



CELESTIQ
OWNER'S MANUAL

2026



Contents

Introduction	1
Keys, Doors, and Windows	6
Seats and Restraints	36
Storage	83
Instruments and Controls	89
Lighting	121
Infotainment System	131
Climate Controls	159
Driving and Operating	165
Vehicle Care	278
Service and Maintenance	343
Technical Data	349
Customer Information	351
Reporting Safety Defects	362
OnStar	365
Connected Services	370
Index	372

Introduction

California Proposition 65 Warning



WARNING

Operating, servicing and maintaining a passenger vehicle or off-highway motor vehicle can expose you to chemicals including engine exhaust, carbon monoxide, phthalates, and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize exposure, avoid breathing exhaust, do not idle engine except as necessary, service your vehicle in a well-ventilated area and wear gloves or wash your hands frequently when servicing your vehicle. For more information go to www.P65Warnings.ca.gov/passenger-vehicle.

Introduction



The names, logos, emblems, slogans, vehicle model names, and vehicle body designs appearing in this manual including, but not limited to, GM, the GM logo, the CADILLAC Emblem, CADILLAC, and CELESTIQ are trademarks and/or service marks of General Motors LLC, its subsidiaries, affiliates, or licensors.

For vehicles first sold in Canada, substitute the name “General Motors of Canada Company” for Cadillac Motor Car Division wherever it appears in this manual.

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 this publication’s release, including changes in standard or optional content.

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

Canadian Vehicle Owners

You can obtain a copy of this guide in French from your dealer, at www.helminc.com, or from the following address:

Propriétaires Canadiens

On peut obtenir un exemplaire de ce guide en français auprès du concessionnaire ou à l’adresse suivante:

Helm, Incorporated
Attention: Customer Service
47911 Halyard Drive
Plymouth, MI 48170
USA

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.

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

Some of the vehicle components and labels use symbols instead of text relating to a specific feature, control, message, gauge, or indicator.

Vehicle Symbol Chart

This chart defines the symbols that may be found on the vehicle.

 : 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

 : Energy Usage and Charge Mode Selection

 : Flame/Fire Prohibited

 : Flammable

 : First Responder

 : Forward Collision Alert

 : Fuse Block Cover Lock Location

 : Fuses

 : High Voltage

 : ISOFIX/LATCH System Child Restraints

 : Keep Fuse Block Covers Properly Installed

 : Lane Change Alert

 : Lane Departure Warning

 : Lane Keep Assist

 : Park Assist

 : Pedestrian Ahead Indicator

 : Power

 : Rear Cross Traffic Alert

 : Registered Technician

 : Remote Start

 : Risk of Electrical Fire

 : Seat Belt Reminders

 : Service Vehicle Soon

 : Side Blind Zone Alert

 : Tire Pressure Monitor

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

 : Under Pressure

 : Vehicle Ahead Indicator

 : Vehicle Ready

Additional Instructions or Information

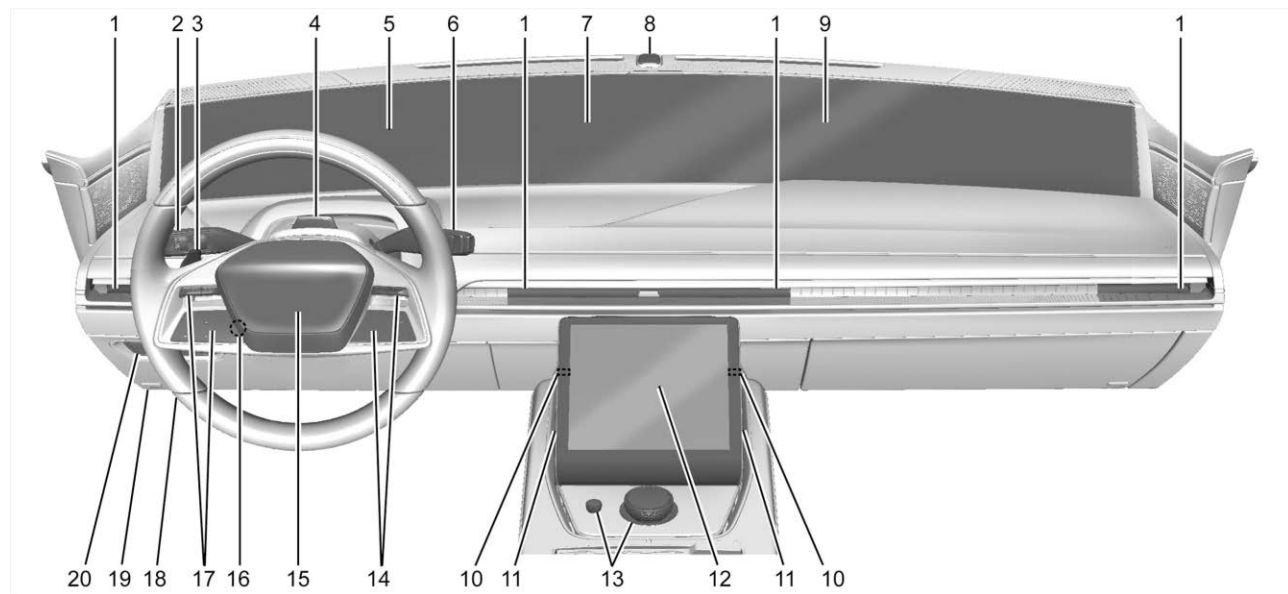
The following symbols are used to indicate additional instructions or information.

 : 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.”

Instrument Panel Overview



1. Air Vents. See *Air Vents* ⇨ 163.
2. Turn Signal Lever. See *Turn and Lane-Change Signals* ⇨ 125.

Windshield Wiper/Washer. See *Windshield Wiper/Washer* ⇨ 91.

3. Regenerative Braking. See *Regenerative Braking* ⇨ 185.

-
4. Driver Monitoring System Camera. See <i>Driver Attention Assist</i> ⇨ 256. 5. Instrument Cluster. See <i>Instrument Cluster</i> ⇨ 95. Driver Information Center. See <i>Driver Information Center (DIC)</i> ⇨ 114. 6. Shift Lever. See <i>Electric Drive Unit</i> ⇨ 178. 7. Infotainment Display. See <i>Using the System</i> ⇨ 133. Hood. See <i>Hood</i> ⇨ 280. 8. Light Sensor. See <i>Automatic Headlight System</i> ⇨ 124 <i>Automatic Headlight System (Enhanced LED Headlights)</i> ⇨ 124. Charging Status Feedback. See <i>Charging Status Feedback</i> ⇨ 265. 9. Passenger Display. See <i>Passenger Infotainment</i> ⇨ 138. 10. USB Port (Out of View). See <i>USB Port</i> ⇨ 137. 11. Wireless Charging (Out of View). See <i>Wireless Charging</i> ⇨ 93. 12. Center Console Display. See <i>Using the System</i> ⇨ 133.	Climate Control Systems. See <i>Climate Control Systems</i> ⇨ 159. Lane Keep Assist. See <i>Lane Keep Assist (LKA)</i> ⇨ 258. 13. Infotainment Controls. See <i>Overview</i> ⇨ 132. Radio Controls. 14. Radio Controls. See <i>Steering Wheel Controls</i> ⇨ 133. 15. Horn. See <i>Horn</i> ⇨ 90. 16. Steering Wheel Adjustment (Out of View). See <i>Steering Wheel Adjustment</i> ⇨ 90. 17. Adaptive Cruise Control. See <i>Adaptive Cruise Control</i> ⇨ 193. Super Cruise (If Equipped). See <i>Super Cruise</i> ⇨ 216. Forward Collision Alert System. See <i>Forward Collision Alert (FCA) System</i> ⇨ 242. Heated Steering Wheel. See <i>Heated Steering Wheel</i> ⇨ 90. Driver Mode Control. See <i>Driver Mode Control</i> ⇨ 188. 18. Hood Release Strap. See <i>Hood</i> ⇨ 280.	19. Data Link Connector (Out of View). See <i>Service Vehicle Soon Light (Propulsion System Failure)</i> ⇨ 101. 20. Electric Parking Brake. See <i>Electric Parking Brake</i> ⇨ 183. Ride Height. See <i>Air Suspension</i> ⇨ 189. Hood. See <i>Hood</i> ⇨ 280. Liftgate. See <i>Liftgate</i> ⇨ 22. Instrument Panel Illumination Control. See <i>Instrument Panel Illumination Control</i> ⇨ 126.

Keys, Doors, and Windows

Keys and Locks

Keys	6
Remote Key	7
Remote Key Operation	7
Remote Start	12
Door Locks	13
Power Door Locks	14
Delayed Locking	14
Automatic Door Locks	14
Lockout Protection	15
Safety Locks	15
Digital Key	15

Doors

Door Operation	17
Hood	19
Liftgate	22

Vehicle Security

Vehicle Security	25
Vehicle Alarm System	25
Steering Column Lock	26
Immobilizer	27
Immobilizer Operation	27

Exterior Mirrors

Convex Mirrors	28
Power Mirrors	28

Folding Mirrors	28
Heated Mirrors	29
Reverse Tilt Mirrors	30

Interior Mirrors

Interior Rearview Mirrors	30
Automatic Dimming Rearview Mirror	30
Rear Camera Mirror	30

Windows

Windows	32
Power Windows	32
Sun Visors	34

Roof

Smart Glass Roof	35

Keys and Locks

Keys



Warning

Leaving children in a vehicle with a remote key 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 remote key 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 a remote key.



The mechanical key that is inside of the remote key can be used for all locks.



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

If it becomes difficult to turn the key, inspect the key blade for debris. Periodically, clean the key with a brush or a pick.

See your dealer if a new key is needed.

If locked out of the vehicle, see *Roadside Assistance Program* ⇨ 356.

With an active OnStar or connected service plan, an OnStar Advisor may remotely unlock the vehicle. See *OnStar Overview* ⇨ 365.

Remote Key

See *Radio Frequency Statement* ⇨ 361.

If there is a decrease in the remote key operating range:

- Check the distance. The remote key may be too far from the vehicle.
- Check the location. Other vehicles or objects may be blocking the signal.
- Check the remote key's battery. See "Battery Replacement" under *Remote Key Operation* ⇨ 7.

- If the remote key is still not working correctly, see your dealer or a qualified technician for service.

Remote Key Operation

The Keyless Access system allows for vehicle entry when the remote key is within 1 m (3 ft). See "Keyless Access Operation" later in this section.

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

Other conditions can impact the performance of the remote key. See *Remote Key* ⇨ 7.



 : Press to lock all doors.

If enabled, the turn signal indicators may flash and/or the horn may sound on the second press. To view available settings from the infotainment home screen, touch Settings > Vehicle > Remote Lock, Unlock, Start.

If you press  when the driver door is open, all doors will lock and the driver door will immediately unlock, if enabled. To view available settings from the infotainment home screen, touch Settings > Vehicle > Remote Lock, Unlock, Start.

If you press , all doors lock.

To arm the alarm system, press . See *Vehicle Alarm System* ⇨ 25.

: Press to unlock the driver door. Press unlock again within three seconds to unlock all doors. The remote key can be programmed to unlock all doors on the first button press. To view available settings from the infotainment home screen, touch Settings > Vehicle > Remote Lock, Unlock, Start.

If enabled, the turn signal lights flash twice to indicate the doors are unlocked. You can also program the exterior lights to turn on. To view available settings from the infotainment home screen, touch Settings > Vehicle > Remote Lock, Unlock, Start.

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

If auto folding mirrors is enabled, press  to unfold the mirrors. Press  to fold the mirrors. To view available settings from the infotainment screen, touch Settings > Vehicle > Comfort and Convenience. See *Folding Mirrors* ⇨ 28.

If remote window operation is enabled, press  twice and hold until the windows fully open. Press  twice and hold until the windows fully close. To view available settings from the infotainment screen, touch Settings > Vehicle > Remote Lock, Unlock, Start. See *Power Windows* ⇨ 32.

: Press twice to open or close the liftgate. Press once to stop the liftgate from moving. The vehicle must be in P (Park).

: Press twice to open the hood. Press once to stop the hood from moving. Press twice and hold until the hood closes. Releasing the button before the hood closes will stop the motion. The vehicle must be in P (Park).

: Press twice to open the driver door. Press again to stop. Press twice to close the driver door. The vehicle must be in P (Park).

: Press, hold, and release within one second to initiate vehicle locator. The exterior lights flash and the horn chirps three times.

Press and hold  for three seconds to sound the panic alarm. The horn sounds and the turn signals flash for about 30 seconds or until you press  again or start the vehicle.

: Press twice from outside the vehicle to remote start the vehicle. The vehicle cannot be started if a remote key is left inside the vehicle. See *Remote Start* ⇨ 12.

Keyless Access Operation

The Keyless Access system allows the doors and liftgate to be unlocked without pressing the remote key button. The remote key must be within 1 m (3 ft) of the liftgate or door being opened.

Doors can be programmed to lock after exiting the vehicle through passive locking or delayed locking. See “Passive Locking” later in this section. The remote key can also be used to lock the doors.

Keyless Access can be programmed to unlock all doors when the exterior driver door switch is pressed. All doors will unlock when any non-driver exterior door switch is pressed

regardless of the current setting. To view available settings from the infotainment screen, touch Settings > Vehicle > Remote Lock, Unlock, Start.

Keyless Unlocking from Passenger Doors

When the doors are locked and the remote key is within 1 m (3 ft) of the door, pressing the exterior door switch will unlatch the door and unlock all doors.

Passive Locking

The Keyless Access system will lock the vehicle several seconds after all doors are closed, if the vehicle is off and at least one remote key has been removed from the interior or none remain in the interior.

If other electronic devices interfere with the remote key signal, the vehicle may not detect the remote key inside the vehicle.

If passive locking is enabled, the doors may lock with the remote key inside the vehicle. Do not leave the remote key in an unattended vehicle.

To view available settings from the infotainment home screen, touch Settings > Vehicle > Power Door Locks.

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 remain disabled until you press  on the interior door or start the vehicle.

Remote Left In Vehicle Alert

When the vehicle is turned off and a remote key is left in the vehicle, the horn will chirp three times after all doors are closed.

To view available settings from the infotainment home screen, touch Settings > Vehicle > Remote Lock, Unlock, Start.

Remote Removed From Vehicle Alert

If the vehicle is on with a door open, and then all doors are closed, the vehicle will check for remote keys or digital keys inside. If a remote key or digital key is not detected, or you started the vehicle with only a key card present, the Driver Information Center will display NO KEY FOUND and the horn will sound three times.

This occurs only once each time the vehicle is driven.

To view available settings from the infotainment home screen, touch Settings > Vehicle > Remote Lock, Unlock, Start.

Keyless Liftgate Opening

Press the Cadillac emblem below the liftgate to open if the remote key is within 1 m (3 ft) and the doors are locked. If the doors are unlocked, the remote key is not required to open the liftgate. See *Liftgate* ⇨ 22.

Key Access

To access a vehicle with a weak remote key battery, see *Door Locks* ⇨ 13.

Programming Remote Keys to the Vehicle

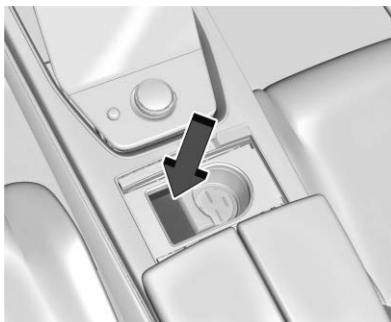
Only remote keys programmed to the vehicle will work. If a remote key is lost or stolen, a replacement can be purchased and programmed through your dealer. The vehicle can be reprogrammed so that lost or stolen remote keys no longer work. Any remaining remote keys will need to be reprogrammed. Each vehicle can have up to eight remote keys matched to it.

Starting the Vehicle with a Low Remote Key Battery

For improved vehicle security, the remote key is equipped with a motion sensor. When starting the vehicle, if the remote key has been idle for an extended period of time, the Driver Information Center may display KEY IN SLEEP MODE, MOVE KEY, THEN START. Move the remote key slightly and try starting the vehicle.

If the remote key battery is weak or if there is interference with the signal, the Driver Information Center may display NO KEY FOUND, REPLACE BATTERY IN KEY or NO REMOTE KEY WAS DETECTED PLACE KEY IN KEY POCKET THEN START YOUR VEHICLE when starting the vehicle.

To start the vehicle:



1. Place the remote key on the mat to the left of the cupholder with the buttons facing down.
2. With the vehicle in P (Park) or N (Neutral), press the brake or close the door. See *Power Modes* ⇨ 176. Replace the remote key battery as soon as possible.

Battery Replacement

Warning

Never allow children to play with the remote key. The remote key 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 remote key 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 remote key. Static from your body could damage the remote key.

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 remote key is not reassembled properly, liquids could enter the housing and damage the circuitry, resulting in a remote key malfunction and/or failure. To prevent damage, always follow the steps for remote key reassembly in this manual to ensure the remote key is sealed properly whenever the remote key is opened.

Replace the battery if the Driver Information Center displays REPLACE BATTERY IN KEY.

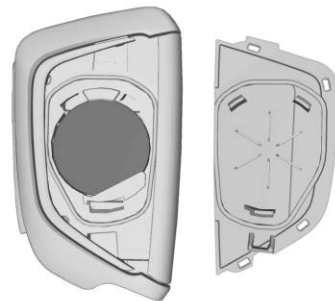
The battery is not rechargeable. To replace the battery:



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



2. Use the mechanical key blade in the slot in the remote key to remove the battery cover by hand.



3. Remove the battery cover.

4. Pull the seal by pulling on the tab to access the battery.
5. Remove the old battery. Do not use a metal object.
6. Insert the new battery, positive side facing up. Replace with a CR2450 Lithium or equivalent battery.
7. Place the seal back into the groove around the battery compartment.
8. Replace the battery cover by snapping it back into the remote key.
9. Reinsert the mechanical key.

Remote Start

This feature starts the heating or air conditioning systems and the rear window defogger from outside the vehicle.

If the outside temperature is below 7 °C (45 °F), and the rear window defogger is on, the area of the windshield beneath the windshield wipers will warm up to melt accumulated snow or ice, if equipped.

Use remote start to heat or cool the interior when the vehicle is plugged in to maximize electric range by utilizing electricity from the electrical outlet. Normal system operation will return after the vehicle has been turned on.

: This button is on the remote key.

The climate control system will use the previous settings during a remote start. The rear defog may come on during a remote start based on cold ambient conditions. The rear defog indicator light will not come on during a remote start.

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

The vehicle cannot be remote started if:

- The remote key is in the vehicle.
- The vehicle has been running for 60 minutes after a remote start.
- The hazard flashers are on.
- The vehicle is not in P (Park).
- The vehicle is already started.

If the battery level is low, do not use the remote start feature. The battery may fully deplete.

The remote key range may be less while the vehicle is running.

Other conditions may affect the range and performance of the remote key. See *Remote Key* ⇨ 7.

Starting the Vehicle Using Remote Start

Press  twice on the remote key. The turn signal lights will flash to confirm the remote start request was received. During the remote start, the parking lights will remain on as long as the vehicle is on.

The vehicle will turn off after 60 minutes, unless you stop the remote start before remote start cycle has completed or the vehicle is turned on.

To drive, start the vehicle. See *Power Modes* ⇨ 176.

Extending Remote Start Time

Remote start can be used for up to 60 minutes of total remote start time.

After a remote start of 60 minutes, or multiple shorter time starts totaling 60 minutes have been used, the vehicle must be started and then turned off before the remote start can be used again.

Canceling a Remote Start

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

- Press . The parking lights will turn off.
- Turn on the hazard warning flashers.
- Turn the vehicle on and then off.

Door Locks



Warning

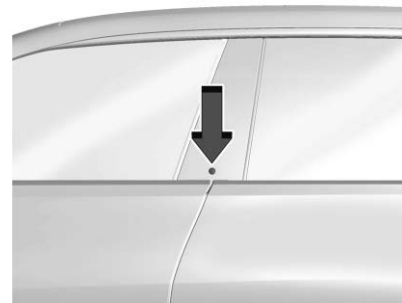
Unlocked doors can be dangerous.

(Continued)

Warning (Continued)

- 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 not locked. So, all passengers should wear seat belts properly and the doors should be locked whenever the vehicle is driven.
- Do not pull the door handles while the vehicle is in motion. The door may open with only a single pull. Always use safety locks when children are in the rear seats. See *Safety Locks* ⇨ 15.
- 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 or unlock the doors from outside the vehicle, press  or  on the remote key. See *Remote Key Operation* ⇨ 7.



Press the exterior door switch to power operate the door. For more information on how to power operate the doors, see *Door Operation* ⇨ 17.

If the vehicle battery is dead, unlock the liftgate with the mechanical key. See *Liftgate* ⇨ 22.

To lock or unlock the doors from inside the vehicle:

- Press the  or  on the interior switch. See *Power Door Locks* ⇨ 14.

- Use the front or rear center console displays.
- Press  or  on the remote key. See *Remote Key Operation* ⇨ 7.

If the vehicle loses power, the door can still be opened by fully pulling the handle on the door trim.

Manual Operation

If the vehicle battery is dead, fully pull either front interior door handle to unlatch that door and manually open it the rest of the way. Fully pull either rear interior door handle to unlock that door and then fully pull again to unlatch it. For more information on how to operate the doors, see *Door Operation* ⇨ 17.

Power Door Locks



 : Press to unlock the doors.

 : Press to lock the doors.

Locking and unlocking the doors will also unlock the liftgate. See *Liftgate* ⇨ 22.

Delayed Locking

This feature delays automatic door locking for five seconds after all doors are closed. While the feature is on, to request a delayed lock, press  on the power door lock switch while the vehicle is off and the door is open. An audible alert will sound three times to confirm the feature is active. If you reopen a door before

that time, the five-second timer will reset when you close all doors again. To lock the doors immediately, press  on the door switch or remote key.

To view available settings from the infotainment screen, touch Settings > Vehicle > Doors & Locks.

Automatic Door Locks

The doors will lock automatically when all doors are closed, the vehicle is on, and the vehicle is shifted out of P (Park).

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 vehicle into P (Park).

Automatic door locking cannot be disabled. Automatic door unlocking can be programmed. To view available settings from the infotainment screen, touch Settings > Vehicle > Doors & Locks.

Lockout Protection

This feature protects you from locking remote keys in the vehicle.

When the lock button is pressed and the vehicle is on, with the driver door open, all of the doors will lock and then the driver door will unlock.

If the vehicle is off and locking is requested while a door is open, when all doors are closed the vehicle will check for remote keys inside. If a remote key is detected and the number of remote keys inside has not reduced, the driver door will unlock and the horn will sound three times.

This can be manually overridden by pressing and holding  on the power door lock switch.

Safety Locks

Child Safety Locks prevent passengers from opening the rear doors from inside the vehicle, as well as lock out motion for the rear seats. To adjust the rear seats in the vehicle, see *Rear Seats* ⇨ 44.

There are three paths to access and activate/deactivate the Child Safety Locks from the front center display screen:

- Controls > Doors & Windows > Child Safety Locks > Off or On
- Controls > Safety > Child Safety Locks > Off or On

or

- Controls > Doors > Child Safety Locks > Off or On

It is recommended to turn child safety locks on when a child restraint is present in the rear seats.

Rear Control Lock prevents rear passengers from using the rear center display screen.

To activate/deactivate the Rear Control Lock, on the front center display screen select Controls > Safety > Rear Control Lock > On or Off.

Digital Key

If equipped and enabled, the digital key feature allows you to access and operate the vehicle using a smart device. Many of the functions

performed by a remote key can also be done using a digital key. See *Remote Key Operation* ⇨ 7.

Bring your remote key to all service appointments at your dealer.

Digital key communicates with the vehicle using Ultrawide Band and Bluetooth Low Energy technology.

Only certain iPhone, Apple Watch, and Android smart devices support digital key. Please see the myCadillac app or www.cadillac.com/support to see if your smart device is compatible.

If the smart device battery is weak or if there is interference with the signal, the Driver Information Center may display NO KEY FOUND or NO REMOTE KEY WAS DETECTED, PLACE KEY IN KEY POCKET THEN START YOUR VEHICLE when starting the vehicle. Charge the smart device battery as soon as possible.

You can use the myCadillac mobile app and device Wallet to pair, manage, or delete your digital key.

If the digital key is not working:

- Check the distance. The smart device may be too far from the vehicle.

- Check the location. Other vehicles or objects may be blocking the signal. Your body could also impact the signal. Hold the smart device in your hand, away from your body, and toward the vehicle for best results.
- Check that the smart device is turned on and has sufficient battery power.
- Check the connection. Your smart device's Bluetooth connection must be enabled.
 - If it is enabled, try to turn Bluetooth off, then back on.
- Check that your smart device has the latest iOS or Android operating system (OS) downloaded.
- Go to www.cadillac.com/support for additional support and frequently asked questions.

If the digital key still does not work, use the commands in your phone's Wallet or myCadillac app or the key card as a backup.

Bring your remote key and key card if you have the digital key serviced at your dealer.

Setting up Digital Key

Digital key is only available if you have accepted the OnStar terms and conditions.

1. Log in to your OnStar account in the myCadillac mobile app.
2. Select Controls > Keys, then follow the steps on your screen to pair your smart device.

Using Your Digital Key

Digital key allows you to:

- Use passive entry with your smart device to lock and unlock the vehicle's doors, and access the rear compartments without a remote key.
See "Keyless Access Operation" under *Remote Key Operation* ⇨ 7.
- Start the vehicle with just your digital key-enabled smart device present.
- Use remote commands in the device Wallet to lock, unlock, and remote start the vehicle.
- Share your digital key with up to three additional people across eight total devices.

Delete keys through the device Wallet or call an OnStar advisor for assistance.

Key Card

Caution

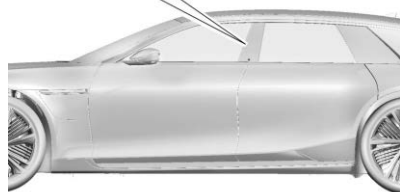
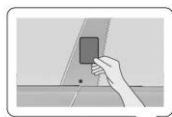
Placing the key card on the wireless charger may damage the card. If the key card is damaged, it may not unlock or start the vehicle. Do not place the key card on the wireless charger.

Your vehicle may be equipped with a key card that unlocks, locks, and starts the vehicle. The key card works by tapping it on the location of the vehicle shown on the back of the key card.

The key card is a back up to the digital key in case the smart device battery is weak or there is interference to the signal. Carry the key card at all times. Store the key card securely to prevent loss, theft, or damage. Do not write or punch holes into the key card.

Only key cards programmed to the vehicle will work. If you lose your key card or it is stolen, you can purchase and program a replacement through your dealer. To prevent lost or stolen key cards from being able to operate the vehicle, see your dealer. Bring your remote key and digital key if you have the key card serviced at your dealer.

Each vehicle can have up to eight key cards programmed to it.



Unlocking with the Key Card

Tap your key card in the center of the B-pillar next to the driver window to unlock the driver door. To program the key card to unlock all doors, on the infotainment home screen, select Settings > Vehicle > Remote Lock, Unlock, Start > Remote Door Unlock.

Locking with the Key Card

With all doors closed, the vehicle off, and any door unlocked, tap your key card in the center of the B-pillar next to the driver window to lock all doors.

Starting with the Key Card

You can start your vehicle for a short period after unlocking it with your key card. If the period has ended, you will need to unlock the vehicle with the key card again to start your vehicle.

Doors

Door Operation



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

(Continued)

Warning (Continued)

- 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.



Warning

Always pay attention to your surroundings when using the power doors. The power doors system may not always detect small objects, objects on the edge, or objects outside of the field of view. The system also may not work correctly when the sensors are blocked, such as in adverse weather conditions. Keep your hands, feet, and other objects away from moving parts to avoid vehicle damage and personal injury.

If equipped and enabled with power doors, the doors are power assisted. See *Radio Frequency Statement* ⇨ 361.

The Power Doors feature can be customized. To view available settings from the infotainment home screen, select Settings > Vehicle > Doors and Locks > Power Doors.

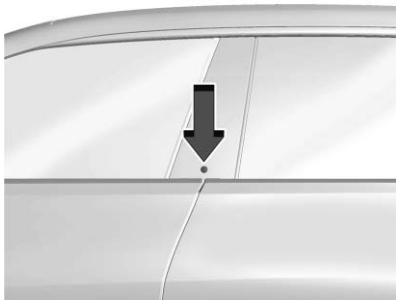
Opening a Door from the Outside

Lock or unlock the doors by:

- Pressing  or  on the remote key. See *Remote Key Operation* ⇨ 7.

Power operate the door by:

- Pressing  twice on the remote key to open the driver door. Press again to stop. Press  twice again to close. See *Remote Key Operation* ⇨ 7 and *Radio Frequency Statement* ⇨ 361.



- Pressing one of the exterior door switches. If the door is in motion, press again to stop the door, or to close it if already open and stopped.

If resistance is detected when the door is opening, such as in icy conditions, a mechanism inside the door will extend to attempt to force the door open.

Operating the Doors from the Inside

Lock or unlock the doors by:

- Pressing the  or  switch above the interior door handle.
- Using the front or rear center console displays.

- Pressing  or  on the remote key. See *Remote Key Operation* ⇨ 7.

Power operate the doors by:

- Lightly pulling and releasing an interior release handle located on the door trim. When the rear doors are locked, pull the handle once to unlock and pull it again to open the door.
- Using the front or rear center console displays. The front center console display can open or close all doors individually. The rear center console display can open or close the rear doors.
- Pressing the brake pedal once to close the driver door. To view available settings from the infotainment home screen, select Settings > Vehicle > Doors and Locks.

Manual Operation

The doors are always power assisted even when being operated manually. The doors will automatically slow down prior to fully opening or closing. If a door is left open, the power assist will hold the door at the same position on flat ground or on an incline.

- If a door is open, the power assist holds the door at the same position on flat ground or on an incline for some time, then deactivates and stops holding the door.
- After a period of inactivity, the vehicle will enter sleep. Power assist for the doors will not be available during this time.
- Power operating the doors consistently over a short period of time will disable power operation and require manual operation to open or close.
- Moving the doors with excessive force will result in resistance, preventing slamming.
- If electrical power is lost, fully pulling the interior release handle will unlatch the door and allow it to be manually opened the rest of the way. It may be more difficult to open the door without the power assist.

Obstacle Detection

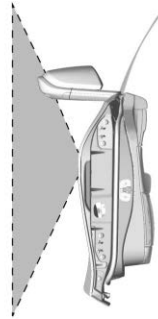
Caution

The sensors only detect objects within range of the door swing path. Always watch for external traffic, people, and

(Continued)

Caution (Continued)

other obstacles when operating the power doors to avoid vehicle damage and personal injury.



If equipped, a door will automatically stop if it detects an obstacle in its path during a power open cycle. The power door system cannot prevent a collision that is caused by an obstacle moving toward the door during a power open cycle. During a power close cycle, the door will only stop if it detects intended resistance.

Hood



Warning

You or others could be injured if caught in the path of the power hood. Always supervise the operation of the power hood until it is fully opened or closed and keep hands and other body parts away from the hood when in use.

This vehicle is equipped with a power hood to cover the front underhood compartment. The power hood opens and closes with the press of a button or in hands-free mode. You can customize settings or disable this feature on the lower display screen at Settings > Vehicle > Comfort and Convenience > Power Hood Opening.

If the battery is disconnected or has low voltage, the hood will not open. The hood will resume operation when the battery is reconnected and charged. See “Operating the Hood When There is No Electrical Power” later in this section.

Safety Features



Warning

Do not drive the vehicle if the hood is not latched completely. The hood could open fully, block your vision, and cause a crash. You or others could be injured. Always close the hood completely before driving. When the hood is not closed, the vehicle will not exceed 42 km/h (26 mph). Close the hood to drive faster than 42 km/h (26 mph).

Shift Lockout Conditions

If the hood is not closed, the electronic drive unit lockout prevents the vehicle from shifting out of P (Park). Close the hood to shift out of P (Park). Confirm the hood is closed by checking that the hood is flush with the surrounding components.

When the hood is not latched, a message will display on the Driver Information Center and the vehicle will not be able to shift out of P (Park). To override this function, press and hold the shift button and brake pedal until the message SHIFTER UNLOCK COMPLETE is

displayed. The vehicle's speed will be limited to 42 km/h (26 mph) when the hood is not completely closed.

If the hood is closed but the ajar message is present, the electronic drive unit lockout can be overridden. Hold the brake for 20 seconds and then shift into D (Drive). The vehicle will not exceed 42 km/h (26 mph). See your dealer for service.

Obstacle Detection Features

If the hood encounters an obstacle during a power open or close cycle, a warning audible alert may sound and the hood will automatically reverse direction and move away from the obstacle. After removing the obstruction, the power hood operation can be used again.

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

Falling Hood Detection

If the power hood encounters excess weight or a possible mechanical failure, a repetitive audible alert will sound and the hood will automatically lower to a stable position. If the

hood stops before fully closing, carefully push the hood closed while keeping hands away from the edges of the hood.

If the hood continues to automatically close after opening, see your dealer for service before using the power hood.

Interfering with the power hood motion or manually closing the hood too quickly may activate the falling hood detection feature, or may resemble a support strut failure. Allow the hood to complete its operation and wait a few seconds before manually closing the hood.

Opening the Power Hood



Warning

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

To open the front hood, the vehicle must be in P (Park) and the doors unlocked. Clear any objects or snow from the hood before opening.

Use any of the methods below to open the power hood.

Settings

- To disable, enable, or customize power hood operation, select Settings > Vehicle > Comfort and Convenience > Power Hood Opening.
- To customize how far the power hood opens, see “Hood Angle Settings” later in this section.

Interior Hood Release Button: To open the hood, press  on the instrument panel to the left of the steering wheel.

Remote Key: To open the hood with the remote key, press  twice. See *Remote Key Operation* ⇨ 7.

If Vehicle Has No Power: If the vehicle has lost power, the power hood and power latch will not operate. Use the manual release cable under the instrument panel instead. See “Operating the Hood When There is No Electrical Power” later in this section.

Closing the Power Hood

Before closing the hood, make sure all cargo is properly stowed and does not go above or across the top of the front underhood compartment.

Interior Power Hood Close Button: To close the hood, press and hold  on the instrument panel to the left of the steering wheel until the hood closes.

Underhood Power Hood Close Button: Press the  button in the underhood area.

Remote Key: To close the hood with the remote key, press  twice and hold. See *Remote Key Operation* ⇨ 7.

Tip-to-Close: To close the hood without pushing any buttons, pull down on the hood until the power assist engages to close the rest of the way. A audible alert will sound to indicate power assist activation. The power assist will only activate when the hood is above a minimum open position.

If Vehicle Has No Power: If the vehicle has lost power, the power hood and power closing latch will not operate. See “Operating the Hood When There is No Electrical Power” later in this section.

Hood Angle Settings

To view available settings from the infotainment screen, touch Settings > Vehicle > Comfort and Convenience > Power Hood Opening.

Maximum: The hood opens to the full open position. Use caution in this mode to avoid hitting overhead obstructions.

Custom: To adjust the hood open angle, manually adjust the hood to the desired angle, then press and hold the underhood switch  until the exterior lights flash and an audible alert sounds.

Pulling the hood too quickly may cause power assist to engage and close the hood. The hood cannot be set below the preset minimum programmable height. If no exterior lights flash or sound, then the height adjustment may be too low.

The hood is restricted to only open to a default height when the vehicle is on a steep downhill grade.

Operating the Hood When There is No Electrical Power



Warning

Do not drive the vehicle if the hood is not latched completely. The hood could open fully, block your vision, and cause a crash. You or others could be injured. Always close the hood completely before driving.

If the vehicle has lost power, the power hood and power closing latch will not operate.

The manual release cable should only be used for service or emergency use, such as loss of vehicle electrical power. Do not store any cargo in the area near the hood release cable.

Opening the Hood

The hood release cable must be pulled twice to release the hood. This process will be easier if a second person stands at the front of the vehicle to perform the second step while the first person performs the third step in the following procedure.

To open the hood:

1. Firmly pull the hood release cable on the lower left side of the instrument panel once to release the hood from its initial latched position.



2. Go to the front of the vehicle and grab the center of the hood, just above the latch. Lift the hood up until it can no longer be moved upward.
3. Return to the hood release cable and firmly pull it a second time to release the hood completely.
4. Go to the front of the vehicle and lift the hood to the desired height.

To close the hood:

1. Pull the hood down until it is secured in the latch.
2. Check to make sure the hood is latched completely. Push down on the hood to latch if it does not latch completely. Repeat this step with additional force if necessary.

Liftgate

Caution

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

To lock or unlock the liftgate, press  or  on the remote key or the Driver Information Center (DIC).

Power Liftgate Operation



Warning

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

Caution

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

Power Liftgate Mode Selection

To view available settings from the infotainment screen, touch Settings > Vehicle > Comfort and Convenience > Power Rear Gate Opening.

Choose from the following settings:

Maximum: Opens to the maximum height.

Custom: Opens to a pre-programmed reduced height that is lower than the maximum open height.

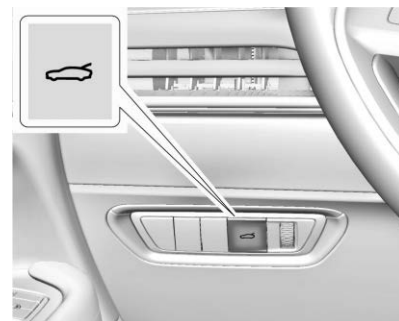
To adjust the liftgate open angle, manually adjust the liftgate to the desired angle, then press and hold the liftgate switch  until the exterior lights flash and a chime sounds.

Pulling the liftgate too quickly may cause power assist to engage and close the liftgate. The hood cannot be set below the preset minimum programmable height. If no exterior lights flash or sound, then the height adjustment may be too low.

Use custom settings to prevent the liftgate from opening into overhead obstructions, such as a garage door, roof-mounted cargo, or storage areas. The liftgate can be manually opened all the way.

Off: Opens manually only.

Operating the Power Liftgate



To open or close the liftgate, press .

Keyless Liftgate Operation

Caution

Manually operating the liftgate during a power open or close can damage the liftgate system. Always wait for the power operation to complete before manually operating the liftgate.

The remote key must be within 1 m (3 ft), when the doors are locked, to open the liftgate. If the doors are unlocked, the remote key is not required to open the liftgate.



Press the Cadillac emblem below the liftgate to power open or close the liftgate when the power liftgate mode is set to Maximum or Custom.

Press the Cadillac emblem below the liftgate and lift up to open when the power liftgate mode is set to Off.

See “Power Liftgate Mode Selection” earlier in this section.

To open the liftgate, press the Cadillac emblem.

Press any liftgate button, the Cadillac emblem, or  on the remote key while the liftgate is moving to stop it.

Pressing any liftgate button or pressing  twice quickly on the remote key restarts the operation in the reverse direction. Pressing the Cadillac emblem will restart the motion, but only in the opening direction.

The power liftgate may be temporarily disabled in extremely low temperatures, or after repeated opening and closings over a short period of time. If this occurs, the liftgate can still be operated manually.

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

Falling Liftgate Detection

If the power liftgate automatically closes after a power opening cycle, there may be excess weight on the liftgate or a possible support strut failure. A repetitive chime will sound. Remove any excess weight. If the liftgate

continues to automatically close after opening, see your dealer for service before using the power liftgate.

Interfering with the power liftgate motion or manually closing the liftgate too quickly after power opening may activate the falling liftgate detection feature. Allow the liftgate to complete its operation and wait a few seconds before manually closing the liftgate.

Obstacle Detection Features

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

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

Liftgate Key Lock Cylinder Access (In Case of Dead Battery)



To access the liftgate key lock cylinder, insert the mechanical key into the cylinder and turn to unlock. See *Keys* ➔ 6.

Free-Turning Locks

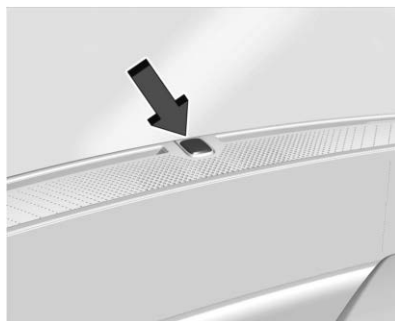
The key cylinder turns freely when either the wrong key is used, or the correct key is not fully inserted. The free-turning lock feature prevents the lock cylinder from being forced open. To reset the lock cylinder, ensure the correct key is fully inserted into the lock cylinder and then rotate the key until you feel the lock

cylinder click back into place. Remove the key and reinsert fully. Rotate the key to unlock the vehicle.

Vehicle Security

This vehicle has theft-deterrent features, but is not theft-proof.

Vehicle Alarm System



The indicator light indicates the status of the system.

Arming the Alarm System

1. Turn off the vehicle.

2. Lock the vehicle in one of three ways:

- Use the remote key.
- Use the Keyless Access system.
- With a door open, press  on the interior of the door.

3. After 30 seconds the alarm system will arm, and the indicator light will begin to slowly flash. Pressing  on the remote key a second time will bypass the 30-second delay and immediately arm the alarm system.

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 turn signals flash and the horn sounds for about 30 seconds. The alarm system will then re-arm to monitor for the next unauthorized event.

Disarming the Alarm System

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

- Press  on the remote key.
- 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 exited.
- Always unlock a door with the remote key, or use the Keyless Access system.

How to Detect a Tamper Condition

If  is pressed on the remote key and the horn sounds three times, an alarm occurred previously while the alarm system was armed.

If the alarm has been activated, a message will appear on the Driver Information Center.

Power Sounder, Inclination Sensor, and Intrusion Sensor

In addition to the standard theft-deterrent system features, this system may also have inclination and intrusion sensors.

The power sounder provides an audible alarm which is distinct from the vehicle horn. It has its own power source and can sound an alarm if the vehicle's battery is compromised.

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 activate the alarm if it senses unauthorized entry into the vehicle 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 sunshades.
- Make sure there are no obstructions blocking the sensors in the front overhead console.

Intrusion and Inclination Sensors Disable Switch

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

The default state of the intrusion and inclination sensors is on.

When the vehicle is turned on, from the front center console display, select Controls  > Park > Motion Sensor to activate or deactivate the intrusion and inclination sensors.

The indicator light may come on momentarily, or a message may display on the instrument cluster, indicating that the sensor has been deactivated until the next time the system is armed.

Steering Column Lock

The steering column lock is a theft-deterrent device. If equipped, this feature locks the steering column when you open the driver door, before or after turning off the vehicle. The steering column unlocks when you turn the vehicle on.

The Driver Information Center may display one of the following:

- Service Steering Column Lock: Indicates an issue with the column lock feature. Have vehicle serviced.
- Steering Column Lock Active: Indicates the vehicle is on and the steering column lock is active. It is normal for the column to lock during a remote start, but it should unlock after you press the brake and start the vehicle. No message will display during a remote start.

- **Turn Steering Wheel and Restart Vehicle:** Indicates the column lock is binding, the column locking device is unable to unlock the steering column, and the vehicle does not start. If this happens, immediately turn the steering wheel from side to side.

If you are still unable to unlock the steering column:

1. Turn the vehicle off and open the driver door.
2. Turn the vehicle on.
3. Immediately turn the steering wheel side to side for about 15 seconds. It may take significant force to unlock the column.

To prevent the steering column from locking, always straighten the front wheels before turning off the vehicle.

Immobilizer

See *Radio Frequency Statement* ⇨ 361.

Immobilizer Operation

This vehicle has a passive theft-deterrent system.

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

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

The immobilization system is disarmed when the vehicle is turned on and a valid remote key 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 remote keys matched to an immobilizer control unit in the vehicle. Only a correctly matched remote key will start the vehicle. If the remote key 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.

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

If the vehicle will not turn on or off, and the remote key appears to be undamaged, try another remote key. Or, you may try placing the remote key in the backup location. See “Starting the Vehicle with a Low Remote Key Battery” in *Remote Key Operation* ⇨ 7.

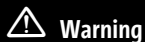
If the vehicle will not turn on or off with the other remote key or in the backup location, the vehicle needs service. If the vehicle does turn on or off, the first remote key may be faulty. See your dealer.

It is possible for the immobilizer system to learn new or replacement remote keys. Up to eight remote keys can be programmed for the vehicle. To program additional remote keys, see “Programming Remote Keys to the Vehicle” under *Remote Key Operation* ⇨ 7.

Do not leave the remote key or device that disarms or deactivates the theft-deterrent system in the vehicle.

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 hit a vehicle that is driving next to you. Check the inside mirror or glance over your shoulder before changing lanes.

Convex mirrors are curved so that more can be seen from the driver seat.

The driver side mirror is flat.

The passenger side mirror is convex shaped.

Power Mirrors



To adjust the mirrors:

1. Press  or  to choose the driver or passenger mirror. An indicator will show the selected mirror.
2. Press one of the four arrows on the control pad while the indicator light on button  or  is illuminated, 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. If you do not deselect the mirror, the mirror adjustment will turn off after about one minute.

Folding Mirrors



To adjust power folding mirrors:

1. Press  to fold the mirrors inward.
2. Press  again to return the mirrors to the driving position.

The outside mirrors may automatically unfold when the vehicle is driven above 20 km/h (12 mph), but may be folded with the power folding mirror switch. If the vehicle speed is

driven above 40 km/h (25 mph), they may automatically unfold and may not be refolded with the power folding mirror switch.

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.
- One mirror folds while the other unfolds.

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.

If one mirror folds while the other unfolds, fold and unfold the mirrors three times 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 the mirrors have been folded with the power folding mirror switch, they may not be unfolded by use of remote key.

If the mirrors have not been folded with the power folding mirror switch and the vehicle is in P (Park), they may be automatically folded/unfolded as follows:

- If doors are locked by pressing  on the remote key, the mirrors will fold. If doors are unlocked by pressing  on the remote key, the mirrors will unfold. See *Remote Key Operation* ⇨ 7.
- If doors are unlocked by pressing the exterior door switch, the mirrors will unfold. See “Keyless Unlocking/Locking from the Driver Door” in *Remote Key Operation* ⇨ 7.
- If passive locking is enabled and doors are locked by that feature, the mirrors will fold. See “Passive Locking” in *Remote Key Operation* ⇨ 7.

Lane Change Alert (LCA)

The vehicle may have LCA. See *Lane Change Alert (LCA)* ⇨ 252.

Turn Signal Indicator

The vehicle may have a turn signal indicator on the mirror housings. The indicator will flash when a turn signal or the hazard warning flashers are used.

Heated Mirrors

If equipped with heated mirrors,  is present on both side mirrors. The symbol does not illuminate when the heated mirrors are active.

The rear window defogger and heated mirrors, if equipped, turn on when the vehicle is turned on using the remote key during colder outside temperatures.

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

 : If equipped, the rear window defogger also heats the outside mirrors. See “Rear Window Defogger” under *Climate Control Systems* ⇨ 159.



REAR : If equipped, press to heat the outside mirrors.

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 curb 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 view available settings from the infotainment app screen, touch Settings > Vehicle > Comfort and Convenience.

Interior Mirrors

Interior Rearview Mirrors

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

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

Automatic Dimming Rearview Mirror

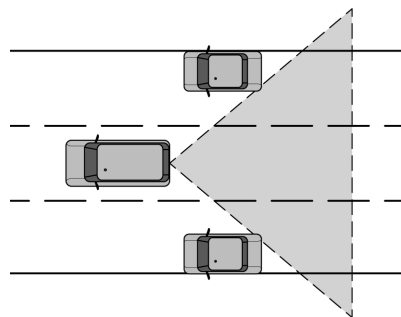
If equipped, automatic dimming reduces the glare of headlights in the rearview mirror from a vehicle behind you. The dimming feature comes on when the vehicle is started.

Rear Camera Mirror

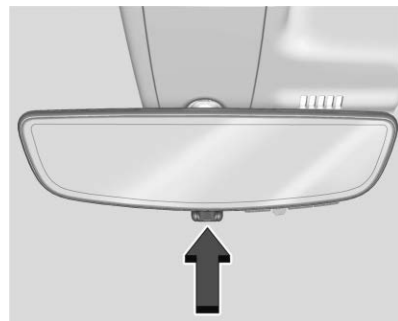


Warning

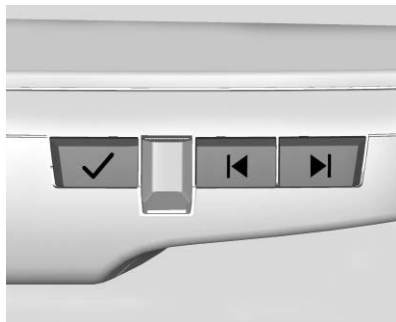
The Rear Camera Mirror (RCM) has a limited view. Portions of the road, vehicles, and other objects may not be seen. Do not drive or park the vehicle using only this camera. Objects may appear closer than they are. Check the outside mirrors or glance over your shoulder when making lane changes or merging.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



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



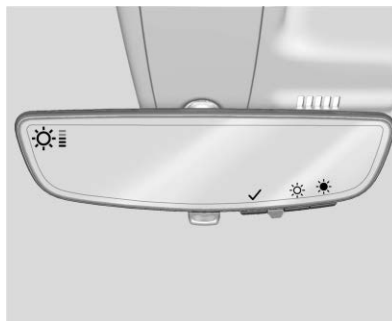
Pull the tab to turn on the display. Push the tab to turn it off. When off, the mirror is automatic dimming. Adjust the mirror for a clear view of the area behind the vehicle while the display is off.



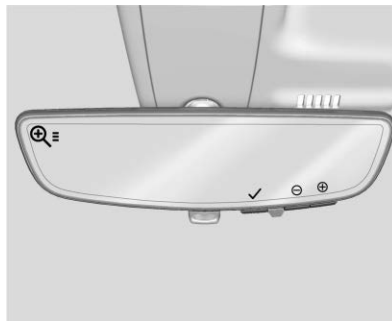
Press to scroll through the adjustment options.

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.

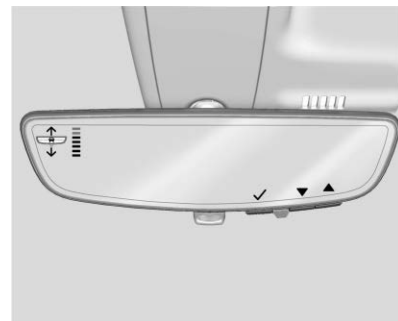
The adjustment options are:



- Brightness

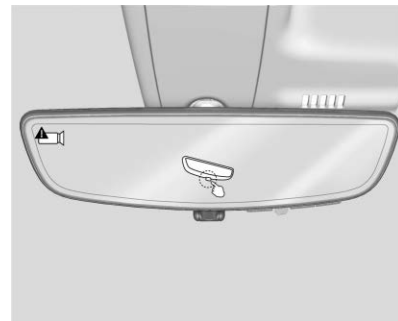


- Zoom



- Tilt

Troubleshooting



See your dealer 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. To clean the rear camera, see *Windshield Wiper/Washer* ⇨ 91 or clean the lens with a soft damp cloth.



- 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 electric range 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 key 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 vehicle is on.

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

If equipped, this feature prevents rear seat passengers from opening the rear windows.

To enable or disable this feature from the infotainment home screen, Controls App > Power Window Lockout quick control.

Window Express Movement

This feature allows you to open all windows fully without holding the switches down. Press the switch down fully, then release to express open the window.

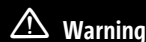
If equipped, pull the window switch up fully and quickly release to express close the window.

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

Window Automatic Reversal System

If equipped, the window automatic reversal system reverses and stops window movement if it detects an object in its path. Extreme cold or ice may 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 vehicle is on, override the automatic reversal system by pulling and holding the window switch if conditions prevent the window from closing.

Programming the Power Windows

Programming may be necessary if the vehicle battery is disconnected or discharged. To program an express-close window:

1. Close all doors.
2. Turn the vehicle on.
3. Partially open the window you want to program, 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 and enabled, this feature allows you to open all the windows remotely.

To view available settings and enable Remote Window Operation, from the infotainment home screen, touch Settings > Vehicle > Remote Lock, Unlock, Start.

To open the windows remotely, press twice and hold  on the remote key.

If equipped, all windows can also be closed using the remote key. To close all windows remotely, press twice and hold  on the remote key.

Automatic Window Sealing

If equipped, the automatic window sealing feature prevents window damage.

When the window is fully closed, the window automatically lowers a small amount when the door is opened. The window raises when the door closes.

Power Loss

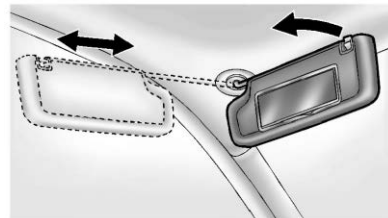
If a window does not raise or lower properly, it could be due to loss of power. See “Programming the Power Windows.”

Frozen Windows

Freezing temperatures may prevent windows from lowering a small amount. If the window will not open:

1. Clear any snow/ice from the door and window.
2. Open the door.
3. Grasp the top of the window, and carefully push and pull until ice between the window and rubber seal breaks.
4. Press the window switch down to lower the window completely and then pull the switch to raise the window up partially.
5. Close the door. The window should raise up to its fully closed position.

Sun Visors



The driver and passenger sun visors can be pulled down to block windshield glare. If equipped, you can detach the visor from the center mount and pivot it from the windshield to the window or to extend it along the rod.

The vehicle may have vanity mirrors and card holders on the back of the sun visors. If equipped, swing down the sun visor to expose the vanity mirror.

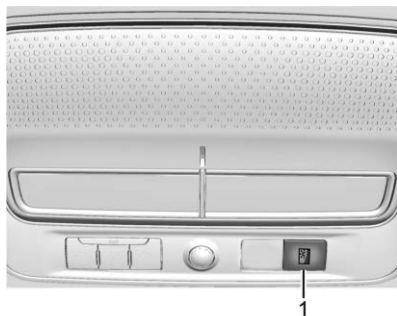
Roof

Smart Glass Roof

Smart Glass Panoramic Roof

The panoramic glass roof is equipped with additional settings which allow you to change the tint level. The roof is divided into multiple zones which can be controlled independently or all at once, as desired.

The system is accessed through Controls & Safety > Tint on the front and rear center display screens, or with the physical switch on the overhead console (1). Options allow you to manually set the tint to any of the five pre-defined tint levels, and an automatic mode that sets the roof tint to maximum during the day and minimum at night.



The system only operates when the vehicle is on, or when Retained Accessory Power (RAP) is active. See *Power Modes* ⇨ 176. When the vehicle is off, the roof will darken to its maximum tint. Your last settings will be saved and restored upon reactivating the vehicle.

Colder outside temperatures will slow the speed at which the system is able to operate.

Tinting Levels

The system has five levels of tint: A maximum clear, maximum dark, and three intermediate tint levels.

Tinting Modes

Individual: The tint level can be selected by tapping the individual panel to the desired tint level, of the available options listed above.

All Clear or All Dark: Select All Clear to set all panels to maximum clear. Select All Dark to set all panels maximum dark.

Automatic: The system will change to All Clear at night, or All Dark during the day.

Absolute Opacity: Will set all panels to All Clear or All Dark. This can also be activated by the overhead console switch (1).

Synchronous: The system can be adjusted via a tint slider. This mode will set all panels to an intermediate tint level and can then be adjusted to the desired levels.

Seats and Restraints

Head Restraints

Head Restraints	37

Front Seats

Power Seat Adjustment	37
Reclining Seatbacks	38
Lumbar Adjustment	40
Massage	40
Memory Seats	40
Heated and Cooled Front Seats	43

Rear Seats

Rear Seat Reminder	44
Rear Seats	44
Massage	45
Heated and Cooled Rear Seats	45

Seat Belts

Seat Belts	45
Buckle To Drive	46
How to Wear Seat Belts Properly	47
Lap-Shoulder Belt	49
Seat Belt Use During Pregnancy	52
Seat Belt Extender	52
Safety System Check	52
Seat Belt Care	52
Replacing Seat Belt System Parts After a Crash	53

Airbag System

Airbag System	53
Where Are the Airbags?	55
When Should an Airbag Inflate?	56
What Makes an Airbag Inflate?	57
How Does an Airbag Restrain?	57
What Will You See After an Airbag Inflates?	57
Passenger Sensing System	58
Servicing the Airbag-Equipped Vehicle	62
Adding Equipment to the Airbag- Equipped Vehicle	62
Airbag System Check	63
Replacing Airbag System Parts After a Crash	63

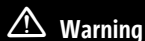
Child Restraints

Older Children	64
Infants and Young Children	65
Child Restraint Systems	67
Where to Put the Restraint	69
Lower Anchors and Tethers for Children (LATCH System)	71
Replacing LATCH System Parts After a Crash	78

Securing Child Restraints (With the Seat Belt in the Rear Seat)	78
Securing Child Restraints (With the Seat Belt in the Front Seat)	80

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 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.

The seats can be adjusted from the front center display screen. Touch  > Position and then select the desired adjustment on the seat image.

To adjust the rear seats, select Rear.

The seat is equipped with a memory function. See *Memory Seats* ⇨ 40 for more information.

The front seat outboard head restraints are not removable.

Rear Seats

Adjusting the Rear Head Restraint

The rear seats have adjustable head restraints in the outboard seating positions.

The fore/aft position of the head restraints can be adjusted.

The seats can be adjusted from the rear center display screen. Touch  > Position and then select the desired adjustment on the seat image.

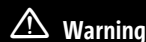
The seats can also be adjusted from the front center display screen. See "Front Seats" earlier in this section.

The seat is equipped with a memory function. See *Memory Seats* ⇨ 40 for more information.

The rear head restraints are not removable.

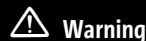
Front Seats

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.



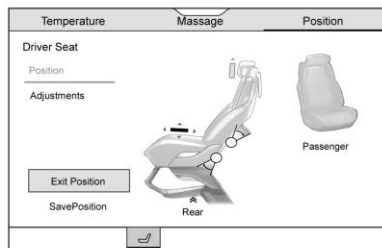
Warning

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



To adjust the seat with the manual control:

- 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.



To adjust the seat from the front center display screen:

- Select  > Position and then touch the desired adjustment on the seat image.
- To adjust the rear seats, select Rear Right or Rear Left.

Warning

If equipped, the second row passenger can create more legroom by moving the front passenger seat with controls located on the rear center display screen. To prevent serious injury or death in a crash,

(Continued)

Warning (Continued)

do not permit a rear seat passenger to move the front seat if someone is seated there. Disable the controls by activating Rear Control Lock from the front center display screen.

To adjust the front passenger seat on the front or rear center display screen:

- Select  > Position > Rear Right > Legroom.

To activate the Rear Control Lock on the front center display screen to prevent rear passengers from using the rear center display screen, select  > Safety > Rear Control Lock.

Reclining Seatbacks

Warning

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

(Continued)

Warning (Continued)

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.

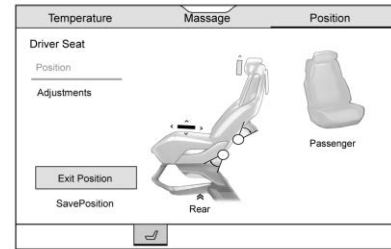
For proper protection when the vehicle is in motion, have the seatback upright. Then sit well back in the seat and wear the seat belt properly.



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

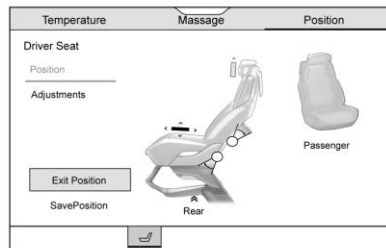


- Move the control back to recline.
- Move the control forward to raise.

**Front Center Display Screen**

To adjust the reclining seatbacks from the front center display screen, select  > Position and then select the desired adjustment on the seat image.

Lumbar Adjustment

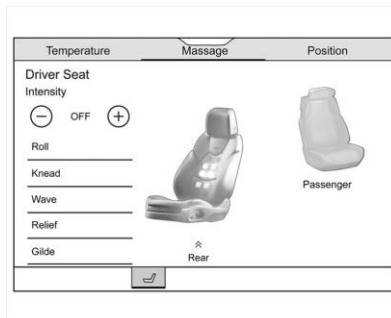


To adjust the lumbar feature from the front center display screen, select > Position and then touch the desired adjustment on the seat image.

Bolster Support

To adjust the back or cushion bolster from the front center display screen, select > Adjustments and then touch the desired adjustment on the seat image.

Massage



To enable the massage feature from the front center display screen, select > Massage and then select the desired massage type and intensity on the seat image.

Memory Seats



The memory seat feature allows drivers to save their unique driving positions and a shared exit position. Other feature positions, such as power mirrors, may also be saved.

Identifying Driver Number

The vehicle identifies the current driver by their remote key number 1–8. The current remote key number may be identified by Driver Information Center 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 remote key 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 remote key IDs, it is recommended to only carry one remote key when entering the vehicle. Perform the following if the welcome message is not displayed:

1. Move all remote keys away from the vehicle.
2. Turn the vehicle on with another remote key. A Driver Information Center welcome message should display indicating the driver number of the other remote key. Turn the vehicle off and remove the other remote key from the vehicle.
3. Turn the vehicle on with the initial remote key. The Driver Information Center welcome message should display the driver number of the initial remote key.

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. A Driver Information Center welcome message may indicate the driver number of the current remote key. See "Identifying Driver Number" previously in this section.
2. Adjust all available memory features to the desired driving position.
3. Press and release SET; an audible alert will sound.
4. Immediately upon releasing SET, press and hold memory button 1 or 2 matching the current driver's remote key number until two audible alerts sound. If too much time passes between releasing SET and pressing 1 or 2, the two audible alerts will not sound indicating memory position were not saved. Repeat Steps 3 and 4 to try again.
5. Repeat Steps 1–4 for the other remote key 1 or 2 using the other 1 or 2 memory button.

It is recommended to save the preferred driving positions to both 1 and 2 if you are the only driver.

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.

Center Display Screens

The seat positions can also be adjusted and saved from the front or rear center display screens. Select  >Position, then touch and hold the desired position type. The rear seat positions can be adjusted and saved from the front center display screen by selecting Rear. See *Power Seat Adjustment* ⇨ 37.

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).

Enabling Automatic Recalls

- Seat Entry Memory moves the driver seat to the selected 1 or 2 position when the vehicle is started. Select Settings > Vehicle > Seating Position > Driver Seat Entry Memory > ON or OFF. See “Auto Seat Entry Memory Recall” later in this section.
- Seat Exit Memory moves the driver seat to the preferred exit position of the  button when the vehicle is turned off and the door is opened. Select Settings > Vehicle > Seating Position > Driver Seat Exit Memory > ON or OFF. See “Auto Seat Exit Memory Recall” later in this section.

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 remote key 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 “Enabling Automatic Recalls” previously in this section.
- The vehicle is in P (Park).

Seat Entry Memory Recall will continue if the vehicle is shifted 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 “Enabling Automatic Recalls” previously in this section.

If the memory seat recalls to the wrong position, the driver's remote key number 1 or 2 may not match the memory button number positions they were saved to. Try the other remote key 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 remote key numbers 1 and 2. Remote keys 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 “Enabling Automatic Recalls” previously in this section.
- The vehicle is in P (Park).

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

Seat Exit Memory is not linked to the driver's remote key. 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 the 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 Cooled 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

(Continued)

Warning (Continued)

on the seat that insulates against heat, such as a blanket, 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.



The buttons are located on the door panel. To operate, the vehicle must be on.

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

Press  or  to heat the driver or passenger seatback.

Press  or  to cool the driver or passenger seat.

When this feature is off, the heated and cooled seat symbols on the buttons are white. When a heated seat is on, the symbol is red. When a cooled seat is on, the symbol is blue.

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 next to the buttons indicate three for the highest setting and one for the lowest. If the heated seats are on high, the level may automatically be lowered after approximately 30 minutes.

The passenger seat may take longer to heat up.

Front Center Display Screen

The heated and cooled front seat controls can be accessed on the front center display screen. Select  > Temperature. Additional heated and cooled seat options can be selected by touching the seat image.

To sync the heated arm rest and seat options, select Settings > Vehicle > Climate and Air Quality > Sync Heated Arm Rest/Seat.

Auto Heated and Cooled Seats

When the vehicle is on, this feature will automatically activate the heated and cooled seats at the level required by the vehicle's interior temperature.

The active high, medium, low, or off heated and cooled seat level will be indicated by the manual heated and cooled seat buttons. Use the manual heated and cooled seat buttons to turn auto heated and cooled seats off. If the passenger seat is unoccupied, the auto heated and cooled seats feature will not activate that seat. To enable or disable auto heated and cooled seats, select Settings > Vehicle > Climate and Air Quality > Cooled/Ventilated Seats on Startup > ON or OFF.

Remote Start Heated and Cooled Seats

During a remote start the heated and cooled seats can be turned on automatically. When it is cold outside, the heated seats turn on, and when it is hot outside the cooled seats turn on. If the auto heated and cooled seats feature is not turned on, the heated and cooled seats may be canceled when the vehicle is turned on. If necessary, press the heated and cooled seat button to use the heated and cooled seats after the vehicle is started.

The heated and cooled seat indicator lights may turn on during a remote start.

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

To enable or disable remote start heated and cooled seats, select Settings > Vehicle > Remote Lock, Unlock, and Start > Remote Start Auto Heated Seats or Remote Start Auto Cooled/Ventilated Seats > ON or OFF. See *Remote Start* ⇨ 12.

Rear Seats

Rear Seat Reminder

If equipped, the message REAR SEAT REMINDER LOOK IN REAR SEAT displays in the Driver Information Center under certain conditions indicating there may be an item or passenger in the rear seat. Check the rear seat 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 the Driver Information Center message and an audible alert activated 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 shut off.

The feature can be turned on or off. From the app screen on the infotainment display, select Settings > Vehicle > Rear Seat Reminder > ON or OFF.

Rear Seats

Rear Seat Adjustment

To adjust the rear seats from the rear center display screen, select  > Position and then touch the desired adjustment on the seat image.

The rear seats can also be adjusted from the front center display screen. See *Power Seat Adjustment* ⇨ 37.

Rear Seat Lockout

The Child Safety Locks can be enabled to lock out the rear executive seats. This will prevent motion of the rear seats. See *Safety Locks* ⇨ 15.

Massage

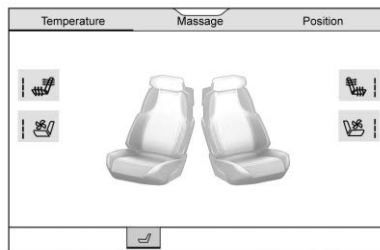
To enable the massage feature from the rear center display screen, select  > Massage and then select the desired massage type and intensity on the seat image.

The rear seat massage feature can also be enabled from the front center display screen. See *Massage* ⇨ 40.

Heated and Cooled 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 Cooled Front Seats* ⇨ 43.



You can turn on the heated and cooled rear seats from the center display screens.

- From the rear center display screen, select  > Temperature.
- From the front center display screen, see *Heated and Cooled Front Seats* ⇨ 43.

Select  or  to heat the seats.

Select  or  to cool the seats.

Touch once for the highest setting. With each touch, the seat will change to the next lower setting, and then to the off setting. The indicators next to the icon indicate three for the highest setting and one for the lowest. If

the heated seats are on high, the level may automatically be lowered after approximately 30 minutes.

Additional heated and cooled seat options can be selected by touching the seat image.

Auto and Remote Start Heated and Cooled Seats

The heated and cooled rear seats can be automatically enabled. See *Heated and Cooled Front Seats* ⇨ 43.

Seat Belts

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

Warning

Do not let anyone ride 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

(Continued)

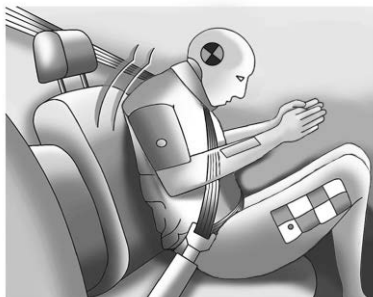
Warning (Continued)

the vehicle. In addition, anyone who is not buckled up can strike other passengers in the vehicle.

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 ride 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 buckle the seat belts. See *Seat Belt Reminders* ⇨ 97.

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 windshield, 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 forces from 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 chance of being conscious during and after a crash, so you *can* unbuckle and get out, is *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* 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, in nearly all states and in all Canadian provinces, the law requires wearing seat belts.

Buckle To Drive

This feature delays the vehicle from shifting out of P (Park) when the driver seat belt is not buckled. The Buckle to Drive feature must be turned ON in the infotainment system to work.

To turn the Buckle to Drive feature on or off, select Settings > Vehicle > Buckle to Drive. See *Teen Driver* ⇨ 154 for more information.

If the vehicle is on and the brake pedal is pressed with the vehicle in P (Park) but the driver seat belt is not buckled, a message displays in the Driver Information Center (DIC) and the vehicle will be delayed from shifting out of P (Park). Buckle the driver seat belt to clear the message and shift out of P (Park). Shifting from P (Park) will be delayed once for each time the vehicle is started.

On this model, Buckle to Drive may also delay shifting out of P (Park) if a front passenger seat belt is unbuckled. A message displays in the DIC. Buckle the front passenger seat belt to shift out of P (Park). This feature may delay the vehicle from shifting out of P (Park) if an object, such as a briefcase, handbag, grocery bag, laptop, or other electronic device, is on the front passenger seat. If this happens, remove the object from the seat or buckle the seat belt to shift out of P (Park).

If the driver, or the present front passenger remains unbuckled, the DIC message will turn off after several seconds and the vehicle can

be shifted out of P (Park). See “Seat Belts” and “Child Restraints” in the Index for information about the importance of proper restraint use.

If the driver seat belt or the front passenger seat belt is unbuckled when driving, the seat belt reminder chime and light(s) will come on. See *Seat Belt Reminders* ⇨ 97. This feature may not function properly if the airbag readiness light is on. See *Airbag Readiness Light* ⇨ 98.

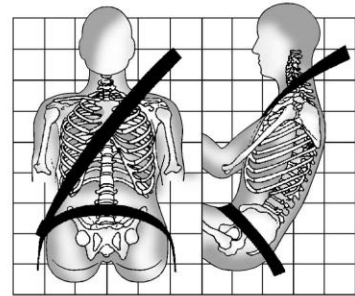
How to Wear Seat Belts Properly

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* ⇨ 64 or *Infants and Young Children* ⇨ 65. 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.

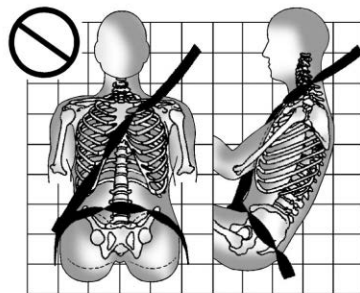
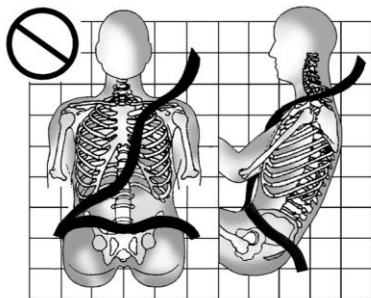
There are important things to know about wearing a seat belt properly.



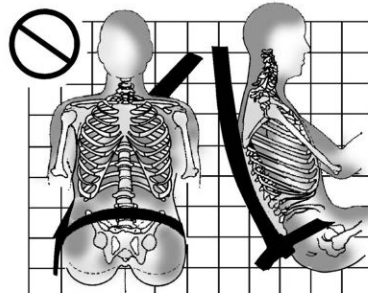
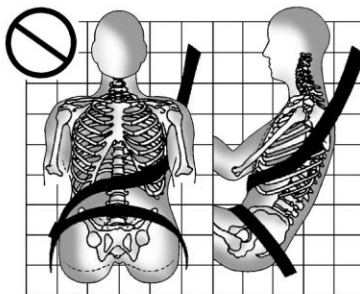
- Sit up straight and always keep your feet on the floor in front of you (if possible).
- Wear the lap part of the belt low and snug on the hips, just touching the thighs. In a crash, this applies force to the strong pelvic bones and you would be less likely to slide under the lap belt. If you slid under 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

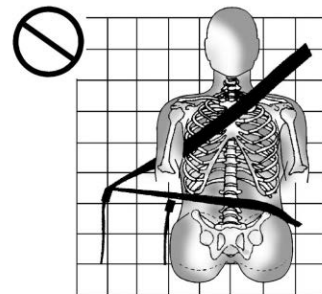
You can be seriously injured, or even killed, by not wearing your seat belt properly.



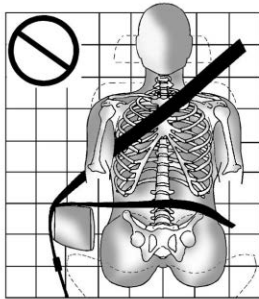
Never allow the lap or shoulder belt to become loose or twisted.



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 seatback 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.

Warning

You can be seriously injured or killed if the shoulder belt is worn behind your back, under your legs, or wrapped around your neck. The shoulder belt can tighten but cannot be loosened if it is locked. The shoulder belt locks when it is pulled all the way out of the retractor. It unlocks when the shoulder belt is allowed to go all the way back into the retractor, but it cannot do this if it is wrapped around you. You may have to cut the seat belt if it is locked and tightened around you.

