag-Equipped Vehicle

Airbags affect how the vehicle should be serviced. There are parts of the airbag system in several places around the vehicle. Your dealer and the service manual have information about servicing the vehicle and the airbag system.

⚠ Warning

For up to 10 seconds after the vehicle is turned off and the battery is disconnected, an airbag can still inflate during improper service. You can be injured if you are close to an airbag when it inflates. Avoid yellow connectors. They are probably part of the airbag system. Be sure to follow proper service procedures, and make sure the person performing work for you is qualified to do so.

⚠ Warning

Safety procedures must be followed at all times when disposing of the vehicle or vehicle parts. Disposal should be performed only by an authorised service centre, to help protect the environment and your health.

Adding Equipment to the Airbag-Equipped Vehicle

Adding accessories that change the vehicle's frame, bumper system, height, front end, or side sheet metal may keep the airbag system from working properly.

The operation of the airbag system can also be affected by changing, including improperly repairing or replacing, any parts of the following:

- Airbag system, including airbag modules, front or side impact sensors, sensing and diagnostic module, or airbag wiring
- Front seats, including stitching, seams or zip fasteners
- Seat belts
- Steering wheel, instrument panel, overhead console, ceiling trim, or pillar garnish trim
- Inner door seals, including speakers

Your retailer and the service manual have information about the location of the airbag modules and sensors, sensing and diagnostic modules and airbag wiring, along with the proper replacement procedures.

If the vehicle has rollover roof-rail airbags, see *Different Size Tyres and Wheels* ⇨ *331* for additional important information.

If the vehicle must be modified because you have a disability and have questions about whether the modifications will affect the vehicle's airbag system, or if you have questions about whether the airbag system will be affected if the vehicle is modified for any other reason, see your retailer.

Airbag System Check

The airbag system does not need regularly scheduled maintenance or replacement. Make sure the airbag readiness light is working. See *Airbag Readiness Light* ⇨ *104*.

Caution

If an airbag covering is damaged, opened, or broken, the airbag may not work properly. Do not open or

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Caution (Continued)

break the airbag coverings. If there are any opened or broken airbag coverings, have the airbag covering and/or airbag module replaced. For the location of the airbags, see *Where Are the Airbags?* ⇨ *57*. See your dealer for service.

Replacing Airbag System Parts after a Crash

⚠ Warning

A crash can damage the airbag systems in the vehicle. A damaged airbag system may not properly protect you and your passenger(s) in a crash, resulting in serious injury or even death. To help make sure the airbag systems are working properly after a crash, have them inspected and any necessary replacements made as soon as possible.

If an airbag inflates, you will need to replace airbag system parts. See your dealer for service.

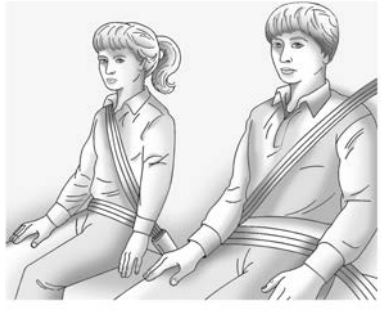
If the airbag readiness light stays on after the vehicle is started or comes on when you are driving, the airbag system may not work properly. Have the vehicle serviced right away. See *Airbag Readiness Light* ⇨ *104*.

⚠ Warning

Safety procedures must be followed at all times when disposing of the vehicle or vehicle parts. Disposal should be performed only by an authorised service centre, to help protect the environment and your health.

Child Restraints

Older Children



Older children who have outgrown booster seats should wear the vehicle's seat belts.

The manufacturer instructions that come with the booster seat state the weight and height limitations for that booster. Use a booster seat with a lap-shoulder belt until the child passes the fit test below:

- Sit all the way back on the seat. Do the knees bend at the seat edge? If yes, continue. If no, return to the booster seat.
- Fasten the lap-shoulder belt. Does the shoulder belt rest on the shoulder? If yes, continue. If no, then return to the booster seat.
- Does the lap belt fit low and snug on the hips, touching the thighs? If yes, continue. If no, return to the booster seat.
- Can proper seat belt fit be maintained for the length of the trip? If yes, continue. If no, return to the booster seat.

Q: What is the proper way to wear seat belts?

A: An older child should wear a lap-shoulder belt and get the additional restraint a shoulder belt can provide. The shoulder belt should not cross the face or neck. The lap belt should fit snugly below the hips, just touching the top of the thighs. This applies belt force to the child's pelvic bones in a crash. It should never be worn over the abdomen, which could cause severe or even fatal internal injuries in a crash.

According to accident statistics, children are safer when properly restrained in a rear seating position.

In a crash, children who are not buckled up can strike other people who are buckled up, or can be thrown out of the vehicle. Older children need to use seat belts properly.

⚠ Warning

Never allow more than one child to wear the same seat belt. The seat belt cannot properly spread the impact forces. In a crash, they can be crushed together and seriously injured. A seat belt must be used by only one person at a time.

⚠ Warning

Never allow a child to wear the shoulder belt of the seat belt under both arms or behind their back. A child can be seriously injured by not wearing the lap-shoulder belt properly. In a crash, the child would not be restrained by the shoulder belt. The child could move too far forward increasing the chance of head and neck injury. The child might also slide under the lap belt. The belt force would then be applied right on the abdomen. That

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Warning (Continued)

could cause serious or fatal injuries. The shoulder belt should go over the shoulder and across the chest.

Infants and Young Children

Everyone in a vehicle needs protection! This includes infants and all other children. Neither the distance travelled nor the age and size of the traveller changes the need, for everyone, to use safety restraints.

⚠ Warning

Children can be seriously injured or killed if the shoulder belt is worn behind their back, under their legs, or wrapped around their neck. Never leave children unattended in a vehicle and never allow children to improperly wear, or play with, the seat belts.

Every time infants and young children ride in vehicles, they should have the protection provided by appropriate child restraints. Neither the vehicle's seat belt system nor its airbag system is designed for them.

Children who are not restrained properly can strike other people, or can be thrown out of the vehicle.

⚠ Warning

Never hold an infant or a child while riding in a vehicle. Due to crash forces, an infant or a child will become so heavy it is not possible to hold it during a crash.

(Continued)

Warning (Continued)

For example, in a crash at only 40 km/h (25 mph), a 5.5 kg (12 lb) infant will suddenly become a 110 kg (240 lb) force on a person's arms. An infant or child should be secured in an appropriate child restraint.

⚠ Warning

Children who are up against, or very close to, any airbag when it inflates can be seriously injured or killed. Never put a rear-facing child

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Warning (Continued)

restraint in the front outboard seat. Secure a rear-facing child restraint in a rear seat. It is also better to secure a forward-facing child restraint in a rear seat. If you must secure a forward-facing child restraint in the front outboard seat, always move the front passenger seat as far back as it will go.

Child restraints are devices used to restrain, seat, or position children in the vehicle and are sometimes called child seats or car seats.

There are three basic types of child restraints:

- Forward-facing child restraints
- Rear-facing child restraints
- Belt-positioning booster seats

The proper child restraint for your child depends on their size, weight, and age, and also on whether the child restraint is compatible with the vehicle in which it will be used.

For each type of child restraint, there are many different models available. When purchasing a child restraint, be sure it is designed to be used in a motor vehicle.

The instruction manual that is provided with the child restraint states the weight and height limitations for that particular child restraint. In addition, there are many kinds of child restraints available for children with special needs.

⚠ Warning

To reduce the risk of neck and head injury in a crash, infants and toddlers should be secured in a

(Continued)

Warning (Continued)

rear-facing child restraint until age two, or until they reach the maximum height and weight limits of their child restraint.

⚠ Warning

A young child's hip bones are still so small that the vehicle seat belt may not remain low on the hip bones, as it should. Instead, it may settle up around the child's abdomen. In a crash, the belt would apply force on a body area that is unprotected by any bony structure. This alone could cause serious or fatal injuries. To reduce the risk of serious or fatal injuries during a crash, young children should always be secured in an appropriate child restraint.

Child Restraint Systems

Infants and children should be placed in the rear seat and properly restrained, according to the terms in this manual.

A young child's hip bones are so small that the vehicle's regular seat belt may not remain low on the hip bones, as it should. Instead, there is a possibility that it will load the abdomen and cause serious or fatal injury in a crash.

⚠ Danger

NEVER use a rearward-facing child restraint on a seat protected by an ACTIVE AIRBAG in front of it; DEATH or SERIOUS INJURY to the CHILD can occur.

⚠ Danger

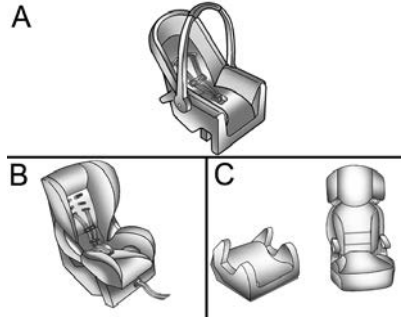
If using a rear-facing child restraint on the front passenger seat, the airbag for the front passenger seat must be deactivated. This also applies to certain forward-facing child restraints as indicated in the tables listed in this manual.

See *Airbag On-Off Switch ⇨ 61*.

When a child restraint is being used, pay attention to the following usage and installation instructions and also those supplied with the child restraint.

Always comply with local or national regulations. In some countries, the use of child restraints is forbidden on certain seats.

Group	Weight Class
Group 0	Up to 10 kg (22 lb)
Group 0+	Up to 13 kg (28 lb)
Group I	9 to 18 kg (20 to 39 lb)
Group II	15 to 25 kg (34 to 55 lb)
Group III	22 to 36 kg (49 to 79 lb)



Model A : Group 0 and 0+ – Baby Seat

Model B : Group I – Child Seat

Model C : Group II and III – Booster Seat

Child restraints are designed to be fastened with the lap-shoulder belt or the ISOFIX anchors. Some child restraints also use a top tether or support leg.

Child Restraint Classification

For reference, child restraints available in the market are classified based on the child's mass. Carefully observe the installation and usage instructions given by the child restraint manufacturer.

When choosing a child restraint, it is important to consider the child's height in addition to its age and mass.

⚠ Danger

- Make sure that the child restraint is installed properly. If the child restraint is not properly attached, the risk of serious injury in the event of a collision increases.

(CONTINUED)

Danger (Continued)

- Do not attach or place objects or other materials on the child restraint.
- Do not leave any loose objects in the vehicle. During an impact, an object may move and cause injuries to the occupants.
- After a crash, it is necessary to replace the child restraint because it may have suffered non-visible damage.
- Always restrain your child in a properly installed child restraint, even on short trips.
- Allow children to enter and exit the vehicle only on the side facing away from traffic.

⚠ Warning

- When carrying a child, follow the procedures for the transport of children established by the local laws.

(Continued)

Warning (Continued)

- In some countries, the use of child restraints is forbidden on certain seats.
- After removing the child from the vehicle, keep the child restraint attached with the seat belt or ISOFIX, in order to avoid the child restraint from being thrown forward in case of sudden braking.

Make sure that the child restraint:

- Is installed in accordance with the instructions given by the child restraint manufacturer.
- Has the label of approval of safety regulations certification, in terms of the local laws.
- Is suitable for your vehicle.

Selecting the Right Child Restraint

The rear seats are the most convenient location to fasten a child restraint.

Children should travel facing rearward in the vehicle to as late an age as possible. This makes sure that the child's backbone, which is still very weak, is under less strain in the event of a crash.

General Motors recommends using a genuine GM child restraint.

Ensure that the child restraint to be installed is compatible with the vehicle type.

Make sure that the mounting location of the child restraint within the vehicle is correct as per the tables included in this manual. See *Where to Put the Restraint* ⇨ *71*.

The provisions established by the laws have priority over the provisions of this manual.

⚠ Danger

Never use a single seat belt with an adult and a child. During an impact, the seat belt will exert strong pressure on the child, causing serious or fatal injury.

(CONTINUED)

Danger (Continued)

Never allow two children to share the same seat belt. Both could suffer serious injuries in a crash.

⚠ Danger

Infants and children must never be carried on the lap of another occupant.

Although an infant does not weigh much, it will be so heavy during a crash that it will be impossible to hold it, even if the occupant is attached to the seat belt.

Where to Put the Restraint

According to accident statistics, children and infants are safer when properly restrained in an appropriate child restraint secured in a rear seating position.

Whenever possible, children aged 12 and under should be secured in a rear seating position.

Never put a rear-facing child restraint in the front. This is because the risk to the rear-facing child is so great if the airbag deploys.

⚠ Danger

NEVER use a rearward-facing child restraint on a seat protected by an ACTIVE AIRBAG in front of it; DEATH or SERIOUS INJURY to the CHILD can occur.

⚠ Danger

When using a child restraint on the front passenger seat, the airbag systems for the front passenger seat must be deactivated; if not, the triggering of the airbags poses a risk of fatal injury to the child.

This is especially the case if rear-facing child restraints are used on the front passenger seat.

EN: NEVER use a rearward-facing child restraint on a seat protected by an ACTIVE AIRBAG in front of it; DEATH or SERIOUS INJURY to the CHILD can occur.

FR: NE JAMAIS utiliser un siège d'enfant orienté vers l'arrière sur un siège protégé par un COUSSIN GONFLABLE ACTIF placé devant lui, sous peine d'infliger des BLESSURES GRAVES, voire MORTELLES à l'ENFANT.

DE: Nach hinten gerichtete Kindersitze NIEMALS auf einem Sitz verwenden, der durch einen davor befindlichen AKTIVEN AIRBAG geschützt ist, da dies den TOD oder SCHWERE VERLETZUNGEN DES KINDES zur Folge haben kann.

ES: NUNCA utilice un sistema de retención infantil orientado hacia atrás en un asiento protegido por un AIRBAG FRONTAL ACTIVO. Peligro de MUERTE o LESIONES GRAVES para el NIÑO.

SV: Använd ALDRIG en bakåtvänd barnstol på ett säte som skyddas med en framförvarande AKTIV AIRBAG. DÖDSFALL eller ALLVARLIGA SKADOR kan drabba BARNET.

IT: Non usare mai un sistema di sicurezza per bambini rivolto all'indietro su un sedile protetto da AIRBAG ATTIVO di fronte ad esso: pericolo di MORTE o LESIONI GRAVI per il BAMBINO!

NL: Gebruik NOOIT een achterwaarts gericht kinderzitje op een stoel met een ACTIEVE AIRBAG ervoor, om DODELIJK of ERNSTIG LETSEL van het KIND te voorkomen.

DA: Brug ALDRIG en bagudvendt autostol på et forsæde med AKTIV AIRBAG, BARNET kan komme i LIVSFARE eller komme ALVORLIGT TIL SKADE.

CS: NIKDY nepoužívejte dětský zádržný systém instalovaný proti směru jízdy na sedadle, které je chráněno před sedadlem AKTIVNÍM AIRBAGEM. Mohlo by dojít k VÁŽNÉMU PORANĚNÍ nebo ÚMRTÍ DÍTĚTE.

RU: ЗАПРЕЩАЕТСЯ устанавливать детское удерживающее устройство лицом назад на сиденье автомобиля, оборудованном фронтальной подушкой безопасности, если ПОДУШКА НЕ ОТКЛЮЧЕНА! Это может привести к СМЕРТИ или СЕРЬЕЗНЫМ ТРАВМАМ РЕБЕНКА.

FI: ÄLÄ KOSKAAN sijoita taaksepäin suunnattua lasten turvaistuinta istuimelle, jonka edessä on AKTIIVINEN TURVATYYNY, LAPSI VOI KUOLLA tai VAMMAUTUA VAKAVASTI.

NO: Bakovervendt barnesikringsutstyr må ALDRI brukes på et sete med AKTIV KOLLISJONSPUTE foran, da det kan føre til at BARNET utsettes for LIVSFARE og fare for ALVORLIGE SKADER.

PT: NUNCA use um sistema de retenção para crianças voltado para trás num banco protegido com um AIRBAG ACTIVO na frente do mesmo, poderá ocorrer a PERDA DE VIDA ou FERIMENTOS GRAVES na CRIANÇA.

EL: ΠΟΤΕ μη χρησιμοποιείτε παιδικό κάθισμα ασφαλείας με φορά προς τα πίσω σε κάθισμα που προστατεύεται από μετωπικό ΕΝΕΡΓΟ ΑΕΡΟΣΑΚΟ, διότι το παιδί μπορεί να υποστεί ΘΑΝΑΣΙΜΟ ή ΣΟΒΑΡΟ ΤΡΑΥΜΑΤΙΣΜΟ.

PL: NIE WOLNO montować fotelika dziecięcego zwróconego tyłem do kierunku jazdy na fotelu, przed którym znajduje się WŁĄCZONA PODUSZKA POWIETRZNA. Niezastosowanie się do tego zalecenia może być przyczyną ŚMIERCI lub POWAŻNYCH OBRAŻEŃ u DZIECKA.

TR: Arkaya bakan bir çocuk emniyet sistemini KESİNLİKLE önünde bir AKTİF HAVA YASTIĞI ile korunmakta olan bir koltukta kullanmayınız. ÇOCUK ÖLEBİLİR veya AĞIR ŞEKİLDE YARALANABİLİR.

UK: НІКОЛИ не використовуйте систему безпеки для дітей, що встановлюється обличчям назад, на сидінні з УВІМКНЕНОЮ ПОДУШКОЮ БЕЗПЕКИ, інакше це може призвести до СМЕРТІ чи СЕРЙОЗНОГО ТРАВМУВАННЯ ДИТИНИ.

HU: SOHA ne használjon hátrafelé néző biztonsági gyerekülést előlről AKTÍV LÉGZSÁKKAL védett ülésen, mert a GYERMEK HALÁLÁT vagy KOMOLY SÉRÜLÉSÉT okozhatja.

HR: NIKADA nemojte koristiti sustav zadržavanja za djecu okrenut prema natrag na sjedalu s AKTIVNIM ZRAČNIM JASTUKOM ispred njega, to bi moglo dovesti do SMRTI ili OZBILJNJIH OZLJEDA za DIJETE.

SL: NIKOLI ne nameščajte otroškega varnostnega sedeža, obrnjenega v nasprotni smeri vožnje, na sedež z AKTIVNO ČELNO ZRAČNO BLAZINO, saj pri tem obstaja nevarnost RESNIH ali SMRTNIH POŠKODB za OTROKA.

SR: NIKADA ne koristiti bezbednosni sistem za decu u kome su deca okrenuta unazad na sedištu sa AKTIVNIM VAZDUŠNIM JASTUKOM ispred sedišta zato što DETE može da NASTRADA ili da se TEŠKO POVREDI.

MK: НИКОГАШ не користете детско седиште свртено наназад на седиште заштитено со АКТИВНО ВОЗДУШНО ПЕРНИЧЕ пред него, затоа што детето може ДА ЗАГИНЕ или да биде ТЕШКО ПОВРЕДЕНО.

BG: НИКОГА не използвайте детска седалка, гледаща назад, върху седалка, която е защитена чрез АКТИВНА ВЪЗДУШНА ВЪЗГЛАВНИЦА пред нея - може да се стигне до СМЪРТ или СЕРИОЗНО НАРАНЯВАНЕ на ДЕТЕТО.

RO: Nu utilizaţi NICIODATĂ un scaun pentru copil îndreptat spre partea din spate a maşinii pe un scaun protejat de un AIRBAG ACTIV în faţa sa; acest lucru poate duce la DECESUL sau VĂTĂMAREA GRAVĂ a COPILULUI.

SK: NIKDY nepoužívajte detskú sedačku otočenú vzad na sedadle chránenom AKTÍVNYM AIRBAGOM, pretože môže dôjsť k SMRTI alebo VÁŽNYM ZRANENIAM DIEŤAŤA.

LT: JOKIU BŪDU nemontuokite atgal atgręžtos vaiko tvirtinimo sistemos sėdynėje, prieš kurią įrengta AKTYVI ORO PAGALVĖ, nes VAIKAS GALI ŽŪTI arba RIMTAI SUSIŽALOTI.

LV: NEKĀDĀ GADĪJUMĀ neizmantojiet uz aizmuguri vērstu bērnu sēdeklīti sēdvietā, kas tiek aizsargāta ar tās priekšā uzstādītu AKTĪVU DROŠĪBAS SPILVENU, jo pretējā gadījumā BĒRNS var gūt SMAGAS TRAUMAS vai IET BOJĀ.

ET: ÄRGE kasutage tahapoole suunatud lapseturvaistet istmel, mille ees on AKTIIVSE TURVAPADJAGA kaitstud iste, sest see võib põhjustada LAPSE SURMA või TÕSISE VIGASTUSE.

MT: QATT tuża trażżin għat-tfal li jħares lejn in-naħa ta' wara fuq sit protett b'AIRBAG ATTIV quddiemu; dan jista' jikkawż l-MEWT jew ĠIEĦ SERJI lit-TFAL.

GA: Ná húsáid srian sábháilteachta linbh cúil RIAMH ar shuíochán a bhfuil mála aeir ag feidhmiú os a chomhair.Tá baol BÁIS nó GORTÚ DONA don PHÁISTE ag baint leis.

When securing a child restraint with the seat belts in a rear seat position, study the instructions that came with the child restraint to make sure it is compatible with this vehicle.

Child restraints and booster seats vary considerably in size, and some may fit in certain seating positions better than others. Do not install a child restraint in any rear seating position where it cannot be installed securely.

Depending on where you place the child restraint and the size of the child restraint, you may not be able to access adjacent seat belts or ISOFIX anchors for additional passengers or child restraints. Adjacent seating positions should not be used if the child restraint prevents access to or interferes with the routing of the seat belt.

The seat in front of an installed child restraint should be adjusted to ensure proper installation according to the child restraint manual.

Wherever a child restraint is installed, be sure to follow the instructions that came with the child restraint and secure the child restraint properly.

Keep in mind that an unsecured child restraint can move around in a collision or sudden stop and injure people in the vehicle. Be sure to properly secure any child restraint in the vehicle - even when no child is in it.

Child Restraint Suitability

	Seating Position								
Seat Position Number	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Seating Position Suitable for Universal Belted (Yes/No)	No	N/A	Yes[1]	Yes	No	Yes	N/A	N/A	N/A
i-Size Seating Position (Yes/No)	N/A	N/A	N/A	Yes	No	Yes	N/A	N/A	N/A
Seating Positions Suitable for Lateral Fixture (L1/L2)	N/A	N/A	N/A	No	No	No	N/A	N/A	N/A
Largest Suitable Rearward Facing Fixture (ISO R1/R2X/ R2/R3)	N/A	N/A	N/A	R3	No	R3	N/A	N/A	N/A
Largest Suitable Forward Facing Fixture (F2X/F2/F3)	N/A	N/A	N/A	F3	No	F3	N/A	N/A	N/A
Largest Suitable Booster Fixture (B2/B3)	N/A	N/A	No	B3	No	B3	N/A	N/A	N/A

Child Restraint Suitability (cont'd)

Legend and Footnotes
N/A: This feature/seating position does not exist in this vehicle
No: No Child Restraint permitted in this seating position
Yes: Child Restraint permitted in this seating position
[1]: Rear Facing Child Restraints are not permitted in this seat position. If a forward facing child restraint system is being secured using a three-point seat belt, move the seat as far back as possible, move the seat upward or the backrest to an upright position, if needed, to get a firm installation of the child restraint. See "Securing Child Restraints with Seat Belt in Front Seat" Section.
L1: Left lateral facing position child restraint system (carry-cot)
L2: Right lateral facing position child restraint system (carry-cot)
R1: Rearward Facing Infant child restraint system
R2X: Reduced-size Rearward Facing Toddler child restraint system
R2: Reduced-size Rearward Facing Toddler child restraint system
R3: Full-size Rearward Facing Toddler child restraint system
F2: Reduced-height Forward Facing toddler child restraint system
F2X: Reduced-height Forward Facing toddler child restraint system
F3: Full-height Forward Facing Toddler child restraint system
B2: Booster seat, reduced width 440 mm
B3: Booster seat, full width 520 mm

Seat Number	Position in the Vehicle
1	Driver
2	Front Centre
3	Front Outboard Passenger
4	Second Row Left
5	Second Row Centre
6	Second Row Right
7	Third Row Left
8	Third Row Centre
9	Third Row Right

ISOFIX Child Restraint Systems

Rear Seat

The ISOFIX anchors are located behind the vertical openings in the seat trim and identified with the symbol .

Fasten ISOFIX child restraints to the ISOFIX anchors.

Specific vehicle ISOFIX child restraint positions are marked in the "ISOFIX Child Restraint Systems Installation Suitability" table. See *Where to Put the Restraint* ⇨ *71*.

Securing a Child Restraint to the ISOFIX Anchors

1. Position the child restraint on the front of the seat on which it will be installed.
2. Lock the ISOFIX attachments to the ISOFIX anchors following the instructions that came with the child restraint.
3. Ensure the child restraint is securely mounted to the seat.
4. A top tether strap or support leg must be used in addition to the ISOFIX anchors.

Top Tether Anchors of Vehicle

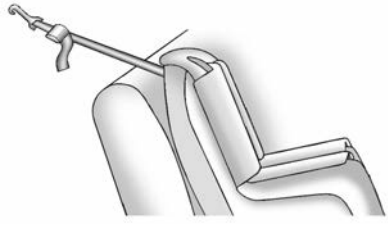
Top tether anchors are located on the back of the second row backrests and are always aligned with rear seats and identified with symbol TOP TETHER.

Do not attach anything other than a child restraint system to the vehicle top tether anchors.

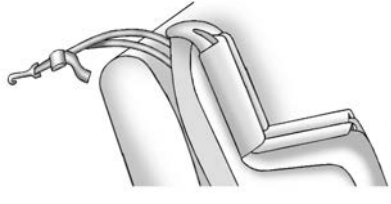
Instructions for attaching the child restraint to the top tether anchor:

If the child restraint manufacturer recommends that a top tether be attached, attach and tighten the top tether to the top tether anchor, if equipped. Refer to the child restraint instructions and the following steps:

1. Find the top tether anchor.
2. Route, attach and tighten the top tether according to your child restraint instructions and the following instructions:

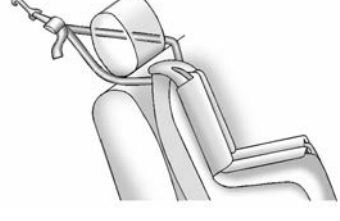


- If the position you are using does not have a head restraint and you are using a single tether, route the tether over the backrest.



- If the position you are using does not have a head restraint and you are using a dual tether, route the tether over the backrest.

- If the position you are using has an adjustable head restraint and you are using a single tether, raise the head restraint and route the tether under the head restraint and in between the head restraint posts.



- If the position you are using has an adjustable headrest or head restraint and you are using a dual tether, raise the headrest or

head restraint and route the tether under the headrest or head restraint and around the headrest or head restraint posts.

If the child restraint is installed next to a centre seat, make sure the top tether does not interfere with the centre seating position shoulder belt/retractor. If it does, find another suitable seating position to install the child restraint.

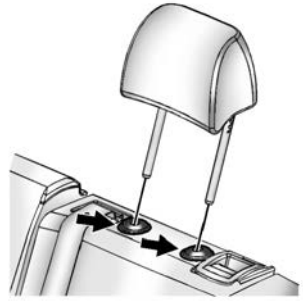
3. Make sure the child restraint top tether hook is completely closed and secured to the top tether anchor.

Head Restraint Removal and Reinstallation

The rear outboard head restraints can be removed if they interfere with the proper installation of the child restraint.

To remove the head restraint:

1. Partially fold the backrest forward. See *Rear Seats* ⇨ *47* for additional information.



2. Press both buttons on the head restraint posts at the same time, and pull up the head restraint.
3. Store the head restraint in a secure place.
4. When the child restraint is removed, reinstall the head restraint before the seating position is used.

⚠ Warning

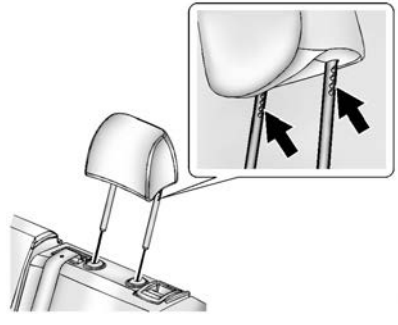
With head restraints that are not installed and adjusted properly, there is a greater chance that occupants will suffer a neck/spinal

(Continued)

Warning (Continued)

injury in a crash. Do not drive until the head restraints for all occupants are installed and adjusted properly.

To reinstall the head restraint:



1. Insert the head restraint posts into the holes in the top of the backrest. The notches on the posts must face the driver side of the vehicle.
2. Push the head restraint down.

   If necessary, press the height adjustment release button to further lower the head restraint. See *Head Restraints* ⇨ *38*.

3. Try to move the head restraint to make sure that it is locked in place.

Securing Child Restraints (With the Seat Belt in the Rear Seat)

When securing a child restraint with the seat belts in a rear seat position, study the instructions that came with the child restraint to make sure it is compatible with this vehicle.

If the child restraint has the ISOFIX system, see *ISOFIX Child Restraint Systems* ⇨ *77* for how and where to install the child restraint using ISOFIX. If a child restraint is secured in the vehicle using a seat belt and it uses a top tether, see *ISOFIX Child Restraint Systems* ⇨ *77* for top tether anchor locations.

Do not secure a child seat in a position without a top tether anchor if a national or local law requires that the top tether be anchored, or if the instructions that come with the child restraint state that the top tether must be anchored.

If the child restraint or vehicle seat position does not have the ISOFIX system, you will be using the seat belt to secure the child restraint. Be sure to follow the instructions that came with the child restraint.

If more than one child restraint needs to be installed in the rear seat, be sure to read *Where to Put the Restraint* ⇨ *71*.

1. Put the child restraint on the seat.
2. Pick up the latch plate, and run the lap and shoulder portions of the vehicle seat belt through or around the child restraint. The child restraint instructions will show you how.

3. Push the latch plate into the buckle until it clicks.

   Position the release button on the buckle, away from the child restraint, so that the seat belt can be quickly unbuckled if necessary.

   The push button used to release the catch plate must be visible and not obscured by the child restraint. There must not be direct contact between the child restraint and the push button.
4. Follow the instructions in the child restraint owner's manual to tighten and lock the child restraint using the vehicle seat belt.
5. If the child restraint has a top tether, follow the child restraint manufacturer's instructions regarding the use of the top tether. See *ISOFIX Child Restraint Systems* ⇨ *77*.
6. Before placing a child in the child restraint, make sure it is securely held in place. Refer to your child restraint manufacturer's instructions.

To remove the child restraint, follow the instructions in the child restraint owner's manual to unlock it. Unfasten the vehicle seat belt and let it return to the stowed position. If the top tether is attached to a top tether anchor, disconnect it.

Securing Child Restraints (With the Seat Belt in the Front Seat)

This vehicle has airbags. A rear seat is a safer place to secure a forward-facing child restraint. See *Where to Put the Restraint* ⇨ *71*.

There may be a switch on the instrument panel that you can use to turn off the front outboard passenger frontal airbag. See *Airbag On-Off Switch* ⇨ *61* for more information, including important safety information.

Never put a rear-facing child restraint in the front. This is because the risk to the rear-facing child is so great if the airbag deploys.

⚠ Danger

When using a child restraint on the front passenger seat, the airbag systems for the front passenger seat must be deactivated; if not, the triggering of the airbags poses a risk of fatal injury to the child.

This is especially the case if rear-facing child restraints are used on the front passenger seat.

⚠ Warning

A child in a rear-facing child restraint can be seriously injured or killed if the front outboard passenger airbag inflates. This is because the back of the rear-facing child restraint would be very close to the inflating airbag. A child in a forward-facing child restraint can be seriously injured or killed if the front outboard passenger airbag inflates and the passenger seat is in a forward position.

(Continued)

Warning (Continued)

Even if the airbag switch has turned off the front outboard passenger frontal airbag, no system is fail-safe. No one can guarantee that an airbag will not deploy under some unusual circumstance, even though it is turned off.

Secure rear-facing child restraints in a rear seat, even if the airbag is off. If you secure a forward-facing child restraint in the front outboard passenger seat, always move the seat as far back as it will go. It is better to secure the child restraint in a rear seat.

⚠ Warning

If the airbag readiness light ever comes on and stays on, it means that something may be wrong with the airbag system. For example, the front outboard passenger frontal

(Continued)

Warning (Continued)

airbag could inflate even though the airbag on-off switch is turned off.

To help avoid injury to yourself or others, have the vehicle serviced right away. See *Airbag Readiness Light* ⇨ *104* for more information, including important safety information.

If the child restraint uses a top tether, see *ISOFIX Child Restraint Systems* ⇨ *77* for top tether anchor locations.

Do not secure a child restraint in a position without a top tether anchor if a national or local law requires that the top tether must be anchored, or if the instructions that come with the child restraint say that the top tether must be anchored.

When using the lap-shoulder belt to secure the child restraint in this position, follow the instructions that came with the child restraint and the following instructions:

1. Move the seat as far back as it will go before securing the forward-facing child restraint. Move the seat upward or the backrest to an upright position, if needed, to get a tight installation of the child restraint.

   The push button used to release the catch plate must be visible and not obscured by the child restraint. There must not be direct contact between the child restraint and the push button.

   When the airbag off switch has turned off the front outboard passenger frontal airbag, the off indicator in the airbag off light should illuminate and remain illuminated when you start the vehicle. See *Airbag On-Off Light* ⇨ *105*.

2. Put the child restraint on the seat.
3. Pick up the latch plate, and run the lap and shoulder portions of the vehicle seat belt through or around the child restraint. The child restraint instructions will show you how.

4. Push the latch plate into the buckle until it clicks.

   Position the release button on the buckle, away from the child restraint, so that the seat belt can be quickly unbuckled if necessary.

5. Follow the instructions in the child restraint owner's manual to tighten and lock the child restraint when using the vehicle seat belt.
6. If the child restraint has a top tether, follow the child restraint manufacturer's instructions regarding the use of the top tether. See *ISOFIX Child Restraint Systems* ⇨ *77*.

If the airbags are off, the off indicator in the passenger airbag status indicator will come on and stay on when the vehicle is started.

To remove the child restraint, unbuckle the vehicle seat belt and let it return to the stowed position. If the top tether is attached to a top tether anchor, disconnect it.

If you turned the airbag off with the switch, turn on the front outboard passenger airbag when you remove the child restraint from the vehicle unless the person who will be sitting there is a member of a passenger airbag risk group. See *Airbag On-Off Switch* ⇨ *61* for more information, including important safety information.

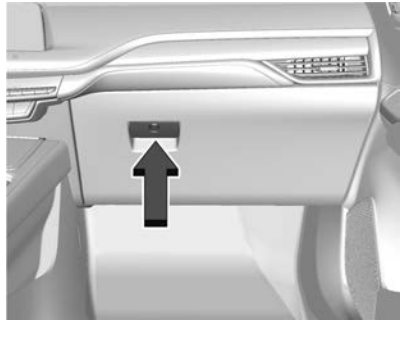
Storage

Storage Compartments

⚠ Warning

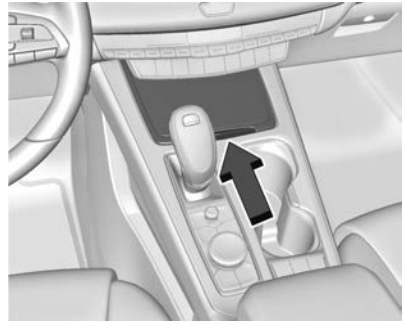
Do not store heavy or sharp objects in storage compartments. In a crash, these objects may cause the cover to open and could result in injury.

Glove Box



Lift the handle to open the glove box. Close until it latches. Use the vehicle key to lock or unlock. See *Keys* ⇨ *6*.

Front Storage



To open the front storage compartment, slide the cover forward. There are two USB ports inside. To close, push the cover forward and let go.

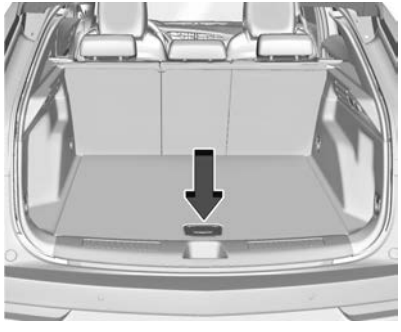
Sunglasses Storage

If equipped, sunglasses storage is on the overhead console. Press the fixed button on the cover and release to access.

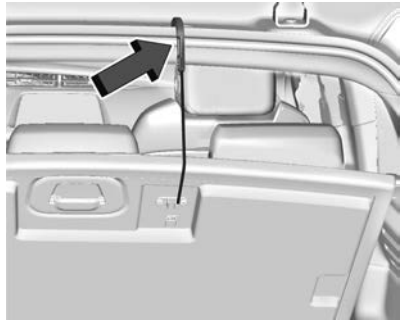
Armrest Storage

For vehicles with a rear seat armrest, pull the rear seat armrest forward to access the cupholders with removable liner.

Rear Storage

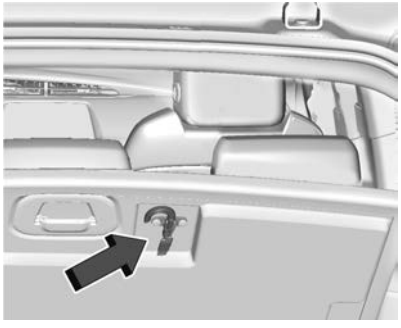


There is storage in the floor of the rear cargo area. Lift the handle to access.



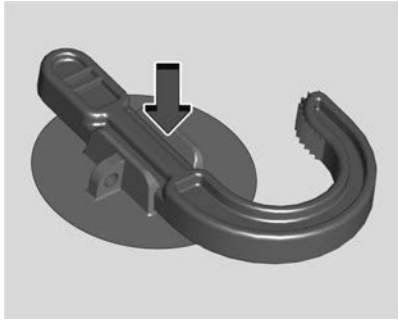
Remove the load floor hook from the holder and hook it to the weatherstrip above.

Then return the load floor hook to the holder.



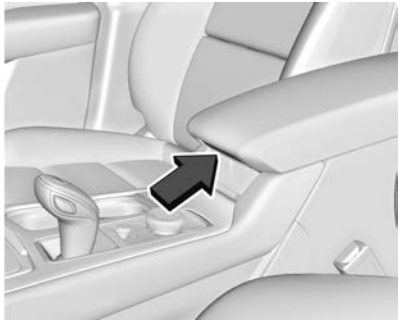
To install the load floor hook into the holder:

1. Insert one side of the load floor hook into the holder.



2. Push down on the other side of the load floor hook to lock into place.

Centre Console Storage



Press the button to access the storage area in front of the armrest cover.

There is a 12-volt power socket inside.

If equipped, there are two charge-only USB ports on the rear of the centre console.

There is a wireless smartphone charger in the front of the console storage. See *Wireless Charging* ⇨ *95*.

Umbrella Storage

Slide a compact umbrella no larger than 6 cm (2.36 in) in diameter into the opening on the driver or passenger door.

Additional Storage Features

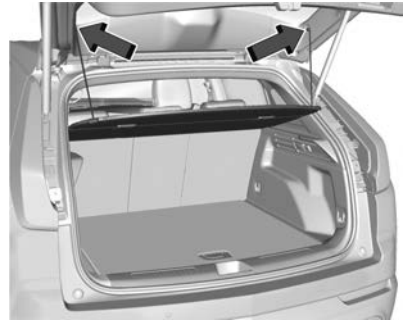
Cargo Cover

⚠ Warning

An unsecured cargo cover could strike people in a sudden stop or turn, or in a crash. Store the cargo cover securely or remove it from the vehicle.

⚠ Warning

Do not place objects on the cargo cover. Sudden stops or turns can cause objects to be thrown in the vehicle. You or others could be injured.



If equipped, the cargo cover can be used to cover items in the cargo area.

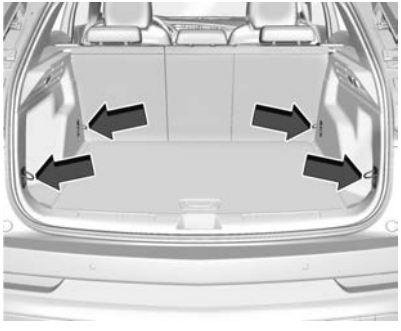
Installing the Cargo Cover

1. Slide the cargo cover into the two front corner brackets until it snaps in place.
2. Attach the cords to the fixed retainers on the tailgate.

Removing the Cargo Cover

To remove, disengage the cords and pull the cover out of the vehicle.

Cargo Tie-Downs



The vehicle has four cargo tie-downs in the rear compartment.

Warning Triangle

If equipped, the warning triangle is stored in the rear of the vehicle.

Roof Rack System

The vehicle may be equipped with side-rails for a roof rack system. Cargo must be secured with properly installed cross rails and other accessories designed to carry cargo. These can be purchased from your dealer.

⚠ Warning

Before driving and occasionally during a trip, check that the cargo is securely fastened, that it rests evenly between the cross rails and does not block the vehicle's lights or windows. Never load cargo directly on the roof of the vehicle or allow cargo to hang over the rear or sides of the vehicle. Never load cargo without first properly installing cross rails and other accessories designed to carry cargo. Personal injury, death or damage to the vehicle or other property may occur.

If driving for a long distance, on rough roads, or at high speeds, occasionally stop the vehicle to make sure the cargo remains in its place.

Cargo Weight Limits

Do not exceed the maximum cargo weight for the roof rack system, which includes the weight of the cross rails and any other accessories used to carry the cargo such as bike racks or roof boxes. The maximum cargo weight that can be loaded onto the roof rack system is 100 kg (220 lb) or the weight designated in the instructions that came with the cross rails or other roof rack accessories, whichever is less.

⚠ Warning

Never load the roof rack with more weight than specified in this section. Loading cargo on the roof rack will make the vehicle's centre of gravity higher. To avoid losing control of the vehicle, avoid overloading, high speeds, sudden starts, sharp turns, sudden braking, or abrupt manoeuvres when carrying cargo on the roof rack.

The weight of any cargo carried on the roof rack system must be included in calculating the loaded weight of the

vehicle. Do not exceed the maximum vehicle capacity when loading the vehicle, including cargo carried on the roof rack system and passengers and cargo carried in the vehicle. For more information on vehicle capacity and loading, see *Vehicle Load Limits* ⇨ *200*.

Instruments and Controls

Controls

Warning Lights, Gauges, and Indicators

Information Displays

Vehicle Messages

Vehicle Personalisation

Controls

Steering Wheel Adjustment

Manual Steering Wheel

To adjust the steering wheel:

1. Pull the lever down.
2. Move the steering wheel up or down.
3. Pull or push the steering wheel closer or away from you.
4. Pull the lever up to lock the steering wheel in place.

Do not adjust the steering wheel while driving.

Power Tilt and Telescoping Steering Wheel

Press the control to move the tilt and telescoping steering wheel up and down or forward and rearward.

Do not adjust the steering wheel while driving.

Steering Wheel Controls

The infotainment system can be operated by using the steering wheel controls. See *Steering Wheel Controls* ⇨ *137*.

Heated Steering Wheel

: If equipped, press to turn on or off. A light near the button displays when the feature is turned on.

The steering wheel takes about three minutes to reach maximum heat.

Automatic Heated Steering Wheel

If equipped with remote start, the heated steering wheel will turn on automatically during a remote start along with the heated seats when it is cold outside. The heated steering wheel indicator light may not come on.

If equipped with auto-heated seats, the heated steering wheel will turn on when the auto heated seats are activated. The heated steering wheel indicator will follow the state of the steering wheel heat.

See *Heated and Ventilated Front Seats* ⇨ *45* and *Vehicle Personalisation* ⇨ *121*.

Horn

Press on the steering wheel pad to sound the horn.

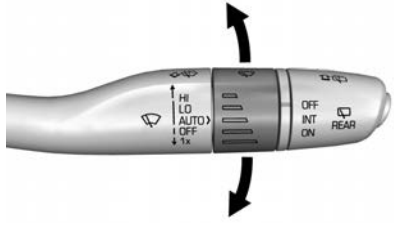
Windscreen Wiper/Washer

Windscreen Wiper with Rainsense (AUTO Shown)

With the ignition on or in ACC/ ACCESSORY, move the windscreen wiper lever to select the wiper speed.

HI : Use for fast wipes.

LO : Use for slow wipes.



AUTO : Use this setting for intermittent wipes when Rainsense is disabled, or Rainsense wipes when Rainsense is enabled. For intermittent wipes, move the windscreen wiper lever to AUTO, then turn the band up for more frequent wipes or down for less frequent wipes. If Rainsense is turned on, see “Rainsense” later in this section.

OFF : Use to turn the wipers off.

1X : For a single wipe, briefly move the wiper lever down. For several wipes, hold the wiper lever down.

: Pull the windscreen wiper lever toward you to spray windscreen washer fluid and activate the wipers. The wipers will continue until the lever is released or the maximum wash time is reached. When the windscreen wiper lever is released, additional wipes may occur depending on how long the windscreen washer has been activated. See *Washer Fluid* ⇨ *301* for information on filling the windscreen washer fluid reservoir.

⚠ Warning

In freezing weather, do not use the washer until the windscreen is warmed. Otherwise the washer fluid can form ice on the windscreen, blocking your vision.

⚠ Warning

Before driving the vehicle, always clear snow and ice from the bonnet, windscreen, washer nozzles, roof, and rear of the vehicle, including all

(Continued)

Warning (Continued)

lights and windows. Reduced visibility from snow and ice build-up could lead to a crash.

Clear snow and ice from the wiper blades and windscreen before using them. If frozen to the windscreen, carefully loosen or thaw them. Damaged blades should be replaced. See *Wiper Blade Replacement* ⇨ *304*.

Heavy snow or ice can overload the wiper motor. See *Electrical System Overload* ⇨ *308*.

Wiper Parking

If the ignition is turned off while the wipers are on LO, HI, or AUTO with Rainsense turned off, they will immediately stop.

If the windscreen wiper lever is then moved to OFF before the driver door is opened or within 10 minutes, the wipers will restart and move to the base of the windscreen.

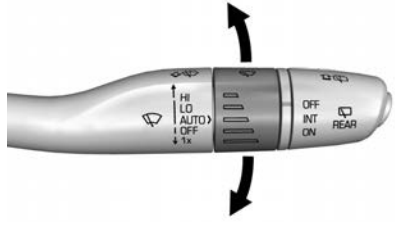
If the ignition is turned off while the wipers are performing wipes due to windscreen washing or Rainsense, the wipers continue to run until they reach the base of the windscreen.

Rainsense

If Rainsense is turned on, a sensor near the top centre of the windscreen detects the amount of water on the windscreen and controls the frequency of the windscreen wiper based on the current sensitivity setting.

Keep this area of the windscreen clear of debris to allow for best system performance.

AUTO : Move the windscreen wiper stalk to AUTO. Turn the band on the wiper stalk to adjust the sensitivity.



- Turn the band up for more sensitivity to moisture.
- Turn the band down for less sensitivity to moisture.
- Move the windscreen wiper lever out of the AUTO position to deactivate Rainsense.

To turn the Rainsense feature on or off, see “Rain Sense Wipers” under *Vehicle Personalisation* ⇨ *121*.

Wiper Arm Assembly Protection

When using an automatic car wash, move the windscreen wiper lever to OFF. This disables the automatic Rainsense windscreen wipers.

With Rainsense, if the transmission is in N (Neutral) and the vehicle speed is very slow, the wipers will automatically stop at the base of the windscreen.

The wiper operations return to normal when the transmission is no longer in N (Neutral) or the vehicle speed has increased.

Rear Window Wiper/ Washer

The rear window wiper/washer controls are on the end of the windscreen wiper lever.

Turn the controls to adjust the setting.

OFF : Turns the wiper off.

INT : Turns on the rear wiper with a delay between wipes.

ON : Turns on the rear wiper.

: Push the windscreen wiper lever forward to spray washer fluid on the rear window. The wipers will clear the rear window and either stop or return to your preset speed. For more washer cycles, push and hold the lever.

The rear window wiper/washer will not operate if the tailgate is open or ajar. If the tailgate is opened while the rear wiper is on, the wiper returns to the parked position and stops.

Rear Wiper Arm Assembly Protection

When using an automatic car wash, move the rear wiper control to OFF to disable the rear wiper. In some vehicles, if the transmission is in N (Neutral) and the vehicle speed is very slow, the rear wiper will automatically park under the rear spoiler.

The wiper operations return to normal when the transmission is no longer in N (Neutral) or the vehicle speed has increased.

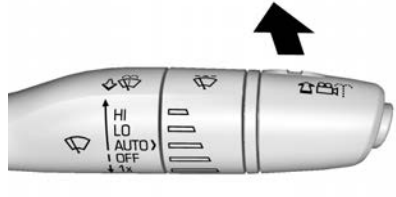
Auto Wipe in Reverse Gear

If the rear wiper control is off, the rear wiper will automatically operate continuously when the gear lever is in R (Reverse), and the front windscreen wiper is performing low or high speed wipes. If the rear wiper control is off, the gear lever is in R (Reverse), and the front windscreen wiper is performing intermittent wipes, then the rear wiper automatically performs INT wipes.

This feature can be turned on or off. See *Vehicle Personalisation* ⇨ *121*.

The windscreen washer reservoir is used for the windscreen and rear window. Check the fluid level in the reservoir if either washer is not working. See *Washer Fluid* ⇨ *301*.

Rear Camera Washer



If equipped, push the windscreen wiper lever forward to spray washer fluid on the rear camera lens. The

lever returns to its starting position when released. See *Rear Camera Mirror* ⇨ *31*.

Compass

The vehicle may have a compass display on the Driver Information Centre (DIC). The compass receives its heading and other information from the Global Positioning System (GPS) aerial, StabiliTrak/Electronic Stability Control (ESC), and vehicle speed information.

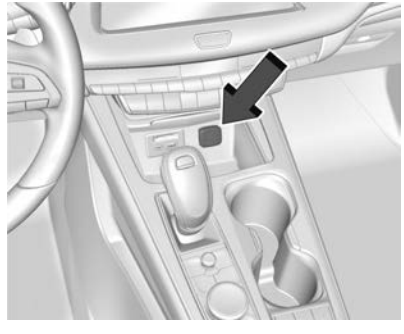
The compass system is designed to operate for a certain number of miles or degrees of turn before needing a signal from the GPS satellites. When the compass display shows CAL, drive the vehicle for a short distance in an open area where it can receive a GPS signal. The compass system will automatically determine when a GPS signal is restored and provide a heading again.

Clock

Set the time and date using the infotainment system. See "Time / Date" under *Settings* ⇨ *170*.

Power Sockets

The accessory power outlet can be used to plug in electrical equipment, such as a cell phone or MP3 player.



The vehicle has three accessory power sockets: one at the front of the centre console, one under the armrest, and one in the rear cargo area.

Certain accessory power plugs may not be compatible with the accessory power outlet and could overload vehicle or adapter fuses. If a problem is experienced, see your dealer.

When adding electrical equipment, ensure that you follow the proper installation instructions included with the equipment. See *Add-On Electrical Equipment* ⇨ *284*.

Caution

Hanging heavy equipment from the power outlet can cause damage not covered by the vehicle warranty. The power outlets are designed for accessory power plugs only, such as mobile phone charge cords.

Always unplug electrical equipment when not in use and do not plug in equipment that exceeds the maximum 15 amps rating.

Wireless Charging

If equipped, the vehicle has wireless charging in front of the centre console. The system operates at 145 kHz and wirelessly charges one Qi compatible smartphone. The power output of the system is capable of charging at a rate of up to 3 amps (15 W), as requested by the compatible smartphone.

⚠ Warning

Wireless charging may affect the operation of an implanted pacemaker or other medical devices. If you have one, it is recommended to consult with your doctor before using the wireless charging system.

The vehicle must be on, in ACC/ ACCESSORY, or Retained Accessory Power (RAP) must be active. The wireless charging feature may not correctly indicate charging when the vehicle is in RAP, during a Bluetooth phone call, or when phone projection (e.g. Apple CarPlay / Android Auto) is active. See *Retained Accessory Power (RAP)* ⇨ *209*.

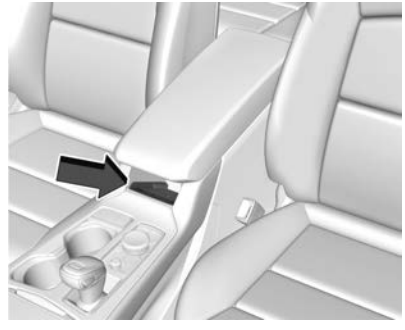
The operating temperature is -40 °C (-40 °F) to 85 °C (185 °F) for the charging system and 0 °C (32 °F) to 35 °C (95 °F) for the phone. A charging stopped alert may be displayed on the infotainment screen, if the wireless charger or smartphone are outside of normal operating temperature.

Charging will automatically resume when a normal operating temperature is reached.

⚠ Warning

Remove all objects from the charger before charging your compatible smartphone. Objects, such as coins, keys, rings, paper clips, or cards, between the smartphone and charger may become very hot.

On the rare occasion that the charging system does not detect an object, and that object becomes wedged between the smartphone and charger, remove the smartphone and allow the object to cool before removing it from the charger, to prevent burns.



To charge a compatible smartphone:

1. Confirm the smartphone is capable of wireless charging.
2. Remove all objects from the charging pad. The system may not charge if there are any objects between the smartphone and charger.
3. Place the smartphone face up against the rear of the charger.

   To maximise the charge rate, ensure the smartphone is fully seated and centred in the holder with nothing under it.

A thick smartphone case may prevent the charger from working, or reduce the charging performance. See your retailer for additional information.

4. A green ⚡ will appear on the infotainment display, next to the phone icon. This indicates that the smartphone is detected.
5. If a smartphone is placed on the charger and ⚡ turns off or turns yellow, remove the smartphone and any objects from the pad. Turn the smartphone 180 degrees and wait a few seconds before placing/aligning it on the pad again.
6. If a smartphone is placed on the charger and ⚡ turns red, the charger and/or the smartphone have overheated. Remove the smartphone and any objects from the charger in order to cool the system.

The smartphone may become warm during charging. This is normal. In warmer temperatures, the speed of charging may be reduced.

Software Acknowledgements

Certain Wireless Charging Module products from LG Electronics, Inc. ("LGE") contain the open source software detailed below. Refer to the indicated open source licences (as are included following this notice) for the terms and conditions of their use.

OSS Notice Information

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Freescale-WCT library

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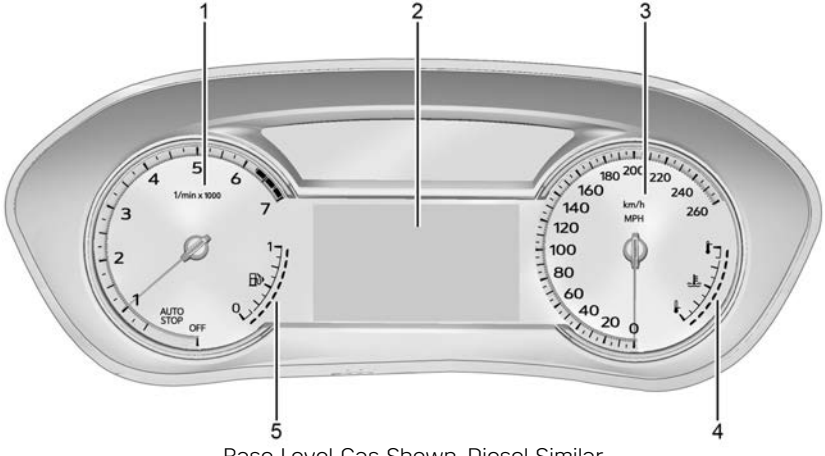
Warning Lights, Gauges, and Indicators

Warning lights and gauges can signal that something is wrong before it becomes serious enough to cause an expensive repair or replacement. Paying attention to the warning lights and gauges could prevent injury.

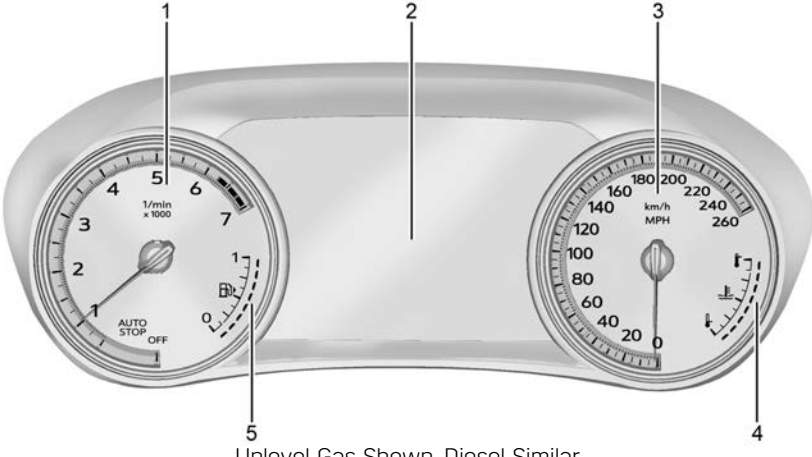
Some warning lights come on briefly when the engine is started to indicate they are working. When one of the warning lights comes on and stays on while driving, or when one of the gauges shows there may be a problem, check the section that explains what to do. Waiting to do repairs can be costly and even dangerous.

Instrument Cluster



Base Level Gas Shown, Diesel Similar

1. *Rev Counter* ⇨ *102*
2. *Driver Information Centre (DIC)* ⇨ *115*
3. *Speedometer* ⇨ *101*
4. *Engine Coolant Temperature Gauge* ⇨ *103*
5. *Fuel Gauge* ⇨ *102*

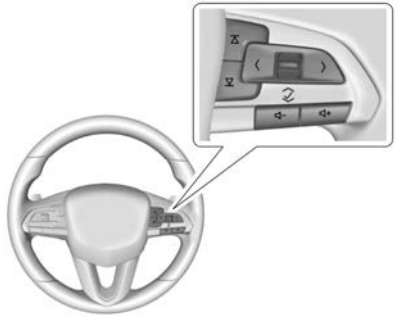


Uplevel Gas Shown, Diesel Similar

1. *Rev Counter* ⇨ *102*
2. *Driver Information Centre (DIC)* ⇨ *115*
3. *Speedometer* ⇨ *101*
4. *Engine Coolant Temperature Gauge* ⇨ *103*
5. *Fuel Gauge* ⇨ *102*

Cluster Menu

There is an interactive display area in the centre of the instrument cluster.



Use the right steering wheel control to open and scroll through the different items and displays.

Press < or > to access the cluster applications. Use the thumbwheel to scroll through the list of available applications. Not all applications will be available on all vehicles.

- Info App. This is where the selected Driver Information Centre (DIC) displays can be viewed. See *Driver Information Centre (DIC)* ⇨ *115*.
- Audio
- Navigation
- Phone
- Options

Audio

In the Audio menu browse for music, select from the favourites, or change the audio source. Use the thumbwheel to change the station or go to the next or previous track.

Navigation

If there is no active route, press enter to access the Recents or Favourites list. If there is an active route, press the thumbwheel to cancel or resume route guidance, mute or unmute voice guidance, or access the Recents or Favourites list.

Phone

In the Phone menu, if there is no active phone call, view recent calls, or scroll through contacts. If there is an active call, mute the phone or switch to handset operation.

Options

Use the thumbwheel to scroll through items in the Options menu.

Head-up Display (HUD) : If equipped, this feature allows for adjusting the angle of the HUD image and changing or turning off the Speed Limit Sign.

HUD Rotation (Uplevel): Press the thumbwheel while Adjust Rotation is highlighted to enter Adjust Mode. Scroll to adjust the angle of the HUD display. Press the thumbwheel to confirm and save the setting. This feature may only be available in P (Park).

Speed Sign: If equipped, press the thumbwheel while Speed Sign is highlighted to turn it on or off.

Units : Choose English or Metric units by pressing the thumbwheel while the desired item is highlighted.

Info Page Options : Press the thumbwheel to select the items to be displayed in the Info app. See *Driver Information Centre (DIC)* ⇨ *115*.

Display : Press the thumbwheel to enter the Display menu. Select to turn on or off the speedometer, time, fuel range, or, if equipped, compass or speed sign.

Speed Warning : The Speed Warning display allows the driver to set a speed that they do not want to exceed. To set the Speed Warning press the thumbwheel when Speed Warning is displayed. Use the thumbwheel to adjust the value and press to set the speed.

Once the speed is set, this feature can be turned off by pressing the thumbwheel while viewing this page. If the selected speed limit is exceeded, a pop-up warning is displayed with a chime.

Software Information : Displays open source software information.

Speedometer

The speedometer shows the vehicle's speed in either kilometres per hour (km/h) or miles per hour (mph).

Mileometer

The odometer shows how far the vehicle has been driven, in either kilometres or miles.

Trip Odometer

The trip odometer shows how far the vehicle has been driven since the trip odometer was last reset.

The trip odometer is accessed and reset through the Driver Information Centre (DIC). See *Driver Information Centre (DIC)* ⇨ *115*.

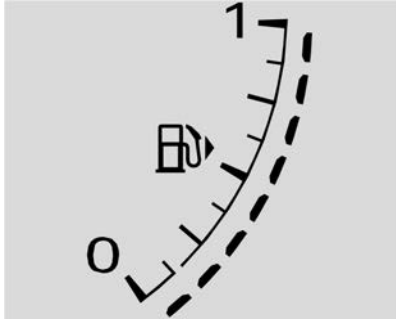
Rev Counter

The tachometer displays the engine speed in revolutions per minute (rpm).

For vehicles with the Stop/Start system, when the ignition is on, the tachometer indicates the vehicle status. When pointing to AUTO STOP, the engine is off but the vehicle is on and can move. The engine could auto start at any time. When the indicator points to OFF, the vehicle is off.

When the engine is on, the tachometer will indicate the engine's revolutions per minute (rpm). During Auto Stop mode, when the engine is shutting off and restarting, the tachometer may fluctuate by several hundred rpm.

Fuel Gauge



When the ignition is on, the fuel gauge indicates about how much fuel is left in the tank.

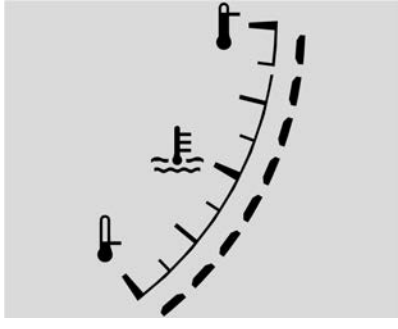
There is an arrow near the fuel gauge pointing to the side of the vehicle the fuel door is on.

When the indicator nears empty, the low fuel light comes on. There still is a little fuel left, but the vehicle should be refuelled soon.

Here are three things that some owners ask about. None of these show a problem with the fuel gauge:

- It takes a little more, or less, fuel to fill up than the gauge indicated. For example, the gauge may have indicated the tank was half full, but it actually took a little more, or less, than half the tank's capacity to fill the tank.
- The gauge moves a little while turning a corner, speeding up or braking.
- The gauge takes a few seconds to stabilise after the ignition is turned on and goes back to empty when the ignition is turned off.

Engine Coolant Temperature Gauge



This gauge measures the temperature of the vehicle's engine.

While driving under normal operating conditions, if the red LED is illuminated, the engine is too hot. Pull off the road, stop the vehicle, and turn off the engine as soon as possible.

Seat Belt Reminders

Driver Seat Belt Reminder Light

There is a driver seat belt reminder light on the instrument cluster.

When the vehicle is started, this light flashes and a chime may come on to remind the driver to fasten their seat belt.

Then the light stays on solid until the belt is buckled. This cycle may continue several times if the driver remains or becomes unbuckled while the vehicle is moving.

If the driver seat belt is fastened, neither the light nor the chime is activated.

Front Passenger Seat Belt Reminder Light

The vehicle may have a front passenger seat belt reminder light near the passenger airbag status indicator. See *Airbag On-Off Switch* ⇨ *61*.

When the vehicle is started, this light flashes and a chime may sound to remind passengers to fasten their seat belts.

Then the light stays on solid until the belt is buckled. This cycle continues several times if the front passenger remains or becomes unbuckled while the vehicle is moving.

If the front passenger seat belt is fastened, neither the chime nor the light is activated.

The front passenger seat belt reminder light and chime may be activated if an object is left on the seat such as a briefcase, handbag, shopping bag, and laptop, or other electronic device. To turn off the reminder light and/or chime, remove the object from the seat or fasten the seat belt.

Second Row Passenger Seat Belt Reminder Lights

The vehicle may have second row passenger seat belt reminder lights. The vehicle has one of the following displays.

When the vehicle is started, these lights illuminate with a solid glow to remind rear seat passengers to fasten their seat belts. Then each light may remain switched on with a solid glow or flash, and a chime may sound if a rear seat passenger remains unfastened, or becomes unfastened, when the vehicle is moving. A shaded light, a green light or empty rectangle indicates the seat belt is fastened.

If all rear seat positions are fastened, neither the chime nor the lights will be activated.

The rear passenger seat belt reminder light and chime may be activated if an object is left on the seat such as a briefcase, handbag, shopping bag, and laptop, or other electronic device. To turn off the reminder light and/or chime, remove the object from the seat or fasten the seat belt.

Airbag Readiness Light

This light shows if there is an electrical problem with the airbag system.

It is located in the instrument cluster.

The system check includes the airbag sensor(s), the pretensioners, the airbag modules, the wiring, and the crash sensing and diagnostic module. For more information on the airbag system, see *Airbag System* ⇨ *55*.

The airbag readiness light comes on for several seconds when the vehicle is started. If the light does not come on then, have it fixed immediately.

⚠ Warning

If the airbag readiness light stays on after the vehicle is started or comes on while driving, it means the airbag system might not be working properly. The airbags in the vehicle might not inflate in a crash, or they could even inflate without a crash. To help avoid injury, have the vehicle serviced right away.

If there is a problem with the airbag system, a Driver Information Centre (DIC) message may also come on.

Airbag On-Off Light

If the vehicle has an airbag on-off switch, it also has a passenger airbag status indicator located in the overhead console.

When the vehicle is started, the passenger airbag status indicator symbols for on and off will light for several seconds as a system check. Then, after several more seconds, the status indicator will light either the on or off symbol to let you know the status of the front outboard passenger frontal airbag.

When the front outboard passenger frontal airbag is manually turned off using the airbag on-off switch on the instrument panel end face, the off symbol will illuminate and stay on as a reminder that the airbag has been turned off. This light will go off when the airbag has been turned on. See *Airbag On-Off Switch* ⇨ *61* for more information, including important safety information.

⚠ Warning

If the front outboard passenger frontal airbag is turned off for a person who does not belong to a category indicated in this manual, that person will not have the extra protection of an airbag. In a crash, the airbag will not be able to inflate and help protect the person sitting there.

(Continued)

Warning (Continued)

Do not turn off the front outboard passenger frontal airbag unless the person sitting there belongs to a category indicated in this manual. See *Airbag On-Off Switch* ⇨ *61* for more on this, including important safety information.

⚠ Warning

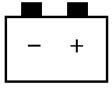
If the airbag readiness light ever comes on and stays on, it means that something may be wrong with the airbag system. For example, the front outboard passenger frontal airbag could inflate even though the airbag on-off switch is turned off.

To help avoid injury to yourself or others, have the vehicle serviced right away. See *Airbag Readiness Light* ⇨ *104* for more information, including important safety information.

If the on symbol is lit, it means that the front outboard passenger frontal airbag is enabled (may inflate). See *Airbag On-Off Switch* ⇨ *61* for more information, including important safety information.

If, after several seconds, both status indicator lights remain on, or if there are no lights at all, there may be a problem with the lights or the airbag on-off switch. See your retailer for service.

Charging System Light



The charging system light comes on briefly when the ignition is turned on, but the engine is not running, as a check to show the light is working. It should go out when the engine is started.

If the light stays on, or comes on while driving, there may be a problem with the electrical charging system. Have it checked by your dealer. Driving while this light is on could drain the battery.

When this light comes on, or is flashing, the Driver Information Centre (DIC) also displays a message.

If a short distance must be driven with the light on, be sure to turn off all accessories, such as the radio and air conditioner. Find a safe place to stop the vehicle.

Malfunction Indicator Lamp (Check Engine Light)

This light is part of the vehicle's emission control on-board diagnostic system. If this light is on while the engine is running, a malfunction has been detected and the vehicle may require service. The light should come on to show that it is working when the ignition is in Service Mode. See *Ignition Positions* ⇨ *205*.

This light may also illuminate when the system has detected a problem with the AdBlue management system. See *AdBlue* ⇨ *212*.

Malfunctions are often indicated by the system before any problem is noticeable. Being aware of the light and seeking service promptly when it comes on may prevent damage.

Caution

If the vehicle is driven continually with this light on, the emission control system may not work as well, the fuel economy may be lower, and the vehicle may not run smoothly. This could lead to costly repairs that might not be covered by the vehicle warranty.

Caution

Modifications to the engine, transmission, exhaust, intake, or fuel system, or the use of replacement tyres that do not meet

(Continued)

Caution (Continued)

the original tyre specifications, can cause this light to come on. This could lead to costly repairs not covered by the vehicle warranty. This could also affect the vehicle's ability to pass an Emissions Inspection/Maintenance test. See *Accessories and Modifications* ⇨ *286*.

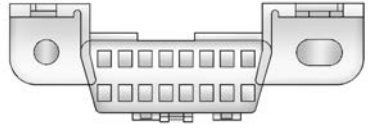
When the light is on, a malfunction has been detected. Diagnosis and service may be required.

Poor fuel quality can cause inefficient engine operation and poor driveability, which may go away once the engine is warmed up. If this occurs, change the fuel brand. It may require at least one full tank of the proper fuel to turn the light off. See *Fuel for Diesel Engines* ⇨ *264*.

If the light remains on, see your retailer.

Emissions Inspection and Maintenance Programs

If the vehicle requires an Emissions Inspection/Maintenance test, the test equipment will likely connect to the vehicle's Data Link Connector (DLC).



The DLC is under the instrument panel to the left of the steering wheel. Connecting devices that are not used to perform an Emissions Inspection/Maintenance test or to service the vehicle may affect vehicle operation. See *Add-On Electrical Equipment* ⇨ *284*. See your dealer if assistance is needed.

The vehicle may not pass inspection if:

- The light is on when the engine is running.
- The light does not come on when the ignition is in Service Mode.
- Critical emission control systems have not been completely diagnosed. If this happens, the vehicle would not be ready for inspection and might require several days of routine driving before the system is ready for inspection. This can happen if the 12-volt battery has recently been replaced or run down, or if the vehicle has recently been serviced.

See your retailer if the vehicle will not pass or cannot be made ready for the test.

Brake System Warning Light

This light should illuminate briefly when the vehicle is turned on. If it does not come on then, have it fixed so it will be ready to warn you if there is a problem.

If the light comes on and stays on at start up, there is a brake problem. Have the brake system inspected immediately.

If the light comes on while driving, pull off the road and stop carefully. The brake system has electric brake boost. Vehicle speed may be limited when the brake system warning light comes on. The brake pedal might be harder to push, or the brake pedal may go closer to the floor. It could take longer to stop. If the light is still on, have the vehicle towed for service. See *Towing the Vehicle* ⇨ *349*.

⚠ Warning

The brake system might not be working properly if the brake system warning light is on. Driving with the brake system warning light on can lead to a crash. If the light is still on after the vehicle has been pulled off the road and carefully stopped, have the vehicle towed for service.

Electric Parking Brake Light

This light comes on when the parking brake is applied. If the light continues flashing after the parking brake is released or while driving, there is a problem with the Electric Parking Brake system. A message may also display in the Driver Information Centre (DIC).

If the light does not come on, or remains flashing, see your dealer.

Service Electric Parking Brake Light

This light should illuminate briefly when the vehicle is turned on. If it does not come on, have it fixed so it will be ready to warn if there is a problem.

If this light stays on or comes on while driving, there is a problem with the Electric Parking Brake (EPB). Take the vehicle to a dealer as soon as possible. In addition to the parking brake, other safety functions that utilise the EPB may also be degraded. A message may also display in the Driver Information Centre (DIC). See *Electric Parking Brake* ⇨ *222*.

Antilock Brake System (ABS) Warning Light

This warning light should illuminate briefly when the vehicle is turned on. If the light does not come on, have it fixed so it will be ready to warn if there is a problem.

If the light illuminates while driving, safely stop as soon as it is possible and turn off the vehicle. Then turn on the vehicle again to reset the system.

If the ABS warning light remains turned on, or illuminates again while driving, the vehicle needs service. A chime may also sound when the light stays on.

If the ABS warning light is the only light turned on, the vehicle has regular brakes, but ABS is not functioning.

If both the ABS warning light and the brake system warning light are turned on, ABS is not functioning and there is a problem with the regular brakes. See your retailer for service.

See *Brake System Warning Light* ⇨ *107*.

Gear Shifting Light

If equipped, this light comes on when a gear change is recommended for best fuel economy. When the arrow is pointed up, an upshift is recommended. When the arrow is pointed down, a downshift is recommended. The number displayed with the arrow indicates the recommended gear.

Performance Shifting Light

If equipped, this light may display in green when Sport Mode is activated and certain driving conditions have been met. Sport Mode detects when the vehicle is being driven in a sporty manner, and adjusts the gear shifting accordingly. See *Driver Mode Control* ⇨ *225*.

All-Wheel-Drive Light

All-Wheel-Drive Light

Front-Wheel-Drive Light

If equipped, the corresponding light illuminates when an All-Wheel Drive (AWD) mode or Front-Wheel Drive mode is selected. See *Driver Mode Control* ⇨ *225*.

If the light turns amber, there may be a malfunction. See your dealer.

Lane Keep Assist (LKA) Light

If equipped, this light is white if LKA is turned on, but not ready to assist. This light is green if LKA is turned on and is ready to assist.

LKA may assist by gently turning the steering wheel if the vehicle approaches a detected lane marking. The LKA light is amber when assisting.

This light flashes amber as a Lane Departure Warning (LDW) alert, to indicate that the lane marking has been unintentionally crossed. If the system detects that the vehicle has been steered intentionally across a lane marker, the LDW may not be given. Do not expect the LDW to occur when intentionally crossing the lane marker.

LKA will not assist or alert if the indicator is active in the direction of lane departure, or if LKA detects that you are accelerating, braking, or actively steering.

See *Lane Keep Assist (LKA)* ⇨ *260*.

Vehicle Ahead Indicator

If equipped, this indicator will display green when a vehicle is detected ahead and amber when you are following a vehicle ahead much too closely.

See *Forward Collision Alert (FCA) System* ⇨ *250*.

Pedestrian Ahead Indicator

If equipped, this indicator will display in amber when a nearby pedestrian is detected in front of the vehicle.

See *Front Pedestrian Braking (FPB) System* ⇨ *254*.

Traction Off Light

This light comes on briefly when the vehicle is turned on. If it does not, have the vehicle serviced by your dealer. If the system is working normally, the indicator light then turns off.

The traction off light comes on when the Traction Control System (TCS) has been turned off. If StabiliTrak/ Electronic Stability Control (ESC) is turned off, TCS is also turned off. To turn TCS and ESC off and on, see *Traction Control/Electronic Stability Control* ⇨ *224*.

If TCS is off, wheel spin is not limited unless necessary to protect the driveline from damage. Adjust driving accordingly.

StabiliTrak OFF Light

This light comes on briefly when the vehicle is turned on. If the light does not come on, have the vehicle serviced by your dealer. If the system is working normally, the indicator light then turns off.

This light illuminates when the StabiliTrak/Electronic Stability Control (ESC) system is turned off. If StabiliTrak/ESC is off, the Traction Control System (TCS) is also off. To turn ESC off and on, see *Traction Control/Electronic Stability Control* ⇨ *224*.

If ESC and TCS are off, the systems do not assist in controlling the vehicle. Adjust driving accordingly.

Traction Control System (TCS)/StabiliTrak Light

This light comes on briefly when the vehicle is turned on.

If the light does not come on, have the vehicle serviced by your dealer. If the system is working normally, the indicator light turns off.

If the light is on and not flashing, the TCS and potentially the StabiliTrak/ESC system are not fully operational and may not assist in maintaining control. Adjust driving accordingly. If the condition persists, see your dealer as soon as possible. A Driver Information Centre (DIC) message may display.

The light flashes when the TCS and/or the StabiliTrak/ESC system is actively working.

See *Traction Control/Electronic Stability Control* ⇨ *224*.

Engine Coolant Temperature Warning Light (Uplevel)

This light comes on briefly while starting the vehicle.

If it does not, have the vehicle serviced by your dealer. If the system is working normally the indicator light goes off.

Caution

The engine coolant temperature warning light indicates that the vehicle has overheated. Driving with this light on can damage the engine and it may not be covered by the vehicle warranty. See *Engine Overheating* ⇨ *299*.

The engine coolant temperature warning light comes on when the engine has overheated.

If this happens, pull over and turn off the engine as soon as possible. See *Engine Overheating* ⇨ *299*.

Driver Mode Control Light

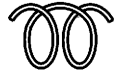
This light comes on when Sport Mode is selected.

This light comes on when Snow/Ice Mode is selected.

This light illuminates when Off-Road Mode is selected.

See *Driver Mode Control* ⇨ *225*.

Wait-to-Start Light



For diesel engines, the wait-to-start light shows that the engine is functioning properly and indicates when the engine can be started.

The fast warm-up glow plug system makes the wait-to-start light stay on for a shorter amount of time than most diesel engines.

For more information, see *Starting the Engine* ⇨ *206*.

Tyre Pressure Light

For vehicles with the Tyre Pressure Monitor System (TPMS), this light comes on briefly when the vehicle is started. It provides information about tyre pressures and the TPMS.

When the Light Is On Steady

This indicates that one or more of the tyres are significantly underinflated.

A Driver Information Centre (DIC) tyre pressure message may also display. Stop as soon as possible, and inflate the tyres to the pressure value shown on the Tyre and Loading Information label. See *Tyre Pressure* ⇨ *321*.

When the Light Flashes First and Then Is On Steady

If the light flashes for about a minute and then stays on, there may be a problem with the TPMS. If the

problem is not corrected, the light will come on at every ignition cycle. See *Tyre Pressure Monitor Operation* ⇨ *324*.

Engine Oil Pressure Light

Caution

Lack of proper engine oil maintenance can damage the engine. Driving with the engine oil low can also damage the engine. The repairs would not be covered by the vehicle warranty. Check the oil level as soon as possible. Add oil if required, but if the oil level is within the operating range and the oil pressure is still low, have the vehicle serviced. Always follow the maintenance schedule for changing engine oil.

This light should come on briefly as the engine is started. If it does not come on, have the vehicle serviced by your dealer.

If the light comes on and stays on, it means that oil is not flowing through the engine properly. The vehicle could be low on oil and might have some other system problem. See your dealer.

Low Fuel Warning Light

A Low Fuel Warning Light near the fuel gauge comes on briefly when the ignition is turned on as a check to show it is working.

It also comes on when the fuel gauge indicator nears empty. The light turns off when fuel is added. If it does not, have the vehicle serviced.

AdBlue Warning Light

This light, a Driver Information Centre (DIC) message, and a chime are activated when there is an issue with the AdBlue system.

If the issue is not corrected, the light will continue to flash or be illuminated. In some instances, an engine start may be prevented. See *AdBlue* ⇨ *212*.

Security Light

The security light should come on briefly as the engine is started. If it does not come on, have the vehicle

serviced by your dealer. If the system is working normally, the indicator light turns off.

If the light stays on and the engine does not start, there could be a problem with the theft-deterrent system. See *Immobiliser Operation* ⇨ *27*.

Main-Beam On Light

This light comes on when the high-beam headlamps are in use. See *Headlamp Main/Dipped-Beam Changer* ⇨ *128*.

IntelliBeam Light

This light comes on when the IntelliBeam system, if equipped, is enabled. See *Exterior Lamp Controls* ⇨ *127*.

Rear Fog Lamp Light

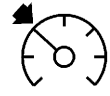
This light comes on when the rear fog lights are on.

The light goes out when the fog lamps are turned off. See *Fog Lamps* ⇨ *130*.

Lamps On Reminder

This light illuminates when the exterior lamps are in use, except when only the Daytime Running Lamps (DRL) are active. See *Exterior Lamp Controls* ⇨ *127*.

Cruise Control Light



The cruise control light is white when the cruise control is on and ready, and turns green when the cruise control is set and active. See *Cruise Control* ⇨ *226*.

Adaptive Cruise Control Light

This light comes on when Adaptive Cruise Control (if equipped) is active. See *Adaptive Cruise Control (Advanced)* ⇨ *231*.

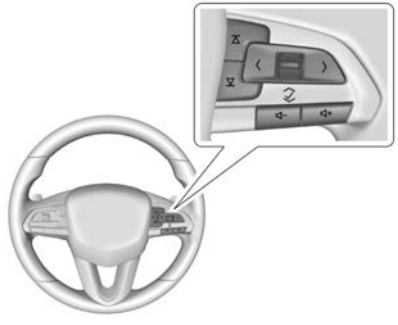
Door Ajar Light

This light comes on when a door is open or not securely latched. Before driving, check that all doors are properly closed.

Information Displays

Driver Information Centre (DIC)

The DIC is displayed in the instrument cluster. It shows the status of many vehicle systems.



< or > : Press to move between the interactive display zones in the cluster. Press < to go back to the previous menu.

∧ or ∨ : Use the thumbwheel to scroll to the previous or next selection.

✓ : Press the thumbwheel to open a menu or select a menu item. Press and hold to reset values on certain screens.

Info Page Options

The info displays on the DIC can be turned on or off through the Options menu.

1. Press > to scroll to the Options menu. Use the thumbwheel to scroll to Info Pages and press the thumbwheel to select.
2. Scroll ∧ or ∨ to move through the list of possible info displays.
3. Press the thumbwheel while an item is highlighted to select or deselect that item.

The info pages can also be turned on or off through the DIC page Info Page Options.

DIC Information Displays

The following is the list of all possible DIC information displays. Some of the information displays may not be available for your particular vehicle.

While in the Info Page Options menu, the info pages can be restored to the default factory settings by pressing and holding on the left steering wheel controls and the thumbwheel on the right steering wheel controls at the same time.

Speed : Shows the vehicle speed in either kilometres per hour (km/h) or miles per hour (mph).

Trip 1 or Trip 2 and Average Fuel Economy : The Trip display shows the current distance travelled, in either kilometres (km) or miles (mi), since the trip odometer was last reset. The trip odometer can be reset by pressing ✓ and selecting yes or no while this display is active.

Shows the approximate average litres per 100 kilometres (L/100 km) or miles per gallon (mpg). This number is calculated based on the number of L/100 km recorded since the last time this menu item was reset. This number reflects only the approximate average fuel economy that the vehicle has right now, and will change as driving conditions change. The Average Fuel Economy can be reset by pressing ✓ and selecting yes or no while this display is active.

Fuel Range : Shows the approximate distance the vehicle can be driven without refuelling. LOW will be displayed when the vehicle is low on fuel. The fuel range estimate is based on an average of the vehicle's fuel economy over recent driving history and the amount of fuel remaining in the fuel tank.

Oil Life : Shows an estimate of the oil's remaining useful life.
If REMAINING OIL LIFE 99% is displayed, that means 99% of the current oil life remains.

When the remaining oil life is low, the CHANGE ENGINE OIL SOON message will appear on the display. The oil should be changed as soon as possible. See *Engine Oil* ⇨ *291*. In addition to the engine oil life system monitoring the oil life, additional maintenance is recommended. See *Maintenance Schedule (Petrol)* ⇨ *361* or *Maintenance Schedule (Diesel)* ⇨ *364*.

The Oil Life display must be reset after each oil change. It will not reset itself. Do not reset the Oil Life display accidentally at any time other than when the oil has just been changed. It cannot be reset accurately until the next oil change. See *Engine Oil Life System* ⇨ *293*.

Tyre Pressure : Shows the approximate pressures of all four tyres. Tyre pressure is displayed in either kilopascal (kPa) or in pounds per square inch (psi). If the pressure is low, the value for that tyre is shown in amber. See *Tyre Pressure Monitor System* ⇨ *323* and *Tyre Pressure Monitor Operation* ⇨ *324*.

Air Filter Life : Shows an estimate of the engine air filter's remaining useful life and the state of the system. Engine Air Filter Life 95% means 95% of the current air filter life remains. Messages will display based on the engine air filter life and the state of the system. When the REPLACE AT NEXT OIL CHANGE message displays, the engine air filter should be replaced at the time of the next oil change. When the REPLACE NOW message displays, the engine air filter should be replaced as soon as possible.

The Air Filter Life display must be reset after the engine air filter replacement. To reset, see *Engine Air Filter Life System* ⇨ *294*.

AdBlue : Displays the AdBlue fluid level as a bar graph with individual segments that illuminate from Empty (E) to Full (F). When LOW appears on the display and the

segments turn red, add fluid as soon as possible. For a guide on how much to add, see *AdBlue* ⇨ *212*.

Fuel Economy : Displays average fuel economy, the best fuel economy over the selected distance, and a bar graph showing instantaneous fuel economy.

Average Speed : Displays the average vehicle speed of the vehicle in kilometres per hour (km/h) or miles per hour (mph). This average is based on the various vehicle speeds recorded since the last reset. Reset the average speed by pressing the thumbwheel while this display is active to show a confirmation window to select yes or no.

Timer : This display can be used as a timer. To start the timer, press the thumbwheel while this display is active. The display will show the amount of time that has passed since the timer was last reset. To stop the timer, press the thumbwheel briefly while this display is active and the timer is running.

Press the thumbwheel while this display is active to reset the timer.

Traffic Sign Memory : Depending on the vehicle, the detected speed limit is displayed in the lower line of the DIC or the upper left of the instrument cluster. If an additional sign is detected with the speed limit sign a ⊕ symbol is displayed. Additionally, the current detected traffic sign is displayed in the Traffic Sign Memory page in the DIC.

If another page on the DIC menu is selected and the Traffic Sign Memory page is chosen again, the last recognised traffic sign will be displayed. The indication of multiple signs on the display is possible.

Press the thumbwheel while this display is active to reset or turn the Traffic Sign alerts on or off. Upon successful reset, a default sign containing dashes appears until the next traffic sign is detected or provided by the navigation system map data. When alerts are turned on and another page on the DIC menu is selected, a Sign Detected alert displays when a new traffic sign is recognised. The alert can be dismissed by pressing the thumbwheel. If the Traffic Sign Memory page is turned off in the Info Page Options and alerts were set to on they will be turned off. In some cases, traffic sign memory is cleared automatically by the system. See *Traffic Sign Assistant* ⇨ *258*.

Follow Distance/Gap Setting : When Adaptive Cruise Control (ACC) is not engaged, the current follow time to the vehicle ahead is displayed as a time value on this page. When ACC has been engaged, the display switches to the gap setting page. This page shows the current gap setting along with the vehicle ahead tell-tale.

Driver Assistance : If equipped, shows information for Lane Keep Assist (LKA) and Forward Collision Alert (FCA).

Battery Voltage : Shows the current battery voltage.

Coolant Temperature : Shows the engine coolant temperature in either degrees Celsius (°C) or degrees Fahrenheit (°F).

Oil Temperature : Shows the engine oil temperature in either degrees Celsius (°C) or degrees Fahrenheit (°F).

Engine Boost : Displays engine manifold pressure relative to ambient air pressure. It will display boost pressure generated by the turbocharging system.

Transmission Fluid Temperature : Shows the temperature of the automatic transmission fluid in either degrees Celsius (°C) or degrees Fahrenheit (°F).

Info Page Options : Scroll to choose which info pages appear on the DIC. Press the thumbwheel to select or deselect.

Blank Page : Allows for no information to be displayed in the cluster info display areas.

Head-Up Display (HUD)

⚠ Warning

If the HUD image is too bright or too high in your field of view, it may take you more time to see things you need to see when it is dark outside. Be sure to keep the HUD image dim and placed low in your field of view.

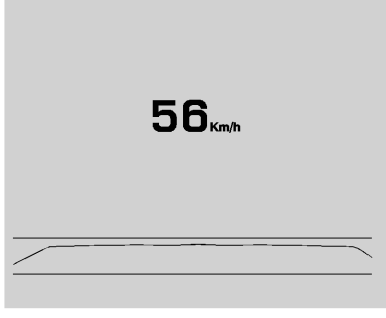
If equipped with HUD, some information concerning the operation of the vehicle is projected onto the windscreen. The image is projected through the HUD lens on top of the instrument panel. The information appears as an image focused out toward the front of the vehicle.

Caution

If you try to use the HUD image as a parking aid, you may misjudge the distance and damage your vehicle. Do not use the HUD image as a parking aid.

The HUD information can be displayed in various languages in some vehicles. The speedometer reading and other numerical values can be displayed in either English or metric units.

The language selection is changed through the radio and the units of measurement is changed through the instrument cluster. See *Settings* ⇨ *170* and “Options” under *Instrument Cluster* ⇨ *99*.



HUD Display on the Windscreen

The HUD may display some of the following vehicle information and vehicle messages or alerts:

- Speed
- Audio
- Phone
- Navigation
- Performance
- Driver Assistance Features
- Vehicle Messages

Some vehicle messages or alerts displayed in the HUD may be cleared by using the steering wheel controls. See *Vehicle Messages* ⇨ *120*.

Some information shown may not be available on your vehicle if it is not equipped with these features.

The HUD control is to the left of the steering wheel.

To adjust the HUD image:

1. Adjust the driver seat.
2. Start the engine.
3. Use the following settings to adjust the HUD.

HUD **:** Press or lift to centre the HUD image. The HUD image can only be adjusted up and down, not side to side.

INFO **:** Press to select the display view. Each press will change the display view.

±☼ **:** Lift and hold to brighten the display. Press and hold to dim the display. Continue to hold to turn the display off.

The HUD image will automatically dim and brighten to compensate for outside lighting. The HUD brightness control can also be adjusted as needed.

The HUD image can temporarily light up depending on the angle and position of sunlight on the HUD display. This is normal.

Polarised sunglasses could make the HUD image harder to see.

Head-Up Display (HUD) Rotation Option

This feature allows the angle of the HUD image to be adjusted.

Press the thumbwheel while Adjust Rotation is highlighted to enter Adjust Mode. Scroll to adjust the angle of the HUD display. Press the thumbwheel to confirm and save the setting. This feature may only be available in P (Park). See *Instrument Cluster* ⇨ *99*.

HUD Views

There are four views in the HUD. Some vehicle information and vehicle messages or alerts may be displayed in any view.

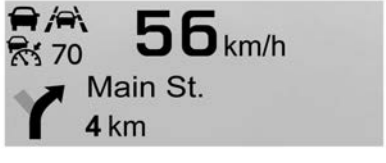
Speed View : This displays digital speed in English or metric units, speed limit, and indicators such as vehicle ahead, Lane Departure Warning/Lane Keep Assist, and Adaptive Cruise Control and set speed. Some information only appears on vehicles that have these features, and when they are active.

The speed limit sign can be disabled in the HUD settings under Options in the Cluster Menu. See *Instrument Cluster* ⇨ *99*.

Audio/Phone View : This displays digital speed, indicators from speed view along with audio/phone information. The current radio station, media type, and incoming calls will be displayed.

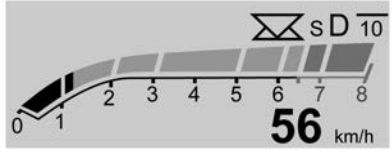
All HUD views may briefly display audio information when the steering wheel controls are used to adjust the audio settings appearing in the instrument cluster.

Incoming phone calls appearing in the instrument cluster may also display in any HUD view.



Navigation View : This displays digital speed, indicators from speed view along with Turn-by-Turn Navigation information in some vehicles. The compass heading is displayed when navigation routing is not active.

Navigation Turn-by-Turn Alerts shown in the instrument cluster may also be displayed in any HUD view.



Performance View : This displays digital speed, indicators from speed view along with rpm reading, transmission positions, and gear shift indicator (if equipped).

Care of the HUD

Clean the inside of the windscreen to remove any dirt or film that could reduce the sharpness or clarity of the HUD image.

Clean the HUD lens with a soft cloth sprayed with glass cleaner. Wipe the lens gently, then dry it.

HUD Troubleshooting

If you cannot see the HUD image when the ignition is on, check that:

- Nothing is covering the HUD lens.
- The HUD brightness setting is not too dim or too bright.
- The HUD is adjusted to the proper height.
- Polarised sunglasses are not worn.
- The windscreen and HUD lens are clean.

If the HUD image is not correct, contact your dealer.

The windscreen is part of the HUD system. See *Windscreen Replacement* ⇨ *305*.

Vehicle Messages

Messages displayed on the Driver Information Centre (DIC) indicate the status of the vehicle or some action

that may be needed to correct a condition. Multiple messages may appear one after another.

The messages that do not require immediate action can be acknowledged and cleared by pressing the thumbwheel. The messages that require immediate action cannot be cleared until that action is performed.

All messages should be taken seriously; clearing the message does not correct the problem.

If a SERVICE message appears, see your retailer.

Follow the instructions given in the messages. The system displays messages regarding the following topics:

- Service Messages
- Fluid Levels
- Vehicle Security
- Brakes
- Steering
- Ride Control Systems
- Driver Assistance Systems
- Cruise Control
- Lighting and Bulb Replacement
- Wiper/Washer Systems
- Doors and Windows
- Seat Belts
- Airbag Systems
- Engine and Transmission
- Tyre Pressure
- Battery

Engine Power Messages

ENGINE POWER IS REDUCED

This message displays when the vehicle's propulsion power is reduced. A reduction in propulsion power can affect the vehicle's ability to accelerate. If this message is on, but there is no observed reduction in performance, proceed to your destination. Under certain conditions, the performance may be reduced the next time the vehicle is driven. The vehicle may be driven while this message is on, but maximum acceleration and speed may be reduced. Anytime this message stays on, or displays repeatedly, the vehicle should be taken to your dealer for service as soon as possible.

Under certain operating conditions, propulsion will be disabled. Try restarting after the ignition has been off for 30 seconds.

Vehicle Speed Messages

SPEED LIMITED TO XXX KM/H (MPH)

This message shows that the vehicle speed has been limited to the speed displayed. The limited speed is protection for the various propulsion and vehicle systems, such as lubrication, thermal, brakes, suspension, or tyres.

Vehicle Personalisation

The following are all possible vehicle personalisation features. Depending on the vehicle, some may not be available.

For System, Apps, and Personal features and functions, see *Settings ⇨ 170*.

To access the vehicle personalisation menu:

1. Touch the Settings icon on the Home Page of the infotainment display.
2. Touch Vehicle to display a list of available options.
3. Touch to select the desired feature setting.
4. Touch ◯ or | to turn a feature off or on.
5. Touch ✕ to go to the top level of the Settings menu.

The menu may contain the following:

Rear Seat Reminder

This allows for a chime and a message when the rear door has been opened before or during the operation of the vehicle.

Touch Off or On.

Climate and Air Quality

Touch and the following may display:

- Auto Fan Speed
- Auto Cooled Seats
- Auto Heated Seats
- Auto Defog
- Auto Rear Defog
- Ionizer

Auto Fan Speed

This setting specifies the amount of airflow when the climate control fan setting is Auto Fan.

Touch Low, Medium, or High.

Auto Cooled Seats

This setting automatically turns on and regulates the ventilated seats when the cabin temperature is warm. See *Heated and Ventilated Front Seats* ⇨ *45*.

Touch Off or On.

Auto Heated Seats

This setting automatically turns on and regulates the heated seats when the cabin temperature is cool. The auto heated seats can be turned off by using the heated seat buttons on the centre console. See *Heated and Ventilated Front Seats* ⇨ *45*.

Touch Off or On.

Auto Defog

This setting automatically turns the front defogger on when the engine is started.

Touch Off or On.

Auto Rear Defog

This setting automatically turns the rear defogger on when the engine is started.

Touch Off or On.

Ionizer

If equipped and on, this feature helps to clean the air inside the vehicle and remove contaminants such as pollen, odours, and dust. See *Dual Automatic Climate Control System* ⇨ *183*.

Touch Off or On.

Collision / Detection Systems

Touch and the following may display:

- Alert Type
- Forward Collision System
- Front Pedestrian Detection
- Rear Pedestrian Detection
- Adaptive Cruise Go Notifier
- Lane Change Alert
- Rear Cross Traffic Alert

Alert Type

This setting specifies the type of vehicle feedback provided, either a beep or seat vibration, when you are in danger of colliding with an object.

Touch Beeps or Safety Alert Seat.

Forward Collision System

This setting can alert of a potential collision with a detected vehicle ahead and can apply the brakes to help reduce a collision's severity.

Touch Off, Alert, or Alert and Brake.

Front Pedestrian Detection

This feature may help avoid or reduce the harm caused by front-end crashes with nearby pedestrians.

See *Front Pedestrian Braking (FPB) System* ⇨ *254*.

Select Off, Alert, or Alert and Brake.

Rear Pedestrian Detection

This setting specifies if alerts will display when the vehicle detects pedestrians behind the vehicle, when in R (Reverse). See *Rear Pedestrian Alert* ⇨ *249*.

Touch Off or Alert.

Adaptive Cruise Go Notifier

This setting determines if an alert will appear when Adaptive Cruise Control brings the vehicle to a complete stop and the vehicle ahead of you starts moving again. See *Adaptive Cruise Control (Advanced)* ⇨ *231*.

Touch Off or On.

Lane Change Alert

This setting specifies if an alert will display on the outside mirror to help you avoid crashing into a vehicle in your blind spot, or rapidly approaching your blind spot, during a lane change manoeuvre. See *Lane Change Alert (LCA)* ⇨ *256*.

When Lane Change Alert is disabled, Side Blind Zone Alert is also disabled.

Touch Off or On.

Rear Cross Traffic Alert

This setting specifies if an alert will display when the vehicle detects approaching rear cross traffic when in R (Reverse). See *Rear Cross Traffic Alert (RCTA) System* ⇨ *250*.

Touch Off or On.

Comfort and Convenience

Touch and the following may display:

- Chime Volume
- Hands Free Liftgate/Boot Lid Control
- Reverse Tilt Mirror
- Remote Mirror Folding
- Rain Sense Wipers
- Auto Wipe in Reverse Gear

Chime Volume

This setting determines the chime volume level.

Touch the controls on the infotainment display to adjust the volume.

Hands Free Liftgate/Boot Lid Control

The liftgate may be operated with a kicking motion under the left corner of the rear bumper. See *Tailgate* ⇨ *18*.

Select Off, On-Open and Close, or On-Open Only.

Reverse Tilt Mirror

When switched on, the driver, passenger, or both driver and passenger door mirrors will tilt downward when R (Reverse) is selected in order to improve visibility of the ground near the rear wheels. They may move from their tilted position when the R (Reverse) is disengaged or the vehicle is switched off. See *Reverse Tilt Mirrors* ⇨ *30*.

Touch Off, On - Driver and Passenger, On - Driver, or On - Passenger.

Remote Mirror Folding

When on, the outside mirrors will automatically fold or unfold when the Remote Keyless Entry (RKE) transmitter or button is pressed and held. See *Folding Mirrors* ⇨ *29*.

Touch Off or On.

Rain Sense Wipers

This setting automatically turns on the wipers when moisture is detected and the wiper switch is in intermittent mode.

Touch Disabled or Enabled.

Auto Wipe in Reverse Gear

When on and the front wiper is on, the rear wiper will automatically activate when the vehicle is shifted to R (Reverse).

Select Off or On.

Lighting

Touch and the following may display:

- Vehicle Locator Lights
- Exit Lighting

Vehicle Locator Lights

This setting flashes the headlights of your vehicle when you press on the Remote Keyless Entry (RKE) transmitter.

Touch Off or On.

Exit Lighting

This setting specifies how long the headlamps stay on after the vehicle is turned off and exited.

Touch Off, 30 Seconds, 60 Seconds, or 120 Seconds.

Power Door Locks

Touch and the following may display:

- Open Door Anti Lock Out
- Auto Door Lock
- Delayed Door Lock

Open Door Anti Lock Out

This setting prevents the driver door from locking when the door is open. If this setting is on, the Delayed Door Lock menu will not be available.

Touch Off or On.

Auto Door Lock

When this feature is turned on, all doors will automatically lock when the vehicle is shifted out of P (Park). The doors will automatically unlock when the vehicle is shifted into P (Park).

Touch Off or On.

Delayed Door Lock

This setting delays the locking of the vehicle's doors.

Touch Off or On.

Remote Lock, Unlock, and Start

Touch and the following may display:

- Remote Unlock Light Feedback
- Remote Lock Feedback
- Remote Door Unlock
- Remote Start Auto Cool Seats
- Remote Start Auto Heat Seats
- Remote Window Operation
- Passive Door Unlock
- Passive Door Lock
- Remote Left in Vehicle Alert

Remote Unlock Light Feedback

This setting flashes the exterior lamps when the vehicle is unlocked with the RKE transmitter.

Touch Off or Flash Lights.

Remote Lock Feedback

This setting specifies how the vehicle responds when the vehicle is locked with the RKE transmitter.

Touch Off, Lights and Horn, Lights Only, or Horn Only.

Remote Door Unlock

This setting specifies whether all doors, or just the driver door, unlock when pressing on the RKE transmitter.

Touch All Doors or Driver Door.

Remote Start Auto Cool Seats

This setting automatically turns on the ventilated seats when using the remote start function on warm days. See *Heated and Ventilated Front Seats* ⇨ *45* and *Remote Vehicle Start* ⇨ *13*.

Touch Off or On.

Remote Start Auto Heat Seats

This setting automatically turns on the heated seats when using the remote start function on cold days. See *Heated and Ventilated Front Seats* ⇨ *45* and *Remote Vehicle Start* ⇨ *13*.

Touch Off or On.

Remote Window Operation

If equipped, this feature enables remote operation of the windows with the RKE transmitter. See *Remote Keyless Entry (RKE) System Operation* ⇨ *7*.

Touch Off or On.

Passive Door Unlock

This setting specifies which doors unlock when using the button on the driver door handle to unlock the vehicle.

Touch Off, All Doors, or Driver Door Only.

Passive Door Lock

This setting specifies if the vehicle will automatically lock, or lock and provide an alert after all the doors are closed, and you walk away from the vehicle with the RKE transmitter. See *Remote Keyless Entry (RKE) System Operation* ⇨ *7*.

Touch Off, On with Horn Chirp, or On.

Remote Left in Vehicle Alert

This feature sounds an alert when the RKE transmitter is left in the vehicle. This menu also enables Remote No Longer in Vehicle Alert.

Touch Off or On.

Seating Position

Touch and the following may display:

- Seat Entry Memory
- Seat Exit Memory

Seat Entry Memory

This feature automatically recalls the previously stored 1 or 2 button positions when the ignition is changed from off to on or ACC/ACCESSORY. See *Memory Seats* ⇨ *43*.

Touch Off or On.

Seat Exit Memory

This feature automatically recalls the previously stored exit button positions when the ignition is changed from on or ACC/ACCESSORY to off if the driver door is open or opened. See *Memory Seats* ⇨ *43*.

Touch Off or On.

Valet Mode

This will lock the infotainment system and steering wheel controls. It may also limit access to vehicle storage locations, if equipped.

To enable valet mode:

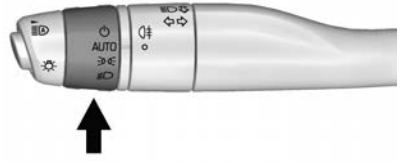
1. Enter a four-digit code on the keypad.
2. Touch Enter to go to the confirmation screen.
3. Re-enter the four-digit code.

Touch Lock or Unlock to lock or unlock the system. Touch Back to go back to the previous menu.

Lighting

Exterior Lighting

Exterior Lamp Controls



The exterior lamp control is on the indicator lever.

Turn the control to the following positions:

⏻ **:** Turns off the exterior lamps. The knob returns to the AUTO position after it is released. Turn to ⏻ again to reactivate the AUTO mode.

AUTO : Automatically turns the exterior lamps on and off, depending on outside lighting.

: Turns on the parking lamps including all lamps, except the headlamps.

: Turns on the headlamps together with the parking lamps and instrument panel lights.

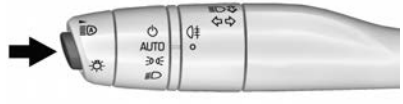
IntelliBeam System

If equipped, this system turns the vehicle's main beam headlamps on and off according to surrounding traffic conditions.

The system turns the main beam headlamps on when it is dark enough and there is no other traffic present.

This light comes on in the instrument cluster when the IntelliBeam system is enabled.

Turning On and Enabling IntelliBeam



To enable the IntelliBeam system, press the button on the end of the indicator lever when the exterior lamp control is in the AUTO or position.

Driving with IntelliBeam

The system only activates the main beams when driving over 40 km/h (25 mph).

The blue main-beam on light appears on the instrument cluster when the main beams are on.

There is a sensor near the top centre of the windscreen that automatically controls the system. Keep this area of the windscreen clear of debris to allow for best system performance.

The main beam headlamps remain on, under the automatic control, until one of the following situations occurs:

- The system detects an approaching vehicle's headlamps.
- The system detects a preceding vehicle's tail lamps.
- The outside light is bright enough that main beam headlamps are not required.
- The vehicle's speed drops below 20 km/h (12 mph).
- The IntelliBeam system is disabled by the button on the indicator Lever. If this happens, press the button on the end of the indicator lever when the exterior lamp control is in the AUTO or position to reactivate the IntelliBeam system. The instrument cluster light will come on to indicate the IntelliBeam is reactivated.

The main beams may not turn off automatically if the system cannot detect another vehicle's lamps because of any of the following:

- The other vehicle's lamps are missing, damaged, obstructed from view, or otherwise undetected.
- The other vehicle's lamps are covered with dirt, snow, and/or road spray.
- The other vehicle's lamps cannot be detected due to dense exhaust, smoke, fog, snow, road spray, mist, or other airborne obstructions.
- The vehicle's windscreen is dirty, cracked, or obstructed by something that blocks the view of the light sensor.
- The vehicle is loaded such that the front end points upward, causing the light sensor to aim high and not detect headlamps and tail lamps.
- The vehicle is being driven on winding or hilly roads.

The automatic main beam headlights may need to be disabled if any of the above conditions exist.

Exterior Lamps Off Reminder

A warning chime sounds if the driver door is opened while the ignition is off and the exterior lamps are on.

Headlamp Main/ Dipped-Beam Changer

: Push the indicator lever away from you and release, to turn the main beams on. To return to dipped beams, push the stalk again or pull it toward you and release.

This indicator light turns on in the instrument cluster when the high-beam headlamps are on.

Flash-to-Pass

To flash the main beams, pull the indicator stalk toward you, and release.

Daytime Running Lamps (DRL)

DRL can make it easier for others to see the front of your vehicle during the day.

The dedicated DRL will come on when all of the following conditions are met:

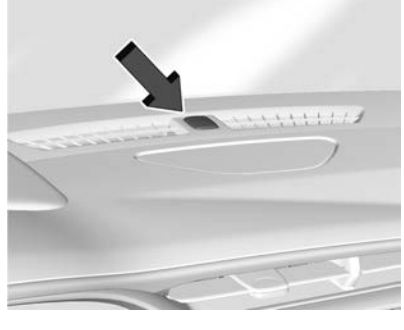
- The ignition is on.
- The exterior lamp control is in AUTO.
- The light sensor determines it is daytime.

When the DRL are on, the tail lights and other lamps will not be on.

The DRL lights are switched off when the exterior lamp control is moved to the PARK or HEADLIGHT position or the ignition is switched off. The DRL lights are not switched off in the OFF position.

Automatic Headlamp System

When the exterior lamp control is set to AUTO and it is dark enough outside, the headlights come on automatically.



There is a light sensor on top of the instrument panel. Do not cover the sensor.

The system may also turn on the headlamps when driving through a parking garage or tunnel.

If the vehicle is started in a dark garage, the automatic headlamp system comes on immediately. If it is light outside when the vehicle leaves the garage, there is a slight delay before the automatic headlight system changes to the Daytime Running Lamps (DRL). During that delay, the instrument cluster may not be as bright as usual. Make sure the instrument panel brightness control is in the full bright position. See *Instrument Panel Illumination Control* ⇨ *131*.

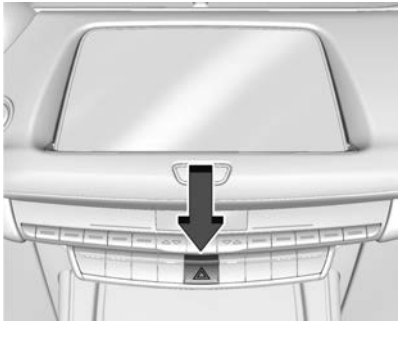
When it is bright enough outside, the headlights will turn off or may change to DRL.

The automatic headlamp system turns off when the exterior lamp control is turned to ⏻ or the ignition is off.

Lights On with Wipers

If the windscreen wipers are activated in daylight with the engine on, and the exterior lamp control is in AUTO, the headlights, parking lights, and other exterior lamps come on. The transition time for the lamps coming on varies based on wiper speed. When the wipers are not operating, these lamps turn off. Move the exterior lamp control to ⏻ or to disable this feature.

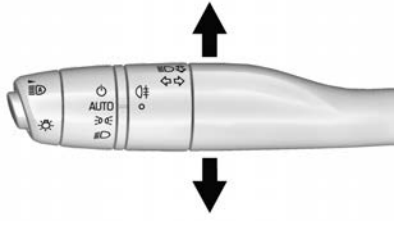
Hazard Lights



⚠ : Press ⚠ to make the front and rear indicator lamps flash on and off. Press again to turn the flashers off.

The hazard warning flashers turn on automatically if the airbags deploy.

Turn and Lane-Change Signals



Move the lever all the way up or down to signal a turn.

An arrow on the instrument cluster flashes in the direction of the turn or lane change.

Raise or lower the lever until the arrow starts to flash to signal a lane change. Hold it there until the lane change is completed. If the lever is briefly pressed and released, the indicator flashes three times.

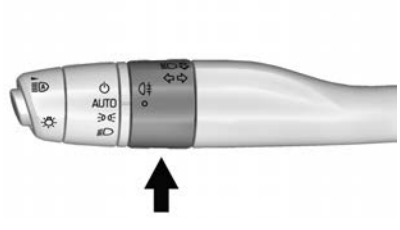
The indicator and lane-change signal can be turned off manually by moving the lever back to its original position.

If after signalling a turn or lane change, the arrow flashes rapidly or does not come on, a signal bulb may be burned out.

Replace any burned out bulbs. If a bulb is not burned out, check the fuse. See *Fuses and Circuit Breakers* ⇨ *310*.

Fog Lamps

Rear Fog Lamps



The rear fog lamps make the vehicle more visible from the rear in foggy or misty conditions.

: Turn the band on the lever to and release it, to turn the rear fog lamps on or off. The band will return

to its original position. An indicator light on the instrument cluster comes on when the fog lamps are on.

The ignition, parking lights or headlights must be on for the rear fog lights to work.

Some localities have laws that require the headlamps to be on along with the fog lamps.

Rear fog lamps should only be used in foggy or misty conditions to allow the drivers behind you to see your vehicle.

Cornering Lights

If equipped with cornering lamps, they automatically come on when all of the following occur:

- The dipped beam headlights are on.
- The indicators are activated or the steering wheel is at a turning angle.
- The vehicle speed is below 40 km/h (25 mph).

Interior Lighting

Instrument Panel Illumination Control

This feature adjusts the brightness of all illuminated controls.

: Move the thumbwheel up or down to brighten or dim the lights.

The thumbwheel is functional at night, or when the headlights or parking lights are on.

The brightness of the displays automatically adjusts based on outdoor lighting. The instrument panel illumination control will set the lowest level to which the display will be automatically adjusted.

Courtesy Lamps

The courtesy lights come on when any door is opened, on the Remote Keyless Entry (RKE) transmitter is pressed, or when the ignition is switched off. See *Dome Lamps* ⇨ *131*.

Dome Lamps

The dome lamp controls are in the overhead console.

To operate, press the following buttons:

OFF : Press to switch off the dome lamps when any door is opened, the remote unlock is pressed, or when the ignition is switched off. An indicator light on the button will turn on when the dome lamp override is activated. Press OFF again to deactivate this feature and the indicator light will turn off. The dome lamps illuminate when any door is opened, the remote unlock is pressed, or when the ignition is switched off.

ON/OFF : Press to turn the dome lights on or off manually.

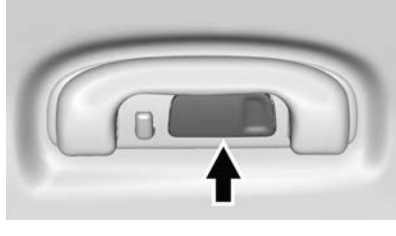
Reading Lamps

There are front and rear reading lamps on the overhead console and over the rear passenger doors. These lamps illuminate automatically when any door is opened, the remote unlock is pressed, or when the ignition is switched off.

To operate, the ignition must be switched on, or in ACC/ACCESSORY, or using Retained Accessory Power (RAP).

To manually turn the reading lamps on or off:

Press the lamp lenses on the front reading lamps.



Press the lamp lenses over the rear passenger doors.

Lighting Features

Entry Lighting

The interior lights turn on when pressing on the Remote Keyless Entry (RKE) transmitter or opening any doors, and the dome light control is in the DOOR position.

Some exterior lights also turn on when pressing on the RKE transmitter or opening any doors. Dipped Beam lights will only turn on briefly at night, or in areas with limited lighting.

All lights will gradually dim after about 30 seconds.

Entry lighting can be disabled manually by closing all doors, pressing on the RKE transmitter, or starting the vehicle.

This feature can be changed. See “Vehicle Locator Lights” under *Vehicle Personalisation* ⇨ *121*.

Exit Lighting

Some exterior lights and interior lamps turn on when the key is removed from the ignition.

The exterior and interior lights remain on for a set amount of time, then automatically turn off. If equipped with Keyless Access, the exterior lights automatically turn on when the driver door is opened after the ignition is turned off.

The interior lights turn on when the ignition is turned off.

The exterior lamps turn off immediately by turning the exterior lamp control off.

This feature can be changed. See *Vehicle Personalisation* ⇨ *121*.

Battery Power Protection

This feature helps prevent the battery from being drained, if the interior courtesy lights or reading lights are accidentally left on. If any of these lights are left on, they automatically turn off after 10 minutes, if the ignition is off. The lights will not come back on again until one of the following occurs:

- The ignition is turned on.
- The doors are closed and then re-opened.

Exterior Lighting Battery Saver

The exterior lamps turn off about 10 minutes after the ignition is turned off, if the parking lamps or headlamps have been manually left on. This protects against draining the battery. To restart the 10-minute timer, turn the exterior lamp control to the ⏻ position and then back to the ≡D or ≡D position.

To keep the lamps on for more than 10 minutes, the ignition must be on or in ACC/ACCESSORY.

Infotainment System

Introduction

Read the following pages to become familiar with the functions.

⚠ Warning

Taking your eyes off the road for too long or too often while using any infotainment feature can cause a crash. You or others could be injured or killed. Do not give extended attention to infotainment tasks while driving. Limit your glances at the vehicle displays and focus your attention on driving. Use voice commands whenever possible.

The infotainment system has built-in features intended to help avoid distraction by disabling some features when driving. These features may grey out when they are unavailable. Many infotainment features are also available through the instrument cluster and steering wheel controls.

Before driving:

- Become familiar with the operation, centre console controls, steering wheel controls, and infotainment display.
- Set up the audio by presetting favourite stations, setting the tone, and adjusting the speakers.
- Set up phone numbers in advance so they can be called easily by pressing a single control or by using a single voice command.

See *Distracted Driving* ⇨ *191*.

Active Noise Cancellation (ANC)

If equipped, ANC reduces engine noise in the vehicle's interior. ANC requires the factory-installed audio system, radio, speakers, amplifier (if equipped), induction system and exhaust system to work properly. Deactivation is required by your retailer if related aftermarket equipment is installed.

Overview

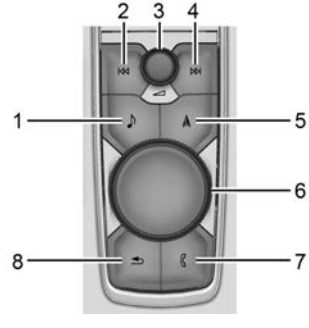
Infotainment System

The infotainment system is controlled by using the infotainment display, controls on the centre console, steering wheel controls, and voice recognition.

1. ⌂ (Home Page)
   - Press to go to the Home Page. See “Home Page” later in this section.

     Press to exit Android Auto or Apple CarPlay. To enter back into Android Auto or Apple CarPlay, press and hold. See *Apple CarPlay and Android Auto* ⇨ *169*.

Infotainment Controls on the Console with Navigation Shown, Radio without Navigation Similar



1. ♪ (Radio/AUX)
   - Press to open the “Now Playing” screen.
2. ⏮ (Seek)
   - Radio: Press and release to tune into the previous station or channel. Press and hold to

fast seek the next strongest previous station or channel. See *AM-FM Radio* ⇨ *140*.

- USB/Bluetooth: Press to search for the beginning of the current or previous track. Press and hold to quickly reverse through a track. Release to return to playing speed. See *USB Port* ⇨ *143* or *Bluetooth Audio* ⇨ *146*.

3. (Power/Volume) Knob
   - Press to turn the power on.
   - Press and hold when the system is on to turn the power off and display the time.
   - Press to mute/unmute the system when on.
   - Turn to decrease or increase the volume.
4. (Seek)
   - Radio: Press and release to tune into the next station or channel. Press and hold to fast seek the next strongest station or channel.
   - USB/Bluetooth: Press to search for the next track. Press and hold to fast forward through a track. Release to return to playing speed. See *USB Port* ⇨ *143* or *Bluetooth Audio* ⇨ *146*.
5. (Navigation) or (Phone)
   - For vehicles with navigation, press to access the navigation menu. For vehicles without navigation, press to access the phone menu.
6. Primary Knob
   - Turn to highlight a feature. Press to activate the highlighted feature.
   - Move right/left or up/down to change the highlighted area on the display screen.
7. (Phone) or (Home Page)
   - For vehicles with navigation, press to access the phone menu. For vehicles without navigation, press to access the Home Page. See "Home Page" later in this section.
8. (Back)
   - Press to return to the previous display in a menu.

Home Page

The Home Page is where vehicle application icons are accessed. Some applications are disabled when the vehicle is moving.

Swipe left or right across the display to access the pages of icons.

Managing Home Page Icons

1. Touch and hold any of the Home Page icons to enter edit mode.
2. Continue holding the icon and drag it to the desired position.
3. Release your finger to drop the icon in the desired position.
4. To move an application to another page, drag the icon to the edge of the display towards the desired page.
5. Continue dragging and dropping application icons as desired.

Steering Wheel Controls

The infotainment steering wheel controls can be used to control the infotainment features displayed in the instrument cluster.

When in Valet Mode, if equipped, access to the infotainment functions is disabled. See “Valet Mode,” under *Vehicle Personalisation* ⇨ *121*.

: Press to answer an incoming call or start voice recognition. See *Bluetooth (Pairing and Using a Phone)* ⇨ *165* or *Bluetooth (Overview)* ⇨ *164*.

: Press to decline an incoming call or end a current call. Press to mute or unmute the infotainment system when not on a call.

or : Press to go to the next or previous favourite when listening to the radio. Press to go to the next or previous track when listening to a media source.

or : Press to move between the interactive displays in the instrument cluster. Press < to go back to the previous menu.

or : Use the thumbwheel to scroll to the previous or next selection.

: Press the thumbwheel to open a menu or select a menu item. Press and hold to reset certain displays.

+ or - : Press to increase or decrease the volume.

Using the System

Audio

Touch the Audio icon to display the active audio source page. Examples of available sources may include AM, FM, My Media, USB, AUX (if equipped), and Bluetooth.

Phone

Touch the Phone icon to display the Phone main page. See *Bluetooth (Pairing and Using a Phone)* ⇨ *165* or *Bluetooth (Overview)* ⇨ *164*.

Nav

If equipped, touch the Nav icon to display the navigation map. See *Using the Navigation System* ⇨ *147*.

Wi-Fi Hotspot

Touch the Wi-Fi Hotspot icon to display the Wi-Fi Hotspot information. See *Settings* ⇨ *170*.

Users

If equipped, touch the Users icon to sign in or create a new user profile, and follow the on-screen instructions.

Only four user profiles can be active at one time in the vehicle. It may be necessary to remove a profile from the menu before creating or signing into an existing profile. The removed profile can be logged into at a later time.

Settings

Touch the Settings icon to display the Settings menu. See *Settings* ⇨ *170*.

Apple CarPlay

Touch the Apple CarPlay icon to activate Apple CarPlay, if equipped, after a supported device is connected. See *Apple CarPlay and Android Auto* ⇨ *169*.

Android Auto

Touch the Android Auto icon to activate Android Auto, if equipped, after a supported device is connected. See *Apple CarPlay and Android Auto* ⇨ *169*.

Climate

Touch the Climate icon to display the Climatemain page. See *Dual Automatic Climate Control System* ⇨ *183*.

Camera

If equipped, touch the Camera icon to access the camera application. See *Surround Vision System* ⇨ *242*.

Shortcut Tray

The shortcut menu is on the left-hand side of the display. It shows the Home application and four other applications.

Infotainment Display Features

Infotainment display features show on the display when available. When a feature is unavailable, it may grey out. When a feature is touched, it may highlight.

Haptic Feedback

If equipped, haptic feedback is a pulse that appears when an icon or option is touched on the display or when controls below the display are pressed.

Infotainment Gestures

Use the following finger gestures to control the infotainment system.

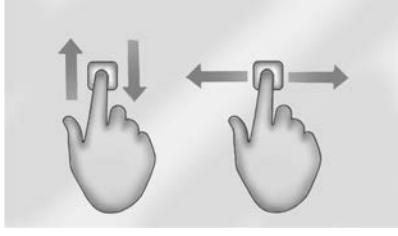
Touch/Tap

Touch/tap is used to select an icon or option, activate an application or change the location inside a map.

Touch and Hold

Touch and hold can be used to start another gesture, or to move or delete an application.

Drag

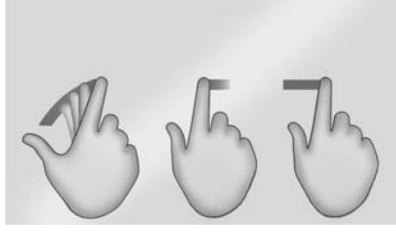


Drag is used to move applications on the Home Page, or to pan the map. To drag the item, it must be held and moved along the display to the new location. This can be done up, down, right, or left. This function is only available when the vehicle is parked and not in motion.

Nudge

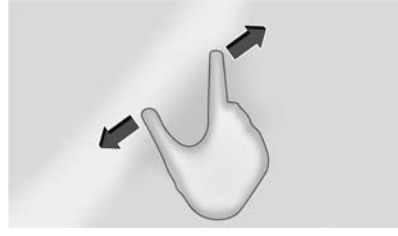
Nudge is used to move items a short distance on a list or a map. To nudge, hold and move the selected item up or down to a new location.

Fling or Swipe



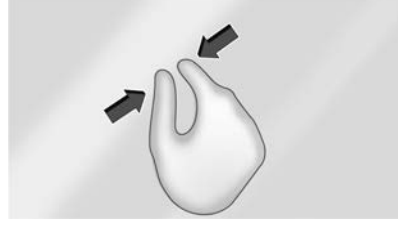
Fling or swipe is used to scroll through a list, pan the map, or change page views. Do this by placing a finger on the display then moving it rapidly up and down or right and left.

Spread



Spread is used to zoom in on a map, certain images, or a web page. Place finger and thumb together on the display, then move them apart.

Pinch



Pinch is used to zoom out on a map, certain images, or a web page. Place finger and thumb apart on the display, then move them together.

Cleaning High Gloss Surfaces and Vehicle Information and Radio Displays

For vehicles with high gloss surfaces or vehicle displays, use a microfibre cloth to wipe surfaces. Before wiping the surface with the microfibre cloth, use a soft bristle brush to remove dirt that could scratch the surface. Then use the microfibre cloth by gently rubbing to clean. Never use window cleaners or solvents. Periodically hand wash the microfibre cloth separately, using mild soap. Do not use bleach or fabric softener. Rinse thoroughly and air dry before next use.

Software Updates

Over-the-Air Software Updates

If equipped, see “Updates” under *Settings* ⇨ *170* for details on software updates.

Radio

AM-FM Radio

Playing the Radio

Press ♪ on the console controls or touch the Audio icon on the Home Page to display the active audio source page. Choose the three most recently used sources listed at the left side of the display. Choose the More option to display a list of available sources. Examples of available sources may include AM, FM, My Media, USB, AUX (if equipped), and Bluetooth.

Infotainment System Sound Menu

From any of the audio source main pages, touch Sound to display the following:

Equaliser : Touch to adjust Bass, Midrange, Treble, and Surround (if equipped) using the options on the infotainment display.

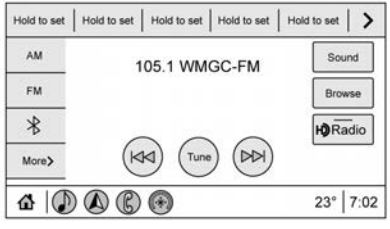
Fade/Balance : Touch to adjust by using the controls on the infotainment display or by tapping/dragging the crosshair.

Sound Mode (If Equipped)

- Bose Centerpoint surround sound systems have four sound modes:
  - Normal: Adjusts the audio to provide the best sound for all seating positions.
  - Driver: Adjusts the audio to provide the best sound for the driver.
  - Rear: Adjusts the audio to provide the best sound for the rear seat occupants.
  - Centerpoint: Turns on Bose Centerpoint surround technology. This setting creates a surround sound from nearly any audio source: existing stereo and MP3 players. For more information on Bose Centerpoint surround technology, see your dealer.

Finding a Station

Seeking a Station



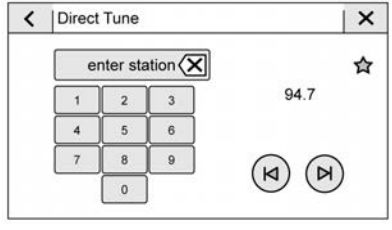
From AM or FM, press ⏮ or ⏭ on the console controls to search for the previous or next strong station.

Browsing Stations

Touch the Browse option to list all available stations. Navigate up and down through all stations by scrolling the list. Touch the station you want to listen to. Touch ☆ to save the station as a favourite.

If equipped, touch Update Station List to update the active stations in your area.

Direct Tune



Access Direct Tune by touching the Tune option on the infotainment display to show the keypad. Navigate through all frequencies using the left and right arrows on the Direct Tune display. Directly enter a station using the keypad. When a new station is entered, the information about that station displays on the right side. This information will update with each new valid frequency. Touch ☆ to save the station as a favourite.

The keypad will grey out entries that do not contribute to a valid frequency and will automatically place a decimal point within the frequency number.

Touch (X) to delete one number at a time. Touch and hold (X) to delete all numbers.

A valid AM or FM station will automatically tune to the new frequency but will not close the Direct Tune display. Press ⮌ on the console controls, touch the Back icon, or ✕ on the infotainment display to exit Direct Tune.

The tune arrows on the right-hand side of the Direct Tune display will tune through the complete station list one station step at a time per touch. A touch and hold advances through stations quickly.

FM Categories

From the FM stations, touch Categories at the top of the Browse menu to access the categories list. The list contains names associated with FM stations. Touch a category name to display a list of stations for that category. Touching a station from the list will tune the radio to that station.

Storing Radio Station Presets

Favourites are stored in the area at the bottom of the display.

AM and FM Radio Stations : Press and hold a preset to store the current station as a favourite. Touch a saved favourite to recall a favourite station.

Favourites can also be stored by touching ☆ in a station list. This will highlight indicating that it is now stored as a favourite.

The number of favourites displayed is automatically adjusted by default, but can be manually adjusted in Settings in the System tab under Favourites and then Set Number of Audio Favourites. It can also be adjusted in Settings in the Apps tab under Audio and then Set Number of Audio Favourites.

Radio Data System (RDS)

If equipped, RDS features are available for use only on FM stations that broadcast RDS information. With RDS, the radio can:

- Group stations by Category (i.e., Programme Type) such as Rock, Jazz, Classical, etc.
- Display messages from radio stations.

This system relies on receiving specific information from these stations and only works when the information is available. It is possible that a radio station could broadcast incorrect information that causes the radio features to work improperly. If this happens, contact the radio station.

When information is broadcast from an RDS station, the station name or call letters display on the audio screen. Radio text supporting the currently playing broadcast may also appear.

Radio Reception

Unplug electronic devices from the accessory power outlets if there is interference or static in the radio.

FM

FM signals only extend about 16 to 65 km (10 to 40 mi). Although the radio has a built-in electronic circuit that automatically works to reduce interference, some static can occur, especially around tall buildings or hills, causing the sound to fade in and out.

AM

The range for most AM stations is greater than for FM, especially at night. The longer range can cause station frequencies to interfere with each other. Static can also occur when things like storms and power lines interfere with radio reception. When this happens, try reducing the treble on the radio.

Digital Audio Broadcasting (DAB)

If equipped, Digital Audio Broadcasting (DAB) is a universal broadcast system that shows stations by the radio programme name on the infotainment display. The DAB signal produces a constant volume and is not affected by interference from nearby frequencies. The reception

quality of DAB improves if the signal is reflected by natural obstacles or buildings. If the DAB signal is unclear, reception is interrupted completely.

Mobile Phone Usage

Mobile phone usage, such as making or receiving phone calls, charging, or just having the phone on may cause static interference in the radio. Unplug the phone or turn it off if this happens.

Multi-Band Aerial

The roof antenna is for GPS (Global Positioning System). Keep clear of obstructions for clear reception. If the vehicle has a sunroof, and it is open, reception can also be affected.

Audio Players

Avoiding Untrusted Media Devices

When using media devices such as SD cards, USB devices, and mobile devices, consider the source. Untrusted media devices could contain files that affect system operation or performance. Avoid use if the content or origin cannot be trusted.

USB Port

Audio stored on a USB device may be listened to.

The vehicle may be equipped with two USB ports in the front centre console. These ports are for data and charging. There may also be two USB ports for charging only at the rear of the centre console.

Caution

To avoid vehicle damage, unplug all accessories and disconnect all accessory cables from the vehicle when not in use. Accessory cables left plugged into the vehicle, unconnected to a device, could be damaged or cause a short circuit if the unconnected end comes in contact with liquid or another power source such as the accessory power outlet.

Playing from a USB

A USB mass storage device can be connected to the USB port.

Audio extensions supported by the USB may include:

- MP3
- AAC
- OGG
- 3GP

Gracenote

When plugging in a USB device, Gracenote service builds voice tags for music. Voice tags allow artists, albums with hard-to-pronounce names, and nicknames to be used to play music through voice recognition, if equipped.

While indexing, infotainment functions may be available.

My Media Library

MyMedia is only available when more than one indexed device is connected. It allows access to content from all indexed media sources. MyMedia will show as an available source in the Source page.

USB MP3 Player and USB Devices

The USB MP3 players and USB devices connected must comply with the USB Mass Storage Class specification (USB MSC).

To play a USB device:

1. Connect the USB.
2. Touch Audio from the Home Page.
3. Touch the More option and then touch the USB device.

Use the following when playing an active USB source:

▷ : Touch to play the current media source.

❙❙ : Touch to pause playback of the current media source.

⏮ :

- Touch to seek the beginning of the current or previous track.
- Touch and hold to reverse quickly through playback. Release to return to playing speed. Elapsed time displays.

⏭:

- Touch to seek the next track.
- Touch and hold to advance quickly through playback. Release to return to playing speed. Elapsed time displays.

Shuffle : Touch the shuffle icon to play music in random order.

USB Sound Menu

See "Infotainment System Sound Menu" under *AM-FM Radio ⇨ 140*.

USB Browse Menu

When a list of songs, albums, artists, or other types of media displays, the up and down arrows, and A-Z appear on the left-hand side. Select A-Z to view a display that will show all letters of the alphabet and select the letter to go to.

Touch the up and down arrows to move the list up and down.

Touch Browse and the following may display:

Playlists:

1. Touch to view the playlists stored on the USB.
2. Touch a playlist to view the list of all songs in that playlist.
3. Touch a song from the list to begin playback.

Supported playlist extensions are m3u and pls.

Artists:

1. Touch to view the list of artists stored on the USB.
2. Touch an artist name to view a list of all albums by the artist.
3. To select a song, touch All songs or touch an album and then touch a song from the list.

Songs:

1. Touch to display a list of all songs on the USB.
2. To begin playback, touch a song from the list.

Albums:

1. Touch to view the albums on the USB.
2. Touch the album to view a list of all songs on the album.
3. Touch a song from the list to begin playback.

Genres:

1. Touch to view the genres on the USB.
2. Touch a genre to view a list of artists.
3. Touch an artist to view albums by that artist.
4. Touch an album to view songs on the album.
5. Touch a song to start playback.

Composers:

1. Touch to view the composers on the USB.
2. Touch a Composer to view a list of albums by that composer.
3. Touch an album or All Songs to view a list of songs.
4. Touch a song from the list to begin playback.

Folders:

1. Touch to view the directories on the USB.
2. Touch a folder to view a list of all files.
3. Touch a file from the list to begin playback.

Podcasts : Touch to view the podcasts on the connected Apple device and get a list of podcast episodes.

Audiobooks:

1. Touch to view the audiobooks stored on the Apple device.
2. Touch an audiobook to get a list of chapters.
3. Touch the chapter from the list to begin playback.

File System and Naming

File systems supported by the USB may include:

- FAT32
- NTFS
- HFS+

The songs, artists, albums, and genres are taken from the file's song information and are only displayed if present. The radio displays the file name as the track name if the song information is not available.

Supported Apple Devices

To view supported devices, see my.cadillac.com/learn.

Storing and Recalling Media Favourites

To store media favourites, touch Browse to display a list of media types.

Touch one of the following Browse options to save a favourite:

Playlists : Touch ☆ next to any playlist to store the playlist as a favourite. Touch a saved favourite to recall a favourite playlist. The first song in the playlist begins to play.

Artists : Touch ☆ next to any artist to store the artist as a favourite. Touch a saved favourite to recall a favourite artist. The first song in the artist list begins to play.

Songs : Touch ☆ next to any song to store the song as a favourite. Touch a saved favourite to recall a favourite song.

Albums : Touch ☆ next to any album to store the album as a favourite. Touch a saved favourite to recall a favourite album. The first song in the album list begins to play.

Genres : Touch ☆ next to any genre to store the genre as a favourite. Touch a saved favourite to recall a favourite genre. The first song of the genre begins to play.

Podcasts : Touch ☆ next to any podcast to store the podcast as a favourite. Touch a saved favourite to recall a favourite podcast. The podcast begins to play.

Audiobooks : Touch ☆ next to any audiobook to store the audiobook as a favourite. Touch a saved favourite to recall a favourite audiobook. The first chapter in the audiobook begins to play.

Media Playback and Mute

USB playback will be paused if the system is muted. If the steering wheel mute control is pressed again, playback will resume.

If the source is changed while in mute, playback resumes and audio will unmute.

Bluetooth Audio

If equipped, music may be played from a paired Bluetooth device. See *Bluetooth (Pairing and Using a Phone)* ⇨ *165* or *Bluetooth (Overview)* ⇨ *164* for help pairing a device.

Volume and song selection may be controlled by using the infotainment controls. If Bluetooth is selected and no sound is heard, check the volume setting on the mobile device.

Music can be launched by touching Bluetooth from the recent sources list on the left of the display or by touching the More option and then touching the Bluetooth device.

To play music via Bluetooth:

1. Power on the device, and pair to connect the device.
2. Once paired, touch Audio from the Home Page, then touch Bluetooth from the recent sources list on the left of the display.

Bluetooth Sound Menu

See “Infotainment System Sound Menu” under *AM-FM Radio* ⇨ *140*.

Manage Bluetooth Devices

From the Home Page:

1. Touch Audio.
2. Touch Devices to add or delete devices.

When using the Bluetooth audio source, the radio may not be able to launch specific applications on your device. Use the device to start audio playback when it is safe to do so.

All devices launch audio differently. When selecting Bluetooth audio as a source, the radio may show as paused on the display. Touch ▶ to begin playback.

Browse functionality will be provided where supported by the Bluetooth device. This media content will not be part of the MyMedia source mode.

Some smartphones support sending Bluetooth music information to display on the radio. When the radio receives this information, it will check to see if any is available and display it. For more information about supported Bluetooth features, see your dealer.

Navigation

Using the Navigation System

If equipped, launch the Nav application by touching the Nav icon on the Home Page or on the shortcut tray near the bottom of the infotainment display.

When the Nav application is launched for the first time, a product walk-through is available. Use of the feature requires the Terms and Conditions and the Privacy statement to be confirmed. If signed into a profile, it is also suggested that you enable and confirm Predictive Navigation.

Predictive Navigation (If Equipped)

If Predictive Navigation is available and confirmed, this feature learns preferences by remembering where the vehicle has been. It uses the locations and navigation history to personalise routes and results.

Predictive Navigation may learn elements such as:

- Personalised routes based on preferred streets.
- Search results that provide best matches are at the top of the list.
- Local map content updating.

Predictive Navigation can also be enabled or disabled at a later time by touching ··· (Options). While in Options, touch Settings to display the options, then Map and Navigation Settings, and then touch Predictive Navigation. See *Settings* ⇨ *170*.

Navigation Map View

After opening the Nav application for the first time, the application will always open in full map view displaying the vehicle's current location. When the vehicle is stopped, the search bar will appear along the top of the navigation map view. When the vehicle is moving, the 🔍 (Search) icon will replace the search bar to maximise the full map view.

Destination Card Preferences

From the Nav application, set up Home and Work addresses to enable one-touch navigation. To set up Home and Work addresses, touch ··· and select Settings, then Map and Navigation Settings, and then choose Destination Card Preferences; Show My Places on Map should be on by default. Select and enter Home and/or Work address and save.

To turn off the My Places bubbles, switch Show My Places on Map to Off.