Lap-Shoulder Belt

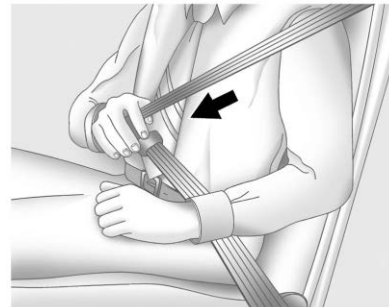
All seating positions in the vehicle have a lap-shoulder belt.

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

Warning

If equipped, the second row passenger can create more legroom by moving the front passenger seat with controls located on the rear center display screen. To prevent serious injury or death in a crash, do not permit a rear seat passenger to move the front seat if someone is seated there. Disable the controls by activating Rear Control Lock from the front center display screen.

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

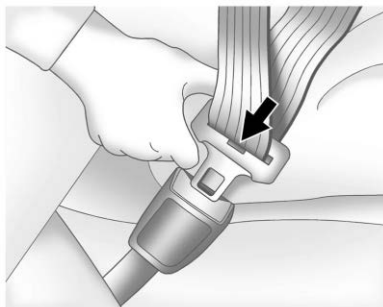


2. Pick up the latch plate and pull the belt across you. Do not let it get twisted.

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.

If the shoulder portion of a passenger belt is pulled out all the way, the child restraint locking feature may be engaged. See *Child Restraint Systems* ⇨ 67. If this occurs, let the belt go back all the way and start again. If the locking feature stays engaged after letting the belt go back to stowed position on the seat, move the seat rearward or recline the seat until the shoulder belt retractor lock releases.

Engaging the child restraint locking feature in the front outboard seating position may affect the passenger sensing system. See *Passenger Sensing System* ⇨ 58.

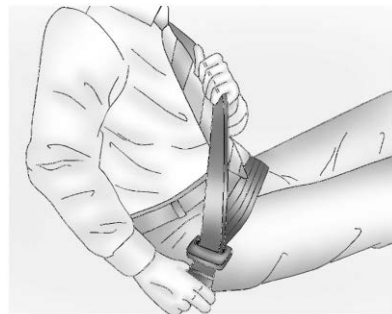


3. Push the latch plate into the buckle until it clicks.

Pull up on the latch plate to make sure it is secure. If the belt is not long enough, see *Seat Belt Extender* ⇨ 52.

Position the release pushbutton 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 release pushbutton 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 dealer.

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* ⇨ 47.



Press and hold the release buttons 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 the front and rear 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 a rollover event.

Pretensioners work only once. If the pretensioners activate in a crash, the pretensioners and probably other parts of the vehicle seat belt system will need to be replaced. See *Replacing Seat Belt System Parts After a Crash* ⇨ 53.

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.

Rear Seat Belt Comfort Guides

Rear seat belt comfort guides may provide added seat belt comfort for older children who have outgrown booster seats and for some adults. When installed on a shoulder belt, the comfort guide positions the shoulder belt away from the neck and head.

Comfort guides are available through your dealer for the rear outboard seating positions. Instructions are included with the guides.

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 fetus is to protect the mother. When a seat belt is worn properly, it is more likely that the fetus will not be hurt in a crash. For pregnant women, as for anyone, the key to making seat belts effective is wearing them properly.

Seat Belt Extender

If the vehicle seat belt will fasten around you, you should use it.

But if a seat belt is not long enough, your dealer will order you an extender. Only a GM issued extender should be used. When you go in to order it, take the heaviest coat you will wear, so the extender will be long enough for you. To help avoid personal injury, do not let someone else use it, and use it only for the seat it is made to fit. The extender has been designed for adults. Never use it for securing child restraints. For more information on the proper use and fit of seat belt extenders see the instruction sheet that comes with the extender.

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 by reversing the latch plate on the webbing. If the twist cannot be corrected, ask your dealer to fix it.

Make sure the seat belt reminder light is working. See *Seat Belt Reminders* ⇨ 97.

Keep seat belts clean and dry. See *Seat Belt Care* ⇨ 52.

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 after proper cleaning 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 dealer 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* ⇨ 98.

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 center 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 seatback 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?* ⇨ 56.

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 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, any airbag

(Continued)

Warning (Continued)

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.

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

(Continued)

Warning (Continued)

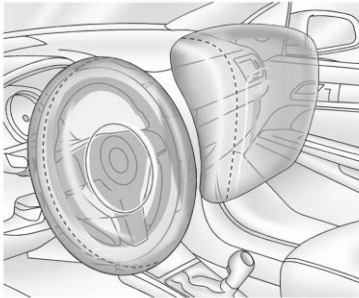
children properly in the vehicle. To read how, see *Older Children* ⇨ 64 or *Infants and Young Children* ⇨ 65.



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

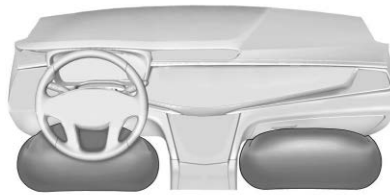
The system checks the airbag electrical system for malfunctions. The light tells you if there is an electrical problem. See *Airbag Readiness Light* ⇨ 98.

Where Are the Airbags?



The driver frontal airbag is in the center 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 side 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 put anything

(Continued)

Warning (Continued)

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* ⇨ 53. 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 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 traveling. 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, in rear impacts, or in many side impacts.

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

Knee airbags are designed to inflate in moderate to severe 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. These airbags may also inflate in some moderate to severe frontal impacts. Seat-mounted side impact airbags are not designed to inflate in 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 may 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 may inflate when either side of the vehicle is struck or 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 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?* ⇨ 55.

How Does an Airbag Restrain?

In moderate to severe 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?* ⇨ 56.

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 realize the airbags inflated. Roof-rail airbags may still be at least partially inflated for some time after they inflate. Some components of the airbag module may be hot for several minutes. For location of the airbags, see *Where Are the Airbags?* ⇨ 55.

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 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 in the vehicle should get out 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 lights and hazard warning flashers after the airbags inflate. The feature may also activate, without airbag inflation, after an event that exceeds a predetermined threshold. After turning the vehicle off and then on again, the doors can be locked, the interior lights 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 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 attempting to restart the vehicle after a crash has occurred.

Plug-in vehicles have a high voltage battery and a standard 12-volt battery.

If an airbag inflates or the vehicle has been in a crash, the sensing system may shut down the high voltage system. When this occurs, the high voltage battery is disconnected and the vehicle will not start. Before the vehicle can be operated again, it must be serviced at your dealer.

In many crashes severe enough to inflate the airbag, windshields are broken by vehicle deformation. Additional windshield 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* ⇨ 363 and *Event Data Recorders* ⇨ 363.
- Let only qualified technicians work on the airbag system. Improper service can mean that an airbag system will not work properly. See your dealer for service.

Passenger Sensing System

The vehicle has a passenger sensing system for the front outboard passenger position. The passenger airbag status indicator will light in the infotainment display when the vehicle is started.

PASSENGER AIR BAG



United States



Canada

The words ON and OFF, or the symbols for on and off, will be visible during the system check. When the system check is complete, either the word ON or OFF, or the symbol for on or off, will be visible. See *Passenger Airbag Status Indicator* ⇨ 99.

The passenger sensing system turns off the front outboard passenger frontal airbag and knee airbag under certain conditions. No other airbag is affected by the passenger sensing system.

The passenger sensing system works with sensors that are part of the front outboard passenger seat and seat belt. The sensors are designed to detect the presence of a properly seated occupant and determine if the front outboard passenger frontal airbag and knee airbag should be allowed to inflate or not.

According to accident statistics, children are safer when properly secured in a rear seat in the correct child restraint for their weight and size.

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

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

 Warning

A child in a rear-facing child restraint can be seriously injured or killed if the passenger frontal 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

(Continued)

Warning (Continued)

seriously injured or killed if the passenger frontal airbag inflates and the passenger seat is in a forward position.

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

Never put a rear-facing child restraint in the front seat, even if the airbag is off. If securing 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 child restraints in the rear seat. Consider using another vehicle to transport the child when a rear seat is not available.

The passenger sensing system is designed to turn off the front outboard passenger frontal airbag and knee airbag if:

- The front outboard passenger seat is unoccupied.

- The system determines that an infant is present in a rear-facing infant seat.
- The system determines that a small child is present in a child restraint.
- The system determines that a small child is present in a booster seat.
- A front outboard passenger takes his/her weight off of the seat for a period of time.
- The front outboard passenger seat is occupied by a smaller person, such as a child who has outgrown child restraints.
- There is a critical problem with the airbag system or the passenger sensing system.

When the passenger sensing system has turned off the front outboard passenger frontal airbag and knee airbag, the OFF indicator will light and stay lit as a reminder that the airbags are off. See *Passenger Airbag Status Indicator* ⇨ 99.

The passenger sensing system is designed to turn on the front outboard passenger frontal airbag and knee airbag, anytime the system senses that a person of adult size is sitting properly in the front outboard passenger seat.

When the passenger sensing system has allowed the airbags to be enabled, the ON indicator will light and stay lit as a reminder that the airbags are active.

For some children, including children in child restraints, and for very small adults, the passenger sensing system may or may not turn off the front outboard passenger frontal airbag and knee airbag, depending upon the person's seating posture and body build. Everyone in the vehicle who has outgrown child restraints should wear a seat belt properly — whether or not there is an airbag for that person.



Warning

If the airbag readiness light ever comes on and stays on, it means that something may be wrong with the airbag system. To help avoid injury to yourself or others, have the vehicle serviced right away. See *Airbag Readiness Light* ⇨ 98 for more information, including important safety information.

If the On Indicator Is Lit for a Child Restraint

The passenger sensing system is designed to turn off the front outboard passenger frontal airbag and knee airbag, if the system determines that an infant is present in a child restraint. If a child restraint has been installed and the ON indicator is lit:

1. Turn the vehicle off.
2. Remove the child restraint from the vehicle.
3. Remove any additional items from the seat such as blankets, cushions, seat covers, seat heaters, or seat massagers.
4. Reinstall the child restraint following the directions provided by the child restraint manufacturer and refer to *Securing Child Restraints (With the Seat Belt in the Rear Seat)* ⇨ 78 *Securing Child Restraints (With the Seat Belt in the Front Seat)* ⇨ 80.

Make sure the seat belt retractor is locked by pulling the shoulder belt all the way out of the retractor when installing the child restraint, even if the child restraint is equipped with a seat belt lock off. When the retractor lock is set, the belt can be tightened but not pulled out of the retractor.

5. If, after reinstalling the child restraint and restarting the vehicle, the ON indicator is still lit, turn the vehicle off. Then slightly recline the vehicle seatback and adjust the seat cushion, if adjustable, to make sure that the vehicle seatback is not pushing the child restraint into the seat cushion.

Also make sure the child restraint is not trapped under the vehicle head restraint. If this happens, adjust the head restraint. See *Head Restraints* ⇨ 37.

6. Restart the vehicle.

The passenger sensing system may or may not turn off the airbags for a child in a child restraint depending upon the child's size. It is better to secure the child restraint in a rear seat. Never put a rear-facing child restraint in the front seat, even if the ON indicator is not lit.

If the Off Indicator Is Lit for an Adult-Sized Occupant



If a person of adult size is sitting in the front outboard passenger seat, but the OFF indicator is lit, it could be because that person is not sitting properly in the seat or that the child restraint locking feature is engaged. Use the following steps to allow the system to detect that person and enable the front outboard passenger frontal airbag and knee airbag:

1. Turn the vehicle off.
2. Remove any additional material from the seat, such as blankets, cushions, seat covers, seat heaters, or seat massagers.

3. Place the seatback in the fully upright position.
4. Have the person sit upright in the seat, centered on the seat cushion, with legs comfortably extended.
5. If the shoulder portion of the belt is pulled out all the way, the child restraint locking feature will be engaged. This may unintentionally cause the passenger sensing system to turn the airbag off for some adult-sized occupants. If this happens, unbuckle the belt, let the belt go back all the way, and then buckle the belt again without pulling the belt out all the way.
6. Restart the vehicle and have the person remain in this position for two to three minutes after the ON indicator is lit.

Warning

If the front outboard passenger airbag is turned off for an adult-sized occupant, the airbag will not be able to inflate and help protect that person in a crash, resulting in an increased risk of serious injury or even

(Continued)

Warning (Continued)

death. An adult-sized occupant should not ride in the front outboard passenger seat, if the passenger airbag OFF indicator is lit.

Additional Factors Affecting System Operation

Seat belts help keep the passenger in position on the seat during vehicle maneuvers and braking, which helps the passenger sensing system maintain the passenger airbag status. See “Seat Belts” and “Child Restraints” in the Index for additional information about the importance of proper restraint use.

A thick layer of additional material, such as a blanket or cushion, or aftermarket equipment such as seat covers, seat heaters, and seat massagers can affect how well the passenger sensing system operates. We recommend that you not use seat covers or other aftermarket equipment except when approved by GM for your specific vehicle. See *Adding Equipment to the Airbag-Equipped Vehicle* ⇨ 62 for more information about modifications that can affect how the system operates.

The ON indicator may be lit if an object, such as a briefcase, handbag, grocery bag, laptop, or other electronic device, is put on an unoccupied seat. If this is not desired, remove the object from the seat.

 Warning

Stowing articles under the passenger seat or between the passenger seat cushion and seatback may interfere with the proper operation of the passenger sensing system.

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. To purchase a service manual, see *Publication Ordering Information* ⇨ 361.

 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.

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 zippers
- Seat belts
- Steering wheel, instrument panel, overhead console, ceiling trim, or pillar garnish trim
- Inner door seals, including speakers

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

In addition, the vehicle has a passenger sensing system for the front outboard passenger position, which includes sensors that are part of the passenger seat. The passenger sensing system may not operate properly if the original seat trim is replaced with non-GM covers, upholstery, or trim; or with GM covers, upholstery, or trim designed for a different vehicle. Any object, such as an aftermarket seat heater or a comfort-enhancing pad or device, installed under or on top of the seat fabric, could also interfere with the operation of the passenger sensing system. This could either prevent proper deployment of the passenger airbag(s) or prevent the passenger

sensing system from properly turning off the passenger airbag(s). See *Passenger Sensing System* ⇨ 58.

If the vehicle has rollover roof-rail airbags, see *Different Size Tires and Wheels* ⇨ 325 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, call Customer Assistance. See *Customer Assistance Offices* ⇨ 355.

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* ⇨ 98.

Caution

If an airbag covering is damaged, opened, or broken, the airbag may not work properly. Do not open or 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?* ⇨ 55. See your dealer for service.

Replacing Airbag System Parts After a Crash

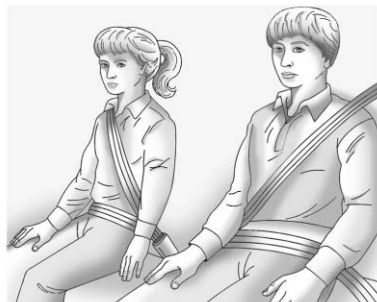
Warning

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* ⇨ 98.

Child Restraints

Older Children



Older children who have outgrown booster seats should wear the vehicle seat belts. See *How to Wear Seat Belts Properly* ⇨ 47.

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.
- Buckle the lap-shoulder belt. Does the shoulder belt rest on the shoulder? If yes, continue. If no, try using the rear seat belt comfort guide, if available. See “Rear Seat Belt Comfort Guides” under *Lap-Shoulder Belt* ⇨ 49. If a comfort guide is not available, or if the shoulder belt still does not rest on the shoulder, 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.

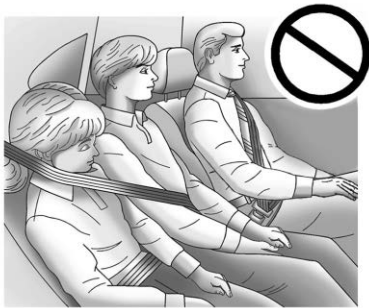
Also see “Rear Seat Belt Comfort Guides” under *Lap-Shoulder Belt* ⇨ 49.

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

 **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. The shoulder belt can tighten but cannot be loosened if it is locked. The shoulder belt locks when it is pulled all the way out of the retractor. It unlocks when the shoulder belt is allowed to go all the way back into the retractor, but it cannot do this if it is wrapped around the child. Never leave children unattended in a vehicle and never allow children to improperly wear, or play with, the seat belts.

Infants and Young Children

Everyone in a vehicle needs protection! This includes infants and all other children. Neither the distance traveled nor the age and size of the traveler changes the need, for everyone, to use safety restraints. In fact, the law in every state in the United States and in every Canadian province says children up to some age must be restrained while in a vehicle.

 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. The shoulder belt can tighten but cannot be loosened if it is locked. The shoulder belt locks when it is pulled all the way out of the retractor. It unlocks when the shoulder belt is allowed to go all the way back into the retractor, but it cannot do this if it is wrapped around the child. 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 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. 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 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 and is designed by a genuine child restraint manufacturer. If it is, the child restraint will have a label saying that it meets federal motor vehicle safety standards.

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 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



Rear-Facing Infant Restraint

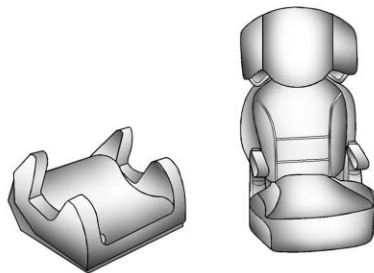
A rear-facing child restraint provides restraint with the seating surface against the back of the infant.

The harness system holds the infant in place and, in a crash, acts to keep the infant positioned in the restraint.



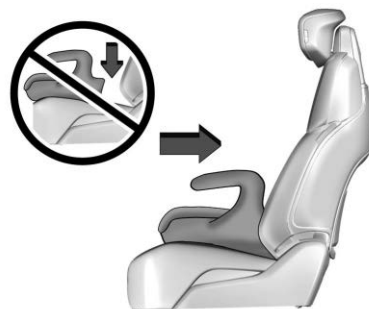
Forward-Facing Child Restraint

A forward-facing child restraint provides restraint for the child's body with the harness.



Booster Seats

A belt-positioning booster seat is used for children who have outgrown their forward-facing child restraint. Boosters are designed to improve the fit of the vehicle seat belt system until the child is large enough for the vehicle seat belts to fit properly without a booster seat. See the seat belt fit test in *Older Children* ⇨ 64.



Backless Booster

Backless booster fitment requirement:

Some backless booster seats are not suitable for rear seats that have oversized side seat bolsters, as they can push the backless booster forward from the seat back.

To use a backless booster:

1. Center the booster on the seat cushion.
2. Ensure the backless booster seat contacts the seat back.

If the backless booster does not meet the fit test described in Steps 1–2, select another booster seat.

Securing an Add-On Child Restraint in the Vehicle

Warning

Each top-tether anchor is designed to anchor only one child restraint. Do not attach more than one child restraint to a single top-tether anchor. The anchor may come loose or break, potentially causing personal injury, property damage, or death.

Warning

A child can be seriously injured or killed in a crash if the child restraint is not properly secured in the vehicle. Secure the child restraint properly in the vehicle using the vehicle seat belt or LATCH system, following the instructions that came with that child restraint and the instructions in this manual.

To help reduce the chance of injury, the child restraint must be secured in the vehicle. Child restraints must be secured in vehicle seats by the lap belt portion of a lap-shoulder belt, or by the LATCH system. See *Lower Anchors and*

Tethers for Children (LATCH System) ⇨ 71 for more information. Never use a seat belt extender when installing a child restraint. Never use non-regulated aftermarket anchors or attachments to secure a child restraint. Children can be endangered in a crash if the child restraint is not properly secured in the vehicle.

When securing an add-on child restraint, see the following:

- Instruction labels provided on the child restraint
- Instruction manual provided with the child restraint
- This vehicle owner's manual

The child restraint instructions are important, so if they are not available, obtain a replacement copy from the manufacturer.

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.

In some areas Certified Child Passenger Safety Technicians (CPSTs) are available to inspect and demonstrate how to correctly

use and install child restraints. In the U.S., see the National Highway Traffic Safety Administration (NHTSA) website to locate the nearest child safety seat inspection station. For CPST availability in Canada, check with Transport Canada or the Provincial Ministry of Transportation office.

Securing the Child Within the Child Restraint

Warning

A child can be seriously injured or killed in a crash if the child is not properly secured in the child restraint. Secure the child properly following the instructions that came with that child restraint.

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.



Warning

A child in a rear-facing child restraint can be seriously injured or killed if the front 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 passenger airbag inflates and the passenger seat is in a forward position.

Even if the passenger sensing system has turned off the front 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 seat, always move the front passenger seat as far back as it will go. It is better to secure the child restraint in a rear seat.

(Continued)

Warning (Continued)

See *Passenger Sensing System* ⇨ 58 for additional information.

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 LATCH 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.

Caution

Child restraints can scratch the surface and cause damage to the screens. Avoid contacting the screens with the child restraint.

Adjust the seat in front of a child restraint to ensure proper installation according to the child restraint manual. Move the front seat forward to avoid contact between the child restraint and the seat or any accessories mounted to the seat.

When installing a child restraint in an adjustable second row seating position, the seat should be adjusted as follows:

- Cushion length adjuster to the closed position
- Lower lumbar adjusted to the fully retracted position
- Head restraint adjusted to the fully retracted position, this vehicle's head restraints are not removable.
- Adjust the seat forward or rearward to achieve proper installation per the child restraint manual. See *Rear Seats* ⇨ 44.

**Warning**

Do not use the folding tray table with any type of child restraint or booster installation in the rear seats. Contact with the folding tray table could result in injury. Return folding tray tables to the correct storage position before installing any child restraint or booster.

**Warning**

To reduce risk of injury, adjust the reclining rear seat back to a near upright seating position according to the child restraint manufacturer instructions. The child restraint must rest against the seat back.

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.

Lower Anchors and Tethers for Children (LATCH System)

The LATCH system secures a child restraint during driving or in a crash. LATCH attachments on the child restraint are used to attach the child restraint to the anchors in the vehicle. This system is designed to make installation of a child restraint easier.

In order to use the LATCH system in your vehicle, you need a child restraint that has LATCH attachments. LATCH-compatible rear-facing and forward-facing child seats can be properly installed using either the LATCH anchors or the vehicle's seat belts. Do not use both the seat belts and the LATCH anchorage system to secure a rear-facing or forward-facing child restraint.

Booster seats use the vehicle's seat belts to secure the child and the booster seat. If the manufacturer recommends that the booster seat be secured with the LATCH system, this

can be done as long as the booster seat can be positioned properly and there is no interference with the proper positioning of the lap-shoulder belt on the child.

Make sure to follow the instructions that came with the child restraint, and also the instructions in this manual.

When installing a child restraint with a top tether, you must also use either the lower anchors or the seat belts to properly secure the child restraint. A child restraint must never be attached using only the top tether.

For a forward-facing five-point harness child restraint where the combined weight of the child and restraint are up to 29.5 kg (65 lb), use either the lower LATCH anchorages with the top tether anchorage, or the seat belt with the top tether anchorage. Where the combined weight of the child and restraint are greater than 29.5 kg (65 lb), use the seat belt with the top tether anchorage only.

Recommended Methods for Attaching Child Restraints

Restraint Type	Combined Weight of the Child + Child Restraint	Use Only Approved Attachment Methods Shown with an X			
		LATCH – Lower Anchors Only	Seat Belt Only	LATCH – Lower Anchors and Top Tether Anchor	Seat Belt and Top Tether Anchor
Rear-Facing Child Restraint	Up to 29.5 kg (65 lb)	X	X		
Rear-Facing Child Restraint	Greater than 29.5 kg (65 lb)		X		
Forward-Facing Child Restraint	Up to 29.5 kg (65 lb)			X	X
Forward-Facing Child Restraint	Greater than 29.5 kg (65 lb)				X

See *Securing Child Restraints (With the Seat Belt in the Rear Seat)* ⇨ 78 *Securing Child Restraints (With the Seat Belt in the Front Seat)* ⇨ 80.

Child restraints built after March 2014 are labeled with the maximum child weight, with which the LATCH system can be used for installing the child restraint.

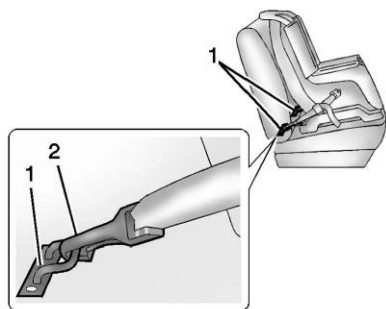
The following explains how to attach a child restraint with these attachments in the vehicle.

Not all vehicle seating positions have lower anchors. In this case, the seat belt must be used (with top tether where available) to secure the child restraint. See *Securing Child*

Restraints (With the Seat Belt in the Rear Seat)

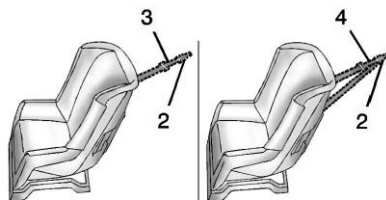
⇒ 78 *Securing Child Restraints (With the Seat Belt in the Front Seat)* ⇒ 80.

Lower Anchors



Lower anchors (1) are metal bars built into the vehicle. There are two lower anchors for each LATCH seating position that will accommodate a child restraint with lower attachments (2).

Top Tether Anchor



A top tether (3, 4) is used to secure the top of the child restraint to the vehicle. A top tether anchor is built into the vehicle. The top tether attachment hook (2) on the child restraint connects to the top tether anchor in the vehicle in order to reduce the forward movement and rotation of the child restraint during driving or in the event of a crash.

The child restraint may have a single tether (3) or a dual tether (4). Either will have a single attachment hook (2) to secure the top tether to the anchor.

Some child restraints with a top tether are designed for use with or without the top tether being attached. Others require the top tether always to be attached. In Canada, the law requires that forward-facing child restraints have a top tether, and that the tether be attached. Be sure to read and follow the instructions for your child restraint.

Lower Anchor and Top Tether Anchor Locations



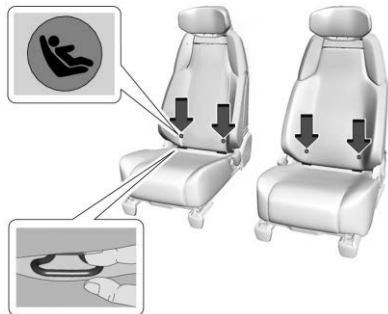
Rear Seats

 : Seating positions with top tether anchors.

 : Seating positions with two lower anchors.



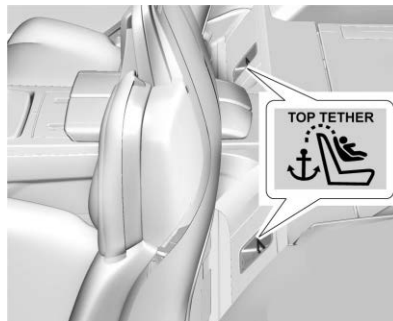
To assist in locating the lower anchors, each seating position has two labels with the lower anchor symbol on them.



Executive seating lower anchors are in the crease between the seatback and the seat cushion. Push the seatback trim up at the crease to access the lower anchor.



To assist in locating the top tether anchors, the top tether anchor symbol is near the anchor.



The top tether anchors are on the wall behind the vehicle seat. Rotate the rear seatback forward or slide the seat forward to access the anchor. Be sure to use the anchor located directly behind the seating position where the child restraint will be placed. See *Rear Seats* ⇨ 44.

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 be attached, or if the instructions that come with the child restraint say that the top tether must be attached.

According to accident statistics, children and infants are safer when properly restrained in a child restraint system or infant restraint system secured in a rear seating position. See *Where to Put the Restraint* ⇨ 69 for additional information.

Securing a Child Restraint Designed for the LATCH System

Warning

A child could be seriously injured or killed in a crash if the child restraint is not properly attached to the vehicle using either the LATCH anchors or the vehicle seat belt. Follow the instructions that came with the child restraint and the instructions in this manual.

 Warning

To reduce the risk of serious or fatal injuries during a crash, do not attach more than one child restraint to a single anchor. Attaching more than one child restraint to a single anchor could cause the anchor or attachment to come loose or even break during a crash. A child or others could be injured.

 Warning

Children can be seriously injured or strangled if a shoulder belt is wrapped around their neck. The shoulder belt can tighten but cannot be loosened if it is locked. The shoulder belt locks when it is pulled all the way out of the retractor. It unlocks when the shoulder belt is allowed to go all the way back into the retractor, but it cannot do this if it is wrapped around a child's neck. If the shoulder belt is locked and tightened around a child's neck, the only way to loosen the belt is to cut it.

(Continued)

Warning (Continued)

Buckle any unused seat belts behind the child restraint so children cannot reach them. Pull the shoulder belt all the way out of the retractor to set the lock, and tighten the belt behind the child restraint after the child restraint has been installed.

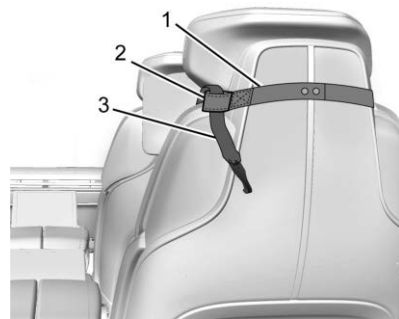
Caution

Do not let the LATCH attachments rub against the vehicle's seat belts. This may damage these parts. If necessary, move buckled seat belts to avoid rubbing the LATCH attachments.

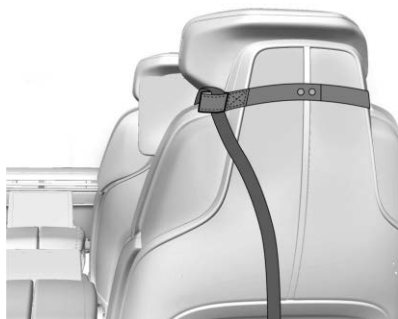
Do not fold the rear seatback when the seat is occupied. Do not fold the empty rear seat with a seat belt buckled. This could damage the seat belt or the seat. Unbuckle and return the seat belt to its stowed position, before folding the seat.

If you need to secure more than one child restraint in the rear seat, see *Where to Put the Restraint* ➔ 69.

This executive seat has a GM Genuine Top Tether Accessory Strap that must be used when using a child restraint with a top tether. This strap is available as a GM Genuine part and one is provided with the vehicle. Additional top tether strap guides are available through your dealer for other rear seating positions with top tethers.



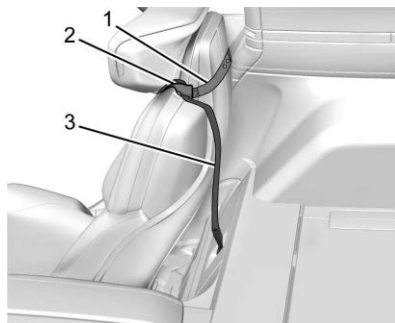
1. GM Genuine Top Tether Accessory Strap
2. Small guide loop
3. Child restraint system top tether strap



1. Adjust the vehicle head restraint full forward to secure the GM Genuine Top Tether Accessory Strap (1) around the top of seat, just below the head restraint as shown in the illustration.
 - 1.1 The small guide loop (2) shall be on the inboard shoulder of the seat.
 - 1.2 The snap of the accessory strap (1) shall be along the centerline of the seat back.
 - 1.3 Ensure the accessory guide snap is secure.
 - 1.4 Adjust the head restraint to full rear position when complete.

2. Attach and tighten the lower attachments to the lower anchors. If the child restraint does not have lower attachments or the desired seating position does not have lower anchors, secure the child restraint with the top tether and the seat belt. Refer to the child restraint manufacturer instructions and the instructions in this manual.

- 2.1 Find the lower anchors for the desired seating position.
- 2.2 Put the child restraint on the seat.
- 2.3 Attach and tighten the lower attachments on the child restraint to the lower anchors.

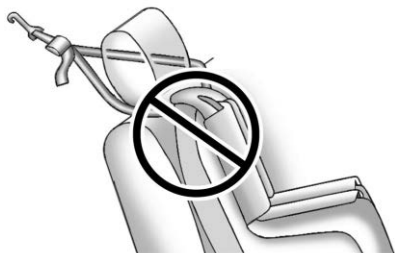


3. If the child restraint manufacturer recommends that the top tether be attached, adjust the top tether to its full length and follow the steps below to attach it to the anchor. Refer to the child restraint instructions and the following steps:
 - 3.1 Find the top tether anchor behind the vehicle seat.
 - 3.2 Route, attach and tighten the top tether according to your child restraint instructions and the following instructions:

If you are using a single strap top tether:

 - 3.2.1 Route the tether strap (3) through the small guide loop (2) on the GM Genuine Top Tether Accessory Strap guide (1). See illustration for proper routing.
 - 3.2.2 Attach the top tether hook to the anchor and make sure the top tether hook is completely closed and secured to the anchor.

- 3.2.3 While maintaining this routing around the head restraint and through the accessory top tether strap loop, remove all slack from the top tether strap.
- 3.2.4 If you are using a child restraint with a dual V-shaped top tether strap, this is not permitted in this vehicle, and it is necessary to find a child restraint with a single strap tether and follow the steps above.



Do not use the Dual V-shape tether strap style in this vehicle.

4. Before placing a child in the child restraint, make sure it is securely held in place. To check, firmly grip the child restraint at the LATCH path and attempt to move it side to side and back and forth. There should be no more than 2.5 cm (1 in) of movement, for proper installation.

Replacing LATCH System Parts After a Crash

Warning

A crash can damage the LATCH system in the vehicle. A damaged LATCH system may not properly secure the child restraint, resulting in serious injury or even death in a crash. To help make sure the LATCH system is working properly after a crash, see your dealer to have the system inspected and any necessary replacements made as soon as possible.

If the vehicle has the LATCH system and it was being used during a crash, new LATCH system parts may be needed.

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

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 LATCH system, see *Lower Anchors and Tethers for Children (LATCH System)* ⇨ 71 for how and where to install the child restraint using LATCH. If a child restraint is secured in the vehicle using a seat belt and it uses a top tether, see *Lower Anchors and Tethers for Children (LATCH System)* ⇨ 71 for top tether anchor locations.

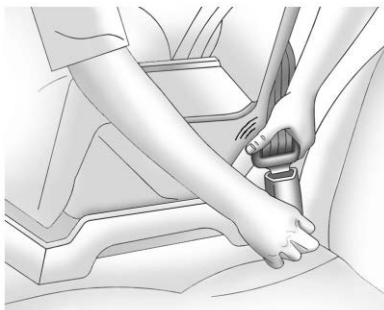
Do not secure a child seat in a position without a top tether anchor if a national or local law requires that the top tether be anchored, or if the instructions that come with the child restraint say that the top strap must be anchored. Refer to the instructions that came with the child restraint and see *Lower Anchors and Tethers for Children (LATCH System)* ⇨ 71.

In Canada, the law requires that forward-facing child restraints have a top tether, and that the tether be attached.

If the child restraint or vehicle seat position does not have the LATCH 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* ⇨ 69.

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. Ensure the seat belt webbing is routed as directly as possible and is not caught on seat handles or plastic trim. The child restraint instructions will show you how.



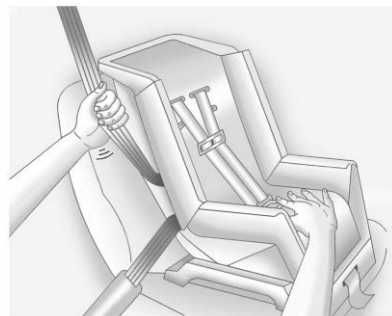
3. Push the latch plate into the buckle until it clicks.

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

The rear seat should be adjusted to the rearmost position before using the locking retractor or child restraint lock off devices.



4. Pull the shoulder belt all the way out of the retractor to set the lock. When the retractor lock is set, the belt can be tightened but not pulled out of the retractor.



5. To tighten the belt, push down on the child restraint, pull the shoulder portion of the belt to tighten the lap portion of the belt, and feed the shoulder belt back into the retractor. When installing a forward-facing child restraint, it may be helpful to use your knee to push down on the child restraint as you tighten the belt.

There must not be direct contact of the child restraint to the buckle release pushbutton. If there is contact, reposition the child restraint using the instructions that came with the child restraint. If there is still contact, use another seating position or child restraint.

Try to pull the belt out of the retractor to make sure the retractor is locked. If the retractor is not locked, repeat Steps 4 and 5.

6. Tighten the top tether. See *Lower Anchors and Tethers for Children (LATCH System)* ⇨ 71.
7. If the child restraint has a top tether, follow the child restraint manufacturer's instructions regarding the use of the top tether. See *Lower Anchors and Tethers for Children (LATCH System)* ⇨ 71.

8. Before placing a child in the child restraint, make sure it is securely held in place. To check, firmly grip the child restraint at the seat belt path and attempt to move it side to side and back and forth. When the child restraint is properly installed, there should be no more than 2.5 cm (1 in) of movement.

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.

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* ⇨ 69.

In addition, the vehicle has a passenger sensing system which is designed to turn off the front outboard passenger frontal airbag and knee airbag under certain conditions. See *Passenger Sensing System* ⇨ 58 and *Passenger Airbag Status Indicator* ⇨ 99 for more information, including important safety information.

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

Warning

A child in a rear-facing child restraint can be seriously injured or killed if the front outboard passenger frontal 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 frontal airbag inflates and the passenger seat is in a forward position.

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

Secure rear-facing child restraints in a rear seat, even if the airbag(s) are 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.

See *Passenger Sensing System* ⇨ 58 for additional information.

If the child restraint uses a top tether, see *Lower Anchors and Tethers for Children (LATCH System)* ⇨ 71 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 say that the top tether must be anchored.

In Canada, the law requires that forward-facing child restraints have a top tether, and that the tether be attached.

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:

Warning

If equipped, the second row passenger can create more legroom by moving the front passenger seat with controls located on the rear center display screen. To prevent serious injury or death in a crash, do not permit a rear seat passenger to move the front seat if someone is seated

(Continued)

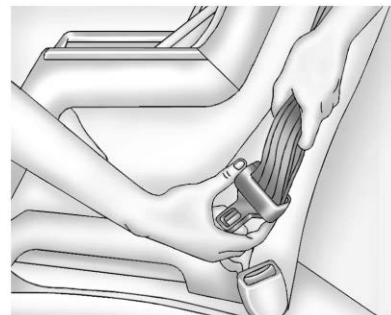
Warning (Continued)

there. Disable the controls by activating Rear Control Lock from the front center display screen.

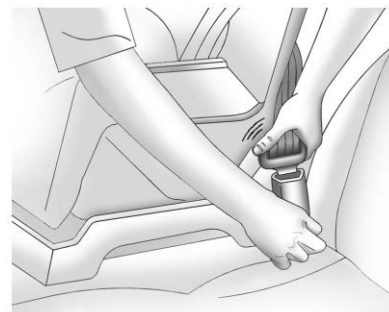
1. Move the seat as far back as it will go before securing the forward-facing child restraint. Move the seat upward or the seatback to an upright position, if needed, to get a tight installation of the child restraint.

When the passenger sensing system has turned off the front outboard passenger frontal airbag and knee airbag, the OFF indicator on the passenger airbag status indicator should light and stay lit when you start the vehicle. See *Passenger Airbag Status Indicator* ⇨ 99.

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 restraint. Ensure the seat belt webbing is routed as direct as possible and is not caught on seat handles or plastic trim. The child restraint instructions will show you how.



Tilt the latch plate to adjust the belt if needed.

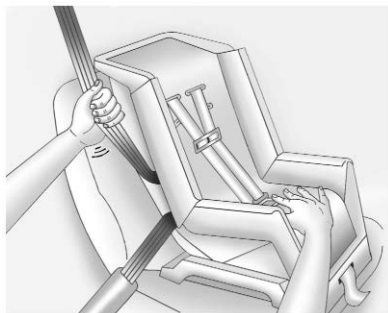


4. Push the latch plate into the buckle until it clicks.

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



5. Pull the shoulder belt all the way out of the retractor to set the lock. When the retractor lock is set, the belt can be tightened but not pulled out of the retractor.



6. To tighten the belt, push down on the child restraint, pull the shoulder portion of the belt to tighten the lap portion of the belt, and feed the shoulder belt back into the retractor.

When installing a forward-facing child restraint, it may be helpful to use your knee to push down on the child restraint as you tighten the belt.

There must not be direct contact of the child restraint to the buckle release pushbutton. If there is contact, move the seat upward and repeat prior installation steps. If there is still contact, reposition the child restraint

using the instructions that came with the child restraint. If there is still contact, use another seating position or child restraint.

Try to pull the belt out of the retractor to make sure the retractor is locked. If the retractor is not locked, repeat Steps 5 and 6.

7. Before placing a child in the child restraint, make sure it is securely held in place. To check, firmly grip the child restraint at the seat belt path and attempt to move it side to side and back and forth. When the child restraint is properly installed, there should be no more than 2.5 cm (1 in) of movement.

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.

If a child restraint has been installed and the on indicator is lit, see "If the On Indicator Is Lit for a Child Restraint" under *Passenger Sensing System* ⇨ 58.

To remove the child restraint, unbuckle the vehicle seat belt and let it return to the stowed position.

Storage

Storage Compartments

Storage Compartments	83
Glove Box	83
Cupholders	83
Underhood Storage	84
Center Console Storage	85

Additional Storage Features

Cargo Management System	87

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

To open the glove box:

- Select the glove box release icon  on the infotainment screen.
- From the infotainment home screen, press the Quick Controls Menu > Glove Box Release or press Controls > Doors & Windows > Glove Box Release.
- If the vehicle is off, you can still open the glove box. Press the volume button on the Multi-function Controller to wake the infotainment home screen and access the virtual Glove Box Release button.
- If the 12-volt battery is dead, the glove box will not open. See *Jump Starting - North America* ⇨ 328.

To close the glove box, push the glove box up until it latches.

Cupholders

Front Cupholder



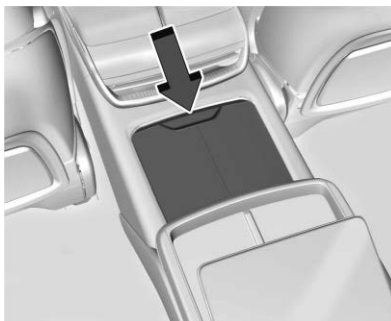


To access the front cupholder, open the split doors.



To access the second front cupholder, slide the armrest rearward until it latches. To close, pull the armrest rearward and release. The armrest will automatically slide forward.

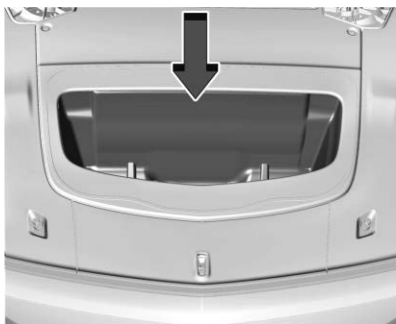
Rear Cupholders



The rear cover can be opened partially to access the small storage bin or fully to access the small storage bin and rear cupholders. To close, pull the cover rearward and release.

Underhood Storage

Caution
Heavy, hard, or sharp items can damage eTrunks with soft finish materials, such as suede. Do not place such items in a soft-finish eTrunk.



There is storage in the front, under the hood.
See *Hood* ⇨ 280.

To access the eTrunk, open the hood.

The eTrunk can hold up to 20 kg (44 lbs).

Center Console Storage

Front Console



To access the front console storage area, push the button and lift. Push the armrest shut to close.

Rear Console



If equipped, to access the rear console storage area, lift either armrest. Push the armrest shut to close.

Tray Tables

Warning

Do not use the folding tray table with any type of child restraint or booster installation in the rear seats. Contact with the folding tray table could result in injury. Return folding tray tables to the correct storage position before installing any child restraint or booster.

See *Where to Put the Restraint* ⇨ 69 for more information about installing a child restraint or booster.

**Warning**

The folding tray table can press into the abdomen, harming a pregnant woman and fetus and putting them at risk for injury. Pregnant women should not use the folding tray tables.

**Warning**

Fingers can be pinched when opening and closing the folding tray tables. To reduce the risk of pinching, open and close the folding tray tables carefully.

**Warning**

Open folding tray tables may be damaged or cause injury to rear seat passengers when the front seats are moved rearward. Be careful when adjusting the front seats to avoid passenger injury or damage to the

(Continued)

Warning (Continued)

folding tray tables or seats. If necessary, stow the folding tray tables when moving the front seats rearward.

**Warning**

The folding tray tables are not designed to sit/stand on and cannot hold more than 40 kg (89 lb.). Do not sit/stand on the folding tray tables, as this could result in possible injury or damage to the tray table.

**Warning**

Objects placed on, or attached to, the folding tray tables may cause injury to you or others or damage the vehicle in the event of a crash or sudden braking/maneuvering.

Caution

Overloading the folding tray tables can damage them. When using the folding tray tables, do not exceed the maximum load rating of 40 kg (89 lb).

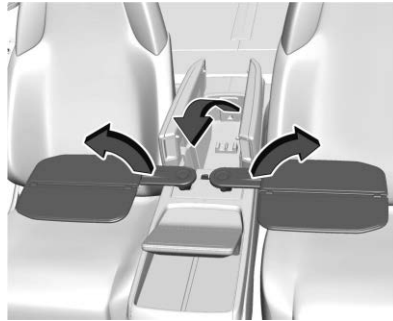
Caution

Objects placed in the rear center console bin when the folding tray tables are open could be damaged when the folding tray tables are closed. Remove all objects from the rear center console bin before closing the folding tray tables.

Caution

The folding tray tables are intended to be opened one at a time. Opening both folding tray tables at the same time could damage the tables. Do not open both folding tray tables simultaneously.

If equipped, there are two folding trays tables in the rear center console.

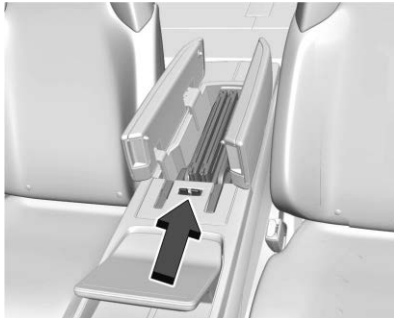


To stow the folding tray tables:

1. Fold the tray table. The folding tray tables must be stowed one at a time.
2. Slide the folding tray table inward.
3. Pull the folding tray table arm upright.
4. Press the button in front of the armrest.
5. Release the latch and press the folding tray table down.
6. Close the rear console split doors.

Additional Storage Features

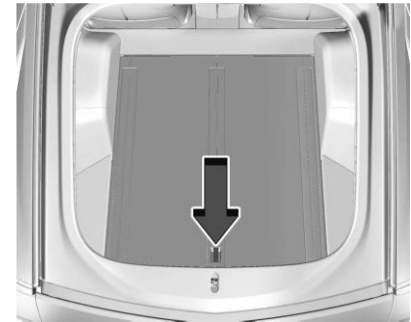
Cargo Management System



If equipped, to access the stowed folding tray tables:

1. Open the rear console split doors.
2. Press the button in front of the armrest. The folding tray tables must be released one at a time.
3. Pull the folding tray table arm upright.
4. Rotate the folding tray table horizontally.
5. Slide the folding tray table outward.
6. Unfold the tray table.

When deployed, the folding tray tables can rotate forward to allow entry and exit into the vehicle.



There is storage under the load floor.



Pull the strap and lift the load floor to access.

Instruments and Controls

Controls

Steering Wheel Adjustment	90
Heated Steering Wheel	90
Horn	90
Pedestrian Safety Signal	90
Windshield Wiper/Washer	91
Compass	92
Clock	93
Wireless Charging	93

Warning Lights, Gauges, and Indicators

Warning Lights, Gauges, and Indicators ..	94
Instrument Cluster	95
Speedometer	96
Odometer	96
Trip Odometer	96
Battery Gauge (High Voltage)	96
Power Indicator Gauge	97
Seat Belt Reminders	97
Airbag Readiness Light	98
Passenger Airbag Status Indicator	99
Charging System Light (12-Volt Battery) ..	100
Low State of Charge Light	100
Charge Cord Connected Light	100
Battery Fault Light	100
Propulsion Power is Limited Light	101

Service Vehicle Soon Light (Propulsion System Failure)	101
Brake System Warning Light	101
Electric Parking Brake Light	101
Service Electric Parking Brake Light	102
Antilock Brake System (ABS) Warning Light	102
Service All-Wheel Drive Light	102
Automatic Vehicle Hold (AVH) Light	102
Lane Keep Assist (LKA) Light	103
Hands-On Steering Assist Light (Lane Centering Assistance)	103
Automatic Emergency Braking (AEB) Disabled Light	103
Vehicle Ahead Indicator	104
Pedestrian Ahead Indicator	104
Traction Off Light	104
Traction Control System (TCS)/ Electronic Stability Control Light	104
Electronic Stability Control (ESC) Off Light	105
Driver Mode Control Light	105
Four-Wheel Steering Light	105
Air Suspension Light	106
Tire Pressure Light	106
Security Light	107
Vehicle Ready Light	107
High-Beam On Light	107
Service Headlight System Indicator	107

Lights On Reminder	107
Cruise Control Light	108
Adaptive Cruise Control Light	108
Super Cruise Light	108
Driver Attention Assist Light	108
Door Ajar Light	108

Information Displays

Charging	109
Driver Information Center (DIC)	114
Vehicle Status	115

Vehicle Messages

Vehicle Messages	116
Propulsion Power Messages	117
Vehicle Speed Messages	118

Universal Remote System

Universal Remote System	118
Universal Remote System Programming	118
Universal Remote System Operation	120

Controls

Steering Wheel Adjustment

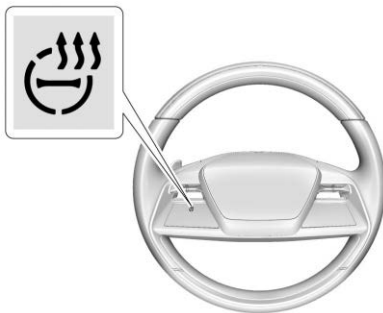


To adjust the steering wheel:

1. Press the control up or down to tilt the steering wheel up or down.
2. Press the control rearward or forward to move the steering wheel closer or away from you.

Do not adjust the steering wheel while driving.

Heated Steering Wheel



Press  once to heat the steering wheel to the highest setting. It will take several minutes to heat fully.

With each additional press of the button, the heat setting lowers until it turns off. An indicator on the Driver Information Center (DIC) will display the heat level.

Remote Start Automatic Operation

After a remote start in cold weather, the heated steering wheel and heated seats will turn on and then automatically drop to the next lowest setting. The heated steering wheel indicator

on the DIC will display the heat setting (high, medium, or low). You can turn off the auto feature by pressing .

See *Heated and Cooled Front Seats* ⇨ 43.

To turn this feature on or off, select Settings > Vehicle > Comfort and Convenience > Heated Steering Wheel > Select ON or OFF.

Horn

To sound the horn, press  on the steering wheel.

Pedestrian Safety Signal

The vehicle is equipped with automatic sound generation. The automatic sound is generated to indicate the vehicle presence to pedestrians. The sound changes if the vehicle is speeding up or slowing down. It is activated when the vehicle is driving or shifted into a forward gear, N (Neutral), or R (Reverse), up to driving speeds of 25 km/h (15 mph) or 35 km/h (22 mph), depending on region of sale.

Windshield Wiper/Washer

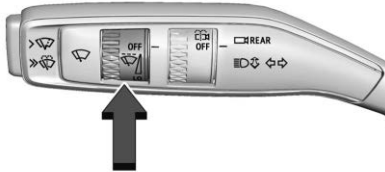
Warning

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

Warning

Before driving the vehicle, always clear snow and ice from the hood, windshield, washer nozzles, roof, and rear of the vehicle, including all lights and windows. Reduced visibility from snow and ice buildup could lead to a crash.

Keep the windshield clear of debris to allow for best system performance.



With the vehicle on, turn the windshield wiper band to select the wiper speed.

OFF: Use to turn the wipers off.

LO: Use for slow wipes.

HI: Use for fast wipes.

Turn the band to select the frequency of intermittent wipes between OFF and LO.

Clear snow and ice from the entire windshield and wiper blades before using them. If frozen to the windshield, carefully loosen or thaw them. Damaged blades should be replaced. See *Wiper Blade Replacement* ⇨ 292.

Heavy snow or ice may restrict wiper operation and can overload the wiper motor.

Wiper Arm Assembly Protection

When using an automatic car wash, turn the windshield wiper band to OFF to disable the automatic Rain Sense windshield wipers.

If the vehicle is in N (Neutral) and the vehicle is moving slowly, the wipers will automatically stop at the base of the windshield.

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

Windshield Washer



 : For a single wipe, push the button on the side of the windshield to the first stop position briefly and then release. For several wipes, keep holding at the first stop position and then release.

➤  : Push the button on the side of the windshield wiper lever all the way to the end, beyond the first stop position, to spray washer fluid and activate the wipers. When the button is released, additional wipes may occur depending on how long the windshield washer had been activated. See *Washer Fluid* ⇨ 286 for information on filling the windshield washer fluid reservoir.

Wiper Parking

If the vehicle is turned off while the wipers are on LO or HI, they will immediately stop.

If the windshield wiper lever is moved to OFF before the driver door is opened, the wipers will restart and move to the base of the windshield.

If the vehicle is turned off while the wipers are performing wipes due to windshield washing or Rain Sense, the wipers continue to run until they reach the base of the windshield.

Heated Wiper Parking

This feature warms the lower area of the windshield where the wiper blades park when the rear window defogger is on, helping to remove frost from the wipers.

 : The rear window defogger button is on the climate control panel.

See “Rear Window Defogger” under *Climate Control Systems* ⇨ 159.

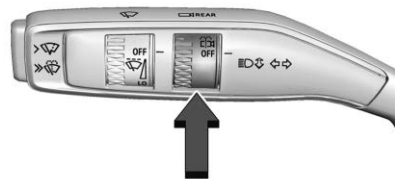
Rain Sense

If equipped with Rain Sense and the feature is turned on, a sensor near the top center of the windshield detects the amount of water on the windshield and controls the frequency of the windshield wiper based on the current sensitivity setting.

To turn the Rain Sense feature on or off, see “Rain Sense Wipers” under Settings > Vehicle > Comfort and Convenience > Rain Sense > Enable/Disable.

If Rain Sense is enabled in Settings, turning the wiper lever to INT will activate Rain Sense.

Rear Camera Washer



If equipped, turn the band to  to spray washer fluid on the rear camera lens. Release the band when done. See *Rear Camera Mirror* ⇨ 30.

Night Vision Camera Washer

To clean the night vision camera sensor, activate the front windshield washer five times when the system is operating.

See *Night Vision System* ⇨ 249 for information on using the night vision system.

Compass

The vehicle may have a compass display on the Driver Information Center. The compass receives its heading and other information

from the Global Positioning System (GPS) antenna, StabiliTrak/Electronic Stability Control, and vehicle speed information.

The compass system can operate for a limited distance or degrees of turn before needing an update from the GPS satellites. When the compass display shows CAL, drive the vehicle to a clear, unobstructed view of the sky in all directions. The system will automatically search for a GPS signal and provide a heading again when the link to the satellites is re-established.

Clock

Set the time and date using the infotainment system. See "Date/Time" under *Settings* ⇨ 151.

Wireless Charging

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.

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.

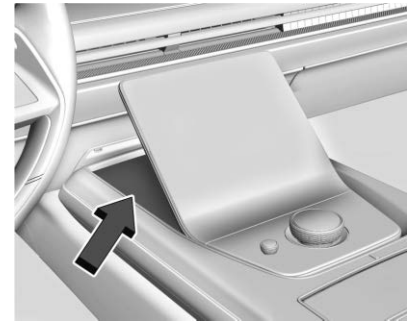
On the rare occasion that the charging system does not detect an object, and the object gets wedged between the smartphone and charger, remove the smartphone and allow the object to cool before removing it from the charger, to prevent burns. In addition, a vehicle key card, credit cards, hotel key cards and other Near Field Communication (NFC) cards may be damaged if placed on the charger.

If equipped, the vehicle has up to four wireless chargers, two in the front and two in the rear of the center console storage bin. The system operates at 127.7 kHz and can charge one Qi compatible smartphone per charger at a rate of up to 3 amp (15 W). See *Radio Frequency Statement* ⇨ 361.

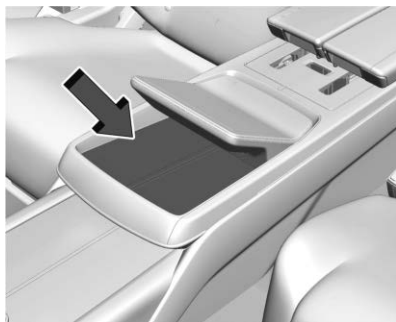
To begin charging, the vehicle must be on or Retained Accessory Power (RAP) must be active. The wireless charging feature may not

correctly indicate charging when the vehicle is in RAP, during a Bluetooth phone call, or when phone projection is active. See *Power Modes* ⇨ 176.

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. An alert will display 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.



Front Console Dual Charger



Rear Console Dual Charger

To charge a smartphone:

1. Confirm the smartphone is capable of wireless charging.
2. Remove all objects from the charging pocket. 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.

A smartphone case may prevent the charger from working, or reduce the charging performance.

4. A green  appears on the infotainment display next to the phone icon when the smartphone is detected.

For optimal charging, place the smartphone in the center of the charging area, with the bottom of the phone aligned to the charging base.

The smartphone may become warm during charging. This is normal. In warmer temperatures, your phone may take longer to charge.

Troubleshooting Wireless Charging

If a smartphone is placed on the charger and  appears, remove the smartphone and any objects from the pocket. Turn the smartphone 180 degrees and wait a few seconds before placing/aligning it on the pocket again.

If a smartphone is placed on the charger and  appears, the charger and/or the smartphone is overheated. Remove the smartphone and any objects from the charger in order to cool the system.

For vehicles with wireless phone projection, the smartphone may overheat during wireless charging. The smartphone may slow down, stop charging, or shut down to protect the

battery. The phone may need to be removed from its case to prevent overheating. The  may flash while the phone is cooling down enough for wireless charging to automatically resume. This is normal. Individual phone performance may vary.

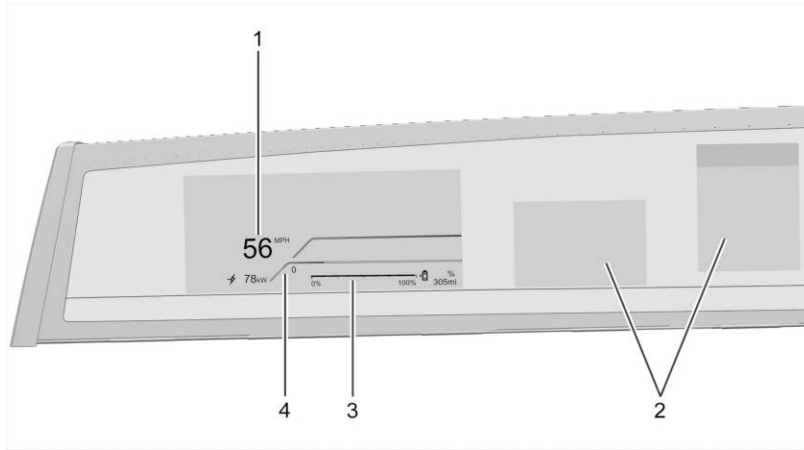
Certain vehicle and smartphone accessories may not be compatible with the wireless charging system. See your dealer for additional information.

Warning Lights, Gauges, and Indicators

Warning lights, gauges, and indicators can alert you to an issue with your vehicle. Some warning lights display briefly to show that they are working when you start the vehicle. However, if a warning light persists while driving, or if a gauge shows there may be a problem, be sure to refer to the sections under “Warning Lights, Gauges, and Indicators.”

Paying attention to your vehicle’s warning lights, gauges, and indicators and promptly addressing any issues may help you to prevent an expensive repair or personal injury. Postponing repairs can be costly and even dangerous.

Instrument Cluster



English Linear View Shown, Others and Metric Similar

1. Speedometer. See *Speedometer* ⇨ 96.
2. Driver Information Center. See *Driver Information Center (DIC)* ⇨ 114.
3. Battery Gauge. See *Battery Gauge (High Voltage)* ⇨ 96.
4. Power Indicator Gauge. See *Power Indicator Gauge* ⇨ 97.

Reconfigurable Instrument Cluster

The following are selectable views:

Gauge: Displays the power indicator gauge and the battery gauge near the speedometer. There are two information zones that are located to the right of the speedometer.

Map: Displays a navigation map.

Driver Assistance: If equipped, displays information for Adaptive Cruise Control (ACC), Follow Distance, Lane Keep Assist (LKA), Forward Collision Alert (FCA), Hands-On Steering Assist (Lane Centering Assistance), and Super Cruise.

Night Vision: If equipped, displays the Night Vision camera onto the instrument cluster. See *Night Vision System* ⇨ 249.

Minimalist: If equipped, displays no information zones.



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

To change the cluster configuration, press **△** or **▽** on the right steering wheel control.

Select the desired option from the list. Press **✓** on the right steering wheel control to select the desired option from the list.

Selecting a different view could hide the vehicle status displayed in the information zones on the cluster. Once a view with information zones is selected, the last selected vehicle status will be displayed. See *Driver Information Center (DIC)* ⇨ 114 and *Vehicle Status* ⇨ 115.

Display Settings

Turn the following options on or off using the infotainment display. Some may not be available for your vehicle. See *Settings* ⇨ 151.

Speed Sign

Shows sign information from a roadway database in the onboard navigation. The sign will show “--” when there is no detected speed limit or the system is unavailable.

Turn-by-Turn Graphics

Provides Turn-by-Turn navigation graphics during an active route in your driver display.

Traffic Sign Recognition

Displays the detected speed limit in your driver display.

Speedometer

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

Odometer

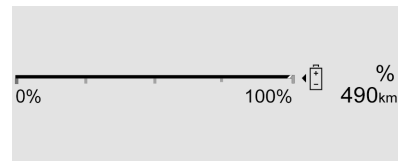
The odometer displays the distance the vehicle has been driven, in either kilometers or miles.

Trip Odometer

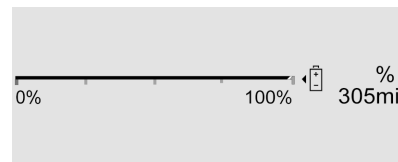
The trip odometer displays the distance the vehicle was driven since the trip odometer was last reset.

Access and reset the trip odometer through the Vehicle Status. See *Vehicle Status* ⇨ 115.

Battery Gauge (High Voltage)



Metric Linear View Shown, Others Similar



English Linear View Shown, Others Similar

This displays the high voltage battery state of charge. The value displayed is an estimate of how far the vehicle can be driven on the remaining charge based on recent driving habits, conditions, and HVAC usage.

The fill bars shown inside of the gauge indicate the percentage range as estimated from current vehicle conditions and climate settings. The range estimate may be affected by climate settings, current vehicle conditions, and ambient conditions. Estimated range may increase and decrease based on climate control energy consumption.

Driving aggressively through hard acceleration and/or braking events, excessive HVAC usage, using heated or cooled seats, battery preconditioning, and performance modes can affect vehicle range estimates.

When the high voltage battery state of charge level gets low, the gauge will change color to amber. When the charge is very low, the estimated range value will change to LOW. Additional alerts may display and a sound may also be heard at low state of charge.

Power Indicator Gauge



Linear View Shown, Others Similar

The power indicator gauge is in the center of the display to the left of the speedometer in the Linear view.

This gauge displays the instantaneous charge and consumption power of the high voltage battery. Maximum power consumption is available when the high voltage battery is fully charged. During normal operation, a slight reduction in consumption power may occur as the high voltage battery state of charge decreases.

Regenerative Braking

When regenerative (regen) braking is active, the regen battery icon displays and will fill the lower section of the gauge. The power indicator gauge value shows the amount of instantaneous power being regenerated.

Regenerative Power Limited

Regenerative power may be limited when the high voltage battery is near full charge or cold. This will affect the vehicle's maximum regenerative braking power.

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, or if the driver remains or becomes unbuckled while the vehicle is moving, this light flashes and an audible alert sounds to alert the driver to fasten their seat belt. The light may then display solid until the driver seat belt is buckled. This cycle may continue several times or continuously until the driver seat belt is buckled. If the driver seat belt is buckled, the light will not display and audible alert will not sound.

Front Passenger Seat Belt Reminder Light

This vehicle may have a front passenger seat belt reminder light near the passenger airbag status indicator. See *Passenger Sensing System* ➤ 58.



When the vehicle is started, or if the front passenger remains or becomes unbuckled while the vehicle is moving, this light flashes and an audible alert may sound to alert the front passenger to fasten their seat belt. The light may then display solid until the front passenger seat belt is buckled. This cycle may continue several times or continuously until the front passenger seat belt is buckled. If the front passenger seat belt is buckled, the light will not display and the audible alert will not sound.

Alerts may occur if an object, such as a briefcase, handbag, grocery bag, laptop, or other electronic device, is on the front

passenger seat. To turn off the reminder light and/or audible alert, remove the object from the seat or buckle the seat belt.

Second Row Passenger Seat Belt Reminder Lights

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



- A shaded or green light indicates the seat belt is buckled.



- An X indicates the seat belt is not buckled.
A ✓ indicates the seat belt is buckled.

For information on the front seat belt reminder lights, see "Driver Seat Belt Reminder Light" and "Front Passenger Seat Belt Reminder Light" listed previously.

When the vehicle is started and not moving, and if a rear passenger has not buckled their seat belt, the light will display solid. If a rear passenger remains or becomes unbuckled while the vehicle is moving, this light may flash and an audible alert may sound to alert the driver that a rear passenger needs to fasten their seat belt.

Alerts may occur if an object, such as a briefcase, handbag, grocery bag, laptop, or other electronic device, is on the rear passenger seats. To turn off the reminder light and/or audible alert, remove the object from the seat or buckle 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 passenger sensing system, the pretensioners, the airbag modules, the wiring, and the crash sensing and diagnostic module. For more information on the airbag system, see *Airbag System* ➤ 53.



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 Center (DIC) message may also come on.

Passenger Airbag Status Indicator

The vehicle has a passenger sensing system. See *Passenger Sensing System* ⇨ 58 for important safety information. The infotainment display has a passenger airbag status indicator.

PASSENGER AIR BAG



United States



Canada

When the vehicle is started, the passenger airbag status indicator will light ON and OFF, or the symbols for on and off, for several seconds as a system check. Then, after several more seconds, the status indicator will light either

ON or OFF, or either the symbol for on or off, to let you know the status of the front outboard passenger frontal airbag and knee airbag.

If the word ON, or the on symbol, are lit on the passenger airbag status indicator, it means that the front outboard passenger frontal airbag and knee airbag are allowed to inflate.

If the word OFF, or the off symbol, are lit on the passenger airbag status indicator, it means that the passenger sensing system has turned off the front outboard passenger frontal airbag and knee airbag.

If, after several seconds, both status indicator lights remain on, or if there are no lights at all, or if the airbag readiness light is on, there may be a problem with the lights or the passenger sensing system. See your dealer for service right away.

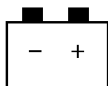
Warning

If the airbag readiness light ever comes on and stays on, it means that something may be wrong with the airbag system. To help avoid injury to yourself or others, have

(Continued)

Warning (Continued)

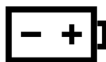
the vehicle serviced right away. See *Airbag Readiness Light* ⇨ 98 for more information, including important safety information.

Charging System Light (12-Volt Battery)

This light displays briefly when you start your vehicle. This is a normal test your vehicle runs on start up.

If the light stays on or displays while driving, there could be a problem with the electrical charging system. Have it checked by your dealer. Driving while this light is on could drain the 12-volt battery.

If you must drive a short distance with the light on, turn off all accessories, such as the radio, to save battery power. Find a safe place to stop the vehicle.

Low State of Charge Light

This light displays amber when the vehicle state of charge is low. Proceed to a charging station to charge the vehicle.

Charge Cord Connected Light

This light displays when a charge cord is connected to the vehicle.

Charge Cord Connected and Locked Light

If equipped, this light displays when a charge cord is connected and locked to the vehicle.

Battery Fault Light

This light displays when there is a fault with the high voltage battery. A message may also display in the Driver Information Center. See your dealer for service.

Propulsion Power is Limited Light



These lights display when vehicle propulsion power is limited. The vehicle is drivable, but the ability to accelerate the vehicle may be reduced.

Service Vehicle Soon Light (Propulsion System Failure)



This light displays to indicate there may be an issue with your vehicle. See your dealer for service as soon as possible.

Brake System Warning Light



BRAKE

Metric

English



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.

This light displays briefly when you start your vehicle. This is a normal test your vehicle runs on startup. If it does not display, see your dealer for service.

If the light stays on, have the brake system inspected immediately. This light may display if the brake fluid is low. See *Brake Fluid* ⇨ 287.

If the light displays 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 displays. 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 *Transporting a Disabled Vehicle* ⇨ 332.

Electric Parking Brake Light



PARK

Metric

English

This light displays when the Electric Parking Brake is applied. If the light flashes after the Electric 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 Center.

If the light does not display, or remains flashing, see your dealer.

Service Electric Parking Brake Light



This light may display briefly when you start your vehicle. This is a normal test your vehicle runs on start up. If it does not display, see your dealer for service.

If this light stays on or displays while driving, there is a problem with the electric parking brake. Take the vehicle to a dealer as soon as possible. In addition to the parking brake, other safety functions that use the electric parking brake may also be affected. A message may also display in the Driver Information Center. See *Electric Parking Brake* ⇨ 183.

Antilock Brake System (ABS) Warning Light



This light displays briefly when you start your vehicle. This is a normal test your vehicle runs on start up. If it does not display, see your dealer for service.

When the Antilock Brake System (ABS) detects a problem, the warning light displays and stays on, and you may hear an audible alert. Your vehicle brakes will still function, but your Antilock Brake System (ABS) is not functioning as expected. See your dealer for service.

If this warning light and the brake system warning light are displayed, your Antilock Brake System (ABS) and your regular brakes are not functioning as expected. See your dealer for service.

See *Brake System Warning Light* ⇨ 101.

Service All-Wheel Drive Light



This light displays amber when the electric All-Wheel Drive System is limited, and will turn off when the system is working normally.

If this light displays red, there may be a malfunction. See your dealer.

See *All-Wheel Drive* ⇨ 182.

Automatic Vehicle Hold (AVH) Light



This light displays when Automatic Vehicle Hold is enabled and turns green when Automatic Vehicle Hold is actively holding the vehicle. See *Automatic Vehicle Hold (AVH)* ⇨ 185.

Lane Keep Assist (LKA) Light



The Lane Keep Assist (LKA) Light may display the following colors:

- **White:** Displays when the vehicle starts. A steady white light indicates that Lane Keep Assist is unable to assist.
- **Green:** Displays when Lane Keep Assist is turned on and ready to assist. Lane Keep Assist will gently turn the steering wheel if the vehicle approaches a detected lane marking.
- **Amber:** Displays when Lane Keep Assist is active. The light flashes amber as a Lane Departure Warning alert indicating that a lane marking has been unintentionally

crossed. If the system detects you are steering intentionally (to pass or change lanes), the Lane Departure Warning alert may not display. The amber light also displays when the Blind Zone Steering Assist (BZSA) detects a potential crash with a moving vehicle in the lane you are entering. See *Blind Zone Steering Assist (BZSA)* ⇨ 254.

Lane Keep Assist will not assist or alert if the turn signal is active in the direction of lane departure, or if Lane Keep Assist detects that you are accelerating, braking, or actively steering. See *Lane Keep Assist (LKA)* ⇨ 258.

Hands-On Steering Assist Light (Lane Centering Assistance)



If equipped, this light displays the Hands-On Steering Assistance status.



If equipped, this light displays when you need to take immediate action by firmly steering the vehicle.

See *Hands-On Steering Assist* ⇨ 203.

Automatic Emergency Braking (AEB) Disabled Light



This indicator displays when you turn off Automatic Emergency Braking or Front Pedestrian Braking.

This indicator also displays if Automatic Emergency Braking or Front Pedestrian Braking are unavailable due to malfunction, weather conditions, or a dirty windshield.

See *Automatic Emergency Braking (AEB)* ⇨ 244.

See *Front Pedestrian Braking (FPB) System*

⇨ 247.

Vehicle Ahead Indicator



This indicator displays green when a vehicle is detected ahead and amber if you are following a vehicle too closely.

See *Forward Collision Alert (FCA) System* ⇨ 242.

Pedestrian Ahead Indicator



This indicator displays amber when a pedestrian is detected in front of the vehicle.

See *Front Pedestrian Braking (FPB) System* ⇨ 247.

Traction Off Light



This light displays briefly when you start your vehicle. This is a normal test your vehicle runs on start up. If it does not display, see your dealer for service.

The traction off light displays when the Traction Control System has been turned off. When StabiliTrak/Electronic Stability Control is turned off, the Traction Control System is also turned off. To turn the Traction Control System and StabiliTrak/Electronic Stability Control off and on, see *Traction Control/Electronic Stability Control* ⇨ 186.

If the Traction Control System is off, wheel slip does not limit acceleration unless necessary to help protect the driveline from damage. Adjust your driving accordingly.

Traction Control System (TCS)/ Electronic Stability Control Light



This light displays briefly when you start your vehicle. This is a normal test your vehicle runs on startup. If it does not display, see your dealer for service.

The light flashes when the Traction Control System and/or the StabiliTrak/Electronic Stability Control System is actively working.

If the light is on and not flashing, the Traction Control System and StabiliTrak/Electronic Stability Control System may not be fully operational or able to assist maintaining control. Adjust your driving accordingly. If the condition persists, see your dealer as soon as possible. A message may display in the Driver Information Center.

See *Traction Control/Electronic Stability Control* ⇨ 186.

Electronic Stability Control (ESC) Off Light



This light displays briefly when you start your vehicle. This is a normal test your vehicle runs on start up. If it does not display, see your dealer for service.

This light displays when the StabiliTrak/Electronic Stability Control system is turned off. When StabiliTrak/Electronic Stability Control is off, the Traction Control System is also off. To turn StabiliTrak/Electronic Stability Control off and on, see *Traction Control/Electronic Stability Control* ⇨ 186.

If StabiliTrak/Electronic Stability Control and the Traction Control System are off, the systems do not assist in controlling the vehicle. Adjust your driving accordingly.

Driver Mode Control Light



This light displays when you select Sport mode.



This light displays when you select Snow/Ice mode.



This light displays when you select My Mode.



If equipped, this light displays when you select Velocity Max mode.

See *Driver Mode Control* ⇨ 188.

Four-Wheel Steering Light



This light displays amber when Rear-Wheel Steering is inoperable.

See *Four-Wheel Steering* ⇨ 189.

Air Suspension Light

Sedan Shown, SUV Similar



This light displays when the vehicle is raised to maximum height.



This light displays when the vehicle is raised to increased height.

It flashes green to indicate that the vehicle is changing to a higher ride height.



This light displays when the vehicle is lowered in height.

It flashes green to indicate that the vehicle is changing to a lower ride height.



This light displays when the vehicle is in Service mode or Alignment mode.



This light displays when the vehicle is lowered to Show mode.

See *Air Suspension* ⇨ 189.

Tire Pressure Light



This light displays briefly when you start your vehicle. This is a normal test your vehicle runs on startup.

The light displays to indicate information about tire pressures and the Tire Pressure Monitor System.

If the Light Stays On

This indicates that one or more of the tires are significantly underinflated.

A Driver Information Center tire pressure message may also display. Stop as soon as possible and inflate the tires to the pressure value shown on the Tire and Loading Information label. See *Tire Pressure* ⇨ 316.

If the Light Flashes and Then Remains On

If the light flashes for about a minute and then stays on, there may be a problem with the Tire Pressure Monitor System. If the problem is

not corrected, the light will display every time the vehicle is started. See *Tire Pressure Monitor Operation* ⇨ 319.

Security Light



This light displays briefly when you start your vehicle. This is a normal test your vehicle runs on start up. If it does not display, see your dealer for service.

If the light stays on and the vehicle does not start, there could be a problem with the theft-deterrent system. See *Immobilizer Operation* ⇨ 27.

Vehicle Ready Light



The vehicle ready light comes on whenever the vehicle is ready to be driven.

High-Beam On Light



This light displays when the high-beam headlights are in use. See *High-Beam Systems* ⇨ 122.

Automatic High-Beam Light



This light displays when the IntelliBeam system is enabled. See *High-Beam Systems* ⇨ 122.

Service Headlight System Indicator



If equipped, this light displays when there is a problem with the Headlight system.

Lights On Reminder



This light displays when the exterior lights are in use. The light will not display when only the Daytime Running Lights are active. See *Headlight Controls* ⇨ 121.

Cruise Control Light



This light displays white when cruise control is on and ready, and turns green when set and active.

The light turns off when cruise control is turned off. See *Adaptive Cruise Control* ⇨ 193.

Adaptive Cruise Control Light



This light displays the Adaptive Cruise Control status.

See *Adaptive Cruise Control* ⇨ 193.

Curve Speed Control Light



If equipped, this light displays green when Adaptive Cruise Control is actively controlling the vehicle speed and detects a sharp curve on the road ahead.

Adaptive Cruise Control automatically slows the vehicle down while navigating the curve, and may increase speed out of the curve without exceeding the set speed.

Super Cruise Light



If equipped, this light displays the Super Cruise status. See *Super Cruise* ⇨ 216.

Driver Attention Assist Light



If equipped, this light displays amber when:

- Drowsiness assistance is not available
- Driver Attention Assist has been disabled

See *Driver Attention Assist* ⇨ 256.

Door Ajar Light



This light displays when a door is open or not securely latched. Before driving, check that all doors are properly closed.

Information Displays

Charging

Important Information about Electric Vehicle Charging

Danger

Improper use of portable electric vehicle charge cords may cause a fire, electrical shock, or burns, and may result in damage to property, serious injury, or death.

- Do not use extension cords, multi-outlet power strips, splitters, grounding adapters, surge protectors, or similar devices.
- Do not use an electrical outlet that is worn or damaged, or will not hold the plug firmly in place.
- Do not use an electrical outlet that is not properly grounded.
- Do not use an electrical outlet that is on a circuit with other electrical loads.

- Charging an electric vehicle (EV) and increased charging rates can stress a building's electrical system more than a typical household appliance.
- Before plugging the charge cord into an electrical outlet for the first time, have a qualified electrician inspect and verify the electrical system (electrical outlet, wiring, junctions, and protection devices) for heavy-duty service at a 12 amp continuous load.
- Check electrical outlets often, as they may wear out with normal use or become damaged over time, making them unsuitable for EV charging.
- Check the electrical outlet/plug while charging. If the electrical outlet/plug appears hot, discontinue using it immediately and have the electrical outlet serviced by a qualified electrician.
- When charging outdoors, use an electrical outlet that is weatherproof.
- Mount the charging cord to reduce strain on the electrical outlet/plug.
- Do not place the charge cord in a position where there is risk of it being submerged in water.

Charging App

The Charging app provides access to features which help you to review and manage charging preferences.

To launch the Charging app from the infotainment home screen, select the Charging icon. There are five selections to choose from: Next Charge, Power Station, Charge Assist, Schedule, and Settings. When you launch Charging for the first time, the Next Charge screen will display.

Next Charge

To view the current charging status in the infotainment screen, select .

On the Next Charge screen, you can review information for the next charging session and specify if you want to Charge Now or Charge Later.

Charge Now

Charge Now is the default charging mode for your vehicle. The vehicle begins charging immediately when it is plugged in and authenticated at the charging location.

With Charge Now selected, the screen displays:

- Text indicating that the vehicle will charge immediately when plugged in.
- The estimated time at which the vehicle will reach the desired charge level.
- Target Charge Level Gauge: The percentage at which the vehicle will stop charging. The gauge also displays an estimate of the vehicle's range upon completing the charging session.

**Warning**

Do not charge your vehicle's battery above an 80% charge if you are going to drive down long, steep grades such as mountain passes. This provides room in the battery for regenerative braking to supplement your conventional brakes during the descent. This is especially important when towing a trailer, which puts additional stress on your vehicle's braking system.

See *Hill and Mountain Roads* ⇨ 170 for important information about driving on grades.

The default charge level is 80% when plugged in to protect battery life. To set a different charge level, drag the circular marker on the Target Charge Level Gauge to the preferred value. To lower the desired charge level, drag the Charge Level marker counterclockwise, and to increase it drag the marker clockwise. The charge level can also be changed by selecting $\wedge$ and $\vee$ inside the gauge on the screen. The range estimate updates once the desired charge level is set. To optimize battery health, the minimum allowable charge level is determined by the vehicle.

Charge Later

Instead of charging immediately to a desired charge level, you may choose to delay the charge to the vehicle and have it completed by your desired departure time. This may be a more economical choice and a more efficient use of energy when charging at home. To use this mode, touch Charge Later on the Next Charge screen.

With Charge Later selected, the screen displays:

- Text indicating that your vehicle will delay charging to be ready by the time specified.

- The ability to set the desired time at which the vehicle will finish charging and be ready for departure.
- Target Charge Level Gauge: Ability to set the percentage at which the vehicle will stop charging. The gauge also displays an estimate of the vehicle's range upon completing the charging session.
- Preconditioning: Ability to heat or cool the cabin to your desired temperature using energy from the charger. Energy from the battery is not used to condition the cabin, ensuring the vehicle gets the maximum range from the charging session. Preconditioning happens at the end of the charge, and right before the departure time.

To set the time at which the vehicle will complete the charge and be ready for departure:

Drag each value up or down within the time selector until the preferred time is selected. If the desired charge level cannot be reached by the selected time, a message will display that one of the two preferences must be adjusted.

To adjust the desired charge level in Charge Later mode, see “Charge Now” earlier in this section.

Setting the Preconditioning preference:

Select the switch to turn on Preconditioning. The Preconditioning temperature can be adjusted by selecting Preconditioning on this screen, or in Settings.

Active Charging

For information on the vehicle battery and charging, see *Plug-In Charging* ⇨ 260.

During an active charging session, the Charging screen displays and continuously updates the following items:

- The current charging status
- The range the vehicle is capable of driving at the current charge level
- Range accumulation per hour of charging
- The estimated time at which the vehicle will reach the desired charge level
- If equipped, the current amount of power that is charging the high voltage battery
- If equipped, the maximum amount of power your vehicle is able to charge at

- **Target Charge Level Gauge:** The current charge level value represented as a percentage and a colored section of the circular gauge

To update the desired charge level for the active charging session, drag the marker on the Target Charge Level Gauge.

If the charge coupler is locked, the Stop Charge button will display. Selecting the Stop Charge button at any time ends the active charging session.

If equipped, for Level 1 or Level 2 chargers, you can also select the appropriate charge cord limit for your location. This determines how much current can flow from an electrical outlet to the vehicle battery. It also ensures proper charge time estimates.

When the charge cord limit is changed to the highest setting on a 120-volt circuit a notification is displayed.

If no Home Location is set, the Level 1 cord limit will revert to the lowest setting every time the vehicle is shifted out of (P) Park.

Range and charge time estimates fluctuate depending on a number of factors such as charge cord level/limit, battery temperature, and outside air temperature.

The peek-in charging screen can be used to monitor your vehicle's charge status when the vehicle is off, see *Instrument Cluster* ⇨ 95. To monitor the charging status remotely, download the myCadillac app on your mobile device.

Fast Charging

If equipped, the vehicle will immediately begin charging when plugged into a fast charge station. While fast charging, the vehicle will bypass any schedule or departure time selection. See *Plug-In Charging* ⇨ 260.

Charge Assist

To find a charge station with the infotainment screen, select .

The choices available for Charge Assist include Nearby, Favorites, Routes, or Accounts. Additionally you can filter the list of shown charge stations by selecting  above the list.

Nearby

Displays nearby stations. When a station name is selected, details of the selected charge station displays on the screen.

Station Details displays Station Info, Connectors and Station Photos.

With Station Info selected, the screen displays:

- Name of the charge station
- Number of ports available
- Estimated charge percentage remaining upon arrival
- Charge station address
- Favorites button
- Navigation button

The Connector screen displays the connector types and availability. From here you can select a connector to see pricing details and charging speed. You can start a charging session by selecting the Start Charging button.

The Station Photos screen displays photos of the selected charge station.

Favorites

Displays a list of your favorited stations. You can favorite stations from the Station Details screen.

Routes

Allows you to access routes planned and saved on the myCadillac app. To activate a route, touch the navigation icon to start route guidance.

Accounts

Allows you to view charge provider accounts that you have linked in the myCadillac app, and pre-pay for charging. You can also choose to be notified when you are approaching one of your providers' stations.

Schedule

Select  to schedule a custom charging plan for each day of the week. When the vehicle is plugged in at the Home Location, the Schedule feature will automatically charge to the desired charge level and precondition the cabin by the time set in the Schedule. This feature acts as a more customizable Charge Later setting than the one on the Next Charge screen.

Creating a Schedule

To create a schedule, touch Create Schedule. If there is no Home Location set, you will be prompted to create one.

The Charging Schedule dialog displays:

- Days of the week
- A value selector for setting the desired charge level
- A time selector for setting the time the vehicle will reach the desired charge level
- Preconditioning: Allows the vehicle to heat or cool the cabin to the desired temperature by using energy from the charger.
- An  allowing you to close the Charging Schedule screen
- Save & Close button: Applies any changes made and exits the dialog.

Days can be assigned to the schedule. Days of the week are represented in toggles containing their first letter. Touching each day illuminates the graphic, confirming that day is assigned that to the schedule. Touching a second time unassigns days from this schedule, dimming the toggle once again. Select all days you wish to adhere to the settings in this schedule. If there are multiple charge schedules, days must be unassigned from their current schedule before they can be assigned to a new one.

Once completed with the charging schedule, select the Save & Close button to finish creating the schedule.

On days that are not assigned a schedule, the vehicle will begin charging to 80% as soon as it is plugged in, unless otherwise specified on the Next Charge screen.

Home Charge Schedule can be turned ON or OFF. To enable or disable all charging schedules, select the toggle switch next to Home Charge Schedule on the Schedule screen.

Modifying and Deleting Charge Schedules

To modify a schedule, select the card on the Schedule screen. This will open a screen. Make the desired changes and select the Save & Close button when finished. To delete the schedule, select the Delete Schedule button and confirm your decision when prompted.

Charge Settings

To view and change the Charge Settings, select



Use this screen to set vehicle charging preferences. Touching any item will display options for specifying their behavior.

The Settings screen displays:

Home Location

With a Home Location set, the vehicle can determine whether it is plugged in at home and will charge according to any existing schedules. The Home Location can be changed or deleted at this screen.

The wireless service and GPS satellite technologies must be available and operating for features to function properly. These systems may not operate if the battery is disconnected, or if the vehicle has been off for an extended period. If GPS is unavailable, a message displays on the infotainment screen. GPS functionality may resume after the next time you drive the vehicle.

Notifications

This section contains on/off preferences for multiple notifications triggered during the Charging session.

Charge Status Feedback: When on, your vehicle will chirp to accompany changes in the charging status.

Charge Cord Unplugged Alert: If equipped, when on and your vehicle is locked and connected to a portable cord (120-volt) charger, the horn sounds and the headlights flash if the charge cord becomes unplugged.

Charge Power Loss Alert: When on, your vehicle will chirp for an extended period if charging power is cut off.

Headlight Charge Status Indicator: When on, your vehicle's headlights will show the charging status. As the battery charges, more LED bars within the headlights will turn on. The headlights will automatically turn off when charging is complete.

Fast Charge Prep

If equipped, adjusts the battery to the optimal temperature for quicker Fast Charging. This should be done before charging at a Fast Charger.

Depending on the outside and battery temperature, battery conditioning could take longer to reach the optimal temperature.

When using Google Maps, the Fast Charge Prep feature begins automatically when a Fast Charge station is added to your route via the  on the infotainment screen.

Preconditioning Temperature

Allows you to set the preferred cabin temperature. During a planned charging session at the Home Location, the vehicle cabin

is warmed or cooled to this temperature if set to ON in either the Charge Later screen or in an active Schedule.

Preferred Charge Times

Allows you to enable preferred charge time windows for the Home Location during both weekday and weekend planned charging sessions. It does so whether the vehicle is set to Charge Later or observing a scheduled charge. This allows for charging at a lower cost by prioritizing charging during the electrical provider's off-peak period. The vehicle will use these times to reach the desired charge level by the scheduled time. If the vehicle cannot reach the desired charge level within these times, it will charge as needed outside of this time window.

Driver Information Center (DIC)

The DIC is displayed in the instrument cluster. It shows the status of many vehicle systems. DIC information is broken down into two main zones:

Left Zone: Displays on the instrument cluster to the right of the speedometer.

Right Zone: Displays on the instrument cluster to the right of the left zone.



^ or v : Use to scroll to the previous or next selection.

✓ : Press to open a menu or select a menu item. Press and hold to reset certain displays.

DIC Information Display Options

Select which info display to view on the DIC by selecting Add to Driver Display in the Vehicle Status on the infotainment display. See *Vehicle Status* ⇨ 115.

DIC Information Displays

The following is the list of all possible DIC information displays and their locations. Some of the information displays may not be available for your particular vehicle.

Left Zone

Audio Now Playing: Displays the actively playing audio.

Navigation: Displays a variety of navigation information.

Phone: Displays a variety of call information.

Right Zone

Time & Temperature: Displays the current time and the current outside air temperature.

Trip Information: The Trip 1 or 2 display shows the current distance traveled, in either kilometers (km) or miles (mi), since the trip odometer was last reset. To reset the current trip, touch and hold the touchscreen display when trip odometer is displayed.

The Average Efficiency shows the approximate average kWh per 100 kilometers (kWh/100 km), kilometers per kilowatt hour kWh (km/kWh), or miles per kilowatt hour kWh(mi/kWh). This number is calculated based on

the number of kWh/100 km, km/kWh, or mi/kWh recorded since the last time this menu item was reset. This number only reflects the approximate average electrical energy economy that the vehicle has at that moment, and changes as driving conditions change.

Current Trip: Displays distance driven, average efficiency, and time elapsed since vehicle startup. It resets when you turn your vehicle off.

Date: Displays current date information. If Add to Driver Display is selected, Air Quality information is shown below date and time information. Air Quality shows the measured Particulate Matter (PM2.5), along with the status of the air quality. This indicates how clean or polluted outdoor air is. Higher numbers indicate more pollutants and a greater potential for adverse health effects.

Tire Pressure: Displays the approximate pressures of all four tires. Tire pressure is displayed in either kilopascal (kPa) or in pounds per square inch (psi). If the pressure is low, the value for that tire is shown in amber. See *Tire Pressure Monitor System* ⇨ 318 and *Tire Pressure Monitor Operation* ⇨ 319.

Energy Usage: Displays energy usage of the Driving, Remote Climate, and Climate and Fast Charge Prep vehicle systems as percentages of overall vehicle energy use.

Energy Efficiency: Displays a graph showing the energy efficiency that has been used by the vehicle over a recently driven distance.

Vehicle Status

To access the menu select the Vehicle Status icon from the infotainment home screen. Vehicle status content is grouped together and shown on the infotainment display.

Selecting vehicle status content on the infotainment display shows the available options. Follow any message or alerts that may display. Some options may be unavailable while driving.

Touch Add to Driver Display to send the desired content to the Driver Information Center (DIC) on the instrument cluster. Touch Remove from Display to remove the selected content from the instrument cluster. See *Driver Information Center (DIC)* ⇨ 114.

Options

The following is the list of all possible vehicle status content and location. Some but not all of the content and options may be available for your particular vehicle.

Overview

Displays an interactive image of your vehicle that shows performance and health information.

Maintenance

Tire Pressure: Displays the approximate pressures of each tire. Tire pressure displays in either kilopascal (kPa) or in pounds per square inch (psi). If the pressure is low, the value for that tire is shown in amber. See *Tire Pressure Monitor System* ⇨ 318 and *Tire Pressure Monitor Operation* ⇨ 319.

Choose from the following options: Relearn Sensors and Add to Driver Display.

Tire Rotation: If equipped, displays the distance remaining for recommended tire rotation. Rotating your tires regularly prevents uneven wear. Schedule service when it is convenient. Messages display based on

tire rotation notifications. See *Tire Rotation Monitor* ⇨ 322 and *Maintenance Schedule* ⇨ 344.

Choose from the following options: Turn Off/On Notifications and Reset.

Energy Info

Energy Usage: Displays how energy is being used for the current drive since the last time the vehicle was started. Percentages of the Driving, Remote Climate, and Climate and Fast Charge Prep vehicle systems as overall vehicle energy use are shown. When selected, distance driven, total energy, energy usage bar diagram, and selectable categories are displayed. Select a category to learn more about how your vehicle uses energy from the battery.

Add to Driver Display may be chosen.

Energy Efficiency: Displays a graph showing the energy efficiency that has been used by the vehicle over a recently driven distance. When selected, regenerated range, and instant efficiency is shown along with average efficiency in the dialog.

Add to Driver Display may be chosen.

Trip

Trip Information: Trip 1 or 2 displays the current distance traveled, in either kilometers (km) or miles (mi), since the trip odometer was last reset.

Average Efficiency shows the approximate average kilometers per kilowatt hour kWh (km/kWh) or miles per kilowatt hour kWh (mi/kWh). This number is calculated based on the number of km/kWh or mi/kWh recorded since the last time this menu item was reset. This number only reflects the approximate average electrical energy economy that the vehicle has at that moment, and changes as driving conditions change.

To reset these values, touch reset on the touchscreen display when the Trip Information dialog is selected.

The following options may be chosen: Reset Trip 1, Reset Trip 2, and Add to Driver Display.

Current Trip: Displays distance driven, average efficiency, and time elapsed since vehicle startup. It resets when you turn your vehicle off.

Add to Driver Display may be chosen.

Air Quality

Displays the measured interior Particulate Matter (PM2.5), along with the status of the air quality. Higher numbers indicate more pollutants and a greater potential for adverse health effects. When Air Quality Index numbers are high, close your vehicles windows and doors, set your climate system to Auto, and turn on air recirculation. Air Quality Index displays all of the possible measurement ranges, along with the status that is attributed to those ranges.

The following options may be chosen: Air Quality Index and Add to Driver Display.

Vehicle Messages

Messages displayed on the Driver Information Center (DIC) indicate the vehicle status or needed action to correct a condition. Multiple messages may appear together.

If equipped, vehicle status notifications are also sent to the infotainment display. Touch  on the infotainment app screen to display vehicle messages. A red dot on the notification icon indicates an active issue. Depending on the

message, you can schedule a service, find the nearest dealer, or find the nearest charging station.

Press ✓ to acknowledge and clear the messages that do not require immediate action. You cannot clear messages that require immediate action until that action is performed.

Address and follow all message instructions promptly; clearing a message does not correct the issue.

If a SERVICE message appears, see your dealer.

The system may display messages concerning:

- Service Messages
- Fluid Levels
- Vehicle Security
- Brakes
- Ride Control Systems
- Advanced Driver Assistance Systems
- Cruise Control
- Lighting and Bulb Replacement
- Wiper/Washer Systems
- Doors and Windows

- Seat Belts
- Airbag Systems
- Propulsion
- Tire Pressure
- Battery
- Steering

Propulsion Power Messages

REDUCED ACCELERATION DRIVE WITH CARE

A 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.

This message can be displayed when the high voltage battery charge level is low. This is normal behavior as the vehicle is limiting power due to reduced battery capability.

Under certain operating conditions propulsion will be disabled. Try restarting after the vehicle has been off for two minutes.

PROPULSION POWER REDUCED DUE TO TEMPERATURE

A message displays when the vehicle is on, the battery temperature is low, and the vehicle power is limited. The duration of the limited vehicle performance depends, in part, on the high voltage battery charge level. If the high voltage battery charge level is relatively high, as the vehicle is driven, the battery temperature will increase, and the vehicle will return to normal operation. If the high voltage battery charge level is relatively low the vehicle will not return to normal operation until charged.

Keep the vehicle plugged in, even when fully charged, to keep the high voltage battery temperature ready for the next drive. This is important when outside temperatures are extremely hot or cold.

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 a protection for various propulsion and vehicle systems, such as lubrication; thermal; brake; suspension; tire; or, if equipped, Teen Driver.

Universal Remote System

See *Radio Frequency Statement* ⇨ 361.

Universal Remote System Programming

The Universal Remote System can replace up to eight remote control transmitters (remote controls), such as garage door openers, security systems, and home automation devices. These instructions address garage door openers, but will work for other devices, too.

Do not use the Universal Remote System with any garage door opener that does not have the stop and reverse feature. This includes any garage door opener model manufactured before April 1, 1982.

Keep the original hand-held transmitter for use in other vehicles and future programming and erase the system if you terminate vehicle ownership. See “Erasing Universal Remotes” later in this section.

Programming the Universal Remote System

Programming involves time-sensitive steps. You must complete these steps within the allotted time, or you will have to repeat programming.

Read these instructions completely before programming the Universal Remote System. It may help to have another person assist with the programming process.

1. If your garage door opener includes a hand-held transmitter, make sure it has a new battery for quick and accurate transmission of the radio-frequency signal.
2. Clear all people and objects away from the garage door.
3. Park your vehicle outside and directly facing the garage door opener receiver. The vehicle must remain in P (Park) for the entire duration of the programming.

4. From the Controls menu, select Universal Remotes > Add Remote.

Depending on the vehicle, access the Controls menu from either the infotainment apps screen or the front center console.

5. If you have a hand-held transmitter, make sure to press Yes to continue to the next step.

If your garage door opener does not include a hand-held transmitter, press either D-Mode (mostly used in North America), or UR-Mode (mostly used in Europe, Mideast, and Asia), and jump to “D-Mode and UR-Mode Based Programming” later in this section.

Hand-Held Transmitter Based Programming

Once you press Yes for the hand-held transmitter, you should see a screen with Searching for Signal.

6. While Searching for Signal is displayed, press and hold the hand-held transmitter button about 3 to 8 cm (1 to 3 in) away from the rear-view mirror. Do not release the button until Signal Found displays.

If Signal Found does not display after 45 seconds, press  and return to Step 4 to try again.

Some garage door openers require a modification to Step 6. See “Radio Signals for Some Gate Operators” later in this section.

7. Once Signal Found displays, press the Test button on the screen. You may need to press it several times, as some garage door openers require multiple valid signals when programming.

8. If your garage door moves, press the It Worked button to confirm programming was successful and end the process.

If programming was not successful, you can return to Step 4 and try again or follow additional steps described in “D-Mode and UR-Mode Based Programming” later in this section. You can also consult with HomeLink by jumping to “Contact HomeLink” later in this section.

D-Mode and UR-Mode Based Programming

If supported, you may be able to program D or UR mode garage door receiver remotes.

9. Locate the Learn or Smart button on the garage door opener receiver in the garage. The name and color may vary by manufacturer but is usually located near the antenna wire. If you have any difficulty finding the button, refer to the garage door opener manufacturer’s instructions.

10. Press and release the Learn or Smart button on the garage door opener receiver, then complete the next step within 30 seconds of pressing the button. If it takes longer than 30 seconds, press the button again.

11. Return to the vehicle and press the Test button on the screen. You may need to press the Test button several times. If your garage door moves, then programming was successful. Press the It Worked button to confirm programming was successful and end the process.

If programming was not successful, you may retry steps above by pressing the It Didn’t Work button or consult with HomeLink by jumping to “Contact HomeLink” later in this section.

Contact HomeLink

For questions or programming help, visit www.homelink.com/gm or call 1-800-355-3515. International rates apply for calls placed outside the U.S., Canada, or Puerto Rico, and may differ based on landline or mobile phone.

Using Universal Remotes

After successfully programming your Universal Remote, you can change the name and location of the remote as desired by selecting  next to the remote on the screen. Be sure that you are nearby your programmed garage door opener when you select Update Location.

Each successfully programmed remote creates a shortcut icon. Tap the desired shortcut icon to operate the remote. You can press and drag icons to reposition them on the screen as desired.

Erasing Universal Remotes

To erase an individual programmed Universal Remote, select  next to the remote on the screen you wish to erase. Then select Delete.

To erase ALL programmed Universal Remotes, select  next to any remote on the screen. Then select Delete All.

Radio Signals for Some Gate Operators

Some gate operators and radio-frequency laws require transmitter signals to time out after several seconds of transmission.

This may not be long enough for the Universal Remote system to pick up the signal during programming. If programming did not work, replace Step 6 under “Programming the Universal Remote System,” previously in the section, with the following:

Press and release the hand-held transmitter button every two seconds until Signal Found appears on the screen. Continue to Step 7 to complete programming.

Universal Remote System Operation

Using the Universal Remote System

Press the desired Universal Remote button on the infotainment apps screen or the front center console, depending on the vehicle.

Reprogramming a Single Universal Remote System Button

To reprogram any of the system buttons:

1. Select the universal remote to be reprogrammed.
2. Select “Delete.”
3. Select “Add Remote.” Follow the instructions in *Universal Remote System Programming* ⇨ 118.

Lighting

Exterior Lighting

Headlight Controls	121
High-Beam Systems	122
Headlights Off Reminder	123
Daytime Running Lights	123
Automatic Headlight System	124
Automatic Headlight System (Enhanced LED Headlights)	124
Headlight Leveling Control	125
Hazard Warning Flashers	125
Turn and Lane-Change Signals	125
Cornering Lights	126

Interior Lighting

Instrument Panel Illumination Control	126
Dome Lights	126
Reading Lights	127

Lighting Features

Entry Lighting	127
Exit Lighting	128
Ambient Lighting	128
Battery Load Management	129
Battery Power Protection	129
Exterior Lighting Battery Saver	130

Exterior Lighting

Headlight Controls

The headlight control is located along the bottom edge of the front center console display. Touch the  symbol, then select any of the following options.

Off : Turns off the exterior lights.

For vehicles first sold in Canada, the Automatic Headlight System activates when the vehicle is shifted out of P (Park), and either the headlights or Daytime Running Lights (DRL) come on, even when Off is selected. See *Daytime Running Lights* ⇨ 123.

Auto: Enables the automatic headlight system, which controls the exterior lights and instrument panel lights depending on outside lighting. See *Automatic Headlight System* ⇨ 124 *Automatic Headlight System (Enhanced LED Headlights)* ⇨ 124.

 : Turns on the exterior lights—such as parking lights, taillights, and license plate lights—and the instrument panel lighting. If the vehicle is not in P (Park), the DRL also come on.

 : Turns on the headlights and all the lights listed in .

Headlights can also be activated in the Controls & Safety app. Select  > See More Controls > Lights > Headlights.

Lights On in Canada

For vehicles first sold in Canada, it is required that either Daytime Running Lights or headlights are always on when the vehicle is shifted out of P (Park). Even if the headlight control is set to Off or , the Automatic Headlight System is engaged and ensures that either the Daytime Running Lights or headlights come on based on outside light level.

Optional Reminder If Headlights Are Off

You can set a reminder for the vehicle to display a message if it is dark outside and the headlights are off. On the front center console display, select  > See More Controls > Lights > Headlights, then touch  in the upper corner of the Headlights menu. Touch the box next to Turn Headlight Reminder On to enable or disable the option.

High-Beam Systems

Manual High-Beam Controls

High/Low-Beam Changer

To manually turn the high beams on, push the turn signal lever away from you. To return to low beams, push the lever again or pull it toward you and release.

The high-beam indicator light  appears in the instrument cluster when the high-beam headlights are on.

Flash-to-Pass

To flash the high beams, pull the turn signal lever toward you and release.

Automatic High-Beam System — IntelliBeam

If equipped, this system turns the high-beam headlights on and off automatically according to surrounding traffic conditions. It must be dark enough with no other traffic present.

Turning the IntelliBeam System On and Off

To enable the IntelliBeam system, select Controls App  > Auto High Beams > On. The system can also be enabled at  > See More Controls > Lights > Auto High Beams > On.

The system engages only when the Headlight control  is set to Auto or . See *Headlight Controls*  121.

The IntelliBeam Indicator light  appears in the instrument cluster when the IntelliBeam system is enabled.

To disable the system when high beams are on, turn on the manual high beams using either the high/low-beam changer or flash-to-pass.

To disable the system, select  > Auto High Beams > Off.

Driving with IntelliBeam



Warning

Using high beams in dense exhaust, smoke, fog, snow, road spray, mist, or other airborne obstructions can cause a glare, obstructing your vision. This reduction in

(Continued)

Warning (Continued)

visibility can result in a crash. Never use high beams in dense exhaust, smoke, fog, snow, road spray, mist, or other airborne obstructions.

The system only activates the high beams when driving over 40 km/h (25 mph).

The blue High-Beam On light  appears in the instrument cluster when the high beams are on.

There is a sensor near the top center of the windshield that automatically detects the lights of oncoming and preceding vehicles. Keep this area of the windshield clear of debris to allow for best system performance.

The high-beam headlights remain on, under automatic control, until one of the following situations occurs:

- The vehicle speed drops below 20 km/h (12 mph).
- The outside light is bright enough that high-beam headlights are not required.
- The system detects an approaching vehicle's headlights.

- The system detects a preceding vehicle's taillights.
- The IntelliBeam system is manually disabled.
- The headlight control is set to Off or Parking .

The high-beam headlights may not turn off automatically if the system cannot detect another vehicle's lights because of any of the following conditions. The IntelliBeam system may then need to be disabled.

- The other vehicle's lights are missing, damaged, obstructed from view, or otherwise undetected.
- The other vehicle's lights are covered with dirt, snow, and/or road spray.
- The other vehicle's lights cannot be detected due to dense exhaust, smoke, fog, snow, road spray, mist, or other airborne obstructions.
- The vehicle windshield 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 headlights and taillights.
- The vehicle is being driven on winding or hilly roads.

Headlights Off Reminder

A warning chime sounds if the driver door is opened when the vehicle is off and the headlights are on.

Daytime Running Lights

Daytime Running Lights can make it easier for others to see the front of your vehicle during the day.

The Automatic Headlight System turns the Daytime Running Lights on and off.

When Daytime Running Lights Turn On

The Daytime Running Lights turn on when all the following conditions are met:

- The vehicle is on
- The headlight control is set to Auto
- The light sensor determines it is daytime

The instrument panel lights, taillights, and other exterior lights do not turn on when the Daytime Running Lights are on.

For vehicles first sold in Canada, it is required that either Daytime Running Lights or headlights are always on when the vehicle is shifted out of P (Park). Even if the headlight control is set to Off or , the Automatic Headlight System is engaged and ensures that either the Daytime Running Lights or headlights come on based on outside light level.

When Daytime Running Lights Turn Off

When it begins to get dark, the automatic headlight system turns off the Daytime Running Lights and turns on the headlights.

The Daytime Running Lights turn off when you turn off either the headlights or the vehicle.

For vehicles first sold in Canada: the Daytime Running Lights turn off only when the vehicle is shifted to P (Park) and the headlight control is off.

Automatic Headlight System

The automatic headlight system controls the headlights, other exterior lights, and instrument panel lights depending on the outside light level.

To enable the system, set the headlight control to Auto.

- If it is dark enough outside, the system turns on the exterior lights—such as headlights, taillights, parking lights, and license plate lights—and the interior instrument panel lights.
- If it is bright enough outside, the system turns off the exterior lights and instrument panel lights, and may turn on the Daytime Running Lights (DRL).

To turn off the automatic headlight system, either set the headlight control to Off or turn the vehicle off.

Low Light Conditions During Daylight Hours

When driving through a parking garage, tunnel, or heavy overcast weather, the automatic headlight system may sense a low light level and turn on the headlights. This is normal.

If the vehicle is started in a dark garage, the headlights come on immediately. If it is light outside when the vehicle leaves the garage, there is a slight delay before the automatic headlight system switches over the headlights to 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* ⇨ 126.

Location of Light Sensor

A light sensor on top of the instrument panel measures the outside light level. See *Instrument Panel Overview* ⇨ 4.

Do not cover the sensor, otherwise the exterior lights will come on when they are not needed.

Lights On with Wipers

If the windshield wipers are activated in daylight with the vehicle on and the headlight control set to Auto, the headlights, parking lights, and other exterior lights come on. The transition time for the lights coming on varies based on wiper speed. When the wipers are not operating, these lights turn off.

Set the headlight control to Off or Parking  to disable this feature.

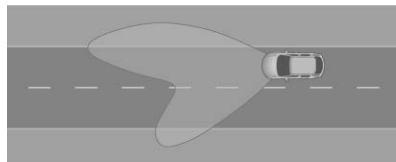
Automatic Headlight System (Enhanced LED Headlights)

The enhanced LED headlight system automatically modifies the low-beam lighting patterns to enable optimal light performance for the driver. Light distribution and intensity of low-beam light are controlled based on exterior lighting conditions, vehicle location, and driving situations.

To activate this feature, set the headlight control to Auto to engage the automatic headlight system. See *Headlight Controls* ⇨ 121.

To deactivate this feature, select a value other than Auto on the headlight control.

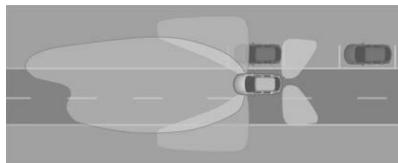
Country Light



The country lighting pattern activates automatically at a speed above 55 km/h (34 mph).

The illumination of the current lane and the side of the road is improved, reducing glare to oncoming and preceding vehicles.

Maneuvering



The maneuvering lighting pattern activates automatically at speeds less than 7 km/h (4 mph) when the vehicle is in R (Reverse). This lighting pattern improves parking and maneuvering situations.

Cornering

When turning the steering wheel, the cornering lights come on to provide greater illumination around curves. See *Cornering Lights* ⇨ 126.

Headlight Leveling Control

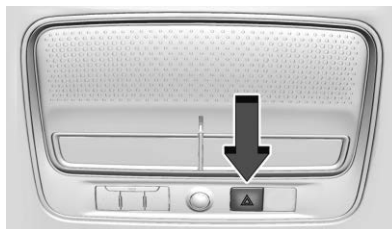
Automatic Headlight Leveling Control

To reduce glare to other drivers, the level of the headlights is adjusted automatically based on the vehicle load.

Dynamic Automatic Headlight Leveling Control

To prevent glare to other drivers, the level of the headlights is automatically adjusted based on the vehicle's angle, which is determined by the road and vehicle conditions.

Hazard Warning Flashers



 : Press this button on the overhead console to make the front and rear turn signal lights flash on and off. This warns others that you are having trouble. Press again to turn the flashers off.

The turn signals do not work while the hazard warning flashers are on.

The hazard warning flashers turn on automatically if the airbags deploy.

Turn and Lane-Change Signals

Raise or lower the turn signal lever until the arrow on the instrument cluster starts to flash in the corresponding direction. See *Instrument Panel Overview* ⇨ 4.

Changing Lanes: Hold the lever in place until you complete the lane change. Let go of the lever and it returns to its starting position.

If you raise or lower the lever quickly then release it, the turn signal flashes three times.

If you change lanes without using the turn signal, the Lane Keep Assist system, if equipped, may respond. See *Lane Keep Assist (LKA)* ⇨ 258.

Turning Corners: Move the lever all the way up or down so that it stays in place when you let go. When you complete the turn, bringing the steering wheel back to center will automatically turn off the turn signal.

If the steering wheel did not turn far enough, the turn signal will remain flashing until you move the lever back to its starting position.

Turn Signal On Alert

If you leave the turn signal on for more than 1.2 km (0.75 mi), an audible alert sounds at each flash of the turn signal. The message TURN SIGNAL ON also appears in the Driver Information Center. To turn off both the audible alert and message, move the turn signal lever back to its starting position.

Turn Signal Not Working Normally

If the indicator arrow flashes rapidly when using the turn signal, an exterior LED may have burned out. See your dealer for service.

If the exterior LED is not burned out, check the fuse. See *Instrument Panel Fuse Block* ⇨ 300.

Cornering Lights

The cornering lights automatically turn on when all the following conditions occur:

- The low-beam headlights are on.
- You activate the turn signals or turn the steering wheel to turn a corner.
- 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 brightness adjustment is functional at night, or when the headlights or parking lights are on.

During the day, the display brightness adjusts automatically based on outdoor lighting.

Dome Lights

Dome lights provide overhead interior lighting and lighting in the rear cargo compartment. They may turn on automatically as part of entry lighting and exit lighting.

To turn the dome lights on or off manually, from the app screen on the infotainment display, select  > .

Auto Mode

You can set an option for the dome lights to turn on automatically or to stay off when you open any door.

Select  > See More Controls > Lights.

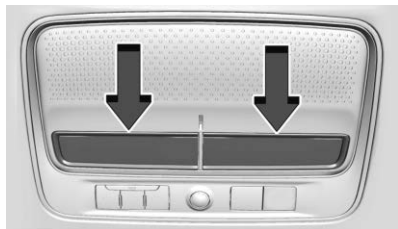
Touch  in the upper corner of the Dome Light menu.

Touch the Auto box to enable or disable this option.

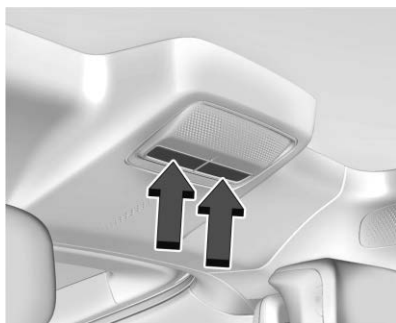
Reading Lights

Reading lights are located on the overhead console and over the rear seats. The reading lights also serve as dome lights. See *Dome Lights* ⇨ 126.

The light lenses are touch-sensitive and do not depress. Touch a light lens to turn it on or off.



Front Reading Lights



Rear Reading Lights

Lighting Features

Entry Lighting

The entry lighting feature automatically turns on various interior and exterior lights for increased visibility in and around a vehicle.

Interior: The interior lights may turn on when you open any doors or press  on the remote key.

For interior lights to turn on, you must enable the Auto option for the dome lights. See *Dome Lights* ⇨ 126.

Exterior: Some exterior lights also turn on when you press  on the remote key.

Low-beam headlights will only turn on briefly at night, or in areas with limited lighting.

All interior and exterior lights turn off when you press  on the remote key or start the vehicle. The lights eventually turn off automatically if you do not interact with the vehicle.

To change this feature, from the app screen on the infotainment display, select Settings > Vehicle > Lighting.

Approach Detection

If equipped, entry lighting activates when the vehicle detects the remote key within approximately 2 m (6 ft).

If you do not use the remote key or keyless access for an extended period while the vehicle is parked, approach detection deactivates. To reactivate approach detection, press any button on the remote key or open and close all doors.

Exit Lighting

Some exterior lights and interior lights turn on when the driver door is opened after the vehicle is turned off.

The exterior and interior lights remain on for a set amount of time, then automatically turn off.

The interior lights turn on when the vehicle is turned off.

The exterior lights turn off immediately when the headlight control is set to Off.

This feature can be changed. From the app screen on the infotainment display, select Settings > Vehicle > Lighting.

Ambient Lighting

If equipped, this feature enables you to customize the colors of the ambient lighting throughout the passenger cabin. The ambient lighting app can be accessed from either the infotainment home screen or the rear center console display.

Only one copy of the Ambient Lighting app can be in use at the same time. For example, if the app is open on the infotainment screen, the app will not display on the rear center console display.

Disabling Access from the Rear Display

If desired, the rear center console display can be disabled so that rear seat passengers cannot adjust any settings on that display.

On the front center console display, select  > Safety > Rear Control Lock.

Overview

To enable or disable the ambient lighting, slide the on-screen toggle to the opposite position.

Styles: Styles are a series of presets. Swipe the row of boxes to display more choices. Touch a box to change all cabin ambient lighting to that style.

Current Lighting: Touch the lighting name to go to the Customize screen to change the light color.

Customize

This screen enables selection of different colors for multiple areas of the cabin.

Tap a dot to select which cabin area to change, then select the lighting name. Color variants will display. Touch the desired color swatch to apply that color, then touch Confirm to keep the selection.

- Touch Sync to apply the same selection to all cabin areas at once.
- Touch Undo to revert to the previous selection.

To save your customized selections to use another time, touch Save to Styles. To find your custom style, go to the Styles tab and swipe the row of presets.

Brightness

To customize the brightness of each effect, tap the  or  icons, or drag your finger across the slider bar.

Sync Brightness: Select this option to apply the same adjustment to all lighting at the same time.

Styles

Styles are a series of presets for all cabin ambient lighting. Swipe the row of tiles to display more choices. Touch a box to change all cabin ambient lighting to that style.

Modes

Link to Theme: If equipped, this mode assigns a predefined color to ambient lighting based on the theme selected in the infotainment Themes app. When you select a different theme, the ambient lighting color changes automatically to complement the theme.

When you unlink from a theme, the ambient lighting retains the theme color until you select another color, link to theme again, or link to Drive mode.

Link to Drive Mode: If equipped, this mode enables a predefined set of colors, one for each mode on the Driver Mode Control. When you change modes — for example, from Tour to Sport — the ambient lighting automatically changes to the assigned color.

To unlink from Drive Mode and revert to the default lighting, leave the Modes tab then go back to it. A prompt to unlink will be displayed. Touch Unlink to confirm.

Custom: This mode enables the selections on the other screens of the Ambient Lighting app.

Demo Mode: If equipped, this mode automatically cycles through the available colors. The vehicle must be in P (Park) to use Demo Mode. See *Electric Drive Unit* ⇨ 178.

Battery Load Management

Electric Power Management estimates the battery temperature and state of charge. It then adjusts the voltage for best performance and extended life of the battery.

When the battery state of charge is low, the voltage raises slightly to quickly increase the charge. When the state of charge is high, the voltage lowers slightly to prevent overcharging. As this adjustment occurs, you may see the voltage move up or down on the voltmeter gauge or voltage display, if equipped, on the instrument cluster. This is normal. If a problem occurs, an alert will display. See *Instrument Cluster* ⇨ 95.

If the electrical loads are too high, the battery can be discharged when the vehicle is stationary. A high electrical load occurs when several of the following features are on: headlights, high beams, rear window defogger, climate control fan at high speed, heated seats, motor cooling fans, trailer loads, and loads plugged into accessory power outlets.

Electric Power Management prevents excessive discharge of the battery by balancing the electrical system output and the vehicle's

electrical needs. In some cases, it can temporarily reduce the power demands of some accessories.

These actions occur in steps or levels without being noticeable. In rare cases at the highest levels of corrective action, you may notice these actions and a Driver Information Center battery voltage and charging message displays. If so, reduce the electrical loads as much as possible. See *Driver Information Center (DIC)* ⇨ 114.

Battery Power Protection

This feature helps prevent the battery from being drained if you leave the interior dome lights or reading lights on. These lights automatically turn off 10 minutes after you turn the vehicle off. The lights will not turn back on again until one of the following actions occurs:

- You start the vehicle.
- You close the doors, then re-open them.

Exterior Lighting Battery Saver

If you leave the parking lights or headlights on manually, they turn off about 10 minutes after you turn the vehicle off. This protects against draining the battery.

To restart the 10-minute timer, set the headlight control to  and then select  or .

To keep the parking lights or headlights on for more than 10 minutes, start the vehicle.

Infotainment System

Introduction

Introduction	131
Overview	132
Steering Wheel Controls	133
Using the System	133
Software Updates	134

Radio

FM Radio	134
Satellite Radio	136
Radio Reception	136
Multi-Band Antenna	137

Audio Players

Avoiding Untrusted Media Devices	137
USB Port	137
Bluetooth Audio	137

Media System

Passenger Infotainment	138

Navigation

Using the Navigation System	141
Maps	142
Navigation Symbols	142
Destination	142
Global Positioning System (GPS)	143
Vehicle Positioning	144
Problems with Route Guidance	144

Voice Recognition

Voice Recognition	145

Phone

Bluetooth (Overview)	146
Bluetooth (Pairing and Using a Phone)	147

Settings

Settings	151
Teen Driver	154

Trademarks and License Agreements

Trademarks and License Agreements	156

Introduction

Read the following pages to become familiar with the features.



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 become disabled 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, center stack controls, steering wheel controls, and infotainment display.

- Set up the audio by presetting favorite 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* ⇨ 166.

Overview

Infotainment System

The infotainment system is controlled by using the infotainment display, Multi-Function Controller on the center console, steering wheel controls, and voice recognition, if available.

Infotainment Controls on the Multi-Function Controller



1. (Power/Volume)
 - Press to turn the power on.
 - Press and hold when the system is on to turn the power off.
 - Press to mute/unmute the system when on.
 - Turn to increase or decrease the volume.
2. ⬅ (Back)

Select to return to the previous display in a menu.
3. 🏠 (Home Page)

Select to access the Home Page. See “Home Page” later in this section.
4. 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.
5. 🎵 (Radio/Audio)

Select to open the active audio source page.

6. ⬆ (Navigation)

Select to access the navigation screen (if equipped).

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 or use the Multi-Function Controller to move the home page. Move the knob right/left to change the page.

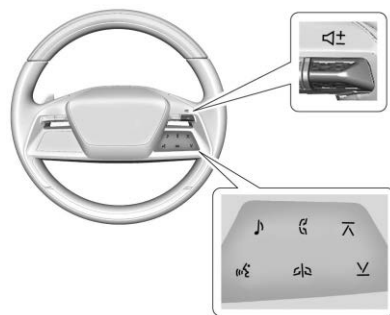
Managing Home Page Icons

1. Touch and hold any of the Home Page icons to enter edit mode. Edit mode is not available when the vehicle is moving.
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 toward the desired page
5. Continue dragging and dropping application icons as desired.

There will always be 10 icons per page except on the last page. If an icon is moved from the first page to the second, then the next available icon will automatically readjust to fill the open space on the first page.

Steering Wheel Controls

If equipped, some audio controls can be adjusted at the steering wheel.



or : Toggle up or down to increase or decrease the volume.

: Press to show the audio sources list.

: Press to answer an incoming phone call or show the recent phone call list when not in a call.

or : Press to go to the next or previous favorite when listening to the radio. Press to go to the next or previous track when listening to a media source.

: Press to reject an incoming phone call, end an active phone call, end a voice recognition session, or mute the audio when there is no phone call.

: Press to initiate voice assistant.

Using the System

Audio

Touch the Audio icon on the infotainment display or on the Multi-Function Controller to display the active audio source page. Examples of available sources may include AM, FM, SiriusXM (if equipped), USB, and Bluetooth.

Phone

Touch the Phone icon on the infotainment display or on the Multi-Function Controller to display the Phone menu. See *Bluetooth (Pairing and Using a Phone)* ⇨ 147 *Bluetooth (Overview)* ⇨ 146.

Maps

Touch the Maps icon to display the Google Maps screen. See *Using the Navigation System* ⇨ 141.

Google Assistant

Touch the Google Assistant icon to open the Google Assistant app. See *Voice Recognition* ⇨ 145.

Google Play

Touch to download some of your favorite apps in your vehicle. Downloading apps on Google Play require you to sign into a Google Account with an active service plan with data. Some third-party apps require a separate account and, in some cases, a paid subscription for in-vehicle access.

Settings

Touch the Settings icon to display the Settings menu. See *Settings* ⇨ 151.

Controls

Touch the Controls icon to display the Controls menu.

Conversation Enhancement

Microphones and some speakers in the vehicle amplify the speaking volume of passengers to help make conversation between the front and back of the vehicle easier. To turn this feature on or off, touch the Conversation Enhancement icon on the controls home page of the infotainment screen.

Close the windows, doors, roof, and tailgate, and ensure the media volume is at a normal level. The feature will not work if you are playing loud music or during calls or speech recognition sessions.

Application Tray

The Application Tray is along the bottom of the display. It shows up to six applications.

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 move or delete an application.

Drag

Drag is used to move applications on the infotainment home screen, 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 feature is only available when 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, Vehicle Information, and Radio Displays

See *Interior Care* ⇨ 339.

Software Updates

Over-the-Air Software Updates

If equipped, see “Updates” under *Settings* ⇨ 151.

Radio

FM Radio

Playing the Radio

From the infotainment home screen, touch the Audio icon to display the active audio source screen. Touch the Source icon from the top of the page to choose from FM, SiriusXM, or Bluetooth.

Finding a Station

Seeking a Station

From the FM screen, touch ◀◀ or ▶▶ on the infotainment display to search for the previous or next strong station.

Tune

Touch  on the infotainment display to display the Tune screen. Enter a station using the keypad.

The keypad will gray out entries that do not contribute to a valid frequency and will automatically place a decimal point within the frequency number.

Touch  to delete one number at a time.

Touch and hold  to delete all numbers.

A valid FM station will automatically tune to the new frequency and display the now playing screen.

The list of all available stations are on the right side of the Tune display to browse. Touch to go to that station or touch  to save the station as a favorite.

Storing Radio Station Favorites

Favorites show in the area on the left of the display.

FM or SiriusXM : To store favorites, touch Hold to Set on the left side of the screen.

The number of favorites is displayed automatically.

Audio Settings

From the now playing screen, touch  and the following may display:

Equalizer : Touch to adjust Bass, Midrange, or Treble using the options on the infotainment display.

Fade/Balance : Touch to adjust by using the controls on the infotainment display.

Sound Mode : Touch to select Front or Rear to provide the best sound for the front or rear seating positions.

Adjust the Surround controls to change from Stereo to Surround mode.

Adaptive Volume : Touch to turn On or Off.

Manage Radio Favorites : Touch to display a list of Audio favorites.

Favorites can be moved or deleted.

To move, touch and hold the move icon, and then drag up or down to rearrange the position.

Radio Text : This allows the Radio Data System (RDS) to be turned on or off.

Touch Off or On.

Radio Text (RDS) Categories : When on, category information about current radio content will be shown.

Radio Text–Radio Data System (RDS)

Radio Data System (RDS) relies on receiving specific Radio Data System (RDS) information from radio stations and only works when the information is available. It is possible that a radio station could broadcast information that causes the radio to work improperly.

In addition, Radio Data System (RDS) features are region and country of sale specific. This means specific Radio Data System (RDS) content may not be available in your listening area or in the country you operate the vehicle.

To turn Radio Data System (RDS) features on or off, see "Audio Settings" previously in this section.

The following Radio Data System (RDS) features may be supported by radio broadcasters in your listening area:

Core Radio Text Radio Data System (RDS) Features

- Display radio station name
- Display messages from radio stations
- Provide radio station category information (when available)

Dolby Atmos

If equipped, Dolby Atmos spatial audio technology creates an immersive sound experience in your vehicle. To play content, you must use entertainment created in Dolby Atmos using a compatible app. An active Onstar subscription is required. See www.Cadillac.com for more details.

Satellite Radio

SiriusXM Radio Service

If equipped, vehicles with a SiriusXM radio subscription can receive SiriusXM programming.

SiriusXM radio has a wide variety of programming and commercial-free music, coast to coast, in digital-quality sound.

In the U.S., see www.siriusxm.com or call 1-888-601-6296. In Canada, see www.siriusxm.ca or call 1-888-539-7474.

When SiriusXM is active, the channel name, number, song title, and artist appear on the display.

SiriusXM with 360L

SiriusXM with 360L interface has enhanced in-vehicle listening experience for subscribers. The experience now offers more categories and system-learned recommendations toward discovering more personalized content.

To use the full SiriusXM 360L program, including streaming content and listening recommendations, OnStar Connected Access is required and Terms and Conditions must be accepted. No paid data subscription is required. Connected vehicle services vary by model and require a complete working electrical system, cell reception, and GPS signal.

Reference the SiriusXM user guide for use and subscription information.

Playing SiriusXM Content

Touch ◀, II, ▶ or ▶▶ on the audio now playing screen to rewind, pause, play, or fast forward content.

Finding a Channel

From the SiriusXM now playing screen, touch ◀CH or CH▶ to open the SiriusXM tuner channel list.

To directly tune to a channel, touch the Tune icon to enter a channel number using the keypad.

Browsing Content

Touch  to view different browsing content, including:

Channels, Music, On Demand shows and episodes, Sports and News content.

SiriusXM Settings

From the SiriusXM now playing screen, touch the user settings icon to display the SiriusXM settings.

The settings include subscription information, help and support, and listener preferences.

Radio Reception

Unplug any electronic devices from the accessory power outlets if there is static interference.

FM

FM signals only reach 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.

SiriusXM Satellite Radio Service

If equipped, SiriusXM Satellite Radio Service provides digital radio reception. Tall buildings or hills can interfere with satellite radio signals, causing the sound to fade in and out. In addition, traveling or parking under heavy foliage, bridges, garages, or tunnels may cause loss of the SiriusXM signal for a period of time. Some cellular services may interfere with SiriusXM reception causing signal loss.

Mobile Devices

Making or receiving calls, charging, or just having a mobile device on may cause static interference. Unplug or turn off any mobile devices if this happens.

Multi-Band Antenna

The multi-band antennas are located in the front windshield and under the roof glass. To ensure clear reception keep the front windshield and roof glass clear of obstructions like snow and ice.

Audio Players

Avoiding Untrusted Media Devices

Avoid using untrusted mobile and USB media devices that may negatively affect system operation or performance.

USB Port

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 an electrical short if

(Continued)

Caution (Continued)

the unconnected end comes in contact with liquids or another power source such as the accessory power outlet.

The vehicle may be equipped with multiple USB ports. Music may be played from a connected USB device. Ports may also be used for charging.

USB Audio

To play music:

1. On the audio now playing screen, select Source> USB.
2. If there is no device connected, connect the device.
3. Supported media content will appear on the display.

Bluetooth Audio

A connected Bluetooth mobile device can play music.

Use the infotainment controls to adjust volume and select songs. Check the volume setting on the infotainment system or the connected mobile device if Bluetooth is selected and no volume is present.

To play music via Bluetooth:

1. On the audio now playing page, touch source and select the desired Bluetooth mobile device.
2. If there is no mobile device connected, follow the screen prompts to pair the device.
3. Supported media content will appear on the display.

Manage Bluetooth Devices

Managing Bluetooth devices allows you to add, delete, or select another paired mobile device. Only one Bluetooth mobile device can be active at a time.

Some mobile devices support sending Bluetooth music information to display on the radio. For more information about supported Bluetooth features, visit your brand website. See *Online Account and Customer Support* ⇨ 355 for details.

Media System

Passenger Infotainment

See *Radio Frequency Statement* ⇨ 361

If equipped, Passenger Infotainment allows passengers to play content on touch screen displays from the front and/or rear passenger seats.

Passenger Infotainment includes HDMI ports, Bluetooth headphone support, video support and use of the web browser, if equipped.

The Passenger Infotainment displays operate best in temperatures above -20 °C (-4 °F) and below 55 °C (131 °F).

System Operation

1. Tap anywhere on the equipped passenger screen to power on and view the home screen.
2. Touch ⏻ on the status bar to turn the screen off.

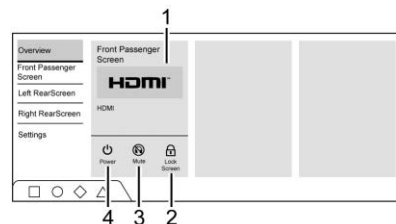
The screen can be turned on and off through the infotainment home screen entertainment hub or on the passenger front or rear home screen.

Playback of any media playing through that specific screen is paused when the screen is turned off.

The passenger screen can be locked via the entertainment hub on the infotainment home screen.

If the vehicle is in D (Drive), the Active Privacy Screen activates on the front passenger display to reduce distractions for the driver.

Source Selecting from the Entertainment Hub



1. Current passenger source screen.
2. Touch to lock the screen from touch inputs.
3. Touch to mute the screen audio.
4. Touch to power screen on or off.

Entertainment Hub Settings

Touch Settings on the Entertainment Hub Overview screen to access the Settings menu.

The menu may contain the following:

Remember Screen Power Status

Select to have screens automatically power on when the vehicle is started.

Voice-Over

If equipped, Passenger Infotainment has a Voice-Over feature to benefit the visually impaired.

When activated, Voice-Over provides audible feedback to the user about which area on the screen they are touching.

Touch Voice-Over to select which equipped screen will use Voice-Over. Voice-Over turns off every time the vehicle is turned off.

Factory Reset Passenger Screens

Select to reset the screen to factory settings.

Restart Passenger Screens

Select to restart passenger screens.

Account

Select to show the vehicle data plan.

Legal

Select to view the terms of use.

Quick Remote

A remote may be used to navigate the passenger display screen while the vehicle is parked or in motion. This remote will appear on a mobile device.

To connect the remote, connect to the vehicle's hot spot, follow on-screen prompts, and scan the QR code. Once connected, a trackpad will be available to navigate the passenger screen.

Additional remote features may also be available depending on the app selected from the home screen.

Passenger Screen Sources

- Applications (if equipped)
- Web Browser (if equipped)
- HDMI
- Vehicle Status

Status Bar

- : Touch to turn off the screen. Tap anywhere on the screen to turn the screen on again.
- : Touch to access Bluetooth Headphones volume and settings. See "Settings" later in this section.
- : Touch to go to the home screen.
- : Touch to go to the Settings menu.

Applications and Web Browser

Touch to stream media and/or view web content. An active service plan is required.

HDMI Input

An HDMI cable is required to connect an HDMI device to the Passenger Infotainment displays. The HDMI inputs allow connection to video games, disc players, cameras, smartphones, tablets, streaming devices, and A/V dongles that have HDMI (version 1.4a) outputs.

Vehicle Status

Touch to view information about the vehicle. See *Vehicle Status* ⇨ 115

Settings

Touch  to access the Settings menu.

The menu may contain the following:

Screen Brightness

Select Screen Brightness. Move the bar left or right to adjust the display brightness.

Customer Owned Bluetooth Headphones

To pair Bluetooth headphones:

1. Touch  on the passenger home screen.
2. Select Add New Headphones.
3. Make sure the Bluetooth headphones are in pairing mode. Once recognized by the system, the Bluetooth headphones are displayed on the list of Available Headphones.
4. Select the Bluetooth headphones from the list. Once connected, touch OK at the Pairing Successful pop-up.

Only one pair of headphones can be active per rear screen.

To disconnect headphones from the home screen, touch  > Options > Forget Headphones.

To switch back to cabin speakers, touch  > Switch to Cabin Speakers.

Voice-Over

If equipped, this feature benefits from the visually impaired.

When enabled, Voice-Over provides audible feedback about which area on the screen is selected, identifying active buttons, and providing information feedback of screen identification, current status, list content, metadata, and pop-up information. Double tap anywhere on the screen to hear the last single touched, audibly announced, selection.

Touch Voice-Over to select which equipped screen will use Voice-Over. Voice-Over turns off every time the vehicle is turned off.

Factory Reset Screen

Select to reset the screen to factory settings, log out of apps, erase paired headphones and clear the web browser cache.

Open Source License

Select to show the license information.

Legal

Select to show the legal information.

Consumer Ports

If equipped with a front passenger display, the Consumer Ports are located in the glove box. This includes an HDMI port and a USB-C charge port only.

The Consumer Ports for the rear passenger displays are in the rear of the center console.

The HDMI input allows an HDMI A/V cable to be connected from an auxiliary device such as a camcorder, video game system, or Apple device. A cable from Apple is required for Apple devices.

Touch the HDMI port that the external device was connected to on the home screen.

For HDMI devices that support USB charging, the USB port can be used as a power source.

Content from this HDMI port is not accessible through the infotainment display.

To use the HDMI input:

1. Connect the auxiliary device with an HDMI cable.
2. Power on both the auxiliary device and the passenger screen.

3. Select HDMI as the source. Touch  to share the screen with another passenger screen.

Troubleshooting

No power: The vehicle might not be on.

There is no sound from the headphones with the indicator light on: The vehicle might not be on.

- Make sure the headphones have sufficient charge. Plug the headphones to a USB-C port to charge.
- Check to see if headphones are paired to the screen.

If the steps above do not work, then unpair the headphones from the screen, turn the headphones off, turn them back on, and attempt to pair them. See “Customer Owned Bluetooth Headphones” previously in this section.

Video Distortion

Video distortion can occur when operating cellular phones, scanners, CB radios, Global Positioning Systems (GPS), two-way radios, mobile faxes, or walkie talkies.

It might be necessary to turn off the video player when operating one of these devices in or near the vehicle.

Navigation

Using the Navigation System

The Navigation software is provided by Google Maps. The information provided in this section is a general overview and is subject to change. For the latest functional information, see g.co/mapsincar.

Accept the Terms and Conditions to use.

Internet Connectivity

Google Maps relies on a subscription data plan for full functionality, including availability of offline maps. With an applicable connected services plan, Google Maps can be used offline when driving through connectivity dead zones by auto-downloading offline maps prior to going offline.

Profiles

Sign in to a Google Account for personalized service. Information available in the Google Account will be shown.

To log into a profile, see Accounts under *Settings* ⇨ 151.

Voice Assistant

If equipped, Google Maps can be controlled by voice commands, see Google Assistant under *Voice Recognition* ⇨ 145.

Language and Units

To change the language and units, see *Settings* ⇨ 151.

Mute Settings

During active route guidance, Google Maps can give audible voice directions, traffic alerts, or can be muted. In the Google Maps app, touch Settings, then Mute settings to access the options. Alternatively, audible voice directions and traffic alerts can be muted by touching the sound icon on the navigation map screen during active navigation.

Compass

The Google Maps orientation can be changed between the direction currently traveling, pointing north, and route overview. Touch the compass to switch between these options.

To recenter the map to the current location, touch the location icon.

Super Cruise

If equipped, Super Cruise highlights routes in a specific outline. See *Super Cruise* ⇨ 216.

Electric Vehicle (EV) Features with Google Maps

When vehicle data is shared with Google, some of the Maps features for EVs are as follows:

- Estimated battery charge level at arrival
- Estimated minimum charging time in order to reach destination

If the vehicle needs to be charged to reach a destination, charging stations may automatically be added to a route.

Maps

Auto-Downloaded Maps

Google Maps downloads maps automatically for use when not connected to the Internet. Offline maps make map data available to vehicle features regardless of connectivity.

To turn on auto-download:

1. Open Google Maps.
2. Touch the Settings icon.
3. Touch Privacy center, then select Offline maps.
4. Select Auto-download offline maps.
5. Check the Internet connection and wait for the download to finish.

Downloading Offline Maps

1. Open Google Maps.
2. Touch Settings, then Offline maps.
3. Touch the Select your own map square icon.
4. Adjust the map to cover the desired area to download.
5. Touch Download.

Navigation Symbols

The following are the most common symbols that may appear in Google Maps.



This 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 Favorites list. Hide the information by touching the pin one more time. It will automatically time out if no action is taken.

A second pin in the menu is the route overview. Touch this pin to show more details of the destination or to remove the destination.

Destination

Searching for a Destination

A destination can be searched using Google Assistant.

To search for a destination without Google Assistant:

1. Open Google Maps.
2. Touch the Search field.

3. Enter the destination.
4. Touch the Navigation icon.

Alternate Routes

Alternate routes are displayed as separate lines. While in either Turn-by-Turn navigation or on the route overview, touch the suggested alternate route.

Adding a Stop on Route by Voice

1. While in Turn-by-Turn navigation, touch the Search icon at the bottom.
2. Touch the Google Assistant mic icon and say the destination to search by voice.
3. Select the desired search result from the list.
4. Touch the Add stop icon.

Adding a Stop on Route by Category

1. While in Turn-by-Turn navigation, touch the Search icon at the bottom.
2. Select a category.
3. Select the desired search result from the list.
4. Touch the Add stop icon.

Adding a Home or Work Address

To edit a home or work address, an account must be logged in. See Profiles and Accounts under *Settings* ⇨ 151.

1. Open Google Maps.
2. Touch Settings, then touch Edit home or work.
3. Enter the address.

Search by Category

Destinations can be searched by category, such as restaurant or grocery store.

1. Open Google Maps.
2. Touch the search bar.
3. Touch Categories, then select a category.
4. Touch the desired location, then touch the Navigation icon.

Avoid Tolls, Highways, or Ferries

1. Open Google Maps.
2. Touch the Settings icon.
3. Select Route options.
4. Select the desired options and then touch X to close.

An Alternative Way for General Route Options

1. During active route guidance, touch Route Overview.
2. Select Route options.
3. Select the desired option and then touch X to close.

Traffic Layers

1. Open Google Maps.
2. Touch the Settings icon.
3. Touch Traffic to turn on or off.

Global Positioning System (GPS)

The current position of the vehicle is determined by using satellite signals and various vehicle signals.

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.

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* ⇨ 144.

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 traveling 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 traveling at high speed.
- The vehicle changes directions more than once, or the vehicle is turning on a turn table in a parking lot.
- The vehicle is entering and/or exiting a parking lot, garage, or a lot with a roof.
- The GPS signal is not received.
- A roof carrier is installed on the vehicle.
- Tire traction devices are installed on the vehicle.
- The tires are replaced or worn.
- The tire pressure for the tires 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

Incorrect 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.
- 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 Maps.

To recalibrate the vehicle's position on the map, drive to a safe location with a clear view of the sky and free from large obstructions. Place the vehicle in (P) Park with the vehicle on for two to five minutes until the vehicle position updates.

Voice Recognition

If equipped, the vehicle's built in Google Assistant allows for hands-free use of media and messaging, navigation and climate control functionality in the vehicle. To activate, quickly press and release  on the steering wheel, touch Google Assistant on the infotainment app screen, or use the wake up words "Hey Google" or "OK Google." Google Assistant must be set as the default assistant for steering wheel and wake word activation to work.

However, not all features within these areas are supported by voice commands and requires the user to have a valid data subscription plan or be able to connect to an external Wi-Fi in order to use the Google Assistant features.

Using Voice Recognition

Voice recognition becomes available once the system is initialized. This begins when the vehicle is turned on. Initialization may take a few moments.

1. Quickly press and release  on the steering wheel controls, touch Google Assistant on the infotainment app screen, or use the wake up words "Hey Google" or "OK Google" to activate voice recognition. Google Assistant must be set as the Default Assistant for the  and the wake word options to work.
2. Clearly speak one of the commands described later in this section.

Canceling Google Assistant

- Press  on the steering wheel controls to cancel the Google Assistant request.

Helpful Hints for Speaking Commands

Voice recognition identifies commands that are naturally stated in sentence form, or direct commands that state the application and the task.

For best results:

- 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 "Play" followed by the radio station number.

Direct commands are more clearly understood by the system. An example of a direct command is "Call <number>."

If a cell phone number was saved with a name and a place, the direct command should include both. For example "Call <name> at work."

Voice Recognition for the Radio

When voice is started, the voice recognition commands for AM, FM, SiriusXM (if equipped), and media apps (if supported) are available.

"Play <AM frequency> AM": Tune to the radio station frequency identified in the command (like "nine fifty").

"Play <FM frequency> FM": Tune to the radio station frequency identified in the command (like "one oh one point one").

"Play channel <SiriusXM channel number> on SiriusXM": Tune to the SiriusXM radio station channel number identified in the command. This command may require an online connection.

“Play <SiriusXM channel name> on Sirius XM”: Tune to the SiriusXM radio station channel name identified in the command. This command may require an online connection.

“Play <Media> on <Audio Source>”: Play media like a song or channel using a specified audio source such as Pandora or Spotify. This command may require an online connection.

Voice Recognition for the Phone

Make sure the phone is paired using Bluetooth to use the phone related voice commands.

“Call <contact name>”: Initiate a call to a stored contact. The command may include location if the contact has location numbers stored.

“Call < phone number>”: Initiate a call to a phone number of seven digits or 10 digits.

“Send a message to <contact name>”: Send a message to a stored contact.

Voice Recognition for Navigation

Navigation commands can be used to start, cancel route, or add way points/POI.

“Navigate to <destination address>”: Initiate navigation to the address in the command.

“Find a <Place of Interest>”: Find and initiate navigation to a POI in the command.

“Add <destination> on my way”: Adds a way-point to the current route.

“Take me home”: Starts navigation to Home location set in Google maps.

Onboard Vehicle Commands

These commands can be used to adjust vehicle temperature, control window defrosters, etc.

“Turn on the A/C”: Turns on the air conditioning.

“Set temperature to <desired number> degrees”: Set to a specific temperature inside your vehicle.

Phone Assistant Voice Recognition

While a mobile phone is connected via Bluetooth, press and hold  on the steering wheel controls until you hear a response from the phone's voice assistant, which will launch the Voice Assistant on the connected mobile phone (e.g., Google Assistant, Siri, etc.).

Phone

Bluetooth (Overview)

The Bluetooth-capable system can interact with many mobile devices to:

- Place and receive calls in a hands-free mode.
- Share the device's address book or contact list with the vehicle.
- Stream audio (music, podcasts).
- Notify receipt and reply to text messages depending on phone type.

To minimize driver distraction, before driving, and with the vehicle parked:

- Become familiar with the features of the mobile device. Organize the phone book and contact lists clearly and delete duplicate or rarely used entries.
- 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 vehicle is on . 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 *Online Account and Customer Support* ⇨ 355 for more information about compatible mobile devices.

Controls

Use the controls on the infotainment display and the steering wheel to operate the Bluetooth system.

Steering Wheel Controls

 : Press and hold until you hear a response from the phone's voice assistant to start voice recognition on your mobile phone that is connected through Bluetooth. If there is an incoming call, then a press and release will answer the call.

 : 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* ⇨ 133.

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 controls for the infotainment system. 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

- Select the Phone icon on the infotainment app screen.
- If no mobile device has been paired, a message on the infotainment display will show the Manage Phones option. Select this option and the Phones screen will display. See "Pairing a Phone" later in this section.
- A mobile device with music capability can be paired to the vehicle as a phone 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 device changes or the phone is deleted from the system.
- If a previously paired mobile device is not connecting to the Bluetooth system, try forgetting the mobile device on the vehicle's infotainment system and also

forgetting the vehicle in the Bluetooth settings of the mobile device. Then repeat the pairing process.

- If multiple paired mobile devices are within range of the system, the system connects to the paired mobile device that is set to First to Connect. If there is no mobile device set to First to Connect, it will connect to the mobile device which was used last. To connect to a different paired mobile device, see “Connecting to a Different Phone” later in this section.

Pairing a Phone

1. Make sure Bluetooth has been enabled on the mobile device before starting the pairing process.
2. Select the Phone icon on the infotainment app screen.
3. If a mobile device has been previously added, select Settings > Connections > Phones to reach the device manager. From the device manager, select “Add Phone.” If a phone has been previously added, the “Add Phone” card will just be a “+” button.
4. Select Manage Phones to display the Phones screen.