If the vehicle's system is not signed into a customised profile, the current location icon uses a generic symbol. Once signed into a customised profile, the current location symbol will show a customised icon. See *Navigation Symbols* ⇨ *150*.

Map and Navigation Settings

Touch ··· while in the map view to display options. The following may display:

- 3D Heading Up, 2D Headings Up, 2D North
- Show on Map
- Traffic Events (available with Connected Navigation)
- Settings
- Edit Destination (if a route has been set)
- Avoid on Route (if a route has been set)

Touch Settings to view Map and Navigation Settings. The following may display:

- Destination Card Preferences. See "Destination Card Preferences" previously in this section.
- Map Preferences
- Route Preferences
- Navigation Voice Control
- Traffic Preferences
- Fuel Grade Preferences
- Alert Preferences
- Manage History
- Predictive Navigation: See "Predictive Navigation" previously in this section.
- Map Updates
- About

To exit out of a list, touch ✕ in the top right corner to return to the main map view.

Make sure to set up preferences before setting a destination and starting active guidance.

Map Preferences

Touch to choose between basic map feature configurations:

Map Colours

- Auto – Touch to automatically change modes based on lighting conditions.
- Day (Light)
- Night (Dark)

3D Landmark (Default is On) : Touch On or Off. When turned on, the system will display all 3D Landmarks on the map depending on the zoom level.

3D Building (Default is Off) : Touch On or Off. When turned on, the system will display all of the possible 3D building shapes on the map depending on the zoom level.

Show Terrain in 3D (Default is Off) : Touch On or Off. When turned on, the system will display terrain information on the map in 3D view.

Auto-Zoom (Default is On) : Touch On or Off. When turned on, the system will automatically adjust the zoom level when the vehicle is approaching a turn. After the turn is completed, the system automatically brings the zoom back to the originally set level. If the vehicle is approaching a turn with the next turn occurring shortly after, the Auto-Zoom will remain on until both turns are completed.

Route Preferences

Touch to access the Route Preferences. The choices are:

- Preferred Route – Choose from two different route options: Fastest or Eco-Friendly.

  - Fastest would be the route with the shortest drive time.
  - Eco-Friendly would be the most fuel-efficient route.
- Avoid on Current Route – Choose any of the road features to avoid while on route:
  - Motorways
  - Unpaved Roads
  - Ferries
  - Carpool Lanes
  - Toll Roads
  - Tunnels
  - Country Borders

Navigation Voice Control

Touch to access the voice control setting display.

- Navigation Volume – To adjust the volume level, touch the up and down arrows. If the voice guidance prompt is playing, volume can also be adjusted using the knob on the centre console or the volume switch on the steering wheel.
- Navigation Voice Prompt Level during a Call. Options available are:
  - Full Prompt (Selected by default)
  - Tone Only
  - None

Traffic Events

This feature provides a list of events that are on the route or nearby. Touch ··· and then select Traffic Events. A connected navigation service plan is required.

Traffic Preferences (If Equipped):

While in Map View, touch ··· then Settings and then Map and Navigation Settings to access Traffic Preferences. When Show Traffic on Map is turned on, the feature provides an overview of the traffic flow using different coded colours. The following options are available for rerouting:

- Auto Reroute to Better Route – The system will automatically reroute if the system detects there is a traffic issue ahead.
- Ask Before Rerouting (Default) – If the system detects there is a traffic issue ahead, it will display a pop-up with details about the issue. Choose to reroute or cancel the alert.
- Never Search for Better Route – The system will not check for a better route until one of the above options is selected.

Alert Preferences

Set alerts on or off during both inactive and active guidance views. The following alerts may be available:

- Road Safety Alerts – Touch to display upcoming School Zone.
- Traffic Camera Alerts

Manage History

Touch Manage History to access the History options:

- Clear Recent Destinations – Touch ⊗ to clear the recent destinations.
- Clear Search History – Touch ⊗ to clear the search history.

About

Touch to display software information, such as:

- Telenav
- Navigation Version

Maps

The Nav application requires a map database to run. It is stored on an SD card that is connected to the infotainment system. If the map database is not available, a missing SD card error message will be displayed.

SD Card Error Messages

The SD card only works for one unique vehicle. The SD card must pass authentication verification to be used for that specific vehicle. Do not remove the SD card while the ignition is on.

Potential error scenarios and messages include:

- The SD card has initialised for the first time: “Once initialised, this SD card can only be used for navigation in this vehicle.” Make sure the SD card switch is in an upward position.
- The SD card is not working properly: “SD card is not functioning properly. (Error Code).”
- The SD card is not paired with the existing system: “This Nav SD card is not valid in this vehicle for navigation. See Owner's Manual for more details or visit your dealer. (Error Code).”
- The SD card has been removed from the slot: “SD card has been removed. (Error Code).” Make sure the Nav SD card is in the slot.

Touch Continue to resume after the initialisation error message. For the other messages, touch OK to return to the Home Page.

If any errors continue, see your dealer.

Navigation Symbols

Following are the most common symbols that appear in the Nav application.

This indicates the vehicle's current location and direction on the map.

This is the vehicle's current location icon during inactive guidance mode. Once a user profile is created, the current location icon can be customised.

This icon indicates the vehicle's current location and direction on the map.

The destination pin marks the location of the final destination. Touch the pin to view the destination address or to add it or remove it from the Favourites list. Hide the information by touching the pin one more time. It will automatically time out if no action is taken.

Smart Points of Interest (POIs) are places of interest for parking and filling stations.

The traffic bar provides an overview of the route progress and any traffic and incidents along the way. As the route proceeds, the vehicle icon moves up the bar.

Touch the icon to zoom out on the map and view the entire route. Touch it again to return to the previous view.

View the drive time by touching the estimated time of arrival (ETA).

Current Location

When the vehicle is parked and not in a Navigation session, the user icon is centred on the map view, highlighting the current location.

Destination

Receiving Destination Directions from Different Sources

Destinations can be received or transferred from different sources to the Nav application for route guidance.

Some of these sources are:

- Navigation from search results.
- An address from the Contacts list.
- An application on the smartphone such as myCadillac (subscription required) that can send destinations to the vehicle.
- An application downloaded to the vehicle that can send destinations to the navigation system.

Waypoints

Add up to five waypoints, which are additional destinations, along the route. To add an additional stop or waypoint:

- From active guidance, touch .
- Search for the destination using One-Box, Voice search, or the Quick Category icons.
- Choose search results Along Route, Nearby, or Near Destination.
- Choose the desired waypoint and touch Add to Trip or replace the current destination by touching New Destination.

Route options are not available for waypoints.

Arriving at a Waypoint

When arriving at a waypoint, the Drive to message can be touched to continue on to the next destination.

If the vehicle passes the waypoint or leaves the current route, the system will automatically reroute back to the current waypoint. At the same time, the system will show a Drive to icon along with the next waypoint address

so the current waypoint can be skipped and guidance can resume to the next waypoint or destination.

Editing a Waypoint

When waypoints are added during active guidance, the system allows a stop to be deleted or the order to be changed. To edit a waypoint:

1. Touch ⋯.
2. Touch Edit Destinations.
   - Modify destination order by touching and holding the arrow until it is highlighted. Drag to move the waypoint up or down the list.
   - Delete a waypoint by touching 🗑. A pop-up will appear to confirm waypoint removal. Once the request is confirmed, the system will remove the address from the destinations list. Touch ✕ on the top right corner so the system can recalculate the route.

     If there is only one address in the destinations list, the system will disable the move and delete functions. The system will not allow the final destination to be deleted.

Map Information

Road network attributes are contained in the map database for map information. Attributes include information such as street names, street addresses, and turn restrictions. A detailed area includes all major motorways, service roads, and residential roads. The detailed areas include Places of Interest (POIs) such as restaurants, airports, banks, hospitals, police stations, petrol stations, tourist attractions, and historical monuments.

If the vehicle does not have an applicable service plan, the map database may not include data for newly constructed areas, or map database corrections that are completed after production. The navigation system provides full route guidance in the detailed map areas.

Zoom Control

The zoom control display is shown on the map view. A few ways to zoom in or out are:

- Touch + or – to zoom in or out on the map.
- Double tap with one finger to zoom in or single tap with two fingers to zoom out on the map.
- Use the index finger and thumb to zoom out by pinching and then zoom in by spreading those two fingers on the map.

Map Gestures and Map Scale

Use the following gestures on the infotainment display to adjust the map scale and display options.

- Pinch to zoom in or out.
- Pan the map.
- Use two fingers to tilt down and change from 2D to 3D. Tilt up to change back to 2D.
- Rotate the map.

See *Using the System* ⇨ *137*.

Mute

When in active guidance, the audio prompts while using navigation can be muted. Touch the speaker icon on the right-hand side of the upper bar.
A slash will appear on the speaker to indicate voice guidance is muted.

Active Guidance View

When a destination is chosen and a navigation session is active, the navigation system enters into an Active Guidance View (AGV).

Map Orientation

Touch the Options icon on the map to access map orientation settings. Map orientation is 3D Heading Up by default.

Available settings are:

- 3D Heading Up (Default): 3D map with the vehicle pointing up. In this mode, the current location icon will always head up and the map will rotate around it.
- 2D Heading Up: 2D map with the vehicle pointing up. In this mode, the current location icon will always head up and the map will rotate around it.
- 2D North Up: 2D map with North pointing up. In this mode, the current location icon will shift as the vehicle turns left and right.

Touch the icon to change the map type. The icon and label will also update accordingly.

Depending on the zoom level of the 2D Heading Up and 3D Heading Up maps, the system may automatically switch to the 2D North Up map.

When in AGV, the entire route can be viewed in 2D North Up by touching the traffic bar. The map will zoom out and readjust to display the full route. When in 2D North Up Route View, the Recentre icon will appear in the middle of the display. Touch either the Recentre icon or the traffic bar again to return to the previous view, either 2D or 3D.

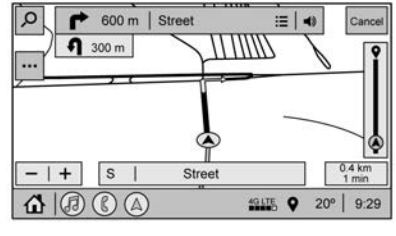
Lane Guidance

The map will display the lane information for the upcoming manoeuvre if it is available.

Junction View

When a vehicle is on the motorway and approaching the exit, an image displays the lane that the vehicle must stay in to complete the next manoeuvre.

Quick-Turn View



When the vehicle is approaching a turn with the next turn following in quick succession, a quick-turn list appears below the primary turn indicator. An audio prompt will announce the quick turn.

Auto-Zoom

When approaching a manoeuvre, the map will automatically zoom in to show both the vehicle icon and the upcoming manoeuvre to give a better view of the manoeuvre. Once the manoeuvre is complete, the system will zoom back to the previous zoom level. Touch ··· on the map to access Settings, then touch Map Configuration to access Auto-Zoom. This feature can be enabled or disabled.

Route List

Touch the menu option next to the next turn street name to display the Route List.

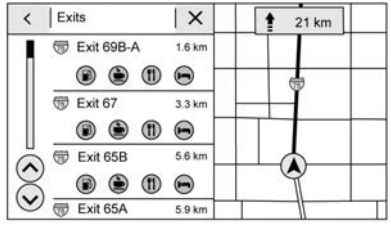
The Route List displays the turns and directions from the current location to the final destination.

Editing the Route List

The Route List can be edited by choosing EDIT, which expands the list to fill the display and enters the Edit Mode. While in Edit Mode, an unwanted route segment can be removed from the route by touching 🗑 next to the segment. A pop-up appears to confirm segment removal.

When the route segment has been removed, all segments are replaced by an activity indicator while the new route is recalculated. When the recalculation is complete, the activity indicator is replaced with the new route segments.

Motorway Exit Lists



Touch the motorway exit icon to open the Exit List. This icon displays next to the current street name near the bottom of the display. The icon only appears when on a motorway with defined exits.

While travelling on roads with designated exits, an Exit List may be available. The Exit List displays the exit number, distance to the exit from the current vehicle position, and convenience stops that may be available, such as petrol, coffee, food, and lodging.

Next Manoeuvre Menu

When in Active Guidance, the Next Manoeuvre Turn Arrow, Street Name, and Manoeuvre Distance are shown in the Next Manoeuvre at the top of the display overlaying the map. ETA, Distance to Destination, and Traffic Indicator are displayed in a panel pinned on the right of the display.

Navigation Next Turn Manoeuvre Alert

If the Navigation application is not open when a near Manoeuvre prompt is given, it is shown as an alert. Touch the alert to go to the main navigation view or touch ✕ to dismiss the alert.

Repeat Voice Guidance

This symbol indicates the next guidance manoeuvre. Touch it to repeat the last spoken guidance instruction.

Incident Alert (If Equipped)

During active guidance, if the system determines that there is an incident ahead but there is not a better route, the system will play a tone and show a Quick Notice. This will only show once per incident.

Incident Reports

Incident report icons, along with traffic flow data, display on the map during both active and inactive guidance.

End Route

Touch Cancel at the top right corner to end active guidance and return to inactive guidance. If active guidance is cancelled before the destination has been reached, a pop-up option to Resume Trip will appear.

Resume Trip

The trip can be resumed if it was cancelled by touching the Resume Trip pop-up option.

If the system has determined that the destination has been reached, either because the arrival view displayed or the destination has been passed, the Resume Trip option will not appear.

Favourites

The navigation favourites can have contacts, addresses, or POIs that have been saved through the favourite icon on the details view.

Accessing Favourites

To manage favourites, touch the Search icon on the Home Page. Touch Favourites to access the Favourites option.

In the Nav application, view the Favourites list by touching ☆ in the search bar along the top of the Nav map view. If the search bar is closed, touch 🔍 and select ☆.

Saving Favourites

Favourites can be added from a number of the system's applications. Touch the favourites icon to save content as a favourite.

Renaming Navigation Favourites

1. Touch the Settings icon on the Home Page and touch the System tab.
2. Touch Favourites to access the Manage Favourites option.
3. Touch a saved Navigation favourite to access the edit icon. Touch the edit icon to rename the favourite.
4. Touch Save to store the renamed favourite.

Recents

Touch ◷ to access a list of recent destinations.

Recentre Position Icon

Touch the Recentre Position arrow in the middle of the map view to reset the map to the current location.

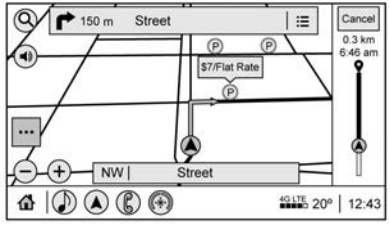
Last Parked Location

The Last Parked Location is the last location the vehicle engine was turned off. That location is displayed in the first row of the Recents list. Touching the last Parked Location shows the Address Details view to either save the address or drive to it. The Last Parked Location can be deleted by entering the Edit display. Once the Last Parked Location is deleted, it no longer appears in the Recents list, unless the vehicle is started at that location again.

Show POI Icons

To see the POI categories, touch Options, then touch Show on Map. Up to eight categories of icons can be selected.

Smart POI Icons on Map



The smart POI icons such as fuel stations and parking appear based on time, location, driver search behaviour, driving conditions, and vehicle conditions.

Touch a smart POI icon to open the corresponding details:

- Left side: Name and address of the POI.
- Right-hand side: + ETE (Estimated Time Enroute.)

Smart Fuel Station Icons

Fuel station prices are shown if available for nearby stations when the vehicle is low on fuel.

Smart Parking Icons

When reaching a densely populated destination and the system determines that parking may be limited, the system will attempt to display nearby parking destinations with pricing information, if available.

Report an Issue Using POI Details

In the POI details page, a POI issue can be reported if the data is not accurate or the address is incorrect. Touch Report an Issue near the bottom of the display to access the issue selection page. Touch one of the predefined issues on the selection page, then touch Send. The system will send the information for analysis.

Search

Touch Search on the infotainment display to open the search display. It has a search field entry box, quick category icon shortcuts, recents icon, favourites icon, and keyboard.

Auto Complete

Enter a partial location in the field entry box on the search display. Auto complete will attempt to complete the destination based on what is being entered. Touch the suggested item to search.

Search While in Motion with No Front Seat Passenger Present

The search display will not allow changes or text input with the keyboard when the vehicle is in motion. As a result, a display showing three rows of the most commonly used categories appears. Touching the search box will activate speech recognition.

Search While in Motion with Front Seat Passenger Present

If the system detects that the front seat passenger is present with both driver and passenger seat belts fastened, touching the search icon will display an alert message that allows the passenger to search for a destination as if the vehicle were stopped.

Global Positioning System (GPS)

The position of the vehicle is determined by using satellite signals, various vehicle signals, and map data.

At times, other interference such as the satellite condition, road configuration, condition of the vehicle, and/or other circumstances can affect the navigation system's ability to determine the accurate position of the vehicle.

The GPS shows the current position of the vehicle using signals sent by GPS satellites. When the vehicle is not receiving signals from the satellites, a symbol appears on the map screen. See *Navigation Symbols* ⇨ *150*.

This system might not be available or interference can occur if any of the following are true:

- Signals are obstructed by tall buildings, trees, large trucks, or a tunnel.
- Satellites are being repaired or improved.

For more information if the GPS is not functioning properly, see *Problems with Route Guidance* ⇨ *158* and *If the System Needs Service* ⇨ *158*.

Vehicle Positioning

At times, the position of the vehicle on the map could be inaccurate due to one or more of the following reasons:

- The road system has changed.
- The vehicle is driving on slippery road surfaces such as sand, gravel, or snow.
- The vehicle is travelling on winding roads or long, straight roads.
- The vehicle is approaching a tall building or a large vehicle.

- The surface streets run parallel to a freeway.
- The vehicle has been transferred by a vehicle carrier or a ferry.
- The current position calibration is set incorrectly.
- The vehicle is travelling at high speed.
- The vehicle changes directions more than once, or the vehicle is turning on a turn table in a car park.
- The vehicle is entering and/or exiting a car park, garage, or a car park with a roof.
- The GPS signal is not received.
- A roof carrier is installed on the vehicle.
- Tyre chains have been installed.
- The tyres are replaced or worn.
- The tyre pressure is incorrect.
- This is the first navigation use after the map data is updated.
- The 12-volt battery has been disconnected for several days.
- The vehicle is driving in heavy traffic where driving is at low speeds, and the vehicle is stopped and started repeatedly.

Problems with Route Guidance

Inappropriate route guidance can occur under one or more of the following conditions:

- The turn was not made on the road indicated.
- Route guidance might not be available when using automatic rerouting for the next right or left turn.
- The route might not be changed when using automatic rerouting.
- There is no route guidance when turning at an intersection.
- Plural names of places might be announced occasionally.
- It could take a long time to operate automatic rerouting during high-speed driving.
- Automatic rerouting might display a route returning to the set waypoint if heading for a destination without passing through a set waypoint.
- The route prohibits the entry of a vehicle due to a regulation by time or season or any other regulation which may be given.
- Some routes might not be searched.
- The route to the destination might not be shown if there are new roads, if roads have recently changed, or if certain roads are not listed in the map data. See *Maps* ⇨ *150*.

To recalibrate the vehicle's position on the map, park with the vehicle running for two to five minutes, until the vehicle position updates. Make sure the vehicle is parked in a location that is safe and has a clear view of the sky and away from large obstructions.

If the System Needs Service

If the navigation system needs service and the steps listed here have been followed but there are still problems, see your retailer.

Map Data Updates

The map data in the vehicle is the most up-to-date information available when the vehicle was produced. The map data is updated periodically, provided that the map information has changed.

For questions about the operation of the navigation system or the update process, see your dealer.

Database Coverage Explanations

Coverage areas vary with respect to the level of map detail available for any given area. Some areas feature greater levels of detail than others. If this happens, it does not mean there is a problem with the system. As the map data is updated, more detail can become available for areas that previously had limited detail. See *Map Data Updates* ⇨ *158*.

Voice Recognition

If equipped, voice recognition allows hands-free operation within the navigation, audio, and mobile device applications. This feature can be started by pressing on the steering wheel or by touching on the infotainment display with the navigation application.

However, not all features within these areas are supported by voice commands. Generally, only complex tasks that require multiple manual interactions to complete are supported by voice commands.

For example, tasks that take more than one or two touches, such as a song or artist to play from a media device, would be supported by voice commands. Other tasks, like adjusting the volume or seeking up or down, are audio features that are easily performed by touching one or two options, and are not supported by voice commands.

In general there are flexible ways to speak commands for completing the tasks.

Try stating a One-Shot command, such as “Directions to address <number, street, city, country>.” Another example of a One-Shot Destination Entry command is, “Directions to Place of Interest at <hotel>.” If these commands do not work, try saying, “Take me to Place of Interest” or “Find address” and the system will walk you through by asking additional questions.

Using Voice Recognition

Voice recognition becomes available once the system has been initialised. This begins when the ignition is turned on. Initialisation may take a few moments.

1. Press on the steering wheel controls to activate voice recognition.
2. The audio system mutes and the system plays a prompt.
3. Clearly speak one of the commands described in this section.

   A voice recognition system prompt can be interrupted while it is playing by pressing again.

   For example, if the prompt seems to be taking too long to finish, speak the command without waiting for the prompt to complete and press again.

Once voice recognition is started, both the infotainment display and instrument cluster show the selections

and visual dialogue content. These displays can be turned on or off in the Tutorial Mode under *Settings* ⇨ *170*.

There are three voice prompt modes supported:

- Informative verbal prompts: This type of prompt will provide more information regarding the supported actions.
- Short prompts: This type of prompt will provide simple instructions about what can be stated.
- Auto informative prompts: This type of prompt plays during the first few speech sessions, then automatically switches to the short prompt after some experience has been gained through using the system.

If a command is not spoken, the voice recognition system says a help prompt.

Prompts and Infotainment Displays

While a voice recognition session is active, there may be corresponding options showing on the displays. A selection can be made by manually touching the option, or by speaking the number for the option to select. Manual interaction in the voice recognition session is permitted. Interaction during a voice session may be completed entirely using voice commands while some manual commands may expedite a task. If a selection is made using a manual control, the voice recognition dialogue will progress in the same way as if the selection were made using a voice command. Once the system completes the task, or the session is terminated, the voice recognition dialogue stops.

An example of this type of manual intervention is touching an entry of a displayed number list instead of speaking the number associated with the entry desired.

Cancelling Voice Recognition

- Touch or say “Cancel” or “Exit” to terminate the voice recognition session and show the display where voice recognition was initiated.
- Press ☜ on the steering wheel controls to terminate the voice recognition session and show the display where voice recognition was initiated.

Natural Language Commands

Most languages do not support natural language commands in sentence form. For those languages, use direct commands like the examples shown on the display.

Helpful Hints for Speaking Commands

Voice recognition can understand commands that are naturally stated in sentence form or direct commands that state the application and the task.

For best results:

- Listen for the prompt before saying a command or reply.
- Speak the command naturally, not too fast, not too slow.
- Use direct commands without a lot of extra words. For example, “Call <name> at work,” “Play” followed by the artist or song name, or “Tune” followed by the radio station number.
- Navigation destinations can be made in a single command using keywords. A few examples are: “I

want directions to an address," "I need to find a Place of Interest or (POI)," or "Find contact."

The system responds by requesting more details. For other POIs, say the name of a category like "Restaurants," "Shopping Malls," or "Hospitals."

- Navigating to a destination outside of the current country takes more than one command. The first command is to tell the system where the navigation will take place, such as an Address, Junction, POI, or Contact. If Address or Junction is selected, the second command is to say, "Change Country." Once the system responds, say the country before saying the rest of the address and/or junction.

  If POI is asked for, say "Change Location," then "Change Country."

Direct commands might be more clearly understood by the system. An example of a direct command would be "Call <number>". Examples of these direct commands are displayed on most of the screens while a voice session is active. If "Phone" or "Phone Commands" is spoken, the system understands that a phone call is requested and will respond with questions until enough details are gathered to make a call.

If a mobile phone number has been saved with a name and a place, the direct command should include both, for example "Call <name> at work."

Using Voice Recognition for List Options

When a list is displayed, a voice prompt will ask to confirm or select an option from that list.

When a display contains a list, there may be options that are available but not displayed. The list on a voice recognition screen functions the same as a list on other displays. Scrolling or flinging can be used to help display other entries from the list.

Manually scrolling or paging the list on a display during a voice recognition session suspends the current voice recognition event and plays the prompt "Please select manually or touch the Back icon on the infotainment display to try again." If manual selection takes more than 15 seconds, the session terminates and prompts that it has timed out. The display returns to the screen where voice recognition was initiated.

The Back Command

Say "Back" or touch the Back icon on the infotainment display to go to the previous display.

If in voice recognition, and "Back" is spoken all the way back to the starting display, and then "Back" is spoken one more time, the voice recognition session will cancel.

Help

Say "Help" on any voice recognition display and the help prompt for the display is played.

Touching  while the help prompt is playing will terminate the prompt. Doing this will stop the help prompt so that a voice command can be used.

Voice Recognition for the Radio

If browsing the audio sources when voice is touched, the voice recognition commands for AM and FM are available.

“Switch to AM” : Switch bands to AM and tune to the last AM radio station.

“Switch to FM” : Switch bands to FM and tune to the last FM radio station.

“Tune to <AM frequency> AM” : Tune to the radio station whose frequency is identified in the command (like “nine fifty”).

“Tune to <FM frequency> FM” : Tune to the radio station whose frequency is identified in the command (like "one oh one point one").

Voice Recognition for Audio MyMedia

The available voice recognition commands for [browsing] MyMedia are:

“Play Artist” : Begin a dialogue to enter a specific artist name.

“Play Artist <artist name>” : Begin playback of a specific artist.

“Play Album” : Begin a dialogue to enter a specific album name.

“Play Album <album name>” : Begin playback of a specific album.

“Play Song” : Begin a dialogue to enter a specific song name.

“Play Song <song name>” : Begin playback of a specific song, if available.

“Play Genre” : Begin a dialogue to enter a specific genre.

“Play Genre <genre name>” : Begin playback of a specific genre.

“Play Playlist” : Begin a dialogue to enter a specific playlist name.

“Play Playlist <playlist name>” : Begin playback of a specific playlist.

“Play <device name>” : Play music from a specific device identified by name. The device name is the name displayed when the device is first selected as an audio source.

“Play Chapter” : Begin a dialogue to enter a specific name.

“Play Chapter <chapter name>” : Begin playback of a specific chapter.

“Play Audiobook” : Begin a dialogue to enter a specific audiobook.

“Play Audiobook <audiobook name>” : Begin playback of a specific audiobook.

“Play Episode” : Begin a dialogue to enter a specific name.

“Play Episode <episode name>” : Begin playback of a specific episode.

“Play Podcast” : Begin a dialogue to enter a specific podcast.

“Play Podcast <podcast name>” : Begin playback of a specific podcast.

“My Media” : Begin a dialogue to enter the desired media content.

Handling Large Amounts of Media Content

It is expected that large amounts of media content will be brought into the vehicle. It may be necessary to handle large amounts of media content in a different way than smaller amounts of media. The system may limit the options of voice recognition by not allowing selection of files by voice at the highest level if the number of files exceeds the maximum limit.

Changes to voice commands due to media content limits are:

- Files, including other individual files of all media types such as songs, audiobook chapters, podcast episodes, and videos.
- Album type folders including types such as albums and audiobooks.

There are no restrictions if the number of files and albums is fewer than 12,000. When the number of files connected to the system is between 12,000 and 24,000, the content cannot be accessed directly with one command like “Play <song name>.”

The restriction is that the command “Play Song” must be spoken first; the system will then ask for the song name. The reply command would be to say the name of the song to play.

Similar limits exist for album content. If there are more than 12,000 albums, but fewer than 24,000, the content cannot be accessed directly with one command like, “Play <album name>.” The command “Play Album” must first be spoken; the system will then ask for the album name. The reply would be to say the name of the album to play.

Once the number of files has exceeded approximately 24,000, there is no support for accessing the songs directly through voice commands. There will still be access to the media content by using commands for playlists, artists, and genres.

The access commands for playlists, artists, and genres are prohibited after the number of this type of media exceeds 12,000.

The system will provide feedback the first time voice recognition is initiated if it has become apparent that any of these limits are reached during a device initialising process.

Voice recognition performance will degrade to some extent based on many factors when adding large amounts of data to recognise. If so, accessing songs through playlists or artist name may work better.

Voice Recognition for Navigation (If Equipped)

“Navigation” : Begin a dialogue to enter specific destination information.

“Navigation Commands” : Begin a dialogue to enter specific destination information.

“Address” : Begin a dialogue to enter a specific destination address, which includes the entire address consisting of the house number, street name, city and country.

“Place of Interest” : Begin a dialogue to enter a destination Place of Interest category or major brand name.

The name must be precisely spoken. Nicknames or short names for the businesses will not likely be found. Lesser known businesses might have to be located by category, such as fast food, hotels, or banks.

“Navigate to Contact” : Begin a dialogue to enter a specific destination contact name.

“Cancel Navigation” : End route guidance.

“Take Me Home” : Create a route to a stored home location.

Voice Recognition for the Phone

“Call <contact name>” : Initiate a call to a stored contact. The command may include location if the contact has location numbers stored.

“Call <contact> At Home,” “At Work,” “On Mobile,” or “On Other” : Initiate a call to a stored contact and location at home, at work, on mobile device, or on another phone.

“Call <mobile phone number>” : Initiate a call to a mobile phone number of seven digits, 10 digits, or three digit emergency numbers.

“Pair Phone” : Begin the Bluetooth pairing process. Follow the instructions on the infotainment display.

“Redial” : Initiate a call to the last dialled number.

“Switch Phone” : Select a different connected mobile phone for outgoing calls.

“Voice Keypad” : Begin a dialogue to enter special numbers like international numbers. The numbers can be entered in groups of digits with each group of digits being repeated back by the system. If the group of digits is not correct, the command “Delete” will remove the last group of digits and allow them to be re-entered. Once the entire number has been entered, the command “Call” will start dialling the number.

Phone Assistant Voice Recognition

Press and hold on the steering wheel controls to pass through and launch Google phone assistant or Siri.

For the low radio, whether connected by Bluetooth or phone projection, the only available voice recognition is either Siri (iPhone) or the Google Assistant (Android).

Phone

Bluetooth (Overview)

The Bluetooth-capable system can interact with many mobile devices, allowing:

- Placement and receipt of calls in a hands-free mode.
- Sharing of the device's address book or contact list with the vehicle.

To minimise driver distraction, before driving and with the vehicle parked:

- Become familiar with the features of the mobile device. Organise the phone book and contact lists clearly and delete duplicate or rarely used entries. If possible, program speed dial or other shortcuts.
- Review the controls and operation of the infotainment system.
- Pair mobile device(s) to the vehicle. The system may not work with all mobile devices. See “Pairing” later in this section.

Vehicles with a Bluetooth system can use a Bluetooth-capable mobile device with a Hands-Free Profile to make and receive phone calls. The infotainment

system and voice recognition are used to control the system. The system can be used while the ignition is on or in ACC/ACCESSORY. The range of the Bluetooth system can be up to 9.1 m (30 ft). Not all mobile devices support all functions and not all mobile devices work with the Bluetooth system. See my.cadillac.com for more information about compatible mobile devices.

Controls

Use the controls on the centre console and the steering wheel to operate the Bluetooth system.

Steering Wheel Controls

: Press to answer incoming calls and start voice recognition on your connected Bluetooth mobile device.

: Press to end a call, decline a call, or cancel an operation. Press to mute or unmute the infotainment system when not on a call.

Infotainment System Controls

For information about how to navigate the menu system using the infotainment controls, see *Using the System* ⇨ *137*.

Audio System

When using the Bluetooth mobile device system, sound comes through the vehicle's front audio system speakers and overrides the audio system. The volume level while on a mobile device call can be adjusted by pressing the steering wheel controls or the volume control on the centre console. The adjusted volume level remains in memory for later calls. The volume cannot be lowered beyond a certain level.

Bluetooth (Pairing and Using a Phone)

Pairing

A Bluetooth-enabled mobile device must be paired to the Bluetooth system and then connected to the vehicle before it can be used. See the mobile device manufacturer's user guide for Bluetooth functions before pairing the device.

Pairing Information

- If no mobile device has been connected, the Phone main page on the infotainment display will show the Connect Phone option. Touch this option to connect. Another way to connect is to touch the Phones tab at the top right of the display and then touch Add Phone.
- A Bluetooth smartphone with music capability can be paired to the vehicle as a smartphone and a music player at the same time.
- Up to 10 devices can be paired to the Bluetooth system.
- The pairing process is disabled when the vehicle is moving.
- Pairing only needs to be completed once, unless the pairing information on the mobile phone changes or the mobile phone is deleted from the system.
- If multiple paired mobile phones are within range of the system, the system connects to the paired mobile phone that is set to First to

Connect. If there is no mobile phone set to First to Connect, it will link to the mobile phone which was used last. To link to a different paired mobile phone, see “Linking to a Different Phone” later in this section.

Pairing a Phone

1. Make sure Bluetooth has been enabled on the mobile phone before the pairing process is started.
2. Touch the Phone icon on the Home Page or the phone icon on the shortcut tray near the bottom of the display.
3. Touch Phones at the top of the infotainment display. There is also a Connect Phones option in the middle of the Phone display which will shortcut to the Phone List menu.
4. Touch Add Phone.
5. Select the vehicle name shown on the infotainment display from your mobile phone's Bluetooth Settings list.
6. Follow the instructions on the mobile phone to confirm the six-digit code showing on the infotainment display and touch Pair. The code on the mobile phone and infotainment display will need to be acknowledged for a successful pairing.
7. Start the pairing process on the mobile phone to be paired to the vehicle. See the mobile phone manufacturer's user guide for information on this process. Once the mobile phone is paired, it will show under Connected.
8. If the vehicle name does not appear on your mobile phone, there are a few ways to restart the pairing process:
   - Turn the mobile phone off and then back on.
   - Go back to the beginning of the Phone menus on the infotainment display and restart the pairing process.
   - Reset the mobile phone, but this step should be done as a last effort.
9. If the mobile phone prompts to accept connection or allow phone book download, touch Always Accept and Allow. The phone book may not be available if not accepted.
10. Repeat Steps 1–8 to pair additional mobile phones.

First to Connect Paired Phones

If multiple paired mobile phones are within range of the system, the system connects to the paired mobile phone that is set as First to Connect. To enable a paired mobile phone as the First to Connect phone:

1. Make sure the mobile phone is turned on.
2. Touch Settings, then touch System.
3. Touch Phones to access all paired and all connected mobile phones and mobile devices.
4. Touch the information icon to the right of the mobile phone to open the mobile phone's settings menu.
5. Touch the First to Connect option, to enable the setting for that device.

Mobile phones and mobile devices can be added, removed, connected, and disconnected. A sub-menu will display whenever a request is made to add or manage mobile phones and mobile devices.

Secondary Phone

A mobile phone can be enabled as a Secondary Phone by touching the information icon to the right of the paired mobile phone name to open the phone settings menu. If a mobile phone is enabled as a Secondary Phone, it can connect simultaneously alongside another Bluetooth mobile device. In doing so, the Secondary Phone will be labelled as Incoming Calls. This means the mobile device can only receive calls. The Address Book of a Secondary Phone will not be available and hands-free outgoing calls cannot be placed using this mobile phone.

If needed, touch the Secondary Phone while in the Phones list to swap it into the Outgoing and Incoming role. This role makes it possible to place outgoing calls from the Contacts and Recents list.

Listing All Paired and Connected Phones

1. Touch the Phone icon on the Home Page or the phone icon on the shortcut tray near the bottom of the display.
2. Touch Phones.

Disconnecting a Connected Phone

1. Touch the Phone icon on the Home Page.
2. Touch Phones.
3. Touch the information icon next to the connected mobile phone or mobile device to show the information display on the mobile phone or mobile device.
4. Touch Disconnect.

Deleting a Paired Phone

1. Touch the Phone icon on the Home Page or the phone icon on the shortcut tray near the bottom of the display.
2. Touch Phones.
3. Touch the information icon next to the connected mobile phone to show the information display on the mobile phone or mobile device.
4. Touch Forget Device.

Linking to a Different Phone

To link to a different mobile phone, the new mobile phone must be in the vehicle and paired to the Bluetooth system.

1. Touch the Phone icon on the Home Page or the phone icon on the shortcut tray near the bottom of the display.
2. Touch Phones.
3. Touch the new mobile phone to link to from the not connected phone list. See “First to Connect Paired Phones” and “Secondary Phone” earlier in this section.

Switching to Handset or Hands-free Mode

To switch between handset or handsfree mode:

- While the active call is hands-free, touch the Handset option to switch to the handset mode.

  The mute icon will not be available or functional while Handset mode is active.

- While the active call is on the handset, touch the Handset option to switch to the hands-free mode.

Making a Call Using Contacts and Recent Calls

Calls can be made through the Bluetooth system using personal mobile phone contact information for all mobile phones that support the Phone Book feature. Become familiar with the mobile phone settings and operation. Verify the mobile phone supports this feature.

The Contacts menu accesses the phone book stored in the mobile phone.

The Recent menu accesses the recents call list from your mobile phone.

To make a call using the Contacts menu:

1. Touch the Phone icon on the Home Page.
2. Touch Contacts.
3. The Contacts list can be searched by using the first character. Touch A-Z on the infotainment display to scroll through the list of names. Touch the name to call.
4. Touch the desired contact number to call.

To make a call using the Recent menu:

1. Touch Phone on the Home Page.
2. Touch Recent.
3. Touch the name or number to call.

Making a Call Using the Keypad

To make a call by dialling the numbers:

1. Touch the Phone icon on the Home Page.
2. Touch Keypad and enter a phone number.
3. Touch on the infotainment display to start dialling the number.

Searching Contacts Using the Keypad

To search for contacts using the keypad:

1. Touch the Phone icon on the Home Page.
2. Touch Keypad and enter partial phone numbers or contact names using the digits on the keypad to search.

   Results will show on the right side of the display. Touch one to place a call.

Accepting or Declining a Call

When an incoming call is received, the infotainment system mutes and a ring tone is heard in the vehicle.

Accepting a Call

There are two ways to accept a call:

- Press on the steering wheel controls.
- Touch Answer on the infotainment display.

Declining a Call

There are two ways to decline a call:

- Press on the steering wheel controls.
- Touch Ignore on the infotainment display.

Call Waiting

Call waiting must be supported on the Bluetooth mobile phone and enabled by the wireless service carrier to work.

Accepting a Call

Press to answer, then touch Switch on the infotainment display.

Declining a Call

Press to decline, then touch Ignore on the infotainment display

Switching Between Calls (Call Waiting Calls Only)

To switch between calls, touch Phone on the Home Page to display Call View. While in Call View, touch the call information of the call on hold to change calls.

Three-Way Calling

Three-way calling must be supported on the Bluetooth mobile phone and enabled by the wireless service carrier to work.

To start a three-way call while in a current call:

1. In the Call View, touch Add Call to add another call.
2. Initiate the second call by selecting from Recent, Contacts, or Keypad.
3. When the second call is active, touch the merge icon to conference the three-way call together.

Ending a Call

- Press on the steering wheel controls.
- Touch on the infotainment display, next to a call, to end only that call.

Dual Tone Multi-Frequency (DTMF) Tones

The in-vehicle Bluetooth system can send numbers during a call. This is used when calling a menu-driven phone system. Use the Keypad to enter the number.

Apple CarPlay and Android Auto

If equipped, Android Auto and/or Apple CarPlay capability may be available through a compatible smartphone. If available, the Android Auto and Apple CarPlay icons will change from grey to colour on the Home Page of the infotainment display.

To use Android Auto and/or Apple CarPlay:

For Wired Phone Projection

1. Download the Android Auto app to your smartphone from the Google Play store. There is no app required for Apple CarPlay.
2. Connect your Android phone or Apple iPhone by using the factory-provided phone USB cable and plugging into a USB data port. For best performance, it is highly recommended to use the device's factory-provided USB cable, which should be replaced after significant wear to maintain connection quality. Aftermarket or third-party cables may not work.
3. When the phone is first connected to activate Apple CarPlay or Android Auto, accept the terms and conditions on both the infotainment system and the phone.

4. Follow the instructions on the phone.

The Android Auto and Apple CarPlay icons on the Home Page will illuminate depending on the smartphone. Android Auto and/or Apple CarPlay may automatically launch upon USB connection. If not, touch the Android Auto or Apple CarPlay icon on the Home Page to launch.

Press ⌂ on the centre console to return to the Home Page.

Features are subject to change. For further information on how to set up Android Auto and Apple CarPlay in the vehicle, see your dealer.

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Press ⌂ on the centre console to exit Android Auto or Apple CarPlay. To enter back into Android Auto or Apple CarPlay, press and hold ⌂ on the centre console.

Apple CarPlay and Android Auto can be disabled from the infotainment system. To do this, touch Home, Settings, and then touch the Apps tab along the top of the display. Use the On/Off toggled to turn off Apple CarPlay or Android Auto.

Settings

Certain settings can be managed in the Owner Centre sites when an account is established, and may be modified if other users have accessed the vehicle or created accounts. This may result in changes to the security or functionality of the infotainment system. Some settings may also be transferred to a new vehicle, if equipped.

Refer to the User Terms and Privacy Statement for important details. To view, touch the Settings icon on the Home Page of the infotainment display.

The settings menu may be organised into four categories. Select the desired category by touching System, Apps, Vehicle, or Personal.

To access the personalisation menus:

1. Touch Settings on the Home Page on the infotainment display.
2. Touch the desired category to display a list of available options.
3. Touch to select the desired feature setting.
4. Touch the options on the infotainment display to disable or enable a feature.
5. Touch ✕ to go to the top level of the Settings menu.

System

The menu may contain the following:

Time / Date

Use the following features to set the clock:

- Automatic Time and Date: Touch Off or On to enable or disable automatic update of the time and date. When this feature is on, the time and date cannot be manually set.
- Set Time: Touch to manually set the time using the controls on the infotainment display.
- Set Date: Touch to manually set the date using the controls on the infotainment display.
- Select Time Zone: Touch to manually set the time zone. Touch a time zone from the list.
- Use 24-Hour Format: Touch to specify the clock format shown.

  Touch Off or On to disable or enable.

Language

This will set the display language used on the infotainment display. It may also use the selected language for voice recognition and audio feedback. Touch Language and touch the appropriate language.

Phones

Touch to connect to a different mobile phone or mobile device source, disconnect a mobile phone or media device, or delete a mobile phone or media device.

Privacy

Touch and the following may display:

- Location Services: This setting enables or disables sharing of vehicle location outside the vehicle. Emergency services will not be affected when Off is selected.
- Voice Recognition Sharing: This setting determines whether voice commands can be shared with a cloud-based voice recognition system. Touch Off to prevent the sharing and possible recording of your voice commands with this system. This may limit the system's ability to understand your voice commands and may disable some features.
- Types: This setting lists all Android-defined as dangerous permissions currently used by the infotainment system, the number of applications that have requested this permission, and the number of applications that are allowed to use this permission.
- Used By Applications: This setting lists all applications that are requested or are using Android-defined as dangerous permissions. Only requested and active permissions are shown.

Display

Touch and the following may display:

- Mode: This adjusts the appearance of the navigation map view and any downloaded apps optimised for day or night time conditions. Set to Auto for the display to automatically adjust based on bright/dark conditions.

  Touch Auto, Day, or Night to adjust the display.

- Calibrate Touchscreen: Touch to calibrate the infotainment display and follow the prompts.
- Turn Display Off: Touch to turn the display off. Touch anywhere on the infotainment display or press any infotainment control on the centre console again to turn the display on.

Sounds

Touch and the following may display:

- Maximum Startup Volume: This feature adjusts the maximum volume of the infotainment system when you start the vehicle. To set the maximum start-up volume, touch the controls on the infotainment display to increase or decrease.
- Audio Cues: This feature determines if sounds play when the infotainment system starts up and shuts down. This feature can be turned off or on.
- Set Audio Cue Volume: This setting controls the volume of Audio Cues played on start-up and shutdown. Touch the controls on the infotainment display to increase or decrease.
- Audible Touch Feedback: This setting determines if a sound plays when touching the infotainment display or radio controls. This feature can be turned off or on.

Voice

Touch and the following may display:

- Confirm More/Less: This setting specifies how often the voice recognition system confirms commands. Touch Confirm More to have the system check with you more often before acting on your commands.
- Prompt Length: This setting specifies the amount of detail the voice recognition system provides when giving you feedback. Touch Auto to have the system automatically adjust to your speech habits. Touch Informative, Short, or Auto.
- Audio Feedback Speed: Touch Slow, Medium, or Fast to adjust how quickly the voice recognition system speaks.
- Friendly Prompts: This setting adjusts the formality of voice prompts. Touch Off for shorter prompts. Touch On to hear prompts with more personality. Touch Auto to have the prompt match your command style.
- Tutorial Mode: Touch Off or On to provide tutorial feedback on the display.
- Allow Prompt Interruptions: This setting controls whether voice commands can be spoken before voice prompts finish. Turn this on to speak commands without hearing the full prompt. Speaking while the prompt is still playing will immediately stop playing the current prompt and recognise your command. Background noise may cause accidental interruptions. Touch Off or On.

Favourites

Touch and the following may display:

- Manage Favourites: Touch to display a list of Audio, Phone, and Navigation favourites.

  Favourites can be moved, renamed, or deleted.

To move, touch and hold the favourite, and then drag up or down to rearrange the position.

- Set Number of Audio Favourites: Touch to select how many favourites pages can be viewed from the audio application. The Auto setting will automatically adjust this number based on the number of favourites you have saved. Touch Auto, 5, 10, 15, 20, 25, 30, 35, or 40.

About

Touch to view the infotainment system software information.

Running Applications

Touch to see a complete list of applications that are currently running on the infotainment system.

Return to Factory Settings

Touch and the following may display:

- Reset Vehicle Settings: Resets all vehicle settings for the current user.

  Touch Reset or Cancel.

- Delete Settings and Personal Data: Erases app data settings, user profiles, and personal data including navigation and mobile device data.

  Touch Erase or Cancel.

- Clear Default Applications: Resets preferred applications that have been set to open when selecting a function. No application data will be lost.

  Touch Clear or Cancel.

Apps

The menu may contain the following:

Android Auto

This feature allows you to interact directly with your mobile device on the infotainment display. See *Apple CarPlay and Android Auto* ⇨ *169*.

Touch the controls on the infotainment display to disable or enable.

Apple CarPlay

This feature allows you to interact directly with your mobile device on the infotainment display. See *Apple CarPlay and Android Auto* ⇨ *169*.

Touch the controls on the infotainment display to disable or enable.

Audio

Depending on the current audio source, different options will be available.

Touch and the following may display:

- Tone Settings: Touch to adjust Equaliser, Fade/Balance, or Sound Mode. See “Infotainment System Sound Menu” in *AM-FM Radio* ⇨ *140*.
- Auto Volume: This feature adjusts the volume based on vehicle speed.

  Touch Off, Low, Medium-Low, Medium, Medium-High, or High.

- Bose AudioPilot Noise Compensation Technology: This feature adjusts the volume based on the noise in the vehicle and the speed.

  Touch Off or On.

- Manage Favourites: Touch to display a list of Audio, Mobile Devices, and Navigation favourites.

  Favourites can be moved, renamed, or deleted.

To move, touch and hold the favourite, and then drag up or down to rearrange the position.

- Set Number of Audio Favourites: Touch to select how many favourites pages can be viewed from the audio application. The Auto setting will automatically adjust this number based on the number of favourites saved. Touch Auto, 5, 10, 15, 20, 25, 30, 35, or 40.
- RDS: This allows the Radio Data System (RDS) to be turned on or off.

  Touch Off or On.
- Manage Phones: Select to connect to a different phone source, disconnect a phone, or delete a phone.
- Reset music index: This allows the music index to be reset if you are having difficulty accessing all of the media content on your device.

  Touch Yes or No.

Climate

Touch and the following may display:

- Auto Fan Speed: This setting specifies the amount of airflow when the climate control fan setting is Auto Fan.

  Touch Low, Medium, or High.
- Air Quality Sensor: This setting switches the system into Recirculation Mode based on the quality of the outside air.

  Touch Off, Low Sensitivity, or High Sensitivity.
- Auto Cooled Seats: This setting automatically turns on and regulates the ventilated seats when the cabin temperature is warm.

  Touch the controls on the infotainment display to disable or enable.
- Auto heated seats: This setting automatically turns on and regulates the heated seats when the cabin temperature is cool. The auto heated seats can be turned off by using the heated seat controls on the centre console.

  Touch the controls on the infotainment display to disable or enable.
- Auto Demist: This setting automatically turns the front demister on when the vehicle engine is started.

  Touch the controls on the infotainment display to disable or enable.
- Auto Rear Demist: This setting automatically turns the rear demister on when the vehicle engine is started.

  Touch the controls on the infotainment display to disable or enable.
- Ionizer: This setting purifies the air in the interior of the vehicle.

  Touch the controls on the infotainment display to disable or enable.

Nav

If equipped, touch and the following may display:

- Destination Card Preferences
- Map Preferences
- Route Preferences
- Navigation Voice Control
- Traffic Preferences

- Alert Preferences
- Fuel Grade Preferences
- Manage History
- Predictive Navigation (if equipped)
- About

See *Using the Navigation System* ⇨ *147*.

Phone

Touch and the following may display:

- My Number: Displays the mobile phone number of the Bluetooth connected device.
- Active Call View: Shows active call display when answering a call.

  Touch the controls on the infotainment display to disable or enable.
- Privacy: Only show call alerts in the instrument cluster.

  Touch Off or On.
- Sort Contacts: Touch to sort by first or last name.
- Re-sync Device Contacts: Allows the device contacts to re-sync if you are having difficulty accessing all of the contacts on your mobile phone.
- Delete all vehicle contacts: Touch to delete all vehicle stored contacts.

See *Using the System* ⇨ *137*.

Vehicle

This menu allows adjustment of different vehicle features. See *Vehicle Personalisation* ⇨ *121*.

Personal

If equipped, this menu allows adjustment of different user profile settings. See “Users” in *Using the System* ⇨ *137* for information on setting up user profiles.

The menu may contain the following:

Name

Touch to edit your user name that will be displayed in the vehicle.

Vehicle account information

Touch to view the vehicle account information and to change the account password.

An “unverified user account” pop-up will display until the account information verification process has been completed on the Internet. Check your registered e-mail account for an activation e-mail to complete the verification process.

Profile Picture

Touch to choose or change your profile picture.

Profile Identifiers

Touch to have the vehicle recognise the identifier you choose.

Touch Vehicle Key 1 and/or Vehicle Key 2.

If the Remote Keyless Entry (RKE) transmitter is lost or stolen, contact your dealer.

Security

Touch to have your profile secured with a Personal Identification Number (PIN).

Touch No or Yes.

Vehicle Name

Touch to edit your vehicle name.

Vehicle Account

Touch to view the vehicle account information and to change the account password.

Delete Profile

Touch to remove the profile from the vehicle.

Touch Remove or Cancel.

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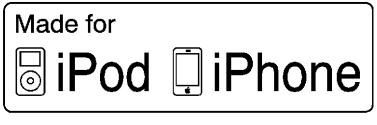

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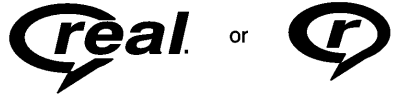

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Maps for Life

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Unicode

Free Type Project

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QNX

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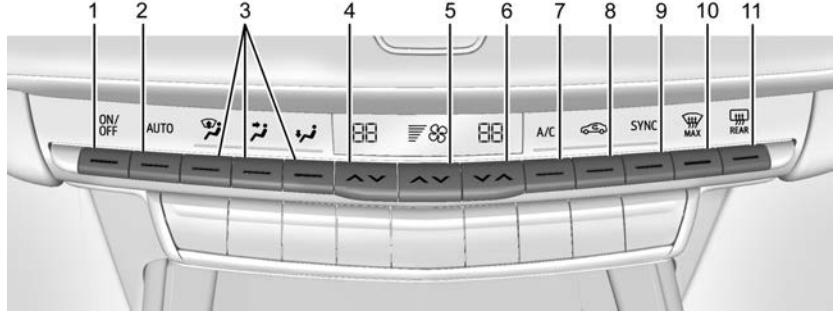
Climate Controls

Climate Control Systems

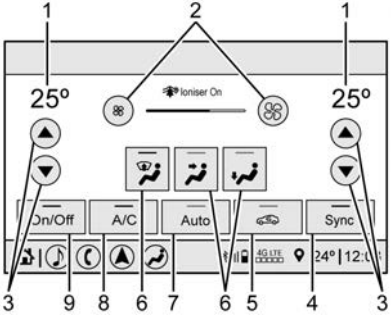
Dual Automatic Climate Control System

The climate control buttons on the centre console and on the climate control display are used to adjust the heating, cooling, and ventilation.



1. ON/OFF
2. AUTO (Automatic Operation)
3. Air Delivery Mode Controls
4. Driver Temperature Control
5. Fan Control
6. Passenger Temperature Control
7. A/C (Air Conditioning)
8. Recirculation
9. SYNC (Synchronised Temperature)
10. Max Defrost
11. Rear Window Demister

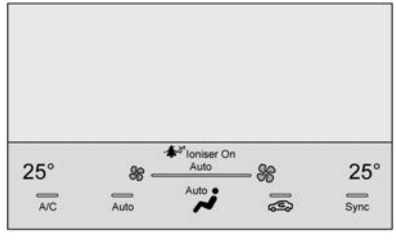
Climate Control Display



1. Driver and Passenger Temperature Displays
2. Fan Control
3. Driver and Passenger Temperature Controls
4. Sync (Synchronised Temperature)
5. Recirculation
6. Air Delivery Mode Control
7. Auto (Automatic Operation)
8. A/C (Air Conditioning)
9. On/Off (Power)

The fan, air delivery mode, air conditioning, driver and passenger temperatures, and Sync settings can be controlled by touching CLIMATE on the infotainment Home Page or the CLIMATE button in the climate control display application tray.
A selection can then be made on the front climate control page displayed. See *Settings* ⇨ *170*.

Climate Control Status Display



The climate control status display appears briefly when the climate controls are adjusted.

Automatic Operation

The system automatically controls the fan speed, air delivery, air conditioning, and recirculation in order to heat or cool the vehicle to the desired temperature.

When AUTO is pressed, all four functions operate automatically. Each function can also be manually set and the selected setting is displayed. Functions not manually set will continue to be automatically controlled, even if the AUTO indicator is not lit.

For automatic operation:

1. Press AUTO.
2. Set the temperature. Allow the system time to stabilise. Adjust the temperature as needed for best comfort.

To improve fuel efficiency and to cool the vehicle faster, recirculation may be automatically selected in warm weather.

The recirculation light will not illuminate when automatically controlled. See under “Manual Operation” for more details.

During hands-free calling, the blower level may automatically reduce. The blower level can be manually adjusted if desired.

Manual Operation

ON/OFF : Press to switch the system off or on. When off is selected, the system will prevent outside air from entering the vehicle. If any climate control buttons are pressed, the system will be switched on and operate at the current setting.

▲ **or** ▼ **:** Lift or press to increase or decrease the fan speed. The fan speed setting appears on the main display. Lifting or pressing either button cancels automatic fan control and the fan is controlled manually. Press AUTO to return to automatic operation.

▲ / ▼ **:** The temperature can be adjusted separately for the driver and the passenger. Lift or press to increase or decrease the temperature.

SYNC : Press to link the passenger temperature settings to the driver setting. The SYNC indicator light will turn on. When the passenger settings are adjusted, the SYNC indicator light turns off.

Air Delivery Mode Controls : Press , , or to change the direction of the airflow. The indicator light in the button will turn on. Any combination of the three buttons can be selected. The current mode appears in the climate control display. Pressing any of the three buttons cancels automatic air delivery control and the direction of the airflow is controlled manually. Press AUTO to return to automatic operation.

To change the current mode, select one or more of the following:

: Clears the windows of mist or moisture. Air is directed to the windscreen.

: Air is directed to the instrument panel outlets.

: Air is directed to the floor outlets.

MAX : Air is directed to the windscreen and the fan runs at a higher speed. Mist or frost is cleared from the windscreen more quickly. When the button is pressed again, the system returns to the previous mode setting.

For best results, clear all snow and ice from the windscreen before defrosting.

A/C : Press to switch the air conditioning system on or off. If the climate control system is switched off or the outside temperature falls below freezing, the air conditioner will not operate.

Pressing this button cancels automatic air conditioning and switches off the air conditioner. Press AUTO to return to automatic operation and the air conditioner operates automatically as required. When the indicator light is on, the air conditioner runs automatically to cool the air inside the vehicle or to dry the air needed to demist the windscreen faster.

: Press to turn on recirculation. An indicator light comes on. Air is recirculated to quickly cool the inside of the vehicle or to reduce the entry of outside air and odours.

Auto Defog : The climate control system may have a sensor to automatically detect high humidity inside the vehicle. When high humidity is detected, the climate control system may adjust to outside air supply and turn on the air conditioner. The fan speed may slightly increase to help prevent misting. If the climate control system does not detect possible window misting, it returns to normal operation.

Ionizer : If equipped with an ioniser, this feature helps to clean the air inside the vehicle and remove contaminants such as pollen, odours, and dust. If the climate control system is on and the ioniser is enabled, the ioniser status indicator will be lit on the climate control display.

Rear Window Demister

REAR **:** Press to turn the rear window demister on or off. An indicator light on the button comes on to show that the rear window demister is on.

The demister can be switched off by turning the ignition to off or ACC/ ACCESSORY.

The rear window demister can be set to automatic operation. When auto rear demist is selected, the rear window demister switches on automatically when the interior temperature is cold enough and the outside temperature is about 7 °C (44 °F) and below. The auto rear demister turns off automatically.

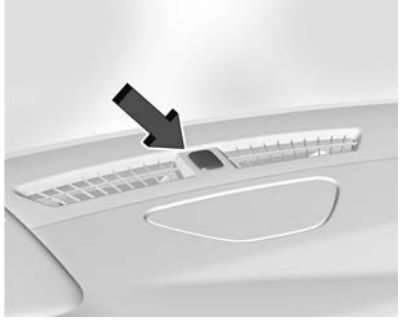
If equipped, the heated outside mirrors switch on when the rear window demister button is on and help to clear mist or frost from the surface of the mirror. See *Heated Mirrors ⇨ 30*.

Caution

Do not try to clear frost or other material from the inside of the front windscreen and rear window with a razor blade or anything else that is sharp. This may damage the rear window demister grid and affect the radio's ability to pick up stations clearly. The repairs would not be covered by the vehicle warranty.

Remote Start Climate Control Operation : If equipped with remote start, the climate control system may run when the vehicle is started remotely. If equipped with heated or ventilated seats or a heated steering wheel, these functions may be activate during a remote start. See *Remote Vehicle Start ⇨ 13*, *Heated and Ventilated Front Seats ⇨ 45*, and *Heated Steering Wheel ⇨ 91*.

Sensor



The solar sensor, on top of the instrument panel near the windscreen, monitors the solar intensity.

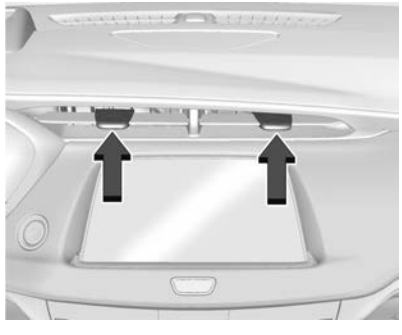
The climate control system uses the sensor information to adjust the temperature, fan speed, recirculation, and air delivery mode for best comfort.

If the sensor is covered, the automatic climate control system may not work properly.

Afterblow Feature

If equipped, under certain conditions, the fan may stay on or may turn on and off several times after you turn off and lock the vehicle. This is normal.

Air Vents



Adjustable air vents are in the centre and on the sides of the instrument panel, and on the rear of the centre console storage.

Move the slider knobs to change the direction of or to close off the airflow.

Operation Tips

- Clear away any ice, snow, or leaves from air inlets at the base of the windscreen that could block the flow of air into the vehicle.
- Clear snow off the bonnet to improve visibility and help decrease moisture drawn into the vehicle.
- Keep the path under the front seats clear of objects to help circulate the air inside of the vehicle more effectively.
- Use of non-GM approved bonnet air flow deflectors can adversely affect the performance of the system. Check with your dealer before adding equipment to the outside of the vehicle.
- Do not attach any devices to the air vent slats. This restricts airflow and may cause damage to the air vents.

Maintenance

Passenger Compartment Air Filter

The filter reduces dust, pollen, and other airborne irritants from outside air that is pulled into the vehicle. The filter should be replaced as part of routine scheduled maintenance. See your retailer regarding replacement of the filter.

Service

All vehicles have a label underbonnet that identifies the refrigerant used in the vehicle. The refrigerant system should only be serviced by trained and certified technicians. The air conditioning evaporator should never be repaired or replaced by one from a salvage vehicle. It should only be replaced by a new evaporator to ensure proper and safe operation.

During service, all refrigerants should be reclaimed with proper equipment. Venting refrigerants directly to the atmosphere is harmful to the environment and may also create unsafe conditions based on inhalation, combustion, frostbite, or other health-based concerns.

The air conditioning system requires periodic maintenance. See your retailer for service.

Driving and Operating

Fuel

Trailer Towing

Conversions and Add-Ons

Driving Information

Driving for Better Fuel Economy

Driving habits can affect fuel mileage. Here are some driving tips to get the best fuel economy possible.

- Set the climate controls to the desired temperature after the engine is started, or turn them off when not required.
- On AWD vehicles, use Tour Mode when conditions permit.
- Avoid fast starts and accelerate smoothly.
- Brake gradually and avoid abrupt stops.
- Avoid idling the engine for long periods of time.
- When road and weather conditions are appropriate, use cruise control.
- Always follow posted speed limits or drive more slowly when conditions require.
- Keep vehicle tyres properly inflated.
- Combine several trips into a single trip.

- Replace the vehicle's tyres with the same TPC Spec number moulded into the tyre's sidewall near the size.
- Follow recommended scheduled maintenance.

Distracted Driving

Distraction comes in many forms and can take your focus from the task of driving. Exercise good judgement and do not let other activities divert your attention away from the road. Many local governments have enacted laws regarding driver distraction. Become familiar with the local laws in your area.

To avoid distracted driving, keep your eyes on the road, keep your hands on the steering wheel, and focus your attention on driving.

- Do not use a phone in demanding driving situations. Use a hands-free method to place or receive necessary phone calls.
- Watch the road. Do not read, take notes, or look up information on phones or other electronic devices.
- Designate a front seat passenger to handle potential distractions.
- Become familiar with vehicle features before driving, such as programming favourite radio stations and adjusting climate control and seat settings. Program all trip information into any navigation device prior to driving.
- Wait until the vehicle is parked to retrieve items that have fallen to the floor.
- Stop or park the vehicle to tend to children.
- Keep pets in an appropriate carrier or restraint.
- Avoid stressful conversations while driving, whether with a passenger or on a mobile phone.

⚠ Warning

Taking your eyes off the road too long or too often could cause a crash resulting in injury or death. Focus your attention on driving.

Refer to the infotainment section for more information on using that system and the navigation system, if equipped, including pairing and using a mobile phone.

Defensive Driving

Defensive driving means “always expect the unexpected.” The first step in driving defensively is to wear the seat belt. See *Seat Belts* ⇨ *49*.

- Assume that other road users (pedestrians, bicyclists, and other drivers) are going to be careless and make mistakes. Anticipate what they may do and be ready.
- Allow enough following distance between you and the driver in front of you.
- Focus on the task of driving.

Control of a Vehicle

Braking, steering, and accelerating are important factors in helping to control a vehicle while driving.

Braking

Braking action involves perception time and reaction time. Deciding to push the brake pedal is perception time. Actually doing it is reaction time.

Average driver reaction time is about three-quarters of a second. In that time, a vehicle moving at 100 km/h (60 mph) travels 20 m (66 ft), which could be a lot of distance in an emergency.

Helpful braking tips to keep in mind include:

- Keep enough distance between you and the vehicle in front of you.
- Avoid needless heavy braking.
- Keep pace with traffic.

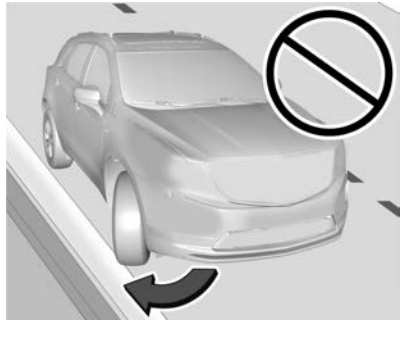
If the engine ever stops while the vehicle is being driven, brake normally but do not pump the brakes. Doing so could make the pedal harder to push down. If the engine stops, there will be some power brake assist but it will be used when the brake is applied. Once the power assist is used up, it can take longer to stop and the brake pedal will be harder to push.

Steering

Electric Power Steering

Caution

To avoid damage to the steering system, do not drive over kerbs, parking barriers, or similar objects at speeds greater than 3 km/h (1 mph). Use care when driving over other objects such as lane dividers and speed bumps. Damage caused by misuse of the vehicle is not covered by the vehicle warranty.



The vehicle has electric power steering. It does not have power steering fluid. Regular maintenance is not required.

If power steering assist is lost due to a system malfunction, the vehicle can be steered, but may require increased effort.

If the steering assist is used for an extended period of time while the vehicle is not moving, power assist may be reduced.

If the steering wheel is turned until it reaches the end of its travel and is held against that position for an extended period of time, power steering assist may be reduced.

Normal use of the power steering assist should return when the system cools down.

See your dealer if there is a problem.

Bend Tips

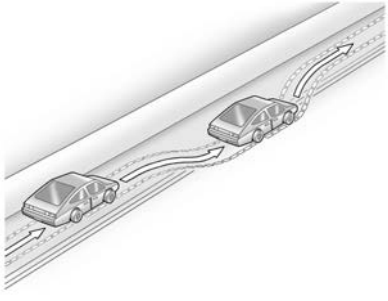
- Take bends at a reasonable speed.
- Reduce speed before entering a bend.
- Maintain a reasonable steady speed through the bend.

- Wait until the vehicle is out of the bend before accelerating gently into the straight.

Steering in Emergencies

- There are some situations when steering around a problem may be more effective than braking.
- Holding both sides of the steering wheel allows you to turn 180 degrees without removing a hand.
- The Antilock Brake System (ABS) allows steering while braking.

Off-Road Recovery



The vehicle's right wheels can drop off the edge of a road onto the shoulder while driving. Follow these tips:

1. Ease off the accelerator and then, if there is nothing in the way, steer the vehicle so that it straddles the edge of the pavement.
2. Turn the steering wheel about one-eighth of a turn, until the right front tyre contacts the pavement edge.
3. Turn the steering wheel to go straight down the roadway.

Loss of Control

Skidding

There are three types of skids that correspond to the vehicle's three control systems:

- Braking Skid - wheels are not rolling.
- Steering or Cornering Skid - too much speed or steering in a bend causes tyres to slip and lose cornering force.
- Acceleration Skid - too much throttle causes the driving wheels to spin.

Defensive drivers avoid most skids by taking reasonable care suited to existing conditions, and by not overdriving those conditions. But skids are always possible.

If the vehicle starts to slide, follow these suggestions:

- Ease your foot off the accelerator pedal and steer the way you want the vehicle to go. The vehicle may straighten out. Be ready for a second skid if it occurs.
- Slow down and adjust your driving according to weather conditions. Stopping distance can be longer and vehicle control can be affected when traction is reduced by water, snow, ice, gravel, or other material on the road. Learn to recognise warning clues - such as enough water, ice, or packed snow on the road to make a mirrored surface - and slow down when you have any doubt.
- Try to avoid sudden steering, acceleration, or braking, including reducing vehicle speed by shifting to a lower gear. Any sudden changes could cause the tyres to slide.

Remember: Antilock brakes help avoid only the braking skid.

Off-Road Driving

All-Wheel Drive (AWD) vehicles can be used for off-road driving. Vehicles without AWD and vehicles not equipped with All Terrain (AT) or On-Off Road (OOR) tyres must not be driven off-road except on a level, solid surface. To contact the tyre manufacturer for more information about the original equipment tyres, see the warranty manual.

Controlling the vehicle is the key to successful off-road driving. One of the best ways to control the vehicle is to control the speed.

⚠ Warning

When driving off-road, bouncing and quick changes in direction can easily throw you out of position. This could cause you to lose control and crash. You and your passengers should always wear seat belts.

Before Driving Off-Road

- Have all necessary maintenance and service work completed.
- Fuel the vehicle, fill fluid levels, and check inflation pressure in all tyres, including the spare, if equipped.
- Read all the information about AWD vehicles in this manual.
- Make sure all underbody shields, if equipped, are properly attached.
- Know the local laws that apply to off-road driving.

To gain more ground clearance if needed, it may be necessary to remove the front fascia lower air dam. However, driving without the front spoiler reduces fuel economy.

Caution

Operating the vehicle for extended periods without the front fascia lower air dam installed can cause improper airflow to the engine. Reattach the front fascia air dam after off-road driving.