5. Select Add Phone.

If a mobile device has been previously added or disconnected, the “Add Phone” card will just be a “+” card.

6. Select the phone name on the infotainment screen of the vehicle name on the phone.
7. The code on both the mobile device and infotainment display need to be acknowledged for pairing to be successful.
8. Follow the instructions on the mobile device to confirm the six-digit code showing on the infotainment display and select Pair. The codes on the mobile device and infotainment display need to be acknowledged for pairing to be successful.
9. If a previously paired mobile device is not connecting to the Bluetooth system, try forgetting the mobile device on the vehicle’s infotainment system and also forgetting the vehicle in the Bluetooth settings of the mobile device.
10. If the vehicle name does not appear on your mobile device under the “other devices” or “available devices” menu, there are a few ways to start the pairing process over:

- Turn Bluetooth off then back on, on your mobile device.
- Go back to the beginning of the Phone menus on the infotainment display and restart the pairing process.
- Turn the mobile device off and then back on.
- Reset the mobile device, but this step should be done as a last effort.

11. If the mobile device prompts to accept connection or allow phone book download, select Always Accept and Allow. The phone book may not be available if not accepted.
12. To pair additional mobile devices, select Settings > Connections > Phones.

First to Connect Paired Phones

If multiple paired mobile devices are within range of the system, the system connects to the paired phone that is set as First to Connect. To enable a paired mobile device as the First to Connect phone:

1. Make sure the mobile device is turned on.
2. Select the Settings icon on the infotainment app screen.

3. Select Connections.
4. Select Phone.
5. Select Options under the connected phone.
6. Select First to Connect from the phone's settings menu and set First to Connect to On.

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 phones and mobile devices.

Accessing the Device List Screen

There are two ways to access the device list screen:

Using the Settings Icon

1. Select the Settings icon on the infotainment app screen or the Settings icon on the application tray near the left of the display.
2. Select Connections.
3. Select Phones.

Using the Phone Icon

1. Select the Phone icon on the infotainment app screen or the Phone icon on the application tray near the left of the display.

2. Select  on the Phones screen.
3. Select Connected Phone.

Disconnecting a Connected Phone

To disconnect a phone:

1. Open the Device List Screen. See "Accessing the Device List Screen" previously in this section.
2. Select Option on the phone card to show the phone's or mobile device's settings.
3. Select the prompt to disconnect the phone.

Deleting a Paired Phone

To delete a paired phone:

1. Open the Device List Screen. See "Accessing the Device List Screen" previously in this section.
2. Select Option on the phone card to show the phone's or mobile device's settings.
3. Select Forget Phone.

Connecting to a Different Phone

To connect to a different phone, the new phone must be in the vehicle and paired to the Bluetooth system.

To connect to a different phone:

1. Open the Device List Screen. See "Accessing the Device List Screen" previously in this section.
2. Select the new phone you want to connect to from the list of available phones. See "First to Connect Paired Phones" previously in this section.

Switching to Handset or Hands-Free Mode

To switch between handset or hands-free mode:

- While the active call is hands-free, select the Audio Output option, then select Phone 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, select the Audio Output option, then select Car Speakers to switch to the hands-free mode.

Making a Call Using Contacts

Calls can be made through the Bluetooth system using personal phone contact information for all phones that support the Phone Book feature. Become familiar with the phone settings and operation and that the

phone is set to allow the sharing of contacts over Bluetooth with the vehicle. Verify the phone supports this feature and that the phone is set to allow the sharing of contacts over Bluetooth with the vehicle.

The Contacts menu accesses the phone book stored in the phone.

To make a call using the Contacts menu:

1. Select the Phone icon on the infotainment app screen or on the application tray near the left of the display.
2. Select Contacts.

If a contact has more than one assigned number, a window will appear with the option to choose a phone number from a list. Select the preferred number to call and then confirm if the selection is “Just once” or “Always.” By choosing “Always” the selection made will remain the default number assigned to this contact for as long as the phone is connected to the vehicle.

3. There are two methods to search for contacts:

- Search bar – Select the search icon on the top right of the Phones window and type the name or number of the contact on the keyboard. Search results will be displayed corresponding to the user input. Select the name to call.
- Scroll – Select the list and scroll, or use the scrollbar on the left side of the Phones window. Select the name to call.

Making a Call Using the Recents Menu

The Recents menu accesses the recents call list from your phone.

To make a call using the Recents menu:

1. Select the Phone icon on the infotainment app screen or on the application tray near the left of the display.
2. Select Recents.
3. There are two methods for placing a call:
 - Select the name or phone number to call.

- Select the contact card to the right of the name or phone number. Within the contact card select the phone number to call.

Making a Call Using the Keypad

To make a call by dialing the numbers:

1. Select the Phone icon on the infotainment app screen or on the application tray near the left of the display.
2. Select Keypad and enter a phone number.
3. There are two methods for placing a call:
 - Select the phone icon in the keypad.
 - Select the contact name to the right of the keypad. If the phone number is stored with a contact, the contact will appear as the number is typed into the keypad.

Searching Contacts Using the Keypad

To search for contacts using the keypad:

1. Select the Phone icon on the infotainment app screen.
2. Select Keypad and enter partial phone numbers or contact names using the digits on the keypad to search.

Results appear on the right side of the display. Select 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

To Accept a call, select Answer on the infotainment display.

Declining a Call

To decline a call, press  on the steering wheel controls or Decline on the infotainment display.

Call Waiting, Merging, and Conferencing

Call waiting, merging, and conferencing must be supported on the Bluetooth mobile device and enabled by the wireless service carrier to work.

When an incoming call is received during an active call, press  on the steering wheel controls or “Answer” from the infotainment display. This will answer the incoming call and place the active call on hold.

To switch between the calls, select the Switch icon on the infotainment display.

To merge the calls, select “Merge” within the Active Call Screen on the infotainment display. This creates a three-way conference. If another call is received during a three-way conference, it can be answered, but it will place the conference on hold.

Making a Call Using Favorites

1. Select the Phone icon on the infotainment app screen or on the application tray near the left of the display.
2. Select Favorites.
 - The vehicle can sync up to five favorites from the phone.
 - The vehicle can also store up to five additional contacts as vehicle favorites. These will be stored for as long as the phone is paired and connected. If the phone is unpaired/forgotten by the vehicle, the vehicle favorites will be deleted.

To add a favorite for the vehicle:

1. Select “Add Favorite.”
2. Select a contact from the Phone Book.

3. Select the star icon next to the phone number to add as a favorite.

Ending a Call

- Press  on the steering wheel controls.
- Select  on the infotainment display, next to a call, to end only that call.

Dual Tone Multi-Frequency 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.

Settings

To access the Settings menus:

1. Touch Settings on the infotainment home screen.
2. Touch the desired feature setting.
3. Touch the options on the infotainment display to change a setting.
4. Touch  to go back.

The Settings menu may contain the following:

Connections

The menu may contain the following:

Phones

Allows connecting to a different cell phone or mobile device source, disconnecting a cell phone or media device, or deleting a cell phone or media device.

Wi-Fi Networks

Shows connected and available Wi-Fi networks.

Wi-Fi Hotspot

Allows adjustment of different Wi-Fi features.

Vehicle-to-Phone Sharing

Allows GM apps to use vehicle data on the listed phones shown.

Trusted Device

Allows for setting a phone as your trusted device to establish a secure communication channel between your phone and vehicle that enables convenient features like instant profile unlocking and account sign in. When your trusted device is nearby, the system automatically recognizes it through a unique Bluetooth connection. Requires MyBrand app.

Vehicle

The menu may contain the following:

Audio Settings

Allows adjustment of different audio settings.

Driver Mode Customization

See *Driver Mode Control* ⇨ 188.

Teen Driver

See *Teen Driver* ⇨ 154.

Doors and Locks

Allows adjustment of different door lock settings.

Valet Mode

Allows adjustment of the valet mode settings.

Rear Seat Reminder

Allows for an audible alert and a message when the rear door has been opened before or during operation of the vehicle.

Occupant Left Behind Reminder

Allows adjustment of occupant left behind reminder settings.

Buckle to Drive

See *Buckle To Drive* ⇨ 46.

Super Cruise Lane Change

See *Super Cruise* ⇨ 216.

Climate and Air Quality

Allows adjustment of different climate settings.

Collision/Detection Systems

Allows adjustment of different driver assistance system settings.

Comfort and Convenience

Allows adjustment of different comfort and convenience settings.

Driver Attention Assist

Allows adjustment of different sensitivity levels for drowsiness attention settings.

Lighting

Allows adjustment of different lighting settings.

Remote Lock, Unlock, and Start

Allows adjustment of different remote lock settings.

Phone Call Audio

Allows adjustment of phone call audio settings.

Seating Position

Allows adjustment of different seating position settings.

Suspension

Allows adjustment of different suspension settings.

Transport Mode

Allows adjustment of transport mode settings.

Apps and Permissions

Shows a list of installed apps and the permissions used.

Date/Time

Allows setting of the clock.

Display

Allows adjustment of the infotainment display.

Sounds

Allows adjustment of the infotainment system sounds.

Profiles and Accounts

Modifies the infotainment system's profiles and provides access to the accounts assigned to the currently active profile. Profiles can be setup and/or modified as Admin profiles or Guest profiles.

Privacy

Allows adjustment of the infotainment privacy settings.

Accessibility

Shows the accessibility information on the infotainment system.

Storage

Shows the storage info on the infotainment system.

Security

Allows adjustment of the infotainment security settings.

System

The menu may contain the following:

Language

This will set the display language used on the infotainment display.

Keyboard and Speech

Touch to change keyboard and speech settings.

Units

Touch to change units settings.

Reset Options

Touch to change reset settings. The submenu "Erase Infotainment Data" is only accessible if the profile logged into the vehicle is configured as an "Admin."

TTY Mode

Touch to turn off or on.

About

Touch to view the infotainment system software information.

Legal Information

Touch to view legal and license information.

Updates

Allows adjustment of the vehicle update settings.

Google

Allows adjustment of the Google settings.

Teen Driver

If equipped, this allows multiple keys to be registered for beginner drivers to encourage safe driving habits. When the vehicle is started with a Teen Driver key, it will automatically activate certain safety systems, allow setting of some features, and limit the use of others. The Report Card will record vehicle data about driving behavior that can be viewed later. When the vehicle is started with a Teen Driver key, the Driver Information Center displays a message that Teen Driver is active.

To access:

1. From the infotainment app screen, select Settings > Vehicle > Teen Driver.
2. Create a PIN by choosing a four-digit PIN. Re-enter the PIN to confirm. To change the PIN, touch Change PIN.

The PIN is required to:

- Set up/add or remove keys.
- Change Teen Driver settings.
- Change or clear the Teen Driver PIN.
- Access or delete Report Card data.

Set up/Add keys to activate Teen Driver and assign restrictions to the key:

Any vehicle key can be registered, up to a maximum of eight keys. Label the Teen Driver key to tell it apart from the other keys.

For a pushbutton start system:

1. Start the vehicle.
2. The vehicle must be in P (Park).
3. From the Settings menu, touch Vehicle and then Teen Driver.
4. Enter the PIN.
5. Place the remote key you wish to register in the transmitter pocket. The key does not need to be the one that started the vehicle.
6. From the Teen Driver menu, touch Setup Keys or Add/Remove Teen Driver Keys.

- If the remote key has not previously been registered, the option to add the key displays. Touch Add and a confirmation message displays. Teen Driver restrictions will be applied whenever this remote key is used to operate the vehicle.
- If the remote key has already been registered, the option to remove the key displays. If Remove is touched, the remote key is no longer registered. A confirmation message displays, and Teen Driver restrictions will not be applied if this remote key is used to operate the vehicle.

In vehicles with a pushbutton start system, if a Teen Driver and a non-Teen Driver key are both present at start up, the vehicle will recognize the non-Teen Driver key to start the vehicle. The Teen Driver settings will not be active.

Manage Settings or Teen Driver Settings

Depending on the options of your vehicle, the following menu items may be displayed:

Buckle to Drive : When turned ON, Buckle to Drive prevents the driver from shifting out of P (Park) for a period of time after the

brake pedal is pressed if the driver, or on some vehicles the detected passenger, has not buckled their seat belt. On some vehicles, Buckle to Drive is always ON when Teen Driver is active and is not configurable.

Audio Volume Limit : Allows a maximum audio volume to be set. Turn the audio volume limit on or off. Use the arrows to choose the maximum allowable level for the audio volume. On some infotainment systems, touch Set Audio Volume Limit to choose the maximum allowable audio volume level.

Set Audio Volume Limit : Use the arrows to choose the maximum allowable level for the audio volume.

Teen Driver Speed Limiter : Limits the maximum speed of the vehicle. When the speed limiter is turned on and the vehicle is started with a Teen Driver key, the Driver Information Center displays a message that the top speed is limited.

On certain vehicles, when the Speed Limiter is turned ON, the vehicle's maximum acceleration will be limited. The Driver Information Center will display a message that the acceleration is limited.

Teen Driver Speed Warning : Displays a warning in the Driver Information Center when exceeding a selectable speed. Turn the speed warning on or off and choose the desired speed warning level. The speed warning does not limit the speed of the vehicle. On some infotainment systems, touch Set Teen Driver Speed Warning to set the warning speed.

Set Teen Driver Speed Warning : Choose the desired speed warning level. The speed warning does not limit the speed of the vehicle.

When Teen Driver is Active:

- If equipped, the radio will mute when the driver seat belt, and in some vehicles the front passenger seat belt, is not buckled. The audio from any device paired to the vehicle will also be muted.
- An object placed on the front passenger seat, such as a briefcase, handbag, grocery bag, laptop, or other electronic device, could cause the passenger sensing system to falsely sense an unbuckled front passenger and mute the radio. If this happens, remove the object from the seat.
- Some safety systems, such as Automatic Emergency Braking, if equipped, cannot be turned off.

- The gap setting for Adaptive Cruise Control and alert timing for Forward Collision Alert, if equipped, cannot be changed.
- When trying to change a safety feature that is not configurable in Teen Driver, the feature may be grayed out or removed from the infotainment menu, or the Driver Information Center will display a message indicating that Teen Driver is active and the action is not available.
- Super Cruise, if equipped, is not available.
- Do not tow a trailer if equipped with Automatic Emergency Braking.
- Daytime Running Lights or headlights are always on when the vehicle is shifted out of P (Park). Even if the headlight control is set to Off or , the Automatic Headlight System is engaged and ensures that either the Daytime Running Lights or headlights come on based on outside light level.

Report Card

The vehicle owner must secure the driver's consent to record certain vehicle data when the vehicle is driven with a registered Teen Driver

key. There is one Report Card per vehicle. Data is only recorded when a registered Teen Driver key is used to operate the vehicle.

The Report Card data is collected from the time Teen Driver is activated or the last time the Report Card was reset. The following items may be recorded:

- Distance Driven – the total distance driven.
- Maximum Speed – the maximum vehicle speed detected.
- Overspeed Warnings – the number of times the speed warning setting was exceeded.
- Wide Open Throttle – the number of times the accelerator pedal was pressed nearly all the way down.
- Forward Collision Alerts (if equipped) – the number of times the driver was notified when approaching a vehicle ahead too quickly and at potential risk for a crash.
- Forward Automatic Braking, also called Automatic Emergency Braking (if equipped) – the number of times the vehicle detected that a forward collision was imminent and applied the brakes.

- Reverse Automatic Braking (if equipped) – the number of times the vehicle detected that a rearward collision was imminent and applied the brakes.
- Traction Control – the number of times the Traction Control System activated to reduce wheel spin or loss of traction.
- Stability Control – the number of events which required the use of electronic stability control.
- Antilock Braking System Active – The number of Antilock Brake System activations.
- Tailgating Alerts (if equipped) – the number of times the driver was alerted for following a vehicle ahead too closely.

Report Card Data

Cumulative Data is saved for all trips until the Report Card is reset or until the maximum count is exceeded. If the maximum count is exceeded for a Report Card line item, that item will no longer be updated in the Report Card until it is reset. Each item will report a maximum of 1,000 counts. The distance driven will report a maximum of 64,374 km (40,000 mi).

To delete Report Card data, do one of the following:

- From the Report Card display, touch Reset.
- Touch Clear PIN and All Teen Driver Keys from the Teen Driver menu. This will also unregister any Teen Driver keys and delete the PIN.

Forgotten PIN

See your dealer to reset the PIN.

Trademarks and License Agreements

FCC Information

See *Radio Frequency Statement* ⇨ 361.



Made for
iPhone

"Made for iPhone" means that an electronic accessory has been designed to connect specifically to iPhone, and has been certified by the developer to meet Apple performance

standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPhone may affect wireless performance. iPhone is a trademark of Apple Inc., registered in the U.S. and other countries.



Trial length and service availability may vary by model, model year, or trim. Service will automatically stop at the end of your trial subscription period unless you decide to continue service. If you do not wish to enjoy your trial, you can cancel by calling the number below. All SiriusXM services require a subscription, each sold separately by SiriusXM after the trial period. Service subject to the applicable SiriusXM Customer Agreement and Privacy Policy, visit www.siriusxm.com (USA) or www.siriusxm.ca (Canada) to see complete terms and how to cancel which includes calling 1-866-635-2349 (USA) or 1-888-539-7474 (Canada). Some

services and features are subject to device capabilities and location availability. Content varies by SiriusXM subscription package. All fees, content, and features are subject to change.

SiriusXM with 360L: Some features, including streaming content and listening recommendations, require an active OnStar Connected Access plan and may vary by vehicle model. Content varies by SiriusXM subscription plan. GM connected vehicle services vary by vehicle model and require active service plan, working electrical system, cell reception, and GPS signal. See onstar.com for details and limitations.

SiriusXM, Pandora, Stitcher, and all related logos are trademarks of SiriusXM Radio Inc. and its respective subsidiaries.

SiriusXM satellite service is only available in the 48 contiguous United States (and Puerto Rico with limited availability) and Canada.

In Canada: Some deterioration of service may occur in extreme northern latitudes. This is beyond the control of SiriusXM.

Explicit Language Notice: Channels with frequent explicit language are indicated with an "XL" preceding the channel name. Family-friendly packages are available by contacting SiriusXM:

- USA Customers — See www.siriusxm.com or call 1-888-601-6296.
- Canada Customers — See www.siriusxm.ca or call 1-877-438-9677.

It is prohibited to copy, decompile, disassemble, reverse engineer, hack, manipulate, or otherwise make available any technology or software incorporated in receivers compatible with the SiriusXM Satellite Radio System or that support the SiriusXM website, the Online Service or any of its content.

General Requirements:

1. A License Agreement from SiriusXM is required for any product that incorporates SiriusXM Technology and/or for use of any of the SiriusXM marks to be manufactured, distributed, or marketed in the SiriusXM Service Area.

2. For products to be distributed, marketed, and/or sold in Canada, a separate agreement is required with Sirius XM Canada Inc.



TouchSense Technology and TouchSense System 1000 Series Licensed from Immersion Corporation. TouchSense System 1000 protected under one or more of the U.S. Patents at the following address www.immersion.com/patent-marking.html and other patents pending.

Bluetooth

The Bluetooth word mark and logos are owned by the Bluetooth SIG, Inc. and any use of such marks by General Motors is under license. Other trademarks and trade names are those of their respective owners.

Java

Java is a registered trademark of Oracle and/or its affiliates.

MPEG4-AVC (H.264)

THIS PRODUCT IS LICENSED UNDER THE AVC PATENT PORTFOLIO LICENSE FOR THE PERSONAL AND NON-COMMERCIAL USE OF A CONSUMER TO (i) ENCODE VIDEO IN COMPLIANCE WITH THE AVC STANDARD ("AVC VIDEO") AND/OR (ii) DECODE AVC VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL AND NON-COMMERCIAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED TO PROVIDE AVC VIDEO. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION MAY BE OBTAINED FROM MPEG LA, L.L.C. SEE [HTTPS://WWW.MPEGLA.COM](https://www.mpegla.com).

MPEG4-Visual

USE OF THIS PRODUCT IN ANY MANNER THAT COMPLIES WITH THE MPEG-4 VISUAL STANDARD IS PROHIBITED, EXCEPT FOR USE BY A CONSUMER ENGAGING IN PERSONAL AND NON-COMMERCIAL ACTIVITIES.

MP3

MPEG Layer-3 audio coding technology licensed from Fraunhofer IIS and Thomson.

WMV/WMA

This product includes technology owned by Microsoft Corporation and under a license from Microsoft Licensing, GP. Use or distribution of such technology outside of this product is prohibited without a license from Microsoft Corporation and/or Microsoft Licensing, GP as applicable.

Climate Controls

Climate Control Systems

Climate Control Systems	159
Rear Climate Control System	162

Air Vents

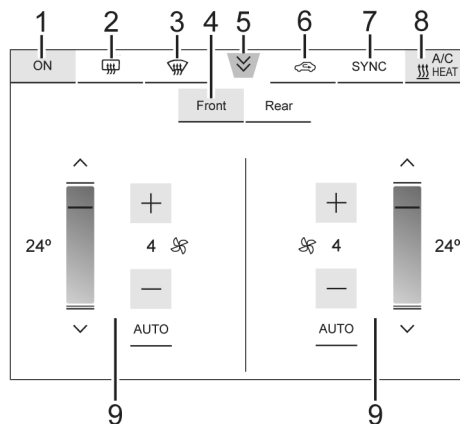
Air Vents	163

Maintenance

Passenger Compartment Air Filter	164
Service	164

Climate Control Systems

The fan speed, air delivery, and recirculation to heat or cool the vehicle can be controlled from the front console. Choose from available options:



1. ON/OFF
2. Rear Window Defogger
3. Max Defrost
4. Front/Rear Climate Zone Selection
5. Climate Zone Selection Launch Button
6. Recirculation

7. SYNC (Synchronized Temperature)
8. A/C (Air Conditioning)/HEAT Selection
9. Driver and Passenger Temperature, Fan, and AUTO Control

Automatic Operation

The system automatically controls the fan speed, air delivery, and recirculation to heat or cool the vehicle to the desired temperature.

When AUTO is selected, the system is in full automatic operation. A/C or HEAT will be underlined to indicate the system is automatically cooling or heating. If the air delivery mode or fan setting is manually adjusted, the auto indicator turns off and the display shows the selected settings. Auto operation can be turned off individually for climate settings.

For automatic operation:

1. Press AUTO.
2. Set the temperature. Allow the system time to stabilize. Then adjust the temperature as needed for best comfort.

To improve efficiency and to warm or cool the vehicle faster, recirculation is automatically selected. The recirculation light will not come on. Press  to select recirculation; press it again to select outside air.

English units can be changed to metric units through the instrument cluster. Select Settings > Time, Date, and Unit > US or Metric.

ON/OFF: Press to turn the fan on or off. When OFF is selected, the system stops air from flowing into the cabin. If ON is selected or any other buttons are pressed, the climate control system will turn on and operate at the current setting.

 /  : The temperature can be adjusted separately for the driver and the passenger. Press to decrease or increase the temperature. Press and hold to rapidly increase or decrease the temperature. Press SYNC reset the passenger temperature to the driver temperature.

Rear: Touch to open the rear climate control screen. The rear climate control settings can now be adjusted from the front passenger area.

Manual Operation

   : Press to decrease or increase the fan speed. Press and hold the fan controls to adjust speed more quickly. The fan speed setting displays. Any adjustment of the fan speed cancels automatic fan control and the fan can be controlled manually. Press AUTO to return to automatic operation.

To turn off the fan and climate control system, press OFF on the center stack climate controls. The airflow will be blocked from entering in all air delivery modes, except defrost.

The maximum automatic fan speed can be set to low, medium, or high. To adjust Auto Fan Speed, select Settings > Climate and Air Quality > Auto Fan Speed.

Vents and Air Distribution: See *Air Vents* ⇨ 163.

A/C: Press to turn the air conditioning on or off. An indicator light comes on to show that the air conditioning is enabled. If the fan is turned off, the air conditioner will not run.

Press AUTO to return to automatic operation and the air conditioner runs as needed.

If fogging reoccurs while in vent or in a combination mode with mild temperature throughout the vehicle, turn on the air conditioner to reduce windshield fogging.

 **HEAT:** Press to turn the heater on or off. The air conditioning compressor is used to provide heat to the cabin and may run when heat is enabled.

 : Clears the windshield of fog or frost more quickly. Air is directed to the windshield. Press  to turn on or off. Changing the air delivery mode also turns the defrost off.

 : Press to alternate between recirculating air inside the vehicle or pulling in outside air. The indicator light on the button is lit when recirculation mode is active. This helps to quickly cool the air inside the vehicle and reduce the entry of outside air and odors.

Pressing this button cancels automatic recirculation. Press AUTO to return to automatic operation; recirculation runs automatically as needed.

Manual recirculation mode is not available when Defrost is active.

The climate control system uses 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, turn on the heater and air conditioner, increase fan and temperature, and direct more air to the windshield. When the climate control system does not detect possible window fogging, it returns to normal operation. To turn Auto Defog off or on, select Settings > Climate and Air Quality > Auto Defog

> Select ON or OFF. If Auto Defog is turned off, or fogging does not clear quickly enough, select  to more quickly clear the windshield.

ECO Climate

When ECO Climate is on, airflow to unoccupied seats will be reduced to improve energy efficiency of the vehicle. To turn ECO Climate on or off:

1. On the driver dashboard display, press Settings > Vehicle > Climate and Air Quality > ECO Climate. Your selection will be set until it is changed.
2. On the center console display, press the ECO Climate icon, or change either the temperature or airflow vent settings. This will turn off ECO Climate until the next drive cycle. Changing the setting in this manner will affect only the section selected.

When ECO Climate is on, cabin temperature changes will be slowed depending on outside weather conditions. Turn off ECO Climate to reach desired cabin temperature more quickly.

Rear Window Defogger

Caution

Do not try to clear frost or other material from the inside of the front windshield and rear window with a razor blade or anything else that is sharp. This may damage the rear window defogger grid and affect the radio's ability to pick up stations clearly. The repairs would not be covered by the vehicle warranty.

 : Press to turn the rear window defogger on or off. An indicator on the button comes on to show that the rear window defogger is on.

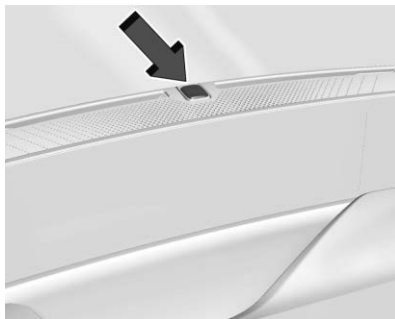
The rear window defogger only works when the vehicle is on.

The rear window defogger can be set to automatic operation. When Auto Rear Defog is selected, the rear window defogger turns on automatically when the vehicle is first started in cold weather and turns off when the vehicle is warmed. To turn Auto Rear Defog off or on, select Settings > Climate and Air Quality > Auto Rear Defog > Select ON or OFF.

The heated outside rearview mirrors turn on when the rear window defogger button is on and help to clear fog or frost from the surface of the mirrors.

If the vehicle is equipped with heated wiper parking, the feature will turn on when the rear window defogger button is on and help to clear frost from the wipers. See *Windshield Wiper/Washer* ⇨ 91.

Sensor



The solar sensor, on top of the instrument panel near the windshield, monitors the solar heat.

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.

Remote Start Climate Control Operation: The climate control system may run when the vehicle is started remotely. The system uses the driver's previous settings to heat or cool the inside of the vehicle. The rear defog may come on during remote start based on cold ambient conditions. The rear defog indicator light does not come on during a remote start. If equipped with heated or cooled seats, they may come on during a remote start. See *Remote Start* ⇨ 12 and *Heated and Cooled Front Seats* ⇨ 43.

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.

Rear Climate Control System

The rear climate controls can be adjusted from the rear console. Choose from the available options:

ON/OFF: Touch ON/OFF on the display to turn the rear climate control on or off.

▲ / ▼ : The temperature can be adjusted separately for the left and right side seating areas. Press to decrease or increase the temperature. Press and hold to rapidly increase or decrease the temperature.

▼ ⚙ ▲ : Press to decrease or increase the fan speed. Press and hold the fan controls to adjust speed more quickly. Any adjustment of the fan speed cancels automatic fan control and the fan can be controlled manually. Press AUTO to return to automatic operation.

AUTO: Press to turn on or off. The air delivery is controlled automatically. Adjusting fan speed cancels full automatic operation.

SYNC: Touch to match the rear climate control settings to the front climate control driver settings. The SYNC button is highlighted.

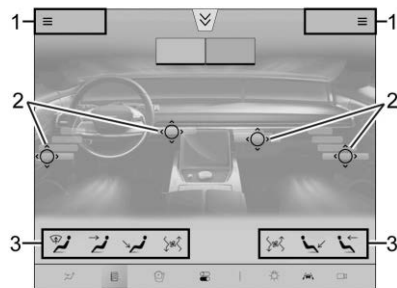
The rear climate controls can also be adjusted on the front climate control display. See *Climate Control Systems* ⇨ 159.

ECO Climate

When ECO Climate is on, airflow to unoccupied rear seats is reduced for energy efficiency. To turn ECO Climate on or off, select Settings > Vehicle > Climate and Air Quality > ECO Climate.

Air Vents

To adjust the vents and air distribution, touch the vents and air distribution launch button. See *Climate Control Systems* ⇨ 159.



Air Distribution Control – Vents Tab

1. Driver and Passenger Settings
2. Vent Aiming Controls

3. Air Delivery Mode Control

Touch and drag the aiming control for each vent to adjust the airflow direction

Touch REAR to open the rear vent control.

Air Delivery Mode Control: Touch the desired air delivery mode to change the direction of the airflow. The selected air delivery mode button is lit. Pressing any of the air delivery buttons cancels automatic air delivery control and the direction of the airflow can be controlled manually. Press AUTO to return to automatic operation.

To change the current mode, select one or more of the following:

: Air is directed to the windshield, outboard instrument panel vents, and side window vents.

: Air is directed to the instrument panel vents.

: Air is directed to the floor vents.

: Enables or disables automatic vent movement.

Air Distribution Control – Settings

Touch to view additional settings.

- Increase or decrease the amount of airflow to each vent by touching + or -.
- Touch Focus to adjust the direction of the airflow directly at the occupant.
- Touch Fade to adjust the direction of the airflow away from the occupant.

Air Distribution Control – Presets

The current adjustment can be saved by touching and holding 1, 2, or 3.

Operation Tips

- Clear away any ice, snow, or leaves from air inlets at the base of the windshield that could block the flow of air into the vehicle.
- Clear snow off the hood 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 hood 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 will restrict 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. Replace the filter as part of routine scheduled maintenance.

See your dealer for filter replacement.

Service

All vehicles have a label underhood 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.

Driving and Operating

Driving Information

Driving for Better Energy Efficiency	166
Distracted Driving	166
Defensive Driving	167
Impaired Driving	167
Control of a Vehicle	167
Braking	168
Steering	168
Off-Road Recovery	169
Loss of Control	169
Driving on Wet Roads	169
Hill and Mountain Roads	170
Winter Driving	171
If the Vehicle Is Stuck	172
Vehicle Load Limits	172

Starting and Operating

New Vehicle Break-In	176
Power Modes	176
Spoiler	178

Electric Drive Unit

Electric Drive Unit	178
One-Pedal Driving	181

Drive Systems

All-Wheel Drive	182

Brakes

Electric Brake Boost	182
Antilock Brake System (ABS)	183
Electric Parking Brake	183
Brake Assist	184
Hill Start Assist (HSA)	184
Automatic Vehicle Hold (AVH)	185
Regenerative Braking	185

Ride Control Systems

Traction Control/Electronic Stability Control	186
Driver Mode Control	188
Four-Wheel Steering	189
Air Suspension	189

Cruise Control

Adaptive Cruise Control	193
Hands-On Steering Assist	203
Super Cruise	216

Advanced Driver Assistance Systems

Advanced Driver Assistance Systems	231
Assistance Systems for Parking or Backing	233
Rear Vision Camera (RVC)	233
Surround Vision System	234
Park Assist	235
Automatic Parking Assist (APA)	237
Reverse Automatic Braking (RAB)	239
Rear Pedestrian Alert	240

Rear Cross Traffic Alert (RCTA) System	241
Assistance Systems for Driving	241
Forward Collision Alert (FCA) System	242
Automatic Emergency Braking (AEB)	244
Front Pedestrian Braking (FPB) System	247
Night Vision System	249
Lane Change Alert (LCA)	252
Blind Zone Steering Assist (BZSA)	254
Traffic Sign Assistant	255
Driver Attention Assist	256
Lane Keep Assist (LKA)	258
Surround Vision Recorder	259

Charging

When to Charge	260
Plug-In Charging	260
Delayed Charging Override	265
Charging Status Feedback	265
Charge Cord	268
Utility Interruption of Charging	276
Electrical Requirements for Battery Charging	277

Trailer Towing

General Towing Information	277

Conversions and Add-Ons

Add-On Electrical Equipment	277

Driving Information

Driving for Better Energy Efficiency

Use the tips in the categories below to help maximize energy efficiency and range.

In colder temperatures, while these efficiency tips will help, the electric vehicle driving range will be lower due to higher energy usage including energy spent heating the cabin.

The Energy Info feature available on the Vehicle Status app estimates the influence of the main factors impacting vehicle range. It displays how energy is being used for the current drive since the last time the vehicle was started and over a recently driven distance. See *Vehicle Status* ⇨ 115.

Acceleration, Braking, and Coasting

Avoid rapid accelerations and decelerations.

Use cruise control when appropriate.

Plan ahead for decelerations, and coast whenever possible. Do not rush to traffic signals, and do not shift to N (Neutral) to coast.

Use the One-Pedal Driving feature when appropriate to help recover energy during coasting and braking. One-Pedal mode recovers more energy while coasting and braking than D (Drive) mode. See *One-Pedal Driving* ⇨ 181.

Use the Regen on Demand feature during deceleration to help recover energy. See *Regenerative Braking* ⇨ 185.

Terrain and Vehicle Speed

Higher speeds and grade changes use more energy and can significantly reduce electric range.

Managing the Interior Temperature

Climate Setting

Using the heat and air conditioning systems decreases the energy available for electric driving. Optimal energy efficiency is achieved when the heat, air conditioning, and fan are turned off.

Use the heated and cooled seat features (if equipped) instead of the climate control system. Heating and cooling the seat uses less energy than heating and cooling the interior of the vehicle. See *Heated and Cooled Front Seats* ⇨ 43 and *Heated and Cooled Rear Seats* ⇨ 45.

Use the Remote Start Climate Control feature to heat or cool the interior while the vehicle is plugged in to use electricity from the electrical outlet instead of using energy from the battery. See *Remote Start* ⇨ 12.

On colder days, it is best to plug in the vehicle overnight, and then remote start the vehicle.

Use the Battery Gauge on the Instrument Cluster to view the effect of climate control settings on your estimated range. See *Battery Gauge (High Voltage)* ⇨ 96.

Other Ways to Affect Cabin Temperature

In hot weather, avoid parking in direct sunlight. Use sunshades inside the vehicle.

Keep the inside of the windows clean to reduce fogging. Turn off the front defroster and rear defogger when they are not needed.

Avoid driving with the windows open at highway speeds.

Distracted Driving

Distraction comes in many forms and can take your focus from the task of driving. Exercise good judgment 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 mobile 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 mobile phones or other electronic devices.
- Designate a front seat passenger to handle potential distractions.
- Become familiar with vehicle features before driving, such as programming favorite 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, 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* ⇨ 45.

- 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.

Impaired Driving

Death and injury associated with impaired driving is a global tragedy.



Warning

Drinking alcohol or taking drugs and then driving is very dangerous. Your reflexes, perceptions, attentiveness, and judgment can be affected by even a small amount of alcohol or drugs. You can have a serious — or even fatal — collision if you drive after drinking or taking drugs.

Do not drive while under the influence of alcohol or drugs, or ride with a driver who has been drinking or is impaired by drugs. Find alternate transportation home; or if you are with a group, designate a driver who will remain sober.

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 a brake fault occurs, the brakes may lose power assist. More effort will be required to stop the vehicle and it may take longer to stop.

If the vehicle loses propulsion power while driving, the brake boost system, which is powered by the 12-volt vehicle battery, will maintain the power assist for as long as the battery has sufficient voltage. Steer the vehicle out of the roadway and stop as soon as it is safe to do so. See *Electric Brake Boost* ⇨ 182.

Steering

Caution

To avoid damage to the steering system, do not drive over curbs, 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.

Electric Power Steering

The vehicle is equipped with an electric power steering system, which reduces the amount of effort needed to steer the vehicle. It does not have power steering fluid. Regular maintenance is not required.

If the vehicle experiences a system malfunction and loses power steering, greater steering effort may be required. Power steering assist also may be reduced if you turn the steering wheel as far as it can turn and hold it there with force for an extended period of time.

See your dealer if there is a problem.

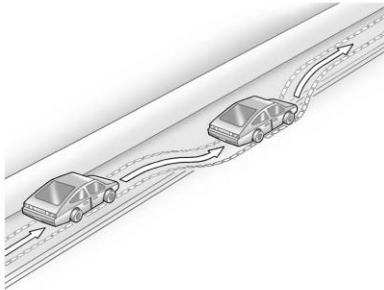
Curve Tips

- Take curves at a reasonable speed.
- Reduce speed before entering a curve.
- Maintain a reasonable steady speed through the curve.
- Wait until the vehicle is out of the curve before accelerating gently into the straightaway.

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 tire 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 curve causes tires 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 recognize 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 tires to slide.

Remember: Antilock brakes help avoid only the braking skid.

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.

(Continued)

Warning (Continued)

After driving through a large puddle of water or a car/vehicle wash, lightly apply the brake pedal until the brakes work normally.

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.

Hydroplaning

Hydroplaning is dangerous. Water can build up under the vehicle's tires so they actually ride on the water. This can happen when the road is wet and you are driving fast. When the vehicle is hydroplaning, it has little or no contact with the road.

There is no hard and fast rule about hydroplaning. 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.
- Pass with caution.
- Keep windshield wiping equipment in good shape, and keep the windshield washer fluid reservoir filled.
- Ensure the tires are maintained and have proper tread depth. See *Tires* ⇨ 310.
- Turn off any cruise control, if equipped. See *Adaptive Cruise Control* ⇨ 193 or *Super Cruise* ⇨ 216.
- Turn off One-Pedal Driving mode. See *One-Pedal Driving* ⇨ 181.
- Turn on the Traction Control System (TCS) and the Electronic Stability Control (ESC). See *Traction Control/Electronic Stability Control* ⇨ 186.

Hill and Mountain Roads

Driving on steep hills or through mountains is different than driving on flat or rolling terrain. Be sure to:

- Use regenerative braking to help slow the vehicle or maintain speed by keeping the vehicle in gear and limiting the initial battery charge to 80% or less. See *Regenerative Braking* ⇨ 185.

 Warning

Do not charge your vehicle's battery above an 80% charge if you are going to drive down long, steep grades such as mountain passes. This provides room in the battery for regenerative braking to supplement your conventional brakes during the descent.

If the battery becomes full, regenerative braking will be limited or unavailable. The brakes will have to do all the work of slowing down the vehicle and could become too hot. Hot brakes may not be able to slow the vehicle enough to maintain speed and control. To help avoid the risk

(Continued)

Warning (Continued)

of a crash, limit the battery's charge and, if you experience brake fade or receive a brake warning, stop the vehicle and allow the brakes to cool.

See "Charge Now" under *Charging* ⇨ 109 for information on setting charge limits.

- When braking is necessary, use frequent light taps of the brake pedal. This maximizes regenerative braking and minimizes the load on the vehicle brake system.
- Keep the vehicle serviced and in good shape.
- Check all fluid levels, brakes, tires, and cooling system.
- Drive at speeds that keep the vehicle in its own lane. Do not swing wide or cross the center line.
- Be alert on top of hills where the road contour may reduce visibility in case anything unexpected is in your lane (e.g., stalled car, crash, debris).

- Pay attention to special road signs (e.g., falling rocks area, winding roads, long grades, passing or no-passing zones) and take appropriate action.

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 tires 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:

- Turn off cruise control.
 - If enabled, turn off One-Pedal Driving. See *One-Pedal Driving* ⇨ 181.
- If turned off, turn on the Traction Control System and StabiliTrak/Electronic Stability Control. See *Traction Control/Electronic Stability Control* ⇨ 186.
 - Select the Snow/Ice driver mode. See *Driver Mode Control* ⇨ 188.
 - Accelerate gently. Accelerating too quickly causes the wheels to spin and makes the surface under the tires slick.
 - 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 maneuvers and braking while on ice.
 - The Antilock Brake System improves vehicle stability during hard stops, but the brakes should be applied sooner than when on dry pavement. See *Antilock Brake System (ABS)* ⇨ 183.
 - Avoid using the Regen on Demand paddle. See *Regenerative Braking* ⇨ 185.

Blizzard Conditions

If you become stranded or cannot continue driving due to winter storm conditions, stop the vehicle in a safe place and signal for help. If possible, use *Roadside Assistance Program* ⇨ 356. Stay with the vehicle unless there is help nearby.

If you stay in your vehicle while waiting, signal for help and keep everyone in the vehicle safe by turning on the hazard warning flashers and tying a red cloth to an outside mirror.

To conserve battery energy while waiting for help, run the vehicle for only short periods as needed to warm the vehicle and then shut the vehicle off and partially close the window. Moving about to keep warm also helps. For additional tips to help conserve battery energy in cold weather, see *Driving for Better Energy Efficiency* ⇨ 166.

If the Vehicle Is Stuck

Slowly and cautiously spin the wheels to free the vehicle when stuck in sand, mud, ice, or snow.

The traction control system can often help to free a stuck vehicle. See *Traction Control/Electronic Stability Control* ⇨ 186. If you cannot free the vehicle with traction control enabled, try “rocking” the vehicle as described below.

Rocking the Vehicle to Get It Out



Warning

If the vehicle's tires spin at high speed, they can explode, and you or others could be injured. Spin the wheels as little as possible and avoid going above 56 km/h (35 mph).

Turn the steering wheel left and right to clear the area around the front wheels. Turn off traction control. Shift back and forth between R (Reverse) and D (Drive), spinning the wheels as little as possible. To prevent electric drive unit wear, wait until the wheels stop spinning before shifting gears. Slowly spinning the wheels in the forward and reverse directions causes a rocking motion that could free the vehicle. If the vehicle does not move after a few attempts, it may need towing. See *Transporting a Disabled Vehicle* ⇨ 332.

Vehicle Load Limits

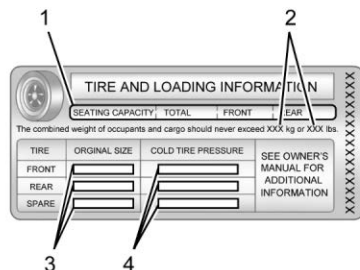
It is very important to know how much weight the vehicle can carry. This weight is called the vehicle capacity weight and includes the weight of all occupants, cargo, and all nonfactory-installed options. Two labels on the vehicle may show how much weight it may properly carry: the Tire and Loading Information label and the Certification/Tire 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 tires, and shorten the life of the vehicle.

Tire and Loading Information Label



Example Label

A vehicle-specific Tire and Loading Information label is attached to the center pillar (B-pillar). The tire and loading information label shows the number of occupant seating positions (1), and the maximum vehicle capacity weight (2) in kilograms and pounds.

The Tire and Loading Information label also shows the size of the original equipment tires (3) and the recommended

cold tire inflation pressures (4). For more information on tires and inflation see *Tires* ⇨ 310 and *Tire Pressure* ⇨ 316.

There is also important loading information on the vehicle Certification/Tire 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/Tire Label" later in this section.

Steps for Determining Correct Load Limit

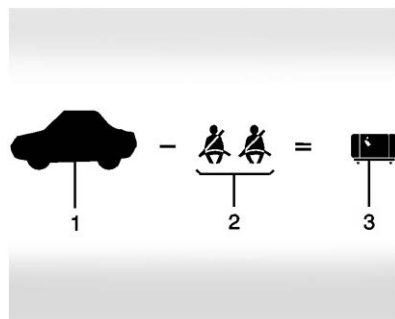
1. Locate the statement "The combined weight of occupants and cargo should never exceed XXX kg or XXX lbs." on your vehicle's placard.
2. Determine the combined weight of the driver and passengers that will be riding in your vehicle.
3. Subtract the combined weight of the driver and passengers from XXX 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.)

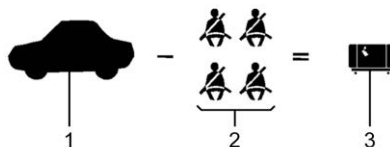
5. Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity calculated in Step 4.

This vehicle is neither designed nor intended to tow a trailer or receive a rooftop carrier.

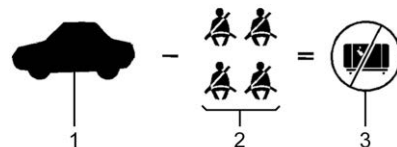
If aftermarket accessories are installed on the vehicle, be sure to add the weight of all installed accessories to the combined weight of luggage and cargo.

**Example 1**

1. Vehicle Capacity Weight for Example 1 = 453 kg (1,000 lb)
Then subtract Accessory Weight = 15.8 kg (35 lb)
2. Subtract Occupant Weight @ 68 kg (150 lb) $\times$ 2 = 136 kg (300 lb)
3. Remaining available capacity for Cargo Weight = 301.2 kg (665 lb)

**Example 2**

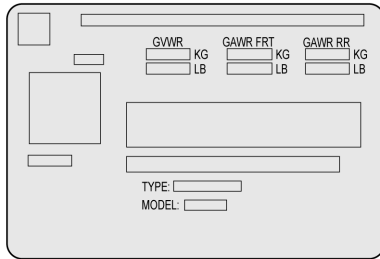
1. Vehicle Capacity Weight for Example 2 = 453 kg (1,000 lb)
Then subtract Accessory Weight = 18.1 kg (40 lb)
2. Subtract Occupant Weight @ 68 kg (150 lb) $\times$ 5 = 340 kg (750 lb)
3. Remaining available capacity for Cargo Weight = 94.9 kg (210 lb)

**Example 3**

1. Vehicle Capacity Weight for Example 3 = 453 kg (1,000 lb)
2. Subtract Occupant Weight @ 91 kg (200 lb) $\times$ 5 = 453 kg (1,000 lb)
3. Available Cargo Weight = 0 kg (0 lb)

Refer to the Tire and Loading Information label for specific information about the vehicle's capacity weight and seating positions. The combined weight of the driver, passengers, accessories, and cargo should never exceed the vehicle's capacity weight.

Certification/Tire Label



Label Example

A vehicle-specific Certification/Tire label is attached to the front pillar (A-pillar).

The label may show the size of the vehicle's original tires 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, and cargo.

The Certification/Tire 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 centerline.

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.

(Continued)

Warning (Continued)

- 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 Break-In

Caution

Avoid making hard stops for the first 1 600 km (1,000 mi). 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. Following break-in, vehicle speed and load can be gradually increased.

Power Modes

Powering On

This vehicle is equipped with Hands-Free Start, which automatically starts the vehicle when you enter with a remote key, press the brake, or close the driver door.

If a remote key was left in the vehicle after the last power cycle, closing the driver door will not turn on the vehicle. The brake pedal

must be pressed to turn the vehicle on. Driver Information Center messages will display explaining how to turn on the vehicle.

If the remote key is not in the vehicle or something is interfering with the remote key, a message displays in the Driver Information Center.

If the vehicle does not turn on due to a low remote key battery, the vehicle can still be driven. See *Remote Key Operation* ⇨ 7.

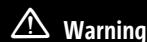


A vehicle ready light displays on the instrument cluster when the vehicle is ready to be driven. This could take up to 15 seconds at extremely cold temperatures.

The instrument cluster also displays an active battery gauge when the vehicle is ready to be driven.

A chime will sound if the driver door is opened while the vehicle is on.

Powering Off



Turning off the vehicle while moving may disable the airbags. While driving, only shut the propulsion system off in an emergency.

When the drive cycle has been completed and the vehicle is shifted to P (Park), the vehicle will turn off when a driver exit is detected. The vehicle can also be turned off by pressing  on the infotainment display.

Retained Accessory Power (RAP) will remain active until the driver door is opened.

If the vehicle has not been shifted out of P (Park), it will not turn off based on driver exit detection and will need to be turned off through  or waiting for the automatic shutdown timeout.

If the vehicle must be shut off in an emergency:

1. Brake using 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, shift to P (Park), and turn the vehicle off.
4. Set the parking brake. See *Electric Parking Brake* ⇨ 183.

If a drive mode is entered where  is present while moving, the vehicle can be shut off while driving. Press  and follow the instructions displayed in the Driver Information Center to confirm that vehicle off mode is desired.

Climate control functions, such as defrost, heating, and air conditioning are only available while the vehicle is powered on. Turning the vehicle off will turn off all climate controls.

If a collision is detected an additional emergency vehicle off display will be shown and can be pressed to turn the vehicle off.

Keeping Vehicle On After Driver Exit

Warning

It is dangerous to get out of the vehicle if the P (Park) button is not pressed with the parking brake set. The vehicle can roll.

Do not leave the vehicle when the propulsion system is running. If you have left the propulsion system 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 set the parking brake and press the P (Park) button.

Press  on the infotainment display to keep the vehicle on after a driver exit is detected.

 needs to be selected each time the vehicle is shifted to P (Park) to be active. The vehicle will remain on for a set time displayed in a notification upon activation.  can be reselected to restart the time interval.

Before exiting the vehicle, press the P (Park) button and the parking brake switch, then activate . See *Electric Drive Unit* ⇨ 178.

Using  will reduce the charge level of the high voltage battery. Ensure your battery has sufficient charge before activating . See *Battery Gauge (High Voltage)* ⇨ 96.

 should only be used when the vehicle is attended. A horn chirp will sound if the vehicle turns off during the set time interval.

Service Mode

Caution

Placing the vehicle in Service Mode will use the 12-volt battery. Do not use Service Mode for an extended period, or the vehicle may not start.

This mode is available for service and diagnostics, and to verify the proper operation of the service vehicle soon light as may be required for inspection or maintenance purposes.

To place the vehicle in Service Mode:

1. Ensure the vehicle is off, the driver door is open, and the brake pedal is not applied.

2. Press and release the accelerator pedal three times within five seconds, keeping the accelerator pressed on the third time.

The instrument cluster and infotainment systems will operate normally, but the vehicle will not be able to be driven. The propulsion system will not be active in Service Mode. Press the brake pedal to turn the vehicle on or press  on the infotainment display to turn the vehicle off.

Spoiler

This vehicle is equipped with an active rear spoiler that will raise and lower to several different heights depending on vehicle speed and other factors. Minor noises may be heard in the vehicle during spoiler movement. This is normal.

The spoiler can be controlled by touching Spoiler on the infotainment home screen.

The active rear spoiler will automatically lower and stay lowered if the rear liftgate is open.

For cleaning instructions, see "Washing the Vehicle" under *Exterior Care* ➔ 334.

Electric Drive Unit



The vehicle uses an electric drive unit. The shift pattern is displayed on the front of the shift lever. The selected gear position will illuminate red on the shift lever, while all others will be displayed in white. If the shift is not immediate, as in very cold conditions, the indicator on the shift switch may blink until it is fully engaged.

P: This position locks the drive wheels. Use P (Park) when starting the vehicle to ensure the vehicle does not move.



Warning

It is dangerous to get out of the vehicle if the P (Park) button is not pressed with the parking brake set. The vehicle can roll.

Do not leave the vehicle when the propulsion system is running. If you have left the propulsion system 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 set the parking brake and press the P (Park) button.

Shifting out of Park

Parking the vehicle in extreme cold for several days without the charge cord connected may cause the vehicle not to start. Plug the vehicle in to allow the high voltage battery to be warmed sufficiently.

1. Verify that the vehicle is unplugged and the vehicle ready light is on.
2. Apply the brake pedal.
3. Move the shift lever to the desired position. After releasing the shift lever, it will return to the center position.

The P indicator will turn white and the gear indicator on the shift lever will turn red when the vehicle is no longer in P (Park).

If the vehicle cannot shift from P (Park), a Driver Information Center message may be displayed. Check that the vehicle is on, the vehicle ready light is on, and the brake pedal is applied when you are attempting to shift out of P (Park). If all of these are met but the vehicle will not shift out of P (Park), have the vehicle serviced.

Shifting Into Park



Warning

Parking on grades with poor traction such as ice, snow, mud, or gravel may cause the vehicle to unintentionally move and could result in injury, death, and/or vehicle damage. Be sure to apply the parking brake. See *Electric Parking Brake* ⇨ 183.

1. Hold the brake pedal down and set the parking brake. See *Electric Parking Brake* ⇨ 183.
2. Press the P (Park) switch at the end of the shift lever. The P indicator on the shift lever will turn red when the vehicle is in P (Park).

When the vehicle is stopped, press  to turn off the vehicle. The vehicle will shift to P (Park) automatically unless the vehicle is in N (Neutral), see “Car Wash Mode” later in this section.

The vehicle will not shift into P (Park) if it is moving too fast. Stop the vehicle and shift into P (Park).

If the vehicle is shifted into P (Park) on a hill, the parking brake may apply automatically. The driver may not be able to release the parking brake using the parking brake switch. It should automatically release when the vehicle is shifted out of P (Park).

Leaving the Vehicle with the Propulsion System On

If the vehicle must be left with the propulsion system on, be sure that the vehicle is in P (Park) with the parking brake set, before leaving the vehicle. After pressing the P (Park) button, hold down the regular brake pedal. If you cannot see the P (Park) indicator in the instrument cluster, it means that the vehicle has not shifted to P (Park).

Service Shift Lever Message

If the message SERVICE SHIFTER SEE OWNER'S MANUAL appears in the Driver Information Center (DIC), the shifter 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 is stuck. To operate the vehicle, hold the shift lever in the desired gear, R (Reverse) or D (Drive), until vehicle speeds exceed 16 km/h (10 mph), then release the shift lever.

R: This position is used to back up.

If the vehicle is shifted from either R (Reverse) to D (Drive) or D (Drive) to R (Reverse) while the speed is too high, the vehicle may shift 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. From the center position, move the shift lever rearward toward you, and then up. R is illuminated in red.
3. After releasing the shift lever, it will return to the center 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 shift lever, it will return to the center 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 electric drive unit. See *If the Vehicle Is Stuck* ⇨ 172.

N: In this position, the propulsion system is inactive. If the vehicle is moving and turned off, restart the propulsion system in N (Neutral) only.

Caution

The vehicle is not designed to stay in N (Neutral) for extended periods of time. It will automatically shift into P (Park).

To shift into N (Neutral):

1. Move the shift lever rearward toward the driver.
 - If the vehicle is in P (Park), apply the brake pedal while moving the shift lever rearward.
 - The N indicator will illuminate red.

2. After releasing the shift lever, it will return to the center position.

To shift out of N (Neutral):

1. Bring the vehicle to a complete stop.
2. Hold the brake pedal down.
3. Shift into the desired gear.

If the brake pedal is not applied, the vehicle may remain in N (Neutral).

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.

The vehicle was neither designed nor intended to be towed with any of its wheels on the ground. If your vehicle is disabled and needs to be towed, see *Transporting a Disabled Vehicle* ⇨ 332.

Caution

The vehicle is not designed to stay in N (Neutral) for extended periods of time. It will automatically shift into P (Park).

Car Wash Mode (Vehicle Off) – Driver In Vehicle

To place the vehicle in N (Neutral) with the vehicle off and occupied:

1. Drive to the entrance of the car wash.
2. Apply the brake pedal.
3. Shift to N (Neutral).
4. Turn off the vehicle 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 (Vehicle Off) – Driver Out of Vehicle

To place the vehicle in N (Neutral) with the vehicle off and 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 vehicle 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 into P (Park) upon re-entry.

Car Wash Mode (Vehicle On) – Driver In Vehicle

To place the vehicle in N (Neutral) with the vehicle on and 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 (Vehicle On) – Driver Out of Vehicle

To place the vehicle in N (Neutral) with the vehicle on and 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 into P (Park) upon re-entry.

D: This position is for normal driving. If more power is needed for passing, press the accelerator pedal down.

Caution

Spinning the tires excessively may damage the electric drive unit. The repair will not be covered by the vehicle warranty. If you are stuck, do not spin the tires.

To shift into D (Drive):

1. Bring the vehicle to a complete stop.
2. From the center position, move the shift lever rearward toward you and then down.
 - If the vehicle is in P (Park), press the brake pedal while moving the shift lever.
 - D will illuminate red.

3. After releasing the shift lever, it will return to the center position.

To shift out of D (Drive):

1. Bring the vehicle to a complete stop.
2. Shift to the desired gear.

When stopping on a steep hill, use the brakes to hold the vehicle in place.

When shifting to P (Park) on a hill, use the brakes to hold the vehicle then shift to P (Park).

One-Pedal Driving

One-Pedal Driving allows the use of the accelerator pedal to control the deceleration of the vehicle to a complete stop. Completely releasing the accelerator pedal will result in aggressive deceleration. Partially lifting off the accelerator pedal allows the deceleration of the vehicle to be adjusted as desired.

Use the brake pedal if emergency braking is required.

To view and configure One-Pedal Driving, from the infotainment display home screen, Select Controls > See More Controls > Drive > One-Pedal Driving.

Select Off to disable One-Pedal Driving for traditional two-pedal driving, similar to a gasoline vehicle.

Select Normal to enable One-Pedal Driving where a moderate level of braking is applied when the accelerator pedal is released while driving.

Select High to enable One-Pedal Driving where a strong level of braking is applied when the accelerator pedal is released while driving.

When enabled, One-Pedal Driving applies in D (Drive). This feature remains enabled until manually disabled by the driver. Press the accelerator pedal to the desired speed. The brake lights will come on during substantial deceleration and when the vehicle is stopped.

If One-Pedal Driving is turned off while stopped, the vehicle will stay stopped. Press the accelerator pedal to return to two-pedal driving.

For faster access, One-Pedal Driving can be toggled in the Smart Controls tray. The Smart Controls button can be enabled in the One-Pedal Driving Settings menu to allow a change of level from most infotainment screens.

Touch  to toggle One-Pedal Driving on or off. When turned on, One-Pedal Driving returns to the previously selected level. To change the level, press the Settings link in the pop-up box to go to the full One-Pedal Driving selection.

When possible, One-Pedal Driving uses regenerative braking to slow the vehicle for energy efficiency. Friction brakes may be used in some cases when regenerative braking is reduced. Friction brakes will be used to hold the vehicle after coming to a stop, and a noise may be noticed when the brakes apply.

When driving on slippery roads, it is recommended to turn off One-Pedal Driving. See *Winter Driving* ⇨ 171.

While using One-Pedal Driving, the parking brake may apply in some circumstances. This can occur when:

- The driver exits the vehicle.
- The vehicle has remained stationary for five minutes.

To resume driving, press the accelerator pedal, and the parking brake will automatically disengage.

Drive Systems

All-Wheel Drive

If equipped, the electric All-Wheel Drive system maximizes driving efficiency by delivering power, as required, to all four wheels for improved traction and control.

Some electric All-Wheel Drive settings can be enhanced in certain drive modes. See *Driver Mode Control* ⇨ 188.

Always take care to adjust your driving style to the traffic and road conditions when using electric All-Wheel Drive.

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 pressed 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 helps to prevent skidding and maintain steering control during hard braking.



If there is a problem, the Antilock Brake System warning light stays on. See *Brake System Warning Light* ⇨ 101.

Using Antilock Brakes

Do not pump the brakes. Just hold the brake pedal down firmly. It is normal to hear and feel the Antilock Brake System operating.

Braking in Emergencies

The Antilock Brake System does not always decrease stopping distance. If a vehicle suddenly slows or stops, there may not be

enough time to apply the brakes. Always allow enough following distance between your vehicle and the vehicle ahead.

The Antilock Brake System allows you to steer and brake at the same time. In many emergencies, steering to make an evasive maneuver can be more effective than braking.

Electric Parking Brake



The Electric Parking Brake can always be applied, even if the vehicle is off. In case of insufficient electrical power, the Electric Parking Brake cannot be applied or released. To prevent draining the battery, avoid unnecessary repeated cycles of the Electric Parking Brake.

The system has a red parking brake status light and an amber service parking brake warning light. See *Electric Parking Brake Light* ⇨ 101 and *Service Electric Parking Brake Light* ⇨ 102. There are also parking brake-related Driver Information Center messages.

Before leaving the vehicle, check the red parking brake status light to ensure that the parking brake is applied.

Electric Parking Brake Apply

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.

To apply the EPB:

1. Be sure the vehicle is at a complete stop.
2. Press the Electric Parking Brake switch momentarily.

The red parking brake status light will flash and then stay on once the Electric Parking Brake is fully applied. If the red parking brake status light flashes continuously, then the Electric Parking Brake is only partially applied or there is a problem with the Electric Parking Brake. A Driver Information Center message will display. Release the Electric Parking Brake 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 parking brake status light is flashing, see your dealer.

If the amber service parking brake warning light is on, press the Electric Parking Brake switch. Continue to hold the switch until the red parking brake status light remains on. If the amber service parking brake warning light is on, see your dealer.

If the Electric Parking Brake 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 Electric Parking Brake will remain applied.

The vehicle may automatically apply the Electric Parking Brake in some situations when the vehicle is not moving. This is normal, and is done to periodically check the correct

operation of the Electric Parking Brake system, or at the request of other safety functions that utilize the Electric Parking Brake.

If the Electric Parking Brake fails to apply, block the rear wheels to prevent vehicle movement.

Electric Parking Brake Release

To release the Electric Parking Brake:

1. Turn the vehicle on.
2. Apply and hold the brake pedal.
3. Press the Electric Parking Brake switch momentarily.

The Electric Parking Brake is released when the red parking brake status light is off.

If the amber service parking brake warning light is on, release the Electric Parking Brake by pressing and holding the Electric Parking Brake switch. Continue to hold the switch until the red parking brake status light is off. If either light stays on after release is attempted, see your dealer.

Automatic Electric Parking Brake Release

The Electric Parking Brake will automatically release if the vehicle is running, placed into gear, and an attempt is made to drive away.

Avoid rapid acceleration when the Electric Parking Brake is applied, to preserve parking brake lining life.

Brake Assist

Brake Assist detects rapid brake pedal applications due to emergency braking situations. It also provides additional braking to activate the Antilock Brake System if the brake pedal is not applied hard enough to activate it 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* ⇨ 167.

When the vehicle is stopped on a grade, Hill Start Assist 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. The brakes may also release under other conditions. Do not rely on Hill Start Assist to hold the vehicle.

Hill Start Assist 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 Hill Start Assist to activate.

Automatic Vehicle Hold (AVH)



Warning

Do not rely on this feature. It 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.

When Automatic Vehicle Hold is turned on and the vehicle is braked to a stop, Automatic Vehicle Hold prevents the vehicle

from moving during the transition from brake pedal release to accelerator pedal apply. The brakes release when the accelerator pedal is applied. The brakes may also release under other conditions. Do not rely on Automatic Vehicle Hold to hold the vehicle.

If the accelerator pedal is not applied within a few minutes, the Electric Parking Brake will apply. The parking brake will also apply if the driver door is opened or the driver seat belt is unfastened while Automatic Vehicle Hold is holding the vehicle.

To enable or disable Automatic Vehicle Hold from the front center display screen, select Controls > Drive > Auto Hold. The Automatic Vehicle Hold indicator light will come on. While Automatic Vehicle Hold is holding the vehicle, the Automatic Vehicle Hold indicator light will change to green. See *Automatic Vehicle Hold (AVH) Light* ⇨ 102.

Regenerative Braking

Regenerative braking takes some of the energy from the moving vehicle and turns it back into electrical energy. This energy is then stored back into the high voltage battery system, contributing to increased energy efficiency.

Regenerative power may be limited when the battery is near full charge or cold. See “Regenerative Power Limited” under *Power Indicator Gauge* ⇨ 97. Regenerative braking supplements your vehicle’s conventional brakes, especially when going downhill. See *Hill and Mountain Roads* ⇨ 170.



Warning

Do not charge your vehicle’s battery above an 80% charge if you are going to drive down long, steep grades such as mountain passes. This provides room in the battery for regenerative braking to supplement your conventional brakes during the descent. This is especially important when towing a trailer, which puts additional stress on your vehicle’s braking system.

See “Active Charging” under *Charging* ⇨ 109 for information on setting charge limits. See *Hill and Mountain Roads* ⇨ 170 for important information about driving on grades.

The brake system uses regenerative braking, conventional hydraulic braking, or a combination of both as appropriate.

Regen on Demand



If equipped, Regen on Demand increases deceleration by pressing and holding the steering wheel paddle. Regen on Demand works in D (Drive). The accelerator pedal can be used to manage deceleration while using Regen on Demand. See *One-Pedal Driving* ⇨ 181.

If the Regen on Demand is activated continuously during a power cycle, Regen on Demand increases deceleration after each use.

If the vehicle is brought to a complete stop while the Regen on Demand paddle is held, the vehicle will not creep forward when the paddle is released. The accelerator pedal must be pressed to move the vehicle forward.

If the vehicle is on a steep grade, the brake pedal must be used to hold the vehicle.

When available regenerative braking power is limited, the hydraulic brakes may be applied to make up the difference.

Cruise control will turn off and the brake lights may come on when this feature is activated.

Avoid using Regen on Demand under slippery road conditions. Use the brake pedal as the primary braking device.

Ride Control Systems

Traction Control/Electronic Stability Control

This vehicle has a Traction Control System and StabiliTrak/Electronic Stability Control system. These systems help limit wheel spin and assist the driver in maintaining control, especially on slippery road conditions. Both systems turn on automatically when the vehicle is started and begins to move.

The Traction Control System activates if any of the drive wheels are spinning and beginning to lose traction. If this happens, the system reduces power and applies the brakes to limit wheel spin.

StabiliTrak/Electronic Stability Control activates when the vehicle senses a difference between the intended path and the direction the vehicle is actually traveling. The system selectively applies braking pressure to any one of the vehicle wheel brakes to assist the driver in keeping the vehicle on the intended path.

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 the Traction Control System off if the vehicle gets stuck in sand, mud, ice, or snow. See *If the Vehicle Is Stuck* ⇨ 172.

If cruise control is engaged and both systems begin to limit wheel spin, cruise control will disengage. Cruise control may be turned back on when road conditions allow.



The indicator light for both systems is in the instrument cluster. This light:

- Flash when the Traction Control System is limiting wheel spin.
- Flash when StabiliTrak/Electronic Stability Control is activated.
- Turn on and stay on when either system is not working.

See *Traction Control System (TCS)/Electronic Stability Control Light* ⇨ 104.

If either system fails to turn on or to activate, a message displays in the Driver Information Center. The vehicle is safe to drive, but adjust driving accordingly.

If  turns on and stays on:

1. Stop the vehicle.
2. Turn the vehicle off and wait 15 seconds.
3. Start the vehicle.
4. Drive the vehicle.

If  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 the Traction Control System on and off, on the front command center home screen, select Controls > Drive > Traction Control. To turn StabiliTrak/Electronic Stability Control on or off, select  next to the Traction Control menu. The following options appear:

- Traction Control Off
- StabiliTrak/ESC Off and Traction Control Off
- StabiliTrak/ESC On and Traction Control On

The Traction Off light  displays in the instrument cluster when the traction control is turned off. When the traction control is turned

back on, the Traction Off light  displayed in the instrument cluster will turn off. See *Traction Off Light* ⇨ 104.

If the Traction Control System is actively limiting wheel spin when disabled, the system will not turn off until the wheels stop spinning.

To turn StabiliTrak/Electronic Stability Control off, select  next to the Traction Control menu. Select the StabiliTrak/ESC Off and Traction Control Off option. The StabiliTrak/Electronic Stability Control Off light  will display in the instrument cluster. See *Electronic Stability Control (ESC) Off Light* ⇨ 105.

The traction system cannot be engaged when the stability control system is off.

Entering Teen Driver will automatically enable both systems and prevent these safety features from being turned off. See *Teen Driver* ⇨ 154.

Vehicles with air suspension re-enable StabiliTrak/Electronic Stability Control at 32 km/h (20 mph).

Adding accessories can affect the vehicle performance. See *Accessories and Modifications* ⇨ 279.

Driver Mode Control

Driver Mode Control allows the driver to adjust the overall driving experience by selecting different modes. Driver Mode Control is equipped with the following modes: Tour, Sport, Snow/Ice, Velocity Max, and one customizable mode: My Mode. These modes adjust multiple systems to fit specific driving needs. Driver mode availability and affected vehicle subsystems are dependent upon trim level, region, and optional features.

If the vehicle is in Tour mode, My Mode, or Sport mode, it will stay in that mode through future on/off cycles. If the vehicle is in any other mode, it will return to Tour mode when the vehicle is restarted. When selected, each mode displays a unique and persistent indicator in the instrument cluster. See *Driver Mode Control Light* ⇨ 105.

Mode Activation

To activate each mode, open the Drive Mode app on the infotainment home screen. Activate each mode by selecting the mode icon.

Mode Descriptions

Tour Mode: Use for normal city and highway driving to provide a smooth ride. This setting provides balance between comfort and handling.

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 efforts, pedal tuning, Electric Vehicle Sound Enhancement (EVSE), and Adaptive Cruise Control.

Snow/Ice Mode: Use for snow covered roads to improve vehicle acceleration. When active, Snow/Ice mode adjusts pedal tuning to optimize traction on slippery surfaces. This can compromise the acceleration on dry asphalt. Snow/Ice mode also modifies electric All-Wheel Drive and steering.

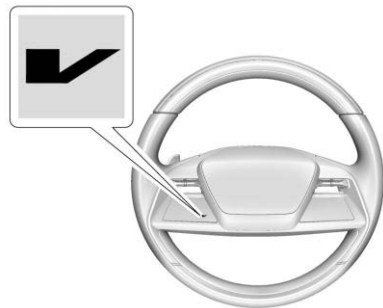
This feature is not intended for use when the vehicle is stuck in sand, mud, ice, snow, or gravel. If the vehicle becomes stuck, see *If the Vehicle Is Stuck* ⇨ 172.

Velocity Max: Use this mode for short durations. It not intended for daily use. Velocity Max provides maximum propulsion. Engaging

Velocity Max will not change the currently active drive mode, but will provide additional propulsion torque for maximum acceleration.

Remaining in this mode will reduce the range of the vehicle. Velocity Max will not function when the vehicle battery is low.

Velocity Max adjusts the acceleration pedal map.



To activate/deactivate Velocity Max, press the Velocity Max button on the steering wheel.

My Mode: Use to personalize everyday driving. This mode allows the driver to configure the vehicle subsystem settings to their driving preferences. My Mode remains active across on/off cycles.

Through the infotainment screen, the following vehicle subsystems may be available for customization in this mode:

Acceleration Feel: Relaxed, Tour, Sport

Brake Feel: Tour, Sport

Motor Sound: Tour, Sport

Steering: Tour, Sport

Suspension: Tour, Sport

For a more detailed description of each selectable option, refer to “Drive Mode Customization.”

Drive Mode Customization

The vehicle is equipped to modify the following settings based on vehicle content. Through the infotainment home screen, select Settings > Vehicle > Drive Mode Customization to personalize My Mode. These settings retain over each on/off cycle, and do not have to be reset each time the vehicle is started.

Acceleration Feel: Choose how responsive you want acceleration to feel. You can adjust the accelerator pedal to provide increased power.

Brake Feel: Brake response settings adjust the brake pedal response. Brake pedal feel is less sensitive at lower settings and more sensitive at higher settings.

Motor Sound: Customize how your vehicle sounds when you are accelerating. Your electric motor remains quiet outside but the sound you hear inside changes as you drive faster or slower.

Steering: Choose how responsive you want the steering to feel. You can set the steering wheel to provide more feedback, which requires more steering effort.

Suspension: Choose how responsive you want the suspension to feel. You can make the suspension stiffer or more comfortable.

Four-Wheel Steering

This vehicle is equipped with four-wheel steering. This feature steers the vehicle with all four wheels, which reduces the vehicle turn diameter and improves maneuverability of the vehicle.

At slower speeds the front and rear wheels will turn in opposite directions. This helps the vehicle make tighter turns, such as during parking, cornering, and turning into tight spaces. At higher speeds the front and rear wheels will turn in the same direction. This improves stability of the vehicle during lane changes and wide turns.

When the vehicle is shut-off, the rear steering angle will automatically return to the forward position.

Four-wheel steering is not operational when Super Cruise is active. See *Super Cruise* ⇨ 216.

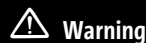
Maximum vehicle speed may be limited if the four-wheel steering system becomes inoperable.

Four-Wheel Steering Behavior at 0 MPH

The rear wheels may not steer to full travel when the vehicle is stationary. Additional travel may be achieved once the vehicle begins to move.

Care should be taken to ensure the vehicle path is clear of obstacles if the rear tires steer once the vehicle is moving.

Air Suspension



To help avoid personal injury or death, make sure the area underneath the vehicle and inside the wheel wells is clear when lowering the vehicle.

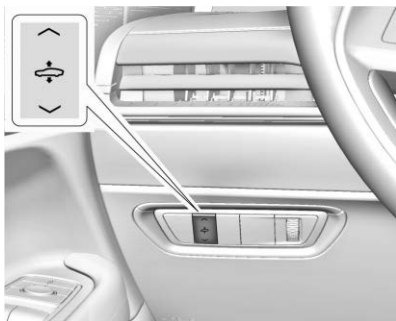
 Warning

To help avoid personal injury or death, always select the lowest ride height for the current driving conditions. Higher ride heights raise the vehicle's center of gravity, increasing the chance of a rollover during extreme maneuvers.

 Warning

Heavy loads on the roof rack will make the vehicle's center of gravity higher, increasing the possibility of a rollover. To avoid losing control of the vehicle, always select the normal height setting and avoid high speeds, sudden starts, sharp turns, sudden braking, or abrupt maneuvers when carrying cargo on the roof rack.

The air suspension feature provides leveling capability depending on the vehicle load along with the benefit of adjusting ride height for increased convenience and capability.

Changing Ride Height

Press either  or  on the Ride Height button to open the Ride Height menu. Use the button to select the desired ride height.

The Ride Height menu contains the option to select either Maximum Ground Clearance or Automatic. Maximum Ground Clearance raises the vehicle to maximum height if the vehicle conditions are correct. Automatic adjusts the vehicle to the ride height associated with the current driver mode. See "Ride Height Descriptions" for more information.

The air suspension light flashes while the ride height is changing and remains solid once the vehicle is raised or lowered. See *Air Suspension Light* ⇨ 106.

Ride Height Descriptions**Normal Height**

Normal height is the standard vehicle height used for everyday driving.

If the My mode customization settings for Suspension is set to Tour, then the vehicle maintains Normal height when My mode is selected. For additional information, see *Driver Mode Control* ⇨ 188.

Increased Height

Increased height is 15 mm (0.6 in) higher than Normal height. This ride height raises the vehicle for additional ground clearance.

Snow/Ice mode will automatically raise to Increased height when the vehicle speed is less than 80 km/h (50 mph). If the vehicle speed exceeds 80 km/h (50 mph), the vehicle will lower to Normal height. When the vehicle speed is slowed to less than 24 km/h (15 mph),

the vehicle will automatically raise back to Increased height. See *Driver Mode Control* ⇨ 188.

Maximum Height

Maximum height is 25 mm (1 in) higher than Normal height. This ride height raises the vehicle for additional ground clearance.

Maximum height is only available for selection in the Ride Height menu while vehicle speed is less than 38 km/h (24 mph). If the vehicle speed exceeds 38 km/h (24 mph), the vehicle will lower to the ride height associated with the current driver mode.

Aerodynamic Height

Aerodynamic height is 10 mm (0.4 in) lower than Normal height. This ride height lowers the vehicle at higher vehicle speeds to improve aerodynamics.

The vehicle will lower to Aerodynamic height when the vehicle speed exceeds 105 km/h (65 mph) for a period of time. The vehicle will raise to Normal height when the vehicle slows to less than 48 km/h (30 mph).

Lowered Height

Lowered height is 10 mm (0.4 in) lower than Normal height. This ride height lowers the vehicle to enhance handling.

Sport mode will automatically lower to Lowered height when enabled. See *Driver Mode Control* ⇨ 188.

If the My mode customization settings for Suspension is set to Sport, then the vehicle maintains Lowered height when My mode is selected. For additional information, see *Driver Mode Control* ⇨ 188.

Show Mode

Show mode is 20 mm (0.75 in) lower than Normal height. This ride height lowers the vehicle for aesthetics when parked. The vehicle will immediately raise from Show mode when the vehicle is turned on.

To lower the vehicle to Show mode:

1. Hold  on the Ride Height button for 3 to 10 seconds to queue Show mode.
2. Turn off the vehicle.
3. Exit the vehicle and shut the door.

Cancelling Show mode after it has been queued:

- Hold  on the Ride Height button for 3 to 10 seconds to cancel Show mode manually.
- Show mode will be cancelled automatically if it remains queued for an extended period of time.
- Changing the vehicle's height while Show mode is queued will not cancel show mode.
- When Show mode is canceled successfully, a message will appear on the Driver Information Center (DIC).

Location-Based Ride Height

Caution

Driving when the vehicle height is too high or low could cause damage to the vehicle. The air suspension adjustment lights will flash when ride height is changing. Make sure the vehicle has adjusted to the requested ride height by verifying the air suspension adjustment light is solid. See *Air Suspension Light* ⇨ 106.

If equipped, Location-Based Ride Height automatically changes vehicle heights based on saved locations. Using GPS, the vehicle will automatically raise or lower at saved locations, such as a speed bump or a steep driveway.

Saving a Location

To save a location for automatic height changes:

1. When approaching the location that you want to save, press either  or  on the Ride Height button to open the menu and select the desired ride height. After a brief pause, the selection finalizes and the ride height begins to change. Ride heights may be disabled in the menu due to driving conditions.
2. Depending on the ride height selected, you may be prompted to save the location. Select Save or Cancel.

Up to 1,000 locations can be saved.

Stored locations may not work with different user profiles. For more information, see “Profiles and Accounts” in *Settings* ⇨ 151.

Approaching a Saved Location

Location-Based Ride Height is available 60 seconds after the vehicle is first started.

When the vehicle approaches a saved location, the vehicle will automatically change ride height to the saved vehicle height.

When a Location-Based Ride Height change occurs, select Delete on the notification on the center screen to permanently remove this specific stored location, or ignore the notification to keep the saved location.

After the ride height changes at a saved location, the vehicle will automatically return to its previous height when the vehicle is about 60 m (197 ft) from the saved location.

The ride height may not automatically change when approaching a saved location if:

- The desired height is unavailable because the vehicle speed is too high.
- The height change raises the vehicle and the compressor is temporarily unavailable due to overheating.

Customization Settings

Location-Based Ride Height has two customization settings. To access them, on the infotainment home screen, select Settings > Vehicle > Ride Height > Location-Based Ride Height or Ask About Deleting Ride Height.

Select Location-Based Ride Height to turn the feature on or off.

Select Ask About Deleting Ride Height to remove the notification that appears every time you approach a saved location.

Deleting All Saved Locations

To delete all saved locations, on the infotainment home screen, select Settings > System > Reset Options to perform a factory reset. See *Settings* ⇨ 151.

Suspension Modes

The air suspension has two special modes, Service mode and Alignment mode, located in the infotainment screen under Settings > Vehicle > Suspension.

Service Mode

Service mode disables all air suspension operation including ride height adjustments and operation of the air compressor. This mode is useful when the vehicle is being towed on a flat bed or when any work under the vehicle is being performed.

Service mode is recommended if a floor jack is used to raise a corner. Service mode automatically disables once the vehicle speed exceeds 32 km/h (20 mph).

Alignment Mode

Alignment mode will optimize the vehicle height to provide the most accurate wheel alignment. This mode should be enabled when your vehicle is being serviced to ensure proper alignment.

To enable Alignment mode, ensure the vehicle is at Normal height. Alignment mode automatically disables when vehicle speed exceeds 16 km/h (10 mph).

Air Suspension Operation with Door(s) or Hood Open

Air suspension operation will suspend all height changes while the hood or any door is open. Height changes will resume once the

hood and doors are closed. The air suspension resumes height changes once the hood and all doors are closed. An open rear liftgate does not suspend the air suspension operation.

System Over-Temperature

If the air suspension is under heavy use, the system may temporarily suspend all height changes to allow compressor cooldown. When this occurs and a height change is requested, a "Leveling System Unavailable" message will be displayed in the instrument cluster.

Air Suspension Service

If a "Service Leveling System" message is displayed in the instrument cluster, see your dealer immediately.

Cruise Control

Adaptive Cruise Control



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

(Continued)

Warning (Continued)

are following. This can occur when vehicles suddenly slow or stop ahead, or enter your lane. Also see "Alerting the Driver" later in this section. Complete attention is always required while driving and you should be ready to take action and apply the brakes. See *Defensive Driving* ⇨ 167.



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 poor due to rain, snow, fog, dirt, insect residue, or dust; when other foreign objects obscure the camera and/or radar; or when the vehicle

(Continued)

Warning (Continued)

in front or oncoming traffic causes additional environmental obstructions, such as road spray. ACC performance is limited under these conditions.

- On slippery roads where fast changes in tire traction can cause excessive wheel slip.

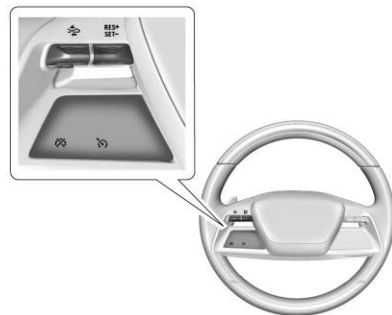
Adaptive Cruise Control allows the cruise control set speed and following gap to be selected. Read this entire section before using this system. The following gap is the following time (or distance) between your vehicle and a vehicle detected directly ahead in your path, moving in the same direction. If no vehicle is detected in your path, Adaptive Cruise Control works like regular cruise control. the system uses a camera and radar sensor(s) to detect other vehicles. See *Radio Frequency Statement* ⇨ 361.

If a vehicle is detected in your path, Adaptive Cruise Control can apply acceleration or limited, moderate braking to maintain the selected following gap. To disengage the system, apply the brake. If Adaptive Cruise

Control is controlling the vehicle speed when the Traction Control System or StabiliTrak/Electronic Stability Control system activates, Adaptive Cruise Control may automatically disengage. See *Traction Control/Electronic Stability Control* ⇨ 186. When road conditions allow Adaptive Cruise Control to be safely used, it can be turned back on.

Disabling the Traction Control System or StabiliTrak/Electronic Stability Control system will disengage and prevent engagement of Adaptive Cruise Control.

Adaptive Cruise Control can reduce the need for you to frequently brake and accelerate, especially when used on expressways, freeways, and interstate highways. When used on other roads, you may need to take over the control of braking or acceleration more often.



 : Press to turn the system on or off. The indicator turns white on the instrument cluster when Adaptive Cruise Control is turned on.

RES+ : Press briefly to resume the previous set speed or to increase vehicle speed if Adaptive Cruise Control is already activated. To increase speed by about 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 Adaptive Cruise Control or to decrease vehicle speed if the system is already activated. To decrease speed by about 1 km/h (1 mph),

press SET— 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 Adaptive Cruise Control without erasing the selected set speed.

: Press to select a following gap setting of Far, Medium, or Near.

The speedometer reading can be displayed in either English or metric units. See *Instrument Cluster* ⇨ 95. The increment value used depends on the units displayed.

Switching Between Adaptive and Regular Cruise Control

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 cause a crash if the brakes are not applied manually. You and others could be seriously injured or killed.

To switch between Adaptive Cruise Control and regular cruise control, press and hold . A Driver Information Center message displays. See *Vehicle Messages* ⇨ 116.



Adaptive Cruise Control Indicator



Regular Cruise Control Indicator

When Adaptive Cruise Control 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.

It is recommended to switch from Adaptive Cruise Control to regular cruise control only, when there are no vehicles ahead of your vehicle.

When the vehicle is turned on, the cruise control mode will be set to the last mode used before the vehicle was turned off.

Setting Adaptive Cruise Control

If Adaptive Cruise Control is on when not in use, the thumbwheel could be pressed to SET— or RES+ and activate the system when not desired. Keep Adaptive Cruise Control off when it is not being used.

Select the desired set speed. This is the vehicle speed when no vehicle is detected in your path.

While the vehicle is moving, Adaptive Cruise Control will not set at a speed below a minimum speed, although it can be resumed. If equipped with Super Cruise, this minimum speed is 5 km/h (3 mph), otherwise, it is 25 km/h (15 mph). The minimum allowable set speed is 25 km/h (15 mph).

To set Adaptive Cruise Control while moving:

1. Press .
2. Accelerate to the desired speed.
3. Press and release SET—.
4. Remove your foot from the accelerator pedal.

After Adaptive Cruise Control is set, it may immediately apply the brakes if a vehicle ahead is detected closer than the selected following gap.

Adaptive Cruise Control can also be set while the vehicle is stopped if the system is on and the brake pedal is applied.



The Adaptive Cruise Control indicator displays on the instrument cluster and Head-Up Display (HUD), if equipped. When Adaptive Cruise Control is turned on, the indicator will be lit white. When the system is active, 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 Adaptive Cruise Control is set at a desired speed and then the brakes are applied, the system is disengaged without erasing the set speed from memory.

To begin using Adaptive Cruise Control again, press RES+ up briefly.

If the vehicle is moving 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. The system will hold the vehicle until RES+ or the accelerator pedal is pressed.

A green Adaptive Cruise Control 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 Adaptive Cruise Control has resumed, the vehicle speed will increase to the set speed under the following conditions:

- There is no vehicle ahead.
- The vehicle ahead is beyond the selected following gap.
- The vehicle speed is not being limited because of a sharp turn.

Increasing Speed While Adaptive Cruise Control Is at a Set Speed

If Adaptive Cruise Control 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, the system will not brake because it is overridden. While overridden, the Adaptive Cruise Control indicator will turn blue on the instrument cluster or Head Up Display (HUD).
- Press and hold RES+ until the desired set speed is displayed, then release it.
- To increase speed in smaller increments, press RES+ to the first position. For each press, the vehicle goes about 1 km/h (1 mph) faster.
- To increase speed in larger increments, press RES+ to the second position. 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 pedal applied, press RES+ until the desired set speed is displayed.
- If Adaptive Cruise Control is holding the vehicle at a stop and there is another vehicle directly ahead, pressing RES+ will increase the set speed.
- Pressing RES+ there is no longer a vehicle ahead or the vehicle ahead is pulling away and the brake is not applied will cause the Adaptive Cruise Control 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.

Reducing Speed While Adaptive Cruise Control Is at a Set Speed

If Adaptive Cruise Control 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 position. For each press, the vehicle goes about 1 km/h or (1 mph) slower.
- To decrease speed in larger increments, press SET- to the second position. 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.

Selecting the Follow Distance Gap

When a slower moving vehicle is detected ahead within the selected following gap, Adaptive Cruise Control 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 Head-Up Display (HUD), if equipped. The gap setting will be maintained until it is changed.

Gap Adjust



Far Gap Setting

Gap Adjust



Medium Gap Setting

Gap Adjust



Near Gap Setting

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 feature. See *Forward Collision Alert (FCA) System* ⇨ 242.

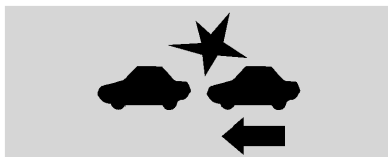
Courtesy Gap

Press and hold  on the steering wheel when vehicle is moving to temporarily increase the gap with the vehicle ahead to allow for merging traffic.

Press and hold  when stopped to cancel Adaptive Cruise Control from resuming automatically (if the stop is brief) and to remain stationary. This can be used to allow traffic to merge between you and the vehicle ahead. Press RES+ or the accelerator pedal to resume Adaptive Cruise Control.

Following distance gap will return to the original selection after hold.

Alerting the Driver



If Adaptive Cruise Control is engaged, driver action may be required when the system cannot apply sufficient braking because of approaching a vehicle too rapidly.

When this condition occurs, the collision alert symbol will flash on the windshield. Either eight beeps will sound from the front, or both sides of the Safety Alert Seat will pulse five times. On the infotainment app screen, touch Settings > Vehicle > Collision/Detection Systems to change settings.

See *Defensive Driving* ⇨ 167.

Approaching and Following a Vehicle



The vehicle ahead indicator is in the instrument cluster and Electronic Stability Control (if equipped). It only displays when a vehicle is detected in your vehicle's path moving in the same direction. If this symbol is not displaying, Adaptive Cruise Control will not respond to or brake for vehicles ahead.

Adaptive Cruise Control automatically slows the vehicle down and adjusts vehicle speed to follow a detected vehicle ahead at the selected following gap. The vehicle speed increases or decreases to follow a detected vehicle in

front of your vehicle when that vehicle is traveling slower than your vehicle set speed. It may apply limited braking, if necessary. When braking is active, the brake lights will come on. The automatic braking may feel or sound different than if the brakes were applied manually. This is normal.

Passing a Vehicle While Using Adaptive Cruise Control

Warning

When using ACC to pass a vehicle or perform a lane change, the following distance to the vehicle being passed may be reduced. ACC may not apply sufficient acceleration or braking when passing a vehicle or performing a lane change. Always be ready to manually accelerate or brake to complete the pass or lane change.

If the set speed is high enough, and the left turn signal is used to pass a vehicle ahead in the selected following gap, Adaptive Cruise Control may assist by gradually accelerating the vehicle prior to the lane change.

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 Adaptive Cruise Control

Adaptive Cruise Control may have difficulty detecting the following objects:

- Vehicles with cargo extending from the back end.
- Non-standard shaped vehicles, such as vehicle transport, vehicles with a side car fitted, or horse carriages.

- Objects that are close to the front of your vehicle.

Adaptive Cruise Control Automatically Disengages

Adaptive Cruise Control may automatically disengage and the driver will need to manually apply the brakes to slow the vehicle if:

- The sensors are blocked.
- The Traction Control System or StabiliTrak/Electronic Stability Control 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 Driver Information Center message may display to indicate that Adaptive Cruise Control is temporarily unavailable.

The Adaptive Cruise Control indicator will turn white when the system is no longer active.

In some cases, when Adaptive Cruise Control is temporarily unavailable, regular cruise control may be used. See "Switching Between Adaptive

and Regular Cruise Control” previously in this section. Always consider driving conditions before using either cruise control system.

Notification to Resume Adaptive Cruise Control

Warning

If ACC has stopped the vehicle, and if ACC is disengaged, turned off, or canceled, 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 it off before leaving the vehicle.

Adaptive Cruise Control 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 Adaptive Cruise Control 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. On the infotainment app screen, touch Settings > Vehicle > Collision/Detection Systems > Alert Type and Adaptive Cruise Go Notifier to change settings.

If equipped with Driver Attention System, when the vehicle ahead drives away, and Driver Attention System determines that the driver's attention is on the road ahead, Adaptive Cruise Control resumes automatically. See "Attention to the Road" under *Super Cruise* ⇨ 216. If necessary, press RES+ or the accelerator pedal to resume Adaptive Cruise Control. If stopped for more than two minutes or if the driver door is opened and the driver seat belt is unbuckled, the system automatically applies the electric parking brake to hold the vehicle. The electric parking brake status light will turn on. See *Electric Parking Brake* ⇨ 183.

A Driver Information Center warning message may display indicating to shift to P (Park) before exiting the vehicle. See *Vehicle Messages* ⇨ 116.

Adaptive Cruise Control Override

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.

If using the accelerator pedal while Adaptive Cruise Control is active, the indicator turns blue on the instrument cluster or Electronic Stability Control, if equipped indicating Adaptive Cruise Control braking will not occur. The system will resume operation when the accelerator pedal is not being pressed.

Curves in the Road

Warning

On curves, 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

(Continued)

Warning (Continued)

use ACC while driving on an entrance or exit ramp. Always be ready to use the brakes if necessary.

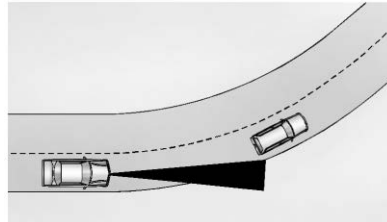
Warning

On curves, 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 curves and be ready to use the brakes if necessary. Select an appropriate speed while driving in curves.

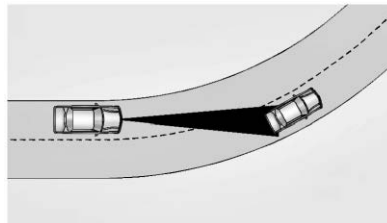
Adaptive Cruise Control may operate differently in a sharp curve. It may briefly reduce the vehicle speed if the curve is too sharp.

The curve speed control indicator  may illuminate green when Adaptive Cruise Control is actively controlling the vehicle speed and detects a sharp curve on the road ahead.

Adaptive Cruise Control automatically slows the vehicle down while navigating the curve and may increase speed out of the curve, but will not exceed the set speed.

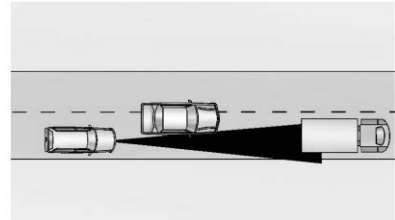


When following a vehicle and entering a curve, Adaptive Cruise Control may not detect the vehicle ahead and accelerate to the set speed. When this happens, the vehicle ahead indicator will not appear.



Adaptive Cruise Control may detect a vehicle that is not in your lane and apply the brakes.

Adaptive Cruise Control may occasionally provide an alert and/or braking that is considered unnecessary. It could respond to vehicles in different lanes or stationary objects when entering or exiting a curve. This is normal operation. The vehicle does not need service.

Other Vehicle Lane Changes

Adaptive Cruise Control 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:

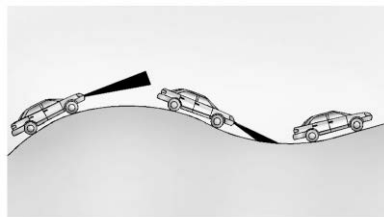
- The vehicle or object ahead is not within your lane.

- The vehicle ahead is shifted, not centered, 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 Adaptive Cruise Control on Hills



Do not use Adaptive Cruise Control when driving on steep hills. The system will not detect a vehicle ahead.

Disengaging Adaptive Cruise Control

There are four ways to disengage Adaptive Cruise Control:

- Press .
- Press the brake pedal.

- Press the Regen On Demand paddle.
- Press .

Erasing Speed Memory

The Adaptive Cruise Control set speed is erased from memory if  is pressed or if the vehicle is turned off.

Auto Set Speed

Warning

When using Auto Set Speed with ACC, the auto set speed may not always be updated when the speed limit changes. The system also does not set the vehicle speed to speed limits shown with supplementary traffic signs, for example in construction zones. Always be attentive to your surroundings and adhere to posted speed limit signs.

If equipped, the Auto Set Speed function uses detected road speed limits to assist setting the vehicle speed while ACC is engaged.

You can enable or disable this feature through vehicle settings. To view available settings from the infotainment screen, touch Settings > Vehicle > Speed Assist.

When ACC is engaged and Auto Set Speed is enabled, the vehicle will:

- use the road speed limit to maintain a set vehicle speed.
- change the ACC set speed to match the new road speed limit.

Increase or decrease ACC set speed at any time using the SET- or RES+ buttons, to a predefined limit. The accelerator pedal can also be used to override the set speed.

If you change ACC set speed, it will reset to the road speed limit under the following conditions:

- You pass a new road speed limit.
- ACC set speed is higher than the road speed limit, and the vehicle speed goes to or below the road speed limit.
- The accelerator pedal is used to increase the speed above road speed limit and then the pedal is released.

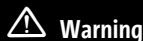
This function will not work when regular Cruise Control is the selected Cruise Control mode.

This function may not work for conditional speed limit signs, for example, during specific times or where workers present.

Weather Conditions Affecting Adaptive Cruise Control

System operation may be limited under snow, heavy rain, or road spray conditions.

Accessory Installations and Vehicle Modifications



Warning

Stickers or accessories attached on or around the front or rear fascia of your vehicle can impair the radar sensors resulting in vehicle damage or personal injury. Your vehicle could brake suddenly. Do not attach anything on or around the front or rear fascia, including the license plate, the bumper, or the grille. Use only GM genuine accessories.

Do not install or place any object around the front camera windshield 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.

Do not modify the hood, headlights, or fog lights, as this may limit the camera's ability to detect an object.

Do not attach anything to the front or rear fascia as this may interfere with the radar sensor operation.

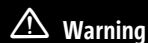
Cleaning the Sensing System

The camera sensor on the windshield behind the rearview mirror, and the sensors on the front of the vehicle can become blocked by snow, ice, dirt, mud, or debris. This area needs to be cleaned for Adaptive Cruise Control to operate properly.

If Adaptive Cruise Control will not operate, regular cruise control may be available. See "Switching Between Adaptive and Regular Cruise Control" previously in this section. Always consider driving conditions before using either cruise control system.

For cleaning instructions, see "Washing the Vehicle" under *Exterior Care* ➞ 334.

Hands-On Steering Assist



Warning

Hands-On Steering Assist is a hands-on driver assistance feature. When using this feature, you must always keep your hands on the steering wheel and always be prepared to take immediate action. Hands-On Steering Assist provides lane centering steering assistance only by helping to maintain vehicle position in the current lane under certain, compatible conditions. Hands-On Steering Assist can only be used when Adaptive Cruise Control is enabled and engaged. Hands-on Steering Assist is not a self-driving system, does not perform all aspects of driving, and cannot accurately detect or predict all situations. Hands-On Steering Assist is not a crash avoidance system. To prevent serious injury or death, you must always supervise the driving task and always monitor the road conditions, including when Hands-on Steering Assist is engaged.

Hands-On Steering Assist does:

(Continued)

Warning (Continued)

- Not prevent crashes or warn of possible crashes.
- Not provide steering or steering assistance to avoid stopped or slow-moving vehicles, cross-traffic, construction barriers or cones, motorcycles, children, pedestrians, animals, or other objects on the road.
- Not steer or provide steering assistance in response to vehicles or objects next to your vehicle, including vehicles attempting to enter your lane.
- Not respond to traffic lights, stop signs, or other traffic control devices.
- Not respond to crossing traffic.
- Not make turns.
- Not steer to merge onto or to exit highways.
- Not steer to avoid, or steer through construction zones.
- Not respond to oncoming traffic.

(Continued)

Warning (Continued)

- Not function when lane markings are not detected or the vehicle is not centered in lane.



Failure to supervise the driving task and to respond appropriately, even while Hands-On Steering Assist is operating, can cause a crash. Hands-On Steering Assist may not respond as you would to all driving situations and may not maintain lane position under all conditions. It is extremely important to pay attention to the operation of the vehicle, even while using Hands-On Steering Assist. Do not use a hand-held device while driving, even with Hands-On Steering Assist engaged. To prevent serious injury or death:

- Always remain properly seated in the driver seat with your seat belt fastened.

(Continued)

Warning (Continued)

- Always make sure traffic conditions are safe before using Hands-On Steering Assist.
- Always keep the front sensors clean.
- Always observe posted speed limits.
- Only use Hands-On Steering Assist at or below the posted speed limit.

Hands-On Steering Assist should not be used in complex or uncertain driving conditions, including:

- Not when approaching or exiting toll plazas.
- Not when approaching an intersection that is controlled with a traffic light, stop sign, or other traffic control device.
- Not when lane markings are not present or cannot be detected. For example, there is too much glare, weather conditions are poor, or lanes are poorly marked.
- Not on slippery or icy roads.

(Continued)

Warning (Continued)

- Not in adverse weather conditions, including rain, sleet, fog, ice, or snow.
- Not on winding or hilly roads.
- Not during heavy or emergency braking.
- Not in a highway exit lane.

Hands-On Steering Assist can only help the driver maintain a lane-centered position. You may need to respond to traffic events by steering, braking, or accelerating. Hands-On Steering Assist cannot determine whether you are awake, asleep, impaired, or properly focused on safe driving. If you are not attentive with your hands on the wheel and eyes on the road, when Hands-On Steering Assist disengages, the vehicle could crash into other vehicles, drive out of the lane, or drive off the road. See *Defensive Driving* ⇨ 167.



Warning

Hands-On Steering Assist may not detect lane markings while traveling on curved roads. If this occurs, the vehicle could drift out of your lane of travel when Hands-On Steering Assist is engaged. Hands-On Steering Assist may also abruptly disengage more often around sharp curves. To prevent crashes, always pay attention to the road and always be prepared to take immediate action by firmly steering the vehicle. You are always responsible for the safe operation of the vehicle, especially braking, steering, and controlling the speed and distance from other vehicles.

If equipped and enabled, Hands-On Steering Assist helps keep your vehicle centered in its lane using the front camera module to detect lane markings, steering wheel touch sensors to monitor hand placement, and the Driver Attention System to confirm your eyes are on the road.

Hands-On Steering Assist provides only steering assistance, it does not steer for you and requires you to keep your hands on the

steering wheel at all times. When using this feature, the vehicle will maintain a set speed and following distance from a lead vehicle.

The Hands-On Steering Assist feature works with Adaptive Cruise Control and Super Cruise, if equipped. See *Adaptive Cruise Control* ⇨ 193 and *Super Cruise* ⇨ 216.

Hands-On Steering Assist differs from Lane Keep Assist, which offers limited steering correction only when a lane departure is detected, by providing continuous steering assistance when engaged. See *Lane Keep Assist (LKA)* ⇨ 258.

To view available settings from the infotainment app screen, select Settings > Vehicle > Lane Centering Assistance.

Hands-On Steering Assist Requirements

Hands-On Steering Assist is designed to operate only when:

- The vehicle has an active Connected Service plan through OnStar.
- Adaptive Cruise Control is engaged. See *Adaptive Cruise Control* ⇨ 193.
- The system detects the driver's hands are on the steering wheel.

- The Driver Attention System detects the driver's head and eyes are directed toward the road ahead.
- The driver's seat belt is buckled.
- The lane markings are clearly visible and detectable by the system.
- The outside temperature is not too cold (i.e., not below 15° F (-9° C)).
- The vehicle speed is less than approximately 85 mph (137 km/h).
- Teen Driver, if equipped, is not active.
- The camera and radar sensors are functioning and not covered, obstructed, or damaged.
- Adjustable Ride Height, if equipped, must be at Normal ride height.
- There are no other conditions preventing the system from working properly.

Hands-On Steering Assist Limitations

Hands-On Steering Assist cannot provide sufficient lane steering assistance to keep the vehicle centered in all driving conditions. It will not change lanes and does not provide automatic lane changing – it provides lane centering assistance only within your

current lane of travel. If the feature is unable to provide sufficient lane centering assistance, it may disengage abruptly with little advanced warning.

This feature may not be able to provide sufficient lane centering assistance in the following conditions:

- The required steering effort to maintain lane centering exceeds the system limit – for example, when the curve in the road is too tight or the curvature of the road combined with your speed exceeds the feature's steering assist capabilities.
- Lane markings are not present or cannot be detected, or when lanes merge or split. For example, there is too much glare, weather conditions are poor, or lanes are poorly marked.
- The area you are driving in is under construction or roadwork is in progress.
- The front windshield camera and/or the front radar are blocked.

Operating Hands-On Steering Assist

1. Start the vehicle.

2. Enable Adaptive Cruise Control by pressing the Adaptive Cruise Control button  on the steering wheel. The white Adaptive Cruise Control light  displays in the instrument cluster.
3. Enable Hands-On Steering Assist and Super Cruise, if equipped, by pressing the Super Cruise button  on the steering wheel.

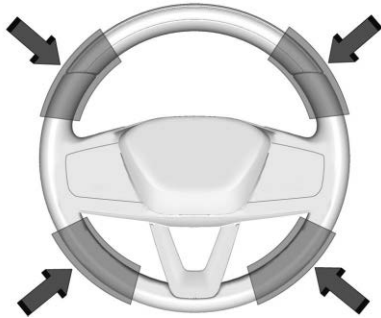
- The white Hands-On Steering Assist light  displays in the instrument cluster.

Adaptive Cruise Control, Hands-On Steering Assist, and Super Cruise, if equipped, will remain enabled the next time you start the vehicle.

4. Engage Adaptive Cruise Control by pressing the SET+/RES- button. The green Adaptive Cruise Control light  displays with the set speed limit.

Once Adaptive Cruise Control is engaged, when your vehicle is centered in the lane and detects lane markers, Hands-On Steering Assist begins providing lane centering assistance. When Hands-On

Steering Assist is engaged, the white Hands-On Steering Assist light  displays green.



Steering Wheel Sensors

5. Hold the steering wheel firmly with both hands using the steering wheel sensor locations shown.

To adjust vehicle position within the lane, change lanes, turn, or maneuver around any object in your path, you must manually take control of the steering. Once you center the vehicle back in the lane, the feature will automatically reengage and actively provide hands-on lane centering steering assistance.

Manually Canceling Hands-On Steering Assist

Hands-On Steering Assist can be manually canceled by any of the following actions:

- Pressing the Super Cruise button  on the steering wheel.
- Disengaging Adaptive Cruise Control by: stepping lightly on the brake pedal, pressing the Adaptive Cruise Control , or canceling the speed setting  buttons on the steering wheel.
- Pressing the Regen On Demand paddle, if equipped.

Automatic Disengagement of Hands-On Steering Assist

Warning

Hands-On Steering Assist will not maintain the vehicle's speed while the Hands-On Steering Assist light is flashing red. If the Hands-On Steering Assist light flashes red, immediately take action by firmly steering the vehicle to prevent serious

(Continued)

Warning (Continued)

injury or death. If the feature is engaged, the green Hands-On Steering Assist light is illuminated, and you remove your hands from the steering wheel or eyes from the road, do not promptly return them, and ignore the alerts and messages, including the red flashing Hands-On Steering Assist light, the system will begin to apply the brakes and slowly bring your vehicle to a stop within the lane of travel, activate the hazard lights, and call OnStar.

Disengagement Due to System Limitations

The system will automatically disengage when an external condition or system limitation exists, for example, no lane markers are detected or the curve in the road is too tight.

The system may disengage frequently and abruptly due to system limitations with little advance warning.

Disengagement Due to Hands-Off or Eyes-Off

The system will automatically disengage when the steering wheel sensors detect your hands are not on the steering wheel and your head and eyes are not directed toward the road ahead.

Warnings Before Disengagement

Before the system disengages due to system limitations or because your hands are off the steering wheel or your eyes are not focused on the road, you will receive one or more of the warnings below depending on the circumstances prompting your immediate action:

- An alert message displays in the Driver Information Center
- The Hands-On Steering Assist lights may flash green or turn red
- Audible alerts sound
- The Safety Alert Seat vibrates, if equipped and enabled

When this happens, you must take immediate action by firmly steering the vehicle and ensure your eyes are on the road ahead. When the feature is engaged and no system limitations are present and your hands are off the steering

wheel or eyes off the road, if you continue to ignore the alerts and fail to put your hands back on the steering wheel or eyes on the road, the system will begin to apply the brakes and slowly bring your vehicle to a stop within the lane of travel, activate the hazard lights, and call OnStar. See *Super Cruise* ⇨ 216.

Repeated misuse—hands off the steering wheel or eyes off the road – and disregard of these warnings may result in being locked out of the feature for a period of time. Repeated lockout events may delay the feature availability.

Caution

If you drive with your hand (or hands) on the top of the steering wheel, you may block the Driver Monitoring System camera, which is mounted on the top of the steering column. See *Defensive Driving* ⇨ 167. If this camera is blocked, it cannot confirm that you have your eyes and attention on the road, and the system will alert you that it is disengaging if you do not put your eyes on the road. For the best experience with Hands-On Steering Assist, avoid holding the top center of the steering wheel to drive.

Hands-On Steering Assist will not provide steering assistance and will enter standby mode if a turn signal is active, if it detects that you are accelerating or braking quickly, or if you are intentionally steering across a lane marker.

When Adaptive Cruise Control is active and Hands-On Steering Assist is automatically disengaged, whether due to a system limitation or failure to keep hands on the steering wheel and eyes on the road, Hands-On Steering Assist remains in standby mode and will automatically reengage when the vehicle is again centered in the lane and the system detects lane markers.

How Adaptive Cruise Control, Hands-On Steering Assist, and Super Cruise Work Together



Warning

Taking your hands off the wheel can result in loss of control of the vehicle. Never take your hands off the wheel unless and until the steering lightbar is green, which indicates that Super Cruise Hands-Free is engaged.

Adaptive Cruise Control, Hands-On Steering Assist, and Super Cruise, if equipped, provide increasing levels of driver assistance as follows:

1. Adaptive Cruise Control

- Maintains your speed and following distance

2. Hands-On Steering Assist

- Adds lane centering and steering support

3. Super Cruise, if equipped

- Allows for hands-free driving assistance, including steering, braking, and acceleration
- Limited to Super Cruise mapped and enabled roads

Hands-On Steering Assist and Super Cruise, if equipped, will alternate depending on driver and system conditions. The level of assistance available and its status, whether in standby mode, engaged/active mode, or when disengaging, is displayed in the instrument cluster, message alerts in the Driver Information Center, and the steering wheel lightbar. See “Driver Assistance Levels and Display Indicators in Increasing Order of Assistance” later in this section.

Hands-On Steering Assist Message Summary

Alert messages for this feature are displayed in the Driver Information Center. See *Instrument Cluster* ⇨ 95. All alert messages refer to this feature as “Lane Centering Assistance”.

Hands-on lane centering on but not active.	Hands-On Steering Assist is enabled but not actively providing lane centering steering assistance. Hands-On Steering Assist has been temporarily overridden by the driver manually taking over steering control, for example, to manually change lanes.
Lane centering active. Keep hands on.	Hands-On Steering Assist is actively providing steering assistance.
Take vehicle control.	Hands-On Steering Assist is prompting you to take full manual control of steering immediately. If you fail to immediately resume full manual steering control, the system will disengage.
Lane centering assistance unavailable.	- Rain or snow is inhibiting the system's ability to see lane markers. - Direct sunlight is on the front camera. - There are missing or poor lane markings on the road. - There is sun glare on the road surface. - There is heavy rain, puddles, road spray, or inclement weather conditions that are affecting system performance. - Adaptive Cruise Control is not enabled.
Keep eyes on road while using lane centering.	Alert for you to pay attention to the road.
Keep hands on for lane centering.	Alert for you to keep hands on the steering wheel.

Lane centering assistance locked out.	• You did not take control of the vehicle when prompted by the Hands-On Steering Assist system. The Hands-On Steering Assist system will be disabled until the vehicle is turned off and back on.
Lane centering unavailable. Can't see face.	• Sun is shining into the Driver Attention System camera. • Sun glare is on the driver's face. • Cups, food, hands, or other objects are obscuring the Driver Attention System view of the driver's face. • The steering column is pointed too high or low for the Driver Attention System to detect the driver. • Adjust the steering column or the seat if the message occurs frequently.

Driver Assistance Levels and Display Indicators in Increasing Order of Assistance

Driver Assistance Feature	Instrument Cluster Light and Color	Steering Wheel Lightbar	Status of Driver Assistance Feature
Adaptive Cruise Control	 White	Off	Adaptive Cruise Control is enabled and in standby mode.
	 Green	Off	Adaptive Cruise Control is actively controlling your speed and maintaining an appropriate and preselected following distance with the lead vehicle.
	 Blue	Off	Adaptive Cruise Control was overridden and will not brake nor maintain following distance.

Driver Assistance Feature	Instrument Cluster Light and Color	Steering Wheel Lightbar	Status of Driver Assistance Feature
Hands-On Steering Assist (Lane Centering)	 White	Off	Hands-On Steering Assist is enabled but not actively providing lane centering steering assistance.
	 Green	Off	Hands-On Steering Assist is actively providing lane centering steering assistance.
	 Flashing Green	Off	Hands-On Steering Assist has detected your hands are not on the steering wheel or you are not paying sufficiently close attention to the road.

Driver Assistance Feature	Instrument Cluster Light and Color	Steering Wheel Lightbar	Status of Driver Assistance Feature
Hands-On Steering Assist (Lane Centering) (Continued)	 Red or Flashing Red	Off	Hands-On Steering Assist is prompting you to take full manual control of steering immediately. If you fail to immediately resume full manual steering control, the system will disengage.
Hands-Free Super Cruise, if equipped	 White	Off	Hands-Free Super Cruise is enabled and in standby mode.
	 Green	Green	Hands-Free Super Cruise is actively steering your vehicle. Pay attention to the road and vehicle operation. Do not take your hands off the wheel until the steering wheel lightbar is solid green.

Driver Assistance Feature	Instrument Cluster Light and Color	Steering Wheel Lightbar	Status of Driver Assistance Feature
Hands-Free Super Cruise, if equipped (Continued)	 Green	Flashing Green	Hands-Free Super Cruise has detected you are not paying sufficiently close attention to the road. Pay attention to the road ahead. The steering wheel lightbar will flash green as well.
	 Red	Flashing Red	Take over steering immediately. Hands-Free Super Cruise will disengage if you fail to take over steering. The steering wheel lightbar will flash red.

Connectivity

An active Connected Service plan that includes Super Cruise Services is required to use Super Cruise, if equipped, and Hands-On Steering Assist. If the vehicle is equipped with OnStar and has an active service plan, additional data may be collected through the OnStar system. This includes information about: the vehicle's

operation; a crash involving the vehicle; the use of the vehicle and its features; and, in certain situations, the location and approximate GPS speed of the vehicle. If vehicle location sharing is disabled, or Terms and Conditions are not accepted, data would no longer be collected. Refer to the OnStar Terms and Conditions and Privacy Statement on the OnStar website.

For additional information on Hands-On and Hands-Free driving, see <https://www.onstar.com/services/super-cruise-hands-free-driving>.

System Care

Caution

The Hands-On Steering Assist system is a highly sophisticated system and should only be serviced by technicians with the proper training, tools, and safety instructions, which your dealer has. Without proper training and tools the vehicle may become damaged.

The Driver Attention System's camera on the steering column, which continually monitors the driver's head movements and eye gaze location to determine driver attentiveness, has a lens cover that may become dirty over time and affect camera performance. Clean the lens cover with a soft cloth sprayed with glass cleaner. Wipe the lens gently, then dry it. Never use abrasive cloths/cleaners or corrosive chemicals on the lens cover.

Super Cruise

**Warning**

Super Cruise does not perform all aspects of driving, nor does it do everything a driver can do. Super Cruise only steers to maintain vehicle position in the current lane or, under some circumstances, to change lanes. Super Cruise can only be used with Adaptive Cruise Control.

Super Cruise does:

- Not prevent crashes or warn of possible crashes.
- Not steer to avoid stopped or slow-moving vehicles, cross-traffic, construction barriers or cones, motorcycles, children, pedestrians, animals, or other objects on the road.
- Not steer in response to vehicles or objects next to your vehicle, including vehicles attempting to enter your lane.
- Not respond to traffic lights, stop signs, or other traffic control devices.

(Continued)

Warning (Continued)

- Not respond to crossing traffic.
- Not make turns.
- Not steer to merge onto or to exit highways.
- Not steer to avoid, or steer through construction zones.
- Not function on surface streets.
- Not respond to oncoming traffic.
- Not function in city driving conditions.

**Warning**

Failure to supervise the driving task and to respond appropriately, even while Super Cruise is operating, can cause a crash. Super Cruise may not respond as you would to all driving situations and may not maintain lane position under all conditions.

It is extremely important to pay attention to the operation of the vehicle, even while using Super Cruise. Do not use a hand-

(Continued)

Warning (Continued)

held device while driving, even with Super Cruise engaged. To prevent serious injury or death:

- Always remain properly seated in the driver seat with your seat belt fastened.
- Never remove your hands from the steering wheel when Super Cruise is not operating.
- Always make sure traffic conditions are safe before using Super Cruise.
- Always keep the entire vehicle and the sensors clean. Sensors are on the front, sides, and rear of the vehicle.
- Always observe posted speed limits. Only use Super Cruise at or below the posted speed limit.

Super Cruise should not be used in complex or uncertain driving conditions, including:

- Not in construction zones.
- Not when approaching or exiting toll plazas.

(Continued)

Warning (Continued)

- Not when approaching an intersection that is controlled with a traffic light, stop sign, or other traffic control device.
- Not when lane markings are not present or cannot be detected. For example, there is too much glare, weather conditions are poor, or lanes are poorly marked.
- Not on slippery or icy roads.
- Not in adverse weather conditions, including rain, sleet, fog, ice, or snow.
- Not on winding or hilly roads.
- Not for city driving.
- Not during heavy or emergency braking.
- Not on surface streets.
- Not on a road shoulder, service drive, or under an elevated freeway.
- Not in a highway exit lane.

 Warning

Super Cruise can only assist to maintain lane position, or steer to change lanes, when driving on compatible roads. You must supervise the driving task and monitor the road conditions. You may need to respond to traffic events by steering, braking, or accelerating. See Defensive Driving.

Super Cruise is:

- Not a self-driving system
- Not a crash avoidance or warning system
- Not a substitute for proper supervision of the driving task

 Warning

Some state and local laws may require hands to be kept on the steering wheel at all times. Only remove your hands from the steering wheel if Super Cruise is engaged, it is safe to do so, and it is permitted by state and local laws.

**Warning**

To prevent serious injury or death, be alert and pay special attention when passing highway exits, entrances, and crossings with Super Cruise, and be ready to take control of the vehicle when necessary. Changes in lane markings around exits and entrances can momentarily cause Super Cruise to not detect the correct lane. If this occurs, Super Cruise may attempt steering inputs to bring the vehicle back into the correct lane and, in rare circumstances, could over-correct and cause the vehicle to momentarily cross into a lane next to your vehicle unless you manually steer to maintain your lane position.

If equipped, Super Cruise is an advanced driver assistance technology that allows hands-free driving on compatible roads. Additionally, it offers support for lane changes and hands-on driving across an expanded set of roads. Super Cruise works with Adaptive Cruise Control to maintain vehicle set speed and following distance. The Driver Attention System monitors your head pose and eye gaze

to ensure you're paying attention to the road. The Driver Attention System does not record or save video.

Super Cruise is designed to operate only when:

- The vehicle has an active Connected Service plan through OnStar.
- Adaptive Cruise Control is engaged. See *Adaptive Cruise Control* ⇨ 193.
- The Driver Attention System detects the driver's head and eyes are directed toward the road ahead.
- The driver's seat belt is buckled.
- The lane markings are clearly visible and detectable by the system.
- The outside temperature is not too cold (i.e., not below 15° F (-9° C)).
- The vehicle speed is less than approximately 85 mph (137 km/h).
- Teen Driver, if equipped, is not active.
- The camera and radar sensors are functioning and not covered, obstructed, or damaged.
- Adjustable Ride Height, if equipped, must be at Normal ride height.

- There are no other conditions preventing the system from working properly.

When Super Cruise is unavailable, a message will display with the reason. See "Super Cruise Message Summary" later in this section.

You may also press and hold  on the steering wheel to have the system display the unavailability message.

Engaging Super Cruise**Warning**

Super Cruise is a driver assistance system and cannot accurately detect or predict all situations. Super Cruise is not a crash avoidance system. To prevent serious injury or death, you must supervise the driving task and monitor the road conditions. You may need to respond to traffic events by steering, braking, or accelerating. See *Defensive Driving* ⇨ 167. Super Cruise also cannot determine whether you are awake, asleep, impaired, or properly focused on safe driving. The vehicle could crash into other vehicles, drive

(Continued)

Warning (Continued)

out of the lane, or drive off the road. Complete attention is always required while driving, even while using Super Cruise. Be prepared to take over steering or apply the brakes at any time.

Warning

Super Cruise may not begin steering immediately, even when Super Cruise is available and  has been pressed. To prevent serious injury or death, only remove your hands from the steering wheel if the steering wheel lightbar, the Super Cruise light , and the Adaptive Cruise Control (ACC) light  are green.

1. Make sure the vehicle is on and Adaptive Cruise Control is enabled. You will see one of two icons: a white illuminated  or a green illuminated  with the set speed limit. If you do not see either of these, press  on the steering wheel.

2. Press  on the steering wheel to enable Super Cruise.
3. Set the desired vehicle speed using the SET+/RES- button.

The system automatically engages the appropriate level of assistance based on availability and operating conditions. There are three possible assistance levels:

Adaptive Cruise Control: When Adaptive Cruise Control is active,  appears green in the instrument cluster. See *Adaptive Cruise Control* ⇨ 193.

Hands-On Steering Assist: If enabled, when the vehicle is centered in the lane, and  displays green in the instrument cluster, the vehicle provide steering assistance to help keep itself centered in the lane. When this feature is engaged,  is green, you must keep your hands on the steering wheel. See *Hands-On Steering Assist* ⇨ 203.

To view available settings from the infotainment app screen, select Settings > Vehicle > Lane Centering Assistance.

Super Cruise Hands-Free: When the vehicle is centered in the lane,  displays green in the instrument cluster, and the steering wheel

lightbar turns green, you may take your hands off the steering wheel. This is the only level that allows for hands-free driving.

Adaptive Cruise Control, Hands-On Steering Assist, and Super Cruise, will remain enabled the next time you start the vehicle.

Lane Changes**Warning**

To help prevent crashes before making a lane change:

- Always check mirrors.
- Glance over your shoulder.
- Use the turn signals.

Warning

Super Cruise Lane Change may not detect a vehicle in an adjacent lane. Always supervise the driving task and monitor traffic conditions when using the Super Cruise Lane Change feature. Only request a lane change when traffic conditions are safe for a lane change, and always be ready to manually steer the vehicle.

Super Cruise allows for manual, automatic, or turn signal activated lane changes. Automatic and turn signal activated lane changes are only available in Super Cruise hands-free functionality. Super Cruise Lane Change functionality may be disabled when accessories (e.g. bike rack, cargo tray, etc.) are detected.

To view the available settings, from the infotainment app screen, touch Settings > Vehicle > Super Cruise Lane Change.

Automatic Lane Changes

Automatic lane changes are initiated by the system under the following conditions to:

- pass a slower vehicle.
- merge out of a lane that is ending.
- allow space for other vehicles to merge from a highway entrance ramp.
- follow a route set on the built-in navigation system.

To cancel an automatic lane change, activate the turn signal lever or steer manually.

Automatic Lane Change is not available when a construction zone is detected.

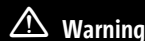
Turn Signal Activated Lane Changes

To initiate this type of lane change:

1. Ensure the adjacent lane is clear of traffic.
2. Activate the turn signal in the direction you want to go.
3. The system will steer the vehicle to perform the lane change.

To cancel a turn signal activated lane change, disengage the turn signal lever or steer manually.

Stationary or Very Slow-Moving Objects; Cross-Traffic



Warning

Super Cruise is not a crash avoidance system and will not steer or brake to avoid a crash. Super Cruise does not steer to prevent a crash with stopped or slow-moving vehicles. You must supervise the driving task and may need to steer and brake to prevent a crash, especially in stop-and-go traffic or when a vehicle suddenly enters your lane. Always pay attention

(Continued)

Warning (Continued)

when using Super Cruise. Failure to do so could result in a crash involving serious injury or death.

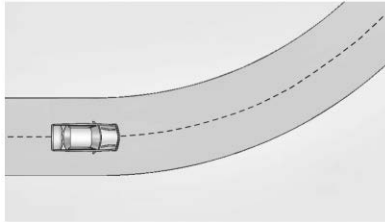
Curves in the Road



Warning

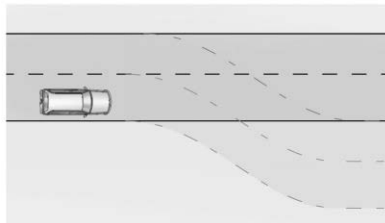
The vehicle could drift out of your lane of travel. To prevent crashes, always be ready to manually steer. Super Cruise may not detect your lane on curves in the road. Super Cruise may not detect the markings that show your lane. You may not have time to react to a vehicle in the lane next to your vehicle while on curves in the road. Super Cruise may hand control back to the driver more often driving around a sharp curve.

Super Cruise may operate differently in sharp curves. It may drift out of your lane of travel if the curve is too sharp.



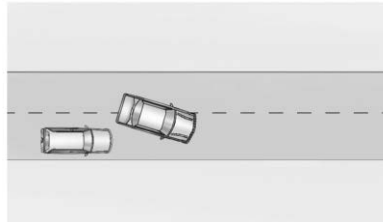
When entering a curve, Super Cruise may not detect the lane markings and may not adjust the steering enough to stay in your lane of travel. When this happens, you will need to steer the vehicle.

Super Cruise may detect other lane markings that are not in your lane and may or may not steer appropriately to maintain your lane.



Super Cruise may occasionally provide an alert and/or steering that is considered unnecessary. It could respond to lane markings in different lanes, signs, guardrails, and other stationary objects when entering or exiting a curve. This is normal operation. The vehicle does not need service.

Other Vehicles Entering Your Lane



Super Cruise may not detect a vehicle that enters your lane, or may not brake fast enough to avoid a crash. You must manually brake and steer the vehicle.

Intersections and Vehicles Crossing the Road Ahead

Super Cruise will not brake the vehicle when approaching an intersection that is controlled by a traffic light or stop sign. Super Cruise

will not detect vehicles crossing the road ahead, including at intersections, and will not automatically steer or brake to prevent a collision. You must manually brake and steer the vehicle.

Super Cruise on Hills

Do not use Super Cruise while driving on steep hills.

Disengaging Super Cruise

To cancel or turn off Super Cruise in your vehicle, you can use one of the following methods:

- Press  on the steering wheel to disengage Super Cruise.
- Press the brake pedal to disengage Super Cruise and Adaptive Cruise Control.
- Turn Adaptive Cruise Control off. This also disengages Super Cruise.
- Use the Regen on Demand paddle, if equipped, to disengage Super Cruise and Adaptive Cruise Control.

Super Cruise Status and Lightbar

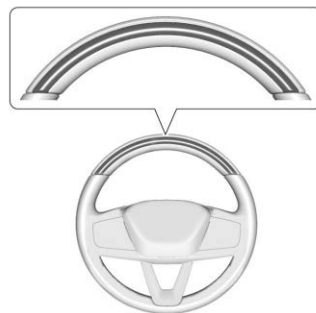
**Warning**

Super Cruise will not maintain the vehicle's speed while the steering wheel lightbar is flashing red. If the steering wheel lightbar flashes red, immediately resume manual steering to prevent serious injury or death.

(Continued)

Warning (Continued)

If you do not resume manual steering, the vehicle will begin to slow in the same lane and eventually come to a complete stop on the road.



Driver Assistance Levels and Display Indicators in Increasing Order of Assistance

Driver Assistance Feature	Instrument Cluster Light and Color	Steering Wheel Lightbar	Status of Driver Assistance Feature
Adaptive Cruise Control, if equipped	 White	Off	Adaptive Cruise Control is enabled and in standby mode.
	 Green	Off	Adaptive Cruise Control is actively controlling your speed and maintaining an appropriate and preselected following distance with the lead vehicle.
	 Blue	Off	Adaptive Cruise Control was overridden and will not brake nor maintain following distance.

Driver Assistance Feature	Instrument Cluster Light and Color	Steering Wheel Lightbar	Status of Driver Assistance Feature
Hands-On Steering Assist (Lane Centering), if equipped	 White	Off	Hands-On Steering Assist is enabled but not actively providing lane centering steering assistance.
	 Green	Off	Hands-On Steering Assist is actively providing lane centering steering assistance.
	 Flashing Green	Off	Hands-On Steering Assist has detected your hands are not on the steering wheel or you are not paying sufficiently close attention to the road.

Driver Assistance Feature	Instrument Cluster Light and Color	Steering Wheel Lightbar	Status of Driver Assistance Feature
Hands-On Steering Assist (Lane Centering), if equipped (Continued)	 Red or Flashing Red	Off	Hands-On Steering Assist is prompting you to take full manual control of steering immediately. If you fail to immediately resume full manual steering control, the system will disengage.
Hands-Free Super Cruise, if equipped	 White	Off	Hands-Free Super Cruise is enabled and in standby mode.
	 Green	Green	Hands-Free Super Cruise is actively steering your vehicle. Pay attention to the road and vehicle operation. Do not take your hands off the wheel until the steering wheel lightbar is solid green.

Driver Assistance Feature	Instrument Cluster Light and Color	Steering Wheel Lightbar	Status of Driver Assistance Feature
Hands-Free Super Cruise, if equipped (Continued)	 Green	Flashing Green	Hands-Free Super Cruise has detected you are not paying sufficiently close attention to the road. Pay attention to the road ahead. The steering wheel lightbar will flash green as well.
	 Red	Flashing Red	Take over steering immediately. Hands-Free Super Cruise will disengage if you fail to take over steering. The steering wheel lightbar will flash red.

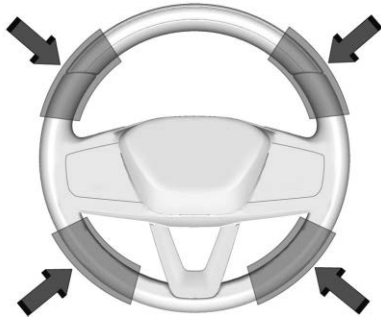
When Super Cruise is Steering

When the vehicle is positioned in the center of the lane, the steering wheel lightbar and  will turn green, indicating Super Cruise is steering the vehicle.

When Super Cruise controls the steering, traffic and other conditions and laws permit, and it is safe to do so, your hands can be taken off the steering wheel.

Always pay attention to the road and the operation of the vehicle. Always monitor and be attentive of surrounding traffic, including vehicles that may cross the road in front of your vehicle.

Cooperative or Manual Steering



Super Cruise steering can be overridden with manual steering at any time. To begin steering manually, hold the steering wheel firmly with both hands using the steering wheel sensor locations shown.

You can adjust vehicle position within the lane by cooperatively steering the vehicle. If you steer out of the lane, the system will disengage.

When ready to allow Super Cruise to resume steering again, position the vehicle in the center of the lane, hold the steering wheel until the steering wheel lightbar turns green, and then release the steering wheel when it is safe to do so.

Escalation Requiring Driver To Take Control of the Steering Wheel

When you are required to take control of the steering wheel, , and the steering wheel lightbar will turn red, and a message will display in the Driver Information Center. When you begin steering manually, Super Cruise will disengage.

In addition, audible alerts will sound, or the Safety Alert Seat will vibrate, if equipped. To view collision and detection settings, from the infotainment app screen, touch Settings > Vehicle > Collision/Detection Systems.

The red flashing steering wheel lightbar could occur under any of the following conditions:

- The lane markings are poor, or visibility is limited.
- The Driver Attention System does not detect that the driver's head and eyes are directed toward the road ahead.
- Adaptive Cruise Control is cancelled.
- The vehicle is on a tight curve, the lane is too wide, or the vehicle enters a curve too quickly.
- The Super Cruise enabled road ends.

- The vehicle is approaching an intersection controlled by a traffic light, stop sign, or other traffic control device.
- A Super Cruise system fault occurs.
- Super Cruise is unable to complete a lane change maneuver.
- Super Cruise detects that the outside temperature is too cold to operate correctly.
- The driver's seatbelt becomes unbuckled.

The system will be locked out if driver does not take control of the vehicle when prompted. The system may be disabled for short duration. If the driver repeatedly does not take control of the vehicle when prompted, the system will be disabled until the vehicle is turned off and back on.

Super Cruise Message Summary

Subscription Required - Press OnStar Button	• The owner's required Connected Services subscription may have ended. • Press the Blue OnStar button in your vehicle to speak with an OnStar representative, who can help determine the issue and what actions to take
Unavailable Turn on Adaptive Cruise Control	Adaptive Cruise Control must be on before Super Cruise can be enabled. • Set speed is not required before enabling Super Cruise. • Adaptive Cruise Control is not required to be engaged before enabling Super Cruise.
Unavailable Lane Ending	Super Cruise is disabled because the driving lane is ending.
Unavailable No Road Information	• There is no map information available for that portion of the road. Recent road reconstruction may turn off Super Cruise for that section of road until new map information is available. • The vehicle is not on the correct type of road. A controlled access freeway or compatible divided or non-divided road is required for Super Cruise. • There are lanes entering or exiting on both the left and right side of the road.
Unavailable Sensors Can't Find Lane Lines	• Rain or snow is inhibiting the system's ability to see lane lines. • Direct sunlight is on the front camera at dawn or dusk. • There are missing or poor lane line markings on the road. • There is sun glare on the road surface. • There is heavy rain, puddles, road spray, or inclement weather conditions that are affecting system performance.

Unavailable Sensor Can't See Face Clearly	• Sun is shining into the Driver Attention System camera. • Dawn or dusk sun glare is on the driver's face. • Cups, food, hands, or other objects are obscuring the Driver Attention System view of the driver's face. • The steering column is pointed too high or low for the Driver Attention System to see the driver. Adjust the steering column or the seat if the message occurs frequently.
Unavailable Looking Away From Road for Too Long	The Driver Attention System detects that the driver is not looking at the road.
Unavailable Driving Too Fast	The vehicle is traveling faster than 137 km/h (85 mph). The maximum Super Cruise speed in curves will vary based on how sharp the curve is. The vehicle will automatically decrease speed if needed.
Unavailable Driving in Exit Lane	The Super Cruise system has detected that the vehicle is in an exit lane.
Unavailable GPS Signal Lost	• There is poor reception in isolated areas. • Reception is being blocked by buildings or other large structures.
Unavailable You Have Taken Vehicle Control	• The brake pedal is being pressed. • Adaptive Cruise Control has been canceled or turned off.
Unavailable Sensor Blocked	Clear snow, ice, dirt, or other contaminants from the front and rear areas of the vehicle.
Unavailable Sharp Curve	Some curves are too sharp to be navigated by the Super Cruise system. Super Cruise will be available after the curve is traveled.

Super Cruise Unavailable	Super Cruise is unavailable for reasons not described in other messages.
Super Cruise Locked Out See Owner's Manual	The driver did not take control of the vehicle when prompted by the Super Cruise system. The Super Cruise system will be disabled until the vehicle is turned off and back on.
Unavailable Seat Belt Not Fastened	The driver seat belt is not fastened.
Unavailable Teen Driver Mode Active	Teen Driver mode is engaged.
Unavailable Snow Mode	A snow plow is attached.
Unavailable Unsupported Intersection	Super Cruise has detected an unsupported intersection.
Unavailable Approaching Toll Booth	Super Cruise has detected that there is a toll booth ahead.
Unavailable Ride Height Out of Range	The vehicle ride height is out of Super Cruise operational range.
Caution Construction Zone - Drive With Care	Super Cruise has detected a construction zone.

Map Updates

Super Cruise relies on precise LIDAR based maps, these are often called High Definition (HD) Maps. These HD Maps are regularly

updated by GM and sent to your vehicle. This will happen automatically as your vehicle is driven. This will not require any user input. If there is any issue with these HD Map updates,

a Service Driver Assist error message will be displayed. If this message is displayed, please contact an authorized GM Service Center.

Connectivity

An active Connected Service plan that includes Super Cruise Services is required to use Super Cruise and Hands-On Steering Assist. If the vehicle is equipped with OnStar and has an active service plan, additional data may be collected through the OnStar system. This includes information about: the vehicle's operation; a crash involving the vehicle; the use of the vehicle and its features; and, in certain situations, the location and approximate GPS speed of the vehicle. Refer to the OnStar Terms and Conditions and Privacy Statement on the OnStar website.

For additional information on Hands-On and Hands-Free driving, see <https://www.onstar.com/services/super-cruise-hands-free-driving>.

Location Services

This setting enables or disables location services for OnStar. If you disable location services, GM may still collect vehicle location information from the vehicle in the event of an emergency (such as in the event of a crash, when the emergency call button is pressed, or where there is overheating of a high voltage battery).

System Care

Caution

The Super Cruise system is a highly sophisticated system and should only be serviced by technicians with the proper training, tools, and safety instructions, which your dealer has. Without proper training and tools the vehicle may become damaged.

The camera on the steering column has a lens cover that may become dirty over time and affect camera performance. Clean the lens cover with a soft cloth sprayed with glass cleaner. Wipe the lens gently, then dry it. Never use abrasive cloths/cleaners or corrosive chemicals of any kind on the lens cover.

Super Cruise uses the front radar, front camera, rear radar, and 360-degree cameras for its operation. Clean surfaces are required for Super Cruise operation. See *Adaptive Cruise Control* ⇨ 193, *Surround Vision System* ⇨ 234, and *Lane Keep Assist (LKA)* ⇨ 258 for care information.

Advanced Driver Assistance Systems

This vehicle may have features that work together to help avoid crashes or reduce crash damage while driving, backing, 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 see alerts or warnings provided by these systems. Failure to use proper care when driving may result in injury, death, or vehicle damage. See *Defensive Driving* ⇨ 167.

Under many conditions, these systems will not:

- Detect children, pedestrians, bicyclists, or animals.
- Detect vehicles or objects outside the area monitored by the system.

(Continued)

Warning (Continued)

- 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.
- 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.

**Warning**

Stickers or accessories attached on or around the front or rear fascia of your vehicle can impair the radar sensors resulting in vehicle damage or personal injury. Your vehicle could brake suddenly. Do not attach anything on or around the front or rear fascia, including the license plate, the bumper, or the grille. Use only GM genuine accessories.

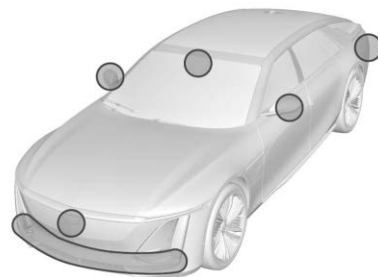
Audible Alert or Safety Alert Seat

Some driver assistance features alert the driver of obstacles by sounding an audible alert. To view available settings from the infotainment screen, touch Settings > Vehicle > Comfort and Convenience.

If equipped with the Safety Alert Seat, the driver seat cushion may provide a vibrating pulse alert instead of an audible alert. To view available settings from the infotainment screen, touch Settings > Vehicle > Collision/Detection Systems.

Cleaning

Depending on vehicle options, keep these areas of the vehicle clean to ensure the best driver assistance feature performance. Driver Information Center 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 windshield 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

Radio Frequency

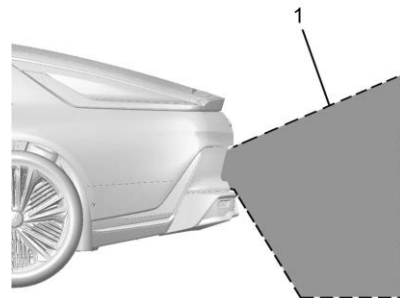
This vehicle may be equipped with driver assistance systems that operate using radio frequency. See *Radio Frequency Statement* ⇨ 361.

Assistance Systems for Parking or Backing

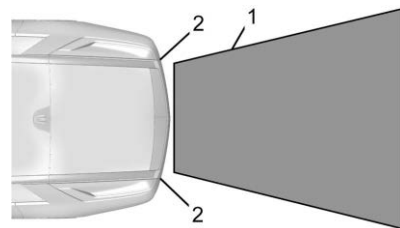
If equipped, the Rear Vision Camera, Rear Park Assist, Surround Vision, Side Bicycle Detection, and Rear Cross Traffic Alert may help the driver park or avoid objects. Always check around the vehicle when parking or backing.

Rear Vision Camera (RVC)

When the vehicle is shifted into R (Reverse), the 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  on the center stack, shift into P (Park), or reach a vehicle speed of approximately 12 km/h (8 mph).



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 display to show that RPA has detected an object. This triangle changes from amber to red and increases in size the closer the object.

If  or a service message appears on the infotainment display, there may be a camera malfunction. See your dealer.

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

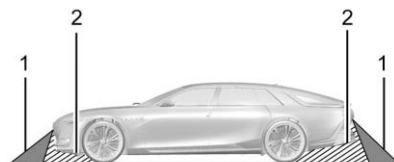
Warning

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 surround view correctly. Always check around the vehicle when parking or backing.

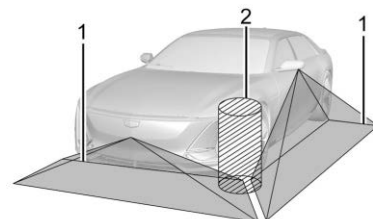
Warning

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.

If equipped, the Surround Vision system can display various views surrounding the vehicle in the infotainment display. See later in this section for camera view descriptions and more information.



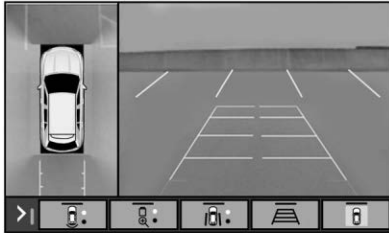
1. Views Displayed by the Surround Vision Cameras
2. Area Not Shown



1. Views Displayed by the Surround Vision Cameras

2. Area Not Shown

Camera Views



Touch the camera view buttons along the bottom of the infotainment display to access each view:

Front/Rear Standard View: Displays an image of the area in front or behind the vehicle. To select, touch Front/Rear Standard View on the infotainment display when a camera view is active.

The view will toggle between Front and Rear Standard View based on gear position. If equipped, the Front Standard View also displays when the Park Assist system detects an object in front of the vehicle.

To access the Rear Standard View, select CAMERA on the infotainment display and select Rear Standard View. The view can be closed by selecting X, Home, or Back on the infotainment display.

Front/Rear Top-Down View: Displays a front or rear overhead view of the vehicle. To view, select Front/Rear Top-Down View on the infotainment display when the camera app is active.

Front/Rear Side View: Displays a view that shows objects next to the front or rear sides of the vehicle. To select, touch Front/Rear Side View on the infotainment display when a camera view is active. Touch the button to toggle between front and rear camera views. Park Assist and Rear Cross Traffic Alert overlays are not available when Front/Rear Side View is active.

Guidance Lines: The guidance lines icon may appear as a selection on the screen when a view supports guidance lines. To change the guidance mode, select the appropriate guidance icon. Depending on the guidance mode and view selected, different guidance lines may appear. If the icon is grayed-out, guidance lines are not available.

Cabin Glance: If equipped, displays a live feed of the seating area on the infotainment screen. This view is used to monitor the occupants of the vehicle without needing to turn around. The video is real-time only and is not recorded or

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

Warning

The Park Assist System is no substitute for careful and attentive driving. The Park Assist system does not detect children, pedestrians, bicyclists, 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 backing.

The vehicle may be equipped with Front and Rear Park Assist. Under certain conditions, the Park Assist system can assist the driver during backing and parking maneuvers 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 1.8 m (6 ft) behind and 1.2 m (4 ft) in front of your vehicle that are taller than 25 cm (10 in).

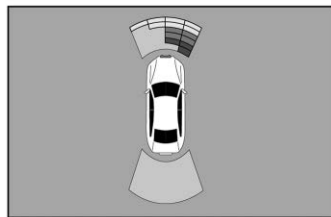
Different environmental conditions may affect whether and how far the Park Assist system can detect objects. Keep the sensors clean of mud, dirt, snow, ice, and slush; and clean sensors after a car wash in freezing temperatures. Sensors that are not clean may not detect objects or may cause the system to alert when not required.

How the System Works

The vehicle may have a Park Assist amphitheater-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 becomes closer, more bars light up and change color from yellow to amber to red.

When an object is first detected in the rear, one audible alert will be heard from the rear, or the driver's seat will pulse two times, if equipped with Safety Alert Seat. When an object is very close, five audible alerts will sound from the front or rear (depending on the object's location), or the driver's seat will pulse five times. Audible alerts for front are higher pitched than the rear.



Turning the System On and Off

The Park Assist System can be turned on or off using the front center console display.

When the system is turned off, a system off message is shown on the display. This message disappears after a short period of time.

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* ⇨ 334.
- 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, 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



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 (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 movement of an adjacent vehicle, or a person or object entering the parking space. APA does not detect or avoid traffic

(Continued)

Warning (Continued)

that is behind or alongside of the vehicle. Always be prepared to stop the vehicle during the parking maneuver.

If equipped, under certain conditions Automatic Parking Assist can use sensors to detect a parking spot, and, under the supervision of the driver, automatically park or unpark the vehicle. The vehicle will control gear selection, steering, acceleration, and braking, at or near idle speeds. The driver must always be prepared to apply braking, as needed. A display and audible alerts help to guide the parking maneuvers.

How to Activate Automatic Parking

To activate Automatic Parking Assist, press  on the infotainment screen, or  on the instrument panel. While driving forward at no greater than 30 km/h (18 mph), Automatic Parking Assist searches for parking spots, within the detection range, to the left or right of the vehicle. To search for a parking space to the left, turn on the left turn signal or, if available, change the side selection in the

infotainment display. To choose or change the parking mode, make a selection on the infotainment display.

The Automatic Parking Assist feature cannot be used 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.
- Not be too steep.

After completely passing an eligible parking spot, an audible alert sounds and a notification to stop the vehicle is displayed in the driver information center. Generally, Automatic Parking Assist 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 the vehicle is ready to begin the maneuver, 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 maneuvers

into the parking spot, continue to check your surroundings. Be prepared to stop to avoid vehicles, pedestrians, or objects.

A progress bar displays the status of the parking maneuver. Once automatic parking is finished and the vehicle has come to a full stop, Automatic Parking Assist will sound an audible alert and display a message indicating parking is complete.

How to Activate Automatic Unparking

To activate Automatic Parking Assist, turn the vehicle on and leave it in P (Park), then press  on the infotainment screen or the  button on the instrument panel. A screen will display with unparking options. Like automatic parking, follow the displayed instructions and continue to check your surroundings, being prepared to brake to avoid vehicles, pedestrians, or objects.

Once automatic unparking is finished and the vehicle has come to a full stop, Automatic Parking Assist will display a message requesting the driver to take control. Press the brakes and take control of the vehicle to drive away.