Loading the Vehicle for Off-Road Driving

⚠ Warning

- Unsecured cargo on the load floor can be tossed about when driving over rough terrain. You or your passengers can be struck by flying objects. Secure the cargo properly.
- Keep cargo in the cargo area as far forward and as low as possible. The heaviest things should be on the floor, forward of the rear axle.
- Heavy loads on the roof raise the vehicle's centre of gravity, making it more likely to roll over. You can be seriously or fatally injured if the vehicle rolls over. Put heavy loads inside the cargo area, not on the roof.

For more information about loading the vehicle, see *Vehicle Load Limits* ⇨ *200*.

Environmental Concerns

- Always use established trails, roads, and areas that have been set aside for public off-road recreational driving and obey all posted regulations.
- Do not damage shrubs, flowers, trees, or grasses or disturb wildlife.
- Do not park over things that burn. See *Parking over Things That Burn ⇨ 210*.

Driving on Hills

Driving safely on hills requires good judgement and an understanding of what the vehicle can and cannot do.

⚠ Warning

Many hills are simply too steep for any vehicle. Driving up hills can cause the vehicle to stall. Driving down hills can cause loss of control. Driving across hills can cause a rollover. You could be injured or killed. Do not drive on steep hills.

Before driving on a hill, assess the steepness, traction, and obstructions. If the terrain ahead cannot be seen, get out of the vehicle and walk the hill before driving further.

When driving on hills:

- Use a low gear and keep a firm grip on the steering wheel.
- Maintain a slow speed.
- When possible, drive straight up or down the hill.
- Slow down when approaching the top of the hill.
- Use headlamps even during the day to make the vehicle more visible.

⚠ Warning

Driving to the top of a hill at high speed can cause a collision. There could be a drop-off, embankment, cliff, or even another vehicle. You could be seriously injured or killed. As you near the top of a hill, slow down and stay alert.

- Never go downhill forward or backward with the transmission in N (Neutral). The brakes could overheat and you could lose control.
- When driving down a hill, keep the vehicle headed straight down. Use a low gear because the engine will work with the brakes to slow the vehicle and help keep the vehicle under control.

⚠ Warning

Heavy braking when going down a hill can cause your brakes to overheat and fade. This could cause loss of control and you or others could be injured or killed. Apply the brakes lightly when descending a hill and use a low gear to keep vehicle speed under control.

If the vehicle stalls on a hill:

1. Apply the brakes to stop the vehicle, and then apply the parking brake.

2. Shift into P (Park) and then restart the engine.
   - If driving uphill when the vehicle stalls, shift to R (Reverse), release the parking brake, and reverse straight down.
   - Never try to turn the vehicle around. If the hill is steep enough to stall the vehicle, it is steep enough to cause it to roll over.
   - If you cannot make it up the hill, back straight down the hill.
   - Never reverse down a hill in N (Neutral) using only the brake.
   - The vehicle can roll backward quickly and you could lose control.
   - If driving downhill when the vehicle stalls, shift to a lower gear, release the parking brake, and drive straight down the hill.
3. If the vehicle cannot be restarted after stalling, apply the parking brake, shift into P (Park), and turn the vehicle off.
   3.1. Leave the vehicle and seek help.
   3.2. Stay clear of the path the vehicle would take if it rolled downhill.

- Avoid turns that take the vehicle across the incline of the hill. A hill that can be driven straight up or down might be too steep to drive across. Driving across an incline puts more weight on the downhill wheels which could cause a downhill slide or a rollover.
- Surface conditions can be a problem. Loose gravel, muddy spots, or even wet grass can cause the tyres to slip sideways, downhill. If the vehicle slips sideways, it can hit something that will trip it - a rock, a rut, etc. - and roll over.
- Hidden obstacles can make the steepness of the incline more severe. If a rock is driven across with the uphill wheels, or if the downhill wheels drop into a rut or depression, the vehicle can tilt even more.
- If an incline must be driven across, and the vehicle starts to slide, turn downhill. This should help straighten out the vehicle and prevent the side slipping.

⚠ Warning

Getting out of the vehicle on the downhill side when stopped across an incline is dangerous. If the vehicle rolls over, you could be crushed or killed. Always get out on the uphill side of the vehicle and stay well clear of the rollover path.

Driving in Mud, Sand, Snow, or Ice

Use a low gear when driving in mud – the deeper the mud, the lower the gear. Keep the vehicle moving to avoid getting stuck.

Traction changes when driving on sand. On loose sand, such as on beaches or sand dunes, the tyres tend to sink into the sand. This affects steering, accelerating, and braking. Drive at a reduced speed and avoid sharp turns or abrupt manoeuvres.

Traction is reduced on hard packed snow and ice and it is easy to lose control. Reduce vehicle speed when driving on hard packed snow and ice.

⚠ Warning

Driving on frozen lakes, ponds, or rivers can be dangerous. Ice conditions vary greatly and the vehicle could fall through the ice; you and your passengers could drown. Drive your vehicle on safe surfaces only.

Driving in Water

⚠ Warning

Driving through rushing water can be dangerous. Deep water can sweep your vehicle downstream and you and your passengers could drown. If it is only shallow water, it can still wash away the ground from under your tyres. Traction could be lost, and the vehicle could roll over. Do not drive through rushing water.

Caution

Do not drive through standing water if it is deep enough to cover the wheel hubs, axles, or exhaust pipe. Deep water can damage the axle and other vehicle parts.

If the standing water is not too deep, drive through it slowly. At faster speeds, water can get into the engine and cause it to stall. Stalling can occur if the exhaust pipe is under water. Do not turn off the ignition when driving through water. If the exhaust pipe is under water, the engine will not start. When going through water, the brakes get wet, and it might take longer to stop. See *Driving on Wet Roads ⇨ 197*.

After Off-Road Driving

Remove any brush or debris that has collected on the underbody or chassis, or under the bonnet. These accumulations can be a fire hazard.

After operation in mud or sand, have the brake linings cleaned and checked. These substances can cause glazing and uneven braking. Check the body structure, steering, suspension, wheels, tyres, and exhaust system for damage and check the fuel lines and cooling system for any leakage.

More frequent maintenance service is required.

Driving on Wet Roads

Rain and wet roads can reduce vehicle traction and affect your ability to stop and accelerate. Always drive slower in these types of driving conditions and avoid driving through large puddles and deep-standing or flowing water.

⚠ Warning

Wet brakes can cause crashes. They might not work as well in a quick stop and could cause pulling to one side. You could lose control of the vehicle.

After driving through a large puddle of water or a car/vehicle wash, lightly apply the brake pedal until the brakes work normally.

(Continued)

Warning (Continued)

Flowing or rushing water creates strong forces. Driving through flowing water could cause the vehicle to be carried away. If this happens, you and other vehicle occupants could drown. Do not ignore police warnings and be very cautious about trying to drive through flowing water.

Aquaplaning

Aquaplaning is dangerous. Water can build up under the vehicle's tyres so they actually ride on the water. This can happen if the road is wet enough and you are going fast enough. When the vehicle is aquaplaning, it has little or no contact with the road.

There is no hard and fast rule about aquaplaning. The best advice is to slow down when the road is wet.

Other Rainy Weather Tips

Besides slowing down, other wet weather driving tips include:

- Allow extra following distance.
- Overtake with caution.
- Keep windscreen wiping equipment in good condition.
- Keep the windscreen washer fluid reservoir filled.
- Have good tyres with proper tread depth. See *Tyres* ⇨ *319*.
- Turn off cruise control.
- Activate All-Wheel Drive (AWD) mode. See *Driver Mode Control* ⇨ *225*.

Hill and Mountain Roads

Driving on steep hills or through mountains is different than driving on flat or rolling terrain. Tips include:

- Keep the vehicle serviced and in good shape.
- Check all fluid levels and brakes, tyres, cooling system, and transmission.
- Shift to a lower gear when going down steep or long hills.

⚠ Warning

Using the brakes to slow the vehicle on a long downhill slope can cause brake overheating, can reduce brake performance, and could result in a loss of braking. Shift the transmission to a lower gear to let the engine assist the brakes on a steep downhill slope.

⚠ Warning

Coasting downhill in N (Neutral) or with the ignition off is dangerous. This can cause overheating of the brakes and loss of steering assist. Always have the engine running and the vehicle in gear.

- Drive at speeds that keep the vehicle in its own lane. Do not swing wide or cross the centre line.
- Be alert on top of hills; something could be in your lane (e.g. stalled car, crash).

- Pay attention to special road signs (e.g., falling rocks area, winding roads, long gradients, overtaking or no-overtaking zones) and take appropriate action.
- Select All-Wheel Drive (AWD) Mode. See *Driver Mode Control* ⇨ *225* and *All-Wheel Drive* ⇨ *221*.

Winter Driving

Driving on Snow or Ice

Caution

To avoid damage to the wheels and brake components, always clear snow and ice from inside the wheels and underneath the vehicle before driving.

Snow or ice between the tyres and the road creates less traction or grip, so drive carefully. Wet ice can occur at about 0 °C (32 °F) when freezing rain begins to fall. Avoid driving on wet ice or in freezing rain until roads can be treated.

For Slippery Road Driving:

- Accelerate gently. Accelerating too quickly causes the wheels to spin and makes the surface under the tyres slick.
- The Antilock Brake System (ABS) improves vehicle stability during hard stops, but the brakes should be applied sooner than when on dry surfaces. See *Antilock Brake System (ABS)* ⇨ *221*.
- Allow greater following distance and watch for slippery spots. Icy patches can occur on otherwise clear roads in shaded areas. The surface of a curve or an overpass can remain icy when the surrounding roads are clear. Avoid sudden steering manoeuvres and braking while on ice.
- Turn off cruise control.
- Select All-Wheel Drive (AWD) Mode for vehicles equipped with AWD. Select Snow/Ice Mode for FWD only vehicles. See *Driver Mode Control* ⇨ *225* and *All-Wheel Drive* ⇨ *221*.

Blizzard Conditions

Stop the vehicle in a safe place and signal for help. Stay with the vehicle unless there is help nearby.

To get help and keep everyone in the vehicle safe:

- Turn on the hazard warning lights.
- Tie a red cloth to an outside mirror.

⚠ Warning

Snow can trap engine exhaust under the vehicle. This may cause exhaust gases to get inside. Engine exhaust contains carbon monoxide (CO), which cannot be seen or smelled. It can cause unconsciousness and even death.

If the vehicle is stuck in snow:

- Clear snow from the base of the vehicle, especially any blocking the exhaust pipe.
- Open a window about 5 cm (2 in) on the vehicle side that is away from the wind, to bring in fresh air.

(Continued)

Warning (Continued)

- Fully open the air outlets on or under the instrument panel.
- Adjust the climate control system to circulate the air inside the vehicle and set the fan speed to the highest setting. See "Climate Control Systems."

For more information about CO, see *Engine Exhaust* ⇨ *211*.

To save fuel, run the engine for short periods to warm the vehicle and then shut the engine off and partially close the window. Moving about to keep warm also helps.

If it takes time for help to arrive, when running the engine, push the accelerator pedal slightly so the engine runs faster than the idle speed. This keeps the battery charged to restart the vehicle and to signal for help with the headlamps. Do this as little as possible, to save fuel.

If the Vehicle Is Stuck

Slowly and cautiously spin the wheels to free the vehicle when stuck in sand, mud, ice, or snow.

If stuck too severely for the traction system to free the vehicle, turn the traction system off and use the rocking method. See *Traction Control/ Electronic Stability Control* ⇨ *224*.

⚠ Warning

If the vehicle's tyres spin at high speed, they can explode, and you or others could be injured. The vehicle can overheat, causing an engine compartment fire or other damage. Spin the wheels as little as possible and avoid going above 56 km/h (35 mph).

Select All-Wheel Drive (AWD) Mode. See *Driver Mode Control* ⇨ *225* and *All-Wheel Drive* ⇨ *221*.

Rocking the Vehicle to Get it Out

Turn the steering wheel left and right to clear the area around the front wheels. Turn off any traction system. Shift back and forth between R (Reverse) and a low forward gear, spinning the wheels as little as possible. To prevent transmission wear, wait until the wheels stop spinning before shifting gears. Release the accelerator pedal while shifting, and press lightly on the accelerator pedal when the transmission is in gear. Slowly spinning the wheels in the forward and reverse directions causes a rocking motion that could free the vehicle. If that does not get the vehicle out after a few tries, it might need to be towed out. If the vehicle does need to be towed out, see *Towing the Vehicle* ⇨ *349*.

Vehicle Load Limits

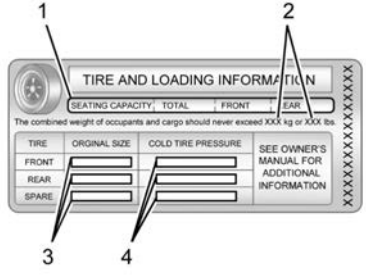
It is very important to know how much weight the vehicle can carry. This weight is called the vehicle capacity weight and includes the weight of all occupants, cargo, and all non-factory-installed options. Two labels on the vehicle may show how much weight it may

properly carry, the Tyre and Loading Information label and the Certification/Tyre label.

⚠ Warning

Do not load the vehicle any heavier than the Gross Vehicle Weight Rating (GVWR), or either the maximum front or rear Gross Axle Weight Rating (GAWR). This can cause systems to break and change the way the vehicle handles. This could cause loss of control and a crash. Overloading can also reduce stopping performance, damage the tyres, and shorten the life of the vehicle.

Tyre and Loading Information Label



Example Label

A vehicle-specific Tyre and Loading Information label is attached to the centre pillar (B-pillar). The tyre and loading information label shows the number of occupant seating positions (1), and the maximum vehicle capacity weight (2) in kilograms and pounds.

The Tyre and Loading Information label also shows the size of the original equipment tyres (3) and the recommended cold tyre inflation pressures (4). For more information on tyres and inflation see *Tyres* ⇨ *319* and *Tyre Pressure* ⇨ *321*.

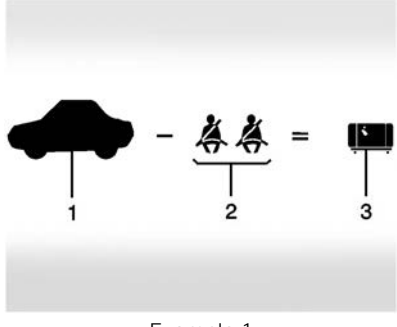
There is also important loading information on the vehicle Certification/Tyre label. It may show the Gross Vehicle Weight Rating (GVWR) and the Gross Axle Weight Rating (GAWR) for the front and rear axle. See "Certification/Tyre Label" later in this section.

"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.

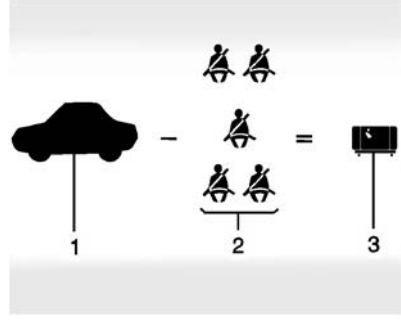
3. Subtract the combined weight of the driver and passengers from XXX kg or XXX lbs.
4. The resulting figure equals the available amount of cargo and luggage load capacity. For example, if the "XXX" amount equals 1400 lbs. and there will be five 150 lb passengers in your vehicle, the amount of available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

See *Trailer Towing* ⇨ *277* for important information on towing a trailer, towing safety rules and trailering tips.



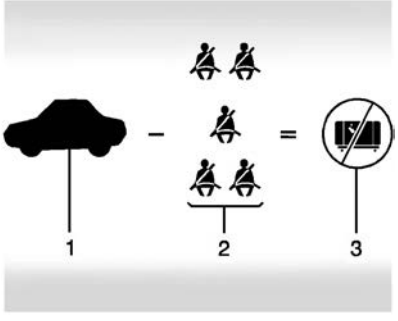
Example 1

1. Vehicle Capacity Weight for Example 1 = 453 kg (1,000 lbs).
2. Subtract Occupant Weight @ 68 kg (150 lbs) × 2 = 136 kg (300 lbs).
3. Available Occupant and Cargo Weight = 317 kg (700 lbs).



Example 2

1. Vehicle Capacity Weight for Example 2 = 453 kg (1,000 lbs).
2. Subtract Occupant Weight @ 68 kg (150 lbs) × 5 = 340 kg (750 lbs).
3. Available Cargo Weight = 113 kg (250 lbs).

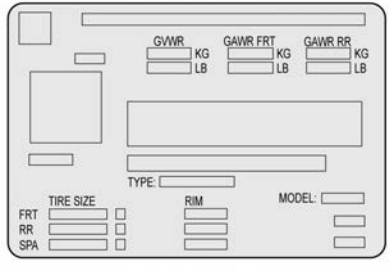


Example 3

1. Vehicle Capacity Weight for Example 3 = 453 kg (1,000 lbs).
2. Subtract Occupant Weight @ 91 kg (200 lbs) × 5 = 453 kg (1,000 lbs).
3. Available Cargo Weight = 0 kg (0 lbs).

Refer to the vehicle's tyre and loading information label for specific information about the vehicle's capacity weight and seating positions. The combined weight of the driver, passengers, and cargo should never exceed the vehicle's capacity weight.

Certification/Tyre Label



Label Example

A vehicle-specific Certification/Tyre label is attached to the centre pillar (B-pillar).

The label may show the size of the vehicle's original tyres and the inflation pressures needed to obtain the gross weight capacity of the vehicle. The label shows the gross weight capacity of the vehicle. This is called the Gross Vehicle Weight Rating (GVWR). The GVWR includes the weight of the vehicle, all occupants, fuel, and cargo.

The Certification/Tyre label may also show the maximum weights for the front and rear axles, called the Gross Axle Weight Rating (GAWR). To find out the actual loads on the front and rear axles, weigh the vehicle at a weigh station. Your dealer can help with this. Be sure to spread the load equally on both sides of the centreline.

Caution

Overloading the vehicle may cause damage. Repairs would not be covered by the vehicle warranty. Do not overload the vehicle.

⚠ Warning

Things inside the vehicle can strike and injure people in a sudden stop or turn, or in a crash.

- Put things in the cargo area of the vehicle. In the cargo area, put them as far forward as possible. Try to spread the weight evenly.
- Never stack heavier things, like suitcases, inside the vehicle so that some of them are above the tops of the seats.
- Do not leave an unsecured child restraint in the vehicle.
- Secure loose items in the vehicle.
- Do not leave a seat folded down unless needed.

Starting and Operating

New Vehicle Run-In

Caution

The vehicle does not need an elaborate run-in. But it will perform better in the long run if you follow these guidelines:

- Do not drive at any one constant speed, fast or slow, for the first 800 km (500 mi). Do not make full-throttle starts. Avoid downshifting to brake or slow the vehicle.
- Avoid making hard stops for the first 300 km (200 mi) or so. During this time the new brake linings are not yet broken in. Hard stops with new linings can mean premature wear and earlier replacement. Follow this breaking-in guideline every time you get new brake linings.

(Continued)

Caution (Continued)

- Do not tow a trailer during run-in. See *Trailer Towing* ⇨ *277* for the trailer towing capabilities of the vehicle and more information.

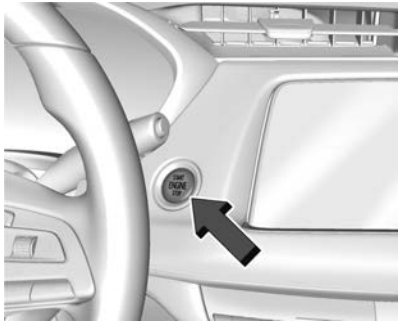
Following run-in, engine speed and load can be gradually increased.

On new vehicles, the various mechanical and electrical systems experience a “break-in” period during the first 6,400 km (4,000 miles) of routine driving. As the vehicle is driven, the mechanical systems adjust to provide optimal fuel economy and gear change performance.

Electrical systems will adapt and calibrate during the break-in period. A one-time occurrence of clicks and similar vehicle noises is normal during this process.

Normal driving charges the vehicle's battery to achieve the best operation of the vehicle, including fuel economy and the Stop/Start System. See *Stop/Start System* ⇨ *208*.

Ignition Positions



The vehicle has an electronic keyless ignition with pushbutton start.

If the pushbutton start is not working, the vehicle may be near a strong radio aerial signal causing interference to the Remote Keyless Entry (RKE) system. See *Remote Keyless Entry (RKE) System Operation* ⇨ *7*.

To shift out of P (Park), the vehicle must be turned on and the brake pedal must be applied.

Stopping the Engine/OFF (No Indicator Light) : When the vehicle is stopped, press ENGINE START/STOP once to turn the engine off.

If the vehicle is in P (Park), the ignition will turn off, and Retained Accessory Power (RAP) will remain active. See *Retained Accessory Power (RAP)* ⇨ *209*.

If the vehicle is in R (Reverse), D (Drive) or M (Manual Mode), the vehicle will shift to P (Park), the ignition will turn off, and RAP will remain active.

If the vehicle is in N (Neutral), the ignition will return to ACC/ ACCESSORY and display the message SHIFT TO PARK in the Driver Information Centre (DIC).

When the vehicle is shifted into P (Park), the ignition will turn off.

⚠ Warning

Turning off the vehicle while moving may cause loss of power assistance in the brake and steering (Continued)

Warning (Continued)

systems and disable the airbags. While driving, only shut the vehicle off in an emergency.

If the vehicle must be shut off in an emergency:

1. Brake using a firm and steady pressure. Do not pump the brakes repeatedly. This may deplete power assist, requiring increased brake pedal force.
2. Shift the vehicle to N (Neutral). This can be done while the vehicle is moving. After shifting to N (Neutral), firmly apply the brakes and steer the vehicle to a safe location.
3. Come to a complete stop and shift to P (Park).
4. Apply the parking brake. See *Electric Parking Brake* ⇨ *222*. Press ENGINE START/STOP to turn the vehicle off.

If the vehicle cannot be pulled over and must be shut off while driving, press and hold ENGINE START/STOP for longer than two seconds, or press twice in five seconds.

ACC/ACCESSORY (Amber Indicator Light) : This mode allows you to use some electrical accessories when the engine is off.

With the ignition off, pressing ENGINE START/STOP once without the brake pedal applied will place the ignition system in ACC/ACCESSORY.

The ignition will switch from ACC/ACCESSORY to OFF after 10 minutes to prevent battery rundown.

ON/RUN/START (Green Indicator Light) : This mode is for driving and starting. With the ignition off and the brake pedal applied, pressing ENGINE START/STOP once will place the ignition system in ON/RUN/START. Once engine cranking begins, release the button. Engine cranking will continue until the engine starts. The ignition will then remain on. See *Starting the Engine* ⇨ *206*.

Service Mode

This mode is available to verify the proper operation of the malfunction indicator lamp as may be required for emissions inspection purposes and for service and diagnostics. See *Automatic Transmission* ⇨ *215*.

With the vehicle off, and the brake pedal not applied, pressing and holding ENGINE START/STOP for more than five seconds will place the vehicle in Service Mode. The instruments and audio systems will operate as they do in ON/RUN, but the vehicle will not be able to be driven. The engine will not start in Service Mode. Press ENGINE START/STOP again to turn the vehicle off.

Starting the Engine

Place the transmission in the proper gear, P (Park) or N (Neutral). To restart the engine when the vehicle is already moving, use N (Neutral) only.

Caution

Do not try to shift to P (Park) if the vehicle is moving. If you do, you could damage the transmission. Shift to P (Park) only when the vehicle is stopped.

Caution

If you add electrical parts or accessories, you could change the way the engine operates. Any resulting damage would not be covered by the vehicle warranty. See *Add-On Electrical Equipment* ⇨ *284*.

Starting Procedure

1. With the Keyless Access system, the RKE transmitter must be in the vehicle. Press ENGINE START/STOP with the brake pedal applied to start. If it is too cold, the wait-to-start light will come on and there will be a short delay before starting. See *Wait-to-Start Light* ⇨ *112*.

The engine has a fast warm-up glow plug system. The wait-to-start light will illuminate for a much shorter time than most diesel engines, due to the rapid heating of the glow plug system.

2. If the engine does not start after 15 seconds of cranking, wait one minute for the cranking motor to cool, then try the same step again.

If you are trying to start the engine after you have run out of fuel, follow the steps in *Running Out of Fuel (Diesel)* ⇨ *269*.

When the engine is cold, let it run for a few minutes before driving. This lets oil pressure build up. The engine will sound louder when it is cold.

Cold Weather Starting

Use the recommended engine oil when the outside temperature drops below freezing. See *Engine Oil* ⇨ *291*. When the outside temperature drops below –18°C (0°F), use of the engine heater is recommended.

See *Fuel for Diesel Engines* ⇨ *264* for information on what fuel to use in cold weather.

If the Engine Will Not Start

If you have run out of fuel, see *Running Out of Fuel (Diesel)* ⇨ *269*.

If the vehicle is not out of fuel, and the engine will not start:

Press ENGINE START/STOP. Immediately after the wait-to-start light turns off, press ENGINE START/STOP to start the vehicle.

If the light does not go off, wait a few seconds, then try starting the engine again. See your retailer for a starting system check.

If the light illuminates and then turns off, and it is known that the battery is charged, but the engine still will not start, the vehicle needs service.

If the light does not come on when the engine is cold, the vehicle needs service.

If the battery does not have enough charge to start the engine, see *Battery* ⇨ *303*.

Check that the correct engine oil has been used and changed at appropriate intervals. If the wrong oil is used, the engine may be harder to start.

Make sure you use the proper fuel for the prevailing weather conditions. See *Fuel for Diesel Engines* ⇨ *264*.

If the engine starts, runs a short time, then stops, the vehicle needs service.

⚠ Warning

Do not use petrol or starting aids, such as ether, in the air intake. They could damage the engine, which may not be covered by the vehicle warranty. They could also cause a fire, which could cause serious personal injury.

Stop/Start System

The Stop/Start system will shut off the engine to help conserve fuel. It has components designed for the increased number of starts.

⚠ Warning

The automatic engine Stop/Start feature causes the engine to shut off while the vehicle is still on. Do not exit the vehicle before shifting to P (Park). The vehicle may restart and move unexpectedly. Always shift to P (Park), and then turn the ignition off before exiting the vehicle.

Auto Engine Stop/Start

When the brakes are applied and the vehicle is at a complete stop, the engine may turn off. When stopped, the tachometer displays AUTO STOP. See *Rev Counter* ⇨ *102*. When the brake pedal is released or the accelerator pedal is depressed, the engine will restart.

To maintain vehicle performance, other conditions may cause the engine to automatically restart before the brake pedal is released.

Auto Stops may not occur and/or Auto Starts may occur because:

- The climate control settings require the engine to be running to cool or heat the vehicle interior.
- The vehicle battery needs to charge.
- The vehicle battery has recently been disconnected.
- Minimum vehicle speed has not been reached since the last Auto Stop.
- The accelerator pedal is depressed.
- The engine or transmission is not at the required operating temperature.
- The outside temperature is not in the required operating range.
- The vehicle transmission is shifted out of D (Drive) to any gear other than P (Park).
- Certain driver modes have been selected. See *Driver Mode Control* ⇨ *225*.
- The vehicle is on a steep hill or grade.
- The driver door has been opened or the driver seat belt has been unfastened.
- The bonnet has been opened.
- The Auto Stop has reached the maximum allowed time.

Auto Stop Disable Switch

The automatic engine Stop/Start feature can be disabled and enabled by pressing Ⓐ. Auto Stop/Start is enabled each time you start the vehicle.

When the Ⓐ indicator is illuminated, the system is enabled.

Retained Accessory Power (RAP)

When the ignition is turned from on to off, the following features (if equipped) will continue to function for up to 10 minutes, or until the driver door is opened. These features will also work when the ignition is in RUN or ACC/ACCESSORY:

- Infotainment System
- Power Windows (during RAP this functionality will be lost when any door is opened)
- Sunroof (during RAP this functionality will be lost when any door is opened)
- Auxiliary Power Socket
- Audio System
- OnStar System

Shifting Into Park

To shift into P (Park):

1. Hold the brake pedal down and set the parking brake. See *Electric Parking Brake* ⇨ *222*.
2. Press the button on top of the gear lever to shift into P (Park). See *Automatic Transmission* ⇨ *215*.
3. The P indicator on the gear lever will turn red when the vehicle is in P (Park).

Leaving the Vehicle with the Engine Running

⚠ Warning

It can be dangerous to leave the vehicle with the engine running. It could overheat and catch fire.

It is dangerous to get out of the vehicle if the vehicle is not in P (Park) with the parking brake set. The vehicle can roll.

Do not leave the vehicle when the engine is running. If you have left the engine running, the vehicle can move suddenly. You or others could be injured. To be sure the vehicle will not move, even when you are on fairly level ground, always apply the parking brake and shift to

(Continued)

Warning (Continued)

P (Park). See *Shifting Into Park* ⇨ *209*. If you are towing a trailer, see *Driving Characteristics and Towing Tips* ⇨ *274*.

If you need to leave the vehicle with the engine running, make sure the vehicle is in P (Park) and the parking brake is set before you leave it. See *Electric Parking Brake* ⇨ *222*.

If you are towing a trailer and parking on a hill, see *Driving Characteristics and Towing Tips* ⇨ *274*.

Shifting out of Park

This vehicle is equipped with an electronic transmission. The shift lock release button is designed to prevent inadvertent shifting out of P (Park).

To shift out of P (Park):

1. Ensure the engine is running.
2. Apply the brake pedal.
3. Press and hold the shift lock release button.
4. Move the shift lever to the desired position.

5. The P indicator will turn white and the gear indicator on the gear lever will turn red when the vehicle is no longer in P (Park).
6. After releasing the gear lever, it will return to the centre position.

If the vehicle cannot shift from P (Park), a Driver Information Centre (DIC) message may be displayed. Check that the ignition is switched on, the engine is running, the brake pedal is depressed, and the shift lock release button is pressed when you are attempting to shift out of P (Park). If all of these conditions are met but the vehicle will not shift out of P (Park), see your retailer for service.

Parking over Things That Burn

⚠ Warning

Things that can burn could touch hot exhaust parts under the vehicle and ignite. Do not park over papers, leaves, dry grass, or other things that can burn.

Active Fuel Management

This vehicle's engine may be equipped with Active Fuel Management, which allows the engine to operate on either all of its cylinders, or in reduced cylinder operation mode, depending on the driving conditions.

When less power is required, such as cruising at a constant vehicle speed, the system will operate in reduced cylinder operation mode, allowing the vehicle to achieve better fuel economy. When greater power demands are required, such as accelerating from a stop, overtaking, or merging onto a freeway, the system will maintain full-cylinder operation.

If the vehicle has an Active Fuel Management indicator, see Driver Information Centre (DIC) for more information about using this display.

Extended Parking

It is best not to park with the vehicle running. If the vehicle is left running, be sure it will not move and there is adequate ventilation.

See *Shifting Into Park* ⇨ *209* and *Engine Exhaust* ⇨ *211*.

If the vehicle is left parked and running with the RKE transmitter outside the vehicle, it will continue to run for up to 15 minutes.

If the vehicle is left parked and running with the RKE transmitter inside the vehicle, it will continue to run for up to 30 minutes.

The vehicle could turn off sooner if it is parked on a hill, due to lack of available fuel.

The timer will reset if the vehicle is taken out of P (Park) while it is running.

Engine Exhaust

⚠ Warning

Engine exhaust contains carbon monoxide (CO), which cannot be seen or smelled. Exposure to CO can cause unconsciousness and even death.

Exhaust may enter the vehicle if:

- The vehicle idles in areas with poor ventilation (parking garages, tunnels, deep snow that may block underbody airflow or exhaust pipes).
- The exhaust smells or sounds strange or different.
- The exhaust system leaks due to corrosion or damage.
- The vehicle exhaust system has been modified, damaged, or improperly repaired.
- There are holes or openings in the vehicle body from damage or aftermarket modifications that are not completely sealed.

(Continued)

Warning (Continued)

If unusual fumes are detected or if it is suspected that exhaust is coming into the vehicle:

- Drive it only with the windows completely down.
- Have the vehicle repaired immediately.

Never park the vehicle with the engine running in an enclosed area such as a garage or a building that has no fresh air ventilation.

Running the Vehicle While Parked

It is better not to park with the engine running.

If the vehicle is left with the engine running, follow the proper steps to be sure the vehicle will not move. See *Shifting Into Park* ⇨ *209* and *Engine Exhaust* ⇨ *211*.

Diesel Particulate Filter

The exhaust system has a Diesel Particulate Filter (DPF) to reduce vehicle emissions. On some exhaust systems with a DPF, the exhaust cooler mixes air with the exhaust to lower the temperature before it leaves the tailpipe.

The DPF, the tailpipe, and other exhaust system components must not be altered. Regularly inspect and clean any mud or dirt from the exhaust cooler, especially where the exhaust cooler connects to the tailpipe and the openings where fresh air enters the cooler.

The DPF will clean itself as part of normal operation. Several factors, including fuel consumed, hours of engine operation, and miles driven, are monitored by the Engine Control Module (ECM). The self-cleaning occurs approximately once per tank of fuel.

Vehicles with the DPF have specific fuel and engine oil requirements. See *Fuel for Diesel Engines* ⇨ *264* and *Engine Oil* ⇨ *291*.

Caution

Damage can occur to the DPF components if the required Ultra Low Sulphur Diesel (15 ppm sulphur maximum) fuel and engine oil specified in the Recommended Fluids and Lubricants section of this manual are not used. This damage would not be covered by the vehicle warranty.

Under certain conditions, such as idling or very short trips, the self-cleaning process has less efficiency and cannot be completed.

To resolve this, continue driving safely at a steady speed as close to the posted speed limit as possible, preferably without stopping, until the message clears. This can take up to 30 minutes.

⚠ Warning

During DPF self cleaning or during extended idling in P (Park), the exhaust system and exhaust gases are very hot. Things that burn could

(Continued)

Warning (Continued)

touch hot exhaust parts under the vehicle and ignite. You or others could be burned. Do not park, or idle for an extended period of time, near or over papers, leaves, dry grass, or other things that can burn. Keep the exhaust area clear of material that could ignite or burn. See “Parking over Things That Burn” in the owner's manual.

Caution

Avoid extended idling because the DPF system is not capable of self-cleaning at idle speed. During extended idling, monitor the instrument cluster lights and DIC for messages and take appropriate action. Continued idling with the warning light/message shown could cause damage to the DPF, requiring repair and possible replacement that might not be covered by the vehicle warranty.

During self-cleaning, there will be a change in the exhaust sound and engine idle speed. Along with this, a burning smell and reduction in fuel economy may be noticed. This is normal.

If the vehicle is run at idle speed or driven on very short trips with the DPF warning message shown and the exhaust filter is not cleaned as required, the malfunction indicator lamp and a DIC message will be shown. See your dealer. Also see *Malfunction Indicator Lamp (Check Engine Light)* ⇨ *106*.

See *Accessories and Modifications* ⇨ *286* if you are adding accessories or modifying the vehicle.

AdBlue

⚠ Warning

Avoid getting AdBlue (also referred to as Diesel Exhaust Fluid or DEF) on your skin or in your eyes as it could cause irritation. For more

(Continued)

Warning (Continued)

safety, handling, and storage information, see the AdBlue container label.

Caution

Use only AdBlue that is GM approved, or fluid containing the API certified or ISO 22241 label. The use of other fluids could damage the system, requiring costly repairs that will not be covered by the vehicle warranty.

Caution

Do not mix fuel with AdBlue, and do not fill AdBlue into the fuel tank. This could lead to costly repairs that might not be covered by the vehicle warranty.

AdBlue is used with diesel engines to reduce the amount of regulated emissions produced. The fluid level in the AdBlue tank must be maintained for the vehicle to run properly. AdBlue is not a fuel additive. AdBlue freezes when exposed to temperatures below -11 °C (12 °F). For AdBlue tank capacity, see *Capacities and Specifications* ⇨ *373*.

It is normal to hear the AdBlue system purge fluid back into the tank after the vehicle is shut off.

Locating AdBlue

AdBlue can be purchased at your authorised retailers. Additionally, some diesel truck filling stations or retailers may have AdBlue available for purchase. See *Recommended Fluids and Lubricants* ⇨ *368*.

Filling the AdBlue Tank

The blue AdBlue cap is behind the fuel/AdBlue hatch. If equipped with a fuel cap, do not remove the fuel and AdBlue caps at the same time. Fill diesel fuel and AdBlue independently. Turn the AdBlue cap anticlockwise to remove.

In cold conditions, AdBlue can freeze in the AdBlue filler pipe opening. If this prevents the filling of the AdBlue tank, park the vehicle in a warm garage overnight.

AdBlue Gauge Indication	Approximate minimum volume of AdBlue that can be added *
E 1/2 F	0 L (0 gal)
E 1/2 F	2 L (0.5 gal)
E 1/2 F	4 L (1 gal)
E 1/2 F	6.5 L (1.5 gal)
E 1/2 F	8.5 L (2 gal)
E 1/2 F	11 L (3 gal)
E 1/2 F	13 L (3.5 gal)
Low E 1/2 F	15.5 L (4 gal)
* Final gauge reading after fill may not illuminate all segments	

Fill the AdBlue tank on level ground and with the vehicle switched off. When adding AdBlue, it is recommended to fully fill the AdBlue tank. For AdBlue tank capacity, see *Capacities and Specifications* ⇨ *373*. When adding AdBlue to an empty tank or tank approaching empty, always fully fill the AdBlue tank and allow the vehicle to restart.

If AdBlue is added under freezing conditions, it may require less fluid to fill the AdBlue tank.

When fluid reaches the top of the AdBlue filler pipe, stop filling. Do not top up the AdBlue tank. If using a bottle or jug to refill AdBlue, follow the instructions on the container label and use a dedicated filling aid.

Caution

Do not overfill the AdBlue tank and do not allow AdBlue to make contact with the finished surfaces of the vehicle, as it could damage the vehicle finish. If AdBlue is spilled during filling, wipe any affected surface with a damp cloth.

When replacing the AdBlue cap, turn it clockwise until it clicks. Make sure the cap is fully installed.

Push the fuel/AdBlue hatch closed.

AdBlue Low

As the AdBlue level drops, warnings automatically display in the Driver Information Centre (DIC). Select Vehicle Information in the DIC to view AdBlue level status. See *Driver Information Centre (DIC)* ⇨ *115*.

Refill the AdBlue tank at the first opportunity after a low warning indication. If the AdBlue tank is empty, the vehicle may not restart.

It may take some time for the vehicle to detect that AdBlue has been added.

If AdBlue is added in freezing conditions, additional time may be required to recognise the new AdBlue level.

The AdBlue range DIC message first displays at approximately 2400 km (1,491 mi). This message appears again at approximately 1750 km (1,087 mi) of remaining range before the AdBlue tank becomes empty.

As the fluid level nears empty, these messages appear every time the vehicle is started.

If the AdBlue low warnings are ignored and the AdBlue tank becomes empty, the DIC will display messages that describe the action needed and distance until vehicle restarts are prevented.

AdBlue Quality Poor

Use only AdBlue that is GM approved, or fluid containing the API certified or ISO 22241 label.

AdBlue has an expiration date. If the system detects poor quality, or contaminated, or diluted AdBlue, a DIC message will display along with distance until vehicle restarts are prevented. There will also be a flashing warning light and chimes.

Adding fresh AdBlue to the system may resolve the problem after driving a short distance, depending on several factors. If the DIC message persists, see your dealer.

High Emission Warnings

If a problem occurs with the vehicle emission system, chimes sound and a DIC message displays along with distance until vehicle restarts will be prevented. In some cases, this message will clear itself, indicating that the emission system has corrected the condition. If the DIC message persists, see your dealer.

Automatic Transmission

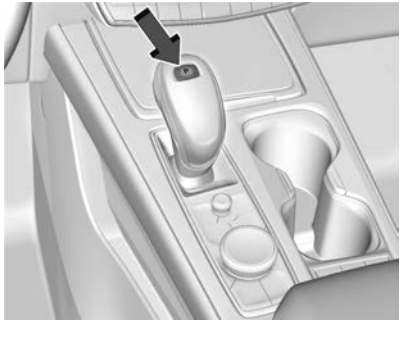
The shift pattern is displayed in the top of the gear lever. The selected gear position will illuminate red on the gear lever, while all others will be displayed in white. If the gear change is not immediate, as in very cold conditions, the indicator on the gear lever may flash until it is fully engaged.

The gear lever always starts from a centre position, represented by an up/down arrow on the shift pattern. After releasing the gear lever, it will return to the centre position.

The transmission does not operate when the vehicle is off.

If the vehicle is in ACC/ACCESSORY, the transmission can be shifted into P (Park).

If the vehicle is turned off while at a relatively high vehicle speed, the transmission will automatically shift to N (Neutral). Once the vehicle is stopped, P (Park) is automatically selected.



P : This position locks the drive wheels. Use P (Park) when starting the engine to prevent the vehicle from moving.

⚠ Warning

It is dangerous to get out of the vehicle if the transmission is not in P (Park) with the parking brake applied. The vehicle can roll.

Do not leave the vehicle when the engine is running. If the engine has been left running, the vehicle can move suddenly. You or others could be injured. To be sure the vehicle will not move, even when on fairly level ground, always apply the parking brake and place the transmission into P (Park). See *Shifting Into Park* ⇨ *209* and *Electric Parking Brake* ⇨ *222*.

This vehicle is equipped with an electronically controlled transmission. The shift lock release button is designed to prevent inadvertent shifting out of P (Park) unless the ignition is on, the brake pedal is applied, and the shift lock release button is pressed.

When the vehicle is stopped, press ENGINE START/STOP to turn off the vehicle. The transmission will shift to P (Park) automatically unless the vehicle is in N (Neutral), See “Car Wash Mode” following.

The vehicle will not shift into P (Park) if it is moving too fast. Stop the vehicle and shift into P (Park).

To shift in and out of P (Park), see *Shifting Into Park ⇨ 209* and *Shifting out of Park ⇨ 209*.

Service Gear Lever Message

If the message SERVICE SHIFTER SEE OWNER'S MANUAL appears in the Driver Information Centre (DIC), the gear lever needs service. Have the vehicle serviced as soon as possible. If the vehicle is automatically shifting into P (Park), check to see if the P (Park) button on top of the gear lever is stuck. To operate the vehicle, hold the gear lever in the desired gear, R (Reverse) or D (Drive), until vehicle speed exceeds 15 km/h (10 mph), then release the gear lever.

R : Use this gear to reverse.

If the gear is changed from either R (Reverse) to D (Drive) or M (Manual Mode), or M (Manual Mode) or D (Drive) to R (Reverse) while the speed is too high, the vehicle will change to N (Neutral). Reduce the vehicle speed and try the shift again.

To shift into R (Reverse):

1. Bring the vehicle to a complete stop.
2. Press and hold the shift lock release button on the side of the gear lever.
3. From the centre position, move the gear lever forward through the first detent to the end of travel. R is illuminated in red.
4. After releasing the gear lever, it will return to the centre position.

To shift out of R (Reverse):

1. Bring the vehicle to a complete stop.
2. Shift to the desired gear.
3. After releasing the gear lever, it will return to the centre position.

At low vehicle speeds, R (Reverse) can be used to rock the vehicle back and forth to get out of snow, ice, or sand without damaging the transmission. See *If the Vehicle Is Stuck ⇨ 200*.

N : In this position, the engine does not connect with the wheels. To restart the engine when the vehicle is already moving, use N (Neutral) only.

⚠ Warning

Shifting into a drive gear while the engine is running at high speed is dangerous. Unless your foot is firmly on the brake pedal, the vehicle could move very rapidly. You could lose control and hit people or objects. Do not shift into a drive gear while the engine is running at high speed.

Caution

Shifting out of P (Park) or N (Neutral) with the engine running at high speed may damage the transmission. The repairs would not be covered by the vehicle warranty. Be sure the engine is not running at high speed when shifting the vehicle.

The vehicle is not designed to stay in N (Neutral) for more than five minutes. It may automatically shift into P (Park). N (Neutral) is not

intended for towing. If the vehicle needs to be towed, see *Towing the Vehicle* ⇨ *349*.

To shift into N (Neutral):

1. Move the gear lever forward to the first detent from the centre position.
   - If the vehicle is in P (Park), apply the brake pedal and press the shift lock release button while moving the gear lever forward.
   - N will illuminate in red.
2. After releasing the gear lever, it will return to the centre position.

To shift out of N (Neutral):

1. Bring the vehicle to a complete stop.
2. Shift to the desired gear. If shifting from N (Neutral) to R (Reverse), press the shift lock release button.
3. After releasing the gear lever, it will return to the centre position.

Car Wash Mode

This vehicle includes a Car Wash Mode that allows the vehicle to remain in N (Neutral) for use in automatic car washes.

Car Wash Mode (Engine Off – Driver in Vehicle)

To place the vehicle in N (Neutral) with the engine off and the vehicle occupied:

1. Drive to the entrance of the car wash.
2. Apply the brake pedal.
3. Shift to N (Neutral).
4. Turn off the engine and release the brake pedal.
5. The indicator should continue to show N. If it does not, repeat Steps 2–4.
6. The vehicle is now ready for the car wash.

Car Wash Mode (Engine Off – Driver out of Vehicle)

To place the vehicle in N (Neutral) with the engine off and the vehicle unoccupied:

1. Drive to the entrance of the car wash.
2. Apply the brake pedal.
3. Open the door.
4. Shift to N (Neutral).
5. Turn off the engine and release the brake pedal.
6. The indicator should continue to show N. If it does not, repeat Steps 2–5.
7. Exit the vehicle and close the door. The vehicle is now ready for the car wash.
8. The vehicle may automatically shift to P (Park) upon re-entry.

Car Wash Mode (Engine On – Driver in Vehicle)

To place the vehicle in N (Neutral) with the engine on and the vehicle occupied:

1. Drive to the entrance of the car wash.
2. Apply the brake pedal.
3. Shift to N (Neutral).

4. Release the brake pedal. The vehicle is now ready for the car wash.

Car Wash Mode (Engine On – Driver out of Vehicle)

To place the vehicle in N (Neutral) with the engine on and the vehicle unoccupied:

1. Drive to the entrance of the car wash.
2. Apply the brake pedal.
3. Open the door.
4. Shift to N (Neutral), then release the brake pedal.
5. The indicator should continue to show N. If it does not, repeat Steps 2–4.
6. Exit the vehicle and close the door. The vehicle is now ready for the car wash.
7. The vehicle may automatically shift to P (Park) upon re-entry.

Caution

A transmission hot message may display if the automatic gearbox fluid is too hot. Driving under this condition can damage the vehicle. Stop and idle the engine to cool the automatic gearbox fluid. This message clears when the gearbox fluid has cooled sufficiently.

D : This position is for normal driving. If more power is needed for overtaking, press the accelerator pedal down.

To shift into D (Drive):

1. Bring the vehicle to a complete stop.
2. From the centre position, move the gear lever back.
   - If the vehicle is in P (Park), press the shift lock release button while pulling the gear lever back.
   - D will illuminate in red.
   - After releasing the gear lever, it will return to the centre position.

To shift out of D (Drive):

1. Bring the vehicle to a complete stop.
2. Shift to the desired gear.
3. After releasing the gear lever, it will return to the centre position.

Downshifting the transmission in slippery road conditions could result in skidding. See “Skidding” under *Loss of Control* ⇨ *193*.

Caution

Spinning the tyres or holding the vehicle in one place on a hill using only the accelerator pedal may damage the transmission. The repair will not be covered by the vehicle warranty. If the vehicle is stuck, do not spin the tyres. When stopping on a hill, use the brakes to hold the vehicle in place.

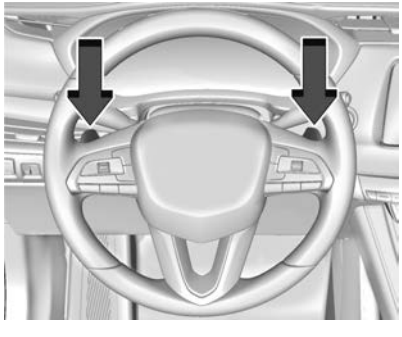
If equipped with the 2.0L L4 engine, engine speeds may be increased while driving at motorway speeds while the engine is still warming up.

Manual Mode

Tap Shift

Caution

Driving with the engine at a high rpm without upshifting while using Tap Shift, could damage the vehicle. Always upshift when necessary while using Tap Shift.



If equipped, vehicles with Tap Shift have controls on the back of the steering wheel to manually shift the automatic transmission.

Permanent Tap Shift Mode

To enter Permanent Tap Shift Mode:

1. With the vehicle in D (Drive), pull back on the gear lever to activate M (Manual Mode). The M in the shift pattern will illuminate in red, and the D will switch to white.
2. After releasing the gear lever, it will return to the centre position.
3. Pull the control toward you to shift. Pull the left-hand control to downshift, and the right-hand control to upshift. To shift to the lowest available gear, pull and hold the left-hand control.

To exit Permanent Tap Shift Mode:

1. To exit M (Manual Mode) and return to D (Drive), pull back on the gear lever. The D in the shift pattern will illuminate in red, and the M will switch to white.
2. After releasing the gear lever, it will return to the centre position.

M (Manual Mode) can be exited to return to D (Drive) at any speed by pulling the lever rearward from the centre position. It is not necessary to stop the vehicle or shift to N (Neutral) or P (Park) prior to shifting back to D (Drive).

Temporary Tap Manual Shift Mode

To enter Temporary Tap Shift Mode:

1. With the transmission in D (Drive) and not in Permanent Tap Shift Mode, the Tap Shift controls will activate a temporary tap manual shift mode, allowing the transmission to be manually shifted.
2. To deactivate, hold the right control briefly. Automatic shifts return after no manual shifts have been done for seven to 10 seconds.

While using Tap Shift, the vehicle will have firmer, quicker shifting. This can be used for sport driving or when climbing or descending hills, to stay in gear longer, or to downshift for more power or engine braking.

The transmission will only allow shifting into gears appropriate for the vehicle speed and engine revolutions per minute (rpm). If shifting is prevented for any reason, the M or D will flash in the instrument cluster.

The transmission will not automatically shift to the next higher gear if the engine rpm is too high. It will only automatically shift to the next lower gear if the engine rpm is much too low.

Drive Systems

All-Wheel Drive

Vehicles with this feature can operate in All-Wheel Drive (AWD) Mode. When the AWD feature is active, the system transfers engine power, if required, to all four wheels. The system is fully automatic and adjusts to road conditions for improved traction and control. In FWD Mode engine power is transferred to the front wheels only, and the AWD feature is off.

The AWD feature is automatically activated when certain modes are selected using the Driver Mode Control switch. When an AWD mode change is requested the light will flash briefly while the system is engaging and the AWD light will be displayed when the system is active. When a non-AWD Mode is selected, the light will flash briefly while the system disengages and a 2WD light will be displayed when the AWD system is off. See *Driver Mode Control* ⇨ *225*.

When a compact spare tyre is installed on an AWD vehicle, the system will automatically detect the compact spare and reduce AWD performance to protect the system. To restore AWD operation and prevent excessive wear on the system, replace the compact spare with a full-size tyre as soon as possible. See *Compact Spare Tyre* ⇨ *346*.

Brakes

Electric Brake Boost

Vehicles equipped with electric brake boost have hydraulic brake circuits that are electronically controlled when the brake pedal is applied during normal operation. The system performs routine tests and turns off within a few minutes after the vehicle is turned off. Noise may be heard during this time. If the brake pedal is depressed during the tests or when the electric brake boost system is off, a noticeable change in pedal force and travel may be felt. This is normal.

Antilock Brake System (ABS)

The Antilock Brake System (ABS) helps prevent a braking skid and maintain steering while braking hard.

If there is a problem with ABS, this warning light stays on. See *Antilock Brake System (ABS) Warning Light* ⇨ *108*.

ABS does not change the time needed to put your foot on the brake pedal and does not always decrease stopping distance. If you get too close to the vehicle ahead, there will not be enough time to apply the brakes if it suddenly slows or stops. Always leave enough room ahead to stop, even with ABS.

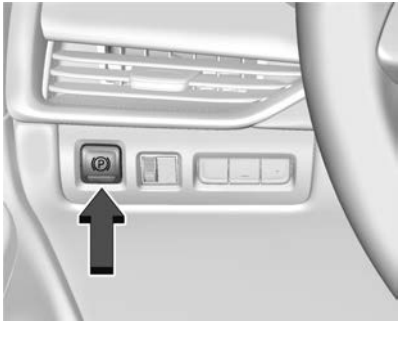
Using ABS

Do not pump the brakes. Just hold the brake pedal down firmly. Hearing and feeling ABS operate is normal.

Braking in Emergencies

ABS allows steering and braking at the same time. In many emergencies, steering can help even more than braking.

Electric Parking Brake



The Electric Parking Brake (EPB) can always be applied, even if the vehicle is switched off. In case of insufficient electrical power, the EPB cannot be applied or released. To prevent draining the battery, avoid unnecessary repeated cycles of the EPB.

The system has a red parking brake status light, and an amber parking brake service warning light. See *Electric Parking Brake Light* ⇨ *108* and *Service Electric Parking Brake Light* ⇨ *108*. There are also handbrake-related Driver Information Centre (DIC) messages.

Before leaving the vehicle, check the red handbrake status light to ensure that the handbrake is applied.

EPB Apply

To apply the EPB:

1. Be sure the vehicle is at a complete stop.
2. Press the EPB switch momentarily.

The red handbrake status light will flash and then stay on once the EPB is fully applied. If the red handbrake status light flashes continuously, then the EPB is only partially applied or there is a problem with the EPB.
A DIC message will display. Release the EPB and try to apply it again.
If the light does not come on, or keeps flashing, have the vehicle serviced. Do not drive the vehicle if the red handbrake status light is flashing. See your dealer.

If the amber parking brake service warning light is illuminated, press the EPB switch. Continue to hold the switch until the red handbrake status light remains on. If the amber parking brake service warning light is illuminated, see your retailer.

If the EPB is applied while the vehicle is moving, the vehicle will decelerate as long as the switch is pressed. If the switch is pressed until the vehicle comes to a stop, the EPB will remain applied.

The vehicle may automatically apply the EPB in some situations when the vehicle is not moving. This is normal, and takes place to periodically check the correct operation of the EPB system, or at the request of other safety functions that utilise the EPB.

If the EPB fails to apply, block the rear wheels to prevent vehicle movement.

EPB Release

To release the EPB:

1. Turn the ignition on or to ACC/ ACCESSORY.
2. Apply and hold the brake pedal.
3. Press the EPB switch momentarily.

The EPB is released when the red handbrake status light is off.

If the amber parking brake service warning light is illuminated, release the EPB by pressing and holding the EPB switch. Continue to hold the switch until the red handbrake status light is off. If either light stays on after release is attempted, see your dealer.

Caution

Driving with the parking brake on can overheat the brake system and cause premature wear or damage to brake system parts. Make sure that the parking brake is fully released and the brake warning light is off before driving.

If you are towing a trailer and parking on a hill, see *Driving Characteristics and Towing Tips* ⇨ *274*.

Automatic EPB Release

The EPB will automatically release if the vehicle is running, placed into gear and an attempt is made to drive away. Avoid rapid acceleration when the EPB is applied, to preserve parking brake lining life.

Brake Assist

Brake Assist detects rapid brake pedal applications due to emergency braking situations and provides additional braking to activate the Antilock Brake System (ABS) if the brake pedal is not pushed hard enough to activate ABS normally. Minor noise, brake pedal pulsation, and/or pedal movement during this time may occur. Continue to apply the brake pedal as the driving situation dictates. Brake Assist disengages when the brake pedal is released.

Hill Start Assist (HSA)

⚠ Warning

Do not rely on the HSA feature. HSA does not replace the need to pay attention and drive safely. You may not hear or feel alerts or warnings provided by this system. Failure to use proper care when driving may result in injury, death, or vehicle damage. See *Defensive Driving* ⇨ *191*.

When the vehicle is stopped on a grade, Hill Start Assist (HSA) prevents the vehicle from rolling in an unintended direction during the transition from brake pedal release to accelerator pedal apply. The brakes release when the accelerator pedal is applied. If the accelerator pedal is not applied within a few minutes, the Electric Parking Brake will apply. The brakes may also release under other conditions. Do not rely on HSA to hold the vehicle.

HSA is available when the vehicle is facing uphill in a forward gear, or when facing downhill in

R (Reverse). The vehicle must come to a complete stop on a grade for HSA to activate.

Ride Control Systems

Traction Control/Electronic Stability Control

System Operation

The vehicle has a Traction Control System (TCS) and StabiliTrak/ Electronic Stability Control (ESC). These systems help limit wheel spin and assist the driver in maintaining control, especially on slippery road conditions.

TCS activates if it senses that any of the drive wheels are spinning or beginning to lose traction. On an All-Wheel Drive (AWD) vehicle in AWD or Sport Mode, the system will operate if it senses that any of the wheels are spinning or beginning to lose traction. When this happens, TCS applies the brakes to the spinning wheels and reduces engine power to limit wheel spin.

StabiliTrak/ESC activates when the system senses a discrepancy between the intended path and the direction the vehicle is actually travelling. StabiliTrak/ESC selectively applies braking pressure at any one of the vehicle's brakes to help steer the vehicle in the direction in which you are steering.

If cruise control is being used and traction control or StabiliTrak/ESC begins to limit wheel spin, cruise control will disengage. Cruise control may be turned back on when road conditions allow. TCS and StabiliTrak/ ESC will automatically turn on when cruise control is set.

Both systems come on automatically when the vehicle is started and begins to move. The systems may be heard or felt while they are operating or while performing diagnostic checks. This is normal and does not mean there is a problem with the vehicle.

It is recommended to leave both systems on for normal driving conditions, but it may be necessary to turn TCS off if the vehicle gets stuck in sand, mud, ice, or snow. See *If the Vehicle Is Stuck ⇨ 200* and “Turning the Systems Off and On” later in this section.

The indicator light for both systems is in the instrument cluster. This light will:

- Flash when TCS is limiting wheel spin.
- Flash when StabiliTrak/ESC is activated.
- Turn on and stay on when either system is not working.

If either system fails to turn on or to activate, a message may display in the Driver Information Centre (DIC), and comes on and stays on to indicate that the system is inactive and is not assisting the driver in maintaining control. The vehicle is safe to drive, but driving should be adjusted accordingly.

If comes on and stays on:

1. Stop the vehicle.
2. Turn the engine off and wait 15 seconds.
3. Start the engine.

Drive the vehicle. If comes on and stays on, the vehicle may need more time to diagnose the problem. If the condition persists, see your dealer.

Turning the Systems Off and On

Caution

Do not repeatedly brake or accelerate heavily when TCS is off. The vehicle driveline could be damaged.

To turn off only TCS, press and release . The Traction Off light displays in the instrument cluster and a DIC message may display.

To turn TCS on again, press and release . The Traction Off light displayed in the instrument cluster will turn off and a DIC message may display.

If TCS is limiting wheel spin when is pressed, the system will not turn off until the wheels stop spinning.

To turn off both TCS and StabiliTrak/ESC, press and hold until the Traction Off light and StabiliTrak/ESC Off light come on and stay on in the instrument cluster. A DIC message may display.

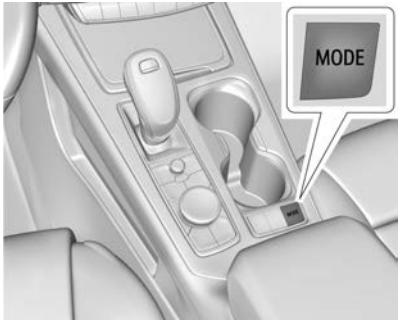
To turn TCS and StabiliTrak/ESC on again, press and release . The Traction Off light and StabiliTrak/ESC Off light in the instrument cluster turn off and a DIC message may display.

Adding accessories can affect vehicle performance. See *Accessories and Modifications* ⇨ *286*.

Driver Mode Control

Driver Mode Control (DMC) allows the driver to adjust the overall driving experience to better suit driver preferences by adjusting vehicle systems. Drive mode availability and affected vehicle systems are dependent on vehicle trim level, region, and optional features.

If the vehicle is in Tour or AWD Mode, it will stay in that mode through future ignition cycles. If the vehicle is in any other mode, it will return to Tour Mode when the vehicle is restarted. When a mode is selected, an indicator will illuminate in the instrument cluster and remain illuminated.



Driver Mode Control Switch

To activate each mode, press the MODE button on the centre console.

Tour Mode : Use for normal city and motorway driving to provide a smooth ride. This setting provides a balance between comfort and handling. This is the standard/default mode. There is no persistent indicator in the instrument cluster for this mode.

AWD Mode : AWD Mode provides torque to all four wheels. Select AWD to improve traction and control on slippery road surfaces, such as gravel, sand, wet pavement, snow, and ice. For more information on AWD Mode, see *All-Wheel Drive* ⇨ *221*.

Sport Mode : Use where road conditions or personal preference demand a more controlled response. Sport Mode improves vehicle handling and acceleration on dry pavement. When active, Sport Mode modifies steering effort, transmission shifting, and AWD torque, if equipped.

The Performance Algorithm Liftfoot (PAL) feature is enabled in Sport Mode. PAL allows the transmission to hold the current gear after the quick release of a heavily applied accelerator pedal. This provides greater engine braking and enhanced vehicle control.

When PAL is activated, there may be an additional gear symbol that is shown in the instrument cluster display. See *Performance Shifting Light* ⇨ *109*.

Off-Road Mode : Use this mode for off-road recreational driving. When active, Off–Road Mode should be used to improve driving at moderate speeds on grass, gravel, dirt, unpaved roads, or snow-covered roads. The accelerator pedal is tuned for off-road use. This mode modifies pedal mapping, AWD, ESC, and TCS Performance.

Snow/Ice Mode : Snow/Ice Mode improves vehicle acceleration on snow and ice covered roads. When active, Snow/Ice Mode will adjust acceleration to optimise traction on slippery surfaces. This can compromise the acceleration on dry asphalt. This feature is not intended for use when the vehicle is stuck in sand, mud, ice, snow, or gravel. If the vehicle becomes stuck, see *If the Vehicle Is Stuck* ⇨ *200*.

Cruise Control

⚠ Warning

Cruise control can be dangerous where you cannot drive safely at a steady speed. Do not use cruise control on winding roads or in heavy traffic.

(Continued)

Warning (Continued)

Cruise control can be dangerous on slippery roads. On such roads, fast changes in tyre traction can cause excessive wheel slip, and you could lose control. Do not use cruise control on slippery roads.

With cruise control, a speed of about 40 km/h (25 mph) or more can be maintained without keeping your foot on the accelerator. Cruise control does not work at speeds below about 40 km/h (25 mph).

If the Traction Control System (TCS) or StabiliTrak/Electronic Stability Control (ESC) begins to limit wheel spin while using cruise control, the cruise control automatically disengages. See *Traction Control/ Electronic Stability Control* ⇨ *224*. If a collision alert occurs when cruise control is activated, cruise control is disengaged. See *Forward Collision Alert (FCA) System* ⇨ *250*. When road conditions allow cruise control to be safely used, it can be turned back on.

Cruise control will disengage if either TCS or StabiliTrak/ESC is turned off.

If the brakes are applied, cruise control disengages.

: Press to turn the system on and off. A white indicator appears in the instrument cluster when cruise is turned on.

RES+ : If there is a set speed in the memory, move the thumbwheel up briefly to resume that speed or press and hold to accelerate. If the cruise control is already active, use to increase vehicle speed. To increase speed by 1 km/h (1 mph), press the thumbwheel up to the first detent toward RES+. To increase speed to the next 5 km/h (5 mph) mark on the speedometer, press the thumbwheel up to the second detent.

SET– : Move the thumbwheel down briefly to set the speed and activate cruise control. If the cruise control is already active, use to decrease vehicle speed. To decrease speed by 1 km/h (1 mph), move the thumbwheel down toward SET–. To decrease speed to the next 5 km/h (5 mph) mark on the speedometer, move the thumbwheel down toward SET– to the second detent.

: Press to disengage cruise control without erasing the set speed from memory.

Setting Cruise Control

If is on when not in use, SET– or RES+ could get pressed and go into cruise when not desired. Keep off when cruise is not being used.

1. Press .
2. Get up to the desired speed.

3. Move the thumbwheel down to SET–. The desired set speed briefly appears in the instrument cluster.
4. Remove your foot from the accelerator.

When the cruise control has been set to the desired speed, a green cruise control indicator appears on the instrument cluster and a cruise set speed message appears on the Head-Up Display (HUD), if equipped.

Resuming a Set Speed

If the cruise control is set at a desired speed and then the brakes are applied or ⛒ is pressed, the cruise control is disengaged without erasing the set speed from memory.

Once the vehicle speed reaches about 40 km/h (25 mph) or more, move the thumbwheel up toward RES+ briefly. The vehicle returns to the previous set speed.

Increasing Speed While Using Cruise Control

If the cruise control system is already activated:

- Move the thumbwheel up toward RES+ until the desired speed is reached, then release it.
- To increase vehicle speed in small increments, move the thumbwheel up toward RES+ briefly. For each press, the vehicle goes about 1 km/h (1 mph) faster.
- To increase vehicle speed in larger increments, move the thumbwheel up toward RES+ to the second detent. For each press, the vehicle speed increases to the next 5 km/h (5 mph) mark on the speedometer.

The speedometer reading can be displayed in either English or metric units. See *Instrument Cluster* ⇨ *99*. The increment value used depends on the units displayed.

Reducing Speed While Using Cruise Control

If the cruise control system is already activated:

- Move the thumbwheel down toward SET– until the desired lower speed is reached, then release it.
- To decrease vehicle speed in small increments, move the thumbwheel down toward SET– briefly. For each press, the vehicle goes about 1 km/h (1 mph) slower.
- To decrease vehicle speed in larger increments, move the thumbwheel down toward SET– to the second detent. For each press, the vehicle speed decreases to the next 5 km/h (5 mph) mark on the speedometer.

The cruise control system may automatically brake to slow the vehicle down.

The speedometer reading can be displayed in either English or metric units. See *Instrument Cluster* ⇨ *99*. The increment value used depends on the units displayed.

Overtaking Another Vehicle While Using Cruise Control

Use the accelerator pedal to increase the vehicle speed. When you take your foot off the pedal, the vehicle will slow down to the previous set cruise speed.

While depressing the accelerator pedal, or shortly after its release to override cruise, briefly moving the

thumbwheel down toward SET– will result in cruise set to the current vehicle speed.

Using Cruise Control on Hills

How well the cruise control will work on hills depends upon the vehicle speed, load, and the steepness of the hills. When going up steep hills, you might have to apply the accelerator pedal to maintain your speed. When going downhill, the cruise control system may automatically brake to slow the vehicle down. Also, you may have to brake or shift to a lower gear to keep your speed down. If the brake pedal is applied, cruise control disengages.

Ending Cruise Control

There are four ways to end cruise control:

- Step lightly on the brake pedal.
- Press .
- Shift the transmission to N (Neutral).
- Press .

Erasing Speed Memory

The cruise control set speed is erased from memory if is pressed or if the ignition is turned off.

Speed Limiter

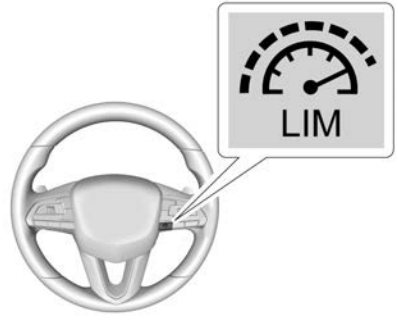
Intelligent Speed Limiter (Automatic)

The Intelligent Speed Limiter (ISL) function allows the vehicle to maintain a set speed. To exceed the set speed, depress the accelerator pedal. Speed Limiter will not control vehicle speed on a hill. If the driver allows the speed to exceed the speed limitation setting, the driver will be alerted. Speed Limiter may be used at speeds greater than 25 kph.

ISL uses an on-board camera to identify road signs and automatically adjust the set speed depending on the speed limit in that area. The driver can adjust the set speed with an offset above or below the identified area speed limit.

The intelligent mode may not function in inclement weather or when road signs are blocked by leaves, snow, or other items that obstruct the camera's view.

ISL can also be used in Manual mode. In Manual mode, all changes to the set speed are performed by the driver.



The speed limiter button is located on the steering wheel.

LIM : Press to turn the Speed Limiter on, off, or switch between Intelligent and Manual modes.

: Press to disengage the Speed Limiter while keeping the last set speed in the memory.

SET– : Press to choose set speed, decrease set speed (Manual), or decrease offset (Intelligent).

+RES : Press to resume set speed, increase set speed (Manual), or increase offset (Intelligent).

Turn Speed Limiter On and Off (Intelligent and Manual)

Press the LIM button. The Speed Limiter will start in Manual mode. To switch to Intelligent mode, press the LIM button. To turn Speed Limiter off, press LIM again.

Setting Speed Limiter (Manual)

Press SET– to activate the Speed Limiter and use the current vehicle speed as the set speed.

Setting Speed Limiter (Intelligent)

Press SET– to activate the Speed Limiter. The set speed will be the current vehicle speed until the vehicle identifies an area speed limit road sign.