How to Cancel Automatic Parking/Unparking

To cancel automatic parking or automatic unparking at any time, press  or X on the infotainment display. Be prepared to resume full control of the vehicle. Automatic Parking Assist holds the vehicle until the parking brake or brake is applied, or the vehicle is shifted into P (Park). To start driving away, press the brakes and shift into D (Drive).

Certain vehicle conditions and driver interferences may also cancel automatic parking:

- The driver manually steers the vehicle.
- The driver shifts gears.
- The driver presses the accelerator pedal.
- There is a failure with the Automatic Parking Assist system.
- The electronic stability control or antilock brakes are activated.
- The parking brake is applied.
- The driver unbuckles the seat belt and opens the door.

System Limitations

Automatic Parking Assist has certain limitations. The system cannot:

- Detect whether a parking space is legal or restricted.
- Detect pavement markings or lines.
- Park in an angled spot.
- Park exactly centered in a very large spot.
- Park in a very narrow spot.
- Always detect short curbs.
- Operate while towing any trailer.
- Operate with certain rear-mounted accessories, such as bike racks.
- Operate on a steep grade.
- Park the vehicle front first.

Reverse Automatic Braking (RAB)

Backing Warning and Reverse Automatic Braking



Warning

The Reverse Automatic Braking System 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 backing speeds, there may not be enough time for the short, sharp application of the vehicle brake system to occur.

It may not avoid many types of backing 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 avoid a crash. It will not brake for objects when the vehicle is moving at very low speeds. The system

(Continued)

Warning (Continued)

will not work correctly under poor visibility or bad weather conditions, such as rain or snow.

To prevent injury, death, or vehicle damage, always check the area around the vehicle and check all mirrors before backing.

Caution

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 release the brakes. Before releasing the brakes, check the Rear Vision Camera and check the area around the vehicle to make sure it is safe to proceed.

If enabled, when in R (Reverse), Backing Warning alerts of rear objects at vehicle speeds greater than 8 km/h (5 mph) and Reverse Automatic Braking may automatically brake hard at speeds between 1–32 km/h (0.5–20 mph).

To view available settings from the infotainment app screen, touch Settings > Vehicle > Collision/Detection Systems.

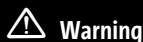
The Backing Warning System will sound an audible alert once from the rear when an object is first detected, or pulse twice on both sides of the Safety Alert Seat. When the system detects a potential crash, audible alerts will be heard from the rear, or five pulses will be felt on both sides of the Safety Alert Seat. There may also be a brief, sharp application of the brakes.

When the vehicle is in R (Reverse), if the system detects the vehicle is backing 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 backing crash.

Pressing the brake pedal after the vehicle comes to a stop will release Reverse Automatic Braking. If the brake pedal is not pressed soon after the stop, the electric parking brake may be set. When it is safe, press the accelerator pedal firmly at any time to override Reverse Automatic Braking.

Unexpected braking events are possible with a static installed accessory, such as a bike rack or hitch-mounted cargo carrier.

Rear Pedestrian Alert



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.
- The RVC is blocked by dirt, snow, or ice.
- The RVC, taillights, or back-up lights are not cleaned or in proper working condition.
- The vehicle is not in R (Reverse).

(Continued)

Warning (Continued)

To help avoid death or injury, always check for pedestrians around the vehicle before backing up. Be ready to take action and apply the brakes. See *Defensive Driving* ⇨ 167. Keep the RVC, taillights, and back-up lights clean and in good repair.

If equipped, and under certain conditions, this feature provides alerts to the driver that a pedestrian may be behind the vehicle. This feature only works in R (Reverse) below 12 km/h (8 mph) when the pedestrian is directly behind the vehicle and within the system's range of 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 seven audible alerts 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 ten audible alerts from the rear, or if equipped, seven pulses from both sides of the driver seat.

Rear Pedestrian Alert can be set to Off or Alert. To view available settings from the infotainment app screen, touch Settings > Vehicle > Collision/Detection Systems.

If equipped, alerts can be set to audible alerts or seat pulses. To view available settings from the infotainment app screen, touch Settings > Vehicle > Collision/Detection Systems.

Rear Cross Traffic Alert (RCTA) System



Warning

The Rear Cross Traffic Alert 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 backing speeds, there may not be enough time for the short, sharp application of the vehicle brake system to occur.

It may not avoid many types of backing 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 avoid a crash. It will not brake for objects when the vehicle is moving at very low speeds. The system

(Continued)

Warning (Continued)

will not work correctly under poor visibility or bad weather conditions, such as rain or snow.

To prevent injury, death, or vehicle damage, always check the area around the vehicle and check all mirrors before backing.

Rear Cross Traffic Alert displays a red warning triangle with a left or right pointing arrow 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 side of the vehicle. When an object is detected, either three audible alerts 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.

Rear Cross Traffic Braking

Rear Cross Traffic Braking displays a red warning triangle with a left or right pointing arrow on the infotainment screen to warn of traffic coming from the left or right. The system detects objects coming from up to 20 m (65 ft) from the left or right side of the vehicle.

When an object is detected, three audible alerts sounds from the left or right, depending on the direction of the detected vehicle. Rear Cross Traffic Braking will bring the vehicle to a full stop if a collision is imminent.

Turning the Features On or Off

Rear Cross Traffic Alert can be turned on or off using the infotainment system. To view available settings from the infotainment screen, touch Settings > Vehicle > Collision/Detection Systems.

Assistance Systems for Driving

If equipped, when driving the vehicle in a forward gear, Forward Collision Alert, Lane Departure Warning, Lane Keep Assist, Blind Zone Steering Assist, Lane Change Alert, Side Bicyclist Detection, Automatic Emergency Braking, Intersection Automatic Emergency Braking, and/or the Front Pedestrian Braking System can help to avoid a crash or reduce crash damage.

Forward Collision Alert (FCA) System

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, guardrails, bridges, construction barrels, or other objects. Be ready to take action and apply the brakes. See *Defensive Driving* ⇨ 167.

The Forward Collision Alert system may help to avoid or reduce the harm caused by front-end crashes. When approaching a vehicle ahead too quickly, the system provides a red flashing alert on the windshield and rapid audible alerts or pulses the driver seat. Forward Collision Alert also lights an amber visual alert if following another vehicle much too closely.

Forward Collision Alert detects vehicles within a distance of approximately 60 m (197 ft) and operates at speeds above 40 km/h (25 mph).

Forward Collision Alert can be disabled through vehicle settings. To view available settings from the infotainment app screen, touch Settings > Vehicle > Collision/Detection Systems.

Detecting the Vehicle Ahead

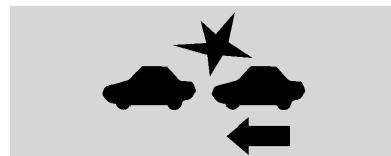
Warning

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 windshield is damaged. It may also not detect a vehicle on winding or hilly roads, or in conditions that can limit visibility such as fog, rain, or snow, or if the headlights or windshield are not cleaned or in proper condition. Keep the windshield, headlights, and FCA sensors clean and in good repair.

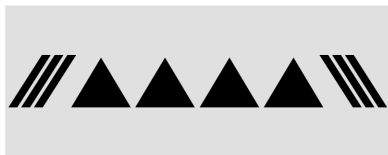


Forward Collision Alert warnings will not occur unless the system detects a vehicle ahead. When a vehicle is detected, the vehicle ahead indicator will display green. Vehicles may not be detected on curves, highway exit ramps, or hills, due to poor visibility; or if a vehicle ahead is partially blocked by pedestrians or other objects. Forward Collision Alert will not detect another vehicle ahead until it is completely in the driving lane.

Collision Alert



With Head-Up Display



Without Head-Up Display

When your vehicle approaches another detected vehicle too rapidly, the red Forward Collision Alert display will flash on the windshield. Also, eight rapid high-pitched audible alerts 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 Forward Collision Alert timing to Far, Medium, or Near. The first button press shows the current setting on the Driver Information Center. 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, changing the Forward Collision Alert timing setting automatically changes the following gap setting (Far, Medium, or Near).

Following Distance Indicator

If equipped, the following distance to a moving vehicle ahead in your path is indicated in following time in seconds on the Driver Information Center. The minimum following time is 0.5 seconds away. If there is no vehicle detected ahead, or the vehicle ahead is out of sensor range, dashes will be displayed.

Unnecessary Alerts

Forward Collision Alert 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 Forward Collision Alert system does not seem to operate properly, this may correct the issue:

- Clean the outside of the windshield in front of the rearview mirror.

- Clean the entire front of the vehicle.
- Clean the headlights.

Automatic Emergency Braking (AEB)

Warning

AEB is an emergency crash preparation feature and is not designed to avoid crashes. 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.
- Detect a vehicle ahead if it is partially blocked by pedestrians or other objects.

(Continued)

Warning (Continued)

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.

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 objects. To override AEB, firmly press the accelerator pedal, if it is safe to do so.

Automatic Emergency Braking may slow the vehicle to a complete stop to try to avoid a potential crash. If this happens, Automatic Emergency Braking may engage the electric parking brake to hold the vehicle at a stop. Release the electric parking brake or firmly press the accelerator pedal.

The system may help avoid or reduce the harm caused by front-end crashes. Automatic Emergency Braking also includes Intelligent

Brake Assist. When the system detects a vehicle ahead in your path that is traveling in the same direction that you may be about to crash into, it can provide a boost to braking or automatically brake the vehicle. 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. Always wear a seat belt and ensure that all passengers are properly restrained. This automatic emergency braking can only occur if a vehicle is detected. This is shown by the Forward Collision Alert vehicle ahead indicator being lit. See *Forward Collision Alert (FCA) System* ⇨ 242.

The system works when driving in a forward gear above 4km/h (2 mph). It can detect vehicles up to approximately 60 m (197 ft).

Intelligent Brake Assist

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.

 Warning

Using AEB or IBA 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.

Intelligent Brake Assist 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. Intelligent Brake Assist will automatically disengage only when the brake pedal is released.

Automatic Emergency Braking and Intelligent Brake Assist can be disabled through vehicle settings. To view available settings from the infotainment app screen, touch Settings > Vehicle > Collision/Detection Systems.

A system unavailable message may display if:

- The front of the vehicle or windshield is not clean.
- Heavy rain or snow is interfering with object detection.

- There is a problem with the StabiliTrak/Electronic Stability Control system.

The Automatic Emergency Braking system does not need service.

Intersection Automatic Emergency Braking System

 Warning

I-AEB is an emergency crash preparation feature. Do not rely on I-AEB to brake or avoid crashes. I-AEB will not brake outside of its operating speed range and only responds to detected intersecting vehicles. I-AEB may not:

- detect a crossing or oncoming vehicle 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.
- detect a vehicle ahead if it is partially blocked by pedestrians or other objects.

(Continued)

Warning (Continued)

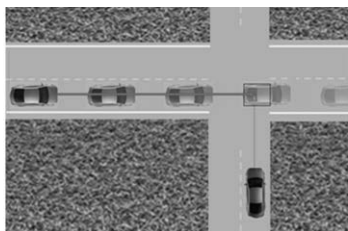
Complete attention is always required while driving, and you should be ready to take action and apply the brakes and/or steer the vehicle to avoid crashes.

If equipped, the Intersection Automatic Emergency Braking system may help avoid or reduce the harm caused by front-end crashes with crossing vehicles.

The system works when driving in a forward gear above 15 km/h (9 mph) and less than 80 km/h (50 mph). It can detect oncoming vehicles up to approximately 60 m (197 ft).

Vehicle Crossing the Path Ahead

When there is a crossing vehicle detected approaching from the right or the left side that may lead to a collision, Intersection Automatic Emergency Braking provides a red flashing alert on the windshield and rapidly provides audible alerts or pulses the Safety Alert Seat. See *Advanced Driver Assistance Systems* ⇨ 231. Intersection Automatic Emergency Braking can provide a boost to braking or automatically brake the vehicle.



Intersection Automatic Emergency Braking can be set to Off, Alert, or Alert and Brake. To view available settings from the infotainment app screen, touch Settings > Vehicle > Collision/Detection Systems.

Crossing Traffic Alert

When your vehicle approaches an intersecting vehicle too rapidly and there is risk of a collision, a red warning graphic will flash on the windshield. Also, eight rapid high-pitched audible alerts will sound, or the driver seat will pulse five times. The side of the seat that is pulsed and the location of the audible alerts will depend on the direction that the intersecting vehicle is detected from. 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.



With Head-Up Display (HUD)



Without Head-Up Display (HUD)

Turning Across Oncoming Traffic Alert

When your vehicle approaches another detected vehicle too rapidly, a red graphic will flash on the windshield. Also, eight rapid high-pitched audible alerts 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.

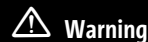


With Head-Up Display (HUD)



Without Head-Up Display (HUD)

Automatic Braking



I-AEB may automatically brake or increase vehicle braking in situations when it may not be necessary or desired. Your vehicle could block the flow of traffic. I-AEB may respond to stationary or parked vehicles, signs, and other non-moving objects. To override AEB, firmly press the accelerator pedal, if it is safe to do so.

 Warning

Using I-AEB 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.

If Intersection Automatic Emergency Braking detects it is about to crash into an intersecting vehicle, and the brakes have not been applied, Intersection Automatic Emergency Braking may automatically brake moderately or hard. This can help to avoid some crashes or lessen impact by reducing the speed of the vehicle. Always wear a seat belt and check that all passengers are properly restrained. Intersection Automatic Emergency Braking can automatically brake between 15 km/h (9 mph) and 80 km/h (50 mph). Automatic braking levels may be reduced under certain conditions, such as higher speeds.

Intersection Automatic Emergency Braking may slow the vehicle to a complete stop to try to avoid a potential crash. If this happens, Intersection Automatic Emergency Braking may engage the electric parking brake to

hold the vehicle at a stop. Release the electric parking brake or firmly press the accelerator pedal to continue driving.

Intersection Automatic Emergency Braking may also apply the brakes automatically when there is an intersecting vehicle at risk of collision and the system determines that the driver is not braking with sufficient force.

Minor brake pedal pulsations or pedal movement during this time is normal and the brake pedal should continue to be applied as needed.

Cleaning the System

If Intersection Automatic Emergency Braking does not seem to operate properly, cleaning the outside of the windshield in front of the rearview mirror may correct the issue.

Front Pedestrian Braking (FPB) System

 Warning

FPB does not provide an alert or automatically brake the vehicle, unless it detects a pedestrian or bicyclist. FPB may not detect pedestrians, including children, or bicyclists:

- When the pedestrian or bicyclist is not directly ahead, fully visible, or standing upright, or when part of a group.
- Due to poor visibility, including nighttime conditions, fog, rain, or snow.
- If the FPB sensor is blocked by dirt, snow, or ice.
- If the headlights or windshield are not cleaned or in proper condition.

Be ready to take action and apply the brakes. For more information, see *Defensive Driving* ⇨ 167. Keep the windshield, headlights, and FPB sensor clean and in good repair.

The Front Pedestrian Braking system may help avoid or reduce the harm caused by front-end crashes with pedestrians and bicyclists near the forward path of the vehicle when driving in a forward gear. It displays an amber indicator, , when a nearby pedestrian or bicyclist is detected ahead. When approaching a detected pedestrian too quickly, Front Pedestrian Braking provides a red flashing alert on the windshield and rapid audible alerts or pulses the driver seat. Front Pedestrian Braking can provide a boost to braking or automatically brake the vehicle. This system includes Intelligent Brake Assist, and the Automatic Emergency Braking system may also respond to pedestrians or bicyclists. See *Automatic Emergency Braking (AEB)* ⇨ 244. Always wear a seat belt and ensure that all passengers are properly restrained.

The Front Pedestrian Braking system can detect and alert to pedestrians or bicyclists 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 or bicyclists up to a distance of approximately 40 m (131 ft). During nighttime driving, system performance is very limited.

Front Pedestrian Braking can be set to Off, Alert, or Alert and Brake through vehicle settings. To view available settings from the infotainment screen, touch Settings > Vehicle > Collision/Detection Systems.

Detecting the Pedestrian Ahead

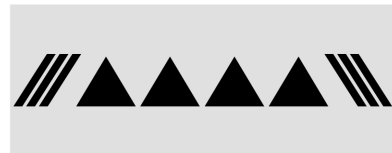


Front Pedestrian Braking alerts and automatic braking will not occur unless the system detects a pedestrian or bicyclist. When a pedestrian or bicyclist that may enter the forward path of the vehicle is detected, the pedestrian ahead indicator will display amber.

Front Pedestrian Alert



With Head-Up Display



Without Head-Up Display

When the vehicle approaches a pedestrian or bicyclist ahead too rapidly, the red Front Pedestrian Braking alert display will flash on the windshield. Eight rapid high-pitched audible alerts 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



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 bicyclists, 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.



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.

If Front Pedestrian Braking detects it is about to crash into a pedestrian or bicyclist directly ahead, and the brakes have not been applied, the system may automatically brake moderately or brake hard. This can help to avoid some very low speed pedestrian or bicyclist crashes or reduce pedestrian injury. Front Pedestrian Braking can automatically brake to detected pedestrians or bicyclist 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.

Front Pedestrian Braking may slow the vehicle to a complete stop to try to avoid a potential collision with a pedestrian or bicyclist. If this happens, Automatic Braking may engage the electric parking brake to hold the vehicle at a stop. Release the electric parking brake. A firm press of the accelerator pedal will also release Automatic Braking and the electric parking brake.

Automatic Braking can be disabled through vehicle settings. To view available settings from the infotainment screen, touch Settings > Vehicle > Collision/Detection Systems.

Cleaning the System

If Front Pedestrian Braking does not seem to operate properly, cleaning the outside of the windshield in front of the rearview mirror may correct the issue.

Night Vision System



Warning

The Night Vision system does not automatically brake the vehicle. It does not provide alerts unless it detects a pedestrian or large animal. The system may not detect pedestrians, including children, or animals:

- If they are less than 10 m (33 ft) away.
- If they are not directly ahead in the sensor coverage area, fully visible, standing upright, or part of a group.
- If the person or animal is moving too quickly through the field of view, such as a bicyclist.
- If the pedestrian is wearing insulated clothing.

(Continued)

Warning (Continued)

- If headlights are off, except when parked.
- If the outside temperature is above 30 °C (86 °F).
- Due to poor visibility, including in heavy fog, rain, or snow.
- If the sensor is blocked by dirt, snow, rain, or ice.
- When traveling faster than 113 km/h (70 mph).

Be ready to take action and apply the brakes. For more information, see *Defensive Driving* ⇨ 167. Keep the Night Vision sensor clean and in good repair.

 Warning

The system does not detect all objects or the vehicle distance from objects. The system may not provide a warning with enough time to help avoid a crash.

Caution

Do not use the Night Vision System during heavy precipitation if you are prone to photosensitivity. The image on the Driver Information Center (DIC) may flash or strobe.

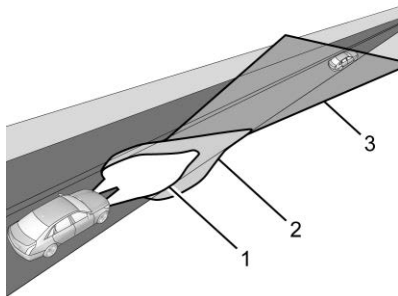
 Warning

Do not stare at the image while driving as this might cause important objects ahead not to be seen. You could crash, and you or others could be injured.

If equipped, this nighttime feature can alert the driver to pedestrians or large animals beyond the headlight beam more than 25 m (82 ft) away. A thermal image of the view ahead displays when it is dark enough outside. If a pedestrian or large animal is detected, an amber icon displays and will change to red if the vehicle is approaching the pedestrian or animal too quickly.



If equipped, when the Front Pedestrian Braking system is turned on, Night Vision provides a red Head-Up Display (HUD) alert, if equipped, when the system detects that the vehicle is approaching a pedestrian or large animal ahead too quickly. In addition, an audible alert will sound or the Safety Alert Seat pulses, if equipped. See *Front Pedestrian Braking (FPB) System* ⇨ 247.



1. Low-Beam Headlights
2. High-Beam Headlights
3. Night Vision System

Select a view on the instrument cluster to display the Night Vision image. See *Instrument Cluster* ⇨ 95. The Night Vision system can detect objects only if:

- The vehicle is on.
- The vehicle is in P (Park) or a forward gear.
- It is dark enough outside.
- The headlights are on, except when parked.

The thermal image is visible during the day, however detections are unavailable.   will display on the instrument cluster.

Adjust the instrument panel brightness to make the image no brighter than necessary. Turn the image off by selecting another view on the instrument cluster.

Adjust the Night Vision image brightness and contrast on the control panel next to the instrument cluster by selecting List  > Layout > then the arrow next to Night Vision .

Warm objects, such as pedestrians, animals, and other moving vehicles, should appear whiter on the Night Vision display. Cold objects, such as the sky, trees, and parked vehicles, should appear darker. Night Vision only shows objects that are warmer or colder than the surroundings. It does not detect brake lights, turn signals, emergency flashers, traffic lights, or sign information.

When a pedestrian or large animal is detected, an amber box displays around the pedestrian or animal on the Night Vision display and an amber pedestrian icon, , or animal icon, , displays on the instrument cluster. This pedestrian icon is also shown on the Head-Up

Display (HUD), if equipped. When the system detects the vehicle is approaching a pedestrian too quickly, the amber pedestrian icon and box turns red, and a red flashing icon, , displays on the Head-Up Display (HUD), if equipped, with rapid beeping or pulsing of the Safety Alert Seat, if equipped.

When the system detects the vehicle is approaching an animal too quickly, the amber animal icon and box turns red, and a red flashing icon, , displays on the Head-Up Display (HUD), if equipped, with rapid beeping or pulsing of the Safety Alert Seat, if equipped.

System pedestrian icons, beeps, and (if equipped) Safety Alert Seat pulses can be set to Off through vehicle settings by turning off the Front Pedestrian Braking system. To view available settings from the infotainment screen, touch Settings > Vehicle > Collision/Detection Systems > Front Pedestrian Detection.

Pedestrian detection may not be available in high outside temperatures. An icon,  , displays. The system does not need service.

In rain, snow, or fog the image may not be clear and the direction of the road ahead may not be seen. In more severe weather conditions, the image may be unclear and unusable. The system does not need service.

Keep the system sensor clean by activating the front window washer five times when it is dark enough for the system to operate. If the Night Vision image still looks blurry, use a soft wet cloth to gently clean the sensor camera lens and dry thoroughly. The sensor is behind the lower front grille below the driver side headlight.

The camera must also be aligned to work correctly. If the camera needs adjustment, see your dealer. Do not attempt to adjust the camera yourself.

If the vehicle displays SERVICE NIGHT VISION, do not attempt to adjust camera yourself. See your dealer.

If the night vision camera gets blocked while driving, the system will attempt to detect the blockage and automatically clean the camera lens. This will happen a maximum of three times per drive. In the event the system cannot clear the blockage the system will display a message on the Driver Information Center saying NIGHT VISION TEMP. UNAVAILABLE. The

system does not need service. Please manually clean the lens following the instructions in this section.

Lane Change Alert (LCA)

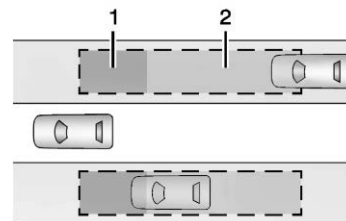
The Lane Change Alert system is a lane-changing aid that assists drivers with avoiding lane change crashes that occur with moving vehicles in the side blind zone (or spot) areas or with vehicles rapidly approaching these areas from behind. The warning display will light up in the corresponding outside mirror and will flash if the turn signal is on.

Side Blind Zone Alert is included as part of the Lane Change Alert system.

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 turn signals.

Lane Change Alert Detection Zones



1. Side Blind Zone Alert Detection Zone
2. Lane Change Alert Detection Zone

The Lane Change Alert 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 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 Lane Change Alert 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 Lane Change Alert symbol indicates it may be unsafe to change lanes. Before making a lane change, check the Lane Change Alert display, check mirrors, glance over your shoulder, and use the turn signals.



**Left Side Mirror
Display**



**Right Side Mirror
Display**

When the vehicle is started, both outside mirror Lane Change Alert 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 turn signal is activated in the same direction as a detected vehicle, this display will flash as an extra warning not to change lanes.

Lane Change Alert can be disabled through vehicle personalization. To view available settings from the infotainment screen, touch Settings > Vehicle > Collision/Detection

Systems. If Lane Change Alert is disabled by the driver, the Lane Change Alert mirror displays will not light up.

When the System Does Not Seem to Work Properly

The Lane Change Alert system requires some driving for the system to calibrate to maximum performance. This calibration may occur more quickly if the vehicle is driven on a straight highway road with traffic and roadside objects (e.g., guardrails, barriers). During a trip, the Lane Change Alert system is not operational until the vehicle first reaches a speed of 24 km/h (15 mph).

Lane Change Alert displays may not come on when passing a vehicle quickly or for a stopped vehicle. It may alert to objects attached to the vehicle, such as a 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.

Lane Change Alert 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.

Lane Change Alert may not operate when the Lane Change Alert 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* ⇨ 334. If the Driver Information Center 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 Lane Change Alert displays do not light up when moving vehicles are in the side blind zone or rapidly approaching this zone and the system is clean, the system may need service. Take the vehicle to your dealer.

Side Bicycle Detection

If equipped, the system may detect a bicyclist approaching from the side or rear of the vehicle.

If this occurs, an audible alert will sound in the direction of the detection, and the Safety Alert Seat will pulse if enabled through vehicle settings. To view available settings from the infotainment screen, touch Settings > Vehicle > Collision/Detection Systems.

Bicyclist Detection is available when the vehicle is in D (Drive), P (Park), and for a short time after the vehicle is turned off.

If the vehicle detects a bicyclist when it is off, a Driver Information Center message may display and alert to the direction of the detection. In some cases, an Unavailable message may display. This is normal and does not mean that the system is broken.

Detection Zones

When the vehicle is in P (Park) or is turned off, a bicyclist can be detected 11 m (36 ft) behind the vehicle or 10 m (33 ft) to the side of the vehicle.

When the vehicle is in D (Drive), a bicyclist can be detected 3 m (10 ft) behind the vehicle or to the side of the vehicle.

Turning the Feature On or Off

Bicyclist Detection can be turned on or off through vehicle settings. To view available settings from the infotainment screen, touch Settings > Vehicle > Collision/Detection Systems.

Blind Zone Steering Assist (BZSA)



Warning

Do not rely on Blind Zone Steering Assist (BZSA) to prevent crashes. This system does not replace the need to pay attention and drive safely. Failure to use proper care when driving may result in vehicle damage, injury, or death.

- BZSA performance may be affected by weather and road conditions.
- BZSA does not provide steering assistance to avoid a vehicle that is in, or has entered, your lane of travel.
- BZSA will not prevent a towed trailer from crossing into the adjacent lane. Always monitor the trailer position while towing to ensure it is in the same lane as your vehicle. BZSA is only designed to detect when your vehicle unintentionally crosses detected lane lines.

The Blind Zone Steering Assist system can detect a potential crash with a moving vehicle in the lane you are entering. It provides a brief, urgent turn of the steering wheel to alert you to take action to avoid a collision.

Blind Zone Steering Assist works with Lane Keep Assist and Lane Change Alert. Blind Zone Steering Assist operates when the vehicle is in a forward gear, and only when Lane Keep Assist and Lane Change Alert are enabled and able to assist. See *Lane Keep Assist (LKA)* ⇨ 258. See *Lane Change Alert (LCA)* ⇨ 252.

Blind Zone Steering Assist will provide a steering correction when your vehicle is about to leave the current lane of travel, with the possibility of a collision with a vehicle in the adjacent lane. This steering correction happens closer to the center of the lane and has a stronger steering correction than Lane Keep Assist. Unlike Lane Keep Assist, the steering correction with Blind Zone Steering Assist will happen even if your turn signal is on in the direction of lane departure.

In addition to the Blind Zone Steering Assist steering intervention, the  will turn amber, six audible alerts or six seat pulses will

occur, if equipped with Safety Alert Seat, and  or  will flash on the outside rear view mirror.

Traffic Sign Assistant

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.

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 recognized 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.

(Continued)

Caution (Continued)

Always adapt vehicle speed to the road conditions.

Driver assistance systems do not relieve the driver from full responsibility for vehicle operation.

Traffic Sign Assistant recognizes designated traffic signs via the front camera located behind the windshield in front of the interior rear view mirror, and displays the detected speed limit in the Driver Information Center. Traffic Sign Assistant requires an active OnStar subscription. Additionally, speed limit information from the navigation system map database may be used.

Traffic signs that are detected are:

- Speed Limit
- Constraint Signs

Display Indication

The currently detected speed limit is displayed in the Driver Information Center until the next speed limit or end of speed limit sign is detected. Depending on the vehicle, the current

valid speed limit is permanently displayed on the Driver Information Center or in the upper left of the instrument cluster.

A (--) symbol in a frame indicates there is a sign detected which cannot be clearly identified by the system.

A (/) symbol in a frame indicates that the feature is turned off or has failed.

See *Instrument Cluster* ⇨ 95.

Alert Function

If equipped, a audible alert may sound when you have exceeded the indicated speed limit, or if a new speed limit is detected.

The alert function can be turned on or off. To view available settings from the infotainment screen, touch Settings > Display > Instrument Cluster.

Each time the vehicle is started, the customization options will be turned on.

System Reset

The content of the traffic sign display can be cleared. To view available settings from the infotainment screen, touch Settings > Display > Instrument Cluster.

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.

Alert function will automatically be turned on when the system is reset.

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. If the map data is unavailable, Traffic Sign Assistant will turn off automatically.

Traffic Sign Map Data Update

In order for the system to keep operating correctly, the traffic sign map data must be updated on at least an annual basis. Periodic updates will be made available to you at no cost for 14 years from the manufacturing date of the vehicle.

Your vehicle will remind you to update the traffic sign map data once a year. Check for new updates at www.gmnavdisc.navigation.com/speedsignmap.

To update:

1. Download the map updates to a USB-C flash drive.
2. Insert USB-C flash drive into the vehicle's USB port. See *USB Port* ⇨ 137.
3. From the infotainment app screen, touch Settings > Display > Instrument Cluster > Traffic Sign Recognition > Traffic Sign Data and follow the prompts on screen.

Do not plug anything else into the USB ports while the transfer is in progress. A message will appear on the infotainment screen when the transfer is complete.

Limitations

Traffic sign memory may not operate correctly if:

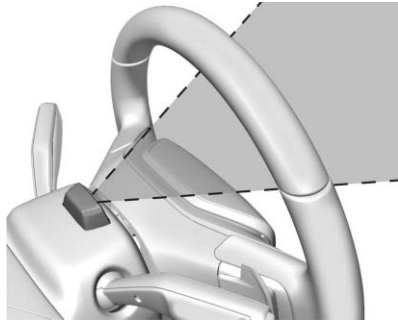
- The area of the windshield, where the front camera is located, is not clean or is affected by foreign objects, e.g. stickers, window tinting, etc.

- 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.
- The navigation map is unavailable.

Driver Attention Assist

If equipped, Driver Attention Assist alerts the driver to pay closer attention to the road ahead. Driver Attention Assist uses a camera-based Driver Monitoring System. The Driver Monitoring System on the steering column continually monitors the driver's head movements and eye gaze location to determine if the driver is drowsy or distracted.

Depending on the level of the driver's distraction or drowsiness, Driver Attention Assist will provide visual warnings, audible alerts, and Safety Alert Seat vibrations, if equipped, to gently guide the driver to refocus on the driving task.



Sunglasses, hats, or other types of clothing that cover head or facial features may interfere with camera performance. To improve camera performance, raise or lower the steering wheel, wear lighter tinted glasses, or change the seat position.

Driver Attention Assist does not record video or audio. It is only active while driving with the feature enabled.

How to Activate Driver Attention Assist

The feature can be enabled or disabled through vehicle settings. To view available settings from the infotainment app screen, select Settings > Vehicle > Driver Attention Assist.

Distracted Driving

When the driver's attention is not on the road, Driver Attention Assist will send visual and audible alerts, or Safety Alert Seat vibrations.

If the driver does not return their attention to the road ahead and displays unresponsive behavior, the system will engage multiple Advanced Driver Assistance Systems, bring the vehicle to a stop, and call OnStar Emergency to get aid to the driver as soon as possible. See *Lane Keep Assist (LKA)* ⇨ 258 and *Automatic Emergency Braking (AEB)* ⇨ 244.

Drowsy Driving

The system monitors the driver for signs of fatigue, such as yawning, slower blinking frequency, or gaze fixation. Driver Attention Assist provides visual and audible alerts, or Safety Alert Seat vibrations. When the system detects that the driver is greatly struggling to stay awake, the alerts will be more intense and frequent. While a driver is detected to

be only be drowsy, Driver Attention Assist may activate or adjust settings for Advanced Driver Assistance Systems, even if they have been disabled, only for the duration that the drowsiness is detected. The activated features will revert to their previous selections once the driver is no longer detected to be showing signs of fatigue.

When the maximum drowsiness alert occurs, the driver will be presented with the following options on the infotainment screen:

- Phone a Friend
- Start a Playlist
- Navigate to Nearest Point of Interest

Select an option from the list and follow the instructions displayed on infotainment screen.

If the driver's eyes are closed, and they are detected to be asleep, the system will engage multiple Advanced Driver Assistance Systems, bring the vehicle to a stop, and call OnStar Emergency to get aid to the driver as soon as possible.

See *Lane Keep Assist (LKA)* ⇨ 258 and *Automatic Emergency Braking (AEB)* ⇨ 244.

Cleaning the Camera

The camera lens cover on the steering column may become dirty over time. If this occurs, clean the lens cover with a soft cloth sprayed with glass cleaner. Wipe the lens gently, then dry it. Never use abrasive cloths, cleaners, or corrosive chemicals of any kind on the lens cover.

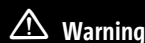
Limitations

Some factors can impact the performance of the Driver Attention Assist feature, causing it to not to function as intended. These include (but are not limited to):

- Damage to the Driver Monitoring System, camera, or lens.
- The camera being blocked by the steering wheel, hands, or objects.

If there is a problem with the system, a Driver Information Center message or icon in the instrument cluster may display.

Lane Keep Assist (LKA)



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:

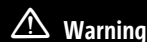
- Provide an alert or enough steering assist to avoid a lane departure or crash.
- Detect lane markings under poor weather or visibility conditions. This can occur if the windshield or headlights are blocked by dirt, snow, or ice, if they are not in proper condition, or if the sun shines directly into 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

(Continued)

Warning (Continued)

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 windshield, headlights, and camera sensors clean and in good repair. Do not use LKA in bad weather conditions.



Warning

Using LKA while towing a trailer or on slippery roads could cause loss of control of the vehicle and a crash. Turn the system off.

Lane Keep Assist may help avoid crashes due to unintentional lane departures. This system uses a camera to detect lane markings. Lane Keep Assist can be ready to assist above approximately 50 km/h (31 mph). It may assist by gently turning the steering wheel if the vehicle approaches a detected lane marking. It may also provide a Lane Departure Warning alert if the vehicle unintentionally crosses a detected lane marking. Lane Keep Assist will

not assist or alert if the turn signal is active in the direction of the lane departure, or if it detects that you are accelerating, braking, or actively steering. Lane Keep Assist can be overridden by turning the steering wheel. If the system detects you are steering intentionally across a lane marker, the Lane Departure Warning may not be given. Do not expect the Lane Departure Warning to occur when you are intentionally crossing a lane marker.

How the System Works

The Lane Keep Assist camera sensor is on the windshield ahead of the rearview mirror.

To turn Lane Keep Assist on and off, press  on the front center console display..

Lane Keep Assist may not be available in extremely cold temperatures of less than approximately -30° F (-34° C).

When on,  is white and changes green if Lane Keep Assist is available to assist and provide Lane Departure Warning alerts. It may assist by gently turning the steering wheel and display  as amber if the vehicle approaches a detected lane marking without using a turn signal in that direction. It may also provide an Lane Departure Warning alert by

flashing  as amber as the lane marking is crossed. Additionally, there may be three audible alerts on the right or left, depending on the lane departure direction.

Take Steering

The Lane Keep Assist system does not continuously steer the vehicle. If Lane Keep Assist does not detect active driver steering, an audible alert or Driver Information Center message may be provided. Move the steering wheel to dismiss.

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 Lane Keep Assist system is not functioning properly when lane markings are clearly visible, cleaning the windshield may help.

A system unavailable message may display if the camera is blocked. The system does not need service.

Lane Keep Assist assistance and/or Lane Departure Warning 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 Lane Keep Assist off if these conditions continue.

Surround Vision Recorder

If equipped, Surround Vision Recorder may record video of the vehicle surroundings continuously, up to two hours, while automatically overwriting the oldest videos to continue recording.

When the feature is enabled, the recordings are saved on a USB device with the specifications of:

- 64GB storage capacity, with at least 32GB of storage available.
- A FAT32 file system. MS-DOS (FAT) should be used for Mac.
- USB type C or A.

- USB3.0 or greater.

It is recommended to use a single USB device specifically for Surround Vision Recorder.

Event recording features may be offered after a future software update to your vehicle. When available, you will learn about the new features through the application.

Security Recording

If Security Recording is enabled, the cameras automatically record the vehicle's exterior and, when selected in settings, the interior when the theft alarm is triggered. This recording will be a video of when the alarm becomes activated.

Configuring the System

To access settings, and the recordings playlist, select Recordings on the infotainment app screen.

Always review the settings carefully before use.

Limitations

Certain features may not be available at all locations and under all vehicle conditions. No sound is included in the video footage.

Features are subject to change. Some features may be enabled with an additional subscription service. You will be informed which features apply after the software update.

When using Surround Vision Recorder, follow all local laws and regulations in your jurisdiction.

Both rear and side perspectives are captured. Due to the angle and placement of the cameras, some recording may show a small black area due to the wide field of view.

Untrusted Media Devices

Do not use untrusted mobile or media devices. They may negatively impact system operation and performance.

Charging

When to Charge

When the high voltage battery is low, an amber warning light may appear and the following charging messages may display on the Driver Information Center:

CHARGE VEHICLE SOON : Charge the battery as soon as possible.

REDUCED ACCELERATION DRIVE WITH CARE :

There is reduced accelerator pedal response and the remaining range value changes to LOW. Charge the vehicle immediately. See *Propulsion Power Messages* ⇨ 117.

OUT OF ENERGY, CHARGE VEHICLE NOW : The battery charge is fully depleted. The vehicle will slow to a stop. Brake and steering assist will continue operating. Once stopped, turn the vehicle off.

Plug-In Charging

Caution

To avoid damage to the vehicle, make sure the charging cord plug is in good condition, is not worn or damaged, and is connected securely to the vehicle's charging port. If vehicle charging is intermittent, disconnect the cord and inspect for damage. An excessively worn or damaged AC or DC charging cord plug may result in an intermittent connection and potential damage to the vehicle's charging port.

Plug-in charge times vary based on the battery condition, charge level, outside temperature, and charge station capability. See *Charging* ⇨ 109 for charge mode selection.

Do not allow the vehicle to remain in temperature extremes for long periods without being driven or plugged in. When temperatures are below 0 °C (32 °F) and above 32 °C (90 °F), plug in the vehicle to maximize high voltage battery life.

In extreme temperature conditions, a full charge will take additional time.

Charging slows down as the battery recharges. Charge the battery to 80% for daily driving, or when driving in mountainous terrain. The vehicle can be charged above 80% for long trips when not driving in mountainous terrain.

GM recommends the following:

- Unless your drive requires a full charge, charge the high voltage battery to 80% or less.
- Avoid allowing the high voltage battery to fall below 20% charged, if possible. See *Battery - North America* ⇨ 288.

- If your route includes steep mountain terrain or if you are towing a trailer, it is important that your battery charge level is 80% or less to maximize regenerative braking performance.

It is normal to hear fans, pumps, and electrical devices clicking while the vehicle is turned off and charging.

The vehicle does not require indoor charging area ventilation before, during, or after charging.

The vehicle cannot be driven while the charge cord is plugged into the vehicle.

Warning

Use of charge cord adaptors may cause electrical overheating, resulting in vehicle damage or personal injury. Only use GM approved adaptors with the charge cord.



To charge your vehicle, it may be necessary to use a special adapter to match the format of the charger you intend to use. The most common adapter for GM vehicles is a North American Charging Standard on a DC Fast Charger to CCS (the connector on your vehicle). If you use an adapter which is not sold, provided, or approved by General Motors and it causes damage to your vehicle's battery, said damage would not be covered under warranty.

There are several infotainment screens that will display depending on the current charging status. See *Charging* ⇨ 109.

Charging Override

A CHARGING OVERRIDE/INTERRUPTION OCCURRED message may display to indicate that a charging override or interruption has occurred due to one or more of the following events:

- Override of the charge settings by the owner.
- Unintended interruption of AC power at the vehicle's charge port.
- Interruption of charging by the utility company.

AC Charging

If equipped, a loss of AC power alert may sound briefly if AC power is lost for over one minute. This sound alert can be turned off. See *Charging* ⇨ 109.



AC Charge Cord Vehicle Plug

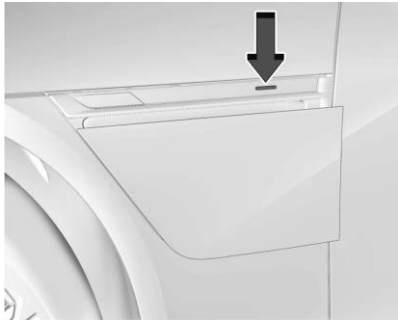
To Start AC Charging

1. Put the vehicle in P (Park).



2. Push the button to open the charge port door.
In cold weather conditions, ice may form around the charge port door. Remove ice from the area before attempting to open or close the charge port door.
3. Open the liftgate, lift the load floor cover, and remove the charge cord.
4. Plug the charge cord into the electrical outlet. To verify the charge cord status, see *Electrical Requirements for Battery Charging* ⇨ 277 and *Charge Cord* ⇨ 268. For instructions to set cord limit settings for a charge session, see *Charging* ⇨ 109.
5. Plug in the AC charge cord into the vehicle charge port. Make sure the AC vehicle plug is fully connected to the AC charge port. If it is not properly connected, the vehicle may not charge.
6. Verify that the headlight Charging Status Indicator illuminates on the headlights (if enabled), the charge status light turns on, and an audible chirp occurs. See *Charging Status Feedback* ⇨ 265.

To End AC Charging

1. Unlock the charge cord from the vehicle by pressing the button on the top of the charge cord plug. Unplug the charge cord from the vehicle. The charge port door will automatically close when the charge cord is unplugged.
- 
- A close-up image of the charge port door. A black arrow points down to a small button on the top edge of the door, indicating how to close it.
2. Press the button to manually close the charge port door.
 3. Unplug the charge cord from the electrical outlet.
 4. Place the charge cord into the storage compartment.

DC Charging

DC Charging Station Hardware

Warning

Do not use the charging station if the handle has defects such as cracks, exposed wires, burnt or missing pins, or any other damage. A damaged handle may result in personal injury and/or damage to the vehicle, the charging port or other property.

You can charge the vehicle using DC charging equipment typically found at service stations and other public locations.

This vehicle is compatible with a Combined Charging System 1 (CCS1) connector. Check the charging station DC vehicle plug for compatibility with the DC charge port on this vehicle.

When recharging at a DC charge station, the charging cable connected to the vehicle must be less than 10 m (33 ft) in length to meet functionality and regulatory requirements.

For maximum charging performance, and to prevent charging interruptions or damage to the high voltage battery and vehicle:

- Remove your hands from the charging handle once it has been plugged in. If not done, this can cause a charging interruption.
- Ensure that the charge cord plug clicks.

Follow the steps listed on the charging station to perform a DC vehicle charge.

If for any reason DC charging does not begin or is interrupted, check the DC charging station display for messages. Unplug the cord to restart the DC charging process.

To Start DC Charging

Caution

Do not attempt to disconnect the DC vehicle plug while charging is active. This action may damage the vehicle or charging station hardware.

1. Put the vehicle in P (Park).



2. Push the button to open the charge port door.

In cold weather conditions, ice may form around the charge port door. Remove ice from the area before attempting to open or close the charge port door.



3. Unlatch the DC charging dust cover and lower it fully.
4. Plug in the DC charge cord into the vehicle charge port. Make sure that the DC vehicle plug is fully connected to the DC charge port. If it is not properly connected, the vehicle may not charge. Check the Driver Information Center (DIC) to make sure the vehicle plug is connected properly.
5. Follow the steps listed on the charging station to start charging.
6. When charging is active, the DC vehicle plug is locked to the DC charge port and cannot be disconnected.

7. Verify that the headlight Charging Status Indicator illuminates on the headlights (if enabled), the charge status light turns on, and an audible chirp occurs. See *Charging Status Feedback* ⇨ 265.

To End DC Charging

When the vehicle is fully charged, charging automatically stops and the plug unlocks. You can also manually stop charging using the button on the DC vehicle plug, the controls at the charging station, or by tapping "Stop" on the Charging screen on the infotainment display.

If the vehicle plug does not unlock from the vehicle charge port after a charge, contact Roadside Assistance or use the emergency manual charge cord release. See *Roadside Assistance Program* ⇨ 356 and "Emergency Manual Charge Cord Release" later in this section.

1. Unplug the DC vehicle plug from the DC charge port on the vehicle and close the dust cover.
2. The charge port door will automatically close when the charge cord is unplugged.

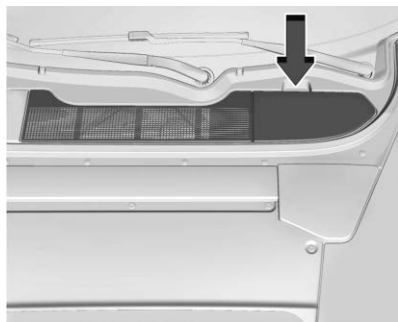


3. Press the button to manually close the charge port door.

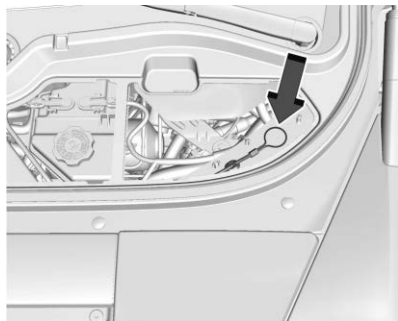
Emergency Manual Charge Cord Release

This vehicle is equipped with an emergency manual charge cord release in the event the DC vehicle plug does not release normally.

1. Open the hood. See *Hood* ⇨ 280.



2. The emergency manual charge cord release is below the underhood access covers. To remove, see *Underhood Access Covers* ⇨ 281.



3. Pull the emergency manual charge cord release handle. The DC charge cord will release.

To Stop AC or DC Charging

Use the controls on the charging station to stop the charge process at any time.

To stop charging when inside the vehicle, use the Stop Charge button on the Charging screen. See “Active Charging” under *Charging* ⇨ 109.

Delayed Charging Override

To override a delayed charge event, unplug the charge cord from the charge port and then plug it back in within five seconds. A single audible chirp will sound and charging will begin immediately.

To cancel an override, unplug the charge cord, wait for 10 seconds, and then plug the charge cord back in. A double audible chirp will sound and delayed charging will resume.

See *Charging* ⇨ 109 for advanced charge scheduling options.

Charging Status Feedback

This vehicle is equipped with a charge port light and a headlight Charge Status Indicator.



When the charge cord is plugged in, a color appears and a sound indicates the charging status.

The headlight Charge Status Indicator bar is located on the headlights. As charging occurs, the white light bars on the headlights fill towards the top of the vehicle.

Refer to the table for charging status feedback once the charge cord is plugged in:

Charge Port Light Color	Headlight Charge Status Indicator	Sound	Description
Solid Blue	None	None	Initial connection is successful.
Pulsing Blue	Single light bar flashing	Two audible chirps	Charging is delayed by the charging screen or by a total utility interruption. Charging will begin later. See <i>Utility Interruption of Charging</i> ⇨ 276. Utility Override (“Demand Response”).
Blinking Green (the longer the blink, the higher the state of charge)	Solid light bars represent the available state of charge. The remaining light bars build in a swipe pattern towards the top of the vehicle.	One audible chirp	Vehicle is actively charging.
Solid Green	All light bars are solid	None	Charging is complete.
Pulsing Red	Off	None	Error or charging has not initialized at the charging station. Check the charge cord connection. There may be no power supplied to the vehicle. Follow the instructions at the charging station to initialize charging.
None (upon plug-in)	None	None	Check the charge cord connection.

Charge Port Light Color	Headlight Charge Status Indicator	Sound	Description
None (after blue and green lights up)	None	None	Check the charge cord connection. If the connection is good, this may indicate a power failure or a total utility interruption, and charging will begin later. It may also occur if a high voltage charging system fault is detected. See <i>Utility Interruption of Charging</i> ⇨ 276 or <i>Service Vehicle Soon Light (Propulsion System Failure)</i> ⇨ 101.
None	None	Three audible chirps when the driver door is opened	The charge port door is open.
Flashing Green (the longer the blink, the higher the state of charge)	None	Four audible chirps	The currently set departure time cannot be met. This may be due to charging power level or charge schedule setting factors. Refer to the charging screen for actual charge completion time. See <i>Charging</i> ⇨ 109.

Charge Port Light Color	Headlight Charge Status Indicator	Sound	Description
Pulsing Green	None	One audible chirp	The vehicle is actively discharging through the vehicle-to-vehicle cord.
None	None	Four audible chirps	When using Persistent Power, the vehicle is approaching the Range Reserve Limit or the Timer (if enabled) to end the session.

Once charging is completed and all the white light bars are filled on the headlights, they will remain lit for five minutes and then turn off.

To turn off the headlight Charge Status Indicator light bars, see "Charge Settings" section under *Charging* ⇨ 109.

Charge Cord

INSTRUCTIONS PERTAINING TO A RISK OF FIRE OR ELECTRIC SHOCK

IMPORTANT SAFETY INSTRUCTIONS



This symbol indicates risk of electrical shock.

The vehicle may come with a portable charge cord that is used to charge the high voltage battery. When used correctly, the charge cord

provides a safe connection between a standard electrical outlet and your vehicle's on-board charger. See *Radio Frequency Statement* ⇨ 361.

When storing the charge cord in the vehicle, ensure the charge cord bag is secured. Depending on the storage location, tether the charge cord bag to vehicle.

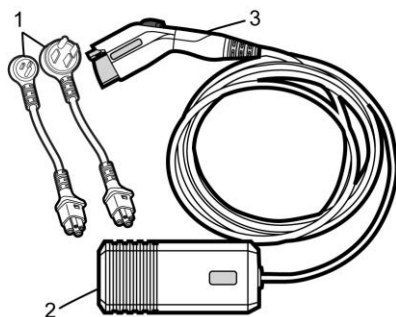


Illustration is for Reference Only

1. Low and High Power Swappable Connectors Based on Region
2. Charge Cord Control Box and Charge Cord Status Indicator
3. Charge Cord Vehicle Plug

Important Information about Portable Electric Vehicle Charging

Warning

When using electric products, basic precautions should always be followed, including the following:

- Read all the safety warnings and instructions before using this product. Failure to follow the warnings and the instructions may result in electric shock, fire, and/or serious injury.
- Never leave children unattended near the vehicle while the vehicle is charging and never allow children to play with the charge cord.
- If the plug provided does not fit the electrical outlet, do not modify the plug. Arrange for a qualified electrician to inspect the electrical outlet.
- Do not put fingers into the electric vehicle connector.

Warning

Improper use of portable electric vehicle charge cords may cause a fire, electrical shock, or burns, and may result in damage to property, serious injury, or death.

- Do not use extension cords, multi-outlet power strips, splitters, grounding adapters, surge protectors, or similar devices.
- Do not use an electrical outlet that is worn or damaged, or will not hold the plug firmly in place.
- Do not use an electrical outlet that is not properly grounded.
- Do not use an electrical outlet that is on a circuit with other electrical loads.
- Do not wrap the charge cord around the housing of the control box.

**Warning**

- To reduce the risk of fire, installations shall comply with the requirements of National Electric Code, ANSI/NFPA 70 (USA), Canadian Electrical Code CSA 22.1 and IEC 60364 – Electrical installations in buildings, depending on the region in which the unit is being installed. The installer shall comply with any additional local requirements mandated by the country and/or municipality.
- Do not use this product if the flexible power cord or the electric vehicle cable is frayed, has broken insulation, or shows any other signs of damage.
- For Canada only: Not for use in commercial garages.
- Do not use this product if the enclosure or the vehicle plug is broken, cracked, open, or shows any other indication of damage.

(Continued)

Warning (Continued)

- The plug must be plugged into an appropriate electrical outlet that is properly installed in accordance with all local codes and ordinances. Do not modify the plug provided with the product. If the plug does not fit the electrical outlet, have a proper electrical outlet installed by a qualified electrician. If ground is missing, the charge cord indicators will indicate an electrical system fault and the vehicle may not charge.

**Warning**

Connecting charging components incorrectly or to a damaged outlet can cause vehicle or property damage, personal injury, or death. When charging your vehicle, ensure all components are connected properly, there is no damage, and the outlet has power.

**Warning**

Disconnecting the charge cord from the grid outlet while charging can result in damage and/or injury. Do not disconnect while the vehicle while charging.

**Warning**

Water, moisture, and other foreign objects can pose a risk when using the charge cord. When charging outdoors, plug into an electrical outlet that is weatherproof and avoid situations where water can run along the charge cord to the vehicle inlet or the grid outlet. Do not place the control box and charge cord in a location where it may be submerged in water. Do not use the charge cord in severe weather conditions.

**Warning**

Check the electrical outlet/plug while charging and discontinue use if the electrical outlet/plug appears hot. Using a hot electrical outlet/plug could result

(Continued)

Warning (Continued)

in vehicle or property damage, personal injury, or death. Have the electrical outlet serviced by a qualified electrician.

**Warning**

Water, moisture, and other foreign objects can damage the portable charge cord. Damage to the charge cord could result in electrical malfunction, vehicle damage, electrical shock, or death. Protect the portable charge cord against water, moisture and foreign objects at all times.

Caution

Coiling or storing the charge cord in a location it may be crushed or forced into space to form a circle smaller than 178 mm (7 in) can damage the cord. Avoid restricting the charge cord rotation or applying excessive pulling force while wrapping.

Caution

Using non-approved electrical sources to charge can cause damage to the charging system. Do not attempt to use the charge cord with non-utility supplied electrical power sources such as backup generating equipment.

Caution

Electrical outlets may wear out with normal usage or may be damaged over time making them unsuitable for electric vehicle charging. Regularly inspect outlets for wear and tear. Do not use if worn or damaged.

Before plugging the charge cord into any electrical outlet, have a qualified electrician inspect and verify the electrical system (electrical outlet, wiring, junctions, and protection devices) is suitable for a heavy-duty service.

Installing and Operating the Portable Charge Cord

The charge cord must be on a dedicated individual branch circuit. A dedicated circuit ensures that there is enough power available without overloading the system.

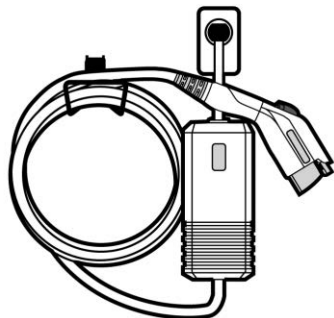
If a dedicated circuit is not used, the circuit breaker could trip or open. If a dedicated circuit is not available, contact a qualified electrician. See “Grounding Instructions” later in this section.

The charge cord must operate at a temperature between -30 °C (-22 °F) and 50 °C (122 °F).

1. Snap the desired connectors into the control box before making any other connections.

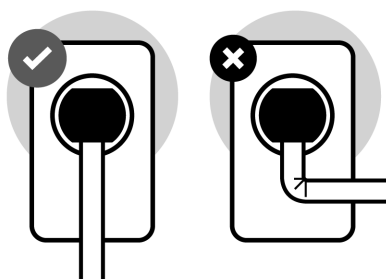


Align the pins and push firmly until you hear the connector snap into place. Ensure you cannot see any glossy black hard plastic. If the connector is not fully inserted into the control box the charge cord will not work properly.

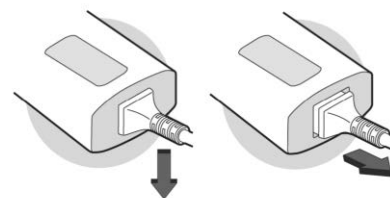


2. Mount the charge cord to reduce strain on the electrical outlet/plug. Mount the control box in a suitable location to prevent physical stress on the electrical outlets and charge cord components.

Mount the control box directly to the wall or stud near a suitable electrical outlet. The retention eyelets on the control box are optimized for use with #10 drywall screws.



3. Handle electrical cables with care. Do not sharply bend, pull, or crush cables.
4. Connect the attachment plug to the electrical outlet. Refer to the "Charge Cord Status Indicator" section to ensure the charge cord is working properly.
5. Insert the vehicle plug into the vehicle charge port to initiate charging.
6. To disconnect the charge cord, press and hold the latch release button on the vehicle plug. Once disconnected from the vehicle, the charge cord can be unplugged from the wall.



7. To remove the connector from the control box, pull down and out at the same time.

Charge Cord Status Indicator

After plugging in the charge cord, it will perform a quick self-test.

Verify the charge cord status on the charge cord control box. The charge cord uses a combination of red and green indicators to display the status of the charge cord.

If the charge cord status indicator is not lit, ensure the electrical outlet has power.

Green	Red	Reason	Action
–	–	The charge cord has no power.	Verify all components are connected properly, there is no damage, and the outlet has power. If the error continues, contact your dealer.
On	–	The charge cord is ready to use.	Plug the charge cord into the vehicle charge port to begin charging.
Blinking	–	Vehicle is actively charging.	No action needed.
Blinking	Blinking	An error has occurred and the charge cord is rebooting.	Wait for the charge cord to return to a solid green. If it reboots two or three more times, unplug the charge cord from the vehicle. If the error continues, contact your dealer.
–	Four blinks	An error has occurred or the connector type is invalid and the charge cord is rebooting.	Check the connection between the connector and the control box to ensure it is fully connected or try another connector.
–	Three blinks	The control box temperature is out of the normal range.	Move the charge cord away from direct sunlight and/or hot surfaces such as asphalt paving, or wait until the charge cord has warmed up.
Blinking	Three blinks	The charge cord control box is overheating, charging continues at a reduced rate.	If unplugging and plugging the charge cord back in to the vehicle does not work, move the charge cord away from direct sunlight and/or hot surfaces such as asphalt paving.
Blinking	One blink	AC plug or electrical outlet is overheating, charging continues at a reduced rate.	Disconnect from the electrical outlet. If the error persists, have a qualified electrician inspect and repair the issue.

Green	Red	Reason	Action
–	One blink	The charger is troubleshooting after an error and requires a reboot.	Try the following actions to restore the full charging rate: – Verify all components are connected properly. Ensure the connectors are fully inserted into the control box or the charge cord will not work properly. – Unplug and plug in the connector. – If the charge cord is in a warm environment, try charging in a cooler area. – Try a different outlet or connector, if available. If the error continues, contact your dealer.
–	Two blinks	There is a Ground Fault Circuit Interruption (GFCI) fault.	After 15 minutes, it will auto-reset. Try a different connector, if available. If the error continues, contact your dealer.
–	On	There is a cordset internal fault.	Immediately disconnect from the electrical outlet and the vehicle. Contact your dealer for a replacement.
–	Blinking	The charge cord is rebooting.	Wait for the charge cord to return to a solid green. If the indicator changes to a different failure mode, refer to that line in this table and follow the corresponding action. If the failure mode is not listed, contact your dealer.

Charge Cord Auto-Restart

Your charge cord set is equipped with the auto-restart feature. When charging your vehicle, if there is an error detected, the auto-restart feature works to eliminate the error and resume charging.

If the error is caused by a Ground Fault Circuit Interruption (GFCI) fault, the charger attempts to restart for a 15 minute interval. After the fourth attempt to restart, the charger shuts down and the red indicator stays on. Unplug and plug the charge cord back in to reset the charging. If this error continues, stop charging your vehicle. See your dealer for service.

Charge Level Selection

Warning

Using a vehicle charge level that exceeds the electrical circuit or electrical outlet capacity may start a fire or damage the electrical circuit. Use the lowest vehicle charge level until a qualified electrician inspects the electrical circuit capacity. Use the lowest vehicle charge level if the electrical circuit or electrical outlet capacity is not known.

To select the charge level, from the app screen on the infotainment display, select Charging app > Settings. For instructions to set vehicle charge level settings for a charge session, see *Charging* ⇨ 109.

Troubleshooting

Confirm that the attachment plug is not too hot to grasp before disconnecting the charge cord from the vehicle.

If it is not hot, manually reboot the charge cord by unplugging and plugging the attachment plug back into the electrical outlet. If the same fault reoccurs, test the charge cord with a different electrical outlet.

The charge cord monitors temperature at several locations and may reduce charging power or interrupt charging if temperatures become too high. The charge cord status indicators illuminate and identify this fault. In hot climates, move the charge cord away from direct sunlight and/or hot surfaces such as asphalt pavement for approximately 30 minutes.

If there are signs of melting or scorching, do not touch the charge cord or attachment plug. Have a qualified electrician inspect and repair the issue.

If there are no signs of damage, check how firm the fit of the plug is. If the plug easily pulls away from the electrical outlet, test the plug on a known good electrical outlet. If the fault condition returns, have your charge cord inspected by your dealership. If the fault does not return, stop using the suspected circuit and have a qualified electrician inspect and repair the issue.

Grounding Instructions

Warning

Improper connection of the charge cord ground may cause electrical shock. Check with a qualified electrician if there is doubt as to whether the charge circuit is properly grounded. Do not modify the plug provided with the product. If it will not fit the electrical outlet, have a proper electrical outlet installed by a qualified electrician.

The charge circuit must be grounded. If the charge circuit should malfunction or break down, grounding provides a path of least resistance for the electric current to reduce the risk of electric shock. This product is equipped with a cord that has an equipment grounding

conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

User Maintenance

The portable charge cord is not serviceable. Do not attempt to perform maintenance on the charge cord, see your dealer for replacement parts. Clean the charge cord and control box with a dry cloth and do not use any cleaning products.

Moving and Storage

When moving the charge cord equipment, use care to prevent damage to the equipment. Do not twist, pull, or drag the charge cord. Do not lift or carry the equipment by the charge cord only.

Keep the charge cord mounted and plugged into the electrical outlet for daily use. If the charge cord will not be used for a long period, unplug it and store in a clean, temperature controlled location between -40 °C (-40 °F) and 85 °C (185 °F).

FCC Information

See *Radio Frequency Statement* ⇨ 361.

Charge Cord Specifications

Voltage: 85–265 volts, AC single phase/split phase only

Frequency: 45–66 Hz

Enclosure: NEMA 4X

Current: Max 32 amps (Grid plug specific)

NEMA 5–15P Max Cordset: 12 amps

NEMA 14–50P Max Cordset: 32 amps

SAVE THESE INSTRUCTIONS

Utility Interruption of Charging

Utility companies may limit or completely block electrical power grid use to balance electricity demand and supply. If electrical grid power is limited, it will take longer than normal to charge your vehicle. If electrical grid power is completely blocked, your vehicle will not charge until the interruption expires.

During a charging interruption:

- A message displays on the instrument cluster indicating a utility interruption has occurred.
- Changing the charge mode to immediate charging or performing a delayed charging override will not resolve the interruption.

- Leave your vehicle plugged so it will automatically resume charging once the interruption expires.

Managed Charging

If you have enrolled in a managed charging program, you may receive a text message or notification in your myCadillac/myOwner app with more details about the utility interruption, including details on how to opt-out, if applicable.

Charging Station Troubleshooting

If the vehicle does not begin charging after you plug it in to a residential 240-volt charging station:

1. Verify that the charge mode is not set to a delayed charging override.
2. Verify that the charging station circuit breaker is not tripped.
3. Plug the portable charge cord into the wall outlet, verify that the indicator light on the charge cord is solid green, and connect it to the vehicle. See “Charge Cord Status Indicators” in *Charge Cord* ⇨ 268.

4. If the vehicle charges with the portable charge cord and a different 240-volt charging station, such as a public station, there may be a problem with the charging station. Contact the charging station manufacturer for service.

Electrical Requirements for Battery Charging

This vehicle is designed for compatibility with most standard vehicle charging equipment in the region of sale. Check for charger compatibility before purchasing a charger.

See *Charge Cord* ⇨ 268.

Trailer Towing

General Towing Information



Warning

Never tow a trailer with your vehicle. It was not designed or intended to tow a trailer.

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 *Service Vehicle Soon Light (Propulsion System Failure)* ⇨ 101. A device connected to the DLC — such as an aftermarket fleet or driver-behavior 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 to not work and would 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.

When adding electrical equipment, it should only be connected using the accessory power outlets. The maximum power that can be supplied by one accessory power outlet or spread across all three is 200 watts or 15 amps. Exceeding 200 watts or 15 amps may cause erratic vehicle operation.

The vehicle has an airbag system. Before attempting to add anything electrical to the vehicle, see *Servicing the Airbag-Equipped Vehicle* ⇨ 62 and *Adding Equipment to the Airbag-Equipped Vehicle* ⇨ 62.

Vehicle Care

General Information

General Information	279
California Perchlorate Materials Requirements	279
Accessories and Modifications	279

Vehicle Checks

Doing Your Own Service Work	279
Hood	280
Underhood Access Covers	281
Underhood Compartment Overview	283
Cooling System	284
Washer Fluid	286
Brakes	286
Brake Fluid	287
Battery - North America	288
Park Brake and P (Park) Mechanism Check	292
Wiper Blade Replacement	292
Windshield Replacement	293

Headlight Aiming

Front Headlight Aiming	293

Bulb Replacement

LED Lighting	293

Electrical System

High Voltage Devices and Wiring	294

Electrical System Overload	294
Fuses and Circuit Breakers	295
Underhood Compartment Fuse Block	296
Instrument Panel Fuse Block	300
Rear Compartment Fuse Block	303

Wheels and Tires

Tires	310
Winter Tires	311
Self-Sealing Tires	311
Noise Reducing Tires	312
Low-Profile Tires	312
Summer Tires	312
Tire Sidewall Labeling	312
Tire Designations	313
Tire Terminology and Definitions	314
Tire Pressure	316
Tire Pressure for High-Speed Operation	317
Tire Pressure Monitor System	318
Tire Pressure Monitor Operation	319
Tire Inspection	321
Tire Rotation Monitor	322
Tire Rotation	322
When It Is Time for New Tires	323
Buying New Tires	323
Reverse Rim Wheels	325
Different Size Tires and Wheels	325
Uniform Tire Quality Grading	325
Wheel Alignment and Tire Balance	327
Wheel Replacement	327

Tire Chains and Other Traction Devices ...	328
If a Tire Goes Flat	328

Jump Starting

Jump Starting - North America	328

Towing the Vehicle

Transporting a Disabled Vehicle	332
Recreational Vehicle Towing	334

Appearance Care

Exterior Care	334
Interior Care	339
Floor Mats	341

General Information

For service and parts needs, visit your dealer. You will receive genuine GM parts and GM-trained and supported service people.

Genuine GM parts have one of these marks:



California Perchlorate Materials Requirements

Certain types of automotive applications, such as airbag initiators, seat belt pretensioners, and lithium batteries contained in electronic keys, may contain perchlorate

materials. Perchlorate Material – special handling may apply. See www.dtsc.ca.gov/hazardouswaste/perchlorate.

Accessories and Modifications

Caution

When adding accessories or other equipment after the purchase of your vehicle, ensure you are not exceeding the vehicle axle weight ratings or overall weight ratings. Overloading the vehicle may cause damage. Repairs would not be covered by the vehicle warranty. Do not overload the vehicle. See *Vehicle Load Limits* ⇨ 172 for specific weight ratings.

Adding non-GM approved accessories or making vehicle modifications can affect performance and safety with airbags, braking, stability, ride and handling, emissions systems, aerodynamics, durability, Advanced Driver Assistance Systems, and electronic systems like antilock brakes, traction control, and stability control. These accessories or modifications could cause malfunction or damage not covered by the vehicle warranty.

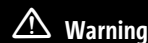
Damage to suspension components caused by modifying vehicle height outside of factory settings will not be covered by the vehicle warranty.

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.

Also, see *Adding Equipment to the Airbag-Equipped Vehicle* ⇨ 62.

Vehicle Checks

Doing Your Own Service Work



Never try to do your own service on high voltage battery components. You can be injured and the vehicle can be damaged if you try to do your own service work. Service and repair of these high voltage battery

(Continued)

Warning (Continued)

components should only be performed by a trained dealer technician with the proper knowledge and tools.

Exposure to high voltage can cause shock, burns, and even death. The high voltage components in the vehicle can only be serviced by technicians with special training.

High voltage components are identified by labels. Do not remove, open, take apart, or modify these components. High voltage cable or wiring has orange covering. Do not probe, tamper with, cut, or modify high voltage cable or wiring.

**Warning**

Unexpected wheel motion and/or direction when one or more wheels are off the ground for service work may result in injury. The vehicle may:

(Continued)

Warning (Continued)

- Allow the wheels to rotate unexpectedly in either direction regardless of mode selection.
- Allow the wheels to rotate in reaction to attempts to rotate the tire(s) manually.
- Resist attempts to rotate the wheels manually.

Before lifting the vehicle to do your own service work, turn the vehicle off or place the vehicle in the Service Mode. To place the vehicle in Service Mode, see “Service Mode” under *Power Modes* ⇨ 176.

**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 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. To order the proper service manual, see *Publication Ordering Information* ⇨ 361.

This vehicle has an airbag system. Before attempting to do your own service work, see *Servicing the Airbag-Equipped Vehicle* ⇨ 62.

Keep a record with all parts receipts and list the mileage and the date of any service work performed. See *Maintenance Records* ⇨ 348.

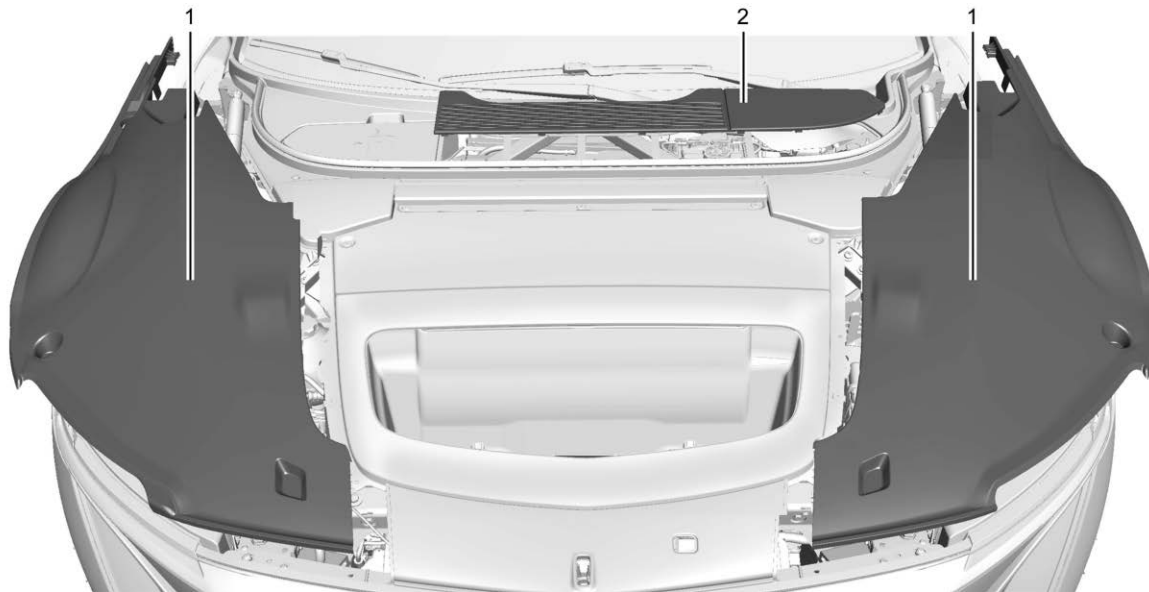
Hood

This vehicle is equipped with a power hood to cover the front underhood compartment. The power hood opens and closes with the press of a button or in hands-free mode. You can customize settings or disable this feature on the lower display screen at Settings > Vehicle > Comfort and Convenience > Power Hood Opening.

If the battery is disconnected or has low voltage, the hood will not open. The hood will resume operation when the battery is reconnected and charged. See *Hood* ⇨ 19 in the Doors section.

Underhood Access Covers

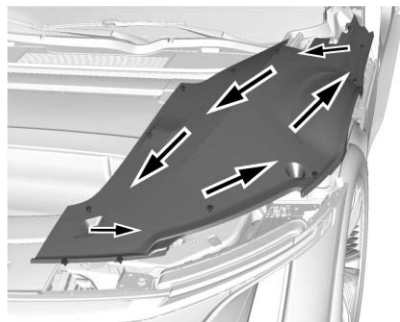
The underhood access covers conceal various reservoirs and maintenance items. You may need to remove one or more access covers to reach what you need.



- 1. Sight Shield Access Covers
- 2. Air Inlet Panel Cover

The air inlet panel cover has a handle on the side facing the windshield. Grip the handle and lift to remove it.