Resuming Speed Limiter

If Speed Limiter was previously active but was disengaged with the button, Speed Limiter can be resumed using the last set speed. Press +RES to reactivate Speed Limiter with the last set speed.

Accept or Decline Automatic Set Speed Changes (Intelligent)

When Speed Limiter is in Intelligent mode, the vehicle can suggest a new set speed if a new area speed limit road sign is identified.

Press SET– to accept the suggested set speed.

Press +RES to ignore the suggested set speed.

Decreasing Set Speed (Manual)

While Speed Limiter is active, the set speed can be decreased using the SET– button.

Press SET– to decrease the set speed by 1 km/h (1 mph).

Hold SET– to decrease the set speed by 5 km/h (5 mph).

Decreasing Set Speed (Intelligent)

While Speed Limiter is active, the offset from area speed limit can be decreased using the SET– button.

Press SET– to decrease the set speed by 1 km/h (1 mph).

Hold SET– to decrease the set speed by 5 km/h (5 mph).

Increasing Set Speed (Manual)

While Speed Limiter is active, the set speed can be increased with the +RES button.

Press +RES to decrease the set speed by 1 km/h (1 mph).

Hold +RES to decrease the set speed by 5 km/h (5 mph).

Increasing Set Speed (Intelligent)

While Speed Limiter is active, the offset from the area speed limit can be increased using the +RES button.

Press +RES to decrease the set speed by 1 km/h (1 mph).

Hold +RES to decrease the set speed by 5 km/h (5 mph).

Adaptive Cruise Control (Advanced)

If equipped with Adaptive Cruise Control (ACC), it allows the driver to select the cruise control set speed and following gap. Read this entire section before using this system. The following gap is the following time between your vehicle and a vehicle detected directly ahead in your path, moving in the same direction. If no vehicle is detected in your path, ACC works like regular cruise control. ACC uses camera and radar sensors.

If a vehicle is detected in your path, ACC can apply acceleration or limited, moderate braking to maintain the selected following gap. To disengage ACC, apply the brake. If ACC is controlling your vehicle speed when the Traction Control System (TCS) or StabiliTrak/Electronic Stability Control (ESC) system activates, the ACC may automatically disengage. See *Traction Control/Electronic Stability Control* ⇨ *224*. When road conditions allow ACC to be safely used, the ACC can be turned back on.

Disabling the TCS or StabiliTrak/ESC system will disengage and prevent engagement of ACC.

ACC can reduce the need for you to frequently brake and accelerate, especially when used on expressways, dual carriageways and motorways. When used on other roads, you may need to take over the control of braking or acceleration more often.

ACC automatically slows the vehicle while navigating a bend and may increase speed out of the bend, but will not exceed the set speed.

⚠ Warning

ACC has limited braking ability and may not have time to slow the vehicle down enough to avoid a collision with another vehicle you are following. This can occur when vehicles suddenly slow or stop ahead, or enter your lane. Also see “Alerting the Driver” in this section. Complete attention is always required while driving and you

(Continued)

Warning (Continued)

should be ready to take action and apply the brakes. See *Defensive Driving* ⇨ *191*.

⚠ Warning

ACC will not detect or brake for children, pedestrians, animals, or other objects.

Do not use ACC when:

- On winding and hilly roads or when the sensors are blocked by snow, ice, or dirt. The system may not detect a vehicle ahead. Keep the entire front of the vehicle clean.
- Visibility is low, such as in mist, rain, or snow conditions. ACC performance is limited under these conditions.
- On slippery roads where fast changes in tyre traction can cause excessive wheel slip.
- When towing a trailer.

: Press to turn the system on or off. The indicator turns white on the instrument cluster when ACC is turned on.

RES+ : Press briefly to resume the previous set speed or to increase vehicle speed if ACC is already activated. To increase speed by 1 km/h (1 mph), press RES+ to the first detent. To increase speed to the next 5 km/h (5 mph) mark on the speedometer, press RES+ to the second detent.

SET– : Press briefly to set the speed and activate ACC or to decrease vehicle speed if ACC is already activated. To decrease speed by 1 km/h (1 mph), press SET– to the first detent. To decrease speed to the next 5 km/h (5 mph) mark on the speedometer, press SET– to the second detent.

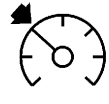
: Press to disengage ACC without erasing the selected set speed.

: Press to select a following gap time (or distance) setting for ACC of Far, Medium, or Near.

Switching Between ACC and Regular Cruise Control

To switch between ACC and regular cruise control, press and hold .
A Driver Information Display (DIC) message displays. See *Vehicle Messages* ⇨ *120*.

ACC Indicator



Regular Cruise Control Indicator

When ACC is engaged, a green indicator will be lit on the instrument cluster and the following gap will be displayed. When the regular cruise control is engaged, a green indicator will be lit on the instrument cluster; the following gap will not display.

When the vehicle is turned on, the cruise control mode will be set to the last mode used before the vehicle was turned off.

Switching from ACC to regular cruise control is only recommended when there are no vehicles ahead of your vehicle.

⚠ Warning

Always check the cruise control indicator on the instrument cluster to determine which mode cruise control is in before using the feature. If ACC is not active, the vehicle will not automatically brake for other vehicles, which could

(Continued)

Warning (Continued)

cause a crash if the brakes are not applied manually. You and others could be seriously injured or killed.

Setting Adaptive Cruise Control

If is on when not in use, it could get pressed and go into cruise when not desired. Keep off when cruise is not being used.

Select the set speed desired for cruise. This is the vehicle speed when no vehicle is detected in its path.

ACC will not set at a speed less than 25 km/h (15 mph), although it can be resumed when driving at lower speeds. The minimum allowable set speed is 25 km/h (15 mph).

To set ACC while moving:

1. Press .
2. Get up to the desired speed.
3. Press and release SET–.
4. Remove your foot from the accelerator.

After ACC is set, it may immediately apply the brakes if a vehicle ahead is detected closer than the selected following gap.

ACC can also be set while the vehicle is stopped if ACC is on and the brake pedal is applied.

The ACC indicator displays on the instrument cluster and Head-Up Display (HUD), if equipped. When ACC is turned on, the indicator will be lit white. When ACC is engaged, the indicator will turn green.

Be mindful of speed limits, surrounding traffic speeds, and weather conditions when selecting the set speed.

Resuming a Set Speed

If the ACC is set at a desired speed and then the brakes are applied, ACC is disengaged without erasing the set speed from memory.

To begin using ACC again, pressRES+ up briefly.

- If the vehicle is travelling at more than 5 km/h (3 mph), it returns to the previous set speed.
- If the vehicle is stopped with the brake pedal applied, press RES+ and release the brake pedal. ACC will hold the vehicle until RES+ or the accelerator pedal is pressed.

A green ACC indicator and the set speed display on the instrument cluster. The vehicle ahead indicator may be flashing if a vehicle ahead was present and moved. See “Approaching and Following a Vehicle” later in this section.

Once ACC has resumed, if there is no vehicle ahead, if the vehicle ahead is beyond the selected following gap, or if the vehicle has exited a sharp curve, then the vehicle speed will increase to the set speed.

Increasing Speed While ACC is at a Set Speed

If ACC is already activated, do one of the following:

- Use the accelerator to get to the higher speed. Briefly press and release SET– and release the accelerator pedal. The vehicle will now cruise at the higher speed. When the accelerator pedal is pressed, ACC will not brake because it is overridden. While overridden, the ACC indicator will turn blue on the instrument cluster and the head-up display, if equipped.
- Press and hold RES+ until the desired set speed is displayed, then release it.
- To increase speed in small increments, pressRES+ to the first detent. For each press, the vehicle goes 1 km/h (1 mph) faster.
- To increase speed in larger increments, press RES+ to the second detent. For each press, the vehicle speed increases to the next 5 km/h (5 mph) mark on the speedometer.

The set speed can also be increased while the vehicle is stopped.

- If stopped with the brake applied, press RES+ until the desired set speed is displayed.
- If ACC is holding the vehicle at a stop and there is another vehicle directly ahead, pressing RES+ will increase the set speed.
- Pressing RES+ when there is no longer a vehicle ahead or the vehicle ahead is pulling away and the brake is not applied will cause the ACC to resume.

When it is determined that there is no vehicle ahead or the vehicle ahead is beyond the selected following gap, then the vehicle speed will increase to the set speed.

The speedometer reading can be displayed in either English or metric units. See *Instrument Cluster* ⇨ *99*. The increment value used depends on the units displayed.

Reducing Speed While ACC is at a Set Speed

If ACC is already activated, do one of the following:

- Use the brake to get to the desired lower speed. Release the brake and press SET– . The vehicle will now cruise at the lower speed.
- Press and hold SET– until the desired lower speed is reached, then release it.
- To decrease speed in smaller increments, press SET– to the first detent. For each press, the vehicle goes about 1 km/h (1 mph) slower.
- To decrease speed in larger increments, pressSET– to the second detent. For each press, the vehicle speed decreases to the next 5 km/h (5 mph) mark on the speedometer.

The set speed can also be decreased while the vehicle is stopped.

- If stopped with the brake applied, press or hold SET– until the desired set speed is displayed.

The speedometer reading can be displayed in either English or metric units. See *Instrument Cluster* ⇨ *99*. The increment value used depends on the units displayed.

Selecting the Follow Distance Gap

When a slower moving vehicle is detected ahead within the selected following gap, ACC will adjust the

vehicle's speed and attempt to maintain the follow distance gap selected.

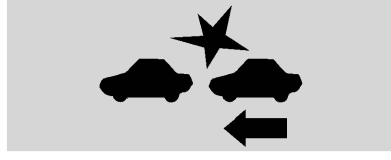
Press on the steering wheel to adjust the following gap. Each press cycles the gap button through three settings: Far, Medium, or Near.

When pressed, the current gap setting displays briefly on the instrument cluster and HUD, if equipped. The gap setting will be maintained until it is changed.

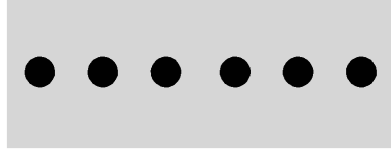
Since each gap setting corresponds to a following time (Far, Medium, or Near), the following distance will vary based on vehicle speed. The faster the vehicle speed, the further back your vehicle will follow a vehicle detected ahead. Consider traffic and weather conditions when selecting the following gap. The range of selectable gaps may not be appropriate for all drivers and driving conditions.

Changing the gap setting automatically changes the alert timing sensitivity (Far, Medium, or Near) for the Forward Collision Alert (FCA) feature. See *Forward Collision Alert (FCA) System* ⇨ *250*.

Alerting the Driver



With Head-Up Display



Without Head-Up Display

If ACC is engaged, driver action may be required when ACC cannot apply sufficient braking because of approaching a vehicle too rapidly.

When this condition occurs, the collision alert symbol will flash on the windscreen. Either eight beeps will sound from the front, or both sides of the Safety Alert Seat will pulse five times. See “Collision/Detection Systems” under *Vehicle Personalisation* ⇨ *121*.

See *Defensive Driving* ⇨ *191*.

Approaching and Following a Vehicle

The vehicle ahead indicator is in the instrument cluster and HUD display, if equipped.

The vehicle ahead indicator only displays when a vehicle is detected in your vehicle's path moving in the same direction.

If this symbol is not displaying, ACC will not respond to or brake for vehicles ahead.

ACC automatically slows the vehicle down and adjusts vehicle speed to follow the vehicle in front at the selected follow gap. The vehicle speed increases or decreases to follow the

vehicle in front of you, but will not exceed the set speed. It may apply limited braking, if necessary. When braking is active, the brake lamps will come on. The automatic braking may feel or sound different than if the brakes were applied manually. This is normal.

Overtaking a Vehicle While Using ACC

If the set speed is high enough, and the left indicator is used to overtake a vehicle ahead within the selected interval, ACC may assist by gradually accelerating the following vehicle prior to the lane change.

⚠ Warning

When using ACC to overtake a vehicle or change lane, the distance to the vehicle ahead being overtaken may be reduced. ACC may not apply sufficient acceleration or braking when overtaking a vehicle or changing lane. Always be ready to accelerate or brake manually to finish overtaking or changing lane.

Stationary or Very Slow-Moving Objects

⚠ Warning

ACC may not detect and react to stopped or slow-moving vehicles ahead of you. For example, the system may not brake for a vehicle it has never detected moving. This can occur in stop-and-go traffic or when a vehicle suddenly appears due to a vehicle ahead changing lanes. Your vehicle may not stop and could cause a crash. Use caution when using ACC. Your complete attention is always required while driving and you should be ready to take action and apply the brakes.

Irregular Objects Affecting ACC

ACC may have difficulty detecting the following objects:

- Vehicles with cargo extending from the rear.
- Non-standard shaped vehicles, such as vehicle transport, vehicles with a side car fitted, or horse-drawn carriages.
- Objects that are close to the front of your vehicle.

ACC Automatically Disengages

ACC may automatically disengage and the driver will need to manually apply the brakes to slow the vehicle when:

- The sensors are blocked.
- The Traction Control System (TCS) or StabiliTrak/ESC system has activated or been disabled.
- There is a fault in the system.
- The radar falsely reports blockage when driving in a desert or remote area with no other vehicles or roadside objects. A DIC message may display to indicate that ACC is temporarily unavailable.

The ACC indicator will turn white when ACC is no longer active.

In some cases, when ACC is temporarily unavailable, regular cruise control may be used. See “Switching Between ACC and Regular Cruise

Control" in this section. Always consider driving conditions before using either cruise control system.

Notification to Resume ACC

ACC will maintain a follow gap behind a detected vehicle and slow your vehicle to a stop behind that vehicle.

If the stopped vehicle ahead has driven away and ACC has not resumed, the vehicle ahead indicator will flash as a reminder to check traffic ahead before proceeding. In addition, the left and right sides of the Safety Alert Seat will pulse three times, or three beeps will sound. See "Alert Type" and "Adaptive Cruise Go Notifier" in "Collision/Detection Systems" under *Vehicle Personalisation* ⇨ *121*.

When the vehicle ahead drives away, ACC resumes automatically if the stop was brief. If necessary, press RES+ or the accelerator pedal to resume ACC. If stopped for more than two minutes or if the driver door is opened and the driver seat belt is unfastened, the ACC automatically applies the Electric Parking Brake (EPB) to hold the vehicle. The EPB status light will turn on. See *Electric Parking Brake* ⇨ *222*. To release the EPB, depress the accelerator pedal.

A DIC warning message may display indicating to shift to P (Park) before exiting the vehicle. See *Vehicle Messages* ⇨ *120*.

⚠ Warning

If ACC has stopped the vehicle, and if ACC is disengaged, turned off, or cancelled, the vehicle will no longer be held at a stop. The vehicle can move. When ACC is holding the vehicle at a stop, always be prepared to manually apply the brakes.

⚠ Warning

Leaving the vehicle without placing it in P (Park) can be dangerous. Do not leave the vehicle while it is being held at a stop by ACC. Always place the vehicle in P (Park) and turn off the ignition before leaving the vehicle.

ACC Override

If using the accelerator pedal while ACC is active, the ACC indicator turns blue on the instrument cluster and in the HUD (if equipped) to indicate that automatic braking will not occur. ACC will resume operation when the accelerator pedal is not being pressed.

⚠ Warning

The ACC will not automatically apply the brakes if your foot is resting on the accelerator pedal. You could crash into a vehicle ahead of you.

Bends in the Road

⚠ Warning

On bends, ACC may not detect a vehicle ahead in your lane. You could be startled if the vehicle accelerates up to the set speed, especially when following a vehicle exiting or entering exit ramps. You could lose control of the vehicle or crash. Do not use ACC while driving

(Continued)

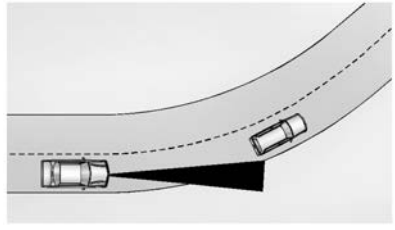
Warning (Continued)

on an entrance or exit ramp. Always be ready to use the brakes if necessary.

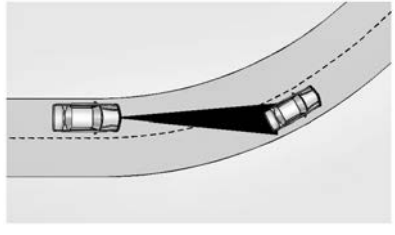
⚠ Warning

On bends, ACC may respond to a vehicle in another lane, or may not have time to react to a vehicle in your lane. You could crash into a vehicle ahead of you, or lose control of your vehicle. Give extra attention in bends and be ready to use the brakes if necessary. Select an appropriate speed while driving in bends.

ACC may operate differently in a sharp bend. It may reduce the vehicle speed if the bend is too sharp.



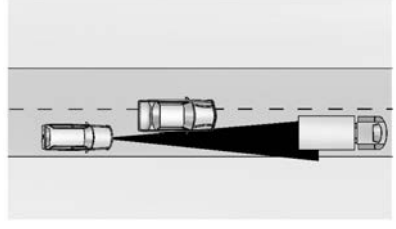
When following a vehicle and entering a bend, ACC may not detect the vehicle ahead and may accelerate to the set speed. When this happens, the vehicle ahead indicator will not appear.



ACC may detect a vehicle that is not in your lane and apply the brakes.

ACC may occasionally provide an alert and/or braking that is considered unnecessary. It could respond to vehicles in different lanes, signs, guardrails, and other stationary objects when entering or exiting a bend. This is normal operation. The vehicle does not need service.

Other Vehicle Lane Changes



ACC will not detect a vehicle ahead until it is completely in the lane. The brakes may need to be manually applied.

Objects Not Directly in Front of Your Vehicle

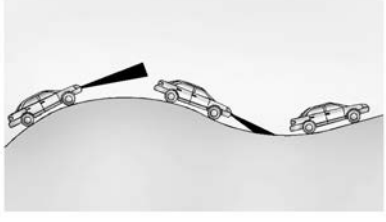
The detection of objects in front of the vehicle may not be possible if:

- The vehicle or object ahead is not within your lane.
- The vehicle ahead is shifted, not centred, or is shifted to one side of the lane.

Driving in Narrow Lanes

Vehicles in adjacent traffic lanes or roadside objects may be incorrectly detected when located along the roadway.

Do Not Use ACC on Hills



Do not use ACC when driving on steep hills as ACC may not detect a vehicle ahead.

Do Not Use ACC When Towing a Trailer

ACC should not be used when towing a trailer.

Disengaging ACC

There are three ways to disengage ACC:

- Step lightly on the brake pedal.
- Press .
- Press .

Erasing Speed Memory

The cruise control set speed is erased from memory if is pressed or if the ignition is turned off.

Weather Conditions Affecting ACC

System operation may be limited in snow, heavy rain, or road spray conditions.

⚠ Warning

Camera visibility may be limited and the ACC system may not work properly if the windscreen is not clear. Do not use ACC if moisture is present on the inside of the windscreen or the windscreen washer is used in cold weather. Turn on the front defroster and make sure the windscreen is clear before using ACC. Before driving, check that the windscreen wipers are in good condition and replace them if worn.

Accessory Installations and Vehicle Modifications

Do not install or place any object around the front camera windscreen area that would obstruct the front camera view.

Do not install objects on top of the vehicle that overhang and obstruct the front camera, such as a canoe, kayak, or other items that can be transported on a roof rack system. See *Roof Rack System* ⇨ *88*.

Do not modify the bonnet, headlights, or fog lights, as this may limit the camera's ability to detect an object.

Cleaning the Sensing System

The camera sensor on the windscreen behind the rear-view mirror and the radar sensors on the front of the vehicle can become blocked by snow, ice, dirt, or mud. These areas need to be cleaned for ACC to operate properly.

If ACC will not operate, regular cruise control may be available. See “Switching Between ACC and Regular

Cruise Control" in this section. Always consider driving conditions before using either cruise control system.

For cleaning instructions, see "Washing the Vehicle" under *Exterior Care* ⇨ *351*.

System operation may also be limited under snow, heavy rain, or road spray conditions.

Driver Assistance Systems

This vehicle may have features that work together to help avoid crashes or reduce crash damage while driving, reversing, and parking. Read this entire section before using these systems.

⚠ Warning

Do not rely on the Driver Assistance Systems. These systems do not replace the need for paying attention and driving safely. You may not hear or feel alerts or warnings provided by these

(Continued)

Warning (Continued)

systems. Failure to use proper care when driving may result in injury, death, or vehicle damage. See *Defensive Driving* ⇨ *191*.

Under many conditions, these systems will not:

- Detect children, pedestrians, bicyclists, or animals.
- Detect vehicles or objects outside the area monitored by the system.
- Work at all driving speeds.
- Warn you or provide you with enough time to avoid a crash.
- Work under poor visibility or bad weather conditions.
- Work if the detection sensor is not cleaned or is covered by ice, snow, mud, or dirt.
- Work if the detection sensor is covered up, such as with a sticker, magnet, or metal plate.

(Continued)

Warning (Continued)

- Work if the detection sensor's viewing zone is interrupted by an installed accessory, such as a bike rack, or hitch-mounted cargo carrier.
- Work if the area surrounding the detection sensor is damaged or not properly repaired.

Complete attention is always required while driving, and you should be ready to take action and apply the brakes and/or steer the vehicle to avoid crashes.

Audible or Safety Alert Seat

Some driver assistance features alert the driver of obstacles by beeping. To change the volume of the warning chime, see "Comfort and Convenience" under *Vehicle Personalisation* ⇨ *121*.

If equipped with the Safety Alert Seat, the driver seat cushion may provide a vibrating pulse alert instead of beeping. To change this, see "Collision/Detection Systems" under *Vehicle Personalisation* ⇨ *121*.

Cleaning

Depending on vehicle options, keep these areas of the vehicle clean to ensure the best driver assistance feature performance. Driver Information Centre (DIC) messages may display when the systems are unavailable or blocked.

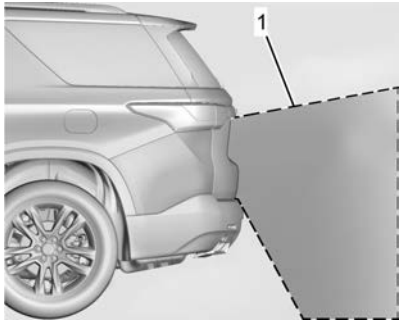
- Front and rear bumpers and the area below the bumpers
- Front grille and headlights
- Front camera lens in the front grille or near the front emblem
- Front side and rear side panels
- Outside of the windscreen in front of the rearview mirror
- Side camera lens on the bottom of the outside mirrors
- Rear side corner bumpers
- Rear Vision Camera above the license plate

Assistance Systems for Parking or Reversing

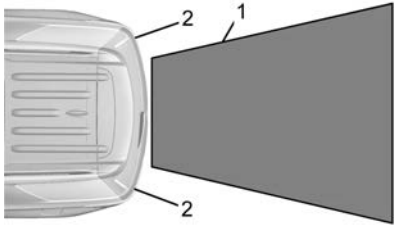
If equipped, the Rear Vision Camera (RVC), Surround Vision, Rear Park Assist (RPA), Front and Rear Park Assist (FRPA), Enhanced Automatic Parking Assist (APA), Reversing Warning and Reverse Automatic Braking (RAB) System, and Rear Cross Traffic Alert (RCTA) may help the driver park or avoid objects. Always check around the vehicle when parking or backing.

Rear Vision Camera (RVC)

When the gear lever is moved to R (Reverse), the Rear Vision Camera (RVC) displays an image of the area behind the vehicle in the infotainment display. The previous screen displays when the vehicle is shifted out of R (Reverse) after a short delay. To return to the previous screen sooner, press Home or Back on the infotainment system, shift into P (Park), or accelerate to a vehicle speed of approximately 12 km/h (8 mph) while in D (Drive).



1. View Displayed by the Camera



1. View Displayed by the Camera
2. Corners of the Rear Bumper

Displayed images may be farther or closer than they appear. The area displayed is limited and objects that are close to either corner of the bumper or under the bumper do not display.

A warning triangle may appear on the infotainment display to show that Rear Park Assist (RPA) or Rear Cross Traffic Alert (RCTA) has detected an object. This triangle changes from amber to red and increases in size the closer the object.

⚠ Warning

The camera(s) do not display children, pedestrians, bicyclists, crossing traffic, animals, or any other object outside of the cameras' field of view, below the bumper, or under the vehicle. Shown distances may be different from actual distances. Do not drive or park the vehicle using only these camera(s). Always check behind and around the vehicle before driving. Failure to use proper care may result in injury, death, or vehicle damage.

Surround Vision System

If equipped, Surround Vision shows an image of the area surrounding the vehicle, along with the front or rear camera views on the infotainment display. The front camera is in the grille or near the front emblem, the side cameras are on the bottom of the outside mirrors, and the rear camera is above the number plate.

The Surround Vision system can be accessed by selecting CAMERA in the infotainment display or when the vehicle is shifted into R (Reverse). To return to the previous screen sooner, when not in R (Reverse) press Home or Back on the infotainment system, change to P (Park), or reach a vehicle speed of approximately 12 km/h (8 mph) while in D (Drive).

⚠ Warning

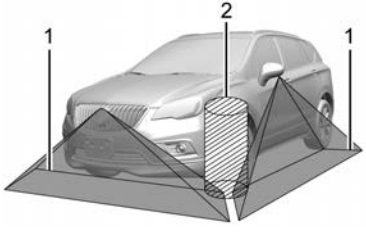
The Surround Vision cameras have blind spots and will not display all objects near the corners of the vehicle. Folding outside mirrors that are out of position may not display

(Continued)

Warning (Continued)

surround view correctly. Always check around the vehicle when parking or backing.

1. Views Displayed by the Surround Vision Cameras
2. Area Not Shown

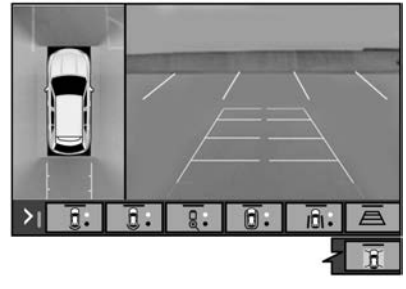


1. Views Displayed by the Surround Vision Cameras
2. Area Not Shown

⚠ Warning

The camera(s) do not display children, pedestrians, bicyclists, crossing traffic, animals, or any other object outside of the cameras' field of view, below the bumper, or under the vehicle. Shown distances may be different from actual distances. Do not drive or park the vehicle using only these camera(s). Always check behind and around the vehicle before driving. Failure to use proper care may result in injury, death, or vehicle damage.

Camera Views



Touch the camera view buttons along the bottom of the infotainment display.

Front/Rear Standard View : Displays an image of the area in front or behind the vehicle. Touch Front/Rear Standard View on the infotainment display when a camera view is active. Touching the button multiple times will toggle between front and rear camera views.

If equipped, the front view camera also displays when the Park Assist system detects an object within 30 cm (12 in).

Front/Rear Overhead View : Displays a front or rear overhead view of the vehicle. Touching the button will toggle between the two views.

Side Forward/Rearward View : Displays a view that shows objects next to the front or rear sides of the vehicle. Touch Side Forward/Rearward View on the infotainment display when a camera view is active. Touching the button multiple times will toggle between forward and rearward views. Park Assist and RCTA overlays are not available when Side Forward/Rearward view is active.

Guidance Lines : Displays available guidelines. The horizontal markings represent the distance from the vehicle.

Top Down View : Displays an image of the area surrounding the vehicle, along with other views in the infotainment display. Top Down can be enabled or disabled by touching the Top Down View button multiple times.

Park Assist

The vehicle may be equipped with Front and Rear Park Assist (FRPA). Under certain conditions, the Park Assist system can assist the driver during reversing and parking manoeuvres when the vehicle is driven at no more than 9 km/h (6 mph). An illuminated indicator in the Park Assist button indicates the system is ready.

Sensors located in the bumpers measure the distance between the vehicle and objects using sonar technology. These sensors are designed to detect certain objects up to 1.5 m (5 ft) behind and 1.2 m (4 ft) in front of your vehicle that are taller than 25 cm (10 in).

Different environmental conditions may affect whether and how far away the Park Assist system can detect objects. Keep the sensors clean of mud, dirt, snow, ice, and slush; and clean sensors after a car wash in freezing temperatures. Sensors that are not clean may not detect objects or may cause the system to alert when not required.

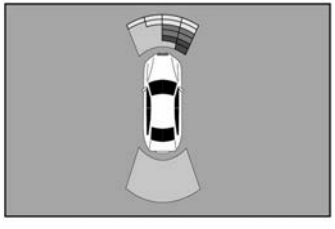
⚠ Warning

The Park Assist System is no substitute for careful and attentive driving. The Park Assist system does not detect children, pedestrians, cyclists, animals, or objects located below the bumper or that are too close or too far from the vehicle. It is not available at speeds greater than 9 km/h (6 mph). To prevent injury, death, or vehicle damage, even with Park Assist, always check the area around the vehicle and check all mirrors before moving forward or reversing.

How the System Works

The vehicle may have a Park Assist amphitheatre-like display on the cluster with bars that represent the estimated location of a detected object and the vehicle's distance from the object. As a detected object gets closer, more bars light up and change colour from yellow to amber to red.

Beeps sound to warn the driver of certain objects that are detected around the vehicle. The frequency of beeps increases as the vehicle gets closer to the object. When the object is very close to the vehicle, the beeps are continuous. Beeps for the front are higher pitched than beeps for the rear.



Turning the System On and Off

The Park Assist System can be turned on or off using the infotainment system. See *Vehicle Personalisation* ⇨ *121*.

The P button is used to turn on or off the Park Assist, which also turns the Reversing Warning and Reverse Automatic Braking (RAB) on or off at the same time. When the system is turned off, a system off message is shown on the display. This message disappears after a short period of time.

Turn off Park Assist when towing a trailer and when a bike rack is attached to prevent unwanted beeps and to ensure proper operation.

When the System Does Not Seem to Work Properly

If a service message displays, check the following conditions:

- The sensors may not be clean. Keep the vehicle's front and rear bumpers free of mud, dirt, snow, ice and slush. For cleaning instructions, see *Exterior Care* ⇨ *351*.
- The Park Assist sensors may be covered by frost or ice. Frost or ice can form around and behind the sensors and may not always be seen; this can occur after washing the vehicle in cold weather. The message may not clear until the frost or ice has melted.

If a service message displays and the above conditions do not exist, take the vehicle to your dealer for repairs.

If the Park Assist System does not activate due to a temporary condition, a system off message is shown on the display. This can occur under the following conditions:

- The driver has disabled the system.
- An object is currently blocking the rear sensors (for example, bike rack, tailgate, trailer hitch, etc.). Once the object is removed, Park Assist will return to normal operation.
- The bumper is damaged. Take the vehicle to your dealer for repairs.
- Other conditions, such as vibrations from a jackhammer or the compression of air brakes on a very large truck, are affecting system performance.

Automatic Parking Assist (APA)

Automatic Parking Assist (APA) with Braking

If equipped, under certain conditions APA with Braking can use sensors based on sonar technology along the vehicle's front, rear and sides to detect a parking spot, and then automatically

park the vehicle with some driver assistance. The vehicle will automatically manoeuvre into a detected spot moving at or near idle speed. It does this by automatically steering and braking while the driver is responsible for acceleration and changing gear as needed. The driver must always be prepared to apply braking or additional acceleration, as needed. A display and audible beeps help to guide the parking manoeuvres.

⚠ Warning

APA may not always detect objects in the parking space, objects that are not rigid (e.g. shrubs and chain-link fences), objects below the bumper, objects high off the ground (e.g. flatbed trucks), hanging objects, objects below ground level such (e.g. large potholes), or moving objects (e.g. pedestrians, cyclists, vehicles). Always verify that the parking space is appropriate for parking a vehicle. APA may not respond to changes in the parking space, such as the movement of an

(Continued)

Warning (Continued)

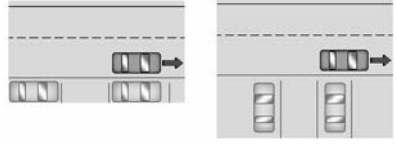
adjacent vehicle, or a person or object entering the parking space. APA does not detect or avoid traffic that is behind or alongside the vehicle. Always be prepared to stop the vehicle during the parking manoeuvre.

How to Activate Automatic Parking

To activate APA, press the soft-touch button or hard switch P for the system to begin searching for a parking space while driving forward at no greater speed than 30 km/h (18 mph). By default, APA searches for parallel parking spaces to the right of the vehicle up to the sensors' range of 1.5 m (5 ft). To search for a parking space to the left, turn on the left indicator or, if available, change the side selection in the infotainment display. To switch the parking mode between parallel and perpendicular press and hold P while searching for a valid parking spot or, if available, change the parking mode in the infotainment display.

APA cannot park in all empty parking spots. The parking spot must:

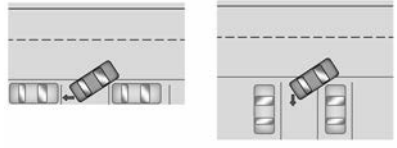
- Be sufficiently large to fit the vehicle comfortably.
- Have an adjacent vehicle, wall, or pillar for the system to align to.



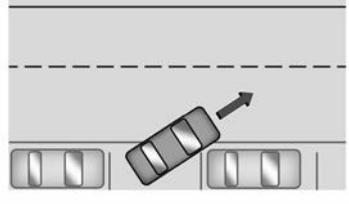
After completely passing an eligible parking spot, a beep sounds and a red stop symbol is displayed in the driver information centre. Generally, APA selects the nearest empty parking spot behind the vehicle, but under some conditions may select a space that is further back. Slow down and bring the vehicle to a complete stop to begin.

Follow the displayed instructions. When instructed to drive in reverse, change to R (Reverse) while holding the brakes. The steering wheel will vibrate briefly as a reminder to remove hands from the steering wheel. After the vibration stops, check your surroundings and release the brakes to begin automatic parking. As the vehicle automatically steers, and brakes into the parking spot, check the surroundings and continue to apply acceleration if necessary and change gears as needed. Be prepared to stop to avoid vehicles, pedestrians, or objects.

A progress arrow displays the status of the parking manoeuvre. Once automatic parking is finished and the vehicle has come to a full stop, APA will beep and display a message indicating parking is complete. Move the gear lever to P (Park) and apply the parking brake



Automatic Parking



Automatic Unparking

How to Cancel Automatic Parking

To cancel automatic parking or automatic unparking at any time, press P. Be prepared to resume full control of the vehicle. APA holds the vehicle until the parking brake or brake is applied, or the gear lever is moved to P (Park). To start driving away, press the brakes and change to D (Drive).

Certain vehicle conditions and driver interference may also cancel automatic parking:

- The driver manually steers the vehicle.
- The maximum allowed speed is exceeded.
- There is a failure with the APA system.
- Electronic stability control or antilock brakes are activated.
- The parking brake is applied.
- Driver unbuckles the seat belt and opens the door.

System Limitations

Automatic Parking Assist has certain limitations. The system cannot:

- Continue to operate if the manoeuvre speed exceeds 5 km/h (3 mph).
- Detect whether a parking space is legal or restricted.
- Detect pavement markings or lines.

- Park the vehicle closely lined up with the vehicle next to it, particularly if the spot is approached at an angle or if the parking space is angled.
- Park exactly centred in a very large spot.
- Always detect short curbs.
- Operate while towing any trailer.
- Function the vehicle is raised or lowered by air suspension,if equipped.

When the System Does Not Seem to Work Properly

If the vehicle does not reverse into the expected parking space, the system could be manoeuvring the vehicle into a previously detected space.

Reverse Automatic Braking (RAB)

Reversing Warning and Reverse Automatic Braking (RAB)

Vehicles with Adaptive Cruise Control (ACC) have the Reversing Warning System and Reverse Automatic Braking (RAB) system. When in R (Reverse), Reversing Warning alerts of rear objects at vehicle speeds greater than 8 km/h (5 mph), and RAB may automatically brake hard at speeds between 1–32 km/h (0.5–20 mph).

The Reversing Warning System will beep once from the rear when an object is first detected, or pulse twice on both sides of the Safety Alert Seat. When the system detects a potential crash, beeps will be heard from the rear, or five pulses will be felt on both sides of the Safety Alert Seat. There may also be a brief, sharp application of the brakes.

⚠ Warning

The Reversing Warning System only operates at speeds greater than 8 km/h (5 mph). It does not detect children, pedestrians, bicyclists, animals, or objects below the bumper or that are too close or too far from the vehicle. In some situations, such as at higher reversing speeds, there may not be enough time for the short, sharp

(Continued)

Warning (Continued)

application of the vehicle brake system to occur. To prevent injury, death, or vehicle damage, even with the Reversing Warning System, always check the area around the vehicle and check all mirrors before reversing.

When the vehicle is in R (Reverse), if the system detects the vehicle is reversing too fast to avoid a crash with a detected object behind your vehicle in your path, it may automatically brake hard to a stop to help avoid or reduce the harm caused by a reversing crash.

⚠ Warning

RAB may not avoid many types of reversing crashes. Do not wait for the automatic braking to apply. This system is not designed to replace driver braking and only works in R (Reverse) when an object is detected directly behind the vehicle. It may not brake or stop in time to

(Continued)

Warning (Continued)

avoid a crash. It will not brake for objects when the vehicle is moving at very low speeds. It does not detect children, pedestrians, bicyclists, animals, or objects below the bumper or that are too close or too far from the vehicle. To prevent injury, death, or vehicle damage, even with RAB, always check the area around the vehicle before and while reversing.

Pressing the brake pedal after the vehicle comes to a stop will release RAB. If the brake pedal is not pressed soon after the stop, the Electric Parking Brake (EPB) may be set. When it is safe, press the accelerator pedal firmly at any time to override RAB.

⚠ Warning

There may be instances where unexpected or undesired automatic braking occurs. If this happens, either press the brake pedal or firmly press the accelerator pedal to

(Continued)

Warning (Continued)

release the brakes from the RAB system. Before releasing the brakes, check the RVC and check the area around the vehicle to make sure it is safe to proceed.

Rear Pedestrian Alert

Under certain conditions, this feature can provide alerts for a pedestrian within the system's range directly behind the vehicle. This feature only works in R (Reverse) below 12 km/h (8 mph), and detects pedestrians up to 8 m (26 ft) away during daytime driving. During nighttime driving, feature performance is very limited.

Rear Pedestrian Alert Indicator

When a pedestrian is detected within the system's range directly behind the vehicle, this symbol flashes amber on the infotainment display, along with two beeps from the rear, or if equipped, two pulses from both sides of the driver seat. When a pedestrian is detected close to the vehicle, the symbol flashes red on the infotainment display, along with seven beeps from the rear, or if equipped, seven pulses from both sides of the driver seat.

⚠ Warning

Rear Pedestrian Alert does not automatically brake the vehicle. It also does not provide an alert unless it detects a pedestrian, and it may not detect all pedestrians if:

- The pedestrian is not directly behind the vehicle, fully visible to the Rear Vision Camera (RVC), or standing upright.
- The pedestrian is part of a group.
- The pedestrian is a child.
- Visibility is poor, including nighttime conditions, fog, rain, or snow.

(Continued)

Warning (Continued)

- The RVC is blocked by dirt, snow, or ice.
- The RVC, tail lights, or reversing lamps are not cleaned or in proper working condition.
- The vehicle is not in R (Reverse).

To help avoid death or injury, always check for pedestrians around the vehicle before reversing. Be ready to take action and apply the brakes. See *Defensive Driving* ⇨ *191*. Keep the RVC, tail lights, and reversing lamps clean and in good repair.

Rear Pedestrian Alert can be set to Off or Alert. See “Rear Pedestrian Detection” in “Collision/Detection Systems” under *Vehicle Personalisation* ⇨ *121*. If equipped, alerts can be set to beeps or seat pulses. See “Alert Type” in “Collision/Detection Systems” under *Vehicle Personalisation* ⇨ *121*.

Rear Cross Traffic Alert (RCTA) System

If equipped, Rear Cross Traffic Alert (RCTA) displays a red warning triangle with an arrow pointing left or right on the infotainment display to warn of traffic coming from the left or right. This system detects objects coming from up to 20 m (65 ft) from the left or right-hand side of the vehicle. When an object is detected, either three beeps sound from the left or right or three Safety Alert Seat pulses occur on the left or right side, depending on the direction of the detected vehicle.

Driving With a Trailer

Use caution while reversing when towing a trailer. The RCTA feature is automatically disabled when a trailer is attached to the vehicle.

Turning the Features On or Off

RCTA can be turned on or off using the infotainment system. See “Collision/Detection Systems” under *Vehicle Personalisation* ⇨ *121*.

Assistance Systems for Driving

If equipped, when driving the vehicle in a forward gear, Forward Collision Alert (FCA), Lane Keep Assist (LKA), Side Blind Zone Alert (SBZA), Lane Change Alert (LCA), Automatic Emergency Braking (AEB), and/or the Front Pedestrian Braking (FPB) System can help to avoid a collision or reduce collision damage.

Forward Collision Alert (FCA) System

If equipped, the FCA system may help to avoid or reduce the harm caused by front-end crashes. When approaching a vehicle ahead too quickly, FCA provides a red flashing alert on the windscreen and rapidly beeps or pulses the driver seat. FCA also lights an amber visual alert if following another vehicle much too closely.

FCA detects vehicles within a distance of approximately 60 m (197 ft) and operates at speeds above 8 km/h (5 mph). If the vehicle has Adaptive Cruise Control (ACC), it can detect

vehicles to distances of approximately 110 m (360 ft) and operates at all speeds. See *Adaptive Cruise Control (Advanced)* ⇨ *231*.

⚠ Warning

FCA is a warning system and does not apply the brakes. When approaching a slower-moving or stopped vehicle ahead too rapidly, or when following a vehicle too closely, FCA may not provide a warning with enough time to help avoid a crash. It also may not provide any warning at all. FCA does not warn of pedestrians, animals, signs, crash barriers, bridges, construction barrels, or other objects. Be ready to take action and apply the brakes. See *Defensive Driving* ⇨ *191*.

FCA can be disabled. See "Collision/ Detection Systems" under *Vehicle Personalisation* ⇨ *121*.

Detecting the Vehicle Ahead

FCA warnings will not occur unless the FCA system detects a vehicle ahead. When a vehicle is detected, the vehicle ahead indicator will display green. Vehicles may not be detected on bends, motorway exit ramps, or hills, due to poor visibility; or if a vehicle ahead is partially blocked by pedestrians or other objects. FCA will not detect another vehicle ahead until it is completely in the driving lane.

⚠ Warning

FCA does not provide a warning to help avoid a crash, unless it detects a vehicle. FCA may not detect a vehicle ahead if the FCA sensor is blocked by dirt, snow, or ice, or if the windscreen is damaged. It may also not detect a vehicle on winding

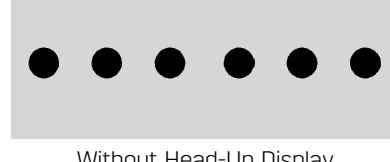
(Continued)

Warning (Continued)

or hilly roads, or in conditions that can limit visibility such as fog, rain, or snow, or if the headlamps or windscreen are not cleaned or in proper condition. Keep the windscreen, headlamps, and FCA sensors clean and in good repair.

Collision Alert

With Head-Up Display



Without Head-Up Display

When your vehicle approaches another detected vehicle too rapidly, the red FCA display will flash on the windscreen. Also, eight rapid high-pitched beeps will sound from the front, or both sides of the Safety Alert Seat will pulse five times. When this Collision Alert occurs, the brake system may prepare for driver braking to occur more rapidly which can cause a brief, mild deceleration. Continue to apply the brake pedal as needed.

Tailgating Alert

The vehicle ahead indicator will display amber when you are following a vehicle ahead much too closely.

Selecting the Alert Timing

The Collision Alert control is on the steering wheel. Press to set the FCA timing to Far, Medium, or Near. The first button press shows the current setting on the DIC. Additional button presses will change this setting. The chosen setting will remain until it is changed and will affect the timing of both the Collision Alert and the Tailgating Alert features. The timing of both alerts will vary based on vehicle speed. The faster the vehicle speed, the farther away the alert will occur. Consider traffic and weather conditions when selecting the alert timing. The range of selectable alert timings may not be appropriate for all drivers and driving conditions.

If your vehicle is equipped with Adaptive Cruise Control (ACC), changing the FCA timing setting automatically changes the following gap setting (Far, Medium, or Near).

Following Distance Indicator

The following distance to a moving vehicle ahead in your path is indicated in following time in seconds on the Driver Information Centre (DIC). See *Driver Information Centre (DIC)* ⇨ *115*. The minimum following time is 0.5 seconds away.

Unnecessary Alerts

FCA may provide unnecessary alerts for turning vehicles, vehicles in other lanes, objects that are not vehicles, or shadows. These alerts are normal operation and the vehicle does not need service.

Cleaning the System

If the FCA system does not seem to operate properly, this may correct the issue:

- Clean the outside of the windscreen in front of the rearview mirror.
- Clean the entire front of the vehicle.
- Clean the headlights.

Automatic Emergency Braking (AEB)

The AEB system may help avoid or reduce the damage caused by front-end collisions. AEB also includes Intelligent Brake Assist (IBA). When the system detects a vehicle in the path ahead that is travelling in the same direction, it can provide a boost to braking, or automatically brake the vehicle, to avoid a collision. This can help avoid or lessen the severity of crashes when driving in a forward gear. Depending on the situation, the vehicle may automatically brake moderately or hard. This Automatic Emergency Braking can only engage if a vehicle is detected. When detecting a vehicle, the Forward Collision Alert (FCA) vehicle ahead indicator light will be illuminated. See *Forward Collision Alert (FCA) System* ⇨ *250*.

The system works when driving in a forward gear between 8 km/h (5 mph) and 80 km/h (50 mph), or on vehicles with Adaptive Cruise Control (ACC), above 4 km/h (2 mph). It can detect vehicles up to approximately 60 m (197 ft).

⚠ Warning

AEB is an emergency crash preparation feature and is not designed to avoid collisions. Do not rely on AEB to brake the vehicle. AEB will not brake outside of its operating speed range and only responds to detected vehicles.

AEB may not:

- Detect a vehicle ahead on winding or hilly roads.
- Detect all vehicles, especially vehicles with a trailer, tractors, muddy vehicles, etc.
- Detect a vehicle when weather limits visibility, such as in fog, rain, or snow.

(Continued)

Warning (Continued)

- Detect a vehicle ahead if it is partially blocked by pedestrians or other objects.

Complete attention is always required while driving, and you should be ready to take action and apply the brakes and/or steer the vehicle to avoid crashes.

AEB may slow the vehicle to a complete stop to try to avoid a potential collision. If this happens, AEB may engage the Electric Parking Brake (EPB) to hold the vehicle at a stop. Release the EPB or firmly press the accelerator pedal.

⚠ Warning

AEB may automatically brake the vehicle suddenly in situations where it is unexpected and undesired. It could respond to a turning vehicle ahead, guardrails, signs, and other non-moving

(Continued)

Warning (Continued)

objects. To override AEB, firmly depress the accelerator pedal, if it is safe to do so.

Intelligent Brake Assist (IBA)

IBA may activate when the brake pedal is applied quickly by providing a boost to braking based on the speed of approach and distance to a vehicle ahead.

Minor brake pedal pulsations or pedal movement during this time is normal and the brake pedal should continue to be applied as needed. IBA will automatically disengage only when the brake pedal is released.

⚠ Warning

IBA may increase vehicle braking in situations when it may not be necessary. You could block the flow of traffic. If this occurs, take your foot off the brake pedal and then apply the brakes as needed.

FCA and AEB may also detect a cyclist ahead. FCA provides a green when a cyclist is detected ahead, and displays amber if you follow a cyclist too closely. When approaching a cyclist ahead too quickly, FCA provides a red flashing alert on the windscreen and beeps rapidly or pulses the driver seat. AEB can provide a boost to braking or automatically brake the vehicle to help avoid or reduce the harm caused by front-end collisions with a nearby cyclist when driving in a forward gear.

AEB and IBA can be disabled through vehicle personalisation. See “Collision/ Detection Systems” under *Vehicle Personalisation* ⇨ *121*.

⚠ Warning

Using AEB or IBA while towing a trailer could cause you to lose control of the vehicle and cause a collision. Turn the system to Alert or Off when towing a trailer.

A system unavailable message may display if:

- The front of the vehicle or windscreen is not clean.
- Heavy rain or snow is interfering with object detection.
- There is a problem with the StabiliTrak/Electronic Stability Control (ESC) system.

The AEB system does not need service.

Front Pedestrian Braking (FPB) System

If equipped, the FPB system may help avoid or reduce the harm caused by front-end crashes with nearby pedestrians and cyclists when driving in a forward gear. FPB displays an amber indicator, , when a nearby pedestrian or cyclist is detected ahead. When approaching a detected pedestrian or cyclist too quickly, FPB provides a red flashing alert on the windscreen and rapidly beeps or pulses the driver seat. FPB can provide a boost to braking or automatically brake the vehicle. This system includes Intelligent Brake Assist (IBA), and the Automatic Emergency Braking (AEB) system may also respond to

pedestrians and cyclists. See *Automatic Emergency Braking (AEB)* ⇨ *253*.

The FPB system can detect and alert to pedestrians and cyclists in a forward gear at speeds between 8 km/h (5 mph) and 80 km/h (50 mph). During daytime driving, the system detects pedestrians up to a distance of approximately 40 m (131 ft). During night-time driving, system performance is very limited.

⚠ Warning

FPB does not provide an alert or automatically brake the vehicle, unless it detects a pedestrian or cyclist. FPB may not detect pedestrians, including children, or cyclists:

- When the pedestrian or cyclist is not directly ahead, fully visible, or standing upright, or when part of a group.
- Due to poor visibility, including night-time conditions, mist, rain, or snow.

(Continued)

Warning (Continued)

- If the FPB sensor is blocked by dirt, snow, or ice.
- If the headlights or windscreen are not cleaned or in proper condition.

Be ready to take action and apply the brakes. For more information, see *Defensive Driving* ⇨ *191*. Keep the windscreen, headlights, and FPB sensor clean and in good repair.

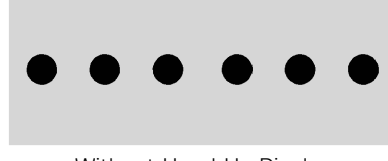
FPB can be set to Off, Alert, or Alert and Brake through vehicle personalisation. See “Collision/ Detection Systems” under *Vehicle Personalisation* ⇨ *121*.

Detecting the Pedestrian Ahead

FPB alerts and automatic braking will not occur unless the FPB system detects a pedestrian or cyclist. When a nearby pedestrian or cyclist is detected in front of the vehicle, the pedestrian ahead indicator will display amber.

Front Pedestrian Alert

With Head-Up Display



Without Head-Up Display

When the vehicle approaches a pedestrian or cyclist ahead too rapidly, the red FPB alert display will flash on the windscreen. Eight rapid high-pitched beeps will sound from the front, or both sides of the Safety Alert Seat will pulse five times. When this Pedestrian Alert occurs, the brake

system may prepare for driver braking to occur more rapidly which can cause a brief, mild deceleration. Continue to apply the brake pedal as needed. Cruise control may be disengaged when the Front Pedestrian Alert occurs.

Automatic Braking

If FPB detects it is about to crash into a pedestrian or cyclist directly ahead, and the brakes have not been applied, FPB may automatically brake moderately or brake hard. This can help to avoid some very low speed pedestrian crashes or reduce pedestrian injury. FPB can automatically brake to detected pedestrians between 8 km/h (5 mph) and 80 km/h (50 mph). Automatic braking levels may be reduced under certain conditions, such as higher speeds.

If this happens, Automatic Braking may engage the Electric Parking Brake (EPB) to hold the vehicle at a stop. Release the EPB. A firm press of the accelerator pedal will also release Automatic Braking and the EPB.

⚠ Warning

FPB may alert or automatically brake the vehicle suddenly in situations where it is unexpected and undesired. It could falsely alert or brake for objects similar in shape or size to pedestrians or cyclists, including shadows. This is normal operation and the vehicle does not need service. To override Automatic Braking, firmly press the accelerator pedal, if it is safe to do so.

Automatic Braking can be disabled through vehicle personalisation. See “Front Pedestrian Detection” in “Collision/Detection Systems” under *Vehicle Personalisation* ⇨ *121*.

⚠ Warning

Using the Front Pedestrian Braking system while towing a trailer could cause you to lose control of the vehicle and crash. Turn the system to Alert or Off when towing a trailer.

Cleaning the System

If FPB does not seem to operate properly, cleaning the outside of the windscreen in front of the rear-view mirror may correct the issue.

Side Blind Zone Alert (SBZA)

If equipped, the SBZA system is a lane-changing aid that assists drivers to avoid a collision with vehicles moving in the side blind zone, or blind spot areas. When the vehicle is in a forward gear, the left or right side mirror display will light up if a moving vehicle is detected in that blind zone. If the indicator is activated and a vehicle is also detected on the same side, the display will flash as an extra warning not to change lanes. Since this system is part of the Lane Change Alert (LCA) system, read the entire LCA section before using this feature.

Lane Change Alert (LCA)

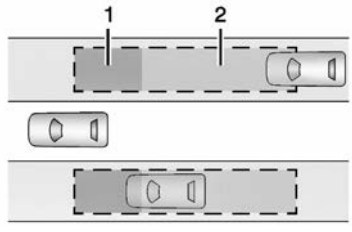
If equipped, the LCA system is a lane-changing aid that assists drivers with avoiding lane change crashes that occur with moving vehicles in the

side blind zone (or spot) areas or with vehicles rapidly approaching these areas from behind. The LCA warning display will light up in the corresponding outside side mirror and will flash if the indicator is on.

⚠ Warning

LCA does not alert the driver to vehicles outside of the system detection zones, pedestrians, bicyclists, or animals. It may not provide alerts when changing lanes under all driving conditions. Failure to use proper care when changing lanes may result in injury, death, or vehicle damage. Before making a lane change, always check mirrors, glance over your shoulder, and use the indicators.

LCA Detection Zones



1. SBZA Detection Zone
2. LCA Detection Zone

The LCA sensor covers a zone of approximately one lane over from both sides of the vehicle, or 3.5 m (11 ft). The height of the zone is approximately between 0.5 m (1.5 ft) and 2 m (6 ft) off the ground. The Side Blind Zone Alert (SBZA) warning area starts at approximately the middle of the vehicle and goes back 5 m (16 ft). Drivers are also warned of vehicles rapidly approaching from up to 70 m (230 ft) behind the vehicle.

How the System Works

The LCA symbol lights up in the side mirrors when the system detects a moving vehicle in the next lane over that is in the side blind zone or rapidly approaching that zone from behind. A lit LCA symbol indicates it may be unsafe to change lanes. Before making a lane change, check the LCA display, check mirrors, glance over your shoulder, and use the indicators.

Left Side Mirror Display

Right Side Mirror Display

When the vehicle is started, both outside mirror LCA displays will briefly come on to indicate the system is operating. When the vehicle is in a forward gear, the left or right side mirror display will light up if a moving vehicle is detected in the next lane over in that blind zone or rapidly approaching that zone. If the indicator is activated in the same direction as a

detected vehicle, this display will flash as an extra warning not to change lanes.

LCA can be disabled through vehicle personalisation. When you disable LCA, SBZA is also disabled. See *Vehicle Personalisation ⇨ 121*. If LCA is disabled by the driver, the LCA mirror displays will not light up.

When the System Does Not Seem to Work Properly

The LCA system requires some driving for the system to calibrate to maximum performance. This calibration may occur more quickly if the vehicle is driving on a straight motorway with traffic and roadside objects (e.g., guardrails, barriers).

LCA displays may not come on when passing a vehicle quickly, for a stopped vehicle, or when towing a trailer. The LCA detection zones that extend back from the side of the vehicle do not move further back when a trailer is towed. Use caution while changing lanes when towing a trailer. LCA may alert to objects attached to the vehicle, such as a trailer, bicycle, or object extending out to either side of the vehicle. Attached objects may also interfere with the detection of vehicles. This is normal system operation; the vehicle does not need service.

LCA may not always alert the driver to vehicles in the next lane over, especially in wet conditions or when driving on sharp curves. The system does not need to be serviced. The system may light up due to guardrails, signs, trees, shrubs, and other non-moving objects. This is normal system operation; the vehicle does not need service.

LCA may not operate when the LCA sensors in the left or right corners of the rear bumper are covered with mud, dirt, snow, ice, or slush, or in heavy rainstorms. For cleaning instructions, see “Washing the Vehicle” under *Exterior Care ⇨ 351*. If the DIC still displays the system unavailable message after cleaning both sides of the vehicle toward the rear corners of the vehicle, see your dealer.

If the LCA displays do not illuminate when moving vehicles are in the side blind zone or are rapidly approaching this zone and the system is clean, the system may need service. Take the vehicle to your dealer.

Traffic Sign Assistant

Traffic sign assistant recognises designated traffic signs via the front camera located behind the windscreen in front of the interior rear view mirror, and displays the detected speed limit in the Driver Information Centre (DIC). Additionally, speed limit information from the navigation system map database may be used.

Caution

The system is intended to assist the driver within a defined speed range to discern certain traffic signs. Always pay attention to posted speed limit signs.

Do not ignore traffic signs which are not displayed by the system.

(Continued)

Caution (Continued)

The system does not discern any signs other than the conventional traffic signs that might give or end a speed limit. It may not detect some electronic speed signs.

Depending on the weather conditions or problems with traffic signs, a traffic sign may not be recognised or a sign different from the actual traffic sign may be displayed.

Do not let this special feature tempt you into taking risks when driving.

Always adapt vehicle speed to the road conditions.

Driver assistance systems do not relieve the driver from full responsibility for vehicle operation.

Traffic signs that are detected are:

- Construction Zones
- Speed Limit
- School Zone
- Constraint Signs

Display Indication

The currently detected speed limit is displayed in the DIC until the next speed limit or end of speed limit sign is detected.

The current valid speed limit is displayed permanently in the lower line of the DIC or upper left of the instrument cluster, depending on the vehicle. If a speed sign with an add on sign is detected, a ⊕ symbol is also displayed.

The indication of multiple signs on the display is possible. A **(–)** symbol in a frame indicates there is a sign detected which cannot be clearly identified by the system.

See *Driver Information Centre (DIC)* ⇨ *115*.

Alert Function

The alert function can be turned on or off from the Traffic Sign Memory page. See *Driver Information Centre (DIC)* ⇨ *115*.

Once activated, and if the Traffic Sign Memory page is currently not displayed, a newly detected speed limit is briefly displayed as a pop-up alert in the DIC.

Exceeding Indicated Speed Limit

If the indicated traffic sign speed limit is exceeded by 5 km/h (3 mph) or more, the permanently displayed traffic sign symbol will flash until the vehicle speed is reduced to or below the indicated speed limit.

System Reset

The content of the traffic sign display can be cleared in the Traffic Sign Menu from the Traffic Sign Memory page by selecting Reset and confirmed by pressing the thumbwheel.

Upon successful reset, a **(–)** symbol displays until the next traffic sign is detected or provided by the navigation system map data. In some cases, traffic sign memory is cleared automatically by the system.

See *Driver Information Centre (DIC)* ⇨ *115*.

Navigation System Traffic Sign Detection

The currently displayed sign can either originate from sign detection using the camera, or from the navigation system map data. If the currently displayed sign originates from map data and the map information changes, a new sign will be displayed. This may lead to detection of a new sign, although no sign on the road may have been passed.

Limitations

Traffic sign memory may not operate correctly if:

- The area of the windscreen, where the front camera is located, is not clean or is affected by foreign objects, e.g. stickers, window tinting, etc.
- Traffic signs are completely or partially covered, are too low or high or difficult to discern.
- Traffic signs are incorrectly mounted or are damaged.
- Traffic signs do not comply with the approved traffic sign standards.
- The speed limit is displayed by certain types of electronic speed signs.
- There are adverse environmental conditions, e.g. heavy rain, snow, direct sunlight or shadows.
- The headlights are dirty or not correctly aligned when driving at night.
- The navigation map data is out of date.

Lane Keep Assist (LKA)

If equipped, LKA may help avoid crashes due to unintentional lane departures. This system uses a camera to detect lane markings. The LKA may be ready to assist at speeds between 50 km/h (31 mph) and 180 km/h (112 mph). LKA may assist by gently turning the steering wheel if the vehicle approaches a detected lane marking. It may also provide a Lane Departure Warning (LDW) alert if the vehicle crosses a detected lane marking. This system is not intended to keep the vehicle centred in the lane. LKA will not assist and alert if the indicator is active in the direction of lane departure, or if it detects that you are accelerating, braking or actively steering. LKA can be overridden by turning the steering wheel. If the system detects you are steering intentionally across a lane marker, the LDW will not be given. Do not expect the LDW to occur when you are intentionally crossing a lane marker.

⚠ Warning

The LKA system does not continuously steer the vehicle. It may not keep the vehicle in the lane or give a Lane Departure Warning (LDW) alert, even if a lane marking is detected.

The LKA and LDW systems may not:

- Provide an alert or enough steering assist to avoid a lane departure or crash.
- Detect lane markings under poor weather or visibility conditions. This can occur if the windscreen or headlamps are blocked by dirt,

(Continued)

Warning (Continued)

snow or ice; if they are not in proper condition; or if the sun shines directly into the camera.

- Detect road edges.
- Detect lanes on winding or hilly roads.

If LKA only detects lane markings on one side of the road, it will only assist or provide an LDW alert when approaching the lane on the side where it has detected a lane marking. Even with LKA and LDW, you must steer the vehicle. Always keep your attention on the road and maintain proper vehicle position within the lane, or vehicle damage, injury or death could occur. Always keep the windscreen, headlamps and camera sensors clean and in good repair. Do not use LKA in bad weather conditions or on roads with unclear lane markings, such as construction zones.

⚠ Warning

Using LKA on slippery roads could cause loss of control of the vehicle and a crash. Turn the system off.

⚠ Warning

LKA will not alert the driver if a towed trailer crosses into an adjacent lane of travel. Serious injury or property damage may occur if the trailer moves into another lane. Always monitor the trailer position while towing to make sure it is within the same lane as the towing vehicle.

How the System Works

LKA uses a camera sensor installed on the windscreen ahead of the rearview mirror to detect lane markings. It may provide brief steering assistance if it detects an unintended lane departure. It may further provide an audible alert, or the driver seat may pulse, indicating that a lane marking has been crossed. The system does not provide a Lane Departure Warning (LDW) when intentionally steering across a lane marker.

To turn LKA on and off, press on the centre console. If equipped, the indicator light on the button illuminates when LKA is on and turns off when LKA is disabled.

When activated, is white, if equipped, indicating that the system is not ready to assist. is green if LKA is ready to assist. LKA may assist by gently turning the steering wheel if the vehicle approaches a detected lane marking. is amber when assisting. It may also provide a Lane Departure Warning (LDW) alert by flashing amber if the vehicle crosses a detected lane marking. Additionally, there may be three beeps, or the driver seat may pulse three times, on the right or left, depending on the lane departure direction.

Take Steering

The LKA system does not continuously steer the vehicle. If LKA does not detect active driver steering,

an alert and chime may be provided. Steer the vehicle to dismiss. LKA may become temporarily unavailable after repeated false steering alerts.

When the System Does Not Seem to Work Properly

The system performance may be affected by:

- Close vehicles ahead.
- Sudden lighting changes, such as when driving through tunnels.
- Banked roads.
- Roads with poor lane markings, such as two-lane roads.

If the LKA system is not functioning properly when lane markings are clearly visible, cleaning the windscreen may help.

A camera blocked message may display if the camera is blocked. Some driver assistance systems may have reduced performance or not work at all. An LKA or LDW unavailable message may display if the systems are temporarily unavailable. This message could be due to a blocked camera. The LKA system does not need service. Clean the outside of the windscreen behind the rearview mirror.

LKA assistance and/or LDW alerts may occur due to tar marks, shadows, cracks in the road, temporary or construction lane markings, or other road imperfections. This is normal system operation; the vehicle does not need service. Turn LKA off if these conditions continue.

Fuel

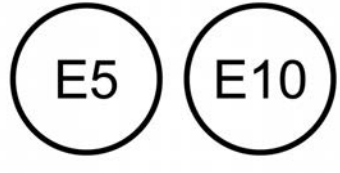
Top Tier Fuel (Petrol)

GM recommends the use of TOP TIER Detergent Gasoline to keep the engine clean, reduce engine deposits, and maintain optimal vehicle performance. Look for the TOP TIER Logo or see www.toptiergas.com for a list of TOP TIER Detergent Gasoline resellers and applicable countries.

TOP TIER
Detergent Gasoline

CATEGORIE SUPERIEURE
Essences Détergentes

Recommended Fuel (Petrol)



Use the recommended fuel for proper vehicle maintenance. Use unleaded petrol with a posted octane rating of 95 RON or higher and with ethanol up to 10% by volume. Unleaded petrol rated at 91 RON can be used, but acceleration and fuel economy will be reduced, and an audible knocking noise may be heard. If this occurs, use petrol rated at 95 RON as soon as possible. If heavy knocking is heard when using unleaded petrol rated at 95 RON, the engine needs service.

Prohibited Fuels (Petrol)

Caution

Do not use fuels with any of the following conditions; doing so may damage the vehicle and void its warranty:

(Continued)

Caution (Continued)

- Fuel with any amount of methanol, methylal, ferrocene and aniline. These fuels can corrode metal fuel system parts or damage plastic and rubber parts.
- Fuel containing metals such as methylcyclopentadienyl manganese tricarbonyl (MMT), which can damage the emissions control system and spark plugs.
- Fuel with a posted octane rating of less than the recommended fuel. Using this fuel will lower fuel economy and performance, and may decrease the life of the emissions catalyst.

Fuel Additives (Diesel)

GM recommends the use of ACDelco Diesel Fuel conditioner. This will help maintain optimal engine performance. GM does not recommend other aftermarket diesel additives.

In the event you refuel using low-quality diesel, GM recommends adding ACDelco Fuel System Treatment Plus-Diesel to the vehicle's fuel tank. ACDelco Fuel System Treatment Plus-Diesel can help clean engine deposits and is available at your GM dealership.

Fuel Additives (Petrol)

TOP TIER Detergent Gasoline is highly recommended for use with your vehicle. If your country does not have TOP TIER Detergent Petrol, add ACDelco Fuel System Treatment Plus-Petrol to the vehicle's petrol fuel tank at every oil change or 15 000 km (9,000 mi), whichever occurs first. TOP TIER Detergent Petrol and ACDelco Fuel System Treatment Plus-Petrol will help keep your vehicle's engine fuel deposit free and performing optimally. If you are unable to obtain ACDelco Fuel System Treatment Plus - Gasoline, consult your retailer for the GM-approved additive available in your country.

Fuel for Diesel Engines

The selection of a high-quality fuel is important for maintaining optimum vehicle performance. Diesel fuel should meet or exceed the minimum requirements in the most current versions of the local fuel standards.

Do not use fuel with more than 15 ppm sulphur. If available, use of diesel fuel with less sulphur is highly recommended for better emissions. In countries where 15 ppm or lower sulphur is not available, do not use diesel fuel with sulphur greater than 50 ppm. In these countries only, the vehicle is already designed to accommodate this level of sulphur.

Caution

Use of fuel that does not comply with the required technical standards may lead to engine power loss, increased wear, or engine damage and may void your warranty.

Some improper fuels are:

- Diesel fuel with the addition of petrol.
- Diesel fuel mixed with engine oil or automatic gearbox fluid.
- Triglyceride fuels, such as raw vegetable oil or animal fat, in any form, including with blends of diesel or biodiesel.
- Marine diesel fuel and fuel oils.
- Diesel-water emulsions, such as Aquazole.
- Aftermarket diesel fuel additives, which contain alcohol, organo-metallic additives, or water emulsifiers.

Caution

If the vehicle is accidentally refuelled with petrol, do not continue driving the vehicle. Driving the vehicle will damage the fuel system. Have the vehicle towed to a qualified technician to have the petrol removed from the tank and fuel system. Refuel with Ultra Low Sulphur Diesel fuel. It is also recommended to have the fuel system flushed with Ultra Low Sulphur Diesel, to ensure all petrol is removed.

Some conditions, such as dirty fuel, may decrease fuel filter life and a CHANGE FUEL FILTER message may come on in the Driver Information Centre (DIC).

Climate Grade Diesel Fuels

At temperatures below 0 °C (32 °F), avoid using biodiesel blends above 7% by volume. Using such a fuel may cause fuel filter plugging, system gelling, and freezing, which may adversely affect vehicle starting.

Severe winter grade diesel fuel, such as 1-D diesel fuel or Arctic grade diesel fuel, can be used in extreme cold temperatures (below -18 °C or 0 °F); however, doing so will reduce power and fuel economy. Avoid using severe winter grade fuel in warm or hot climates. It may result in stalling, poor starting, and damage to the fuel injection system.

Fuels improperly blended for cold temperature operation may result in restricted fuel filters. The vehicle is equipped with a fuel heating system to prevent gelling or waxing of conventional diesel fuel and biodiesel blends, but may not prevent all cases.