Sight Shield Access Cover Removal Procedure



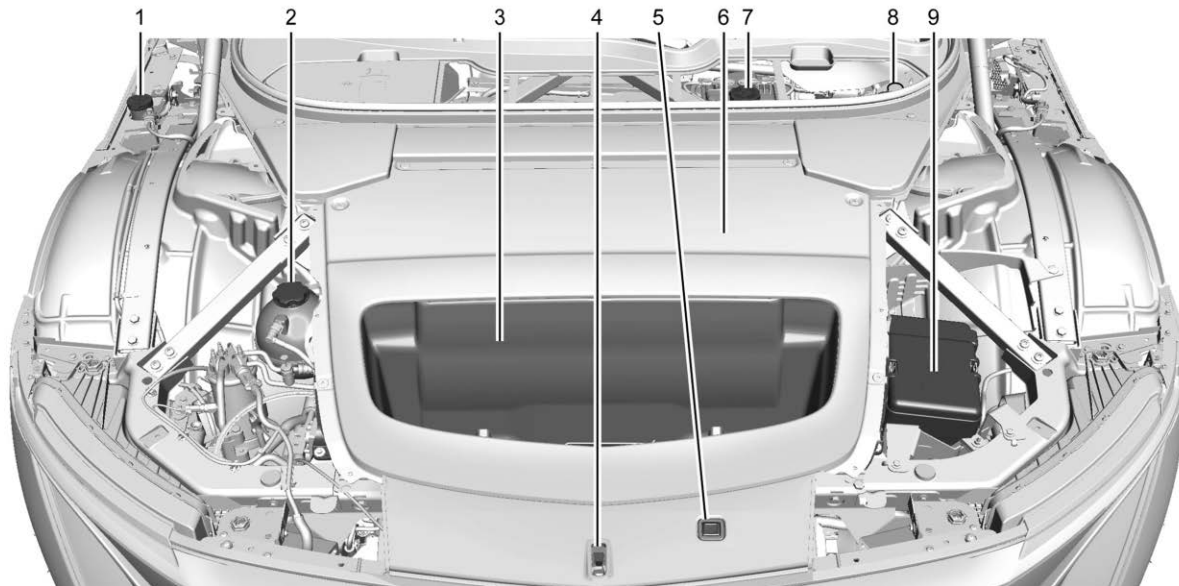
Right Side Shown, Left Side Similar

1. Locate the outer hood hinge.
2. From the hood hinge, lift the access cover to release the retainers.
3. Work across and down, following the perimeter of the cover. Lift at the retainers to prevent damage to the cover.

Installation Procedure

1. Align the retaining clips with their receiving clasps.
2. Push down on the sight shield access cover above each retaining clip until it is secured tightly.
3. Confirm that the sight shield access covers are attached securely before closing the hood.

Underhood Compartment Overview



1. Windshield Washer Fluid Reservoir. See *Washer Fluid* ⇨ 286.

2. EV Coolant Reservoir (under cover). See *Cooling System* ⇨ 284.

3. eTrunk. See *Underhood Storage* ⇨ 84.

4. Hood Latch.

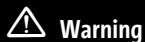
5. Power Hood Close Button. See *Hood* ⇨ 280.

6. Battery (under cover). No access to battery. See *Battery - North America* ⇨ 288.

Terminal connections for jump starting are under the rear liftgate. See *Jump Starting - North America* ⇨ 328.

7. Brake Fluid Reservoir. See *Brake Fluid* ⇨ 287.
8. Charging Port Manual Cord Release (under cover). See “Emergency Manual Charge Cord Release” on *Plug-In Charging* ⇨ 260.
9. Fuse Block. See *Underhood Compartment Fuse Block* ⇨ 296.

Cooling System



Warning

If the coolant inside the surge tank is boiling, do not do anything else until the cooling system cools down. You or others could be burned. You should have your vehicle checked by your GM dealer.



Warning

The coolant system hoses and related components become hot during vehicle operation. To avoid potential burns, do not touch these components while they are still hot.

Electric vehicles have one or more independent cooling systems designed to control the temperature of the high voltage battery, power electronic modules, and cabin heating. These cooling systems are complex and should only be serviced by a qualified technician.

The following explains the cooling systems and how to check coolant levels.

High Voltage Battery Cooling System

The high voltage battery cooling system works to keep the vehicle battery within a normal operating temperature range. If the temperature rises above this range, the battery cooling system turns on the air conditioning compressor to regulate the temperature. If the temperature falls below this temperature, a high voltage heater, located outside the battery on a cradle, heats the coolant until the correct temperature is reached.

Single Power Inverter Module, Accessory Power Module, and Charger Module

The Single Power Inverter Module (SPIM), Accessory Power Module (APM), and charger module are cooled using a separate coolant loop. These modules are kept below a maximum temperature. If the temperature rises above this temperature, the electric cooling fan will turn on to cool the coolant.

Cabin Heating

Cabin heating is maintained by coolant heated by the Coolant Heater Control Module (CHCM), separate from the power electronics and battery coolant loops. This module heats the coolant based on temperature inputs from the cabin climate control systems.

Cooling System Pressure Caps

Caution

If the pressure caps are not secured and tightened properly, coolant loss and damage to the vehicle and/or its electrical systems may occur. Always visit your local GM dealer for service to the electric vehicle cooling systems.

Electric vehicle cooling system pressure caps are tamper-resistant and must be fully installed on the coolant surge tanks at all times. The coolant should only be serviced by a qualified technician.

Coolant

Caution

GM electric vehicle cooling systems require a 50/50 mix of DEXCOOL and de-ionized water. Use only ACDelco Premix (50/50 mixture of DEXCOOL and de-ionized water), which is available from your dealer. Do not use DEXCOOL mixed with tap water or distilled water in an electric vehicle cooling system as it could damage and/or contaminate the cooling system and related components. The vehicle could become disabled.

The electric vehicle cooling systems are filled with coolant that meets GM Standards GMW18270 and GMW3420 (DEXCOOL). This coolant is designed to remain in the vehicle for five years or 240,000 km (150,000 miles), whichever occurs first.

Checking Coolant

Warning

Do not drive the vehicle if there is a coolant leak. Coolant loss can indicate a problem. All the coolant could leak out, causing the vehicle to suddenly lose propulsion while driving, which could result in a crash causing vehicle damage or personal injury/death. Always visit your local GM dealer for electric vehicle cooling systems service.

The coolant needs to be replaced at the appropriate interval. See *Maintenance Schedule* ⇨ 344.

The coolant reservoir is in the underhood compartment. See *Underhood Compartment Overview* ⇨ 283.

How to Add Coolant to the Coolant Surge Tank

Warning

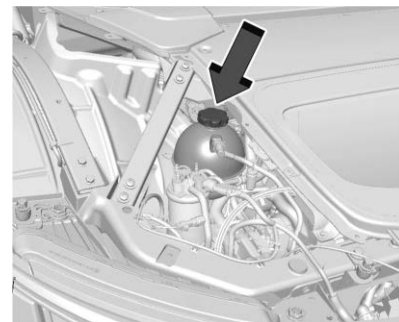
Use only ACDelco Premix (50/50 mixture of DEXCOOL and de-ionized water), which is available from your dealer. Do not use

(Continued)

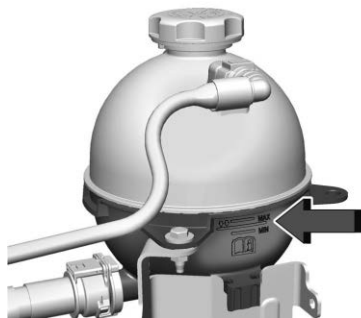
Warning (Continued)

any other coolant or mixture. Plain water or other liquid may cause cooling system corrosion and/or cooling system being frozen which eventually may cause a loss of propulsion while driving.

1. Park on a level surface and turn the vehicle off.
2. Open the hood. See *Hood* ⇨ 280.



3. After the system has completely cooled, check that the coolant level in the reservoir.



4. If the coolant level is not visible or needs to be adjusted within the reservoir, contact your dealer.

Washer Fluid

What to Use

Caution

- Do not use washer fluid that contains any type of water repellent coating. This can cause the wiper blades to chatter or skip.

(Continued)

Caution (Continued)

- Do not use engine coolant (antifreeze) in the windshield washer. It can damage the windshield 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.

When windshield 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

If the vehicle is equipped with a washer fluid level indicator, and the washer fluid reservoir is low, a message displays on the Driver Information Center (DIC). See *Driver Information Center (DIC)* ⇨ 114 for more information.



Open the cap with the washer symbol on it. Add washer fluid until the tank is full. See *Underhood Compartment Overview* ⇨ 283 for reservoir location.

Brakes

Inspections

Visually inspect brake system components as follows:

- Brake lines and hoses for proper attachment, connections, binding, leaks, cracks, and chafing.

- Disc brake pads for wear and rotors for surface condition.
- Drum brake linings/shoes for wear or cracks.
- All other brake parts for cracks and leaks.

When tires are rotated, inspect drum brake linings or disc brake pads for wear.

Troubleshooting

Brake Pedal Travel

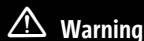
See your dealer if the brake pedal does not return to normal height, or if there is a rapid increase in pedal travel. This could be a sign that brake service may be required.

Brake Pulsation

If brakes are pulsating:

- Inspect rotors, pads, linings for uneven wear. Resurface or replace as needed.
- Check torque on all wheel nuts. Properly torqued wheel nuts are necessary to help prevent brake pulsation. Evenly tighten wheel nuts in the proper sequence to torque specifications. See *Capacities and Specifications* ⇨ 349.

Brake Squeal and Brake Wear Indicators



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.

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.

Some driving conditions or climates can cause a brake squeal when the brakes are first applied, clearing up following several applications. This does not mean something is wrong with the brakes.

Replacing Brake System Parts

Caution

Continuing to drive with worn-out brake linings could result in costly brake repairs.

Brake pads should be replaced as complete axle sets.

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.

Checking Brake Fluid

1. Place the vehicle in P (Park) on a level surface.
2. Locate the brake fluid reservoir. See *Underhood Compartment Overview* ⇨ 283 for the reservoir location.

3. Clean the brake fluid reservoir cap and the area around the cap before removing it to prevent dirt or debris from contaminating the brake fluid.
4. Check that the brake fluid level is between “MIN” and “MAX” marks on the brake fluid reservoir.
5. Review “Adding Brake Fluid” and “Low Brake Fluid” later in this section.

Low Brake Fluid

When the brake fluid falls to a low level, the brake warning light comes on. See *Brake System Warning Light* ⇨ 101.

Low brake fluid may be a result of normal brake lining wear or a brake system fluid leak.

- Do not top off the brake fluid. Adding fluid does not correct the issue if the linings are worn. Fluid level will return to normal when new linings are installed.
- The brakes will not work as normal. See your dealer to have the brake hydraulic system fixed.

Adding Brake Fluid



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.

Caution

If too much brake fluid is added, the brake fluid can spill and cause vehicle damage, including damage to electrical components and surfaces. Add brake fluid only when work is done on the brake hydraulic system.

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* ⇨ 344.

Use only GM approved DOT 4 brake fluid from a clean, sealed container. See *Recommended Fluids and Lubricants* ⇨ 347.

Battery - North America

This vehicle has a high voltage battery, a standard 12-volt battery, and a 48-volt battery.

See your dealer if any battery needs service.



Warning

WARNING: Battery posts, terminals and related accessories can expose you to chemicals including lead and lead compounds, which are known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling. For more information go to www.P65Warnings.ca.gov.

See *California Proposition 65 Warning* ⇨ 1.

12-Volt Battery

The original equipment battery is maintenance free. Do not remove the cap and do not add fluid.

Do not disconnect the 12-volt battery during storage.

Refer to the replacement number shown on the original battery label when a new 12-volt battery is needed. The vehicle has an Absorbent Glass Mat (AGM)/Valve regulated lead acid battery (VRLA) 12-volt battery. Installation of a standard 12-volt battery will result in reduced 12-volt battery life.

Some 12-volt chargers have an AGM battery setting. This setting limits the charge voltage to 14.8 volts and helps extend the battery life. If available, use the AGM setting when charging the battery.

48-Volt Battery

Warning

The 48-volt lithium-ion battery in your vehicle has special shipping and handling requirements. Contact your local GM dealer

(Continued)

Warning (Continued)

for battery service or recycling support, or if your battery is damaged. Signs of damage may include physical damage to the case, visible bulging, soot in the vent, or water inside the battery. Damaged batteries can be dangerous and must be properly stored away from combustible materials. Do not dispose of batteries in municipal waste.

Warning

Lithium-ion battery cells contain chemicals that can burn you and gas that can explode under extreme conditions. Explosive gases can cause blindness and/or injury. You can be badly hurt if you are not careful. Always wear eye protection. See *Jump Starting - North America* ⇨ 328 for tips on working around a lithium-ion battery without getting hurt.

Only a trained service technician should inspect, test, or replace the 48-volt lithium-ion battery. The dealer has information on how to recycle the 48-volt lithium-ion battery.

The 48-volt lithium-ion battery will automatically charge when you drive the vehicle.

If you store the vehicle for more than six months, turn the vehicle on for 10 minutes to charge the 48-volt lithium-ion battery. Make sure Max Defrost and Rear Window Defogger are off. See *Climate Control Systems* ⇨ 159.

High Voltage Battery

Only a trained service technician should inspect, test, or replace the high voltage battery. The dealer has information on how to recycle the high voltage battery. There is also information available at <https://www.recyclemybattery.com>.

Warning

Damage to the high voltage battery or high voltage system can create a risk of electric shock, overheating, or fire.

If the vehicle is damaged from a moderate to severe crash, flood, fire, or other event, the vehicle should be inspected as soon as possible. Until the vehicle has been

(Continued)

Warning (Continued)

inspected, store it outside at least 15 m (50 ft) from any structure or anything that can burn. Ventilate the vehicle by opening a window or a door.

Contact Customer Assistance as soon as possible to determine whether an inspection is needed. See *Customer Assistance Offices* ⇨ 355.

If the vehicle is in a crash, the sensing system may shut down the high voltage system. When this occurs, the high voltage battery is disconnected and the vehicle will not start. The SERVICE VEHICLE SOON message in the Driver Information Center (DIC) will display. Before the vehicle can operate again, it must be serviced at your dealer. If a crash occurs or an airbag(s) inflates, see “If a Crash Occurs” under *Collision Damage Repair* ⇨ 359 and *What Will You See After an Airbag Inflates?* ⇨ 57 for additional information.

Battery Temperature**Warning**

This vehicle is equipped with high voltage battery thermal detection, mitigation, and notification software. If the high voltage battery overheats, it may create a risk of a vehicle fire and may result in damage to property, serious injury, or death.

If the high voltage battery overheats, an audible alarm may sound, a message may display on the Driver Information Center (DIC), and OnStar may be called. To alert others outside your vehicle, the horn may sound, and the lights may flash.

If driving, pull over as soon as possible to a safe location at least 50 feet (15 m) away from any structure or anything that may burn. Park your vehicle, set the parking brake, and turn the vehicle off. Open a window or door for ventilation.

(Continued)

Warning (Continued)

Remove the remote key and move yourself and others to a safe, upwind location away from the vehicle. Do not return to the vehicle or attempt to restart or drive the vehicle.

Call emergency services and inform them that an electrical vehicle high voltage battery is overheating.

Never attempt to put out a vehicle fire.

Your vehicle must be towed to an authorized dealer to have the high voltage battery inspected before the vehicle can be operated again.

Keep the vehicle plugged in, even when fully charged, to keep the high voltage battery temperature ready for the next drive. This is important when outside temperatures are extremely hot or cold.

Propulsion power may be reduced in extremely cold temperatures, or if the high voltage battery is too cold. The message BATTERY TOO COLD, PLUG IN TO WARM will display. If the

message displays, a level 2 charger is required to heat the battery to a minimum temperature to enable propulsion or charging.

A vehicle cover, which can reduce sun loading on the vehicle and improve high voltage battery life, is available from your dealer.

See *Radio Frequency Statement* ⇨ 361.

Federal Communications Commission (FCC) Radiation Exposure Statement

This equipment has been evaluated to be installed and operated at a minimum distance of 5.7 cm (2.2 in) between the device and your body. The vehicle design ensures this distance is maintained during normal use. Changes or modifications to any of these systems by other than an authorized service facility could void authorization to use this equipment.

Innovation, Science, and Economic Development (ISED) Radiation Exposure Statement

This equipment complies with RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 5.7 cm (2.2 in) between the radiator and any part of your body.

The vehicle design ensures this distance is maintained during normal use. Changes or modifications to any of these systems by other than an authorized service facility could void authorization to use this equipment.

Vehicle Storage

The best way to store the vehicle for any length of time is to plug in the charge cord and leave it plugged in. The vehicle monitors and maintains the 12-volt battery daily. It is okay to leave the vehicle plugged in for extended periods of time. Once charged to full, very little energy is required to maintain the 12-volt battery and high voltage battery.

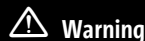
If it is not possible to charge the vehicle with the charge cord left plugged in, be sure to fully charge the high voltage battery before storing. The vehicle will stop maintenance of the 12-volt battery if the high voltage battery state of charge gets too low.

When storing the vehicle on a long-term basis:

- Keep the high voltage battery state of charge at 30%.
- Attach an AGM/VRLA compatible battery tender or trickle charger to the 12-volt battery.

- Keep the remote key more than 3 m (10 ft) away from the vehicle.

12-Volt Battery



Warning

Batteries have acid that can burn you and gas that can explode. You can be badly hurt if you are not careful. Always wear eye protection. See *Jump Starting - North America* ⇨ 328 for tips on working around a battery without getting hurt.

Do not disconnect the 12-volt battery during storage.

A trickle charger may be attached to the 12-volt outlet in the rear cargo area, the 12-volt battery terminals, or trickle charge from the remote positive (+) and negative (–) terminals in the trunk. See *Jump Starting - North America* ⇨ 328 for location of these terminals.

Caution

The vehicle is equipped with an AGM/VRLA 12-volt battery, which can be damaged by using the incorrect type of trickle charger. An AGM/VRLA-compatible charger must be used, with the appropriate setting selected. Follow the trickle charger manufacturer instructions.

With a trickle charger connected to the 12-volt battery, the vehicle will still monitor the 12-volt battery daily, but it will not use energy from the high voltage battery for maintenance.

High Voltage Battery

After extended storage, it is possible that the vehicle may not operate. If this happens, the high voltage battery may need to be plugged in and charged.

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 steep hill, with the vehicle facing downhill. Keeping your foot on the regular brake, set the Electric Parking Brake.

- To check the Electric Parking Brake's holding ability: With the propulsion system active and the electric drive unit in N (Neutral), slowly remove foot pressure from the regular brake pedal. Do this until the vehicle is held by the Electric Parking Brake only.
- To check the P (Park) mechanism's holding ability: With the propulsion system active, shift to P (Park). Then release the Electric Parking Brake and slowly remove foot pressure from the regular brake pedal.

Contact your dealer if service is required.

Wiper Blade Replacement

Windshield wiper blades should be replaced periodically. See the *Maintenance Schedule* ⇨ 344.

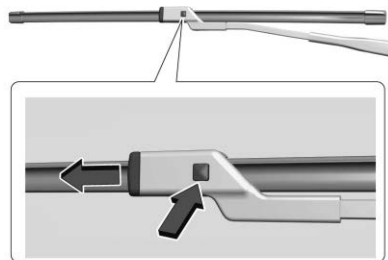
Replacement blades come in different types and are removed in different ways. For proper type and length, see your dealer.

Caution

Allowing the wiper arm to touch the windshield when no wiper blade is installed could damage the windshield. Any damage that occurs would not be covered by the vehicle warranty. Do not allow the wiper arm to touch the windshield.

To replace the windshield wiper blade:

1. Pull the windshield wiper assembly away from the windshield.



2. Press the button in the middle of the wiper arm connector, and pull the wiper blade away from the arm connector.
3. Remove the wiper blade.
4. Reverse Steps 1–3 for wiper blade replacement.

Windshield Replacement

Acoustic and Heated Windshield

Caution

The vehicle's windshield and rear window are equipped with an advanced defrosting/defogging system that incorporates a thin layer of film in the glass panels. If the glass is chipped or cracked, the system may malfunction or overheat. Replace the damaged glass as soon as possible.

This vehicle is equipped with an acoustic and heated windshield. If the windshield needs replacement, use a GM compatible acoustic and heated windshield to retain its features.

Advanced Driver Assistance Systems

If equipped with a front camera sensor, see your dealer to replace the windshield. Your dealer will ensure the windshield is installed according to GM specifications for proper alignment, and that the Advanced Driver Assistance Systems work. If the windshield is installed incorrectly, error messages may display, or these systems may not work properly or at all.

Headlight Aiming

Front Headlight Aiming

Headlight aim has been preset and should need no further adjustment.

If the vehicle is damaged in a crash, the headlight aim may be affected. If adjustment to the headlights is necessary, see your dealer.

Bulb Replacement

LED Lighting

This vehicle is equipped with LED light sources for all exterior lights.

The light assemblies do not contain any serviceable light sources (e.g., incandescent bulbs).

For replacement of any LED lighting assembly, contact your dealer.

Electrical System

High Voltage Devices and Wiring



Warning

Exposure to high voltage can cause shock, burns, and even death. The high voltage components in the vehicle can only be serviced by technicians with special training.

High voltage components are identified by labels. Do not remove, open, take apart, or modify these components. High voltage cable or wiring has orange covering or labels. Do not probe, tamper with, cut, or modify high voltage cable or wiring.

Electrical System Overload

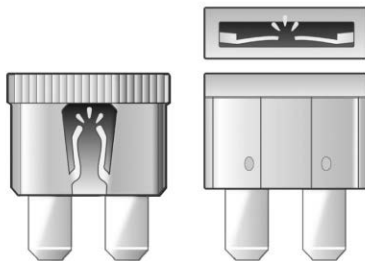
The vehicle has fuses and circuit breakers to protect against an electrical system overload.

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 the wires that provide the power to the devices in your vehicle.

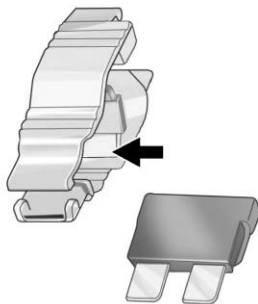
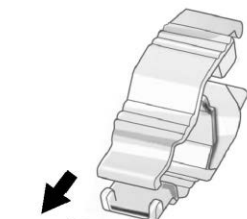
If there is a problem on the road and a fuse needs to be replaced, the same amperage fuse can be borrowed. Choose some feature of the vehicle that is not needed to use and replace it as soon as possible.

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 underhood 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.

Headlight Wiring

An electrical overload may cause the lights to go on and off, or in some cases to remain off. Have the headlight wiring checked right away if the lights go on and off or remain off.

Windshield Wipers

If the wiper motor overheats due to heavy snow or ice, the windshield 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 windshield before using the windshield 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

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.

The fuses and circuit breakers protect the electrical system from short circuits, greatly reducing the chance of electrical damage or fire.



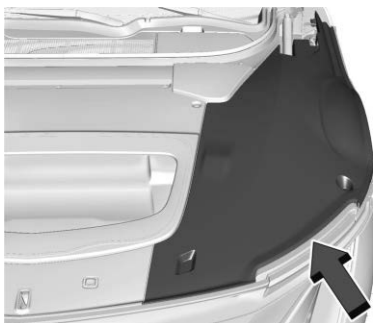
See *Accessories and Modifications* ⇨ 279 and *General Information* ⇨ 279.

To check or replace a blown fuse, see *Electrical System Overload* ⇨ 294.

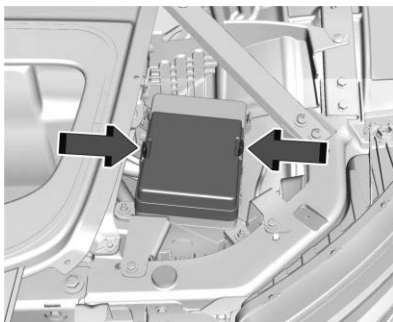
Underhood Compartment Fuse Block

To Access:

1. Open the hood. See *Hood* ⇨ 280.



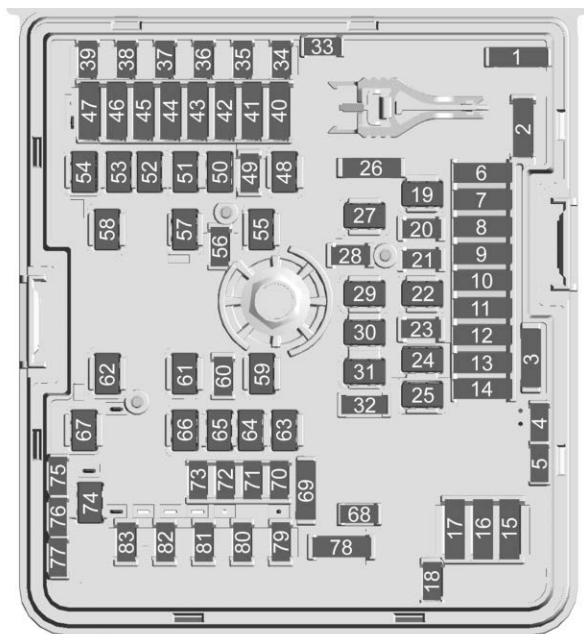
2. The Underhood Compartment Fuse Block is below the underhood access covers. To remove, see *Underhood Access Covers* ⇨ 281.



3. To open the fuse block cover, press the clips at the side and back and pull the cover up.

Caution

Spilling liquid on any electrical component on the vehicle may damage it. Always keep the covers on any electrical component.



A fuse puller is in the underhood compartment fuse block.

The vehicle may not be equipped with all the fuses and features shown.

Fuse	Usage
F01	–
F02	–
F03	–
F04	–
F05	–
F06	VICM – Vehicle Integration Control Module LIB48V – Lithium-Ion Battery 48 Volt
F07	PCEV – Primary Chiller Expansion Valve
F08	SPARE
F09	–
F10	–
F11	–
F12	OBCM – On Board Charging Module

Fuse	Usage
F13	–
F14	–
F15	–
F16	–
F17	ARC FRT – Active Roll Control Front
F18	GLVBX DR REL – Glove Box Door Release
F19	–
F20	–
F21	CPDM – Charge Port Door Motor
F22	–
F23	PECP – Power Electronics Coolant Pump
F24	–
F25	–

Fuse	Usage
F26	–
F27	–
F28	CPDL – Charge Port Door Light
F29	–
F30	ESSCP – Energy Storage System Coolant Pump
F31	–
F32	–
F33	–
F34	ELM5 – Exterior Lighting 5
F35	ELM4 – Exterior Lighting 4
F36	–
F37	–
F38	ELM7 – Exterior Lighting 7
F39	ELM3 – Exterior Lighting 3

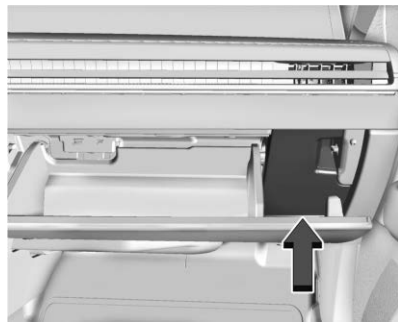
Fuse	Usage
F40	HCAM DR – Heated Console Armrest Driver
	HCAM PASS – Heated Console Armrest Passenger
F41	HNSM DR – Heated Neck Scarf Module Driver
	HNSM PASS – Heated Neck Scarf Module Passenger
F42	SPS PASS – Seat Position Switch Passenger
	SPS DR – Seat Position Switch Driver
F43	MCV – Main Coolant Valve
F44	ACM – Aero Shutter Control Module
	PEEV – Primary Evaporator Expansion Valve

Fuse	Usage	Fuse	Usage	Fuse	Usage
	VKS – Virtual Key Sensor			F66	–
F45	CHFV – Condensing Heater Flow Valve	F53	FRT WPR MTR – Front Wiper Motor	F67	WPR D ICE – Wiper De-Ice
	ECFV – External Condenser Flow Valve	F54	–	F68	–
F46	CHIM – Charge Interface Module	F55	–	F69	–
	PSM – Power Sounder Module	F56	–	F70	Relays Coil Ground
F47	PLCM – Power Line Communication Module	F57	EBCM 2 – Electronic Brake Control Module 2		PRK EMBL LT – Park Emblem Light
F48	SAM RF2– Side Access Module Right Front 2	F58	–	F71	FT GRILL LT – Front Grill Light
F49	–	F59	–	F72	–
F50	SAM RF1– Side Access Module Right Front 1	F60	Horn	F73	NHT VSN WSH – Night Vision Camera Wash
F51	PFCM – Power Front Closure Module	F61	–	F74	–
F52	–	F62	CRFM – Condenser Radiator Fan Module	F75	–
		F63	–	F76	–
		F64	SAM RR2 – Side Access Right Rear 2	F77	–
		F65	SAM RR1 – Side Access Right Rear 1	F78	–
				F79	–

Fuse	Usage
F80	—
F81	—
F82	Wash Pump Front
F83	Camera Wash Pump

Instrument Panel Fuse Block

The instrument panel fuse block is behind the glove box.



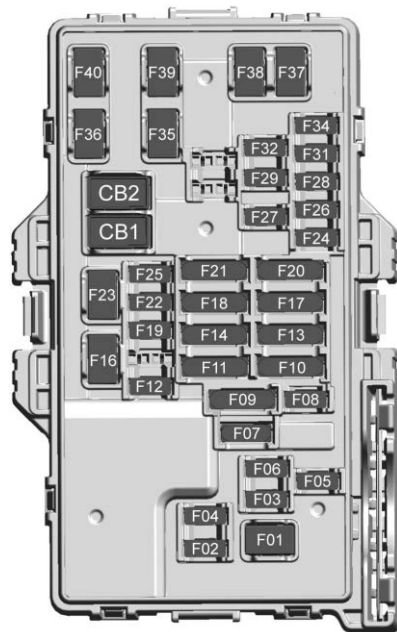
To Access the Fuses:

1. Open the glovebox. See *Glove Box* ⇨ 83.

2. Remove the panel, starting at the bottom.
3. Once the panel clips disengage, the tabs along the bottom of the door can disengage 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.

See your dealer if additional assistance is needed.



The vehicle may not be equipped with all fuses and features shown.

Fuse	Usage	Fuse	Usage	Fuse	Usage
F01	FRT BLWR – Front Blower		UGDO – Universal Garage Door Opener		HTD DR ARMREST DRV 2 – Heated Door Armrest Driver 2
F02	VCU 2 – Virtual Cockpit Unit 2		ETC – Electronic Toll Collection		HTD DR ARMREST DRV – Heated Door Armrest Driver
F03	SCL – Steering Column Lock		RLH – Rain Light Humidity	F11	HTD DR ARMREST PASS 2 – Heated Door Armrest Passenger 2
F04	ELM 2 – Exterior Lighting Module 2	F10	FPI – Front Passenger Infotainment		HTD DR ARMREST PASS – Heated Door Armrest Passenger
F05	BCM 2 – Body Control Module 2		MFC – Multi-Function Control	F12	SCL – Steering Column Lock
F06	VCU – Virtual Cockpit Unit		ILSS – Indicator Light and Solar Sensor		SDM – Sensing & Diagnostic Module
F07	STR WHL CONTROL – Steering Wheel Controls			F13	AOS – Automatic Occupant Sensor
F08	TCP – Telematics Control Platform				TPIM – Traction Power Inverter Module
	HVAC OUTLT MOD – Heating Ventilation Air Conditioning Outlet Module				
F09	ETRS – Electronic Transmission Range Select				
	EPB – Electronic Park Brake Switch				

Fuse	Usage	Fuse	Usage	Fuse	Usage
	IPE – Integrated Power Electronics		SDM – Sensing & Diagnostic Module	F23	USB ACC – USB Power Outlet Rear
	LIB 48V – Lithium Ion Battery 48 Volt		ELM – Exterior Lighting Module		WCM 2 – Wireless Charger Module 2
F14	EBCM – Electronic Brake Control Module	F18	ETC – Electronic Toll Collection	F24	WCM – Wireless Charger Module
	AQS – Air Quality Sensor		IPMS – Interior Particulate Matter Sensor		VKM – Virtual Key Module
	ICCM – Integrated Chassis Control Module		TPIM – Traction Power Inverter Module		DLC – Data Link Connector
	ISRVIM – Inside Rear View Mirror	F19		F25	Spare
F15	–	F20	CGM – Central Gateway Module	F26	ELM – Exterior Lighting Module
F16	AC ELEC COMP – AC Electric Compressor		AQI – Air Quality Ionizer		AUX A/V – Auxiliary Audio/Video
	SRRS – Short Range Radar Sensors	F21	FCC – Front Command Center		VCD – Virtual Cockpit Display
F17	FCM – Front Camera Module		HVSL – High Voltage System Lockout	F27	VCD 1 – Virtual Cockpit Display 1
	LRR – Long Range Radar	F22	VICM – Vehicle Integration Control Module		AUX A/V – Auxiliary Audio/Video

Fuse	Usage
F28	ELM 6 – Exterior Lighting Module 6
F29	BCM 1 – Body Control Module 1
F30	–
F31	BCM 3 – Body Control Module 3
F32	HSWM – Heated Steering Wheel Module
F33	–
F34	SCPM – Steering Column Position Module
F35	SAM LF 2 – Side Access Module Left Front 2
F36	AMP 1 – Amplifier 1
F37	HDLMP RT – Headlight Right
F38	HDLMP LT – Headlight Left

Fuse	Usage
F39	BCM 4 – Body Control Module 4
F40	SAM LF – Side Access Module Left Front

Relays	Usage
CB1	Spare
CB2	Spare

Rear Compartment Fuse Block

The rear compartment fuse block is behind a cover on the driver side of the rear compartment.

To Access:

1. Open the liftgate. See *Liftgate* ⇨ 22.



2. Pull the side floor panel straight up to release the panel clips.

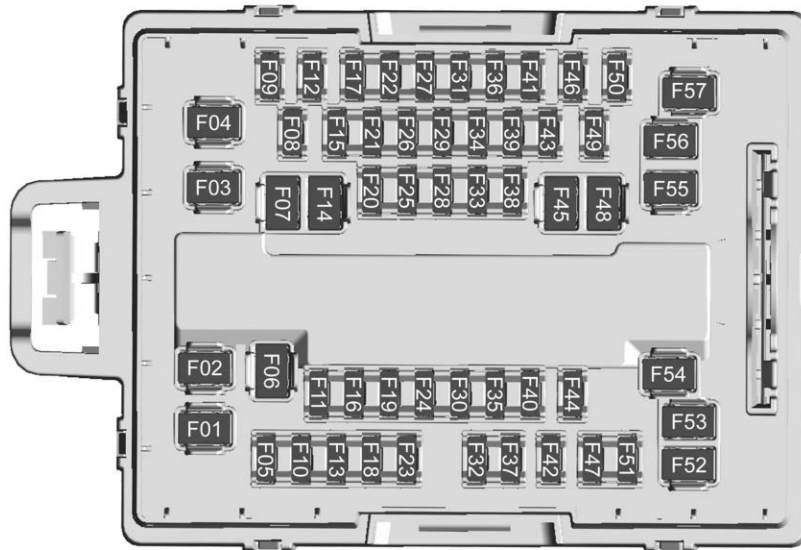


3. Remove the side panel, starting at the bottom.

See your dealer if additional assistance is needed.

To remove a fuse, use the fuse puller located in the underhood compartment fuse block. See *Electrical System Overload* ⇨ 294.

The vehicle may not be equipped with all the fuses and features shown.



Rear Compartment Fuse Block — Top

Fuses	Usage
F01	MSM DR – Memory Seat Module Driver
F02	MSM PASS – Memory Seat Module Passenger
F03	MSM LR – Memory Seat Module LR
F04	VLM – Vehicle Leveling Module
F05	ICCM – Integrated Chassis Control Module
F06	SPARE
F07	WNDW MTR RF – Window Motor Right Front
	WNDW MTR RR – Window Motor Right Rear
F08	HVAC DISP R – HVAC Display Rear
F09	TLMP RHT – Taillight Right

Fuses

Usage

F10	HTD DR ARMREST PASS R – Heated Door Armrest Passenger Rear
F11	SPARE
F12	SAM LR 2 – Side Access Module Left Rear 2
F13	TLMP LFT – Taillight Left
F14	HSM LR – Heated Seat Module Left Rear
F15	TPIM 1 – Traction Power Inverter Module 1
	DR SHD SWTCH R – Door Shade Switches Rear
F16	SPARE
F17	NVM – Night Vision Module
F18	TPIM 2 – Traction Power Inverter Module 2
F19	SPARE

Fuses

Usage

F20	SADOD – Side Access Door Object Detection Sensors
F21	RFR – Radio Function Receiver
F22	VKS – Virtual Key Sensors
F23	SADS – Semi Active Dampening Suspension
F24	–
F25	AFL_AHL – Automatic Forward Lighting and Headlight Leveling
	AMP 3 – Audio Amplifier 3
F26	VLM – Vehicle Leveling Module
F27	PAM – Park Assist Module
F28	AMP 3 – Audio Amplifier 3
F29	RSI DISP RR – Rear Seat Infotainment RR

Fuses

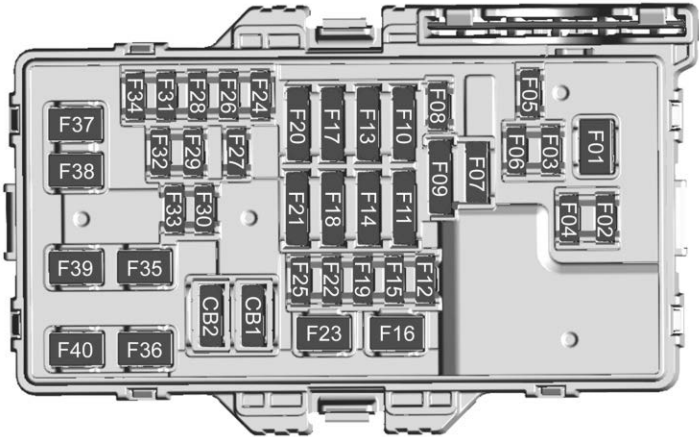
Usage

F30	SPARE
	AAS – Auxiliary Alarm Sensor
F31	PFA – Pedestrian Friendly Alert
	MSM LR – Memory Seat Module Left Rear
F32	MSM RR – Memory Seat Module Right Rear
F33	–
	VKBM – Virtual Key Backup Module
F34	RSI – Rear Seat Infotainment Module
	APM 48V – Auxiliary Power Module 48 Volts
F35	VDM – Vehicle Data Module
F36	ARS – Active Rear Spoiler

Fuses	Usage
F37	HCAM RR – Heated Console Armrest Module Right Rear
F38	SPARE
F39	MSM RF – Memory Seat Module Right Front MSM LF – Memory Seat Module Left Front
F40	SPARE
F41	RSI DISP LR – Rear Seat Infotainment Display Left Rear
F42	ARC REAR – Active Roll Control Rear
F43	WCM 4 – Wireless Charger Module 4 WCM 3 – Wireless Control Module 3
F44	SPARE

Fuses	Usage
F45	PWR WDW LF – Power Window Left Front PWR WDW LR – Power Window Left Rear
F46	ACP 3 – ADAS Compute Platform 3
F47	ROOF RGB – Roof Ambient Color Module
F48	HSM LR – Heated Seat Module Left Rear
F49	HCAM LR – Heated Console Armrest Module Left Rear
F50	HDAM LR – Heated Door Armrest Module Left Rear
F51	OBCM 2 – Onboard Charging Module 2
F52	MSM RR – Memory Seat Module Right Rear
F53	HSM RR – Heated Seat Module Right Rear

Fuses	Usage
F54	AMP 1 – Audio Amplifier 1
F55	HSM RR – Heated Seat Module Right Rear
F56	SAM LR – Side Access Module Left Rear
F57	SPARE



Rear Compartment Fuse Block — Bottom

Fuses	Usage
F01	HSM LF – Heated Seat Module Left Front
F02	SPARE
F03	MBM RF – Memory Bolster Module Right Front MBM LF – Memory Bolster Module Left Front
F04	BATT TNDR APO – Battery Tender Auxiliary Power Outlet
F05	AMP 2_2 – Audio Amplifier 2_2
F06	DSP LF – Door Switch Panel Left Front
F07	–
F08	–

Fuses	Usage	Fuses	Usage	Fuses	Usage
F09	MBM RR – Memory Bolster Module Right Rear	F15	SPARE	F21	RFSI – Front Right Seat Infotainment
	MBM LR – Memory Bolster Module Left Rear	F16	Blower Rear		RSI – Rear Seat Infotainment
F10	–	F17	HTD/COOLSBMRF – Heated/Cooled Seat Back Module Right Front	F22	SPARE
F11	HTD/COOLSCMRR – Heated/Cooled Seat Cushion Module Right Rear		HTD/COOLSCMRF – Heated/Cooled Seat Cushion Module Right Front	F23	SPARE
	HTD/COOLSBMRR – Heated/Cooled Seat Back Module Right Rear	F18	HDRST RF – Headrest Right Front	F24	–
F12	SPARE		HDRST LF – Headrest Left Front	F25	SPARE
F13	HTD/COOLSBMLF – Heated/Cooled Seat Back Module Left Front	F19	HDRST LR – Headrest Left Rear	F26	HTD NCK SCRF RR – Heated Neck Scarf Right Rear
	HTD/COOLSCMLF – Heated/Cooled Seat Cushion Module Left Front		HDRST RR – Headrest Right Rear	F27	DSP RF – Door Switch Panel Right Front
F14	ESTOP	F20	COOL_BOX – Cooler Box	F28	HTD NCK SCRF LR – Heated Neck Scarf Left Rear
	SPARE		–	F29	HTD/COOLSBMLR – Heated/Cooled Seat Back Module Left Rear
					HTD/COOLSCMLR – Heated/Cooled Seat Cushion Module Left Rear

Fuses	Usage
F30	–
F31	AMP 2_1 – Audio Amplifier 2_1
F32	–
F33	–
	VLTS – Variable Light Transmission Sunshade
F34	WSM BACK – Windshield Sunshade Module Back
F35	HSM LF – Heated Seat Module Left Front
F36	PTM – Power Tailgate Module
F37	SPARE
F38	SPARE

Fuses	Usage
F39	HSM RF – Heated Seat Module Right Front
F40	HSM RF 2 – Heated Seat Module Right Front 2

Relays	Usage
CB1	–
CB2	–

Wheels and Tires

Tires

Every new GM vehicle has high-quality tires made by a leading tire manufacturer. See the warranty manual for information regarding the tire warranty and where to get service. For additional information refer to the tire manufacturer.



Warning

- Poorly maintained and improperly used tires are dangerous.
- Overloading the tires can cause overheating as a result of too much flexing. There could be a blowout and a serious crash. See *Vehicle Load Limits* ⇨ 172.
- Underinflated tires pose the same danger as overloaded tires. The resulting crash could cause serious injury. Check all tires frequently to maintain the recommended pressure. Tire pressure should be checked when the tires are cold.
- Overinflated tires are more likely to be cut, punctured, or broken by a sudden impact — such as when hitting a pothole. Keep tires at the recommended pressure.

(Continued)

Warning (Continued)

- Worn or old tires can cause a crash. If the tread is badly worn, replace them.
- Replace any tires that have been damaged by impacts with potholes, curbs, etc.
- Improperly repaired tires can cause a crash. Only your dealer or an authorized tire service center should repair, replace, dismount, and mount the tires.
- Do not spin the tires in excess of 56 km/h (35 mph) on slippery surfaces such as snow, mud, ice, etc. Excessive spinning may cause the tires to explode.

See *Tire Pressure for High-Speed Operation* ⇨ 317 for inflation pressure adjustment for high-speed driving.

Winter Tires

This vehicle was not originally equipped with winter tires. Winter tires are designed for increased traction on snow and ice-covered roads. Consider installing winter tires on the vehicle if frequent driving on ice or snow covered roads is expected. See your dealer for details regarding winter tire availability and proper tire selection. Also, see *Buying New Tires* ⇨ 323.

With winter tires, there may be decreased dry road traction, increased road noise, and shorter tread life. After changing to winter tires, be alert for changes in vehicle handling and braking.

If using winter tires:

- Use tires of the same brand and tread type on all four wheel positions.
- Use only radial ply tires of the same size, load range, and speed rating as the original equipment tires.

Winter tires with the same speed rating as the original equipment tires may not be available for H, V, W, Y, and ZR speed rated tires. If

winter tires with a lower speed rating are chosen, never exceed the tire's maximum speed capability.

Self-Sealing Tires**Caution**

Do not drive on a deflated self-sealing tire as this could damage the tire. Make sure the tire is inflated to the recommended pressure or have it immediately repaired or replaced.

This vehicle may have self-sealing tires. These tires have a material inside that can seal punctures from common road hazards, such as nails and screws, in the tread area. The tire may lose air pressure if the sidewall is damaged or the tread puncture is too large. If the Tire Pressure Monitor System indicates the tire pressure is low, inspect the tire for damage and inflate it to the recommended pressure. If the tire is unable to maintain the recommended pressure, contact the nearest authorized GM servicing facility immediately for inspection and repair or replacement. To locate the nearest GM servicing facility, call GM Customer Assistance.

When tire replacement is needed, replace with a self-sealing tire, because the vehicle does not come with a spare tire or tire changing equipment.

Noise Reducing Tires

This vehicle may be equipped with tires that have noise-absorbing foam technology to reduce road and interior noise levels.

To maintain overall vehicle performance, replace damaged or worn tires with Tire Performance Criteria Specification (TPC Spec) original equipment tires equipped with noise-absorbing foam. See *Buying New Tires* ⇨ 323.

Low-Profile Tires

Caution

Low-profile tires are more susceptible to damage from road hazards or curb impact than standard profile tires. Tire and/or wheel assembly damage can occur when coming into contact with road hazards like potholes, or sharp edged objects, or when sliding into a curb. The warranty does

(Continued)

Caution (Continued)

not cover this type of damage. Keep tires set to the correct inflation pressure and when possible, avoid contact with curbs, potholes, and other road hazards.

If the vehicle has 285/40R22 or 285/35R23 size tires, they are classified as low-profile tires.

Summer Tires

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

(Continued)

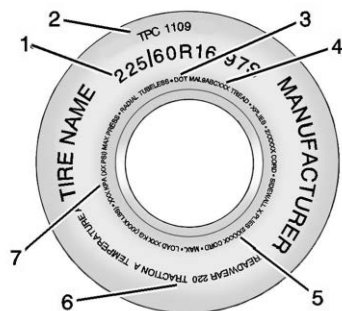
Caution (Continued)

they are installed. Do not apply heat or blow heated air directly on the tires. Always inspect tires before use. See *Tire Inspection* ⇨ 321.

This vehicle may come with 285/40R22 110V or 285/35R23 107V high performance summer tires. These tires have a special tread and compound that are optimized 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 tires 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 Tires* ⇨ 311.

Tire Sidewall Labeling

Useful information about a tire is molded into its sidewall. The example shows a typical passenger tire sidewall.



Passenger Tire Example

(1) Tire Size : The tire size is a combination of letters and numbers used to define a particular tire's width, height, aspect ratio, construction type, and service description. See the "Tire Size" illustration later in this section.

(2) TPC Spec (Tire Performance Criteria Specification) : Original equipment tires designed to GM's specific tire performance criteria have a TPC specification code molded onto the sidewall. GM's TPC specifications meet or exceed all federal safety guidelines.

(3) DOT (Department of Transportation) : The Department of Transportation (DOT) code indicates that the tire is in compliance with the U.S. Department of Transportation Motor Vehicle Safety Standards.

DOT Tire Date of Manufacture : The last four digits of the TIN indicate the tire manufactured date. The first two digits represent 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 through Saturday) of each year.

(4) Tire Identification Number (TIN) : The letters and numbers following the DOT code are the Tire Identification Number (TIN). The TIN shows the manufacturer and plant code, tire size, and date the tire was manufactured. The TIN is molded onto both sides of the tire, although only one side may have the date of manufacture.

(5) Tire Ply Material : The type of cord and number of plies in the sidewall and under the tread.

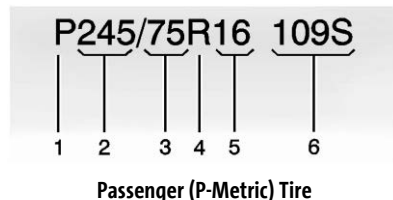
(6) Uniform Tire Quality Grading (UTQG) : Tire manufacturers are required to grade tires based on three performance factors: treadwear, traction, and temperature resistance. For more information, see *Uniform Tire Quality Grading* ⇨ 325.

(7) Maximum Cold Inflation Load Limit : Maximum load that can be carried and the maximum pressure needed to support that load.

Tire Designations

Tire Size

The example shows a typical passenger vehicle tire size.



(1) Passenger (P-Metric) Tire : The United States version of a metric tire sizing system. The letter "P" as the first character in the tire size means a passenger vehicle tire engineered to standards set by the U.S. Tire and Rim Association.

(2) Tire Width : The 3-digit number indicates the tire section width in millimeters from sidewall to sidewall.

(3) Aspect Ratio : A 2-digit number that indicates the tire height-to-width measurements. For example, if the tire size aspect ratio is 75, as shown in item (3) of the illustration, it would mean that the tire's sidewall is 75 percent as high as it is wide.

(4) Construction Code : A letter code is used to indicate the type of ply construction in the tire. The letter "R" means radial ply construction; the letter "D" means diagonal or bias ply construction.

(5) Rim Diameter : Diameter of the wheel in inches.

(6) Service Description : These characters represent the load index and speed rating of the tire. The load index represents the load carrying capacity a tire is certified to carry. The speed rating is the maximum speed a tire is certified to carry a load.

Tire Terminology and Definitions

Air Pressure : The amount of air inside the tire pressing outward on each square inch of the tire. Air pressure is expressed in kPa (kilopascal) or psi (pounds per square inch).

Aspect Ratio : The relationship of a tire's height to its width.

Belt : A rubber coated layer of cords that is located between the plies and the tread. Cords may be made from steel or other reinforcing materials.

Bead : The tire bead contains steel wires wrapped by steel cords that hold the tire onto the rim.

Bias Ply Tire : A pneumatic tire in which the plies are laid at alternate angles less than 90 degrees to the centerline of the tread.

Cold Tire Pressure : The amount of air pressure in a tire, measured in kPa (kilopascal) or psi (pounds per square inch) before a tire has built up heat from driving. See *Tire Pressure* ⇨ 316.

DOT Markings : A code molded into the sidewall of a tire signifying that the tire is in compliance with the U.S. Department of Transportation (DOT) Motor Vehicle Safety Standards. The DOT code includes the Tire Identification Number (TIN), an alphanumeric designator which can also identify the tire manufacturer, production plant, brand, and date of production.

GVWR : Gross Vehicle Weight Rating. See *Vehicle Load Limits* ⇨ 172.

GAWR FRT : Gross Axle Weight Rating for the front axle. See *Vehicle Load Limits* ⇨ 172.

GAWR RR : Gross Axle Weight Rating for the rear axle. See *Vehicle Load Limits* ⇨ 172.

Intended Outboard Sidewall : The side of an asymmetrical tire, that must always face outward when mounted on a vehicle.

Kilopascal (kPa) : The metric unit for air pressure.

Light Truck (LT-Metric) Tire : A tire used on light duty trucks and some multipurpose passenger vehicles.

Load Index : An assigned number ranging from 1 to 279 that corresponds to the load carrying capacity of a tire.

Maximum Inflation Pressure : The maximum air pressure to which a cold tire can be inflated. The maximum air pressure is molded onto the sidewall.

Maximum Load Rating : The load rating for a tire at the maximum permissible inflation pressure for that tire.

Occupant Distribution : Designated seating positions.

Outward Facing Sidewall : The side of an asymmetrical tire that has a particular side that faces outward when mounted on a vehicle. The side of the tire that contains a whitewall, bears white lettering, or bears manufacturer, brand, and/or model name molding that is higher or deeper than the same moldings on the other sidewall of the tire.

Passenger (P-Metric) Tire : A tire used on passenger cars and some light duty trucks and multipurpose vehicles.

Recommended Inflation Pressure : Vehicle manufacturer's recommended tire inflation pressure as shown on the tire placard. See *Tire Pressure* ⇨ 316 and *Vehicle Load Limits* ⇨ 172.

Radial Ply Tire : A pneumatic tire in which the ply cords that extend to the beads are laid at 90 degrees to the centerline of the tread.

Rim : A metal support for a tire and upon which the tire beads are seated.

Sidewall : The portion of a tire between the tread and the bead.

Speed Rating : An alphanumeric code assigned to a tire indicating the maximum speed at which a tire can operate.

Traction : The friction between the tire and the road surface. The amount of grip provided.

Tread : The portion of a tire that comes into contact with the road.

Treadwear Indicators : Narrow bands, sometimes called wear bars, that show across the tread of a tire when only 1.6 mm (1/16 in) of tread remains. See *When It Is Time for New Tires* ⇨ 323.

UTQGS (Uniform Tire Quality Grading Standards) : A tire information system that provides consumers with ratings for a tire's traction, temperature, and

treadwear. Ratings are determined by tire manufacturers using government testing procedures. The ratings are molded into the sidewall of the tire. See *Uniform Tire Quality Grading* ⇨ 325.

Vehicle Capacity Weight : The number of designated seating positions multiplied by 68 kg (150 lbs) plus the rated cargo load. See *Vehicle Load Limits* ⇨ 172.

Vehicle Maximum Load on the Tire : Load on an individual tire due to curb weight, accessory weight, occupant weight, and cargo weight.

Vehicle Placard : A label permanently attached to a vehicle showing the vehicle's capacity weight and the original equipment tire size and recommended inflation pressure. See "Tire and Loading Information Label" under *Vehicle Load Limits* ⇨ 172.

Tire Pressure

Tires need the correct amount of air pressure to operate effectively.



Warning

Neither tire underinflation nor overinflation is good. Underinflated tires, or tires that do not have enough air, can result in:

- Tire overloading and overheating, which could lead to a blowout
- Premature or irregular wear
- Poor handling
- Reduced fuel economy for internal combustion engine vehicles
- Reduced range for electric vehicles

Overinflated tires, or tires that have too much air, can result in:

- Unusual wear
- Poor handling
- Rough ride
- Needless damage from road hazards

The Tire and Loading Information label on the vehicle indicates the original equipment tires and the correct cold tire inflation pressures. The recommended pressure is the minimum air pressure needed to support the vehicle's maximum load carrying capacity. See *Vehicle Load Limits* ⇨ 172.

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 tires once a month or more.

How to Check

Use a good quality pocket-type gauge to check tire pressure. Proper tire inflation cannot be determined by looking at the tire. Check the tire inflation pressure when the tires 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 tire valve stem. Press the tire gauge firmly onto the valve to get a pressure measurement. If the cold tire inflation pressure matches the recommended pressure on the Tire 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 center of the tire valve to release air.

Recheck the tire pressure with the tire gauge.

Put the valve caps back 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.

Tire Pressure for High-Speed Operation



Warning

Driving at high speeds, 160 km/h (100 mph) or higher, puts additional strain on tires. Sustained high-speed driving causes excessive heat buildup and can cause sudden tire failure. This could cause a crash, and you or others could be killed. Some high-speed rated tires require inflation pressure adjustment for high-speed operation. When speed limits and road conditions allow the vehicle to be driven at high speeds, make sure the tires are rated for high-speed operation, are in excellent condition, and are set to the correct cold tire inflation pressure for the vehicle load.

Vehicles with tire 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 tire inflation pressure to the corresponding value in the table for the tire size on the vehicle.

High Speed Operation Inflation Pressures	
Tire Size	Cold Inflation Pressure kPa (psi)
285/35R23	290 kPa (42 psi) (Rear Tire Only)

Return the tires to the recommended cold tire inflation pressure when high-speed driving has ended. See *Vehicle Load Limits* ⇨ 172 and *Tire Pressure* ⇨ 316.

Tire Pressure Monitor System

The Tire Pressure Monitor System (TPMS) uses radio and sensor technology to check tire pressure levels. The TPMS sensors monitor the air pressure in your tires and transmit tire pressure readings to a receiver located in the vehicle.

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

or tire inflation pressure label, you should determine the proper tire inflation pressure for those tires.)

As an added safety feature, your vehicle has been equipped with a tire pressure monitoring system (TPMS) that illuminates a low tire pressure telltale when one or more of your tires is significantly under-inflated.

Accordingly, when the low tire pressure telltale illuminates, you should stop and check your tires as soon as possible, and inflate them to the proper pressure. Driving on a significantly under-inflated tire causes the tire to overheat and can lead to tire failure. Under-inflation also reduces energy efficiency and tire tread life, and may affect the vehicle's handling and stopping ability.

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

Your vehicle has also been equipped with a TPMS malfunction indicator to indicate when the system is not operating properly. The TPMS malfunction indicator is combined with the low tire pressure telltale. When the system detects a malfunction, the telltale will flash for approximately one minute and then remain continuously illuminated. This sequence will continue upon subsequent vehicle start-ups as long as the malfunction exists.

When the malfunction indicator is illuminated, the system may not be able to detect or signal low tire pressure as intended. TPMS malfunctions may occur for a variety of reasons, including the installation of replacement or alternate tires or wheels on the vehicle that prevent the TPMS from functioning properly. Always check the TPMS malfunction telltale after replacing one or more tires or wheels on your vehicle to ensure that the replacement or alternate tires and wheels allow the TPMS to continue to function properly.

See “Tire Pressure Monitor Operation” following.

See *Radio Frequency Statement* ⇨ 361.

Tire Pressure Monitor Operation

This vehicle may have a Tire Pressure Monitor System (TPMS). The TPMS is designed to warn the driver when a low tire pressure condition exists. TPMS sensors are mounted onto each tire and wheel assembly, excluding the spare tire and wheel assembly. The TPMS sensors monitor the air pressure in the tires and transmit the tire pressure readings to a receiver located in the vehicle.



When a low tire pressure condition is detected, the TPMS illuminates the low tire pressure warning light located on the instrument cluster. If the warning light comes on, stop as soon as possible and inflate the tires to the recommended pressure shown on the Tire and Loading Information label. See *Vehicle Load Limits* ⇨ 172.

A message to check the pressure in a specific tire displays in the Driver Information Center (DIC). The low tire pressure warning light and the DIC warning message come on each time the vehicle is started until the tires are inflated to the correct inflation pressure. If the vehicle has DIC buttons, tire pressure levels can be viewed. For additional information and details about the DIC operation and displays, see *Driver Information Center (DIC)* ⇨ 114.

The low tire 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 Tire and Loading Information label shows the size of the original equipment tires and the correct inflation pressure for the tires when they are cold. See *Vehicle Load Limits* ⇨ 172, for an example of the Tire and Loading Information label and its location. Also see *Tire Pressure* ⇨ 316.

The TPMS can warn about a low tire pressure condition but it does not replace normal tire maintenance. See *Tire Inspection* ⇨ 321, *Tire Rotation* ⇨ 322, and *Tires* ⇨ 310.

Caution

Tire sealant materials are not all the same. A non-approved tire sealant could damage the TPMS sensors. TPMS sensor damage caused by using an incorrect tire sealant is not covered by the vehicle warranty. Always use only the GM approved tire sealant available through your dealer or included in the vehicle.

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 tire pressure warning light flashes for about one minute and then stays on for the remainder of the time the vehicle is on. A DIC warning message also displays. The malfunction light and DIC warning message will come on each time the vehicle is turned on until the problem is corrected. Some of the conditions that can cause these to come on are:

- One of the road tires has been replaced with the spare tire. The spare tire does not have a TPMS sensor. The malfunction light and the DIC message should go off after the road tire is replaced and the sensor matching process is performed successfully. See "TPMS Sensor Matching Process — Auto Learn Function" later in this section.
- The TPMS sensor matching process was not done or not completed successfully after rotating the tires. The malfunction light and the DIC message should go off after successfully completing the sensor

matching process. See "TPMS Sensor Matching Process — Auto Learn Function" later in this section.

- 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 tires or wheels do not match the original equipment tires or wheels. Tires and wheels other than those recommended could prevent the TPMS from functioning properly. See *Buying New Tires* ⇨ 323.
- 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 tire pressure condition. See your dealer for service if the TPMS malfunction light and DIC message come on and stay on.

Tire Fill Alert (If Equipped)

This feature provides visual and audible alerts outside the vehicle to help when inflating an underinflated tire to the recommended cold tire pressure.

When the low tire pressure warning light comes on:

1. Park the vehicle in a safe, level place.
2. Set the parking brake firmly.
3. Place the vehicle in P (Park).
4. Add air to the tire that is underinflated. The turn signal light will flash.

When the recommended pressure is reached, the horn sounds once and the turn signal light will stop flashing and briefly turn solid.

Repeat these steps for all underinflated tires that have illuminated the low tire pressure warning light.

 Warning

Overinflating a tire could cause the tire to rupture and you or others could be injured. Do not exceed the maximum pressure listed on the tire sidewall. See *Tire Sidewall Labeling* ⇨ 312 and *Vehicle Load Limits* ⇨ 172.

If the tire is overinflated by more than 35 kPa (5 psi), the horn will sound multiple times and the turn signal light will continue to flash for several seconds after filling stops. To release and correct the pressure, while the turn signal light is still flashing, briefly press the center of the valve stem. When the recommended pressure is reached, the horn sounds once.

If the turn signal light does not flash within 15 seconds after starting to inflate the tire, the tire fill alert has not been activated or is not working.

If the hazard warning flashers are on, the tire fill alert visual feedback will not work properly.

The TPMS will not activate the tire 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 tire.
- There is a malfunction in the TPMS.
- There is a malfunction in the horn or turn signal lights.
- The TPMS sensor identification code is not registered to the system.
- The TPMS sensor battery is low.

If the tire 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 tire fill alert feature is not working, use a tire pressure gauge.

TPMS Sensor Matching Process — Auto Learn Function

Each TPMS sensor has a unique identification code. The identification code needs to be matched to a new tire/wheel position after rotating the tires or replacing one or more of the TPMS sensors. When a tire is installed, the vehicle must be stationary for about 20 minutes before the system recalculates. The following relearn process takes up to 10 minutes, driving at a minimum speed of 20 km/h (12 mph). A dash (-) or pressure value will display in the DIC. See *Driver Information*

Center (DIC) ⇨ 114. A warning message displays in the DIC if a problem occurs during the relearn process.

Tire Inspection

We recommend that the tires, including the spare tire, if the vehicle has one, be inspected for signs of wear or damage at least once a month.

Replace the tire if:

- The indicators at three or more places around the tire can be seen.
- There is cord or fabric showing through the tire's rubber.
- The tread or sidewall is cracked, cut, or snagged deep enough to show cord or fabric.
- The tire has a bump, bulge, or split.
- The tire has a puncture, cut, or other damage that cannot be repaired well because of the size or location of the damage.

Tire Rotation Monitor

If equipped, the Tire Rotation Monitor feature tracks your mileage and alerts you when it is time to schedule a tire rotation. To access this feature, from the infotainment apps screen, select Vehicle Status and navigate to Tire Rotation. See *Vehicle Status* ⇨ 115.

After rotating the tires, promptly use this feature to reset the Distance since last rotation counter and start tracking for the next rotation. Ensure you only perform the reset after completing the tire rotation.

You can turn the feature alert off. If you do so, you will not receive the Schedule Tire Rotation alert. The mileage counter will remain active.

To perform a reset, or turn the notification off or on, select Tire Rotation on the infotainment apps screen and select your desired action.

To rotate your tires, see *Tire Rotation* ⇨ 322.

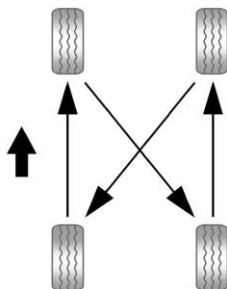
Tire Rotation

Tires should be rotated according to the interval listed in the maintenance schedule. See *Maintenance Schedule* ⇨ 344.

When rotating the tires, inspect the brake pads for signs of wear. See *Brakes* ⇨ 286.

Tires are rotated to achieve a more uniform wear for all tires. The first rotation is the most important.

Anytime unusual wear is noticed, rotate the tires as soon as possible, check for proper tire inflation pressure, and check for damaged tires or wheels. If the unusual wear continues after the rotation, check the wheel alignment. See *When It Is Time for New Tires* ⇨ 323 and *Wheel Replacement* ⇨ 327.



Use this rotation pattern when rotating the tires.

Adjust the front and rear tires to the recommended inflation pressure on the Tire and Loading Information label after the tires have been rotated. See *Tire Pressure* ⇨ 316 and *Vehicle Load Limits* ⇨ 172.

Reset the Tire Pressure Monitor System. See *Tire Pressure Monitor Operation* ⇨ 319.

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 used; however, use a scraper or wire brush later to remove all rust or dirt.

 Warning

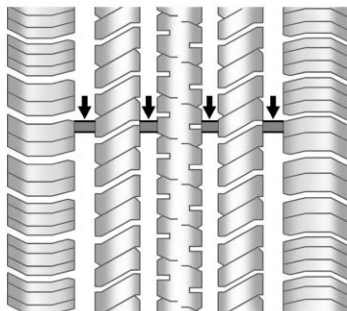
Do not apply grease to the wheel mounting surface, wheel conical seats, or the wheel nuts or bolts. Grease applied to these areas could cause a wheel to become loose or come off, resulting in a crash.

Check that all wheel nuts are properly tightened. See “Wheel Nut Torque” under *Capacities and Specifications* ⇨ 349.

Lightly coat the inner diameter of the wheel hub opening with wheel bearing grease after a wheel change or tire rotation to prevent corrosion or rust build-up.

When It Is Time for New Tires

Factors, such as maintenance, temperatures, driving speeds, vehicle loading, and road conditions affect the wear rate of the tires.



Treadwear indicators are one way to tell when it is time for new tires. Treadwear indicators appear when the tires have only 1.6 mm (1/16 in) or less of tread remaining. See *Tire Inspection* ⇨ 321 and *Tire Rotation* ⇨ 322.

The rubber in tires ages over time. This also applies to the spare tire, if the vehicle has one, even if it is never used. Multiple factors including temperatures, loading conditions, and inflation pressure maintenance affect how fast aging takes place. GM recommends that tires, including the spare if equipped, be replaced after six years, regardless of tread wear. To identify the age of a tire, use the tire manufacture date, which is the last four digits of the DOT Tire Identification Number

(TIN) molded into one side of the tire sidewall. The last four digits of the TIN indicate the tire manufacture date. The first two digits represent 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 through Saturday) of each year.

Vehicle Storage

Tires 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 aging. This area should be free of grease, gasoline, or other substances that can deteriorate rubber.

Parking for an extended period can cause flat spots on the tires that may result in vibrations while driving. When storing a vehicle for at least a month, remove the tires or raise the vehicle to reduce the weight from the tires.

Buying New Tires

GM has developed and matched specific tires for the vehicle. The original equipment tires installed were designed to meet General Motors Tire Performance

Criteria Specification (TPC Spec) system rating. When replacement tires are needed, GM strongly recommends buying tires 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 tire pressure monitoring performance. GM's TPC Spec number is molded onto the tire's sidewall near the tire size.

 Warning

Tires could explode during improper service. Attempting to mount or dismount a tire could cause injury or death. Only your dealer or authorized tire service center should mount or dismount the tires.

 Warning

Mixing tires of different sizes (other than those originally installed on the vehicle), brands, tread patterns, or types may cause loss of vehicle control, resulting in a crash or other vehicle damage. Use the correct size, brand, and type of tire on all wheels.

GM recommends replacing worn tires in complete sets of four. Uniform tread depth on all tires will help to maintain the performance of the vehicle. Braking and handling performance may be adversely affected if all the tires are not replaced at the same time. If proper rotation and maintenance have been done, all four tires should wear out at about the same time. However, if it is necessary to replace only one axle set of worn tires, place the new tires on the rear axle. See *Tire Rotation* ⇨ 322.

Winter tires with the same speed rating as the original equipment tires may not be available for H, V, W, Y and ZR speed

rated tires. Never exceed the winter tires' maximum speed capability when using winter tires with a lower speed rating.

 Warning

Using bias-ply tires on the vehicle may cause the wheel rim flanges to develop cracks after many miles of driving. A tire and/or wheel could fail suddenly and cause a crash. Use only radial-ply tires with the wheels on the vehicle.

If the vehicle tires must be replaced with a tire 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 tires.

The Tire and Loading Information label indicates the original equipment tires on the vehicle. See *Vehicle Load Limits* ⇨ 172.

Reverse Rim Wheels

Warning

Reverse Rim Wheels must be mounted to tires using specialized service equipment by your GM Dealer or qualified tire service center. Servicing Reverse Rim Wheels incorrectly can damage the tire, wheel, and vehicle, which could result in a crash causing severe injury or death. Do not attempt to service Reverse Rim Wheels yourself, see your dealer for service.

Warning

Tires could explode during improper service. Attempting to mount or dismount a tire could cause injury or death. Only your dealer or authorized tire service center should mount or dismount the tires.



This vehicle may be equipped with Reverse Rim Wheels. Reverse Rim Wheels can be identified by the logo on the rim near the service valve, as shown.

Different Size Tires and Wheels

Warning

If different sized wheels are used, there may not be an acceptable level of performance and safety if tires not recommended for those wheels are selected. This increases the chance of a crash and serious injury. Only use GM specific wheel and tire systems developed for the vehicle, and have them properly installed by a GM certified technician.

If wheels or tires are installed that are a different size than the original equipment wheels and tires, 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.

See *Buying New Tires* ⇨ 323 and *Accessories and Modifications* ⇨ 279.

Uniform Tire Quality Grading

The following information relates to the system developed by the United States National Highway Traffic Safety Administration (NHTSA), which grades tires by treadwear, traction, and temperature performance. This applies only to vehicles sold in the United States. The grades are molded on the sidewalls of most passenger car tires. The Uniform Tire Quality Grading (UTQG) system does not apply to deep tread, winter tires,

compact spare tires, tires with nominal rim diameters of 10 to 12 inches (25 to 30 cm), or to some limited-production tires.

While the tires available on General Motors passenger cars and light trucks may vary with respect to these grades, they must also conform to federal safety requirements and additional General Motors Tire Performance Criteria (TPC) standards.

Quality grades can be found where applicable on the tire sidewall between tread shoulder and maximum section width. For example:

Treadwear 200 Traction AA Temperature A

All Passenger Car Tires Must Conform to Federal Safety Requirements In Addition To These Grades.

Treadwear

The treadwear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear

one and one-half ($1\frac{1}{2}$) times as well on the government course as a tire graded 100. The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices and differences in road characteristics and climate.

Traction

The traction grades, from highest to lowest, are AA, A, B, and C. Those grades represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance. Warning: The traction grade assigned to this tire is based on straight-ahead braking traction tests, and does not include acceleration, cornering, hydroplaning, or peak traction characteristics.

Temperature

The temperature grades are A (the highest), B, and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel. Sustained high temperature can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure. The grade C corresponds to a level of performance which all passenger car tires must meet under the Federal Motor Safety Standard No. 109. Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law. Warning: The temperature grade for this tire is established for a tire that is properly inflated and not overloaded. Excessive speed, underinflation, or excessive loading, either separately or in combination, can cause heat buildup and possible tire failure.

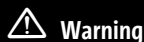
Wheel Alignment and Tire Balance

The tires and wheels were aligned and balanced at the factory to provide the longest tire life and best overall performance. Adjustments to wheel alignment and tire balancing are not necessary on a regular basis. Consider an alignment check if there is unusual tire wear or the vehicle is significantly pulling to one side or the other. Some slight pull to the left or right, depending on the slope 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 tires and wheels may need to be rebalanced. See your dealer for proper diagnosis.

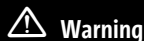
Road Imperfections/Slope Effects

The vehicle's precise steering and handling make it very responsive to road surface feedback. A slight pull may be felt in the steering depending on the slope of the road and/or other road surface variations such as troughs or ruts. This is normal and the vehicle does not require service.

Wheel Replacement



Using the wrong replacement wheels, wheel bolts, or wheel nuts can be dangerous. It could affect the braking and handling of the vehicle. Tires can lose air and cause loss of control, resulting in a crash. Always use the correct wheel, wheel bolts, and wheel nuts for replacement.



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.

Caution

The wrong wheel can also cause problems with bearing life, brake cooling, speedometer or odometer calibration, headlight aim, bumper height, vehicle ground clearance, and tire or tire chain clearance to the body and chassis.

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 aluminum 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 Tire Pressure Monitor System sensors with new GM original equipment parts.

Tire Chains and Other Traction Devices

Warning

Do not use tire chains or textile/fabric traction devices, such as snow socks. There is not enough clearance. Tire chains or textile/fabric traction devices 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 tire chains or textile/fabric traction devices could cause loss of control and a crash. Use another type of traction device only if its manufacturer recommends it for the vehicle's tire size combination and road conditions. Follow that manufacturer's instructions. To avoid vehicle damage, drive slowly 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 tires of the rear axle only.