In the event of severe winter conditions, the fuel filter may become clogged by wax naturally present in the fuel. To unclog it, move the vehicle to a warm garage area and allow the filter to warm up. The fuel filter may need to be replaced. See *Fuel Filter Replacement (Diesel)* ⇨ *269*.

Biodiesel

Biodiesel is a renewable fuel produced from vegetable oils or animal fats that have been chemically modified to make it compatible with diesel fuel.

Caution

Do not use homemade biodiesel or home test kits because the quality cannot be verified by approved scientific methods. Do not use raw vegetable oil or other unmodified bio-oils, fats, or blends of vegetable oil with diesel. They could damage the fuel system and engine, and damage would not be covered by the vehicle warranty.

Biodiesel Blends

Fuels with a biodiesel content up to 7% by volume may be used (e.g., named B7). Only use biodiesel blends up to 7% by volume that comply with your country's or region's fuel standards.

Caution

Do not use blends containing more than 7% by volume biodiesel. Any engine, fuel system, or exhaust after-treatment system damage would not be covered by the vehicle warranty.

As a renewable fuel, biodiesel provides some environmental benefits. However, biodiesel has unique properties and needs to be handled differently than diesel fuel. Its use presents additional risks and may not be appropriate in all situations. Certain vehicle operating modes increase these risks and should be avoided.

Biodiesel fuel quality degrades with time and exposure to high temperature more quickly than Ultra Low Sulphur Diesel fuel. More frequent refuelling provides the best opportunity to have a supply of fresh fuel. Storage at hot ambient temperatures will accelerate biodiesel degradation.

Owners who use little fuel, or who have vehicles stored for extended periods of time, should avoid the use of biodiesel blended fuels above 5% by volume. When vehicles are stored for longer than one month, they should be run out of biodiesel to below one quarter tank, refuelled with biodiesel-free diesel fuel, and driven several kilometres (miles) before storage.

Cold Weather Operation (Diesel)

At temperatures below 0 °C (32 °F), avoid using biodiesel blends above 5% by volume. Using such a fuel may cause fuel filter plugging, system gelling, and freezing, which may adversely affect vehicle starting.

Severe winter grade diesel fuel, such as 1-D diesel fuel or Arctic grade diesel fuel, can be used in extreme cold temperatures (below -18 °C or 0 °F); however, doing so will reduce power and fuel economy. Avoid using severe winter grade fuel in warm or hot climates. It may result in stalling, poor starting, and damage to the fuel injection system.

Fuels improperly blended for cold temperature operation may result in restricted fuel filters. The vehicle is equipped with a fuel heating system to prevent gelling or waxing of conventional diesel fuel and biodiesel blends, but it may not prevent all cases.

In severe winter conditions, the fuel filter may become clogged by wax naturally present in the fuel. To unclog it, move the vehicle to a warm garage area and allow the filter to warm up. The fuel filter may need to be replaced. See *Fuel Filter Replacement (Diesel)* ⇨ *269*.

Water in Fuel (Diesel)

Improper fuel tank inspection or cleaning, or contaminated fuel from suppliers, may cause water to be pumped into the fuel tank along with the diesel fuel. If a WATER IN FUEL message displays in the DIC, the water must be drained immediately.

⚠ Warning

Diesel fuel containing water is still combustible. You or others could be burned. If the fuel needs to be drained, keep sparks, flames, and smoking materials away from the mixture.

Caution

Water in the diesel fuel may corrode internal components of the fuel system and lead to severe damage. It may also support fungus or bacteria growth, which may damage the fuel system. Even with a diesel fuel biocide, the fuel system may still need to be cleaned. Your retailer can advise of the appropriate solution.

If the fuel tank needs to be purged to remove water, see your retailer or a qualified technician. Improper purging may damage the fuel system.

Water in Fuel Troubleshooting

If a WATER IN FUEL message illuminates:

Problem	Recommended Action
Message displays but turns off during the ignition cycle.	The fuel filter is approximately half full of water. Drain the water immediately. See "Removing Water from the Fuel Filter" later in this section.
Message displays and stays on.	Drain the fuel filter immediately. If no water can be drained, and the temperature is below freezing, then water may be frozen in the filter. Move the vehicle to a warm location to thaw the water, and then drain the fuel. If water still does not drain, see your retailer.
Immediately after refuelling, message displays and stays on.	A large amount of water is in the fuel tank. Drain the fuel filter immediately. If the message remains illuminated, or illuminates again without refuelling, then fuel tank purging is required. See your dealer. If the message displays and the vehicle stalls or running is rough, do not drive until the water-contaminated fuel is drained.

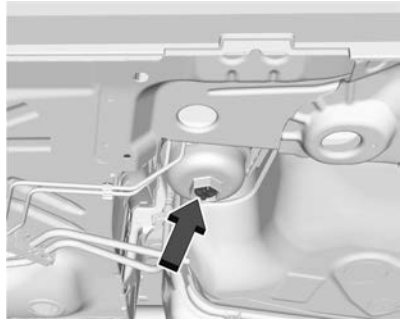
Caution

Driving with this message on may damage the fuel injection system and the engine. If the message illuminates directly after refuelling, water has been pumped into the fuel tank. Turn off the engine and drain the water immediately.

Removing Water from the Fuel Filter

To drain water:

1. Turn the engine off and apply the parking brake.
2. Place a container under the filter drain valve, which is on the bottom of the fuel filter.



3. Turn the drain plug anticlockwise using a suitable tool.
4. With the engine turned off, press and hold ENGINE START/STOP without applying the brake for five seconds to place the vehicle in Service Mode. See *Ignition Positions* ⇨ *205*. Wait approximately five seconds, and then press ENGINE START/STOP again to turn it off. This operation will enhance water flow out of the filter. The filter is drained as soon as diesel fuel emerges from the port.
5. Retighten the drain plug by turning it clockwise.
6. Properly dispose of the water-contaminated fuel.
7. Start the engine and let it run for a few minutes. During the draining process, air may have entered the fuel system. If the engine stalls, the fuel system may need to be primed. See “Fuel Priming” following.

Fuel Priming

For the fuel system to work properly, there must not be any air in the fuel lines. If air does enter, the engine may not start and the fuel lines will need to be primed before operating the vehicle.

If air is present, the following may have occurred:

- The vehicle has run out of fuel.
- The fuel filter was removed.
- The fuel lines were removed or disconnected.
- The fuel filter water drain valve was opened while the engine was running.

To prime the fuel lines:

1. With the engine turned off, press and hold ENGINE START/STOP without applying the brake for five seconds to place the vehicle in Service Mode. See *Ignition Positions* ⇨ *205*. Wait approximately five seconds and press ENGINE START/STOP again to turn it off. Perform this step three times or more while the engine is turned off.
2. Press and hold ENGINE START/STOP while applying the brake for a maximum of 40 seconds at a time, with five seconds between attempts, until the engine starts. If the engine tries to run, but does not run smoothly, increase the engine revolutions slightly by using the accelerator pedal. This will help force air through the system.
3. Repeat Step 2 if the engine stalls and will not restart.
4. After a few attempts, if the engine still does not start, see your retailer.

Running Out of Fuel (Diesel)

⚠ Warning

Diesel fuel is flammable. It could start a fire if something ignites it, and people could be burned. Do not allow it to spill on hot engine parts, and keep matches or other ignition sources away.

If the engine has stalled due to running out of fuel, add at least 7.6 L (2 gal) of fuel if parked on a level surface, or up to 18.9 L (5 gal) of fuel if parked on a slope, and perform the procedure under “Fuel Priming” previously in this section.

Fuel Filter Replacement (Diesel)

⚠ Warning

Diesel fuel is flammable. It could start a fire if something ignites it, and people could be burned. Do not

(Continued)

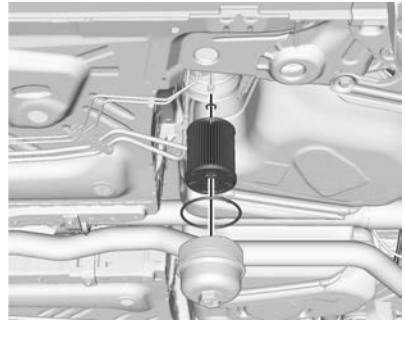
Warning (Continued)

allow it to spill on hot engine parts, and keep matches or other ignition sources away.

The fuel filter is under the vehicle on the driver side in front of the left-hand rear tyre.

1. Drain any water from the filter. See “Removing Water from Fuel Filter” in *Water in Fuel (Diesel)* ⇨ *266*.

   Keep the engine off until the procedure is completed.
2. Apply the parking brake.



3. Remove the filter element cap by turning it anticlockwise.
4. Remove the filter element and O-rings. If there is any dirt on the filter sealing surface, clean it off.
5. Install the new filter element and O-rings.
6. Reinstall and tighten the filter cap to the housing.
7. Use the fuel filter priming procedure to prime the fuel filter. See “Fuel Priming” in *Water in Fuel (Diesel)* ⇨ *266*.
8. Start the engine and let it idle for five minutes. Check the fuel filter and air bleed valve for leaks.

Filling the Tank (Diesel)

An arrow on the fuel gauge indicates which side of the vehicle the fuel door is on. See *Fuel Gauge* ⇨ *102*. Do not refill the diesel fuel and Diesel Exhaust Fluid (DEF) at the same time.

⚠ Warning

Fuel vapours and fuel fires burn violently and can cause injury or death.

Follow these guidelines to help avoid injuries to you and others:

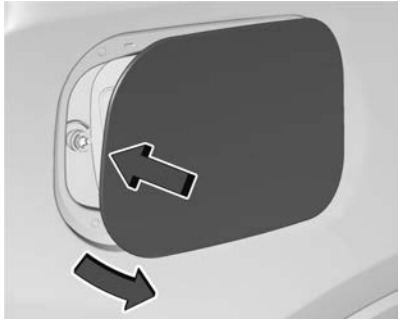
- Read and follow all the instructions on the fuel pump island.
- Turn off the engine when refuelling.
- Keep sparks, flames, and smoking materials away from fuel.
- Do not leave the fuel pump unattended.
- Avoid using electronic devices while refuelling.
- Do not re-enter the vehicle while pumping fuel.
- Keep children away from the fuel pump and never let children pump fuel.

(Continued)

Warning (Continued)

- Before touching the fill nozzle, touch a metallic object to discharge static electricity from your body.
- Fuel can spray out if the fuel cap is opened too quickly. This spray can happen if the tank is nearly full, and is more likely in hot weather. Open the fuel cap slowly and wait for any hissing noise to stop, then unscrew the cap all the way.

The fuel door unlocks when the vehicle doors are unlocked. See *Remote Keyless Entry (RKE) System Operation* ⇨ *7*.



To open the fuel filler flap, push and release the rearward centre edge of the flap.

Turn the fuel cap anticlockwise to remove. When refuelling, hang the fuel cap from the hook on the fuel door. Fully insert and latch the fill nozzle, begin refuelling.

⚠ Warning

Overfilling the fuel tank by more than three clicks of a standard fill nozzle may cause:

(Continued)

Warning (Continued)

- Vehicle performance issues, including engine stalling and damage to the fuel system.
- Fuel spills.
- Under certain conditions, fuel ignites.

Diesel fuel can foam when filling the tank. The automatic pump nozzle may shut off, even if the tank is not full. Wait for the foaming to stop, and then fill the tank more slowly. Be careful not to spill fuel. Wait five seconds after pumping before removing the fill nozzle. Clean fuel from painted surfaces as soon as possible. See *Exterior Care* ⇨ *351*.

Reinstall the cap by turning it clockwise until it clicks. Push the fuel door closed until it latches.

⚠ Warning

If a fire starts while you are refuelling, do not remove the fill nozzle. Shut off the flow of fuel by

(Continued)

Warning (Continued)

shutting off the pump or by notifying the station attendant. Leave the area immediately.

Caution

If a new fuel cap is needed, be sure to get the right type of cap from your dealer. The wrong type of fuel cap may not fit properly and could damage the fuel system.

Accidental Refuelling with Petrol

Caution

If the vehicle is accidentally refuelled with petrol, do not continue driving the vehicle except to reach a location where it can be stopped safely. Driving the vehicle will damage the engine. Tow the vehicle for service. Have the petrol removed from the tank and fuel system.

Filling the Tank (Petrol)

An arrow on the fuel gauge indicates which side of the vehicle the fuel door is on. See *Fuel Gauge* ⇨ *102*.

⚠ Warning

Fuel vapours and fuel fires burn violently and can cause injury or death.

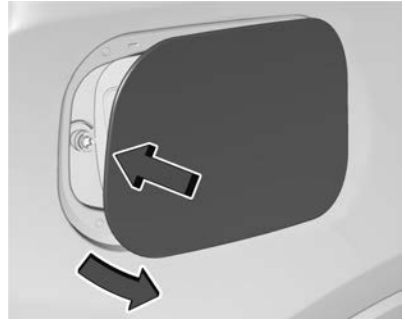
Follow these guidelines to help avoid injuries to you and others:

- Read and follow all the instructions on the fuel pump island.
- Turn off the engine when refuelling.
- Keep sparks, flames, and smoking materials away from fuel.
- Do not leave the fuel pump unattended.
- Avoid using electronic devices while refuelling.
- Do not re-enter the vehicle while pumping fuel.

(Continued)

Warning (Continued)

- Keep children away from the fuel pump and never let children pump fuel.
- Before touching the fill nozzle, touch a metallic object to discharge static electricity from your body.
- Fuel may spray out if the filler nozzle is inserted too quickly. This spray can happen if the tank is nearly full, and is more likely in hot weather. Insert the filler nozzle slowly and wait for any hissing noise to stop before starting to fill fuel.



To open the fuel filler flap, push and release the rearward centre edge of the flap.

The capless refuelling system does not have a fuel cap. Fully insert and latch the fill nozzle, begin refuelling.

⚠ Warning

Overfilling the fuel tank by more than three clicks of a standard fill nozzle may cause:

- Vehicle performance issues, including engine stalling and damage to the fuel system.
- Fuel spills.

(Continued)

Warning (Continued)

- Under certain conditions, fuel ignites.

Be careful not to spill fuel. Wait five seconds after you have finished refuelling before removing the filler nozzle. Clean fuel from painted surfaces as soon as possible. See *Exterior Care* ⇨ *351*. Push the fuel door closed until it latches.

⚠ Warning

If a fire starts while you are refuelling, do not remove the fill nozzle. Shut off the flow of fuel by shutting off the pump or by notifying the station attendant. Leave the area immediately.

Filling the Tank with a Portable Fuel Container

If the vehicle runs out of fuel and must be filled from a portable fuel container:

1. Locate the capless funnel adapter in the rear cargo area under the load floor tray.
2. Insert and latch the funnel into the capless fuel system.

⚠ Warning

Attempting to refuel from a portable fuel container without using the funnel adapter may cause fuel spillage and may damage the capless fuel system. This could cause a fire. You or others could be badly burned and the vehicle could be damaged.

3. Remove and clean the funnel adapter and return it to the storage location.

Filling a Portable Fuel Container

⚠ Warning

Never fill a portable fuel container while it is in the vehicle. Static electricity discharge from the container can ignite the fuel vapour. You or others could be badly burned and the vehicle could be damaged. To help avoid injury to you and others:

- Dispense fuel only into approved containers.
- Do not fill a container while it is inside a vehicle, in a vehicle's boot, on a pickup platform, or on any surface other than the ground.
- Bring the fill nozzle in contact with the inside of the fill opening before operating the nozzle. Maintain contact until filling is complete.

(Continued)

Warning (Continued)

- Keep sparks, flames, and smoking materials away from fuel.
- Avoid using electronic devices while filling fuel.

Trailer Towing

General Towing Information

Only use towing equipment that has been designed for the vehicle. Contact your retailer or trailer retailer for assistance with preparing the vehicle to tow a trailer. Read the entire section before towing a trailer.

To tow a disabled vehicle, see *Towing the Vehicle ⇨ 349*.

Driving Characteristics and Towing Tips

⚠ Warning

You can lose control when towing a trailer if the correct equipment is not used or the vehicle is not driven properly. For example, if the trailer is too heavy or the trailer brakes are inadequate for the load, the vehicle may not stop as expected. You and others could be seriously injured. The vehicle may also be damaged, and the repairs would not be covered by the vehicle warranty. Pull a trailer only if all the steps in this section have been followed. Ask your dealer for advice and information about towing a trailer with the vehicle.

Driving with a Trailer

Trailering is different than just driving the vehicle by itself. Trailer towing means changes in handling, acceleration, braking, durability, and fuel economy. Successful, safe trailering takes correct equipment, and it has to be used properly.

The following information has many time-tested, important trailering tips and safety rules. Many of these are important for your safety and that of your passengers. Read this section carefully before pulling a trailer.

When towing a trailer:

- Become familiar with and follow all state and local laws that apply to trailer towing. These requirements vary from state to state.
- State laws may require the use of extended side view mirrors. Even if not required, you should install extended side view mirrors if your visibility is limited or restricted while towing.
- Do not tow a trailer during the first 800 km (500 mi) of vehicle use to prevent damage to the engine, axle, or other parts.
- It is recommended to perform the first oil change before heavy towing.

- During the first 800 km (500 mi) of trailer towing, do not drive over 80 km/h (50 mph) and do not make starts at full throttle.
- Vehicles can tow in D (Drive). If the transmission downshifts too often, a lower gear may be selected using Manual Mode See *Manual Mode* ⇨ *220*.

If equipped, the following driver assistance features should be turned off when towing a trailer:

- Adaptive Cruise Control (ACC)
- Super Cruise Control
- Lane Keep Assist (LKA)
- Park Assist
- Automatic Parking Assist (APA)
- Reverse Automatic Braking (RAB)

If equipped, the following driver assistance features should be turned to alert or off when towing a trailer:

- Automatic Emergency Braking (AEB)
- Intelligent Brake Assist (IBA)
- Front Pedestrian Braking (FPB)

If equipped with Lane Change Alert (LCA), the LCA detection zones that extend back from the side of the vehicle do not move further back when a trailer is towed. Use caution while changing lanes when towing a trailer.

If equipped with Rear Cross Traffic Alert (RCTA), exercise caution while reversing when towing a trailer, as the RCTA detection zones that extend out from the back of the vehicle do not move further back when a trailer is towed.

⚠ Warning

To prevent serious injury or death from carbon monoxide (CO) when towing a trailer:

- Do not drive with the tailgate, boot/hatch, or rear-most window open.
- Fully open the air outlets on or under the instrument panel.

(Continued)

Warning (Continued)

- Adjust the climate control system to a setting that only allows in outside air. See “Climate Control Systems” in the Index.

For more information about carbon monoxide, see *Engine Exhaust* ⇨ *211*.

Towing a trailer requires experience. The combination of the vehicle and trailer is longer and not as responsive as the vehicle itself. Get used to the handling and braking of the combination by driving on a level road surface before driving on public roads.

The trailer structure, the tyres, and the brakes must all be rated to carry the intended load. Inadequate trailer equipment can cause the combination to operate in an unexpected or unsafe manner. Before driving, inspect all trailer hitch parts and attachments, safety chains, electrical connectors, lamps, tyres, and mirrors. See *Towing Equipment* ⇨ *280*. If the trailer has electric brakes, start the combination moving and then manually apply the

trailer brake controller to check that the trailer brakes work. During the trip, occasionally check that the load and trailer are secure and that the lamps and any trailer brakes are working.

Towing with a Stability Control System

When towing, the stability control system might be heard. The system reacts to vehicle movement caused by the trailer, which mainly occurs during cornering. This is normal when towing heavier trailers.

Following Distance

Stay at least twice as far behind the vehicle ahead as you would when driving without a trailer. This can help to avoid heavy braking and sudden turns.

Overtaking

More overtaking distance is needed when towing a trailer. The combination of the vehicle and trailer will not accelerate as quickly and is much longer than the vehicle alone. You need to drive much farther beyond the overtaken vehicle before turning back into the lane. Overtaking on level roadways. Avoid overtaking on hills if possible.

Reversing

Hold the bottom of the steering wheel with one hand. To move the trailer to the left, move that hand to the left. To move the trailer to the right, move that hand to the right. Always reverse slowly and, if possible, have someone guide you.

Making Turns

Caution

Turn more slowly and make wider arcs when towing a trailer to prevent damage to your vehicle. Making very sharp turns could cause the trailer to make contact with the vehicle.

Make wider turns than normal when towing, so the trailer does not go over soft shoulders, over kerbs, or collide with road signs, trees, or other objects. Always indicate turns well in advance. Do not steer or brake suddenly.

Driving on Grades

Reduce speed and change to a lower gear before starting down a long or steep downhill grade. If the transmission is not shifted down, the brakes may overheat and result in reduced braking efficiency.

The vehicle can tow in D (Drive). Shift the transmission to a lower gear if the transmission shifts too often under heavy loads and/or hilly conditions.

When towing at higher altitudes, engine coolant will boil at a lower temperature than at lower altitudes. If the engine is turned off immediately after towing at high altitude on steep uphill grades, the vehicle could show signs similar to engine overheating. To avoid this, let the engine run, preferably on level ground, with the transmission in P (Park) for a few minutes before turning the engine off. If the overheat warning comes on, see *Engine Overheating ⇨ 299*.

Parking on Hills

⚠ Warning

To prevent serious injury or death, always park your vehicle and trailer on a level surface when possible.

When parking your vehicle and your trailer on a hill:

1. Press the brake pedal, but do not shift into P (Park) yet. Turn the wheels into the curb if facing downhill or into traffic if facing uphill.
2. Have someone place chocks under the trailer wheels.
3. When the wheel chocks are in place, gradually release the brake pedal to allow the chocks to absorb the load of the trailer.
4. Reapply the brake pedal. Then apply the parking brake and shift into P (Park).
5. Release the brake pedal.

Leaving After Parking on a Hill

1. Apply and hold the brake pedal.
   - Start the engine.
   - Shift into a gear.
   - Release the parking brake.
2. Release the brake pedal.
3. Drive slowly until the trailer is clear of the chocks.
4. Stop and have someone pick up and store the chocks.

Maintenance When Trailer Towing

The vehicle needs to be serviced more often when used to tow trailers. See *Maintenance Schedule (Petrol)* ⇨ *361* or *Maintenance Schedule (Diesel)* ⇨ *364* for more information. It is especially important to check the automatic gearbox fluid, engine oil, axle lubricant, belts, cooling system, and brake system before and during each trip.

Check periodically that all nuts and bolts on the trailer hitch are tight.

Engine Cooling When Trailer Towing

The cooling system may temporarily overheat during severe operating conditions. See *Engine Overheating* ⇨ *299*.

Trailer Towing

Caution

Towing a trailer improperly can damage the vehicle and result in costly repairs not covered by the vehicle warranty. To tow a trailer correctly, follow the directions in this section and see your retailer for important information about towing a trailer with the vehicle.

Trailering is different than just driving the vehicle by itself. Trailer towing means changes in handling, acceleration, braking, durability, and fuel economy. Successful, safe trailering takes correct equipment, and it has to be used properly.

The following information has many time-tested, important trailering tips and safety rules. Many of these are

important for your safety and that of your passengers. Read this section carefully before pulling a trailer.

Trailer Weight

⚠ Warning

Never exceed the towing capacity for your vehicle.

Safe trailer towing requires monitoring of the weight, speed, altitude, road gradients, outside temperature, dimensions of the front of the trailer, and how frequently the vehicle is used to tow a trailer.

When towing a trailer, the combined weight of the vehicle, vehicle contents, trailer, and trailer contents must be below all of the maximum weight ratings for the vehicle, including:

- GCWR: Gross Combined Weight Rating
- GVWR: Gross Vehicle Weight Rating
- Maximum Trailer Weight Rating
- Maximum Trailer Tongue Weight Rating

See “Trailer Brakes” under *Towing Equipment* ⇨ *280*.

The only way to be sure that the weight does not exceed any of these ratings is to weigh the towing vehicle and trailer combination, fully loaded for the trip, getting individual weights for each of these items.

⚠ Warning

You and others could be seriously injured or killed if the trailer is too heavy or the trailer brakes are inadequate for the load. The vehicle may be damaged, and the repairs would not be covered by the vehicle warranty.

Only tow a trailer if all the steps in this section have been followed. Ask your retailer for advice and information about towing a trailer.

Gross Combined Weight Rating (GCWR)

GCWR is the total allowable weight of the completely loaded vehicle and trailer including any fuel, passengers, cargo, equipment, and accessories. Do not exceed the GCWR for your vehicle. The GCWR for the vehicle is in the following Tow Rating Chart.

Gross Vehicle Weight Rating (GVWR)

For information about the vehicle's maximum load capacity, see *Vehicle Load Limits* ⇨ *200*. When calculating the GVWR with a trailer attached, the trailer tongue weight must be included as part of the weight the vehicle is carrying.

Maximum Trailer Weight

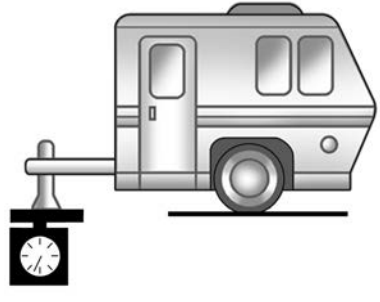
The maximum trailer weight rating is calculated assuming the towing vehicle has a driver, a front seat passenger, and all required trailer towing equipment. This value represents the heaviest trailer the vehicle can tow, but it may be necessary to reduce the trailer weight to stay within the GCW, GVWR, maximum trailer tongue load, or GAWR-RR for the vehicle.

Use the tow rating chart to determine how much the trailer can weigh, based on the vehicle model and options.

Vehicle	Maximum Trailer Weight	GCWR*	Maximum Tongue Weight
2.0L L4 Gas Engine (LSY) with Base Cooling System	1 800 kg (3968 lb)	4175 kg (9204 lb)	72 kg (159 lb)
2.0L L4 Gas Engine (LSY) with Heavy Duty Cooling System	2000 kg (4409 lb)	4375 kg (9645 lb)	80 kg (176 lb)
2.0L L4 Diesel Engine (LSQ)	1 600 kg (3,527 lb)	3 965 kg (8,740 lb)	64 kg (141 lb)
*The Gross Combination Weight Rating (GCWR) is the total allowable weight of the completely loaded vehicle and trailer including any passengers, cargo, equipment, and conversions. The GCWR for the vehicle should not be exceeded.			

Maximum Trailer Tongue Weight Rating

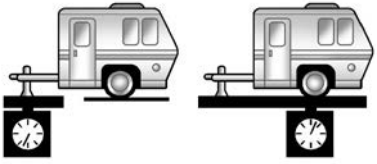
The Maximum Trailer Tongue Weight Rating is the allowable trailer tongue weight that the vehicle can support using a conventional trailer hitch. It may be necessary to reduce the overall trailer weight to stay within the maximum trailer tongue weight rating while still maintaining the correct trailer load balance.



The trailer tongue weight contributes to the Gross Vehicle Weight (GVW). GVW includes the kerb weight of your vehicle, any passengers, cargo, equipment and the trailer tongue weight. Vehicle options, passengers, cargo, and equipment reduce the maximum allowable tongue weight the vehicle can carry, which also reduces the maximum allowable trailer weight.

Trailer Load Balance

The correct trailer load balance must be maintained to ensure trailer stability. Incorrect load balance is a leading cause of trailer sway.



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The trailer tongue weight (1) should be 4% of the loaded trailer weight (2). Some specific trailer types, such as boat trailers, fall outside of this range. Always refer to the trailer owner's manual for the recommended trailer tongue weight for each trailer. Never exceed the maximum loads for your vehicle, hitch and trailer.

The trailer load balance percentage is calculated as: weight (1) divided by weight (2) times 100.

After loading the trailer, separately weigh the trailer and then the trailer tongue to see if the weights are appropriate for your vehicle. If the trailer weight is too high, it may be possible to transfer some of the cargo into your vehicle. If the trailer tongue weight is too high or too low, it may be possible to rearrange some of the cargo inside the trailer.

Do not exceed the maximum allowable tongue weight for your vehicle. Use the shortest hitch extension available to position the hitch ball closer to your vehicle. This will help reduce the effect of the trailer tongue weight on the trailer hitch and the rear axle.

If a cargo carrier is used in the trailer hitch receiver, choose a carrier that positions the load as close to the vehicle as possible. Make sure the total weight, including the carrier, is no more than half of the maximum allowable tongue weight for the vehicle.

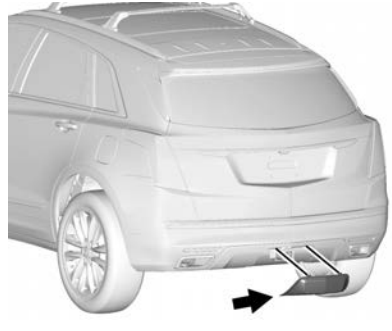
Ask your retailer for trailer towing information or assistance.

Towing Equipment

Hitches

If equipped with trailer towing, the vehicle has a factory installed swivel style trailer hitch with an integrated ball neck.

Hitch Cover



To remove hitch cover, if equipped:

1. Remove the two fasteners on the lower tabs.
2. Pull the lower edge of the cover to about a 45 degree angle.
3. Pull the cover downward to disengage the upper attachments.

To reinstall the hitch cover:

1. Hold the cover at a 45 degree angle to the vehicle and push the upper tabs into the slots in the bumper.
2. Push the bottom of the cover forward until the lower tabs line up with the lower slots.
3. Snap the hitch cover into place by pushing the upper corners forward.
4. Reinstall the two fasteners on the lower tabs.

Trailer Hitch

Never unlock the hitch ball neck while towing or with an accessory attached. If the warning buzzer does not stop, do not use the hitch and have it checked and serviced to ensure it is safe to use.

Always use the correct hitch equipment for your vehicle. Crosswinds, large trucks going by, and rough roads can affect the trailer and the hitch.

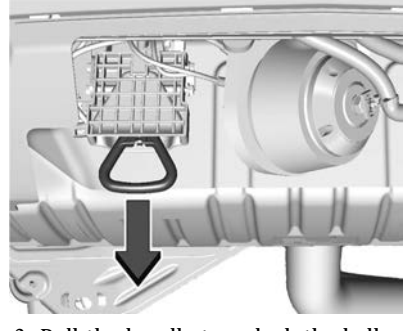
Proper hitch equipment for your vehicle helps maintain control of the vehicle-trailer combination. Many trailers can be towed using a weight-carrying hitch which has a coupler latched to the hitch ball, or a tow eye latched to a pintle hook. Other trailers may require a weight-distributing hitch that uses spring bars to distribute the trailer tongue weight between your vehicle and trailer axles. See “Maximum Trailer Tongue Weight” under *Trailer Towing* ⇨ *277* for weight limits with various hitch types.

Consider using mechanical sway controls with any trailer. Ask a trailering professional about sway controls or refer to the trailer manufacturer's recommendations and instructions.

Never attach rental hitches or other bumper-type hitches. Only use frame-mounted hitches that do not attach to the bumper.

To use the factory installed hitch:

1. Remove the hitch cover. See “Hitch Cover” above.



2. Pull the handle to unlock the ball neck from the stowed position. The ball neck will partially pivot down.

A warning buzzer will sound while the ball neck is unlocked.

3. Pull the ball neck rearward until it locks with the ball centred and pointing up.

   A click should be heard and the warning buzzer will stop.

To stow the hitch:

1. Pull on the handle to unlock the ball neck.

   The warning buzzer will sound while the ball neck is unlocked.

2. Push the ball neck forward and up until it locks into place.

   The warning buzzer will stop when the ball neck is locked.

Tyres

- Do not tow a trailer while using a compact spare tyre on the vehicle.
- Tyres must be properly inflated to support loads while towing a trailer. See *Tyres* ⇨ *319* for instructions on proper tyre inflation.

Safety Chains

Always attach chains between the vehicle and the trailer, and attach the chains to the holes on the trailer hitch platform. Instructions about safety chains may be provided by the hitch manufacturer or by the trailer manufacturer.

Cross the safety chains under the tongue of the trailer to help prevent the tongue from contacting the road if it becomes separated from the hitch. Always leave just enough slack so the combination can turn. Never allow safety chains to drag on the ground.

Trailer Brakes

Loaded trailers over 450 kg (1,000 lb) must be equipped with brake systems and with brakes for each axle. Trailer braking equipment conforming to Canadian Standards Association (CSA) requirement CAN3-D313, or its equivalent, is recommended.

Regional or local regulations may require trailers to have their own braking system if the loaded weight of the trailer exceeds certain minimums that can vary from region to region.

Read and follow the instructions for the trailer brakes so they are installed, adjusted, and maintained properly. Never attempt to tap into your vehicle's hydraulic brake system. If you do, both the vehicle anti-lock brakes and the trailer brakes may not function, which could result in a collision.

Trailer Wiring Harness

Basic Trailer Wiring

The trailer wiring harness is located at the rear of the vehicle and is tied to the vehicle's frame. The harness connector can be plugged into a trailer connector available through your retailer.

The swivel-style factory installed hitch has a standard 13-pin connector integrated into the ball neck that is accessible when the hitch cover is removed and the hitch is deployed.

Trailer Lamps

Always check that all trailer lamps are working at the beginning of each trip, and periodically on longer trips.

Turn Signals When Towing a Trailer

When properly connected, the trailer indicators will illuminate to indicate the vehicle is turning, changing lanes, or stopping. When towing a trailer, the arrows on the instrument cluster will illuminate even if the trailer is not properly connected or the bulbs are burned out.

Trailer Sway Control (TSC)

Vehicles with StabiliTrak/Electronic Stability Control (ESC) have a Trailer Sway Control (TSC) feature. Trailer sway is unintended side-to-side motion of a trailer while towing. If the vehicle is towing a trailer and the TSC detects that sway is increasing, the vehicle brakes are selectively applied at each wheel, to help reduce excessive trailer sway. If equipped with the Integrated Trailer Brake Control (ITBC) system, and the trailer has an electric brake system, StabiliTrak/ESC may also apply the trailer brakes.

If TSC is enabled, the Traction Control System (TCS)/StabiliTrak/ESC warning light will flash on the instrument cluster. Reduce vehicle speed by gradually removing your foot from the accelerator. If trailer sway continues, StabiliTrak/ESC can reduce engine torque to help slow the vehicle. TSC will not function if StabiliTrak/ESC is turned off. See *Traction Control/ Electronic Stability Control* ⇨ *224*.

⚠ Warning

Trailer sway can result in a crash and in serious injury or death, even if the vehicle is equipped with TSC.

If the trailer begins to sway, reduce vehicle speed by gradually removing your foot from the accelerator. Then pull over to check the trailer and vehicle to help correct possible

(Continued)

Warning (Continued)

causes, including an improperly or overloaded trailer, unsecured load, improper trailer hitch configuration, or improperly inflated or incorrect vehicle or trailer tyres. See *Towing Equipment* ⇨ *280* for trailer ratings and hitch setup recommendations.

Trailer Tyres

Special Trailer (ST) tyres differ from vehicle tyres. Trailer tyres are designed with stiff sidewalls to help prevent sway and to support heavy loads. These features can make it difficult to determine if the trailer tyre pressures are low only based on a visual inspection.

Always check all trailer tyre pressures before each trip when the tyres are cool. Low trailer tyre pressure is a leading cause of trailer tyre blowouts.

Trailer tyres deteriorate over time. The trailer tyre sidewall will show the week and year the tyre was

manufactured. Many trailer tyre manufacturers recommend replacing tyres more than six years old.

Overloading is another leading cause of trailer tyre blowouts. Never load your trailer with more weight than the tyres are designed to support. The load rating is located on the trailer tyre sidewall.

Always know the maximum speed rating for the trailer tyres before driving. This may be significantly lower than the vehicle tyre speed rating. The speed rating may be on the trailer tyre sidewall. If the speed rating is not shown, the default trailer tyre speed rating is 105 km/h (65 mph).

Conversions and Add-Ons

Add-On Electrical Equipment

⚠ Warning

The Data Link Connector (DLC) is used for vehicle service and Emission Inspection/Maintenance testing. See *Malfunction Indicator Lamp (Check Engine Light)* ⇨ *106*. A device connected to the DLC — such as an aftermarket fleet or driver-behaviour tracking device — may interfere with vehicle systems. This could affect vehicle operation and cause a crash. Such devices may also access information stored in the vehicle's systems.

Caution

Some electrical equipment can damage the vehicle or cause components not to work and would

(Continued)

Caution (Continued)

not be covered by the vehicle warranty. Always check with your dealer before adding electrical equipment.

Add-on equipment can drain the vehicle's 12-volt battery, even if the vehicle is not operating.

The vehicle has an airbag system. Before attempting to add anything electrical to the vehicle, see *Servicing the Airbag-Equipped Vehicle* ⇨ *63* and *Adding Equipment to the Airbag-Equipped Vehicle* ⇨ *64*.

Vehicle Care

General Information

For service and parts needs, visit your dealer. You will receive genuine parts and trained and supported service people.

Accessories and Modifications

Adding non-dealer accessories or making modifications to the vehicle can affect vehicle performance and safety, including such things as airbags, braking, stability, ride and handling, emissions systems, aerodynamics, durability, and electronic systems like anti-lock brakes, traction control, and stability control. These accessories or modifications could even cause malfunction or damage not covered by the vehicle warranty.

Damage to suspension components caused by modifying vehicle height outside of factory settings will not be covered by the vehicle warranty.

Damage to vehicle components resulting from modifications or the installation or use of non-GM certified parts, including control module or software modifications, is not covered under the terms of the vehicle warranty and may affect remaining warranty coverage for affected parts.

GM Accessories are designed to complement and function with other systems on the vehicle. See your dealer to accessorise the vehicle using genuine GM Accessories installed by a dealer technician.

Also, see *Adding Equipment to the Airbag-Equipped Vehicle* ⇨ *64*.

Vehicle Checks

Doing Your Own Service Work

⚠ Warning

It can be dangerous to work on your vehicle if you do not have the proper knowledge, service manual, tools, or parts. Always follow owner's manual procedures and

(Continued)

Warning (Continued)

consult the service manual for your vehicle before doing any service work.

If doing some of your own service work, use the proper service manual. It tells you much more about how to service the vehicle than this manual can.

This vehicle has an airbag system. Before attempting to do your own service work, see *Servicing the Airbag-Equipped Vehicle* ⇨ *63*.

If the vehicle is equipped with remote vehicle start, open the bonnet before performing any service work to prevent remote starting the vehicle accidentally. See *Remote Vehicle Start* ⇨ *13*.

Keep a record with all parts receipts and list the mileage and the date of any service work performed.

Caution

Even small amounts of contamination can cause damage to vehicle systems. Do not allow contaminants to contact the fluids, reservoir caps, or dipsticks.

Bonnet

⚠ Warning

For vehicles with auto engine stop/start, turn the vehicle off before opening the bonnet. If the vehicle is on, the engine will start when the bonnet is opened. You or others could be injured.

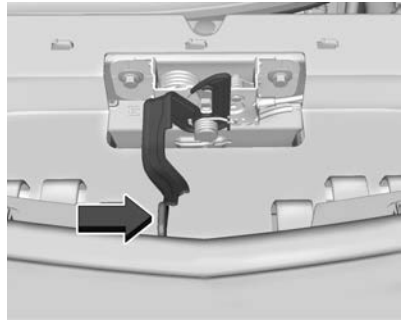
⚠ Warning

Components under the bonnet can get hot from running the engine. To help avoid the risk of burning unprotected skin, never touch these components until they have cooled, and always use a glove or towel to avoid direct skin contact.

Clear any snow from the bonnet before opening.

To open the bonnet:

1. Pull the bonnet release lever with the symbol. It is on the lower left side of the instrument panel.



2. Go to the front of the vehicle and locate the secondary release lever under the front centre of the bonnet. Push the secondary bonnet release lever to the right to release.
3. After you have partially lifted the bonnet, the gas strut system will automatically lift the bonnet and hold it in the fully open position.

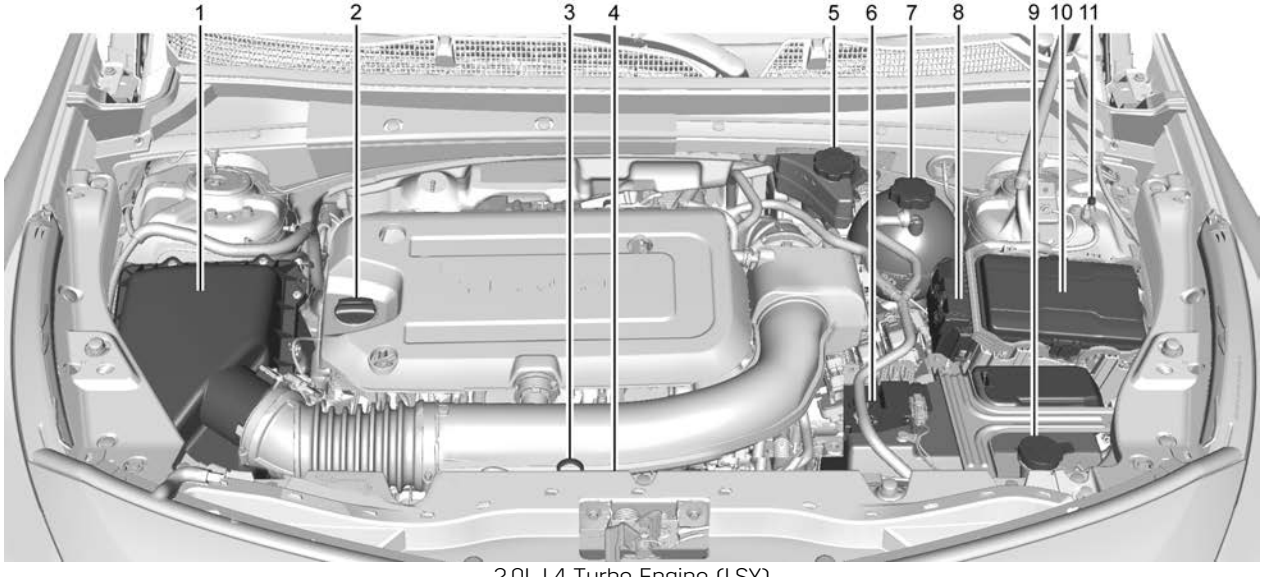
To close the bonnet:

1. Before closing the bonnet, make sure all filler caps are fitted on properly, and all tools are removed.
2. Pull the bonnet down until the strut system is no longer holding up the bonnet.
3. Allow the bonnet to fall. Check to make sure the bonnet is latched completely. Repeat this process with additional force if necessary.

⚠ Warning

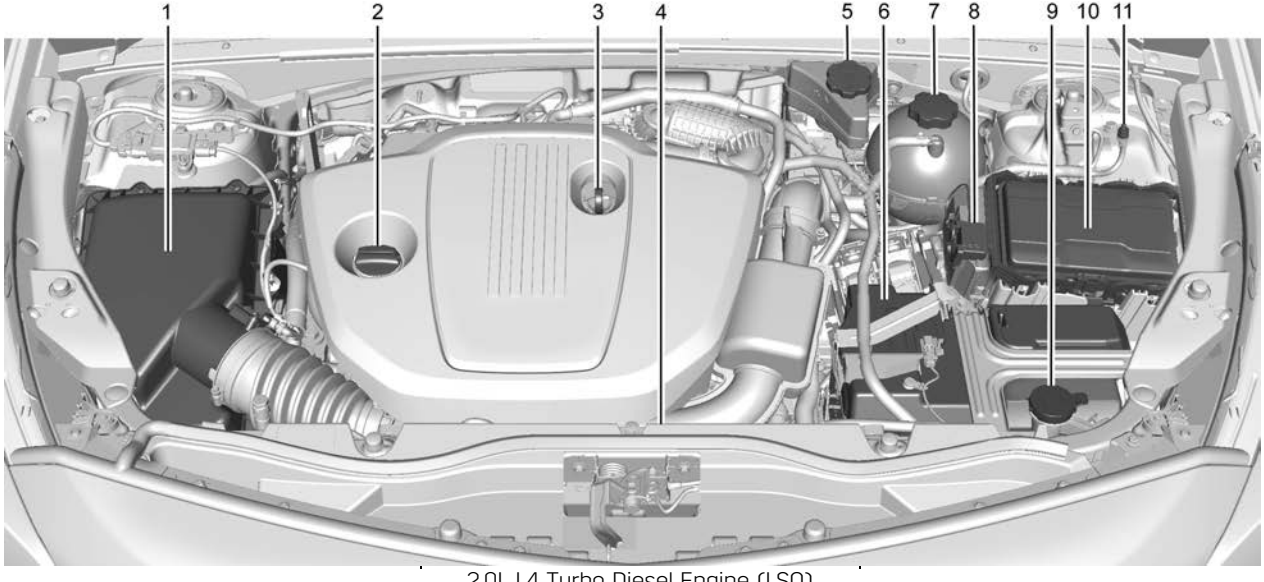
Do not drive the vehicle if the bonnet is not latched completely. The bonnet could open fully, block your vision, and cause a crash. You or others could be injured. Always close the bonnet completely before driving.

Engine Compartment Overview



2.0L L4 Turbo Engine (LSY)

1. *Engine Air Cleaner/Filter* ⇨ *295*.
2. Engine Oil Fill Cap. See *Engine Oil* ⇨ *291*.
3. Engine Oil Dipstick. See *Engine Oil* ⇨ *291*.
4. Engine Cooling Fan (Out of View). See *Cooling System* ⇨ *296*.
5. Brake Fluid Reservoir. See *Brake Fluid* ⇨ *302*.
6. *Battery* ⇨ *303*.
7. Engine Coolant Surge Tank and Pressure Cap. See *Cooling System* ⇨ *296*.
8. Positive (+) Battery Terminal (Under Cover). See *Jump Starting* ⇨ *347*.
9. Windscreen Washer Fluid Reservoir. See *Washer Fluid* ⇨ *301*.
10. *Engine Compartment Fuse Block* ⇨ *310*.
11. Remote Negative (-) Battery Terminal. See *Jump Starting* ⇨ *347*.



2.0L L4 Turbo Diesel Engine (LSQ)

1. *Engine Air Cleaner/Filter* ⇨ *295*.
2. Engine Oil Fill Cap. See *Engine Oil* ⇨ *291*.
3. Engine Oil Dipstick. See *Engine Oil* ⇨ *291*.
4. Engine Cooling Fan (Out of View). See *Cooling System* ⇨ *296*.
5. Brake Fluid Reservoir. See *Brake Fluid* ⇨ *302*.
6. *Battery* ⇨ *303*.
7. Engine Coolant Surge Tank and Pressure Cap. See *Cooling System* ⇨ *296*.
8. Positive (+) Battery Terminal (Under Cover). See *Jump Starting* ⇨ *347*.

9. Windscreen Washer Fluid Reservoir. See *Washer Fluid* ⇨ *301*.
10. *Engine Compartment Fuse Block* ⇨ *310*.
11. Remote Negative (-) Battery Terminal. See *Jump Starting* ⇨ *347*.

Engine Oil

To ensure proper engine performance and long life, careful attention must be paid to engine oil. Following these simple, but important steps will help protect your investment:

- Use engine oil approved to the proper specification and of the proper viscosity grade. See "Selecting the Right Engine Oil" in this section.
- Check the engine oil level regularly and maintain the proper oil level. See "Checking Engine Oil" and "When to Add Engine Oil" in this section.
- Change the engine oil at the appropriate time. See *Engine Oil Life System* ⇨ *293*.
- Always dispose of engine oil properly. See "What to Do with Used Oil" in this section.

Checking Engine Oil

Check the engine oil level regularly, every 650 km (400 mi), especially prior to a long trip. The engine oil dipstick handle is a loop. See *Engine Compartment Overview* ⇨ *288* for the location.

⚠ Warning

The engine oil dipstick handle may be hot; it could burn you. Use a towel or glove to touch the dipstick handle.

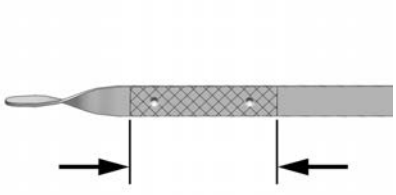
If a low oil Driver Information Centre (DIC) message displays, check the oil level.

Follow these guidelines:

- To get an accurate reading, park the vehicle on level ground. Check the engine oil level after the engine has been off for at least two hours. Checking the engine oil level on steep gradients or too soon after engine shutoff can result in incorrect readings. Accuracy improves when checking a cold engine prior to starting. Remove the dipstick and check the level.
- If unable to wait two hours, the engine must be off for at least 15 minutes if the engine is warm, or at least 30 minutes if the engine is not warm. Pull out the dipstick, wipe it with a clean paper towel or cloth, then push it back in all the way. Remove it again, keeping the tip down, and check the level.

When to Add Engine Oil

LSY 2.0L L4 Turbo Engine



LSQ 2.0L L4 Turbo Diesel Engine

If the oil is below the cross-hatched area at the tip of the dipstick and the engine has been off for at least 15 minutes, add 1 L (1 qt) of the recommended oil and then recheck the level. See "Selecting the Right Engine Oil" later in this section for an explanation of what kind of oil to use. For engine oil crankcase capacity, see *Capacities and Specifications* ⇨ *373*.

Caution

Do not add too much oil. Oil levels above or below the acceptable operating range shown on the dipstick are harmful to the engine. If the oil level is above the operating range (i.e. the engine has

(Continued)

Caution (Continued)

so much oil that the oil level rises above the cross-hatched area that shows the correct operating range), the engine could be damaged. Drain the excess oil or limit driving the vehicle, and seek help from a service professional to remove the excess oil.

See *Engine Compartment Overview* ⇨ *288* for the location of the engine oil fill cap.

Add enough oil to put the level somewhere in the proper operating range. Push the dipstick all the way back in when done.

Selecting the Right Engine Oil (Petrol Engine)

Selecting the right engine oil depends on both the proper oil specification and viscosity grade. See *Recommended Fluids and Lubricants* ⇨ *368*.

Specification

Use fully synthetic engine oils that meet the dexos1 specification.

Engine oils that have been approved by GM as meeting the dexos1 specification are marked with the dexos1 approved logo. See www.gmdexos.com.

Caution

Failure to use the recommended engine oil or equivalent can result in engine damage not covered by the vehicle warranty.

Viscosity Grade

Use SAE 0W-20 viscosity grade engine oil.

When selecting an oil of the appropriate viscosity grade, it is recommended to select an oil of the correct specification. See "Specification" earlier in this section.

Selecting the Right Engine Oil (Diesel Engine)

Selecting the right engine oil depends on both the proper oil specification and viscosity grade:

Specification

Use engine oils that meet the dexosD specification. Engine oils that have been approved by GM as meeting the dexosD specification are marked with the dexosD approved logo. See www.gmdexos.com.

dexosD DIESEL

Caution

Failure to use the recommended engine oil or equivalent can result in engine damage not covered by the vehicle warranty.

Viscosity Grade

Use SAE 0W-20 viscosity grade engine oil.

When selecting an oil of the appropriate viscosity grade, it is recommended to select an oil of the correct specification. See "Specification" earlier in this section.

Engine Oil Additives/Engine Oil Flushes

Do not add anything to the oil. The recommended oils meeting the dexos specification are all that is needed for good performance and engine protection.

Engine oil system flushes are not recommended and could cause engine damage not covered by the vehicle warranty.

What to Do with Used Oil

Used engine oil contains certain elements that can be unhealthy for your skin and could even cause cancer. Do not let used oil stay on your skin for very long. Clean your skin and nails with soap and water, or a good hand cleaner. Wash or properly dispose of clothing or rags containing used engine oil. See the manufacturer's warnings about the use and disposal of oil products.

Used oil can be a threat to the environment. If you change your own oil, be sure to drain all the oil from the filter before disposal. Never dispose of oil by putting it in the trash or pouring it on the ground, into sewers, or into streams or bodies of water. Recycle it by taking it to a place that collects used oil.

Engine Oil Life System

When to Change Engine Oil

This vehicle has a computer system that indicates when to change the engine oil and filter. This is based on a combination of factors which include engine revolutions, engine temperature, and miles driven. Based on driving conditions, the mileage at which an oil change is indicated can vary considerably. For the oil life system to work properly, the system must be reset every time the oil is changed.

2.0L Turbo Petrol Engine

Change engine oil and filter when indicated by the Engine Oil Life System, or at 15 000 km (9,300 mi), or at one year, whichever comes first. When the CHANGE ENGINE OIL SOON message displays, have the engine oil and filter changed within the next 1 000 km (600 mi). The system must be reset. Your dealer has trained service people who will perform this work and reset the system. It is also important to check the oil regularly over the course of an oil drain interval and keep it at the proper level.

2.0L Turbo Diesel Engine

Change engine oil and filter when indicated by the Engine Oil Life System, or at 30 000 km (18,640 mi), or after one year, whichever comes first. (15 000 km (9,320 mi) or after 6 months in severe driving conditions). When the CHANGE ENGINE OIL SOON message displays, have the engine oil and filter changed within the next 1 000 km (600 mi). The system must be reset. Your dealer has trained service people who will perform this work and reset the system. It is also important to check the oil regularly over the course of an oil drain interval and keep it at the proper level.

Resetting the Oil Life System

After you change the oil, the oil life system will need to be reset. See your dealer for service.

If the system is ever reset accidentally, the oil must be changed at 5 000 km (3,000 mi) since the last oil change. Remember to reset the oil life system whenever the oil is changed.

See “Oil Life” under *Driver Information Centre (DIC)* ⇨ *115* for information on the engine oil life system.

Automatic Transmission Fluid

A transmission fluid leak is the only reason for fluid loss. If a leak occurs, take the vehicle to your dealer and have it repaired as soon as possible.

Caution

Using the incorrect automatic transmission fluid may damage the vehicle, and the damage may not be covered by the vehicle warranty. Always use the correct automatic gearbox fluid. See *Recommended Fluids and Lubricants* ⇨ *368*.

See your retailer to have the fluid and filter changed at the intervals.

Engine Air Filter Life System

If equipped, this feature provides the engine air filter's remaining life and best timing for a change. The timing to change an engine air filter depends on driving and environmental conditions.

When to Change Engine Air Filter

When the Driver Information Centre (DIC) displays a message to replace the engine air filter at the next oil change, follow this timing.

When the DIC displays a message to replace the engine air filter soon, replace the engine air filter at the earliest convenience. The system must be reset after the engine air filter has been changed.

If the DIC displays a message to check the engine air filter system, see your retailer.

How to Reset Engine Air Filter Life System

To reset:

1. Place the vehicle in P (Park).
2. Display the Air Filter Life on the DIC. See *Driver Information Centre (DIC)* ⇨ *115*.
3. Press > on the steering wheel to move to the Reset/Disable display area. Select Reset then press ✓.
4. Press ✓ to confirm to reset.

Engine Air Cleaner/Filter

The engine air cleaner/filter is in the engine compartment on the passenger side of the vehicle. See *Engine Compartment Overview* ⇨ *288*.

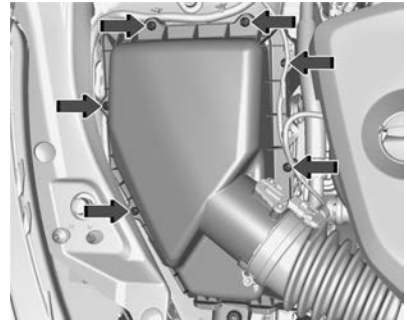
When to Inspect the Engine Air Cleaner/Filter

- For intervals on inspecting and changing the engine air cleaner/filter, see your retailer.
- If equipped with Engine Air Filter Life System, see *Engine Air Filter Life System* ⇨ *294*.
- If driving in dusty areas, follow the engine air filter inspection and changing intervals, see your retailer.

How to Inspect/Replace the Engine Air Cleaner/Filter

Do not start the engine or have the engine running with the engine air cleaner/filter housing open. Before removing the engine air cleaner/filter, make sure that the engine air cleaner/filter housing and nearby components are free of dirt and debris. Remove the engine air cleaner/filter. Lightly tap and shake the engine air cleaner/filter (away from the vehicle), to release dust and dirt. Inspect the engine air cleaner/filter for damage, and replace if damaged. Do not clean the engine air cleaner/filter or components with water or compressed air.

To inspect or replace the engine air cleaner/filter:



1. Remove the six screws on top of the engine air cleaner/filter housing.
2. Lift the air cleaner/filter cover housing away from the engine.
3. Pull out the filter.

⚠ Warning

If part replacement is necessary, the part must be replaced with one of the same part number or with an equivalent part. Use of a replacement part without the same

(Continued)

Warning (Continued)

fit, form, and function may result in personal injury or damage to the vehicle.

4. Inspect or replace the engine air cleaner/filter.
5. Reverse Steps 1–3 to reinstall the filter cover housing.

⚠ Warning

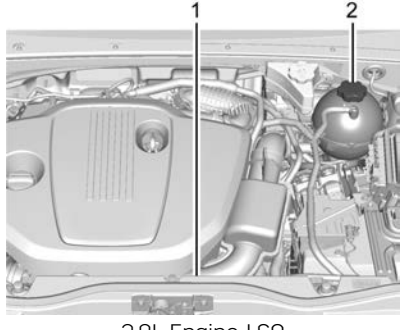
Operating the engine with the air cleaner/filter off can cause you or others to be burned. Use caution when working on the engine. Do not start the engine or drive the vehicle with the air cleaner/filter off, as flames may be present if the engine backfires.

Caution

If the air cleaner/filter is off, dirt can easily get into the engine, which could damage it. Always have the air cleaner/filter in place when driving.

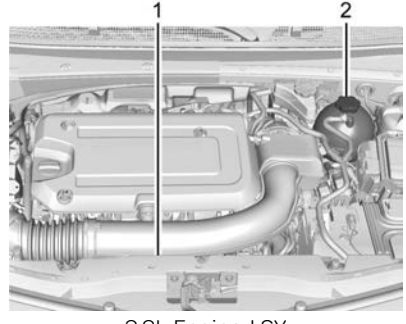
Cooling System

The cooling system allows the engine to maintain the correct working temperature.



2.0L Engine LSQ

1. Electric Engine Cooling Fan (Out of View)
2. Coolant Surge Tank and Pressure Cap



2.0L Engine LSY

1. Electric Engine Cooling Fan (Out of View)
2. Coolant Surge Tank and Pressure Cap

⚠ Warning

An underbonnet electric fan can start up even when the engine is not running and can cause injury. Keep hands, clothing, and tools away from any underbonnet electric fan.

⚠ Warning

Do not touch heater or radiator hoses, or other engine parts. They can be very hot and can burn you. Do not run the engine if there is a leak; all coolant could leak out. That could cause an engine fire and can burn you. Fix any leak before driving the vehicle.

Engine Coolant

The engine cooling system in the vehicle is filled with DEX-COOL engine coolant mixture. This coolant needs to be checked and changed at appropriate levels. See *Recommended Fluids and Lubricants* ⇨ *368*.

The following explains the cooling system and how to check and add coolant when it is low. If there is a problem with engine overheating, see *Engine Overheating* ⇨ *299*.

What to Use

⚠ Warning

Do not touch heater or radiator hoses, or other engine parts. They can be very hot and can burn you. Do not run the engine if there is a leak; all coolant could leak out. That could cause an engine fire and can burn you. Fix any leak before driving the vehicle.

Use a 50/50 mixture of clean, drinkable water and DEX-COOL coolant. This mixture:

- Gives freezing protection down to –37 °C (–34 °F), outside temperature.
- Gives boiling protection up to 129 °C (265 °F), engine temperature.
- Protects against rust and corrosion.
- Will not damage aluminium parts.
- Helps keep the proper engine temperature.

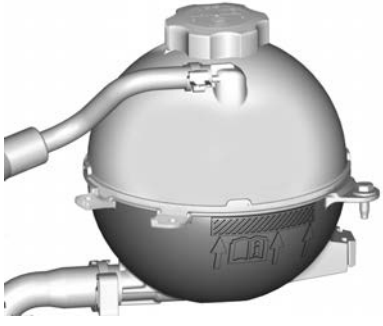
Caution

Do not use anything other than a mix of DEX-COOL coolant that meets GM Standard GMW3420 and clean, drinkable water. Anything else can cause damage to the engine cooling system and the vehicle, which would not be covered by the vehicle warranty.

Never dispose of engine coolant by putting it in the rubbish, pouring it on the ground, or pouring into sewers, streams, or bodies of water. Have the coolant changed by an authorised service centre, familiar with legal requirements regarding used coolant disposal. This will help protect the environment and your health.

Checking Coolant

The vehicle must be on a level surface when checking the coolant level.



Check to see if coolant is visible in the coolant surge tank. If the coolant inside the coolant surge tank is boiling, do not do anything else until it cools down. If coolant is visible but the coolant level mark is not at or above the indicated mark, add a 50/50 mixture of clean, drinkable water and DEX-COOL coolant. Be sure the cooling system is cool before this is done. See *Engine Overheating* ⇨ *299*.

The coolant surge tank is in the engine compartment on the driver side of the vehicle. See *Engine Compartment Overview* ⇨ *288*.

How to Add Coolant to the Surge Tank

⚠ Warning

Spilling coolant on hot engine parts can burn you. Coolant contains ethylene glycol and it will burn if the engine parts are hot enough.

⚠ Warning

Steam and scalding liquids from a hot cooling system are under pressure. Turning the pressure cap, even a little, can cause them to jet out at high speed and you could be burned. Never turn the cap when the cooling system, including the pressure cap itself, is hot. Wait for the cooling system and pressure cap to cool.

Caution

Failure to follow the specific coolant filling procedure could cause the engine to overheat and

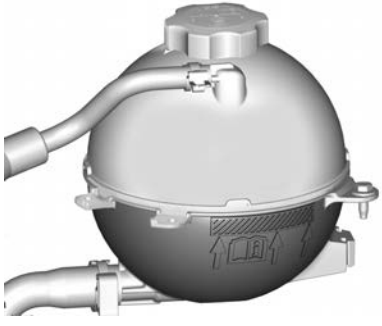
(Continued)

Caution (Continued)

could cause system damage.
If coolant is not visible in the surge tank, contact your retailer.

The coolant surge tank pressure cap can be removed when the cooling system, including the surge tank pressure cap and upper radiator hose, is no longer hot.

1. Turn the pressure cap slowly anticlockwise. If a hiss is heard, wait for that to stop. A hiss means there is still some pressure left.
2. Keep turning the pressure cap slowly and remove it.



3. If topping up the level in the coolant surge tank, add the proper mixture until the level reaches the mark on the front of the tank and replace the cap. Operate the vehicle. Repeat steps 1–3, as necessary.

   If filling the system (such as after servicing), follow the Automatic Coolant Service Filling Instructions.

Caution

If the pressure cap is not tightly installed, coolant loss and engine damage may occur. Be sure the cap is properly and tightly secured.

Automatic Coolant Service Filling Instructions

It is recommended to take Diesel engine vehicles to the retailer for coolant system servicing. However, if that is not possible, the vehicle is equipped with an Automatic Coolant Service Fill feature.

To fill the system, use the following steps:

1. With a cold system, add coolant to the indicated mark on the surge tank.
2. Turn the ignition on. See *Ignition Positions* ⇨ *205*.
3. Turn off the air conditioning.
4. Apply the parking brake.
5. At the same time, depress the accelerator and the brake pedals for two seconds, then release.
6. Start the vehicle within five to 10 seconds.
7. Idle for three minutes while adding fluid as the level drops below the indicated mark on the surge tank.
8. Reinstall the cap and run the engine at 2000 RPM for 10 minutes while watching the coolant temperature gauge to be sure the temperature has risen but is not overheating.

   If the temperature has not risen or the temperature is indicating overheating, stop the process by returning to idle and turning off the engine. Then return to Step 1. If the coolant filling process cannot be completed without overheating, see your retailer for assistance.

   If the temperature has risen and is not overheating, proceed to Step 9.
9. Idle the engine for two minutes before turning off and allowing the engine to cool down.
10. Allow the system to completely cool down and make a note of the level of the coolant in the surge tank. If low, add fluid to the indicated mark and repeat Steps 3–9.

Engine Overheating

The vehicle has several indicators to warn of the engine overheating.

There is an engine coolant temperature gauge and an engine coolant temperature warning light on the instrument cluster. See *Engine Coolant Temperature Gauge* ⇨ *103* and *Engine Coolant Temperature Warning Light (Uplevel)* ⇨ *111*. The vehicle may also display a message on the Driver Information Centre (DIC).

If the decision is made not to lift the bonnet when this warning appears, get service help right away.

If the decision is made to lift the bonnet, make sure the vehicle is parked on a level surface. Then check to see if the engine cooling fan is running. If the engine is overheating, the fan should be running. If it is not, do not continue to run the engine. Have the vehicle serviced.

Caution

Do not run the engine if there is a leak in the engine cooling system. This can cause a loss of all coolant and can damage the system and vehicle. Have any leaks fixed right away.

If Steam Is Coming from the Engine Compartment

⚠ Warning

Steam and scalding liquids from a hot cooling system are under pressure. Turning the pressure cap, even a little, can cause them to jet out at high speed and you could be burned. Never turn the cap when the cooling system, including the pressure cap itself, is hot. Wait for the cooling system and pressure cap to cool.

If No Steam Is Coming from the Engine Compartment

If an engine overheat warning is displayed but no steam can be seen or heard, the problem may not be too serious. Sometimes the engine can get a little too hot when the vehicle:

- Climbs a long hill on a hot day.
- Stops after high-speed driving.
- Idles for long periods in traffic.

If the overheat warning is displayed with no sign of steam:

1. Turn the air conditioning off.
2. Turn the heater on to the highest temperature and to the highest fan speed. Open the windows as necessary.
3. When it is safe to do so, pull off the road, shift to P (Park) or N (Neutral), and let the engine idle.

If the engine coolant temperature gauge is no longer in the overheated area or the engine coolant temperature warning light no longer displays, the vehicle can be driven. Continue to drive the vehicle slowly for about 10 minutes. Keep a safe distance from the vehicle in front. If the warning does not come back on, continue to drive normally and have the cooling system checked for proper fill and function.

If the warning continues, pull over, stop, and park the vehicle right away.

If there is no sign of steam, idle the engine for three minutes while parked. If the warning is still displayed, turn off the engine until it cools down.

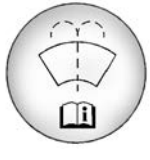
Washer Fluid

What to Use

When windscreen washer fluid is needed, be sure to read the manufacturer's instructions before use. If operating the vehicle in an area where the temperature may fall below freezing, use a fluid that has sufficient protection against freezing.

Adding Washer Fluid

The appropriate message will appear in the Driver Information Centre (DIC) when the fluid level is low.



Open the cap with the washer symbol on it. Add washer fluid until the tank is full. See *Engine Compartment Overview* ⇨ *288* for reservoir location.

Caution

- Do not use washer fluid that contains any type of water repellent coating. This can cause the wiper blades to chatter or skip.
- Do not use engine coolant (antifreeze) in the windscreen washer. It can damage the windscreen washer system and paint.
- Do not mix water with ready-to-use washer fluid. Water can cause the solution to freeze and damage the washer fluid tank and other parts of the washer system.
- When using concentrated washer fluid, follow the manufacturer instructions for adding water.
- Fill the washer fluid tank only three-quarters full when it is very cold. This allows for fluid expansion if freezing occurs, which could damage the tank if it is completely full.

Brakes

Disc brake linings have built-in wear indicators that make a high-pitched warning sound when the brake linings are worn and new linings are needed. The sound can come and go or can be heard all the time when the vehicle is moving, except when applying the brake pedal firmly.

⚠ Warning

The brake wear warning sound means that soon the brakes will not work well. That could lead to a crash. When the brake wear warning sound is heard, have the vehicle serviced.

Caution

Continuing to drive with worn-out brake linings could result in expensive brake repairs.

Some driving conditions or climates can cause brake squeal when the brakes are first applied, which clears

up following several brake applications. This does not mean something is wrong with the brakes.

Properly torqued wheel nuts are necessary to help prevent brake pulsation. When tyres are rotated, inspect the brake linings for wear and evenly tighten wheel nuts in the correct sequence to torque specifications. See *Capacities and Specifications* ⇨ *373*.

Brake pads should be replaced as complete axle sets.

Brake Pedal Travel

See your dealer if the brake pedal does not return to normal height, or if there is a rapid increase in pedal travel. This could be a sign that brake service may be required.

Replacing Brake System Parts

Always replace brake system parts with new, approved replacement parts. If this is not done, the brakes may not work properly. The braking performance can change in many ways if the wrong brake parts are installed or if parts are improperly installed.

Brake Fluid

The brake master cylinder reservoir is filled with GM approved DOT 4 brake fluid as indicated on the reservoir cap. See *Engine Compartment Overview* ⇨ *288* for the location of the reservoir.

Checking Brake Fluid

With the vehicle in P (Park) on a level surface, the brake fluid level should be between the minimum and maximum marks on the brake fluid reservoir.

There are only two reasons why the brake fluid level in the reservoir may go down:

- Normal brake lining wear. When new linings are installed, the fluid level goes back up.
- A fluid leak in the brake hydraulic system. Have the brake hydraulic system fixed. With a leak, the brakes will not work well.

Always clean the brake fluid reservoir cap and the area around the cap before removing it.

Do not top off the brake fluid. Adding fluid does not correct a leak. If fluid is added when the linings are worn, there will be too much fluid when new brake linings are installed. Add or remove fluid, as necessary, only when work is done on the brake hydraulic system.

⚠ Warning

If too much brake fluid is added, it can spill on the engine and burn, if the engine is hot enough. You or others could be burned, and the vehicle could be damaged. Add brake fluid only when work is done on the brake hydraulic system.

When the brake fluid falls to a low level, the brake warning light comes on. See *Brake System Warning Light* ⇨ *107*.

Brake fluid absorbs water over time which degrades the effectiveness of the brake fluid. Replace brake fluid at the specified intervals to prevent increased stopping distance. See *Maintenance Schedule (Petrol)* ⇨ *361* or *Maintenance Schedule (Diesel)* ⇨ *364*.

What to Add

Use only GM approved DOT 4 brake fluid from a clean, sealed container. See *Recommended Fluids and Lubricants* ⇨ *368*.

⚠ Warning

The wrong or contaminated brake fluid could result in damage to the brake system. This could result in the loss of braking leading to a possible injury. Always use the proper GM approved brake fluid.

Caution

If brake fluid is spilled on the vehicle's painted surfaces, the paint finish can be damaged. Immediately wash off any painted surface.

Battery

The original equipment battery is maintenance free. Do not remove the cap and do not add fluid.

Refer to the replacement number shown on the original battery label when a new battery is needed. See *Engine Compartment Overview* ⇨ *288* for battery location.

Stop/Start System

The vehicle has a Stop/Start system to shut off the engine to help conserve fuel. See *Stop/Start System* ⇨ *208*.

The vehicle has an Absorbed Glass Mat (AGM) 12-volt battery. Installation of a standard 12-volt battery will result in reduced 12-volt battery life.

When using a 12-volt battery charger on the 12-volt AGM battery, some chargers have an AGM battery setting on the charger. If available, use the AGM setting on the charger, to limit charge voltage to 14.8 volts. Follow the charger manufacturer's instructions.

⚠ Warning

Do not use a match or flame near a vehicle's battery. If you need more light, use a torch.

Do not smoke near a vehicle's battery.

When working around a vehicle's battery, shield your eyes with protective glasses.

Keep children away from vehicle batteries.

⚠ Warning

Batteries have acid that can burn you and gas that can explode. You can be hurt badly if you are not careful.

Follow instructions carefully when working around a battery.

Battery posts, terminals and related accessories contain lead and lead compounds which can cause cancer and reproductive harm. Wash hands after handling.

Vehicle Storage

If the vehicle battery must be disconnected, unlock the vehicle using the RKE transmitter to disarm the power sounder and disconnect the battery within 15 seconds.

Infrequent Usage: Remove the black, negative (-) cable from the battery to keep the battery from running down.

Extended Storage: Remove the black, negative (-) cable from the battery or use a battery trickle charger.

All-Wheel Drive

Transfer Case

Under normal driving conditions, transfer case fluid does not require maintenance unless there is a fluid leak or unusual noise. If required, have the transfer case serviced by your dealer.

Park Brake and P (Park) Mechanism Check

⚠ Warning

When you are doing this check, the vehicle could begin to move. You or others could be injured and property could be damaged. Make sure there is room in front of the vehicle in case it begins to roll. Be ready to apply the regular brake at once should the vehicle begin to move.

Park on a fairly steep hill, with the vehicle facing downhill. Keeping your foot on the regular brake, apply the parking brake.

- To check the parking brake's holding ability: With the engine running and the transmission in N (Neutral), slowly remove foot pressure from the regular brake pedal. Do this until the vehicle is held by the parking brake only.
- To check the P (Park) mechanism's holding ability: With the engine running, shift to P (Park). Then release the parking brake followed by the regular brake.

Contact your dealer if service is required.

Wiper Blade Replacement

Windscreen wiper blades should be inspected for wear or cracking.

It is a good idea to clean or replace the wiper blade assembly on a regular basis or when worn. For proper windscreen wiper blade length and type, see *Maintenance Replacement Parts ⇨ 369*.

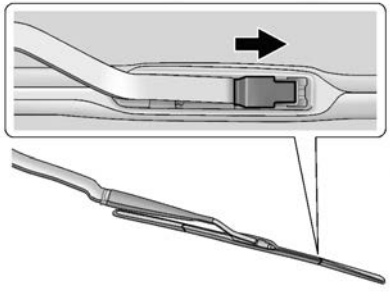
Caution

Allowing the wiper arm to touch the windscreen when no wiper blade is installed could damage the windscreen. Any damage that occurs would not be covered by the vehicle warranty. Do not allow the wiper arm to touch the windscreen.

Front Wiper Blade Replacement

To replace the wiper blade assembly:

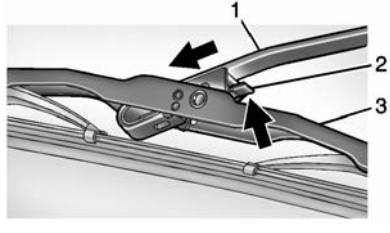
1. Pull the windscreen wiper assembly away from the windscreen.



2. Lift up on the latch in the middle of the wiper blade where the wiper arm attaches.
3. With the catch open, pull the wiper blade down towards the windscreen far enough to release it from the J-hooked end of the wiper arm.
4. Remove the wiper blade.
5. Reverse Steps 1–3 for wiper blade replacement.

Rear Wiper Blade Replacement

To remove the wiper blade:



1. Set the vehicle in ACC/ACCESSORY and turn on the rear windscreen wiper. The wiper will stop pointing down. See *Rear Window Wiper/ Washer* ⇨ *94*.
2. Push ENGINE START/STOP to turn the vehicle off.
3. Lift the wiper arm away from the window.
4. Push the release lever (2) to disengage the hook and push the wiper arm (1) out of the blade assembly (3).
5. Push the new blade assembly securely on the wiper arm until the release lever clicks into place.
6. Start the engine and the rear wiper will return to its normal position.

Windscreen Replacement

HUD System

The windscreen is part of the HUD system. If the windscreen needs to be replaced, make sure you get one that is designed for HUD or the HUD image may look out of focus.

Driver Assistance Systems

If the windshield needs to be replaced and the vehicle is equipped with a front camera sensor for the Driver Assistance Systems, a GM replacement windshield is

recommended. The replacement windshield must be installed according to GM specifications for proper alignment. If it is not, these systems may not work properly, they may display messages, or they may not work at all. See your dealer for proper windshield replacement.

Acoustic Windscreen

The vehicle is equipped with an acoustic windscreen. If the windscreen needs to be replaced be sure to get an acoustic windscreen so you will continue to have the benefits an acoustic windscreen can provide.

Gas Strut(s)

This vehicle is equipped with gas strut(s) to provide assistance in lifting and holding open the bonnet/boot/tailgate system in full open position.

⚠ Warning

If the gas struts that hold open the bonnet, boot, and/or tailgate fail, you or others could be seriously injured. Take the vehicle to your

(Continued)

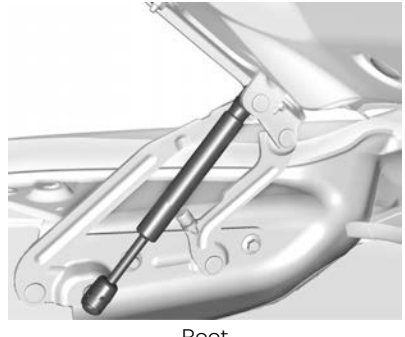
Warning (Continued)

retailer for service immediately. Visually inspect the gas struts for signs of wear, cracks, or other damage periodically. Check to make sure the bonnet/boot/tailgate is held open with enough force. If struts are failing to hold the bonnet/boot/tailgate, do not operate. Have the vehicle serviced.

Caution

Do not apply tape or hang any objects from gas struts. Also do not push down or pull on gas struts. This may cause damage to the vehicle.

Bonnet



Boot

Tailgate

Headlamp Aiming

Front Headlight Aiming

Headlamp alignment has been preset and should need no further adjustment.

If the vehicle is damaged in a crash, the headlamp alignment may be affected. If adjustment to the headlamps is necessary, see your dealer.

Bulb Replacement

For the proper type of replacement bulbs, or any bulb changing procedure not listed in this section, contact your retailer.

Caution

Do not replace incandescent bulbs with aftermarket LED replacement bulbs. This can cause damage to the vehicle's electrical system.

LED Lighting

This vehicle has several LED lamps. For replacement of any LED lighting assembly, contact your dealer.

Front Indicator Lamps

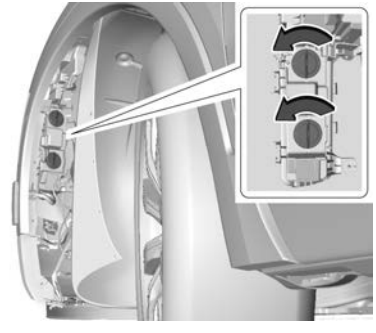
Uplevel

See your retailer for indicator replacement.

Base level

To replace one of these lamps:

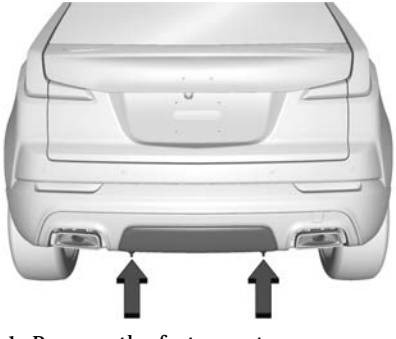
1. Turn the steering wheel in the opposite direction as the bulb in need of replacement.
2. Remove the fasteners securing the front wheel arch liner.
3. Pull back the wheel arch liner to expose the rear of the indicator lamp.



4. Remove the indicator bulb socket from the lamp housing by rotating it anticlockwise.
5. Replace the bulb and reverse Steps 1–4 to reinstall.

Back-Up Lamps

To replace one of these bulbs:



1. Remove the fasteners to remove the trailer hitch cover.
2. Access the lamp through the opening in the underbody.
3. Disconnect the electrical connector from the bulb assembly.

4. Turn the bulb socket anticlockwise and pull the bulb straight out of the socket.
5. Replace the bulb and reverse Steps 1–4 to reinstall.

Electrical System

Electrical System Overload

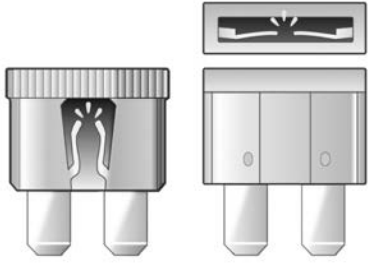
The vehicle has fuses and circuit breakers to protect against an electrical system overload.

When the current electrical load is too heavy, the circuit breaker opens and closes, protecting the circuit until the current load returns to normal or the problem is fixed. This greatly reduces the chance of circuit overload and fire caused by electrical problems.

Fuses and circuit breakers protect power devices in the vehicle.

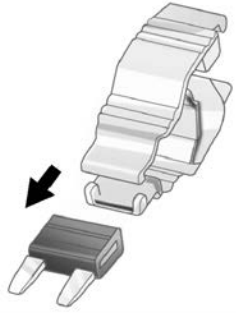
If there is a problem on the road and a fuse needs to be replaced, the same amperage fuse can be borrowed. Choose some feature of the vehicle that is not needed to use and replace it as soon as possible.

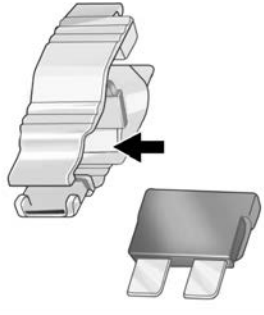
To check a fuse, look at the band inside the fuse. If the band is broken or melted, replace the fuse. Be sure to replace a bad fuse with a fuse of the identical size and rating.



Replacing a Blown Fuse

1. Turn off the vehicle.
2. Locate the fuse puller in the engine compartment fuse block.





3. Use the fuse puller to remove the fuse from the top or side, as shown above.
4. If the fuse must be replaced immediately, borrow a replacement fuse with the same amperage from the fuse block. Choose a vehicle feature that is not needed to safely operate the vehicle. Repeat Steps 2-3.
5. Insert the replacement fuse into the empty slot of the blown fuse.

At the next opportunity, see your dealer to replace the blown fuse.

Headlamp Wiring

An electrical overload may cause the lamps to go on and off, or in some cases to remain off. Have the headlamp wiring checked right away if the lamps go on and off or remain off.

Windscreen Wipers

If the wiper motor overheats due to heavy snow or ice, the windscreen wipers will stop until the motor cools and will then restart.

Although the circuit is protected from electrical overload, overload due to heavy snow or ice may cause wiper

linkage damage. Always clear ice and heavy snow from the windscreen before using the windscreen wipers.

If the overload is caused by an electrical problem and not snow or ice, be sure to get it fixed.

Fuses and Circuit Breakers

The wiring circuits in the vehicle are protected from short circuits by a combination of fuses and circuit breakers. This greatly reduces the chance of damage caused by electrical problems.

⚠ Danger

Fuses and circuit breakers are marked with their ampere rating. Do not exceed the specified amperage rating when replacing fuses and circuit breakers. Use of an oversized fuse or circuit breaker can result in a vehicle fire. You and others could be seriously injured or killed.

⚠ Warning

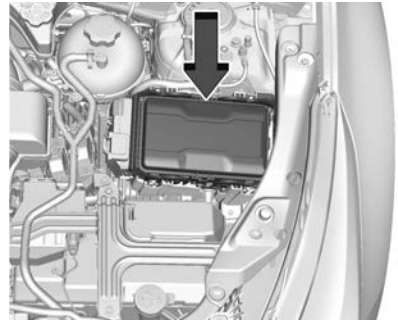
Installation or use of fuses that do not meet GM's original fuse specifications is dangerous. The fuses could fail, and result in a fire. You or others could be injured or killed, and the vehicle could be damaged.

See *Accessories and Modifications* ⇨ *286* and *General Information* ⇨ *286*.

To check or replace a blown fuse, see *Electrical System Overload* ⇨ *308*.

Engine Compartment Fuse Block

The under bonnet fuse block is in the engine compartment, on the driver side of the vehicle.



Caution

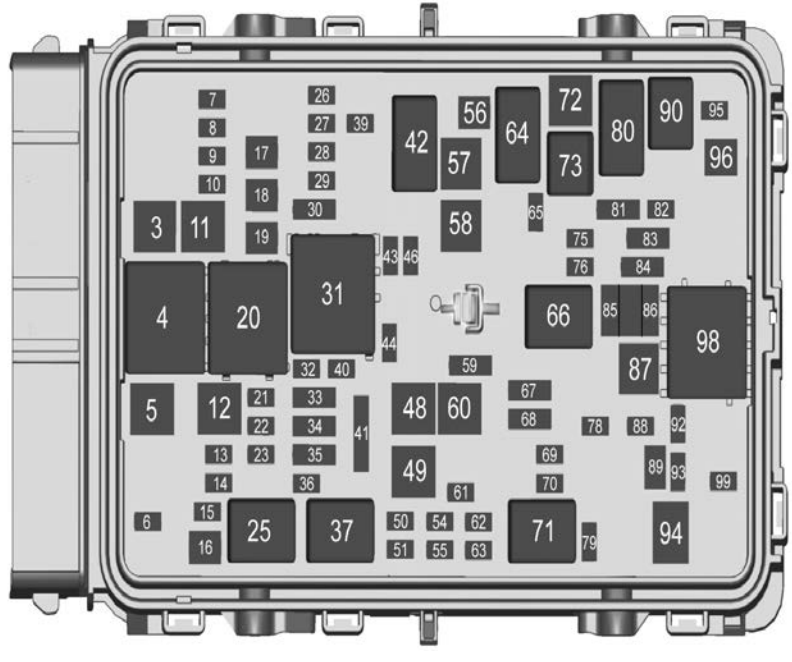
Do not pull the engine compartment fuse block lever, since it is intended only for service purposes. If pulled, vehicle malfunction may occur.

Caution

Spilling liquid on any electrical component on the vehicle may damage it. Always keep the covers on any electrical component.

To remove the fuse block cover, press the clips on the cover and lift it straight up.

The vehicle may not be equipped with all of the fuses, relays, and features shown.



Fuses	Usage	Fuses	Usage
3	EBCM – Electronic Brake Control Module	5	Trailer Brake -

Fuses	Usage
6	REAR CLOSR – Rear Closure Release – Spare
7	TRLR ST/TRN LT – Not Used
8	MSM – Memory Seat Module – Driver and Passenger
	-
9	PFAF – Power Sounder (Alarm Horn)
10	SADS – Semi-active Damping System
	-
11	DC DC BAT 1/2 – Direct Current to Direct Current Converter 1
12	REAR DEFOG – Rear Window Demister
13	HTD MIR – Outside Rear View Mirrors Demister
14	-

Fuses	Usage
15	PEPS – Passive Entry Passive Start Module
16	FRT/WPR – Front Wiper
17	PASS/PWR/SEAT – Passenger Power Seat
	-
18	LGM MTR – Handsfree Liftgate
	-
19	DRVR/PWR/SEAT – Driver Power Seat
	-
21	S/ROOF – Power Sunroof
22	-
23	TIM 2 – Trailer Interface Module Power Feed 2
26	TCM IGN – Transmission Control Module/Ignition

Fuses	Usage
27	IP BODY IGN – Inside Rear View Mirror – Auxiliary Heater – Gearchange Interface Board Module Run/ Crank – Central Gateway Module Run/ Crank – Heating Ventilation and Air Conditioning Control Module Run/Crank ignition 3
28	RR/WPR – Rear Wiper
29	TRAILER IGN – Trailer Ignition
	-

Fuses	Usage
30	MIL SS/TIM IGN – Trailer Interface Module Ignition Run/ Crank – Diesel Exhaust Fluid Control Module Run/Crank – Fuel Tank Zone Module Run/Crank – Direct Current to Direct Current Transformer Run/ Crank – Electronic Brake Control Module Run/Crank – Instrument Panel Cluster Run/Crank
32	RDCM 1 – Rear Drive Control Module 1
33	FRT/HTD/SEAT 2/ Spare – Front Heated Seat Power Feed 2/ Spare
34	HANDSFREE/WDO SW – Handsfree/Front Window Switches
35	DEF/NOT USED – Diesel Exhaust Fuel Fuel Heater
36	FUEL MODULE – Fuel Tank Zone Module
39	MASGE – Driver Seat Massage/Passenger Seat Massage
40	STR/COL/LCK – Steering Column Lock
41	-
43	HTD/STR/WHL – Heated Steering Wheel
44	FRT HTD ST 1/VENT SEAT – Front Heated Seat Power Feed 1/ Front Vented Seats// Rear Heated Seats
46	ECM IGN – Engine Control Module Ignition
48	RDCM 2 – Rear Drive Control Module 2
49	HVAC BLOWR MTR – Heating Ventilation and Air Conditioning Control Blower Motor
50	Spare
51	Spare
54	Spare
55	Spare
56	STRTR MTR – Starter Motor
57	-
58	-
59	HDLP HI BEAM LT/ RT – Main Beam Headlights
60	TIM 1 – Trailer Interface Module 1
61	Spare
62	Spare
63	Spare
65	A/C CLUTCH – Air Conditioning Clutch

Fuses	Usage
67	Spare
68	Spare
69	-
70	TRLR PRK LIGHT – Trailer Park Light
72	STRTR PINION – Starter Pinion
75	ECM MAIN – Engine Control Module Main
76	PT OFF ENG – Powertrain Off Engine – Engine Control Module Power Train Ignition 1 (Gas)/ Engine Control Module Power Train Ignition 3 (Diesel)
78	Horn
79	WASH PMP – Front and Rear Washer Pump
81	TCM/ECM/COOL PUMP – Transmission Control Module/ Engine Control Module/Cooling Pump (Diesel)
82	NOx SNSR – Nitric Oxide and Nitrogen Dioxide and Exhaust Particulate Sensors – Exhaust Particulate Matter Sensor – Diesel Exhaust Fluid Control (DEFC) Module Bus Enable – Fuel Tank Zone Module PWR TRN SNSR Bus Enable – Gearchange Interface Board Module PWR TRN SNSR Bus Wake Up
83	IGN COIL – Ignition Coils (Gas)/Engine Control Module Power Train Ignition 2 (Diesel)
84	PT ON ENG – Canister Purge Solenoid/Step Cam Exhaust Solenoid Cylinder 2 and 3/ Step Cam Intake Cylinder Solenoids/ Turbo Bypass Solenoid/Oxygen Sensor (Pre)/O2 Heater/Oxygen Heated Sensor/Mass Airflow/Inlet Air Temperature/Throttle Inlet Absolute Pressure/Humidity Sensor/Charge Air Cooler Water Pump
85	Shunt
86	Shunt
87	DIESEL FUEL HTR 1 – Diesel Fuel Heater 1
88	AERO SH – Aeroshutter

Fuses	Usage
89	SCR MODULE – Selective Catalytic Reduction Power Module
92	TRLR ST/TRN RT – Right Trailer Brake/ Indicator Light
	-
93	AHL/CVS – Automatic Headlight Levelling/ Canister Vent Solenoid (Gas)
95	SMART SENSORS – NOX Sensors (Pre/ Post/Aft)
96	DIESEL FUEL HTR 2 – Diesel Fuel Heater 2
99	-

Relays	Usage
20	REAR DEFOG – Rear Demister/Outside Rear View Mirror Demister
25	FRT WPR CNTRL – Front Wiper Control
31	RUN/CRNK – Run/ Crank
37	FRT WPR SPD – Front Wiper Speed
42	-
64	STRTR MTR – Starter Motor
66	PWRTRN – Powertrain
71	TRLR PRK LAMP – Trailer Park Lights/ Spare
	-
73	A/C CNTRL – Air Conditioning Controls
80	STRTR PINION – Starter Pinion
90	PWRTRN SNSR – Powertrain Sensor
94	DEF HTR – Diesel Exhaust Fluid Control Module
	-
98	DIESEL FUEL HTR – Diesel Fuel Heater
	-

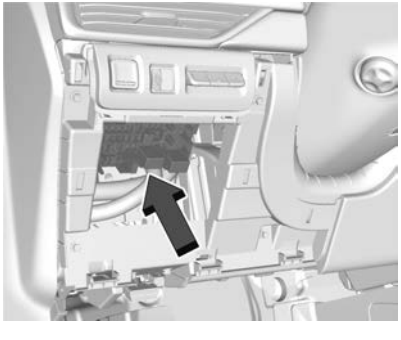
Instrument Panel Fuse Block

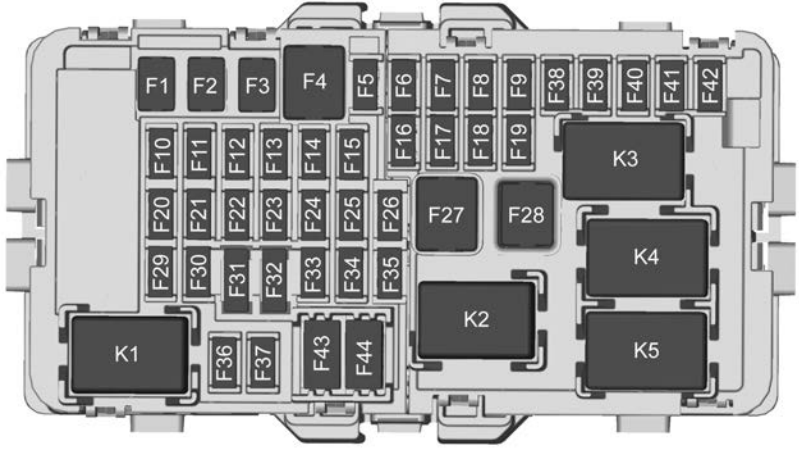
The instrument panel fuse block is on the driver side of the instrument panel, between the steering wheel and

the door. To access the fuses, remove the panel, starting at the top. Once clips are disengaged, the tabs along the bottom of the door can be disengaged from the instrument panel to remove the door.

To reinstall the door, place the bottom tabs into the slots, and rotate the door into position, engaging the clips.

The vehicle may not be equipped with all of the fuses, relays, and features shown.





Fuses	Usage
F1	WNDW LT – Left Power Window
F2	WNDW RT – Right Power Window
F3	-
F4	DC-DC BAT 2/1 – Direct Current to Direct Current Converter 2
F5	APO CARGO – Auxiliary Power Outlet – Cargo
F6	HTD SEAT BATT 1 – Heated Seat Battery 1
F7	HTD SEAT BATT 2 – Heated Seat Battery 2

Fuses	Usage
F8	BCM 3 – Body Control Module 3 – LED Headlight Dipped Beam Right Control Signal, Right Front Indicator Light Control Signal, Left Front Side Marker and Auxiliary Park, Left Rear Tail/Side Marker Control Signal, Left Daytime Running Lights Control Signal
F9	ELEC PRK/BRK – Electric Park Brake
F10	BCM 2 SS – Body Control Module 2 (Stop/Start) – Interior Lights Control Signal, Door Handle Puddle Light (LED), Left Cornering Light, Right Cornering Light, Interior Lights Control Signal, Reversing Light Supply Voltage, Number Plate Light Control Signal, Rear Closure Cargo Light Control Signal, Centre High Mounted Brake lamp LED Light Control Signal
F11	-
F12	-
F13	-
F14	-
F15	TCM SS – Transmission Control Module (Stop/Start)
F16	AMP – Amplifier
F17	-
F18	VPM – Video Processing Module
F19	PWR STR COL – Power Steering Column
F20	BCM 6 – Body Control Module 6 – LED Backlight Control, Interior Lighting Inadvertent Load Control Signal, Fuel Door Lock Control Signal, LED Backlight Control Signal
F21	BCM 4 – Body Control Module 4 – LED Headlight Dipped beam Left Control Signal, Right Front Side Marker and Auxiliary Park, Right Rear Tail/Side Marker Control Signal, Left Rear Brake lamp Control Signal, Left Rear Brake/Indicator Light Control Signal, Right DRL Control Signal

Fuses	Usage
F22	BCM 7 – Body Control Module 7 – Right Rear Brake lamp Control Signal, Right Rear Brake/ Indicator Light Control Signal, Left Front Indicator Light Control Signal, Right Rear Indicator Control Signal
F23	ESCL – Electric Steering Column Lock
F24	Airbag
F25	DLC – Data Link Connector
F26	-
F27	-
F28	-

Fuses	Usage
F29	BCM 8 – Body Control Module 8 – Internal Driver/Fuel Door Unlock Relay Control Signal, Internal Non-Driver Door Lock Relay Control Signal, Internal All Door Unlock Relay Control Signal
F30	OVERHD CNSL – Overhead Console
F31	STR/WHL/CNTRL – Steering Wheel Controls
F32	-
F33	HVAC – Heating Ventilation and Air Conditioning Control Module
F34	CGM – Central Gateway Module
F35	HEATED SW – Heated Seat Switch/Hazard Switch

Fuses	Usage
F36	Wireless Charger Module/ USB Charge Port
	-
F37	APO FRT – Front Auxiliary Power Outlet
F38	OnStar
F39	Displays – Gearchange Interface Board/Centre Stack/Head Up Display/ Instrument Panel Cluster/ HVAC Display
F40	OBS DET – Long Range Radar Sensor/Ultrasonic Park Assist Module/ Camera Module/External Object Calculating Module/Side Blind Zone Alert Modules/Front Camera Module

Fuses	Usage
F41	BCM 1 SS – Body Control Module 1 (Stop/Start) – LED Indicator Lighting Control, Accessory LED Control, Run-Start LED Control, Ambient Lighting LED Control 2, Liftgate Catch Motor Control Signal, Rear Wiper Control Signal, Main Beam Light Control (Direct Drive), Rear Fog LED Light Control Signal, Windscreen Washer Pump Motor Control Signal, Run/Crank Relay Control Signal, ECM/TCM ACC Wakeup Control Signal, Left Rear Indicator Control Signal, Rear Wiper Wash Pump Control Signal, Brake Pedal Apply Signal
F42	RDO – Radio
F43	APO CNSL – Console Auxiliary Power Outlet (Circuit Breaker)
F44	APO CNSL – Front Console Auxiliary Power Outlet

Relay	Usage
K1	-
K2	RAP/ACCY – Retained Accessory Power
K3	Content Theft -
K4	-
K5	-

Wheels and Tyres

Tyres

Every new GM vehicle has high-quality tyres made by a leading tyre manufacturer. See the warranty manual for information regarding the tyre warranty and where to get service. For additional information refer to the tyre manufacturer.

⚠ Warning

- Poorly maintained and improperly used tyres are dangerous.
- Overloading the tyres can cause overheating as a result of too much flexing. There could be a blowout and a serious crash. See *Vehicle Load Limits* ⇨ *200*.
- Underinflated tyres pose the same danger as overloaded tyres. The resulting crash could cause serious injury. Check all tyres frequently to maintain the recommended pressure. Tyre pressure should be checked when the tyres are cold.
- Overinflated tyres are more likely to be cut, punctured, or broken by a sudden impact

(Continued)

Warning (Continued)

- such as when hitting a pothole. Keep tyres at the recommended pressure.

- Worn or old tyres can cause a crash. If the tread is badly worn, replace them.
- Replace any tyres that have been damaged by impacts with potholes, curbs, etc.
- Improperly repaired tyres can cause a crash. Only your dealer or an authorised tyre service centre should repair, replace, remove, and reinstall the tyres.
- Do not spin the tyres in excess of 56 km/h (35 mph) on slippery surfaces such as snow, mud, ice, etc. Excessive spinning may cause the tyres to explode.

See *Tyre Pressure for High-Speed Operation* ⇨ *322* for inflation pressure adjustment for high-speed driving.

Winter Tyres

This vehicle was not originally equipped with winter tyres. Winter tyres are designed for increased traction on snow and ice-covered roads. Consider installing winter tyres on the vehicle if frequent driving on ice or snow covered roads is expected. See your dealer for details regarding winter tyre availability and proper tyre selection. Also, see *Buying New Tyres* ⇨ *330*.

With winter tyres, there may be decreased dry road traction, increased road noise and shorter tread life. After changing to winter tyres, be alert for changes in the vehicle handling and braking.

If using winter tyres:

- Use tyres of the same brand and tread type on all four wheel positions.
- Use only radial ply tyres of the same size, load range and speed rating as the original equipment tyres.

Winter tyres with the same speed rating as the original equipment tyres may not be available for H, V, W, Y and ZR speed rated tyres. If winter tyres with a lower speed rating are chosen, never exceed the tyre's maximum speed capability.

Summer Tyres

This vehicle may come with 235/55R18 or 245/45R20 high performance summer tyres. These tyres have a special tread and compound that are optimised for maximum dry and wet road performance. This special tread and compound will have decreased performance in cold climates, and on ice and snow. It is recommended that winter tyres be installed on the vehicle if frequent driving at temperatures below approximately 5 °C (40 °F) or on ice or snow covered roads is expected. See *Winter Tyres* ⇨ *320*.

Caution

High performance summer tires have rubber compounds that lose flexibility and may develop surface cracks in the tread area at temperatures below -7 °C (20 °F). Always store high performance summer tires indoors and at temperatures above -7 °C (20 °F) when not in use. If the tires have been subjected to -7 °C (20 °F) or less, let them warm up in a heated space to at least 5 °C (40 °F) for 24 hours or more before being installed or driving a vehicle on which they are installed. Do not apply heat or blow heated air directly on the tyres. Always inspect tyres before use. See *Tyre Inspection* ⇨ *327*.

Tyre Pressure

Tyres need the correct amount of air pressure to operate effectively.

⚠ Warning

Neither tyre underinflation nor overinflation is good. Underinflated tyres, or tyres that do not have enough air, can result in:

- Tyre overloading and overheating, which could lead to a blowout.
- Premature or irregular wear.
- Poor handling.
- Reduced fuel economy.

Overinflated tyres, or tyres that have too much air, can result in:

- Unusual wear.
- Poor handling.
- Rough ride.
- Needless damage from road hazards.

The Tyre and Loading Information label on the vehicle indicates the original equipment tyres and the correct cold tyre inflation pressures. The recommended pressure is the minimum air pressure needed to support the vehicle's maximum load carrying capacity. See *Vehicle Load Limits* ⇨ *200*.

How the vehicle is loaded affects vehicle handling and ride comfort. Never load the vehicle with more weight than it was designed to carry.

When to Check

Check the pressure of the tyres once a month or more. Do not forget the compact spare, if the vehicle has one. The compact spare cold tyre pressure should be at 420 kPa (60 psi). See *Compact Spare Tyre* ⇨ *346*.

How to Check

Use a good quality pocket-type gauge to check tyre pressure. Proper tyre inflation cannot be determined by looking at the tyre. Check the tyre inflation pressure when the tyres are cold, meaning the vehicle has not been driven for at least three hours or no more than 1.6 km (1 mi).

Remove the valve cap from the tyre valve stem. Press the tyre gauge firmly onto the valve to get a pressure measurement. If the cold tyre inflation pressure matches the recommended pressure on the Tyre and Loading Information label, no further adjustment is necessary. If the inflation pressure is low, add air until the recommended pressure is reached. If the inflation pressure is high, press on the metal stem in the centre of the tyre valve to release air.

Recheck the tyre pressure with the tyre gauge.

Refit the valve caps on the valve stems to keep out dirt and moisture. Use only valve caps designed for the vehicle by GM. TPMS sensors could be damaged and would not be covered by the vehicle warranty.

Tyre Pressure for High-Speed Operation

⚠ Warning

Driving at high speeds, 160 km/h (100 mph) or higher, puts additional strain on tyres. Sustained high-speed driving causes excessive heat build-up and can cause sudden tyre failure. This could cause a crash, and you or others could be killed. Some high-speed rated tyres require inflation pressure adjustment for high-speed operation. When speed limits and road conditions allow the vehicle to

(Continued)

Warning (Continued)

be driven at high speeds, make sure the tyres are rated for high-speed operation, are in excellent condition, and are set to the correct cold tyre inflation pressure for the vehicle load.

Vehicles with tyre sizes listed in the High Speed Operation Inflation Pressures table require inflation pressure adjustment when driving the vehicle at speeds of 160 km/h (100 mph) or higher. Set the cold tyre inflation pressure to the corresponding value in the table for the tyre size on the vehicle.

High Speed Operation Inflation Pressures	
Tyre Size	**Cold Inflation Pressure kPa (psi)**
235/55R18	260 kPa (38 psi)
245/45R20	260 kPa (38 psi)

Return the tyres to the recommended cold tyre inflation pressure when high-speed driving has ended. See *Vehicle Load Limits* ⇨ *200* and *Tyre Pressure* ⇨ *321*.

Tyre Pressure Monitor System

Caution

Modifications made to the Tyre Pressure Monitor System (TPMS) by anyone other than an authorised service facility may void authorisation to use the system.

The Tyre Pressure Monitor System (TPMS) uses radio and sensor technology to check tyre pressure levels. The TPMS sensors monitor the air pressure in your vehicle's tyres and transmit tyre pressure readings to a receiver located in the vehicle.

Each tyre, 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 tyre inflation pressure label. (If your vehicle has tyres of a different size than the size indicated on the vehicle placard or tyre inflation pressure label, you should determine the proper tyre inflation pressure for those tyres.)

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

Please note that the TPMS is not a substitute for proper tyre maintenance, and it is the driver's responsibility to maintain correct tyre pressure, even if under-inflation has not reached the level to trigger illumination of the TPMS low tyre 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 tyre 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 tyre pressure as intended. TPMS malfunctions may occur for a variety of reasons, including the installation of replacement or alternate tyres or wheels on the vehicle that prevent the TPMS from functioning properly. Always check the TPMS malfunction telltale after replacing one or more tyres or wheels on your vehicle to ensure that the replacement or alternate tyres and wheels allow the TPMS to continue to function properly.

See *Tyre Pressure Monitor Operation* ⇨ *324* for additional information.

See *Declaration of Conformity* ⇨ *376*.

Tyre Pressure Monitor Operation

This vehicle may have a Tyre Pressure Monitor System (TPMS). The TPMS is designed to warn the driver when a low tyre pressure condition exists. TPMS sensors are mounted onto each tyre and wheel assembly, excluding the spare tyre and wheel assembly. The TPMS sensors monitor the air pressure in the tyres and transmit the tyre pressure readings to a receiver located in the vehicle.

When a low tyre pressure condition is detected, the TPMS illuminates the low tyre pressure warning light on the instrument cluster. If the warning light comes on, stop as soon as possible and inflate the tyres to the recommended pressure shown on the Tyre and Loading Information label. See *Vehicle Load Limits* ⇨ *200*.

A message to check the pressure in a specific tyre displays in the Driver Information Centre (DIC). The low tyre pressure warning light and the DIC warning message come on at each ignition cycle until the tyres are inflated to the correct inflation pressure. Using the DIC, tyre pressure levels can be viewed. For additional information and details about the DIC operation and displays see *Driver Information Centre (DIC)* ⇨ *115*.

The low tyre pressure warning light may come on in cool weather when the vehicle is first started, and then turn off as the vehicle is driven. This could be an early indicator that the air pressure is getting low and needs to be inflated to the proper pressure.

A Tyre and Loading Information label, attached to your vehicle, shows the size of the original equipment tyres and the correct inflation pressure for the tyres when they are cold. See *Vehicle Load Limits* ⇨ *200* for an

example of the Tyre and Loading Information label and its location. Also see *Tyre Pressure* ⇨ *321*.

The TPMS can warn about a low tyre pressure condition but it does not replace normal tyre maintenance. See *Tyre Inspection* ⇨ *327*, *Tyre Rotation* ⇨ *328*, and *Tyres* ⇨ *319*.

Caution

Tyre sealant materials are not all the same. A non-approved tyre sealant could damage the TPMS sensors. TPMS sensor damage caused by using an incorrect tyre sealant is not covered by the vehicle warranty. Always use only the GM approved tyre sealant available through your dealer or included in the vehicle.

Factory-installed Tyre Inflater Kits use a GM-approved liquid tyre sealant. Using non-approved tyre sealants could damage the TPMS sensors. See *Tyre Sealant and Compressor Kit* ⇨ *334* for information regarding the inflator kit materials and instructions.

TPMS Malfunction Light and Message

The TPMS will not function properly if one or more of the TPMS sensors are missing or inoperable. When the system detects a malfunction, the low tyre pressure warning light flashes for about one minute and then stays on for the remainder of the ignition cycle. A DIC warning message also displays. The malfunction light and DIC warning message come on at each ignition cycle until the problem is corrected. Some of the conditions that can cause these to come on are:

- One of the road tyres has been replaced with the spare tyre. The spare tyre does not have a TPMS sensor. The malfunction light and DIC message should go off after the road tyre is replaced and the sensor matching process is performed successfully. See “TPMS Sensor Matching Process” following.
- The TPMS sensor matching process was not done or not completed successfully after rotating the tyres. The malfunction light and the DIC message should go off after successfully completing the sensor matching process. See "TPMS Sensor Matching Process" following.
- One or more TPMS sensors are missing or damaged. The malfunction light and the DIC message should go off when the TPMS sensors are installed and the sensor matching process is performed successfully. See your dealer for service.
- Replacement tyres or wheels do not match the original equipment tyres or wheels. Tyres and wheels other than those recommended could prevent the TPMS from functioning properly. See *Buying New Tyres* ⇨ *330*.
- Operating electronic devices or being near facilities using radio wave frequencies similar to the TPMS could cause the TPMS sensors to malfunction.

If the TPMS is not functioning properly, it cannot detect or signal a low tyre pressure condition. See your dealer for service if the TPMS malfunction light and DIC message come on and stay on.

Tyre Fill Alert (If Equipped)

This feature provides visual and audible alerts outside the vehicle to help when inflating an underinflated tyre to the recommended cold tyre pressure.

When the low tyre pressure warning light comes on:

1. Park the vehicle in a safe, level place.
2. Apply the parking brake firmly.
3. Place the vehicle in P (Park).
4. Add air to the tyre that is underinflated. The indicator lamp will flash.

   When the recommended pressure is reached, the horn sounds once and the indicator lamp will stop flashing and briefly turn solid.

Repeat these steps for all underinflated tyres that have illuminated the low tyre pressure warning light.

⚠ Warning

Overinflating a tyre could cause the tyre to rupture and you or others could be injured. Do not exceed the maximum pressure listed on the tyre sidewall.

If the tyre is overinflated by more than 35 kPa (5 psi), the horn will sound multiple times and the indicator lamp will continue to flash for several seconds after filling stops. To release and correct the pressure, while the indicator lamp is still flashing, briefly press the centre of the valve stem. When the recommended pressure is reached, the horn sounds once.

If the indicator lamp does not flash within 15 seconds after starting to inflate the tyre, the tyre fill alert has not been activated or is not working.

If the hazard warning flashers are on, the tyre fill alert visual feedback will not work properly.

The TPMS will not activate the tyre fill alert properly under the following conditions:

- There is interference from an external device or transmitter.
- The air pressure from the inflation device is not sufficient to inflate the tyre.
- There is a malfunction in the TPMS.
- There is a malfunction in the horn or indicator lamps.
- The identification code of the TPMS sensor is not registered to the system.
- The battery of the TPMS sensor is low.

If the tyre fill alert does not operate due to TPMS interference, move the vehicle about 1 m (3 ft) back or forward and try again. If the tyre fill alert feature is not working, use a tyre pressure gauge.

TPMS Sensor Matching Process

Each TPMS sensor has a unique identification code. The identification code needs to be matched to a new tyre/wheel position after rotating the vehicle's tyres or replacing one or more of the TPMS sensors. The TPMS sensor matching process should also be performed after replacing a spare

tyre with a road tyre containing the TPMS sensor. The malfunction light and the DIC message should go off at the next ignition cycle. The sensors are matched to the tyre/wheel positions, using a TPMS relearn tool, in the following order: driver side front tyre, passenger side front tyre, passenger side rear tyre, and driver side rear tyre. See your dealer for service or to purchase a relearn tool.

You have two minutes to match the first tyre/wheel position, and five minutes overall to match all four tyre/wheel positions. If it takes longer, the matching process stops and must be restarted.

The TPMS sensor matching process is outlined below:

1. Apply the parking brake.
2. Place the vehicle in Service Mode. See *Ignition Positions* ⇨ *205*.
3. Make sure the Tyre Pressure info display option is turned on. The info displays on the DIC can be turned on and off through the Options menu. See *Driver Information Centre (DIC)* ⇨ *115*.
4. Use the DIC controls on the right-hand side of the steering wheel to scroll to the Tyre Pressure screen under the DIC info page.
5. Press and hold the thumbwheel located in the centre of the DIC controls on the right-hand side of the steering wheel.

   The horn sounds twice to signal the receiver is in relearn mode and the TYRE LEARNING ACTIVE message displays on the DIC screen.
6. Start with the driver side front tyre.
7. Place the relearn tool against the tyre sidewall, near the valve stem. Then press the button to activate the TPMS sensor. A horn chirp confirms that the sensor identification code has been matched to this tyre and wheel position.
8. Proceed to the passenger side front tyre, and repeat the procedure in Step 7.
9. Proceed to the passenger side rear tyre, and repeat the procedure in Step 7.
10. Proceed to the driver side rear tyre, and repeat the procedure in Step 7. The horn sounds two times to indicate the sensor identification code has been matched to the driver side rear tyre, and the TPMS sensor matching process is no longer active. The TYRE LEARNING ACTIVE message on the DIC display screen goes off.
11. Turn the vehicle off.
12. Set all four tyres to the recommended air pressure level as indicated on the Tyre and Loading Information label.

Tyre Inspection

We recommend that the tyres, including the spare tyre, if the vehicle has one, be inspected for signs of wear or damage at least once a month.

Replace the tyre if:

- The indicators at three or more places around the tyre can be seen.

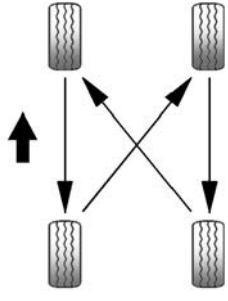
- There is cord or fabric showing through the tyre's rubber.
- The tread or sidewall is cracked, cut, or snagged deep enough to show cord or fabric.
- The tyre has a bump, bulge, or split.
- The tyre has a puncture, cut, or other damage that cannot be repaired well because of the size or location of the damage.

Tyre Rotation

Tyres should be rotated according to the interval listed in the maintenance schedule. See *Maintenance Schedule (Petrol)* ⇨ *361* or *Maintenance Schedule (Diesel)* ⇨ *364*.

Tyres are rotated to achieve a more uniform wear for all tyres. The first rotation is the most important.

Anytime unusual wear is noticed, rotate the tyres as soon as possible, check for proper tyre inflation pressure, and check for damaged tyres or wheels. If the unusual wear continues after the rotation, check the wheel alignment. See *When It Is Time for New Tyres* ⇨ *329* and *Wheel Replacement* ⇨ *332*.



Use this rotation pattern when rotating the tyres.

Do not include the compact spare tyre in the tyre rotation.

Adjust the front and rear tyres to the recommended inflation pressure on the Tyre and Loading Information label after the tyres have been rotated. See *Tyre Pressure* ⇨ *321* and *Vehicle Load Limits* ⇨ *200*.

Reset the Tyre Pressure Monitor System. See *Tyre Pressure Monitor Operation* ⇨ *324*.

Check that all wheel nuts are properly tightened. See “Wheel Nut Torque” under *Capacities and Specifications* ⇨ *373*, and “Removing the Flat Tyre and Installing the Spare Tyre” under *Tyre Changing* ⇨ *341*.

⚠ Warning

Rust or dirt on a wheel, or on the parts to which it is fastened, can cause wheel nuts to become loose over time. The wheel could come off and cause a crash. When changing a wheel,

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Warning (Continued)

remove any rust or dirt from places where the wheel attaches to the vehicle. In an emergency, a cloth or paper towel can be used; however, use a scraper or wire brush afterwards to remove all rust or dirt.

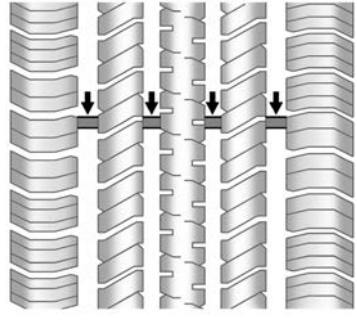
Lightly coat the inner diameter of the wheel hub opening with wheel bearing grease after a wheel change or tyre rotation to prevent corrosion or rust build-up.

⚠ Warning

Do not apply grease to the wheel mounting surface, wheel conical seats, or the wheel nuts or bolts. Grease applied to these areas could cause a wheel to become loose or detach, resulting in a collision.

When It Is Time for New Tyres

Factors, such as maintenance, temperatures, driving speeds, vehicle loading, and road conditions affect the wear rate of the tyres.



Tread wear indicators are one way to tell when it is time for new tyres. Tread wear indicators appear when the tyres have only 1.6 mm (1/16 in) or less of tread remaining. See *Tyre Inspection* ⇨ *327* and *Tyre Rotation* ⇨ *328* for additional information.

The rubber in tyres ages over time. This also applies to the spare tyre, if the vehicle has one, even if it is never used. Multiple factors including temperatures, loading conditions, and inflation pressure maintenance affect how fast ageing takes place. GM recommends that tyres, including the spare if equipped, be replaced after six years, regardless of tread wear. To identify the age of a tyre, use the tyre manufacture date, which consists of the last four digits of the DOT Tyre Identification Number (TIN) moulded into one side of the tyre sidewall. The last four digits of the TIN indicate the tyre manufacture date. The first two digits indicate the week and the last two digits, the year. For example, the third week of the year 2020 would have a 4-digit DOT date of 0320. Week 01 is the first full week (Sunday to Saturday inclusive) of each year.

Vehicle Storage

Tyres age when stored normally mounted on a parked vehicle. Park a vehicle that will be stored for at least a month in a cool, dry, clean area away from direct sunlight to slow

ageing. This area should be free of grease, petrol, or other substances that can deteriorate rubber.

Parking for an extended period can cause flat spots on the tyres that may result in vibrations while driving. When storing a vehicle for at least a month, remove the tyres or raise the vehicle to reduce the weight from the tyres.

Buying New Tyres

GM has developed and matched specific tyres for the vehicle. The original equipment tyres installed were designed to meet General Motors Tyre Performance Criteria Specification (TPC Spec) system rating. When replacement tyres are needed, GM strongly recommends buying tyres with the same TPC Spec rating.

GM's exclusive TPC Spec system considers over a dozen critical specifications that impact the overall performance of the vehicle, including brake system performance, ride and handling, traction control, and tyre pressure monitoring performance. GM's TPC Spec number is moulded onto the tyre's sidewall near the tyre size. If the tyres have an all-season tread design, the TPC Spec number will be followed by MS for mud and snow.

GM recommends replacing worn tyres in complete sets of four. Uniform tread depth on all tyres will help to maintain the performance of the vehicle. Braking and handling performance may be adversely affected if all the tyres are not replaced at the same time. If proper rotation and maintenance have been done, all four tyres should wear out at about the same time. However, if it is necessary to replace only one axle set of worn tyres, place the new tyres on the rear axle. See *Tyre Rotation* ⇨ *328*.

⚠ Warning

Tyres could explode during improper service. Attempting to mount or dismount a tyre could cause injury or death. Only your dealer or authorised tyre service centre should mount or dismount the tyres.

⚠ Warning

Mixing tyres of different sizes (other than those originally installed on the vehicle), brands, tread patterns or types may cause loss of control of the vehicle, resulting in a crash or other vehicle damage. Use the correct size, brand, and type of tyre on all wheels.

⚠ Warning

Using bias-ply tyres on the vehicle may cause the wheel rim flanges to develop cracks after many miles of driving. A tyre and/or wheel could fail suddenly and cause a crash. Use only radial-ply tyres with the wheels on the vehicle.

Winter tyres with the same speed rating as the original equipment tyres may not be available for H, V, W, Y and ZR speed rated tyres. Never exceed the winter tyres' maximum speed capability when using winter tyres with a lower speed rating.

If the vehicle tyres must be replaced with a tyre that does not have a TPC Spec number, make sure they are the same size, load range, speed rating, and construction (radial) as the original tyres.

The Tyre and Loading Information label indicates the original equipment tyres on the vehicle. See *Vehicle Load Limits* ⇨ *200*.

Different Size Tyres and Wheels

If wheels or tyres are installed that are a different size than the original equipment wheels and tyres, vehicle performance, including its braking, ride and handling characteristics, stability, and resistance to rollover may be affected. If the vehicle has electronic systems such as antilock brakes, rollover airbags, traction control, electronic stability control, or All-Wheel Drive, the performance of these systems can also be affected.

⚠ Warning

If different sized wheels are used, there may not be an acceptable level of performance and safety if tyres not recommended for those wheels are selected. This increases the chance of a crash and serious

(Continued)

Warning (Continued)

injury. Only use GM specific wheel and tyre systems developed for the vehicle, and have them properly installed by a GM certified technician.

See *Buying New Tyres* ⇨ *330* and *Accessories and Modifications* ⇨ *286*.

Wheel Alignment and Tyre Balance

The tyres and wheels were aligned and balanced at the factory to provide the longest tyre life and best overall performance. Adjustments to wheel alignment and tyre balancing are not necessary on a regular basis. Consider an alignment check if there is unusual tyre wear or the vehicle is significantly pulling to one side or the other. Some slight pull to the left or right, depending on the crown of the road and/or other road surface variations such as troughs or ruts, is normal. If the vehicle is vibrating when driving

on a smooth road, the tyres and wheels may need to be rebalanced. See your dealer for proper diagnosis.

Wheel Replacement

Replace any wheel that is bent, cracked, or badly rusted or corroded. If wheel nuts keep coming loose, the wheel, wheel bolts, and wheel nuts should be replaced. If the wheel leaks air, replace it. Some aluminium wheels can be repaired. See your dealer if any of these conditions exist.

Your dealer will know the kind of wheel that is needed.

Each new wheel should have the same load-carrying capacity, diameter, width, offset, and be mounted the same way as the one it replaces.

Replace wheels, wheel bolts, wheel nuts, or Tyre Pressure Monitor System (TPMS) sensors with new GM original equipment parts.

⚠ Warning

Using the wrong replacement wheels, wheel bolts, or wheel nuts can be dangerous. It could affect the braking and handling of the vehicle. Tyres can lose air, and cause loss of control, causing a crash. Always use the correct wheel, wheel bolts, and wheel nuts for replacement.

Caution

The wrong wheel can also cause problems with bearing life, brake cooling, speedometer or odometer calibration, headlamp aim, bumper height, vehicle ground clearance, and tyre or tyre chain clearance to the body and chassis.

Used Replacement Wheels

⚠ Warning

Replacing a wheel with a used one is dangerous. How it has been used or how far it has been driven may be unknown. It could fail suddenly and cause a crash. When replacing wheels, use a new GM original equipment wheel.

Tyre Chains

⚠ Warning

If the vehicle has 245/45R20 size tyres, do not use tyre chains. There is not enough clearance. Tyre chains used on a vehicle without the proper amount of clearance can cause damage to the brakes, suspension or other vehicle parts. The area damaged by the tyre chains could cause loss of control and a crash. Use another type of traction device only if its manufacturer recommends it for the vehicle's tyre size combination

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Warning (Continued)

and road conditions. Follow that manufacturer's instructions. To avoid vehicle damage, drive slow and readjust or remove the traction device if it contacts the vehicle. Do not spin the wheels. If traction devices are used, install them on the front tyres.

Caution

If the vehicle is equipped with a tyre size other than 245/45R20, use tyre chains only where legal and only when necessary. Use low profile chains that add no more than 12 mm thickness to the tyre tread and inner sidewall. Use chains that are the proper size for the tyres. Install them on the tyres of the front axle. Do not use chains on the tyres of the rear axle. Tighten them as tightly as possible with the ends securely fastened. Drive slowly and follow the chain manufacturer's instructions. If the chains contact

(Continued)

Caution (Continued)

the vehicle, stop and retighten them. If the contact continues, slow down until it stops. Driving too fast or spinning the wheels with chains on will damage the vehicle.

If a Tyre Goes Flat

It is unusual for a tyre to blow out while driving, especially if the tyres are maintained properly. See *Tyres* ⇨ *319*. If air goes out of a tyre, it is much more likely to leak out slowly. But if there is ever a blowout, here are a few tips about what to expect and what to do:

If a front tyre fails, the flat tyre creates a drag that pulls the vehicle toward that side. Take your foot off the accelerator pedal and grip the steering wheel firmly. Steer to maintain lane position, and then gently brake to a stop, well off the road, if possible.

A rear blowout, particularly on a curve, acts much like a skid and may require the same correction as used in a skid. Stop pressing the accelerator pedal and steer to straighten the vehicle. It may be very bumpy and noisy. Gently brake to a stop, well off the road, if possible.

⚠ Warning

Driving on a flat tyre will cause permanent damage to the tyre. Re-inflating a tyre after it has been driven on while severely underinflated or flat may cause a blowout and a serious crash. Never attempt to re-inflate a tyre that has been driven on while severely underinflated or flat. Have your dealer or an authorised tyre service centre repair or replace the flat tyre as soon as possible.

⚠ Warning

Lifting a vehicle and getting under it to do maintenance or repairs is dangerous without the appropriate safety equipment and training. If a jack is provided with the vehicle, it is designed only for changing a flat

(Continued)

Warning (Continued)

tyre. If it is used for anything else, you or others could be badly injured or killed if the vehicle slips off the jack. If a jack is provided with the vehicle, only use it for changing a flat tyre.

If a tyre goes flat, avoid further tyre and wheel damage by driving slowly to a level place, well off the road, if possible. Turn on the hazard warning flashers. See *Hazard Lights* ⇨ *130*.

⚠ Warning

Changing a tyre can be dangerous. The vehicle can slip off the jack and roll over or fall causing injury or death. Find a level place to change the tyre. To help prevent the vehicle from moving:

1. Apply the parking brake firmly.
2. Put an automatic transmission in P (Park) or a manual gearbox in 1 (First) or R (Reverse).

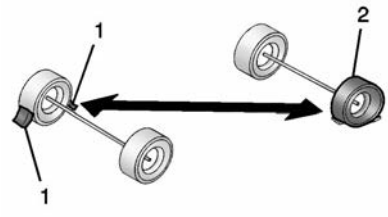
(Continued)

Warning (Continued)

3. Turn off the engine and do not restart while the vehicle is raised.
4. Do not allow passengers to remain in the vehicle.
5. Place wheel chocks, if equipped, on both sides of the tyre at the opposite corner of the tyre being changed.

This vehicle may come with a jack and spare tyre or a tyre sealant and compressor kit. To use the jacking equipment to change a spare tyre safely, follow the instructions below. Then see *Tyre Changing* ⇨ *341*. To use the tyre sealant and compressor kit, see *Tyre Sealant and Compressor Kit* ⇨ *334*.

When the vehicle has a flat tyre (2), use the following example as a guide to assist you in the placement of wheel chocks (1), if equipped.



1. Wheel Chock (If Equipped)
2. Flat Tyre

The following information explains how to repair or change a tyre.

Tyre Sealant and Compressor Kit

⚠ Warning

Idling a vehicle in an enclosed area with poor ventilation is dangerous. Engine exhaust may enter the vehicle. Engine exhaust contains carbon monoxide (CO) which cannot be seen or smelled. It can cause unconsciousness and even death. Never run the engine in an

(Continued)

Warning (Continued)

enclosed area that has no fresh air ventilation. For more information, see *Engine Exhaust* ⇨ *211*.

⚠ Warning

Overinflating a tyre could cause the tyre to rupture and you or others could be injured. Be sure to read and follow the tyre sealant and compressor kit instructions and inflate the tyre to its recommended pressure. Do not exceed the recommended pressure.

⚠ Warning

Storing the tyre sealant and compressor kit or other equipment in the passenger compartment of the vehicle could cause injury. In a sudden stop or collision, loose equipment could strike someone. Store the tyre sealant and compressor kit in its original location.

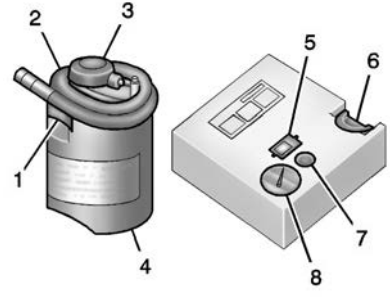
If this vehicle has a tyre sealant and compressor kit, there may not be a spare tyre or tyre changing equipment, and on some vehicles there may not be a place to store a tyre.

The tyre sealant and compressor can be used to temporarily seal punctures up to 6 mm (0.25 in) in the tread area of the tyre. It can also be used to inflate an under inflated tyre.

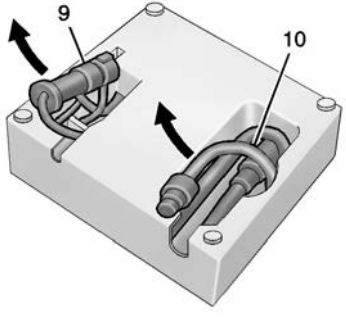
If the tyre has been separated from the wheel, has damaged sidewalls, or has a large puncture, the tyre is too severely damaged for the tyre sealant and compressor kit to be effective.

Read and follow all of the tyre sealant and compressor kit instructions.

The kit includes:



1. Sealant Canister Inlet Valve
2. Sealant/Air Hose
3. Base of Sealant Canister
4. Tyre Sealant Canister
5. On/Off Button
6. Slot on Top of Compressor
7. Pressure Deflation Button
8. Pressure Gauge



9. Power Plug
10. Air Only Hose

Tyre Sealant

Read and follow the safe handling instructions on the label adhered to the tyre sealant canister (4).

Check the tyre sealant expiration date on the tyre sealant canister. The tyre sealant canister (4) should be replaced before its expiration date. Replacement tyre sealant canisters are available at your local dealer.

There is only enough sealant to seal one tyre. After usage, the tyre sealant canister must be replaced.

Using the Tyre Sealant and Compressor Kit to Temporarily Seal and Inflate a Punctured Tyre

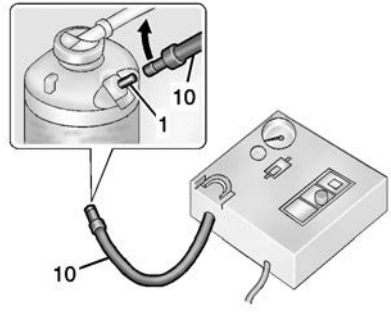
When using the tyre sealant and compressor kit during cold temperatures, warm the kit in a heated environment for five minutes. This will help to inflate the tyre faster.

If a tyre goes flat, avoid further tyre and wheel damage by driving slowly to a level place. Turn on the hazard warning flashers. See *Hazard Lights* ⇨ *130*.

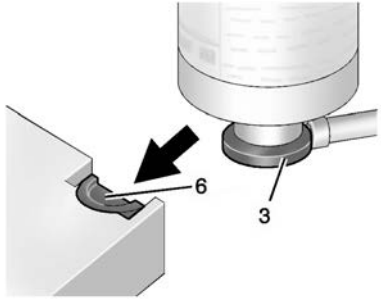
See *If a Tyre Goes Flat* ⇨ *333* for other important safety warnings.

Do not remove any objects that have penetrated the tyre.

1. Remove the tyre sealant canister (4) and compressor from its storage location. See *Storing the Tyre Sealant and Compressor Kit* ⇨ *341*.
2. Remove the air only hose (10) and the power plug (9) from the bottom of the compressor.
3. Place the compressor on the ground near the flat tyre.



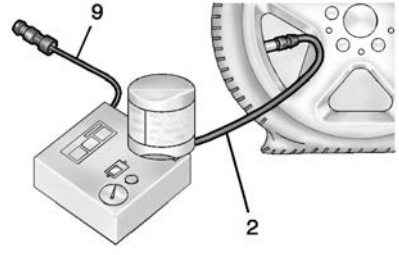
4. Attach the air only hose (10) to the sealant canister inlet valve (1) by turning it clockwise until tight.



5. Slide the base of the tyre sealant canister (3) into the slot on the top of the compressor (6) to hold it upright.

   Make sure the tyre valve stem is positioned close to the ground so the hose will reach it.

6. Remove the valve stem cap from the flat tyre by turning it anticlockwise.



7. Attach the sealant/air hose (2) to the tyre valve stem by turning it clockwise until tight.

8. Plug the power plug (9) into the accessory power outlet in the vehicle. Unplug all items from other accessory power outlets. See *Power Sockets* ⇨ *95*.

   If the vehicle has an accessory power outlet, do not use the cigarette lighter.

   If the vehicle only has a cigarette lighter, use the cigarette lighter.

   Do not pinch the power plug cord in the door or window.

9. Start the vehicle. The vehicle must be running while using the air compressor.

10. Press the on/off button (5) to turn the tyre sealant and compressor kit on.

    The compressor will inject sealant and air into the tyre.

    The pressure gauge (8) will initially show a high pressure while the compressor pushes the sealant into the tyre. Once the sealant is completely dispersed into the tyre, the pressure will quickly drop and start to rise again as the tyre inflates with air only.

11. Inflate the tyre to the recommended inflation pressure using the pressure gauge (8). The recommended inflation pressure can be found on the Tyre and Loading Information label. See *Tyre Pressure* ⇨ *321*.

    The pressure gauge (8) may read higher than the actual tyre pressure while the compressor is on. Turn the compressor off to get an accurate pressure reading. The

compressor may be turned on/off until the correct pressure is reached.

Caution

If the recommended pressure cannot be reached after approximately 25 minutes, the vehicle should not be driven farther. The tyre is too severely damaged and the tyre sealant and compressor kit cannot inflate the tyre. Remove the power plug from the accessory power outlet and unscrew the inflating hose from the tyre valve.

12. Press the on/off button (5) to turn the tyre sealant and compressor kit off.

    The tyre is not sealed and will continue to leak air until the vehicle is driven and the sealant is distributed in the tyre. Therefore, Steps 13–21 must be done immediately after Step 12.

    Be careful while handling the tyre sealant and compressor kit as it could be warm after usage.

13. Unplug the power plug (9) from the accessory power outlet in the vehicle.
14. Turn the sealant/air hose (2) anticlockwise to remove it from the tyre valve stem.
15. Replace the tyre valve stem cap.
16. Remove the tyre sealant canister (4) from the slot on top of the compressor (6).
17. Turn the air only hose (10) anticlockwise to remove it from the tyre sealant canister inlet valve (1).
18. Turn the sealant/air hose (2) clockwise onto the sealant canister inlet valve (1) to prevent sealant leakage.
19. Return the air only hose (10) and power plug (9) back to their original storage location.

20. If the flat tyre was able to inflate to the recommended inflation pressure, remove the maximum speed label from the sealant canister and place it in a highly visible location.

    Do not exceed the speed on this label until the damaged tyre is repaired or replaced.

21. Return the equipment to its original storage location in the vehicle.
22. Immediately drive the vehicle 8 km (5 mi) to distribute the sealant in the tyre.
23. Stop at a safe location and check the tyre pressure. Refer to Steps 1–10 under “Using the Tyre Sealant and Compressor Kit without Sealant to Inflate a Tyre (Not Punctured).”

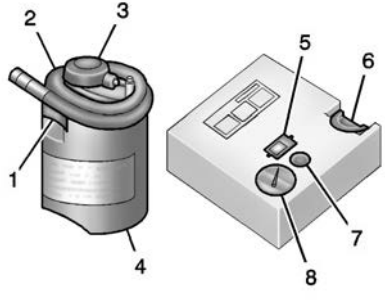
    If the tyre pressure has fallen more than 68 kPa (10 psi) below the recommended inflation pressure, stop driving the vehicle. The tyre is too severely damaged and the tyre sealant cannot seal the tyre.

If the tyre pressure has not dropped more than 68 kPa (10 psi) from the recommended inflation pressure, inflate the tyre to the recommended inflation pressure.

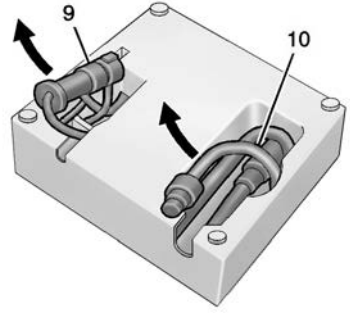
24. Wipe off any sealant from the wheel, tyre, or vehicle.
25. Dispose of the used tyre sealant canister (4) at a local dealer or in accordance with local state codes and practices.
26. Replace it with a new canister available from your dealer.
27. After temporarily sealing a tyre using the tyre sealant and compressor kit, take the vehicle to an authorised dealer within 161 km (100 mi) of driving to have the tyre repaired or replaced.

Using the Tyre Sealant and Compressor Kit without Sealant to Inflate a Tyre (Not Punctured)

The kit includes:



1. Sealant Canister Inlet Valve
2. Sealant/Air Hose
3. Base of Sealant Canister
4. Tyre Sealant Canister
5. On/Off Button
6. Slot on Top of Compressor
7. Pressure Deflation Button
8. Pressure Gauge



9. Power Plug
10. Air Only Hose

If a tyre goes flat, avoid further tyre and wheel damage by driving slowly to a level place. Turn on the hazard warning flashers. See *Hazard Lights* ⇨ *130*.

See *If a Tyre Goes Flat* ⇨ *333* for other important safety warnings.

1. Remove the compressor from its storage location. See *Storing the Tyre Sealant and Compressor Kit* ⇨ *341*.
2. Remove the air only hose (10) and the power plug (9) from the bottom of the compressor.

3. Place the compressor on the ground near the flat tyre.

   Make sure the tyre valve stem is positioned close to the ground so the hose will reach it.

4. Remove the valve stem cap from the flat tyre by turning it anticlockwise.
5. Attach the air only hose (10) to the tyre valve stem by turning it clockwise until tight.
6. Plug the power plug (9) into the accessory power outlet in the vehicle. Unplug all items from other accessory power outlets. See *Power Sockets* ⇨ *95*.

   If the vehicle has an accessory power outlet, do not use the cigarette lighter.

   If the vehicle only has a cigarette lighter, use the cigarette lighter.

   Do not pinch the power plug cord in the door or window.

7. Start the vehicle. The vehicle must be running while using the air compressor.
8. Press the on/off button (5) to turn the tyre sealant and compressor kit on.

   The compressor will inflate the tyre with air only.

9. Inflate the tyre to the recommended inflation pressure using the pressure gauge (8). The recommended inflation pressure can be found on the Tyre and Loading Information label. See *Tyre Pressure* ⇨ *321*.

   The pressure gauge (8) may read higher than the actual tyre pressure while the compressor is on. Turn the compressor off to get an accurate pressure reading. The compressor may be turned on/off until the correct pressure is reached.

Caution

If the recommended pressure cannot be reached after approximately 25 minutes, the vehicle should not be driven farther. The tyre is too severely damaged and the tyre sealant and

(Continued)

Caution (Continued)

compressor kit cannot inflate the tyre. Remove the power plug from the accessory power outlet and unscrew the inflating hose from the tyre valve.

10. Press the on/off button (5) to turn the tyre sealant and compressor kit off.

    Be careful while handling the compressor as it could be warm after usage.

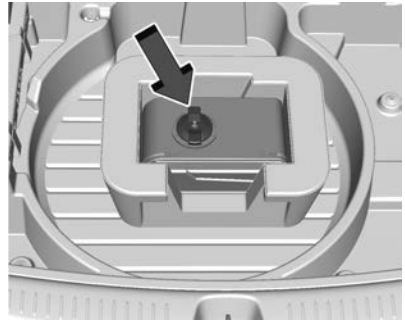
11. Unplug the power plug (9) from the accessory power outlet in the vehicle.
12. Turn the air only hose (10) anticlockwise to remove it from the tyre valve stem.
13. Replace the tyre valve stem cap.
14. Return the air only hose (10) and power plug (9) back to their original storage location.
15. Return the equipment to its original storage location in the vehicle.

The tyre sealant and compressor kit has accessory adapters in a compartment on the bottom of its housing that can be used to inflate air mattresses, balls, etc.

Storing the Tyre Sealant and Compressor Kit

The tyre sealant and compressor kit is in a bag in the rear compartment storage area.

1. Open the tailgate.
2. Remove the cargo cover, if equipped.
3. Lift the load floor. Use the hook to hold the load floor open. See *Rear Storage* ⇨ *85*.

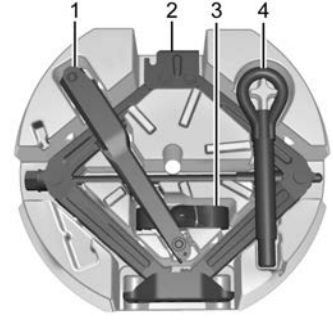


4. Turn the retainer nut anticlockwise to remove the tyre sealant and compressor kit bag.
5. Remove the tyre sealant and compressor kit from the bag.

To store the tyre sealant and compressor kit, reverse the steps.

Tyre Changing

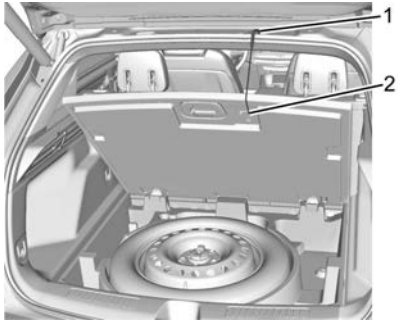
Removing the Spare Tyre and Tools



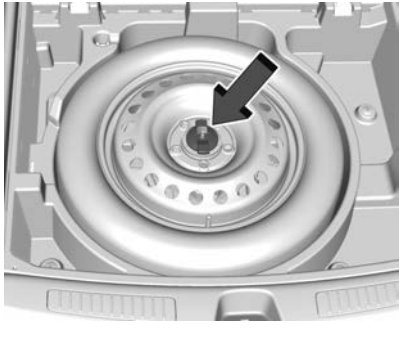
1. Wrench
2. Jack
3. Strap
4. Tow Hook (If Equipped)

To access the spare tyre and tools:

1. Open the tailgate. See *Tailgate* ⇨ *18*.
2. Remove the cargo cover, if equipped.
3. Lift the load floor.



Insert the hook (2) into the opening on the tailgate (1) to hold it open.



4. Turn the retainer nut anticlockwise and remove the spare tyre.

   Place the spare tyre next to the tyre being changed.
5. The jack and tools are stored below the spare tire.

   Remove them from their container and place them near the tyre being changed.

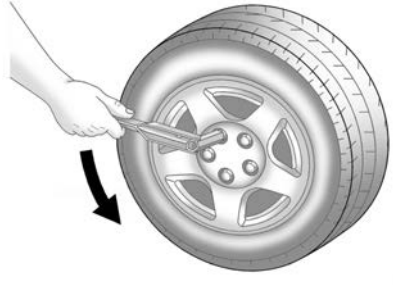
Removing the Flat Tyre and Installing the Spare Tyre

1. Do a safety check before proceeding. See *If a Tyre Goes Flat* ⇨ *333*.
2. For vehicles equipped with a wheel cover or centre cap, pull the cover or centre cap away from the wheel to remove it.

   Store the wheel cover in the cargo area until the flat tyre is repaired or replaced.

   If the vehicle has a centre cap with wheel nut caps, the wheel nut caps are designed to stay with the centre cap after they are loosened.

   Remove the entire centre cap if the wheel has a smooth centre cap. Place the chisel end of the wheel wrench in the slot on the wheel, and gently prize it off.



3. Turn the wheel wrench anticlockwise to loosen all the wheel nuts, but do not remove them yet.

Caution

Make sure that the jack lift head is in the correct position or you may damage your vehicle. The repairs would not be covered by your warranty.

4. Position the jack lift head at the jack location nearest the flat tyre.

Locate the notch on the sheet metal weld flange. Place the centre of the jack lift head on the centre of the sheet metal notch.

The jack must not be used in any other position.

⚠ Warning

Getting under a vehicle when it is lifted on a jack is dangerous. If the vehicle slips off the jack, you could

(Continued)

Warning (Continued)

be badly injured or killed. Never get under a vehicle when it is supported only by a jack.

⚠ Warning

Raising the vehicle with the jack improperly positioned can damage the vehicle and even make the vehicle fall. To help avoid personal injury and vehicle damage, be sure to fit the jack lift head into the proper location before raising the vehicle.

⚠ Warning

Lifting a vehicle and getting under it to do maintenance or repairs is dangerous without the appropriate safety equipment and training. If a jack is provided with the vehicle, it is designed only for changing a flat tyre. If it is used for anything else, you or others could be badly injured

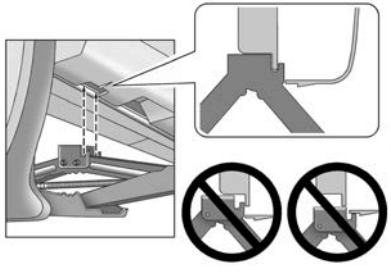
(Continued)

Warning (Continued)

or killed if the vehicle slips off the jack. If a jack is provided with the vehicle, only use it for changing a flat tyre.

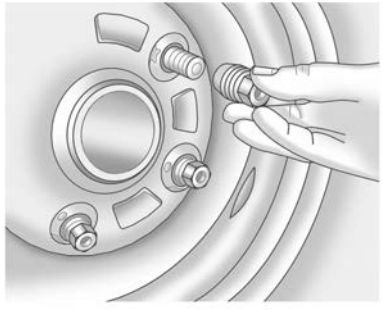
Caution

Using a jack to raise the vehicle without positioning it correctly could damage your vehicle. When raising your vehicle on a jack, be sure to position it correctly under the frame and avoid contact with the plastic moulding.



5. Turn the wheel wrench clockwise to raise the jack until the slot in the jack lift head fits into the metal flange located behind the cut out on the plastic moulding.

   Do not raise the vehicle yet.
6. Put the compact spare tyre near you.
7. Raise the vehicle by turning the jack handle clockwise. Raise the vehicle far enough off the ground so there is enough room for the road tyre to clear the ground.



8. Remove all of the wheel nuts.
9. Remove the flat tyre.

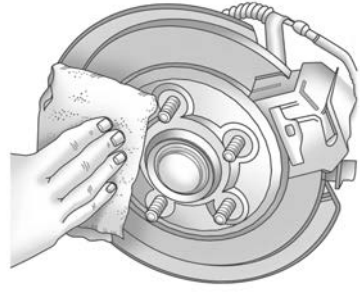
⚠ Warning

Rust or dirt on a wheel, or on the parts to which it is fastened, can cause wheel nuts to become loose over time. The wheel could come off and cause a crash. When changing a wheel, remove any rust or dirt from places where the wheel attaches to the vehicle. In an emergency, a cloth or paper towel can be

(Continued)

Warning (Continued)

used; however, use a scraper or wire brush afterwards to remove all rust or dirt.



10. Remove any rust or dirt from the wheel bolts, mounting surfaces, and spare wheel.
11. Place the compact spare tyre on the wheel-mounting surface.

⚠ Warning

Never use oil or grease on bolts or nuts because the nuts might come loose. The vehicle's wheel could fall off, causing a crash.

12. Reinstall the wheel nuts. Tighten each nut by hand until the wheel is held against the hub.
13. Lower the vehicle by turning the jack handle anticlockwise.

⚠ Warning

Wheel nuts that are improperly or incorrectly tightened can cause the wheels to become loose or come off. The wheel nuts should be tightened with a torque wrench to the proper torque specification after replacing. Follow the torque specification supplied by the aftermarket manufacturer when using accessory locking wheel nuts. See *Capacities and Specifications* ⇨ *373* for original equipment wheel nut torque specifications.

Caution

Improperly tightened wheel nuts can lead to brake pulsation and disc damage. To avoid expensive brake repairs, evenly tighten the wheel nuts in the proper sequence and to the proper torque specification. See *Capacities and Specifications* ⇨ *373* for the wheel nut torque specification.

14. Tighten the wheel nuts firmly in a crisscross sequence, as shown.
15. Lower the jack all the way and remove the jack from under the vehicle.
16. Tighten the wheel nuts firmly with the wheel wrench.

When reinstalling the wheel cover or centre cap on the full-size tyre, tighten all five plastic caps hand snug with the aid of the wheel wrench and tighten them with the wheel wrench an additional one-quarter of a turn.

Caution

Wheel covers will not fit on the vehicle's compact spare. If you try to put a wheel cover on the compact spare, the cover or the spare could be damaged.

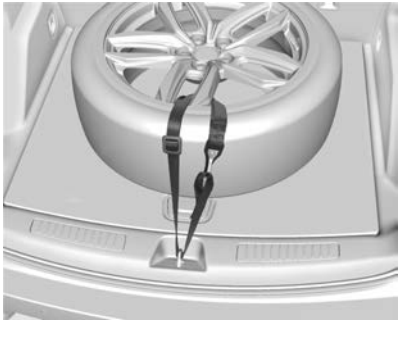
Storing a Flat or Spare Tyre and Tools

⚠ Warning

Storing a jack, a tyre, or other equipment in the passenger compartment of the vehicle could cause injury. In a sudden stop or collision, loose equipment could strike someone. Store all these in the proper place.

To store the flat or spare tyre and tools:

1. Open the tailgate. See *Tailgate ⇨ 18*.
2. Replace the jack and tools in their original storage location.
3. Lower the load floor.
4. Place the tyre, lying flat, in the rear storage compartment.
5. Place the loop end of the strap through the tailgate striker.



6. Route the strap through the wheel as shown.
7. Attach the hook to the loop end of the strap.
8. Tighten the strap.
9. Replace the cargo cover, if equipped.
10. Close the tailgate and make sure it is fully latched.

The compact spare is for temporary use only. Replace the compact spare tyre with a full-size tyre as soon as you can.

Compact Spare Tyre

⚠ Warning

Driving with more than one compact spare tyre at a time could result in loss of braking and handling. This could lead to a crash and you or others could be injured. Use only one compact spare tyre at a time.

If this vehicle has a compact spare tyre, it was fully inflated when new; however, it can lose air over time. Check the inflation pressure regularly. It should be 420 kPa (60 psi).

Stop as soon as possible and check that the spare tyre is correctly inflated after being installed on the vehicle.

The compact spare tyre is designed for temporary use only. The vehicle will perform differently with the spare tyre installed and it is recommended that the vehicle speed be limited to 80 km/h (50 mph). To conserve the tread of the spare tyre, have the standard tyre repaired or replaced as soon as convenient and return the spare tyre to the storage area.

When using a compact spare tyre, the AWD (if equipped), ABS, and Traction Control systems may engage until the spare tyre is recognised by the vehicle, especially on slippery roads. Adjust driving to reduce possible wheel slip.

Caution

When the compact spare is installed, do not take the vehicle through an automatic car wash with guide rails. The compact spare can get caught on the rails which can damage the tyre, wheel, and other parts of the vehicle.

Do not use the compact spare on other vehicles.

Do not mix the compact spare tyre or wheel with other wheels or tyres. They will not fit. Keep the spare tyre and its wheel together.

Caution

Tyre chains will not fit the compact spare. Using them can damage the vehicle and the chains. Do not use tyre chains on the compact spare.

Jump Starting

For more information about the vehicle battery, see *Battery* ⇨ *303*.

If the battery has run down, try to use another vehicle and some jumper cables to start your vehicle. Be sure to use the following steps to do it safely.

⚠ Warning

Batteries can hurt you. They can be dangerous because:

- They contain acid that can burn you.
- They contain gas that can explode or ignite.

(Continued)

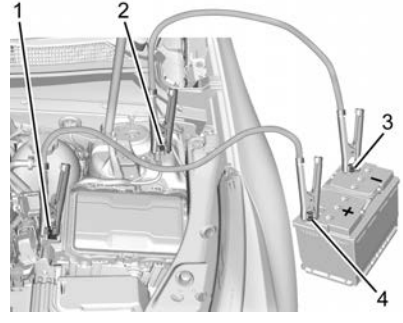
Warning (Continued)

- They contain enough electricity to burn you.

If you do not follow these steps exactly, some or all of these things can hurt you.

Caution

Ignoring these steps could result in costly damage to the vehicle that would not be covered by the vehicle warranty. Trying to start the vehicle by pushing or pulling it will not work, and it could damage the vehicle.



1. Discharged Battery Positive (+) Terminal
2. Discharged Battery Negative (-) Terminal
3. Good Battery Negative (-) Terminal
4. Good Battery Positive (+) Terminal

The discharged battery positive (+) terminal and the discharged battery negative (–) terminal are on the driver side of the vehicle.

The good battery negative (–) terminal and good battery positive (+) terminal are on the battery of the vehicle providing the jump start.

The discharged battery positive (+) terminal is under a cover. Remove the cover to expose the terminal.

1. Check the other vehicle. It must have a 12-volt battery with a negative ground system.

Caution

If the other vehicle does not have a 12-volt system with a negative ground, both vehicles can be damaged. Only use a vehicle that has a 12-volt system with a negative ground for jump starting.

2. Position the two vehicles so that they are not touching.
3. Apply the parking brake firmly and put the transmission in P (Park). See *Shifting Into Park ⇨ 209*.

Caution

If any accessories are left on or plugged in during the jump starting procedure, they could be damaged. The repairs would not be covered by the vehicle warranty. Whenever

(Continued)

Caution (Continued)

possible, turn off or unplug all accessories on either vehicle when jump starting.

4. Turn the ignition off. Turn off all lights and accessories in both vehicles, except the hazard warning flashers if needed.

⚠ Warning

An electric fan can start up even when the engine is not running and can injure you. Keep hands, clothing, and tools away from any underbonnet electric fan.

⚠ Warning

Using a match near a battery can cause battery gas to explode. People have been hurt doing this, and some have been blinded. Use a torch if you need more light.

(Continued)

Warning (Continued)

Battery fluid contains acid that can burn you. Do not get it on you. If you accidentally get it in your eyes or on your skin, flush the place with water and get medical help immediately.

⚠ Warning

Fans or other moving engine parts can injure you badly. Keep your hands away from moving parts once the engine is running.

5. Connect one end of the red positive (+) cable to the discharged battery positive (+) terminal.
6. Connect the other end of the red positive (+) cable to the good battery positive (+) terminal.
7. Connect one end of the black negative (–) cable to the good battery negative (–) terminal.

8. Connect the other end of the black negative (–) cable to the discharged battery negative (–) terminal on the driver side suspension turret.
9. Start the engine in the vehicle with the good battery and run the engine at idle speed for at least four minutes.
10. Try to start the vehicle that had the dead battery. If it will not start after a few tries, it probably needs service.

Caution

If the jump leads are connected or removed in the wrong order, electrical shorting may occur and damage the vehicle. The repairs would not be covered by the vehicle warranty. Always connect and remove the jump leads in the correct order, making sure that the cables do not touch each other or other metal.

Jump Lead Removal

Reverse the sequence exactly when removing the jump leads.

After starting the disabled vehicle and removing the jump leads, allow it to idle for several minutes.

Towing the Vehicle

Caution

Transporting a disabled vehicle incorrectly may cause damage to the vehicle. Use proper tyre straps to secure the vehicle to the flatbed tow truck. Do not strap or hook to any frame, underbody, or suspension component not specified below. Do not move vehicles with drive axle tyres on the ground. Damage is not covered by the vehicle warranty.

Caution

The vehicle may be equipped with an electric parking brake and/or an electronic gearchange. In the event of a loss of 12-volt battery power, the electric parking brake cannot be released, and the vehicle cannot be

(Continued)

Caution (Continued)

changed to N (Neutral). Tyre skates or dollies must be used under the non-rolling tyres to prevent damage while loading/unloading the vehicle. Dragging the vehicle will cause damage not covered by the vehicle warranty.

Caution

The vehicle may be equipped with a towing eye. Improper use of the towing eye may cause damage to the vehicle and is not covered by the vehicle warranty. If equipped, use the towing eye to load the vehicle onto a flatbed tow truck from a flat road surface, or to move the vehicle a very short distance at a walking pace. The towing eye is not designed for off-road recovery. The vehicle must be in N (Neutral) with the electric parking brake released when using the towing eye.

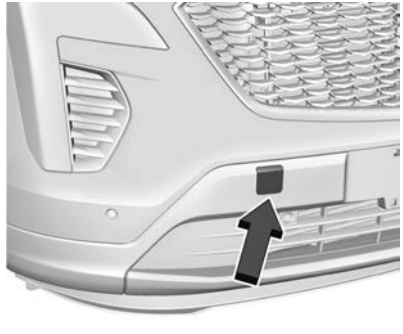
Contact a professional towing service if the disabled vehicle must be transported. GM recommends a flatbed tow truck to transport a disabled vehicle. Use ramps to help reduce approach angles, if necessary.

If equipped, a towing eye may be located near the spare tyre or emergency jack. Do not use the towing eye to pull the vehicle from the snow, mud, sand, or ditch. Towing eye threads may have right or left-hand threads. Use caution when installing or removing the towing eye.

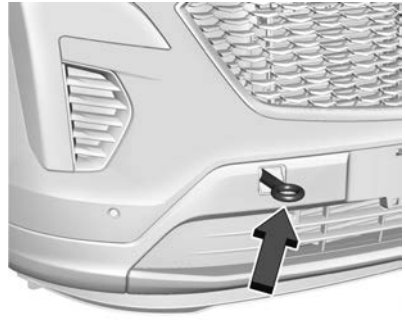
The vehicle must be in N (Neutral) and the electronic parking brake must be released when loading the vehicle onto a flatbed tow truck.

- If the vehicle is equipped with car wash mode and has 12-volt battery power, refer to "Car Wash Mode" under *Automatic Transmission* ⇨ *215* to place the vehicle in N (Neutral).
- If the 12-volt battery is dead and/or the engine will not start, the vehicle will not move. Try to jump start the vehicle. Refer to *Jump Starting* ⇨ *347* and if the jump start is successful, retry the "Car Wash Mode" procedure.
- If jump starting is unsuccessful, the vehicle will not move. Tyre skates or dollies must be used under the non-rolling tyres to prevent vehicle damage.

Front Tow Eye



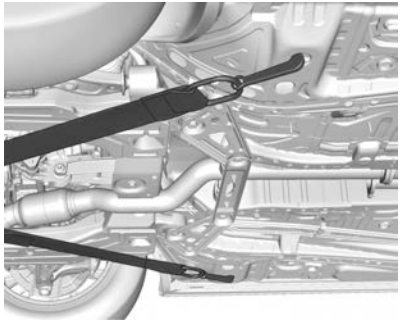
Carefully open the cover by using the small notch that conceals the front tow eye socket.



Install the tow eye into the socket and turn it until it is fully tightened.

When the tow eye is removed, reinstall the cover with the notch in the original position.

Front Attachment Points



The vehicle is equipped with specific attachment points to be used by the towing provider. These holes may be used to pull the vehicle from a flat road surface onto the flatbed tow truck.

Appearance Care

Exterior Care

Locks

Locks are lubricated at the factory. Use a de-icing agent only when absolutely necessary, and have the locks greased after using. See *Recommended Fluids and Lubricants* ⇨ *368*.

Washing the Vehicle

To preserve the vehicle's finish, wash it often and out of direct sunlight.

Caution

Do not use petroleum-based, acidic, or abrasive cleaning agents as they can damage the vehicle's paint, metal, or plastic parts. If damage occurs, it would not be covered by the vehicle warranty. Approved cleaning products can be obtained from your dealer. Follow all manufacturer directions regarding correct product usage, necessary safety precautions, and appropriate disposal of any vehicle care product.

Caution

Avoid using high-pressure washers closer than 30 cm (12 in) to the surface of the vehicle. Use of power

(Continued)

Caution (Continued)

washers exceeding 8 274 kPa (1,200 psi) can result in damage or removal of paint and decals.

If using an automatic car wash, follow the car wash instructions. The windscreen wiper and rear window wiper, if equipped, must be off. Remove any accessories that may be damaged or interfere with the car wash equipment.

Rinse the vehicle well, before washing and after, to remove all cleaning agents completely. If they are allowed to dry on the surface, they could stain.

Dry the finish with a soft, clean chamois or an all-cotton towel to avoid surface scratches and water spotting.

Cleaning Underbonnet Components

Caution

Do not power wash any component under the bonnet that has this symbol.

(Continued)

Caution (Continued)

This could cause damage that would not be covered by the vehicle warranty.

Solvents or aggressive cleaners may harm underbonnet components. The usages of these chemicals should be avoided.

Recommend water only.

A pressure washer may be used, but care must be taken. The following criteria must be followed:

- Water pressure must be kept below 14 000 KPa (2,000 PSI).
- Water temperature must be below 80 °C (180 °F).
- Spray nozzle with a 40-degree wide angle spray pattern or wider must be used.
- Nozzle must be kept at least 30 cm (1 ft) away from all surfaces.

Finish Care

Application of aftermarket clearcoat sealant/wax is not recommended. If painted surfaces are damaged, see your dealer to have the damage assessed and repaired. Foreign materials such as calcium chloride and other salts, ice melting agents, road oil and tar, tree sap, bird droppings, chemicals from industrial chimneys, etc., can damage the vehicle's finish if they remain on painted surfaces. Wash the vehicle as soon as possible. If necessary, use non-abrasive cleaners that are marked safe for painted surfaces to remove foreign matter.

Occasional hand waxing or mild polishing should be done to remove residue from the paint finish. See your dealer for approved cleaning products.

Do not apply waxes or polishes to uncoated plastic, vinyl, rubber, decals, simulated wood, or flat paint as damage can occur.

Caution

Machine compounding or aggressive polishing on a base coat/clear coat paint finish may damage it. Use only non-abrasive waxes and

(Continued)

Caution (Continued)

polishes that are made for a base coat/clear coat paint finish on the vehicle.

To keep the paint finish looking new, keep the vehicle garaged or covered whenever possible.

Protecting Exterior Bright Metal Mouldings

Caution

Failure to clean and protect the bright metal mouldings can result in a hazy white finish or pitting. This damage would not be covered by the vehicle warranty.

The bright metal mouldings on the vehicle are aluminium, chrome, or stainless steel. To prevent damage always follow these cleaning instructions:

- Be sure the moulding is cool to the touch before applying any cleaning solution.

- Use only approved cleaning solutions for aluminium, chrome, or stainless steel. Some cleaners are highly acidic or contain alkaline substances and can damage the mouldings.
- Always dilute a concentrated cleaner according to the manufacturer's instructions.
- Do not use cleaners that are not intended for automotive use.
- Use a nonabrasive wax on the vehicle after washing to protect and extend the moulding finish.

Cleaning Exterior Lamps/Lenses, Emblems, Decals, and Stripes

Use only lukewarm or cold water, a soft cloth, and a car washing soap to clean exterior lamps, lenses, emblems, decals, and stripes. Follow instructions under "Washing the Vehicle" previously in this section.

Lamp covers are made of plastic, and some have a UV protective coating. Do not clean or wipe them when dry.

Do not use any of the following on lamp covers:

- Abrasive or caustic agents.
- Washer fluids and other cleaning agents in higher concentrations than suggested by the manufacturer.
- Solvents, alcohols, fuels, or other harsh cleaners.
- Ice scrapers or other hard items.
- Aftermarket appearance caps or covers while the lamps are illuminated, due to excessive heat generated.

Caution

Failure to clean lamps properly can cause damage to the lamp cover that would not be covered by the vehicle warranty.

Caution

Using wax on low gloss black finish stripes can increase the gloss level and create a non-uniform finish. Clean low gloss stripes with soap and water only.

Air Intakes

Clear debris from the air intakes, between the bonnet and windscreen, when washing the vehicle.

Shutter System

The vehicle may have a shutter system designed to help improve fuel economy. Keep the shutter system clear of debris, snow and ice. If the check engine light is activated, please check to see if the shutter system is clear of debris, snow or ice.

Windscreen and Wiper Blades

Clean the outside of the windscreen with glass cleaner.

Clean rubber blades using a lint-free cloth or paper towel soaked with windscreen washer fluid or a mild detergent. Wash the windscreen thoroughly when cleaning the blades. Insects, road grime, sap, and a build-up of vehicle wash/wax treatments may cause wiper streaking.

Replace the wiper blades if they are worn or damaged. Damage can be caused by extreme dusty conditions, sand, salt, heat, sun, snow, and ice.

Weatherstrips

Apply weatherstrip lubricant on weatherstrips to make them last longer, seal better, and not stick or squeak. Lubricate weatherstrips at least once a year. Hot, dry climates may require more frequent application. Black marks from rubber material on painted surfaces can be removed by rubbing with a clean cloth. See *Recommended Fluids and Lubricants* ⇨ *368*.

Tyres

Use a stiff brush with tyre cleaner to clean the tyres.

Caution

Using petroleum-based tyre dressing products on the vehicle may damage the paint finish and/or tyres. When applying a tyre dressing, always wipe off any overspray from all painted surfaces on the vehicle.

Wheels and Wheel Trim

Use a soft, clean cloth with mild soap and water to clean the wheels. After rinsing thoroughly with clean water, dry with a soft, clean towel. A wax may then be applied.

Caution

Chrome wheels and chrome wheel trim may be damaged if the vehicle is not washed after driving on roads that have been sprayed with magnesium chloride or calcium chloride. These are used on roads for conditions such as dust and ice. Always wash the chrome with soap and water after exposure.

Caution

To avoid surface damage on wheels and wheel trims, do not use strong soaps, chemicals, abrasive polishes, cleaners or brushes. Use only GM approved cleaners. Do not drive the vehicle through an automatic car wash that uses silicon carbide tyre/wheel cleaning brushes. Damage could occur and the repairs would not be covered by the vehicle warranty.

Brake System

Visually inspect brake lines and hoses for proper hook-up, binding, leaks, cracks, chafing, etc. Inspect disc brake pads for wear and discs for surface condition. Inspect drum brake linings/shoes for wear or cracks. Inspect all other brake parts.

Steering, Suspension, and Chassis Components

Visually inspect steering, suspension, and chassis components for damaged, loose, or missing parts or signs of wear at least once a year.

Inspect power steering for proper attachment, connections, binding, leaks, cracks, chafing, etc.

Visually check constant velocity joint boots and axle seals for leaks.

Body Component Lubrication

Lubricate all key lock cylinders, bonnet hinges, tailgate hinges, and the steel fuel flap hinges, unless the components are plastic. Applying silicone grease on weatherstrips with a clean cloth will make them last longer, seal better, and not stick or squeak.

Underbody Maintenance

At least twice a year, spring and fall, use plain water to flush any corrosive materials from the underbody. Take care to thoroughly clean any areas where mud and other debris can collect.

Do not directly power wash the transfer case and/or front/rear axle output seals. High pressure water can overcome the seals and contaminate the fluid. Contaminated fluid will decrease the life of the transfer case and/or axles and should be replaced.

Sheet Metal Damage

If the vehicle is damaged and requires sheet metal repair or replacement, make sure the body repair shop applies anti-corrosion material to parts repaired or replaced to restore corrosion protection.

Original manufacturer replacement parts will provide the corrosion protection while maintaining the vehicle warranty.

Finish Damage

Quickly repair minor chips and scratches with touch-up materials available from your dealer to avoid corrosion. Larger areas of finish damage can be corrected in your dealer's body and paint shop.

Chemical Paint Spotting

Airborne pollutants can fall upon and attack painted vehicle surfaces causing blotchy, ring-shaped discolourations, and small, irregular dark spots etched into the paint surface. See “Finish Care” previously in this section.

Interior Care

To prevent dirt particle abrasions, regularly clean the vehicle's interior. Before using cleaners, read and follow all safety instructions on the label. While cleaning the interior, open the doors and windows to get proper ventilation. Newspapers or dark garments can transfer colour to the vehicle's interior.

Caution

Immediately remove cleaners, hand lotions, sunscreen, and insect repellent from all interior surfaces or permanent damage may result.

Caution

Use cleaners specifically designed for the surfaces being cleaned to prevent permanent damage to the vehicle. Apply all cleaners directly

(Continued)

Caution (Continued)

to a cleaning cloth. Do not spray cleaners on any switches or controls.

When using liquid soap cleaners, follow the directions on the specific cleaner or soap solution for dilution instructions.

Caution

To prevent damage:

- Never use a razor or any other sharp object to remove soil from any interior surface
- Never use a brush with stiff bristles.
- Never rub any surface aggressively or with too much pressure.
- Do not get any exposed electrical components wet.

(Continued)

Caution (Continued)

- Do not use laundry detergents or dishwashing soaps with degreasers. Do not use solutions that contain strong or caustic soap.
- Do not heavily saturate the upholstery when cleaning.
- Do not use solvents or cleaners containing solvents.
- Do not use disinfectant wipes that are scented or contain bleach. Do not use wipes or cleaners that show a colour transfer to the wipe or change the appearance of the interior surface when used.
- Do not use scented or gel-type hand sanitisers. If hand sanitiser comes into contact with interior surfaces of the vehicle, blot immediately and clean with a soft cloth dampened with a mild soap and water solution.

Interior Glass

To clean, use a microfibre cloth fabric dampened with water. Wipe droplets left behind with a clean dry cloth. If necessary, use a commercial glass cleaner after cleaning with plain water.

Caution

To prevent scratching, never use abrasive cleaners on automotive glass. Abrasive cleaners or aggressive cleaning may damage the rear window defogger.

Cleaning the windscreen with water during the first three to six months of ownership will reduce tendency to fog.

Speaker Covers

Vacuum around a speaker cover gently, so that the speaker will not be damaged. Clean spots with water and mild soap.

Coated Mouldings

Coated mouldings should be cleaned.

- When lightly soiled, wipe with a sponge or soft, lint-free cloth dampened with water.

- When heavily soiled, use warm soapy water.

Vinyl/Rubber

If equipped with vinyl floor and rubber floor mats, use a soft cloth and/or brush dampened with water to remove dust and loose dirt. For more thorough cleaning, use a mild soap and water solution.

⚠ Warning

Do not use cleaners that contain silicone, wax-based products, or cleaners that increase gloss on vinyl/rubber floor and mats. These cleaners can permanently change the appearance and feel of the vinyl/rubber and can make the floor slippery. Your foot could slip while operating the vehicle, and you could lose control, resulting in a collision. You or others could be injured.

Fabric/Carpet/Suede

Start by vacuuming the surface using a soft brush attachment. If a rotating vacuum brush attachment is being used, only use it on the floor carpet. Before cleaning, gently remove as much of the soil as possible:

- Gently blot liquids with a paper towel. Continue blotting until no more soil can be removed.
- For solid soil, remove as much as possible prior to vacuuming.

To clean:

1. Saturate a clean, lint-free colour-fast cloth with water. Microfiber cloth is recommended to prevent lint transfer to the fabric or carpet.
2. Remove excess moisture by gently wringing until water does not drip from the cleaning cloth.
3. Start on the outside edge of the soil and gently rub toward the centre. Fold the cleaning cloth to a clean area frequently to prevent forcing the soil into the fabric.
4. Continue gently rubbing the soiled area until there is no longer any colour transfer from the soil to the cleaning cloth.
5. If the soil is not completely removed, use a mild soap solution followed only by plain water.

If the soil is not completely removed, it may be necessary to use a commercial upholstery cleaner or spot lifter. Test a small hidden area for colourfastness before using a commercial upholstery cleaner or spot lifter. If ring formation occurs, clean the entire fabric or carpet.

After cleaning, use a paper towel to blot excess moisture.

Cleaning High Gloss Surfaces and Vehicle Information and Radio Displays

Use a microfibre cloth on high gloss surfaces or vehicle displays. First, use a soft bristle brush to remove dirt that can scratch the surface. Then gently clean by rubbing with a microfibre cloth. Never use window cleaners or solvents. Periodically hand wash the microfibre cloth separately, using mild soap. Do not use bleach or fabric softener. Rinse thoroughly and air dry before next use.

Caution

Do not attach a device with a suction cup to the display. This may cause damage and would not be covered by the vehicle warranty.

Instrument Panel, Leather, Vinyl, Other Plastic Surfaces, Low Gloss Paint Surfaces, and Natural Open Pore Wood Surfaces

Use a soft bristle brush to remove dust from knobs and crevices on the instrument cluster. Use a soft microfiber cloth dampened with water to remove dust and loose dirt. For a more thorough cleaning, use a soft microfibre cloth dampened with a mild soap and water solution.

Caution

Soaking or saturating leather, especially perforated leather, as well as other interior surfaces, may cause permanent damage. Wipe excess moisture from these surfaces after cleaning and allow them to

(Continued)

Caution (Continued)

dry naturally. Never use heat, steam, or spot removers. Do not use liquids that contain alcohol or solvents on leather seats. Do not use cleaners that contain silicone or wax-based products. Cleaners containing these solvents can permanently change the appearance and feel of leather or soft trim, and are not recommended.

Do not use cleaners that increase gloss, especially on the instrument panel. Reflected glare can decrease visibility through the windscreen under certain conditions.

Caution

Use of air fresheners may cause permanent damage to plastics and painted surfaces. If an air freshener comes in contact with any plastic or painted surface in the vehicle, blot immediately and clean with a soft cloth dampened with a mild

(Continued)

Caution (Continued)

soap solution. Damage caused by air fresheners would not be covered by the vehicle warranty.

Cargo Cover and Convenience Net

If equipped, wash with warm water and mild detergent. Do not use chlorine bleach. Rinse with cold water, and then dry completely.

Care of Seat Belts

Keep belts clean and dry.

⚠ Warning

Do not bleach or dye seat belt webbing. It may severely weaken the webbing. In a crash, they might not be able to provide adequate protection. Clean and rinse seat belt webbing only with mild soap and lukewarm water. Allow the webbing to dry.

Floor Mats

⚠ Warning

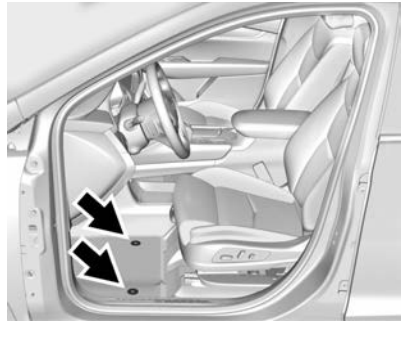
If a floor mat is the wrong size or is not properly installed, it can interfere with the pedals. Interference with the pedals can cause unintended acceleration and/or increased stopping distance which can cause a crash and injury. Make sure the floor mat does not interfere with the pedals.

Use the following guidelines for proper floor mat use.

- The original equipment floor mats were designed for your vehicle. If the floor mats need to be replaced, it is recommended that GM-certified floor mats be purchased. Non-GM floor mats may not fit properly and may interfere with the pedals. Always check that the floor mats do not interfere with the pedals.
- Do not use a floor mat if the vehicle is not equipped with a floor mat retainer on the driver side floor.
- Use the floor mat with the correct side up. Do not turn it over.
- Do not place anything on top of the driver side floor mat.
- Use only a single floor mat on the driver side.
- Do not place one floor mat on top of another.

Removing and Replacing the Floor Mats

The driver and passenger side floor mats are held in place by two button-type retainers.



1. Pull up on the rear of the floor mat to unlock each retainer and remove.
2. Reinstall by lining up the floor mat retainer openings over the carpet retainers and pushing down to snap into position.
3. Make sure the floor mat is properly secured in place. Verify the floor mat does not interfere with the pedals.

Cleaning Rubber Floor Mats (All-Weather Mats and Floor Liners)

See “Vinyl/Rubber” under *Interior Care* ⇨ *355* for important cleaning information.

Service and Maintenance

General Information

Your vehicle is an important investment. This section describes the required maintenance for the vehicle. Follow this schedule to help protect against major repair expenses resulting from neglect or inadequate maintenance. It may also help to maintain the value of the vehicle if it is sold. It is the responsibility of the owner to have all required maintenance performed.

Your retailer has trained technicians who can perform required maintenance using genuine replacement parts. They have up-to-date tools and equipment for fast and accurate diagnostics. Many dealers have extended evening and Saturday hours, courtesy transportation, and online scheduling to assist with service needs.

Your retailer recognises the importance of providing competitively priced maintenance and repair services. With trained technicians, your retailer is the place for routine maintenance such as oil changes and tyre rotations and additional maintenance items like tyres, brakes, batteries, and wiper blades.

Caution

Damage caused by improper maintenance can lead to costly repairs and may not be covered by the vehicle warranty. Maintenance intervals, checks, inspections, recommended fluids, and lubricants are important to keep the vehicle in good working condition.

Do not have chemical flushes that are not approved by GM performed on the vehicle. The use of flushes, solvents, cleaners, or lubricants that are not approved by GM could damage the vehicle, requiring expensive repairs that are not covered by the vehicle warranty.

The Tyre Rotation and Required Services are the responsibility of the vehicle owner. It is recommended that your retailer perform these services every 15 000 km. Proper vehicle maintenance helps to keep the vehicle

in good working condition, improves fuel economy, and reduces vehicle emissions.

Because of the way people use vehicles, maintenance needs vary. There may need to be more frequent checks and services. The Additional Required Services - Normal are for vehicles that:

- Carry passengers and cargo within recommended limits on the Tyre and Loading Information label. See “Vehicle Load Limits” in the owner's manual.
- Are driven on reasonable road surfaces within legal driving limits.
- Use the recommended fuel. See *Fuel for Diesel Engines* ⇨ *264*.

Refer to the information in the Maintenance Schedule Additional Required Services - Normal chart.

The Additional Required Services - Severe are for vehicles that are:

- Mainly driven in heavy city traffic in hot weather.
- Mainly driven in hilly or mountainous terrain.
- Frequently towing a trailer.
- Used for high speed or competitive driving.
- Used for taxi, police, or delivery service.

Refer to the information in the Maintenance Schedule Additional Required Services - Severe chart.

⚠ Warning

Performing maintenance work can be dangerous and can cause serious injury. Perform maintenance work only if the required information, proper tools, and equipment are available. If they are not, visit your retailer for a trained technician to do the work. See "Doing Your Own Service Work" in the owner's manual.

Maintenance Schedule

Maintenance Schedule (Petrol)

Owner Checks and Services

Check the engine oil level. See *Engine Oil* ⇨ *291*.

Once a Month

- Check the tyre inflation pressures. See *Tyre Pressure* ⇨ *321*.
- Inspect the tyres for wear. See *Tyre Inspection* ⇨ *327*.
- Check the windscreen washer fluid level. See *Washer Fluid* ⇨ *301*.

Every Two Years

- Replace brake fluid.

Engine Oil Change

Change engine oil and filter when indicated by the Engine Oil Life System, or at 15 000 km, or at one year, whichever comes first. When the CHANGE ENGINE OIL SOON message displays, have the engine oil and filter changed within the next 1 000 km. The system must be reset. Your dealer has trained service people who will perform this work and reset the system. It is also important to check the oil regularly over the course of an oil drain interval and keep it at the proper level.

Engine Air Filter Change

When the REPLACE AT NEXT OIL CHANGE message displays, the engine air filter should be replaced at the next engine oil change. When the REPLACE ENGINE AIR FILTER SOON message displays, the engine air filter should be replaced at the earliest convenience. Reset the engine air filter life system after the engine air filter is replaced. See *Engine Air Filter Life System* ⇨ *294*.

Air Conditioning Desiccant (Replace Every Seven Years)

The air conditioning system requires maintenance every seven years. This service requires replacement of the desiccant to help the longevity and efficient operation of the air conditioning system. This service can be complex. See your dealer.

Vehicle Inspection and Required Services

Inspect the following items when indicated by the oil life system, at 15 000 km, or at one year, whichever comes first. See *Tyre Rotation* ⇨ *328*.

- Check engine oil level and oil life percentage. If needed, change engine oil and filter, and reset oil life system. See *Engine Oil* ⇨ *291* and *Engine Oil Life System* ⇨ *293*.
- Check the air filter life percentage. If necessary, replace the engine air filter and reset the engine air filter life system. See *Engine Air Filter Life System* ⇨ *294*.
- Check engine coolant level. See *Cooling System* ⇨ *296*.
- Check the windscreen washer fluid level. See *Washer Fluid* ⇨ *301*.
- Check the tyre inflation pressures. See *Tyre Pressure* ⇨ *321*.
- Inspect the tyre wear. See *Tyre Inspection* ⇨ *327*.
- Visually check for fluid leaks.
- Inspect brake system. See *Exterior Care* ⇨ *351*.
- Visually inspect steering, suspension, and chassis components for damage, including cracks or tears in the rubber boots, loose or missing parts, or signs of wear, at least once a year. See *Exterior Care* ⇨ *351*.
- Inspect power steering for proper attachment, connections, binding, leaks, cracks, chafing, etc.
- Visually inspect halfshafts and drive shafts for excessive wear, lubricant leaks, and/or damage including: tube dents or cracks, constant velocity joint or universal joint looseness, cracked or missing boots, loose or missing boot clamps, centre bearing excessive looseness, loose or missing fasteners, and axle seal leaks.
- Check the restraint system components. See *Safety System Check* ⇨ *54*.
- Visually inspect the fuel system, including the evaporative (EVAP) system, for damage or leaks. Visually check all fuel pipes, vapour lines, and hoses for proper attachment, connection, routing, and condition.
- Visually inspect the exhaust system and nearby heat shields for loose or damaged parts.
- Lubricate body components. See *Exterior Care* ⇨ *351*.

- Check the parking brake and automatic transmission park mechanism. See *Park Brake and P (Park) Mechanism Check* ⇨ *304*.
- Check the accelerator pedal for damage, high effort, or binding. Replace if needed.
- Visually inspect gas strut for signs of wear, cracks, or other damage. Check the hold open ability of the strut. If the hold open is low, service the gas strut. See *Gas Strut(s)* ⇨ *306*.
- Check the tyre sealant expiration date, if equipped. See *Tyre Sealant and Compressor Kit* ⇨ *334*.
- Inspect sunroof track and seal, if equipped. See *Sunroof* ⇨ *35*.

Additional Required Services — Normal Service

Every 15,000 km

- Rotate the tyres, if recommended for the vehicle, and perform Required Services. Check engine oil level and oil life percentage. Change the engine oil and filter, if needed.
- Check the engine air filter life percentage and status. Change the engine air filter, if needed. The engine air filter should be replaced when the REPLACE ENGINE AIR FILTER SOON message displays, 60 000 km, or 2 Years, whichever comes first. If driving in dusty conditions, inspect the filter at each oil change or more often as needed. See *Engine Air Cleaner/Filter* ⇨ *295*.

Every 30,000 km

- Replace the passenger compartment air filter. Or every 12 months, whichever comes first. More frequent passenger compartment air filter replacement may be needed if driving in areas with heavy traffic, poor air quality, high dust levels, or environmental allergens. Passenger compartment air filter replacement may also be needed if there is reduced airflow, window misting, or odours. Your GM retailer can help determine when to replace the filter.
- Replace front and rear wiper blades. Or every 12 months, whichever comes first. See *Wiper Blade Replacement* ⇨ *304*.

Every 60,000 km

- Replace spark plugs. Inspect spark plug wires and/or boots.

Every 120,000 km

- Replace bonnet and/or body lift support gas struts. Or every 10 years, whichever comes first. See *Gas Strut(s)* ⇨ *306*.
- Change rear axle fluid, if equipped with AWD. Do not directly power wash the transfer case and/or front/rear axle output seals. High pressure water can overcome the seals and contaminate the transfer case fluid. Contaminated fluid will decrease the life of the transfer case and/or axles and should be replaced.

Every 240,000 km

- Drain and fill the engine cooling system. Or every five years, whichever comes first. See *Cooling System* ⇨ *296*.

- Visually inspect the accessory drive belts. Or every 10 years, whichever comes first. Inspect for fraying, excessive cracking, or damage; replace, if needed.

Severe Conditions Requiring More Frequent Maintenance*

- Public service, military, or commercial use vehicles to include the following:
  - Ambulances, police cars and emergency rescue vehicles.
  - Civilian vehicles such as light duty pick-up trucks, SUVs and passenger cars that are used in military applications.
  - Recovery vehicles such as tow trucks and flatbed single vehicle carriers or any vehicle that is consistently used in towing trailers or other loads.
  - High use commercial vehicles such as courier delivery vehicles, private security patrol vehicles or any vehicles that operate on a 24 hour basis.
  - Any vehicle consistently operated in a high sand or dust environment, such as those used on oil pipelines and similar applications.
- Vehicles that are regularly used for short trips of 6 km or less

  * Footnote: Under extreme driving conditions listed above, it may be necessary to replace your spark plugs at more frequent intervals. For further assistance in determining the most suitable service maintenance intervals for your vehicle, please contact your authorised GM Dealer.

Additional Required Services — Severe Service

Every 60,000 km

- Change the automatic gearbox fluid.

Maintenance Schedule (Diesel)

Owner Checks and Services

Check the engine oil level. See *Engine Oil* ⇨ *291*.

Once a Month

- Check the tyre inflation pressures. See *Tyre Pressure* ⇨ *321*.
- Inspect the tyres for wear. See *Tyre Inspection* ⇨ *327*.
- Check the windscreen washer fluid level. See *Washer Fluid* ⇨ *301*.

Every Two Years

- Replace brake fluid.

Engine Oil Change

Change engine oil and filter when indicated by the Engine Oil Life System, 30 000 km, or at one year, whichever comes first (15 000 km or at six months under severe driving conditions). When the CHANGE ENGINE OIL SOON message displays, have the engine oil and filter changed within the next 1 000 km. The system must be reset. Your dealer has trained service people who will perform this work and reset the system. It is also important to check the oil regularly over the course of an oil drain interval and keep it at the proper level.

Drain the diesel fuel filter of water when the oil is changed or when the WATER IN FUEL CONTACT SERVICE message displays.

Engine Air Filter Change

When the REPLACE AT NEXT OIL CHANGE message displays, the engine air filter should be replaced at the next engine oil change. When the REPLACE ENGINE AIR FILTER SOON message displays, the engine air filter should be replaced at the earliest convenience. Reset the engine air filter life system after the engine air filter is replaced. See *Engine Air Filter Life System ⇨ 294*.

Air Conditioning Desiccant (Replace Every Seven Years)

The air conditioning system requires maintenance every seven years. This service requires replacement of the desiccant to help the longevity and efficient operation of the air conditioning system. This service can be complex. See your dealer.

Vehicle Inspection and Required Services

Inspect the following items when indicated by the oil life system, at 30 000 km, or at one year, whichever comes first. See *Tyre Rotation ⇨ 328*.

- Check engine oil level and oil life percentage. If needed, change engine oil and filter, and reset oil life system. See *Engine Oil ⇨ 291* and *Engine Oil Life System ⇨ 293*.
- Check the air filter life percentage. If necessary, replace the engine air filter and reset the engine air filter life system. See *Engine Air Filter Life System ⇨ 294*.
- Check engine coolant level. See *Cooling System ⇨ 296*.
- Check the windscreen washer fluid level. See *Washer Fluid ⇨ 301*.
- Check the tyre inflation pressures. See *Tyre Pressure ⇨ 321*.
- Inspect the tyre wear. See *Tyre Inspection ⇨ 327*.
- Visually check for fluid leaks.
- Inspect brake system. See *Exterior Care ⇨ 351*.
- Visually inspect steering, suspension, and chassis components for damage, including cracks or tears in the rubber boots, loose or missing parts, or signs of wear, at least once a year. See *Exterior Care ⇨ 351*.
- Inspect power steering for proper attachment, connections, binding, leaks, cracks, chafing, etc.
- Visually inspect halfshafts and drive shafts for excessive wear, lubricant leaks, and/or damage including: tube dents or cracks, constant velocity joint or universal joint looseness, cracked or missing boots, loose or missing boot clamps, centre bearing excessive looseness, loose or missing fasteners, and axle seal leaks.
- Check the restraint system components. See *Safety System Check ⇨ 54*.
- Visually inspect the fuel system, including the evaporative (EVAP) system, for damage or leaks. Visually check all fuel pipes, vapour lines, and hoses for proper attachment, connection, routing, and condition.

- Visually inspect the exhaust system and nearby heat shields for loose or damaged parts.
- Lubricate body components. See *Exterior Care* ⇨ *351*.
- Check the parking brake and automatic transmission park mechanism. See *Park Brake and P (Park) Mechanism Check* ⇨ *304*.
- Check the accelerator pedal for damage, high effort, or binding. Replace if needed.
- Visually inspect gas strut for signs of wear, cracks, or other damage. Check the hold open ability of the strut. If the hold open is low, service the gas strut. See *Gas Strut(s)* ⇨ *306*.
- Check the tyre sealant expiration date, if equipped. See *Tyre Sealant and Compressor Kit* ⇨ *334*.
- Inspect sunroof track and seal, if equipped. See *Sunroof* ⇨ *35*.

Additional Required Services — Normal Service

Every 30,000 km

- Rotate the tyres, if recommended for the vehicle, and perform Required Services. Check engine oil level and oil life percentage. Change the engine oil and filter, if needed.
- Check the engine air filter life percentage and status. Change the engine air filter, if needed. Or every four years, whichever comes first. If driving in dusty conditions, inspect the filter at each oil change or more often as needed. See *Engine Air Cleaner/Filter* ⇨ *295*.
- Replace the passenger compartment air filter. Or every 24 months, whichever comes first. More frequent passenger compartment air filter replacement may be needed if driving in areas with heavy traffic, poor air quality, high dust levels, or environmental allergens. Passenger compartment air filter replacement may also be needed if there is reduced airflow, window misting, or odours. Your GM retailer can help determine when to replace the filter.
- Drain the diesel fuel filter of water.
- Replace front and rear wiper blades. Or every 12 months, whichever comes first. See *Wiper Blade Replacement* ⇨ *304*.

Every 60,000 km

- Replace fuel filter. Or as indicated by the Driver Information Centre (DIC) or two years whichever comes first. The fuel filter may need to be replaced more often based on biodiesel usage, driving in climates with severe dust, off-road driving, or towing a trailer for extended periods..

Every 120,000 km

- Replace bonnet and/or body lift support gas struts. Or every 10 years, whichever comes first. See *Gas Strut(s)* ⇨ *306*.

Every 240,000 km

- Change rear axle fluid, if equipped with AWD. Do not directly power wash the transfer case and/or front/rear axle output seals. High pressure water can overcome the seals and contaminate the transfer case fluid. Contaminated fluid will decrease the life of the transfer case and/or axles and should be replaced.
- Drain and fill the engine cooling system. Or every five years, whichever comes first. See *Cooling System* ⇨ *296*.
- Visually inspect the accessory drive belts. Or every 10 years, whichever comes first. Inspect for fraying, excessive cracking, or damage; replace, if needed.

Severe Conditions Requiring More Frequent Maintenance*

- Public service, military, or commercial use vehicles to include the following:
  - Ambulances, police cars and emergency rescue vehicles.
  - Civilian vehicles such as light duty pick-up trucks, SUVs and passenger cars that are used in military applications.
  - Recovery vehicles such as tow trucks and flatbed single vehicle carriers or any vehicle that is consistently used in towing trailers or other loads.
  - High use commercial vehicles such as courier delivery vehicles, private security patrol vehicles or any vehicles that operate on a 24 hour basis.
  - Any vehicle consistently operated in a high sand or dust environment, such as those used on oil pipelines and similar applications.
- Vehicles that are regularly used for short trips of 6 km or less

  * Footnote: Under extreme driving conditions listed above, it may be necessary to replace your spark plugs at more frequent intervals. For further assistance in determining the most suitable service maintenance intervals for your vehicle, please contact your authorised GM Dealer.

Additional Required Services — Severe Service

Every 60,000 km

- Change the automatic gearbox fluid.

Recommended Fluids, Lubricants, and Parts

Recommended Fluids and Lubricants

Fluids and lubricants identified below by name or specification, including fluids or lubricants not listed here, can be obtained from your retailer.

Usage	Fluid/Lubricant
Automatic Transmission	DEXRON-VI Automatic Transmission Fluid.
Diesel Exhaust Aftertreatment System	AdBlue Diesel Exhaust Fluid that meets ISO 22241 or equivalent.
Engine Coolant	50/50 mixture of clean, drinkable water and use only DEX-COOL Coolant. See *Cooling System* ⇨ *296*.
Engine Oil (Petrol)	Engine oil meeting the dexos1 specification of the proper SAE viscosity grade. ACDelco dexos1 is recommended. See *Engine Oil* ⇨ *291*.
Engine Oil (Diesel)	Engine oil meeting the dexosD specification of the proper SAE viscosity grade. ACDelco dexosD is recommended. See *Engine Oil* ⇨ *291*.
Bonnet Latch Assembly, Secondary Latch, Pivots, Spring Anchor and Release Pawl	Lubricant meeting requirements of NLGI #2, Category LB or GC-LB.
Hydraulic Brake System	DOT 4 Hydraulic Brake Fluid.
Key Lock Cylinders, Bonnet and Door Hinges	Multi-Purpose Lubricant. Superlube. See your dealer.

Usage	Fluid/Lubricant
Rear Axle/Front Axle	See your dealer.
Transfer Case (All-Wheel Drive)	Transfer Case Fluid. See your dealer.
Windscreen Washer	Automotive windscreen washer fluid that meets regional freeze protection requirements.

Maintenance Replacement Parts

Replacement parts identified below by name, part number, or specification can be obtained from your dealer.

Part	GM Part Number	ACDelco Part Number
Engine Air Cleaner/Filter		
2.0L L4 Diesel Engine (LSQ)	84796603	A3255C
2.0L L4 Gas Engine (LSY)	23430313	A3210C
Engine Oil Filter		
2.0L L4 Diesel Engine (LSQ) Cartridge	55515474	PF2268G
2.0L L4 Gas Engine (LSY)	55495105	PF66

Part	GM Part Number	ACDelco Part Number
Engine Fuel Filter		
2.0L L4 Diesel Engine (LSQ) Cartridge	84428486	TP1020
Passenger Compartment Air Filter	13508023	CF185
Spark Plugs	55504354	41-103-IP
Wiper Blades		
Driver Side – 60 cm (23.62 in)	84580856	-
Passenger Side – 50 cm (19.68 in)	84580859	-
Rear — 30 cm (11.81 in)	84215609	-

Maintenance Records

After the scheduled services are performed, record the date, odometer reading, who performed the service, and the type of services performed in the boxes provided. Retain all maintenance receipts.

Date	Odometer Reading	Serviced By	Maintenance Stamp	Services Performed

Technical Data

Vehicle Identification

Vehicle Identification Number (VIN)

This legal identifier is in the front corner of the instrument panel, on the driver side of the vehicle. It can be seen through the windscreen from outside. The Vehicle Identification Number (VIN) also appears on the Vehicle Certification label and certificates of title and registration.

Engine Identification

The eighth character in the VIN is the engine code. This code identifies the vehicle's engine, specifications, and replacement parts. See “Engine Specifications” under *Capacities and Specifications* ⇨ *373* for the vehicle's engine code.

Service Parts Identification

There may be a large barcode on the certification label on the centre pillar that you can scan for the following information:

- Vehicle Identification Number (VIN)
- Model designation
- Paint information
- Production options

If there is not a large barcode on this label, then you will find this same information on a label under the tailgate area.

Vehicle Data

Capacities and Specifications

Application	Capacities	
	Metric	English
Air Conditioning Refrigerant	For the air conditioning system refrigerant type and charge amount, see the refrigerant label under the bonnet. See your dealer for more information.	
Engine Cooling System*		
2.0L L4 Diesel Engine (LSQ)	9.2 L	9.7 qt
2.0L L4 Gas Engine (LSY)	9.4 L	10.0 qt
Engine Oil with Filter	5.0 L	5.3 qt
Fuel Tank - Petrol		
FWD	60.2 L	15.9 gal
AWD	61.7 L	16.3 gal

Application	Capacities	
	Metric	English
Fuel Tank - Diesel		
FWD	59.4 L	15.7 gal
AWD	60.9 L	16.1 gal
AdBlue Tank	18.4 L	4.9 gal
Wheel Nut Torque	190 N•m	140 lb ft
All capacities are approximate. When adding, be sure to fill to the approximate level, as recommended in this manual. Recheck fluid level after filling.		
*Engine cooling system capacity values are based on the entire cooling system and its components.		

Engine Specifications

Engine	VIN Code	Transmission	Spark Plug Gap
2.0L L4 Turbo Diesel Engine (LSQ)	2	Automatic	-
2.0L L4 Turbo Gas Engine (LSY)	4	Automatic	0.65–0.75 mm (0.026–0.030 in)
The horsepower and torque values for the LSY engine are based on RON98 petrol (premium).			
Spark plug gaps are preset by the manufacturer. Re-gapping the spark plug is not recommended and can damage the spark plug.			

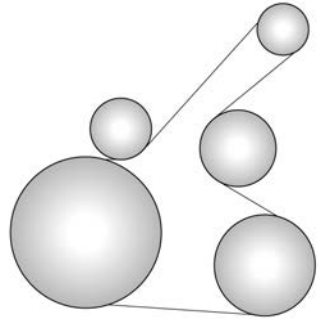
Engine Data

Engine	Horsepower	Torque	Displacement	Compression Ratio
2.0L L4 Turbo Diesel Engine (LSQ)	128 kW (174 hp) @ 3500 rpm	381 N•m (281 lb ft) @ 1500-2750 rpm	2.0 L	15.5:1
2.0L L4 Turbo Gas Engine (LSY)	169 kW (230 hp) @ 5000 rpm	350 N•m (258 lb ft) @ 1500–4000 rpm	2.0 L	10.0:1

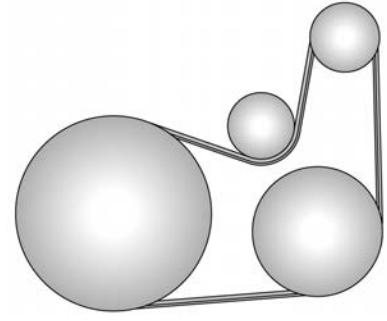
Fuel Consumption and Emissions Information

For the values specific for your vehicle, refer to the EC Certificate of Conformity provided with your vehicle, other national registration documents, or your local dealership.

Engine Drive Belt Routing



2.0L L4 Diesel Engine (LSQ)



2.0L L4 Gas Engine (LSY)

Customer Information

Customer Information

Radio Frequency Identification (RFID)

RFID technology is used in some vehicles for functions such as tyre pressure monitoring and ignition system security. It is also used in connection with conveniences such as Remote Keyless Entry (RKE) transmitters for remote door locking/unlocking and starting, and in-vehicle transmitters for garage door openers. RFID technology in GM vehicles does not use or record personal information or link with any other GM system containing personal information.

Declaration of Conformity

Transmission Systems

This vehicle has systems that transmit and/or receive radio waves subject to 2014/53/EU. The manufacturers of the systems listed below declare conformity with Directive 2014/53/EU. The full text of the EU declaration of conformity for each system is available at the following Internet address: www.cadillaceurope.com.

This vehicle has systems that transmit and/or receive radio waves subject to Radio Equipment Regulations of the United Kingdom. The manufacturers of the systems listed below declare conformity with Radio Equipment Regulations of the United Kingdom. The full text of the United Kingdom declaration of conformity for each system is available at the following Internet address: www.cadillaceurope.com.

UK CA

Importer

GM Mobility Europe GmbH

Bethmannstraße 50-54 Ort

60311 Frankfurt am Main

Hessen

Germany

RFR Bosch Thick 433 MHz

Robert Bosch GmbH

Robert Bosch Platz1

70839 Gerlingen, Germany

Operation frequency: 433.92 MHz

Maximum output power: -81.3 dBm

TPM Sensor Global A Faraday/Delta 314.9 Mhz – Sensata

Sensata Technologies de Mexico

Av. Aguascalientes Sur # 401

Ex Ejido Salto de Ojocaliente CP. 20290

Aguascalientes, Ags. Mexico

Operation frequency: 314.9MHz +/- 75KHz

Maximum output power: 0.015 mW

Bosch Immobiliser BAR

Robert Bosch GmbH

Robert Bosch Platz1

70839 Gerlingen, Germany

Operation frequency: 125 kHz

Maximum output power: -32.05 dBm

Forward Collision Alert and Adaptive Cruise Control

ADC Automotive Distance Control Systems GmbH

Peter-Dornier-Strasse 10,
88131 Lindau, Germany

Frequency: 76-77 GHz

Power output: 35 dBm

Max: Less than 40 dBm

Side Blind Zone Alert/Rear Cross Traffic Alert/Lane Change Alert

Hella KGaA Hueck & Co.

Rixbecker Straße 75

59552 Lippstadt

Frequency: 24.050 - 24.250 GHz

Power Output: < 20 dBm (100mW)

Rear Collision Mitigation

APTIV Services US, LLC

2151 East Lincoln Road

Kokomo, Indiana 46902

USA

Operating frequency: 76-77 GHz

Maximum transmit power: 22 dBm

RKE Transmitter

DENSO Corporation

1-1, Showa-cho, Kariya-shi, Aichi-ken, 448-8661, Japan

Operating frequency: 433.92 MHz

Maximum output power (ERP): 0.19 mW

Keyless Access Module

DENSO Corporation

1-1, Showa-cho, Kariya-shi, Aichi-ken, 448-8661, Japan

Operating frequency: 125 kHz

Maximum transmit power: 0.97 mW

Tyre Pressure Monitoring System

Schrader Electronics Ltd.

11 Technology Park

Belfast Road

Antrim Bt41 1QS

Northern Ireland

United Kingdom

Operating frequency: 433.92 MHz

Maximum transmit power: 10 dBm

Universal Garage Door Opener

Gentex Corporation

600 North Centennial Street

Zeeland, MI 49464

USA

Operating frequency: 433.05 MHz - 434.79 MHz

Maximum transmit power: 0.138 mW E.R.P.

Infotainment 3.5 Centre Console Module

Harman International Industries, Incorporated

30001 Cabot Drive

Novi, MI 48377 USA

Operating frequency ranges: 2402 - 2480 MHz, 5150 - 5775 MHz

Maximum transmit power: 17 mW, 12 mW

eCall Module

LG Electronics
European Shared Service Center B.V.
Krijgsman 1
1186 DM
Amstelveen
The Netherlands

Operating Frequency (MHz)	Maximum Transmit Power (dBm)
880 – 915	33.00
1710 – 1785	30.00
1920 – 1980	22.41
880 – 915	22.88
1920 – 1980	22.60
1710 – 1785	22.60
2500 – 2570	23.90
880 – 915	22.40
832 – 862	22.20
2570 – 2620	22.18
2402 – 2472	12.62
1559 – 1610	

GM North America

General Motors Company
Warren Technical Center
Vehicle Engineering Center
29427 Louis Chevrolet Rd.
Warren, Michigan 48093
U.S.A.

Declaration of Conformity
Pursuant to Machinery Directive 2006/42/EC

We hereby declare that the product:

Product Description: Scissor / Screw Automotive Jack
Type/Part #: 13508400-Base Jack

Is in conformity with Machinery Directive 2006/42/EC.

Technical standards applied:
GMW14337 Standard Equipment Jack - Hardware Tests
GMW15005 Standard Equipment Jack and Spare Tire, Vehicle Test

The person authorized to compile the technical file:
Lisa Pennick-Taylor
General Motors Company
29427 Louis Chevrolet Rd.
Warren, MI, 48093, USA

Date: January 17, 2019, Warren/MI, USA

Phillip Hubler
Engineering Group Manager
Tire/Wheel System
29427 Louis Chevrolet Rd.
Warren, MI, 48093, USA

Declaration of Conformity

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GMW15005 Standard Equipment Jack and Spare Tyre, Vehicle Test

The person authorised to complete the technical file:

Lisa Pennick-Taylor

General Motors Company

GMNA, USA

Signed by:

Phillip Hubler

Engineering Group Manager Tyre/Wheel Systems

GMNA, USA

Vehicle Data Recording and Privacy

Event Data Recorders

Data Storage Modules in the Vehicle

A large number of electronic components of your vehicle contain data storage modules temporarily or permanently storing technical data about the condition of the vehicle, events, and errors. In general, this technical information documents the condition of parts, modules, systems, or the environment:

- Operating conditions of system components (e.g., filling levels).
- Status messages of the vehicle and its single components (e.g., number of wheel revolutions/rotational speed, deceleration, lateral acceleration).
- Dysfunctions and defects in important system components.
- Vehicle reactions in particular driving situations (e.g., inflation of an airbag, activation of the stability regulation system).
- Environmental concerns (e.g., temperature).

This data is exclusively technical and helps identify and correct errors as well as optimise vehicle functions.

Motion profiles indicating travelled routes cannot be created with this data.

If services are used (e.g., repair works, service processes, warranty cases, quality assurance), employees of the service network (manufacturer included) are able to read out this technical information from the event and error data storage modules applying special diagnostic devices. If required, you will receive further information at these dealers. After an error has been corrected, the data is deleted from the error storage module or constantly overwritten.

When using the vehicle, situations may occur in which these technical data related to other information

(crash report, damage to the vehicle, witness statements, etc.) may be associated with a specific person — possibly, with the assistance of an expert.

In an emergency, your vehicle location and other data may be transmitted to emergency services in accordance with Directive (EU) 2015/758. See *eCall Overview* ⇨ *382*.

Cybersecurity

GM collects information about the use of your vehicle including operational and safety related information. We collect this information to provide, evaluate, improve, and troubleshoot our products and services and to develop new products and services. The protection of vehicle electronics systems and customer data from unauthorised outside electronic access or control is important to GM. GM maintains appropriate security standards, practices, guidelines and controls aimed at defending the vehicle and the vehicle service ecosystem against unauthorised electronic access, detecting possible malicious activity in related networks, and responding to suspected cybersecurity incidents in a timely, coordinated and effective manner. Security incidents could impact your safety or compromise your private data. To minimise security risks, please do not connect your vehicle electronic systems to unauthorised devices or connect your vehicle to any unknown or untrusted networks (such as Bluetooth, Wi-Fi or similar technology). In the event you suspect any security incident impacting your data or the safe operation of your vehicle, please stop operating your vehicle and contact your retailer.

Infotainment System

If the vehicle is equipped with a navigation system as part of the infotainment system, use of the system may result in the storage of destinations, addresses, telephone numbers, and other trip information. See the infotainment section for information on stored data and for deletion instructions.

eCall

eCall Overview

eCall Overview

This vehicle is equipped with a 112 based eCall system that is free of charge.

In the event of a crash, an eCall-equipped vehicle may automatically call the nearest 112 emergency centre. If built-in sensors detect a crash, an emergency call is placed automatically. An advisor will determine whether help is needed. The exact location of the crash site is sent to the emergency centre even if the occupants of the vehicle are unable to communicate with emergency personnel.

The eCall system can also be activated manually. Press SOS on the overhead console to contact the nearest 112 emergency centre. Press within two seconds to cancel the manually activated eCall.

A problem with the system may be indicated by the following:

- Red light near the phone button displays
- Light near the phone button does not display with vehicle on
- Driver Information Centre message may appear

Contact your retailer for service.

When the system is active, the green light near the phone button is illuminated.

Usage of personal data is strictly limited to the purpose of forwarding the emergency call to the emergency number 112.

The eCall system may collect and process the following data:

- Vehicle Identification Number
- Vehicle type, such as passenger vehicle or light commercial vehicle
- Vehicle propulsion storage type, such as petrol, diesel, CNG, LPG, electric, or hydrogen

- Last three vehicle locations and direction of travel
- Automatic activation log file for the system and its time stamp

Data collected by the eCall system is shared only with the 112 emergency centre when a connection is made.

Data collected by the system is:

- Temporarily stored in the system memory, but it is not available outside of the system before an eCall is triggered.
- Not traceable and not subject to constant tracking during normal system operation.
- Stored in the system's memory but is automatically and continuously deleted.

Vehicle location data is continuously overwritten and limited to the last three locations for normal operation of the system.

The system activity log is kept for the duration of the emergency call, or a maximum of 13 hours after the call was initiated.

The data subject, or vehicle owner, has the right to access the data and as appropriate, to request the rectification, erasure or blocking of personal data when processing of the data does not comply with local regulations. Any third parties who received the data must be notified of any rectification, erasure, or blocking done to comply with local regulations unless it proves impossible or involves a disproportionate effort.

The data subject, or vehicle owner, has the right to complain to the competent data protection authority if he or she feels that his or her rights have been infringed as a result of the processing of his or her personal data.

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GENERAL MOTORS
OVERSEAS DISTRIBUTION
LLC

All information contained in this booklet is based on latest product information available at the time of printing, and is effective as of the date indicated below, Cadillac Europe GmbH reserves the exclusive right to modifications to this booklet.

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