If a Tire Goes Flat

Warning

Driving on a flat tire will cause permanent damage to the tire. Re-inflating a tire 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 tire that has been driven on while severely underinflated or flat. Have your dealer or an authorized tire service center repair or replace the flat tire as soon as possible.

It is unusual for a tire to blow out while driving, especially if the tires are maintained properly. It is much more likely for a tire to experience a slow leak. See *Tires* ⇨ 310.

In the event of a blowout, follow these tips:

- A front tire blowout causes the vehicle to pull toward the side of the flat. 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.

- 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.

The vehicle has no spare tire, no tire changing equipment, and no place to store a tire.

If the vehicle has self-sealing tires, see *Self-Sealing Tires* ⇨ 311. Tread punctures typically will not cause tires to lose air. However, if the vehicle does get a flat tire, there is no spare tire, tire changing equipment, or place to store a tire. Contact Roadside Assistance for help.

If a tire goes flat, avoid further tire and wheel damage by driving slowly to a level place, well off the road, if possible. Turn on the hazard warning flashers. See *Hazard Warning Flashers* ⇨ 125.

Jump Starting

Jump Starting - North America

For more information about the vehicle battery, recovery, and reset process, see *Battery - North America* ⇨ 288.

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

WARNING: Battery posts, terminals and related accessories can expose you to chemicals including lead and lead compounds, which are known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling. For more information go to www.P65Warnings.ca.gov.

See *California Proposition 65 Warning* ⇨ 1.

 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.

Use eye protection when handling the battery. If you do not follow these steps exactly, some or all of these things can hurt you.

 Warning

Charging the 12-volt battery and the high voltage battery at the same time may result in overheating or failure. Do not attempt to charge the 12-volt battery and the high voltage battery at the same time. If jumpstarting fails, see your dealer for service.

Caution

The vehicle is equipped with an AGM/VRLA 12-volt battery, which can be damaged by using the incorrect type of trickle charger. An AGM/VRLA-compatible charger

(Continued)

Caution (Continued)

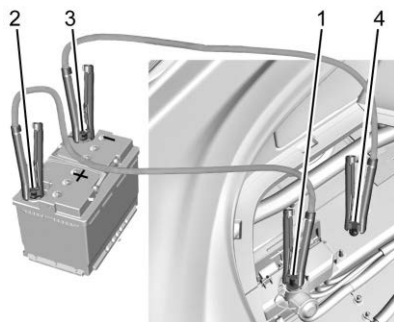
must be used, with the appropriate setting selected. Follow the trickle charger manufacturer instructions.

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.

Caution

If the jumper cables 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 jumper cables in the correct order, making sure that the cables do not touch each other or other metal.



Connection Points and Sequence

1. Discharged Battery Positive (+) Terminal
2. Good Battery Positive (+) Terminal
3. Good Battery Negative (-) Terminal
4. Discharged Battery Negative (-) Grounding Point

The discharged battery positive (+) terminal and the discharged battery negative (-) grounding point are on the driver side of the vehicle.

The good battery negative (-) terminal and the good battery positive (+) terminal are on the battery of the vehicle providing the jump start.

The discharged battery positive (+) terminal and the discharged Battery Negative (-) Grounding Point are under the cargo management system in the rear of the vehicle. Remove the compartment on the driver side to expose the terminal.

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.

1. Check the other vehicle. It must have a 12-volt battery with a negative ground system.

Caution

If the vehicles touch each other while jump starting, a ground connection may occur that disables your vehicle and/or damages the electrical systems of one or both vehicles.

2. Get the vehicles close enough so the jumper cables can reach, but make sure the vehicles are not touching each other.
3. To avoid the possibility of the vehicles rolling, set the parking brake firmly on both vehicles involved in the jump start procedure. Put the vehicles into P (Park). If the other vehicle has a manual transmission, put the vehicle in N (Neutral) before setting the parking brakes.

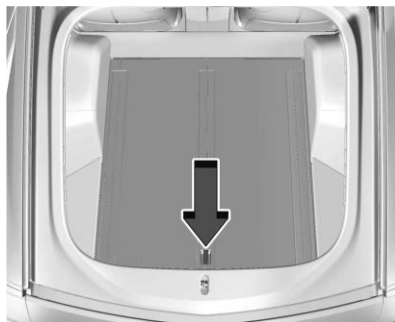
Caution

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 possible, turn off or unplug all accessories on either vehicle when jump starting.

4. Turn off both vehicles. Unplug unnecessary accessories plugged into the cigarette lighter or the accessory power outlet. Turn off the radio and all lights that are not needed.
5. Open the liftgate. See *Liftgate* ⇨ 22.



6. Pull the strap and lift the load floor to access the storage bins.



7. Remove the storage bin on the driver side by unscrewing the wing nut screw in the bottom of the bin.



8. Remove the cover on the positive terminal.
9. Locate the battery positive (+) terminal and negative (-) grounding point.

Warning

Always inspect jumper cables prior to use. Jumper cables with loose or missing insulation could shock you or cause vehicle damage. Do not use jumper cables that appear damaged.

10. Check that the jumper cables do not have loose or missing insulation.

11. Connect one end of the red positive (+) cable to the discharged battery positive (+) terminal. Do not let the other end touch metal.

12. Connect the other end of the red positive (+) cable to the good battery positive (+) terminal.

13. Connect one end of the black negative (-) cable to the good battery negative (-) terminal.

Do not let the other end touch anything until the next step.

14. Connect the other end of the negative (-) cable to the discharged battery negative (-) grounding point.

15. Start the vehicle with the good battery and keep the vehicle running for a while.

16. Try to start the vehicle that had the dead battery. If it will not start after a few tries, have your vehicle serviced.

Jumper Cable Removal

To remove the jumper cables, reverse Steps 11–14 in exact order.

After starting the disabled vehicle and removing the jumper cables, allow it to idle for several minutes.

Towing the Vehicle

Transporting a Disabled Vehicle

Caution

Incorrectly transporting a disabled vehicle may cause damage to the vehicle. Use proper tire 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 tires on the ground. Damage is not covered by the vehicle warranty.

Caution

The vehicle may be equipped with an Electric Parking Brake (EPB) and/or an electronic shifter. In the event of a loss of 12-volt battery power, the EPB cannot

(Continued)

Caution (Continued)

be released, and the vehicle cannot be shifted to N (Neutral). Tire skates or dollies must be used under the non-rolling tires 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 tow eye. Improper use of the tow eye may cause damage to the vehicle and is not covered by the vehicle warranty. If equipped, use the tow 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 tow eye is not designed for off-road recovery. The vehicle must be in N (Neutral) with the Electric Parking Brake (EPB) released when using the tow eye.

Contact a professional towing service to transport a disabled vehicle. GM recommends a flatbed tow truck to transport a disabled vehicle. Use ramps to help reduce approach angles, if necessary.

If equipped, a tow eye may be located in the rear storage compartment. Do not use the tow eye to pull the vehicle from snow, mud, sand, or a ditch. Tow eye threads may have right-or-left-hand threads. Use caution when installing or removing the tow eye.

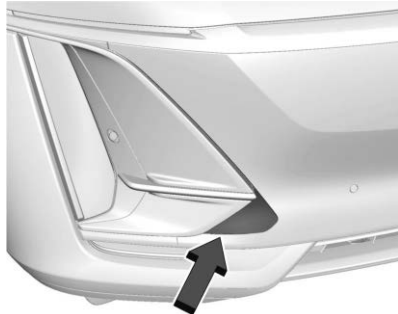
The vehicle must be in N (Neutral) and the electric parking brake must be released when loading the vehicle onto a flatbed tow truck.

- If the vehicle will not start but still has 12-volt battery power, buckle the driver seat belt then press and hold the brake pedal for 60 seconds and shift into N (Neutral).
- If the vehicle is equipped with car wash mode and has 12-volt battery power, see “Car Wash Mode” under *Electric Drive Unit* ⇨ 178 to place the vehicle in N (Neutral).
- If the 12-volt battery is dead and/or the vehicle will not start, the vehicle will not move. Try to jump start the vehicle. See

Jump Starting - North America ⇨ 328, and if the jump start is successful, retry the “Car Wash Mode” procedure.

- If jump starting is unsuccessful, the vehicle will not move. Tire skates or dollies must be used under the non-rolling tires to prevent vehicle damage.

Front Tow Eye Attachment Point



1. Carefully open the cover on the fascia by using the small notch that conceals the tow eye socket.



2. 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.

Rear Tow Eye Attachment Point



1. Carefully open the cover on the fascia by using the small notch that conceals the tow eye socket.



2. 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.

Recreational Vehicle Towing

Caution

Dolly towing or dinghy towing may damage the vehicle. Always put the vehicle on a flatbed truck or trailer.

This vehicle was neither designed nor intended to be towed with any of its wheels on the ground. If your vehicle is disabled and needs to be towed, see *Transporting a Disabled Vehicle* ⇨ 332.

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 the de-icing agent. See *Recommended Fluids and Lubricants* ⇨ 347.

Washing the Vehicle



Warning

Do not power wash any part of the vehicle's interior, including the vinyl floor covering. This could damage safety and other systems in the vehicle, which would not be covered by the vehicle warranty.

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 washers exceeding 8,274 kPa (1,200 psi) can result in damage or removal of paint and decals.

To preserve the exterior finish, wash it often and out of direct sunlight.

Take care to wash materials such as calcium chloride and other salts, ice melting agents, road oil and tar, tree sap, bird droppings,

chemicals from industrial chimneys, etc. from the finish as soon as possible. These materials can damage the finish if they remain on painted surfaces.

Automatic Car Wash

Caution

Some automatic car washes can cause damage to the vehicle, wheels, and ground effects. Automatic car washes are not recommended, due to lack of clearance for the undercarriage and/or wide rear tires and wheels.

Caution

To avoid damage to a matte paint finish, do not use an automatic car wash equipped with brushes or scrubbers. Only use touchless automatic car washes.

Caution

The rear spoiler may not be cleaned properly or could be damaged if it is raised during an automatic car wash. Before using an automatic car wash, press Rear Spoiler on the infotainment screen to lower the rear spoiler.

Follow the posted instructions at the automatic car wash carefully. Turn off the windshield wipers and rear window wiper, if equipped. Remove any accessories that can be damaged or interfere with the car wash equipment.

Hand Wash

Before handwashing the exterior, press Rear Spoiler on the infotainment screen to raise the rear spoiler.

Thoroughly rinse all cleaning agents before and after hand washing. Agents left to dry on the exterior may stain the finish.

Dry the finish with a soft, clean chamois or an all-cotton towel to avoid surface scratches and water spotting.

Cleaning Underhood Components

Caution

Do not power wash any component under the hood. This could cause damage that would not be covered by the vehicle warranty.

Do not use solvents or aggressive cleaners that can harm underhood components. Instead, use water only.

Finish Care

Caution

Do not apply waxes or polishes to uncoated plastic, vinyl, rubber, decals, simulated wood, or matte paint as damage can occur.

Caution

Machine compounding or aggressive polishing on a basecoat/clearcoat paint finish may damage it. Use only non-abrasive waxes and polishes that are made for a basecoat/clearcoat paint finish on the vehicle.

Perform occasional hand waxing or mild polishing to remove residue from the paint finish. Do not use aftermarket clearcoat sealant/wax. See your dealer for approved cleaning products.

Avoid rubbing the finish vigorously. This can create bright spots and an uneven appearance on the finish.

To keep paint finish looking new, keep the vehicle garaged or covered whenever possible.

If the vehicle has a brushed body side with a protective film, the film is intended to stay on the vehicle indefinitely. If the film needs to be removed, see your dealer.

Protecting Exterior Bright Metal Moldings**Caution**

Failure to clean and protect the bright metal moldings can result in a hazy white finish or pitting. This damage would not be covered by the vehicle warranty.

The bright metal moldings on the vehicle are aluminum, chrome, or stainless steel. To prevent damage always follow these cleaning instructions:

- Be sure the molding is cool to the touch before applying any cleaning solution.
- Use only approved cleaning solutions for aluminum, chrome, or stainless steel. Some cleaners are highly acidic or contain alkaline substances and can damage the moldings.
- 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 after washing to protect and extend the molding finish.

Cleaning Exterior Lights/Lenses, Emblems, Decals, and Stripes**Caution**

Failure to clean lights properly can cause damage to the light 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.

Use only lukewarm or cold water, a soft cloth, and a car washing soap to clean exterior lights, lenses, emblems, decals, and stripes. Follow instructions under "Washing the Vehicle" previously in this section.

Light covers are made of plastic, and some have a UV protective coating. Do not clean or wipe them while they are dry. This can cause scratches to the surface of the light cover.

Do not use any of the following on light covers:

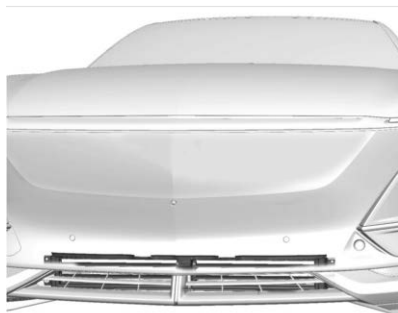
- Abrasive or caustic agents.

- 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 lights are illuminated.

Air Intakes

Clear debris from the air intakes, between the hood and windshield, when washing the vehicle.

Shutter System



The vehicle may have a shutter system that automatically closes the frontal cooling openings. This system promotes airflow around the vehicle, reducing drag and providing energy savings. Ensure the shutter system is clear of any visible debris, snow, or ice. If the Service Vehicle Soon light activates and remains after clearing the shutter system, see *Service Vehicle Soon Light (Propulsion System Failure)* ⇨ 101.

Windshield and Wiper Blades

Clean the outside of the windshield with glass cleaner.

Clean rubber blades using a lint-free cloth or paper towel soaked with windshield washer fluid or a mild detergent. Wash the windshield thoroughly when cleaning the blades. Bugs, road grime, sap, and a buildup of vehicle wash/wax treatments may cause wiper streaking.

Extreme dusty conditions, sand, salt, heat, sun, snow, and ice can cause damage. Replace the wiper blades if they are worn or damaged.

Weatherstrips

Apply weatherstrip lubricant once a year to help weatherstrips last longer, seal better, and not stick or squeak. Hot, dry climates may require more frequent application.

Use a clean cloth to remove any black marks caused by weatherstrips.

Tires, Wheels, and Wheel Trim

Caution

Using petroleum-based tire dressing products on the vehicle may damage the paint finish and/or tires. When applying a tire dressing, always wipe off any overspray from all painted surfaces on the vehicle.

Use a stiff brush with tire cleaner to clean the tires.

Caution

To avoid surface damage on wheels and wheel trim, 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 tire/wheel cleaning brushes. Damage could occur and the repairs would not be covered by the vehicle warranty.

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.

Body Component Lubrication

Lubricate all key lock cylinders, hood hinges, liftgate hinges, and the steel charge port door hinge unless the components are plastic. See *Recommended Fluids and Lubricants* ⇨ 347.

Underbody Maintenance**Caution**

For electric or hybrid vehicles, perform regular care around the high voltage system. Do not direct high pressure spray at or around connectors, cables, or any of the vents. High pressure can damage the seals and battery components.

Every six months, flush any corrosive materials from the underbody with plain water. Take care to thoroughly clean any areas where mud and other debris can collect. If equipped, extend power assist steps and use a high pressure wash to clean all joints and gaps.

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, use original manufacturer replacement parts which provide corrosion protection and maintain the vehicle warranty.

If original manufacturer replacement parts are not used, make sure the body repair shop applies anti-corrosion material to parts repaired or replaced.

Finish Damage

Quickly repair minor chips and scratches with touch-up materials available from your dealer to avoid corrosion. See your dealer's body and paint shop to correct larger areas of finish damage.

Chemical Paint Spotting

Airborne pollutants can damage painted vehicle surfaces and cause ring-shaped discolorations and small, irregular dark spots. See "Finish Care" previously in this section for cleaning instructions.

Interior Care

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 to a cleaning cloth. Do not spray cleaners on any switches or controls.

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.

(Continued)

Caution (Continued)

- Never rub any surface aggressively or with too much pressure.
- Do not get any exposed electrical components wet.
- 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 disinfecting wipes that are scented or contain bleach. Do not use wipes or cleaners that show a color transfer to the wipe or change the appearance of the interior surface when used.
- Do not use scented or gel-type hand sanitizers. If hand sanitizer comes in contact with interior surfaces of the vehicle, blot immediately and clean with a soft cloth dampened with a mild soap and water solution.

To prevent dirt particle abrasions to the vehicle's interior, regularly clean it. Before using cleaners, read and follow all safety instructions on the label. While cleaning the interior, open the doors and windows for proper ventilation. Newspapers or dark garments can transfer color to the vehicle's interior.

When using liquid soap cleaners, follow the directions on the specific cleaner or soap solution for dilution instructions.

Interior Glass

Caution

To prevent scratching, never use abrasive cleaners on automotive glass and panoramic roof glass. Use of abrasive cleaners or aggressive cleaning may damage the vehicle's glass surfaces.

Use a microfiber cloth fabric dampened with water to clean interior glass. Wipe droplets left behind with a clean dry cloth. If necessary, use a commercial glass cleaner after cleaning with plain water.

Cleaning the interior windshield with water during the first three to six months of ownership will reduce tendency to fog.

Speaker Covers

Vacuum gently around speaker covers to prevent damage. Clean spots with water and mild soap.

Coated Moldings

When cleaning coated moldings:

- When lightly soiled, wipe with a sponge or soft, lint-free cloth dampened with water.
- When heavily soiled, use warm soapy water.

Care of Builder's Badge

Caution

Failure to clean the Builder's Badge can result in corrosion. Clean regularly with an approved stainless steel cleaner.

Clean the Builder's Badge regularly. It is located on the bottom of the driver side b-pillar.

Fabric/Carpet/Suede

Before cleaning, remove as much solid soils as possible, then gently vacuum the surface using a soft brush attachment. If a rotating vacuum brush attachment is used, only use it on the floor carpet.

Gently blot liquids with a paper towel. Continue blotting until no more soil can be removed.

To clean:

1. Saturate a clean, lint-free colorfast 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 center. 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 color 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.
6. After cleaning, use a paper towel to blot excess moisture.

Stubborn stains may require the use of a commercial upholstery cleaner or spot lifter. Test a small hidden area for colorfastness before using a commercial upholstery cleaner or spot lifter. If ring formation occurs, clean the entire fabric or carpet.

Cleaning High Gloss Surfaces, Vehicle Information, and Radio Displays

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.

1. Use a soft bristle brush to remove any dirt from the high gloss surface/display.
2. Gently clean the surface/display with a clean microfiber cloth that has not been bleached or washed with fabric softener. Never use window cleaners or solvents.

Instrument Panel, Leather, Vinyl, Plastic Surfaces, Low Gloss Paint Surfaces, and Natural Open Pore Wood Surfaces**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 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.

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,

(Continued)

Caution (Continued)

blot immediately and clean with a soft cloth dampened with a mild soap solution. Damage caused by air fresheners would not be covered by the vehicle warranty.

Use compressed air or a vacuum to remove liquid or dust under the Multi-Functional Controller (MFC) cap, if equipped.

To remove dust and dirt from knobs and crevices on the instrument cluster:

1. Use a soft bristle brush.
2. Wipe with a soft microfiber cloth dampened with water. Use a mild soap and water solution for more thorough cleaning.

Do not use cleaners that increase gloss, especially on the instrument panel. Reflected glare can decrease visibility through the windshield under certain conditions.

Care of Seat Belts **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.

Keep belts clean and 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.

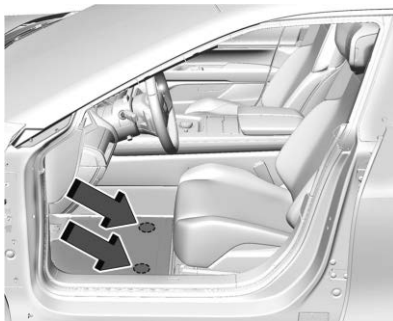
Use the following guidelines for proper floor mat use:

- The original equipment floor mats are designed for your vehicle. If the floor mats need to be replaced, it is recommended that GM-certified floor mats are 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 side floor mat is held in place by two button-type retainers.

The passenger side floor mat is 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 retainers over the carpet retainer openings and snapping them into position.
3. Make sure the floor mat is properly secured in place. Verify the floor mat does not interfere with the pedals.

Protecting the Metal Plates in the Floor Mats

Caution

Failure to clean and protect the metal plates in the floor mats can result in a hazy white finish or pitting. This damage would not be covered by the vehicle warranty.

The metal plates in the floor mats are stainless steel. To prevent damage always follow these cleaning instructions:

- Use only approved cleaning solutions for stainless steel. Some cleaners are highly acidic or contain alkaline substances and can damage the metal plates.
- Always dilute a concentrated cleaner according to the manufacturer's instructions.
- Do not use cleaners that are not intended for automotive use.

Service and Maintenance

General Information

General Information 343

Maintenance Schedule

Maintenance Schedule 344

Multi-Point Vehicle Inspection (MPVI)

Multi-Point Vehicle Inspection (MPVI) 345

Owner Checks and Services

Owner Checks and Services 346

Recommended Fluids, Lubricants, and Parts

Recommended Fluids and Lubricants 347

Maintenance Records

Maintenance Records 348

General Information



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, see your dealer to have a trained technician do the work. See *Doing Your Own Service Work* ⇨ 279.

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,

(Continued)

Caution (Continued)

or lubricants that are not approved by GM could damage the vehicle, requiring expensive repairs that are not covered by the vehicle warranty.

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 dealer 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 dealer recognizes the importance of providing competitively priced maintenance and repair services. With trained technicians, the dealer is the place for routine maintenance

such as tire rotations and additional maintenance items like tires, brakes, batteries, and wiper blades.

The Tire Rotation and Required Services are the responsibility of the vehicle owner. It is recommended to have your dealer perform these services every 12 000 km/7,500 mi. Proper vehicle maintenance helps to keep the vehicle in good working condition.

The Additional Required Services are for vehicles that:

- Carry passengers and cargo within recommended limits on the Tire and Loading Information label. See *Vehicle Load Limits* ⇨ 172.
- Are driven on reasonable road surfaces within legal driving limits.

Maintenance Schedule

Rotate Tires and Perform Required Services Every 12 000 km (7,500 mi)

- Rotate the tires. Rotating the tires helps achieve a more uniform wear. The first rotation is the most important. Anytime you notice unusual tire wear, rotate the tires as soon as possible, check for

proper tire inflation pressure, and check for damage to tires or wheels. If unusual wear continues after a rotation, check the wheel alignment.

See *When It Is Time for New Tires* ⇨ 323 and *Wheel Replacement* ⇨ 327.

- Perform the Multi-Point Vehicle Inspection. See *Multi-Point Vehicle Inspection (MPVI)* ⇨ 345.
- Lubricate body components. See *Exterior Care* ⇨ 334.

Additional Required Services — Normal Service

Every 12 000 km (7,500 mi)

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 fogging, or odors. Your GM dealer can help determine when to replace the filter.

Every 240 000 km (150,000 mi)

Drain and fill the coolant circuits. Or every five years, whichever comes first. See *Cooling System* ⇨ 284.

Severe Conditions Requiring More Frequent Maintenance

- Mainly driven in heavy city traffic in hot weather.
- Mainly driven in hilly or mountainous terrain.
- Used for high speed or competitive driving.
- Used for taxi, police, or delivery service.

Additional Required Services — Severe Service

Every 72 000 km (45,000 mi)

- Change electric drive unit fluid. See *Recommended Fluids and Lubricants* ⇨ 347.

Owner Checks and Services

Every Five Years

Replace the brake fluid every five years. See *Brake Fluid* ⇨ 287.

Every Seven Years

Replace the air conditioning desiccant every seven years. This service helps the longevity and efficient operation of the air conditioning system. This service can be complex. See your dealer.

Multi-Point Vehicle Inspection (MPVI)

A Multi-Point Vehicle Inspection completed by a trained technician is a maintenance assessment of your vehicle. The benefit of the Multi-Point Vehicle Inspection is to identify service items that require immediate attention and those that may require attention in the future.

The technician will perform the following checks on your vehicle. You can obtain a copy of the appropriate Multi-Point Vehicle Inspection checklist on your country's GM Certified Service website. For a complete list of checks, inspections, and services, see your dealer.

Some items may not apply to your vehicle and/or region.

Diagnostics

- OnStar active, if equipped

- Service history/recall check

Exterior Lights

- Visual inspection

Windshield and Wipers

- Visual inspection

12 Volt Battery

- Battery visual inspection
- Battery test results
- Battery cables and connections

Systems, Fluids, and Visible Leak Inspection

- Electric Drive Unit
- Drive axle
- Transfer case
- Power electronics cooling system
- Windshield washer fluid

Tire Inspection

- Tire pressure, tread depth, and wear
- Rotation, if applicable
- Alignment check, optional

- Reset tire pressure monitor
- Check tire sealant expiration date, if equipped
- Check spare tire, if equipped

Brakes

- Check brake system

Visible and Functional Inspections

- Seat belt components
- Accelerator pedal
- Passenger compartment air filter, if equipped
- Hoses
- Shocks and struts
- Steering components
- Axle boots or driveshaft and u-joints
- Compartment lift struts, if equipped
- Floor mats secured, no interference with pedals
- Horn
- Starter switch

Lubricate

- Chassis components

Owner Checks and Services

- At least twice a year, have underbody flushing service performed. See "Underbody Maintenance" in *Exterior Care* ⇨ 334.

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 dealer.

Usage	Fluid/Lubricant
Electric Drive Unit	DEXRON ULV Automatic Transmission Fluid.
Hydraulic Brake System	GM approved DOT 4 Hydraulic Brake Fluid.
Key Lock Cylinders, Hood and Liftgate Hinges	Multi-Purpose Lubricant, Superlube. See your dealer.
Vehicle Coolant Circuits	Use only ACDelco Premix (50/50 mixture of de-ionized water and DEX-COOL Coolant). See your dealer.
Windshield Washer	Automotive windshield washer fluid that meets regional freeze protection requirements.

Maintenance Records

After 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.

[illegible]

Technical Data

Vehicle Identification

Vehicle Identification Number (VIN) 349

Service Parts Identification 349

Vehicle Data

Capacities and Specifications 349

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 windshield from outside. The Vehicle Identification Number (VIN) also appears on the Vehicle Certification label and certificates of title and registration.

Service Parts Identification

There may be a large barcode on the certification label on the front pillar (A-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 inside of the trunk.

Vehicle Data

Capacities and Specifications

The following approximate capacities are given in metric and English conversions.

Refer to *Recommended Fluids and Lubricants* ⇨ 347 for more information.

Application	Capacities	
	Metric	English
Air Conditioning Refrigerant	For the air conditioning system refrigerant charge type and amount, see the refrigerant label under the hood. See your dealer for more information.	
Cooling Systems*	See your dealer.	
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.		
*The refilling or adding coolant procedures can be complex. See your dealer.		

Customer Information

Customer Information

Customer Satisfaction Procedure	351
California Warranty Information	353
Customer Assistance Offices	355
Customer Assistance for Text Telephone (TTY) Users	355
Online Account and Customer Support	355
GM Mobility Reimbursement Program (U.S. Only)	356
Roadside Assistance Program	356
Scheduling Service Appointments	358
Courtesy Transportation Program	358
Collision Damage Repair	359
Publication Ordering Information	361
Windshield Radio Frequency Identification	361
Radio Frequency Statement	361

Reporting Safety Defects

Reporting Safety Defects to the United States Government	362
Reporting Safety Defects to the Canadian Government	362
Reporting Safety Defects to General Motors	362

Vehicle Data Recording and Privacy

Vehicle Data Recording and Privacy	363
Cybersecurity	363
Event Data Recorders	363
OnStar	364
Infotainment System	364

Customer Satisfaction Procedure

Your satisfaction and goodwill are important to your dealer and to Cadillac. Normally, any concerns with the sales transaction or the operation of the vehicle will be resolved by your dealer's sales or service departments. Sometimes, however, despite the best intentions of all concerned, misunderstandings can occur. If your concern has not been resolved to your satisfaction, the following steps should be taken:

STEP ONE: Discuss your concern with a member of dealership management. Normally, concerns can be quickly resolved at that level. If the matter has already been reviewed with the sales, service or parts manager, contact the owner of your dealership or the general manager

STEP TWO: If after contacting a member of dealership management, it appears your concern cannot be resolved by your dealership without further help, in the U.S., call the Cadillac Customer Assistance Center at 1-800-333-4223. In Canada, call the Canadian Cadillac Customer Care Centre at 1-888-446-2000.

We encourage you to call the toll-free number in order to give your inquiry prompt attention. Have the following information available to give the Customer Assistance representative:

- Vehicle Identification Number (VIN). This is available from the vehicle registration or title, or the plate at the top left of the instrument panel and visible through the windshield.
- Dealership name and location.
- Vehicle delivery date and present mileage.

When contacting Cadillac, remember that your concern will likely be resolved at a dealer's facility. That is why we suggest following Step One first.

STEP THREE — U.S. Owners: Both GM and your GM dealer are committed to making sure you are completely satisfied with your new vehicle. However, if you continue to remain unsatisfied after following the procedure outlined in Steps One and Two, you can file with the Better Business Bureau (BBB) AUTO LINE Program to enforce any additional rights you may have.

The BBB AUTO LINE Program is an out-of-court program administered by BBB National Programs, Inc. to settle automotive disputes regarding vehicle repairs or the interpretation

of the New Vehicle Limited Warranty. Although you may be required to resort to this informal dispute resolution program prior to filing a court action, use of the program is free of charge and your case will generally be heard within 40 days. If you do not agree with the decision given in your case, you may reject it and proceed with any other venue for relief available to you. When contacting the BBB AUTO LINE, you will need to provide the following information: Owner's name and address, Vehicle identification number (VIN), the Year, Make, Model, mileage of the vehicle and provide a description of the concern.

Contact the BBB AUTO LINE Program using the toll-free telephone number or write them at the following address:

BBB AUTO LINE Program
BBB National Programs, Inc.
1676 International Drive
Suite 550
McLean, VA 22102

Telephone: 1-800-955-5100
www.bbbauto.org

This program is available in all 50 states and the District of Columbia. Eligibility is limited by vehicle age, mileage, and other factors. General

Motors reserves the right to change eligibility limitations and/or discontinue its participation in this program.

STEP THREE — Canadian Owners: In the event that you do not feel your concerns have been addressed after following the procedure outlined in Steps One and Two, General Motors of Canada Company wants you to be aware of its participation in a no-charge mediation/arbitration program. General Motors of Canada Company has committed to binding arbitration of owner disputes involving factory-related vehicle service claims. The program provides for the review of the facts involved by an impartial third party arbiter, and may include an informal hearing before the arbiter. The program is designed so that the entire dispute settlement process, from the time you file your complaint to the final decision, should be completed in about 70 days. We believe our impartial program offers advantages over courts in most jurisdictions because it is informal, quick, and free of charge.

For further information concerning eligibility in the Canadian Motor Vehicle Arbitration Plan (CAMVAP), call toll-free 1-800-207-0685, or call the Cadillac Customer Care Centre, 1-888-446-2000, or write to:

General Motors Cadillac Customer Care Centre
General Motors of Canada Company
500 Wentworth Street W
Oshawa, ON L1J 0C5

Your inquiry should be accompanied by the Vehicle Identification Number (VIN).

California Warranty Information

The Song-Beverly Consumer Warranty Act provides consumers who purchase or lease a new motor vehicle in California with certain rights if their vehicle has nonconformities that GM or its authorized repair facilities (e.g., GM dealers) are unable to repair after a reasonable number of attempts.

Applied to your vehicle, California Civil Code Section 1793.2(d) requires that, if GM or its authorized repair facilities are unable to repair a new motor vehicle to conform to the vehicle's applicable express warranties after a reasonable number of attempts, GM shall either replace the new motor vehicle or provide restitution in accordance with a statutory formula.

California Civil Code Section 1793.22(b) creates a presumption that GM has had a reasonable number of attempts to conform the vehicle

to its applicable express warranties if, within 18 months from delivery to the buyer or 18,000 miles on the vehicle's odometer, whichever occurs first, one or more of the following occurs:

- The same nonconformity results in a condition that is likely to cause death or serious bodily injury if the vehicle is driven AND the nonconformity has been subject to repair two or more times by GM or its authorized repair facilities (e.g., dealers) AND the buyer or lessee has at least once directly notified GM of the need for the repair of the nonconformity by mailing such notification to the address listed below.
- The same nonconformity has been subject to repair four or more times by GM or its authorized repair facilities AND the buyer has at least once directly notified GM of the need for the repair of the nonconformity by mailing such notification to the address listed below.
- The vehicle is out of service by reason of repair nonconformities by GM or its authorized repair facilities for a cumulative total of more than 30 calendar days after delivery of the vehicle to the buyer.

If you purchased or leased a new motor vehicle in California and GM or its authorized repair facilities have been unable to repair the vehicle to conform it to applicable express warranties within a reasonable number of attempts, you may be eligible for relief under the Song-Beverly Consumer Warranty Act. You can submit a claim with the BBB AUTO LINE Program (see *Customer Satisfaction Procedure* ⇨ 351) or you can request in writing that GM replace or repurchase your vehicle.

Notice to General Motors regarding warranty issues must be sent either by email to californiawarrantynotice@gm.com or by certified or registered mail, return receipt requested, to the following address:

California Repurchase Notice
P.O. Box 33173
Detroit, MI 48232-5173

Any repurchase request must include your name, the accurate Vehicle Identification Number ("VIN") of your vehicle, a brief summary of the repair history and problems with the vehicle.

Información de garantía de California

La Ley de Garantía del Consumidor Song-Beverly brinda a los consumidores que compran o alquilan un vehículo automotor nuevo en California ciertos derechos si su vehículo presenta inconformidades que GM o sus talleres de reparación autorizadas (por ejemplo, los distribuidores de GM) no pueden reparar después de una cantidad razonable de intentos.

Aplicado a su vehículo, la Sección 1793.2(d) del Código Civil de California requiere que, si GM o sus talleres de reparación autorizadas no pueden reparar un vehículo automotor nuevo para cumplir con las garantías expresas aplicables del vehículo después de una cantidad razonable de intentos, GM deberá reemplazar el vehículo automotor nuevo o proporcionar una restitución de acuerdo con una fórmula legal.

La Sección 1793.22(b) del Código Civil de California crea una presunción de que GM ha realizado un número razonable de intentos para adaptar el vehículo a sus garantías expresas aplicables si, dentro de los 18 meses desde la entrega al comprador o 18,000 millas en el odómetro del vehículo, lo que ocurra primero, ocurre uno o más de los siguientes:

- La misma inconformidad da como resultado una condición que probablemente cause la muerte o lesiones corporales graves si se conduce el vehículo Y la inconformidad ha sido objeto de reparación dos o más veces por GM o sus talleres de reparación autorizadas (por ejemplo, distribuidores) Y el comprador o arrendatario ha notificado directamente por lo menos una vez a GM sobre la necesidad de reparar la inconformidad enviando dicha notificación por correo a la dirección que se indica a continuación.
- La misma inconformidad ha sido objeto de reparación cuatro o más veces por GM o sus talleres de reparación autorizadas Y el comprador ha notificado directamente por lo menos una vez a GM sobre la necesidad de la reparación de la inconformidad enviando dicha notificación a la dirección que se indica a continuación.
- El vehículo está fuera de servicio debido a inconformidades de reparación por parte de GM o sus talleres de reparación autorizadas por un total acumulado de más de 30 días calendario después de la entrega del vehículo al comprador.

Si compró o alquiló un vehículo automotor nuevo en California y GM o sus talleres de reparación autorizados no han podido reparar el vehículo para cumplir con las garantías expresas aplicables dentro de una cantidad razonable de intentos, puede ser elegible para recibir ayuda bajo la Ley de Garantía del Consumidor Song-Beverly. Puede presentar un reclamo ante el Programa BBB AUTO LINE (consulte el Procedimiento de satisfacción del cliente) o puede solicitar por escrito que GM reemplace o recompre su vehículo.

El aviso a General Motors sobre problemas de garantía debe enviarse por correo electrónico a californiawarrantynotice@gm.com o por correo certificado o registrado, con acuse de recibo solicitado, a la siguiente dirección:

Aviso de recompra de California
P.O. Box 33173
Detroit, MI 48232-5173

La solicitud para reemplazo o recompra debe incluir su nombre, el Número de identificación del vehículo ("NIV") preciso de su vehículo, un breve resumen del historial de reparación y problemas con el vehículo.

Customer Assistance Offices

Cadillac is committed to assisting customers. Visit us online at www.cadillac.com/support (U.S.) or www.cadillaccanada.ca/en/owners (Canada) to chat with us or find answers to commonly asked questions, tips, vehicle how-to instructions, and available support services.

Need more help? Use the telephone numbers or mailing addresses below for additional assistance.

United States and Puerto Rico

Cadillac Customer Assistance Center
Cadillac Motor Car Division
P.O. Box 33169
Detroit, MI 48232-5169
1-800-333-4223

TTY: Dial 711 relay service and contact 1-800-833-2438

Roadside Assistance: 1-800-224-1400

Canada

Cadillac Customer Care Centre
General Motors of Canada Company
500 Wentworth Street W
Oshawa, ON L1J 0C5

1-888-446-2000 (English/French)

Cadillac Roadside Assistance: 1-800-882-1112

Overseas

Contact the local General Motors Business Unit.

Customer Assistance for Text Telephone (TTY) Users

To assist customers who are deaf, hard of hearing, or speech-impaired and/or who use Text Telephones (TTYs), please dial the national 711 relay service and contact 1-800-833-2438. TTY users in Canada can dial 1-800-263-3830.

Online Account and Customer Support

Create a Cadillac Account (U.S.) at cadillac.com

Learn more about your vehicle features, shop for and manage your connected services and OnStar plans, and access diagnostic information specific to your vehicle. Visit cadillac.com and create an account today.

Membership Benefits

 : Download owner's manuals and view vehicle-specific how-to videos.

 : View maintenance schedules, alerts, and Vehicle Diagnostic Information. Schedule service appointments.

 : View service records from your dealership and add your own.

 : Select a dealer and view locations, maps, phone numbers, and hours.

 : Track your vehicle warranty information.

 : View active recalls or search by Vehicle Identification Number. See *Vehicle Identification Number (VIN)* ⇨ 349.

 : Manage your profile and payment information. View your GM Rewards Card earnings and My Cadillac Rewards points.

 : Chat with online help representatives.

Cadillac Account (Canada)

Visit your Cadillac Account at cadillaccanada.ca/en (English) or cadillaccanada.ca/fr (French) to access similar benefits.

GM Mobility Reimbursement Program (U.S. Only)

GENERAL MOTORS MOBILITY



This program is available to qualified applicants for cost reimbursement, up to certain limits, of eligible aftermarket adaptive equipment required for the vehicle, such as hand controls or a wheelchair/scooter lift for the vehicle.

To learn about the GM Mobility program, call the GM Mobility Assistance Center at 1-800-323-9935. Text Telephone (TTY) users, please dial the national 711 relay service and contact 1-800-323-9935.

Roadside Assistance Program

For U.S.-purchased vehicles, call 1-844-515-1420. Text Telephone (TTY) Users (U.S. Only): Contact 711 relay service and provide 1-844-515-1420.

For Canadian purchased vehicles, call 1-844-637-1757.

Service is available 24 hours a day, 365 days a year.

Calling for Assistance

When calling Roadside Assistance, have the following information ready:

- Your name, home address, and home telephone number
- Telephone number of your location
- Location of the vehicle
- Model, year, color, and license plate number of the vehicle
- Odometer reading and Vehicle Identification Number (VIN)
- Description of the problem

Coverage

For Roadside coverage duration see the Limited Warranty and Owner Assistance Information Manual. For questions on additional Roadside coverage, contact Cadillac Roadside Assistance.

In the U.S., anyone driving the vehicle is covered. In Canada, a person driving the vehicle without permission from the owner is not covered.

Roadside Assistance is not a part of the New Vehicle Limited Warranty. General Motors North America and Cadillac reserve the right to make any changes or discontinue the Roadside Assistance program at any time without notification.

General Motors North America and Cadillac reserve the right to limit services or payment to an owner or driver if they decide the claims are made too often, or the same type of claim is made many times.

Cadillac Owner Privileges™

- **Lock-Out Service:** Service to unlock the vehicle if you are locked out. A remote unlock may be available if you have OnStar. For security reasons, the driver must present identification before this service is given.
- **Emergency Tow from a Public Road or Highway:** Tow to the nearest certified Cadillac EV dealer for warranty service, or if the vehicle was in a crash and cannot be driven. Assistance is not given when the vehicle is stuck in the sand, mud, or snow. If the vehicle is out of charge, Roadside

Assistance will arrange to tow the vehicle to the nearest charging station or to the customer's home, whichever is closest.

- **Flat Tire Change:** If the tire has been separated from the wheel, has damaged sidewalls, or has a large puncture, the tire is too severely damaged for the self-sealing tire to be effective and the vehicle will have to be towed. It is the owner's responsibility for the repair or replacement of the tire if it is not covered by the warranty.
- **Battery Jump Start:** Service to jump start a dead battery.
- **Trip Interruption Benefits and Service:** If your trip is interrupted due to a warranty failure, incidental expenses may be reimbursed. Items considered are hotel, meals, and rental car or a vehicle being delivered back to the customer, up to 500 miles. Contact Cadillac Roadside Assistance for Trip Interruption eligibility at the time of vehicle disablement.

Cadillac Technician Roadside Assistance (U.S. Only)

Cadillac's exceptional Roadside Assistance is more than an auto club or towing service. It provides every Cadillac owner in the United States with the advantage of contacting a Cadillac advisor and, where available, a Cadillac trained dealer technician who can provide on-site service.

A dealer technician will travel to your location within a 30-mile radius of a participating Cadillac dealership. If beyond this radius, we will arrange to have your car towed to the nearest Cadillac dealership. Each technician travels with a specially equipped service vehicle complete with the necessary Cadillac parts and tools required to handle most roadside repairs.

Services Not Included in Roadside Assistance

- Impound towing caused by violation of any laws
- Reimbursement of legal fines
- Reimbursement of police mandated tows
- Mounting, dismounting, or changing of snow tires, chains, or other traction devices

- Towing of anything attached to the vehicle like boats, campers, trailers, cargo boxes, etc.
- Vehicles stranded due to off-road driving

Service is not provided if a vehicle is in an area that is not accessible to the service vehicle or is not a regularly traveled or maintained public road, which includes ice and winter roads. Service is not provided on restricted roadways which can include and is not limited to, some highways, tunnels, toll roads, toll bridges, turnpikes, and service roads.

Services Specific to Canadian-Purchased Vehicles

- **Lock-Out Service:** Vehicle registration is required.
- **Trip Interruption Benefits and Service:** Must be over 150 km (93 mi) from where the trip was started to qualify. Pre-authorization, original detailed receipts, and a copy of the repair orders are required. Once authorization has been received, the Roadside Assistance advisor will help to make arrangements and explain how to receive payment. Items considered are

hotel, meals, and rental car or a vehicle being delivered back to the customer, up to 800 km.

- **Alternative Service:** If assistance cannot be provided right away, the Roadside Assistance advisor may give you permission to get local emergency road service. You will receive payment, up to \$100, after sending the original receipt to Roadside Assistance. Mechanical failures may be covered, however any cost for parts and labor for repairs not covered by the warranty are the owner responsibility.

Scheduling Service Appointments

If your vehicle requires service, contact your dealer and request an appointment. By scheduling a service appointment and advising the service consultant of your transportation needs, your dealer can help minimize your inconvenience. Be sure to notify your dealer of any safety-related concerns when requesting the appointment.

If you cannot schedule service immediately, keep driving the vehicle until your scheduled appointment, unless the problem is safety related.

If you are seeking a same-day repair, schedule your appointment as early in the day as possible.

Courtesy Transportation Program

GM and our participating dealers are proud to offer Courtesy Transportation. This customer support program minimizes inconvenience during warranty repairs for vehicles with the Bumper-to-Bumper (Base Warranty Coverage period in Canada), Federal Emission, Extended Powertrain, or Electric-specific warranties in both the U.S. and Canada.

Courtesy Transportation is not a part of the New Vehicle Limited Warranty. See the “Limited Warranty and Owner Assistance Information” manual for detailed new vehicle warranty coverage information.

Transportation Options

Warranty service is often completed while you wait. If not, your dealer may offer these transportation options:

Shuttle Service

One-way or round-trip shuttle service within a reasonable time and distance from your dealer.

Public Transportation, Ridesharing App, or Fuel Reimbursement

If your vehicle is kept overnight for repairs and you use public transportation or a ridesharing app, original receipts must support the expense within GM’s allowed maximum to qualify for reimbursement. If U.S. customers arrange their own transportation, limited reimbursement for reasonable fuel expenses may be available. Claims should reflect actual costs and must be supported by original receipts. See your dealer for information.

Courtesy Rental Vehicle

For an overnight warranty repair, the dealer may offer a courtesy rental vehicle or reimburse rental costs. Reimbursement requires original receipts, a signed and complete rental agreement, and must meet state/provincial, local and rental vehicle provider requirements, which may include, minimum age requirements, insurance coverage, and credit card. Additional fees for fuel, rental vehicle insurance, taxes, levies, usage fees, excessive mileage, or rental usage beyond the completion of the repair are your responsibility.

A like vehicle may not be available as a courtesy rental.

Additional Program Information

Not all program options, like shuttle service, are available at every dealer. Contact your dealer for availability.

General Motors reserves the right to unilaterally modify, change, or discontinue Courtesy Transportation at any time and to resolve all questions of claim eligibility pursuant to the terms and conditions described herein at its sole discretion.

Collision Damage Repair

If the vehicle is involved in a collision and it is damaged, have the damage repaired by a qualified technician using the proper equipment and quality replacement parts. Poorly performed collision repairs diminish the vehicle resale value, and safety performance can be compromised in subsequent collisions.

Collision Parts

Genuine GM Collision parts are new parts made with the same materials and construction methods as the parts with which the vehicle was originally built. Genuine GM Collision

parts are the best choice to ensure that the vehicle's designed appearance, durability, and safety are preserved. The use of Genuine GM parts can help maintain the GM New Vehicle Limited Warranty.

Recycled original equipment parts may also be used for repair. These parts are typically removed from vehicles that were total losses in prior crashes. In most cases, the parts being recycled are from undamaged sections of the vehicle. A recycled original equipment GM part may be an acceptable choice to maintain the vehicle's originally designed appearance and safety performance; however, the history of these parts is not known. Such parts are not covered by the GM New Vehicle Limited Warranty, and any related failures are not covered by that warranty.

Aftermarket collision parts are also available. These are made by companies other than GM and may not have been tested for the vehicle. As a result, these parts may fit poorly, exhibit premature durability/corrosion problems, and may not perform properly in subsequent collisions. Aftermarket parts are not covered by the GM New Vehicle Limited Warranty, and any vehicle failure related to such parts is not covered by that warranty.

Repair Facility

GM also recommends that you choose a collision repair facility that meets your needs before you ever need collision repairs. Your dealer may have a collision repair center with GM-trained technicians and state-of-the-art equipment, or be able to recommend a collision repair center that has GM-trained technicians and comparable equipment.

Insuring the Vehicle

Protect your investment in the GM vehicle with comprehensive and collision insurance coverage. There are significant differences in the quality of coverage afforded by various insurance policy terms. Many insurance policies provide reduced protection to the GM vehicle by limiting compensation for damage repairs by using aftermarket collision parts. Some insurance companies will not specify aftermarket collision parts. When purchasing insurance, we recommend that you ensure that the vehicle will be repaired with GM original equipment collision parts. If such insurance coverage is not available from your current insurance carrier, consider switching to another insurance carrier.

If the vehicle is leased, the leasing company may require you to have insurance that ensures repairs with Genuine GM Original Equipment Manufacturer (OEM) parts or Genuine Manufacturer replacement parts. Read the lease carefully, as you may be charged at the end of the lease for poor quality repairs.

If a Crash Occurs

If there has been an injury, call emergency services for help. Do not leave the scene of a crash until all matters have been taken care of. Move the vehicle only if its position puts you in danger, or you are instructed to move it by a police officer.

Give only the necessary information to police and other parties involved in the crash.

For emergency towing see *Roadside Assistance Program* ⇨ 356.

Gather the following information:

- Driver name, address, and telephone number
- Driver license number
- Owner name, address, and telephone number
- Vehicle license plate number

- Vehicle make, model, and model year
- Vehicle Identification Number (VIN)
- Insurance company and policy number
- General description of the damage to the other vehicle

Choose a reputable repair facility that uses quality replacement parts. See “Collision Parts” earlier in this section.

In a crash, the sensing system may shut down the high voltage system. See *Battery - North America* ⇨ 288 for important safety information. If an airbag has inflated, see *What Will You See After an Airbag Inflates?* ⇨ 57.

If the vehicle is damaged from a crash, flood, fire, or other event it may be necessary to have the vehicle inspected. See *Battery - North America* ⇨ 288 for important safety information.

Managing the Vehicle Damage Repair Process

In the event that the vehicle requires damage repairs, GM recommends that you take an active role in its repair. If you have a pre-determined repair facility of choice, take the vehicle there, or have it towed there. Specify

to the facility that any required replacement collision parts be original equipment parts, either new Genuine GM parts or recycled original GM parts. Remember, recycled parts will not be covered by the GM vehicle warranty.

Insurance pays the bill for the repair, but you must live with the repair. Depending on your policy limits, your insurance company may initially value the repair using aftermarket parts. Discuss this with the repair professional, and insist on Genuine GM parts. Remember, if the vehicle is leased, you may be obligated to have the vehicle repaired with Genuine GM parts, even if your insurance coverage does not pay the full cost.

If another party's insurance company is paying for the repairs, you are not obligated to accept a repair valuation based on that insurance company's collision policy repair limits, as you have no contractual limits with that company. In such cases, you can have control of the repair and parts choices as long as the cost stays within reasonable limits.

Publication Ordering Information

Service Manuals

Service manuals have the diagnosis and repair information on the engine/propulsion, transmission, axle, suspension, brakes, electrical system, steering system, body, etc.

Customer Literature

Owner's manuals are written specifically for owners and are intended to provide basic operational information about the vehicle. The owner's manual includes the Maintenance Schedule for all models.

Customer literature publications available for purchase include owner's manuals, warranty manuals, and portfolios. Portfolios include an owner's manual, warranty manual, if applicable, and zip lock bag or pouch.

Current and Past Models

Service manuals and customer literature are available for many GM vehicles.

To check availability and to order, call
1-800-551-4123 Monday–Friday, 8:00 a.m.–
6:00 p.m. Eastern Time

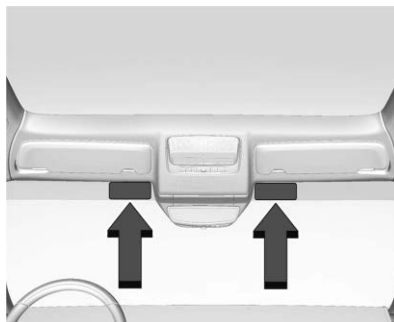
For credit card orders only (VISA, MasterCard, or Discover), see Helm, Inc. at: www.helminc.com.

To order by mail, write to:

Helm Incorporated
Attention: Customer Service
47911 Halyard Drive, Suite 200
Plymouth, MI 48170

Make checks payable in U.S. funds.

Windshield Radio Frequency Identification



Radio Frequency Identification (RFID) tags act as wireless toll collection tags and/or electronic entry/exit cards that allow you to drive through designated areas using wireless technology.

Align the tag with the upper edge of the glass interior, next to the rearview mirror. If the tag is below this area, it will not work properly.

Solar attenuating glass windshields use a special coating that may impact the readability of Radio Frequency Identification tags. See *Radio Frequency Statement* ⇨ 361.

Radio Frequency Statement

This vehicle uses license-exempt transmitters / receivers / systems that operate on a radio frequency that complies with Part 15/Part 18 of the Federal Communications Commission (FCC) rules and with Innovation, Science and Economic Development (ISED) Canada's license-exempt RSS(s) / RSP-100 / ICES-GEN.

Operation is subject to the following two conditions:

1. The device may not cause harmful interference.

2. The device must accept any interference received, including interference that may cause undesired operation of the device.

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

Reporting Safety Defects

Reporting Safety Defects to the United States Government

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

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

To contact NHTSA, you may call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 888-275-9171); go to <https://www.safercar.gov>; or write to:

Administrator, NHTSA
1200 New Jersey Avenue, S.E.,
Washington, D.C. , 20590

You can also obtain other information about motor vehicle safety from <https://www.safercar.gov>.

Reporting Safety Defects to the Canadian Government

If you live in Canada, and you believe that the vehicle has a safety defect, notify Transport Canada immediately, and notify General Motors of Canada Company. Call Transport Canada at 1-800-333-0510; go to:

www.tc.gc.ca/recalls (English)

www.tc.gc.ca/rappels (French)

or write to:

Transport Canada
Motor Vehicle Safety Directorate
Defect Investigations and Recalls Division

80 Noel Street
Gatineau , QC J8Z 0A1

Reporting Safety Defects to General Motors

In addition to notifying National Highway Traffic Safety Administration (NHTSA) (or Transport Canada) in a situation like this, notify General Motors.

In the U.S., call 1-800-458-8006, or write:

Cadillac Customer Assistance Center
Cadillac Motor Car Division
P.O. Box 33169
Detroit, MI 48232-5169

In Canada, call 1-888-446-2000, or write:

Canadian Cadillac Customer Care Centre
General Motors of Canada Company
500 Wentworth Street W
Oshawa, ON L1J 0C5

In Mexico, call 800-466-0805 or 800-212-2345.

In other Central America and Caribbean Countries, call 52-555-901-2369.

Vehicle Data Recording and Privacy

The vehicle has a number of computers that record information about the vehicle's performance and how it is driven or used. For example, the vehicle uses computer modules to monitor and control electric drive unit performance, to monitor the conditions for airbag deployment and to deploy them in a crash, and, if equipped, to provide antilock braking to help the driver control the vehicle. These modules may store data to help the dealer technician service the vehicle or to help GM improve safety or features. Some modules may also store data about how the vehicle is operated, such as rate of energy consumption or average speed. These modules may retain personal preferences, such as radio presets, seat positions, and temperature settings.

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 unauthorized 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 unauthorized 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 minimize security risks, please do not connect your vehicle electronic systems to unauthorized 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 dealer.

Event Data Recorders

This vehicle is equipped with an Event Data Recorder (EDR). The main purpose of an EDR is to record, in certain crash or near crash-like situations, such as an air bag deployment or

hitting a road obstacle, data that will assist in understanding how a vehicle's systems performed. The EDR is designed to record data related to vehicle dynamics and safety systems for a short period of time, typically 30 seconds or less. The EDR in this vehicle is designed to record such data as:

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

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

Note

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

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

GM will not access these data or share it with others except: with the consent of the vehicle owner or, if the vehicle is leased, with the consent of the lessee; in response to an official request by police or similar government office; as part of GM's defense of litigation through the discovery process; or, as permitted by law. Data that GM collects or receives may also be used for GM research needs or may be

made available to others for research purposes, where a need is shown and the data is not tied to a specific vehicle or vehicle owner.

OnStar

If the vehicle is equipped with OnStar and has an active service plan, additional data may be collected and transmitted through the OnStar system. This includes information about the vehicle's operation; collisions involving the vehicle; the use of the vehicle and its features, including infotainment; and the location and approximate GPS speed of the vehicle. Refer to the OnStar Terms and Conditions and Privacy Statement on the OnStar website.

See *OnStar Additional Information* ⇨ 366.

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.

OnStar

OnStar Overview

OnStar Overview 365

OnStar Services

Emergency 366

Security 366

OnStar Additional Information

OnStar Additional Information 366

OnStar Overview



 White OnStar Button



 Blue OnStar Button



 Red Emergency Button

This vehicle may be equipped with a comprehensive, in-vehicle system that can connect to an OnStar Advisor for Emergency, Security, Navigation, Connections, and Diagnostics Services. OnStar services may require a paid service plan and data plan. OnStar requires the vehicle battery and electrical system, cellular service, and GPS satellite signals to be available and operating. OnStar acts as a link to existing emergency service providers. OnStar may collect information about you and your vehicle, including location information. See OnStar User Terms, Privacy Statement, and

Software Terms for more details including system limitations at www.onstar.com (U.S.) or www.onstar.ca (Canada).

The OnStar system status light is next to the OnStar buttons. If the status light is:

- Solid Green: System is ready.
- Flashing Green: On a call.
- Red: Indicates a problem.
- Off: System is off. Press  twice to speak with an OnStar Advisor.

Press  or call 1-888-4ONSTAR (1-888-466-7827) to speak to an Advisor.

Functionality of the White OnStar Button may vary by vehicle and region.

Press  to answer and end incoming calls with a live OnStar Advisor.

Press  to connect to an Advisor to:

- Verify account information or update contact information.
- Get driving directions.
- Receive a Diagnostic check of the vehicle's key operating systems.
- Receive Roadside Assistance.

- Manage Wi-Fi Settings, if equipped.

Press  to get a priority connection to an OnStar Advisor available 24/7 to:

- Get help for an emergency.
- Be a Good Samaritan or respond to an AMBER Alert.
- Get assistance in severe weather or other crisis situations and find evacuation routes.

OnStar Services

Emergency

Emergency Services require an active safety and security plan. With Automatic Crash Response, built-in sensors can automatically alert a specially trained OnStar Advisor who is immediately connected in to the vehicle to help.

Press  for a priority connection to an OnStar Advisor who can contact emergency service providers, direct them to your exact location, and relay important information.

With OnStar Crisis Assist, specially trained Advisors are available 24 hours a day, 7 days a week, to provide a central point of contact, assistance, and information during a crisis.

With Roadside Assistance, Advisors can locate a nearby service provider to help with a flat tire or a battery jump.

Security

If equipped, OnStar provides these services:

- With Stolen Vehicle Assistance, OnStar Advisors can use GPS to pinpoint the vehicle and help authorities quickly recover it.
- With Remote Ignition Block, if equipped, OnStar can block the vehicle from being restarted.
- With Stolen Vehicle Slowdown, if equipped, OnStar can work with law enforcement to gradually slow the vehicle down.

Theft Alarm Notification

If Equipped, when the vehicle alarm system is armed and the alarm is activated, a notification by text, email, or app push will be sent. If the vehicle is stolen, an OnStar Advisor can work with authorities to recover the vehicle.

OnStar Additional Information

In-Vehicle Audio Messages

Audio messages may play important information at the following times:

- Prior to vehicle purchase. Press  to set up an account.
- After change in ownership and at 90 days.

Transferring Service

Press  to request account transfer eligibility information. The Advisor can cancel or change account information.

Selling/Transferring the Vehicle

Call 1-888-4ONSTAR (1-888-466-7827) immediately to terminate your OnStar or connected services if the vehicle is disposed of, sold, transferred, or if the lease ends.

Reactivation for Subsequent Owners

Press  and follow the prompts to speak to an Advisor as soon as possible. The Advisor will update vehicle records and explain OnStar or connected service options.

How OnStar Service Works

Automatic Crash Response, Emergency Services, Crisis Assist, Stolen Vehicle Assistance, Remote Services, and Roadside Assistance are available on most vehicles. Not all OnStar services are available everywhere or on all vehicles. For more information, a full description of OnStar services, system limitations, and OnStar User Terms, Privacy Statement, and Software Terms:

- Call 1-888-4ONSTAR (1-888-466-7827).
- See www.onstar.com (U.S.).
- See www.onstar.ca (Canada).
- Call TTY 1-877-248-2080.
- Press  to speak with an Advisor.

OnStar or connected services cannot work unless the vehicle is in a place where OnStar has an agreement with a wireless service provider for service in that area. The wireless service provider must also have coverage, network capacity, reception, and technology compatible with OnStar or connected services. Service involving location information about the vehicle cannot work unless GPS signals are available, unobstructed, and compatible with the OnStar hardware. OnStar or connected

services may not work if the OnStar equipment is not properly installed or it has not been properly maintained. If equipment or software is added, connected, or modified, OnStar or connected services may not work. Other problems beyond the control of OnStar — such as hills, tall buildings, tunnels, weather, electrical system design and architecture of the vehicle, damage to the vehicle in a crash, or wireless phone network congestion or jamming — may prevent service.

See *Radio Frequency Statement* ⇨ 361.

Services for People with Disabilities

Advisors provide services to help with physical disabilities and medical conditions.

Press  to help:

- Find a hotel, restaurant, etc., that meets accessibility needs.
- Provide directions to the closest hospital or pharmacy in urgent situations.

TTY Users

OnStar has the ability to communicate to deaf, hard-of-hearing, or speech-impaired customers while in the vehicle. The available TTY system provides in-vehicle access to all OnStar services.

If equipped, from the infotainment home screen, access TTY by touching Settings > Apps > Phone > TTY > Enable OnStar TTY mode. When TTY mode is on, phone calls can be made or received with OnStar using the infotainment display.

OnStar Personal Identification Number (PIN)

A PIN is needed to access some OnStar services. The PIN will need to be changed the first time when speaking with an Advisor. To change the OnStar PIN, contact an OnStar Advisor by pressing  or calling 1-888-4ONSTAR.

Warranty

OnStar equipment may be warranted as part of the vehicle warranty.

Languages

The vehicle can be programmed to respond in multiple languages. Press  and ask for an Advisor. Advisors are available in English, Spanish, and French. Available languages may vary by country.

Potential Issues

OnStar cannot perform Remote Door Unlock or Stolen Vehicle Assistance after the vehicle has been off continuously for an extended period of time without being started. To find out the duration of time that applies for the vehicle, contact an OnStar Advisor by pressing  or calling 1-888-4ONSTAR. If the vehicle has not been started for an extended period of time, OnStar can contact Roadside Assistance or a locksmith to help gain access to the vehicle.

Global Positioning System (GPS)

- Obstruction of the GPS can occur in a large city with tall buildings; in parking garages; around airports; in tunnels and underpasses; or in an area with very dense trees. If GPS signals are not available, the OnStar system should still operate to call OnStar. However, OnStar could have difficulty identifying the exact location.
- In emergency situations, OnStar can use the last stored GPS location to send to emergency responders.

A temporary loss of GPS can cause loss of the ability to send a Turn-by-Turn Navigation route. The Advisor may give a verbal route or may ask for a call back after the vehicle is driven into an open area.

Cellular and GPS Antennas

Cellular reception is required for OnStar to send remote signals to the vehicle. Do not place items over or near the antenna to prevent blocking cellular and GPS signal reception.

Unable to Connect to OnStar Message

If there is limited cellular coverage or the cellular network has reached maximum capacity, this message may come on. Press  to try the call again or try again after driving a few miles into another cellular area.

Vehicle and Power Issues

OnStar services require a vehicle electrical system, wireless service, and GPS satellite technologies to be available and operating for features to function properly. These systems may not operate if the battery is discharged or disconnected.

Add-on Electrical Equipment

The OnStar system is integrated into the electrical architecture of the vehicle. Do not add any electrical equipment. See *Add-On Electrical Equipment* ⇨ 277. Added electrical equipment may interfere with the operation of the OnStar system and cause it to not operate.

Vehicle Software Updates

OnStar or GM may remotely deliver software updates or changes to the vehicle without further notice or consent. These updates or changes may enhance or maintain safety, security, or the operation of the vehicle or the vehicle systems. Software updates or changes may affect or erase data or settings that are stored in the vehicle, such as saved navigation destinations or pre-set radio stations. Neither OnStar nor GM is responsible for any affected or erased data or settings. These updates or changes may also collect personal information. Such collection is described in the OnStar privacy statement or separately disclosed at the time of installation. These updates or changes may also cause a system to automatically communicate with GM servers to collect information about vehicle system status, identify whether updates or changes

are available, or deliver updates or changes. An active OnStar agreement constitutes consent to these software updates or changes and agreement that either OnStar or GM may remotely deliver them to the vehicle.

Connected Services Privacy Statement

The complete OnStar Privacy Statement may be found at www.onstar.com (U.S.), or www.onstar.ca (Canada). We recommend that you review it. If you have any questions, call 1-888-4ONSTAR (1-888-466-7827) or press  to speak with an Advisor. Users of wireless communications are cautioned that the privacy of any information sent via wireless cellular communications cannot be assured. Third parties may unlawfully intercept or access transmissions and private communications without consent.

OnStar – Software Acknowledgements

To obtain the source code under GPL, LGPL, MPL, and other open source licenses, that is contained in this product, please visit www.opensourceautomotive.com/an/GM. In addition to the source code, all referred license terms, warranty disclaimers, and copyright notices are available for download. This offer is

valid for a period of three years after our last shipment of this product. This offer is valid to anyone in receipt of this information.

*Provided through Continental Automotive Systems, Inc., who is solely responsible for provisions of related OSS compliance.

Connected Services

Connected Services

Navigation	370
Connections	370
Diagnostics	371

Navigation

Navigation requires a specific OnStar or connected service plan.

Press  to receive Turn-by-Turn directions or have them sent to the vehicle navigation screen, if equipped. A destination transfer from OnStar will show the detail view of the destination when it is transferred from OnStar to the Navigation application. See www.onstar.com for a coverage map. Services vary by model. Map coverage is available in the United States and Canada.

Turn-by-Turn Navigation

1. Press  to connect to an Advisor.
2. Request directions to be downloaded to the vehicle.

Send Directions to Vehicle

If equipped, directions can be sent to the navigation screen.

Press , then ask the Advisor to download directions to the navigation system, if equipped. After the call ends, the navigation screen will provide prompts to begin driving

directions. Routes that are sent to the navigation screen can only be canceled through the navigation system.

See www.onstar.com (U.S.) or www.onstar.ca (Canada).

Connections

The following services help with staying connected.

For coverage maps, see www.onstar.com (U.S.) or www.onstar.ca (Canada).

Ensuring Security

- Change the default password for the myCadillac application. Use a combination of letters and numbers to increase the security.
- Change the Wi-Fi hotspot name (Service Set Identifier) and password. The Service Set Identifier is the network's default name that is visible to other wireless devices. Choose a unique name and avoid family names or vehicle descriptions.

Wi-Fi Hotspot

If equipped and enabled, the vehicle has a built-in Wi-Fi hotspot that provides access to the Internet and web content up to 5G. Multiple devices can be connected, but a data plan is required. Use the in-vehicle controls only when it is safe to do so.

1. To retrieve Wi-Fi hotspot information, tap the Wi-Fi hotspot icon on the infotainment app screen.
2. The Wi-Fi settings will display the Wi-Fi hotspot name, password, and on some vehicles, the connection type (no Internet connection, 3G, 4G, 4G LTE, 5G), and signal quality (poor, good, excellent). The connection type icon (3G, 4G, 4G LTE, 5G) shows connection to Wi-Fi. It is possible that the icon may not illuminate even though the vehicle has an active connection.
3. To change the Wi-Fi hotspot name or password, press . On some vehicles, the Wi-Fi hotspot name and password can be changed in the Wi-Fi Hotspot menu, or call 1-888-4ONSTAR to connect with an Advisor if you are unable to change it yourself.

After initial setup, your vehicle's Wi-Fi hotspot will connect automatically to your mobile devices. Manage data usage by turning Wi-Fi on or off on your mobile device, using the myCadillac app, or by contacting an OnStar Advisor. On some vehicles, Wi-Fi can also be managed from the Wi-Fi Hotspot menu.

myCadillac App

If available, download the myCadillac mobile app to compatible Apple and Android smartphones.

Features are subject to change. For myCadillac app information and compatibility, see my.cadillac.com.

An active OnStar or connected service plan may be required. A compatible device, factory-installed remote start, and power locks are required. Data rates apply. See www.cadillac.com or www.onstar.com for details and system limitations.

Wireless Configuration

Export of this vehicle to another region may require reset of internal settings for wireless communication configuration to ensure regulatory compliance or enable

connectivity. See your dealer. The end-user of the device does not have an option to modify the regulatory wireless configuration.

Diagnostics

By monitoring and reporting on the vehicle's main systems, OnStar Advanced Diagnostics, if equipped, provides a way to keep up on maintenance. Capabilities vary by model. See www.onstar.com for details and system limitations. Features are subject to change. For updates on feature capabilities, see my.cadillac.com. Message and data rates may apply.

Index

A

Accessories and Modifications.....	279	What Makes an Airbag Inflate?.....	57
Adaptive		What Will You See after an Airbag	
Cruise Control.....	108, 193	Inflates?.....	57
Additional		When Should an Airbag Inflate?.....	56
OnStar Information.....	366	Where Are the Airbags?.....	55
Add-On Electrical Equipment.....	277	Alarm	
Advanced		Vehicle Security.....	25
Driver Assistance Systems.....	231	Alert	
Agreements		Blind Zone Steering Assist (BZSA).....	254
Trademarks and License.....	156	Lane Change (LCA).....	252
Aiming		Rear Cross Traffic.....	241
Headlight, Front.....	293	Rear Pedestrian.....	240
Air		All-Wheel Drive.....	182
Filter, Passenger Compartment.....	164	Service Light.....	102
Suspension.....	189	Ambient Lighting.....	128
Suspension Light.....	106	Antenna	
Vents.....	163	Multi-band.....	137
Airbags		Antilock Brake System (ABS).....	183
Adding Equipment to the Vehicle.....	62	Warning Light.....	102
How Does an Airbag Restrain?.....	57	Appearance Care	
Passenger Sensing System.....	58	Exterior.....	334
Passenger Status Indicator.....	99	Interior.....	339
Readiness Light.....	98	Assistance	
Replacing System Parts after a Crash.....	63	Program, Roadside.....	356
Servicing Airbag-Equipped Vehicles.....	62	Assistance Systems	
System.....	53	Advanced.....	231
System Check.....	63	Automatic Emergency Braking (AEB)....	244
		Automatic Parking Assist (APA).....	237
		Blind Zone Steering (BZSA).....	254

Driver Attention.....	256
Driving.....	241
Forward Collision Alert (FCA) System....	242
Front Pedestrian Braking (FPB).....	247
Lane Change Alert (LCA).....	252
Lane Keep Assist (LKA).....	258
Night Vision.....	249
Parking.....	235
Parking and Backing.....	233
Rear Cross Traffic Alert (RCTA).....	241
Rear Pedestrian Alert.....	240
Rear Vision Camera (RVC).....	233
Reverse Automatic Braking (RAB).....	239
Surround Vision Recorder.....	259
Surround Vision System.....	234
Traffic Sign.....	255
Audio	
Bluetooth.....	137
Automatic	
Door Locks.....	14
Emergency Braking (AEB) Disabled	
Light.....	103
Parking Assist (APA).....	237
Vehicle Hold (AVH).....	185
Avoiding Untrusted Media Devices.....	137

B

Battery	
Charging Electrical Requirements.....	277

Exterior Lighting Battery Saver.....	130
Fault Light.....	100
Gauge.....	96
Jump Starting.....	328
Load Management.....	129
Power Protection.....	129
Battery - North America.....	288
Blade Replacement, Wiper.....	292
Bluetooth	
Audio.....	137
Overview.....	146, 147
Brakes.....	286
Antilock.....	183
Brake Assist.....	184
Electric Brake Boost.....	182
Electric Parking Brake.....	183
Fluid.....	287
Regenerative Braking.....	185
System Warning Light.....	101
Braking.....	168
Automatic Emergency (AEB).....	244
Front Pedestrian (FPB) System.....	247
Reverse Automatic.....	239
Break-In, New Vehicle.....	176
Buckle To Drive.....	46
Buying New Tires.....	323

C

Calibration	
Compass.....	92
California	
Perchlorate Materials Requirements.....	279
Proposition 65 Warning.....	1
Warranty Information.....	353
Camera	
Rear Vision (RVC).....	233
Canadian Vehicle Owners.....	2
Capacities and Specifications.....	349
Carbon Monoxide	
Liftgate.....	22
Winter Driving.....	171
Cargo	
Management System.....	87
Car Wash Mode.....	178
Caution, Danger, and Warning.....	2
Center	
Console, Storage.....	85
Chains and Other Traction Devices	
Tire.....	328
Charge	
Cord.....	100, 268
Charging.....	109
Delay Override.....	265
Plug-In.....	260
Status Feedback.....	265

System Light.....	100
Utility Interruption.....	276
When to Charge, Vehicle.....	260
Charging Phone	
Wireless.....	93
Child Restraints	
Infants and Young Children.....	65
Lower Anchors and Tethers for Children.....	71
Older Children.....	64
Securing.....	78, 80
Systems.....	67
Where to Put.....	69
Child Safety Locks.....	15
Circuit Breakers.....	295
Cleaning	
Exterior Care.....	334
Interior Care.....	339
Climate Control Systems.....	159
Rear.....	162
Clock.....	93
Setting.....	151
Cluster, Instrument.....	95
Collision Alert	
Forward (FCA) System.....	242
Collision Damage Repair.....	359
Compartment	
Underhood.....	283

Compartments	
Storage.....	83
Compass.....	92
Connected Services	
Connections.....	370
Diagnostics.....	371
Navigation.....	370
Connections	
Connected Services.....	370
Control	
of a Vehicle.....	167
Traction and Electronic Stability.....	186
Controls	
Headlight.....	121
Steering Wheel.....	133
Convex Mirrors.....	28
Cooling and Heating.....	159
Cooling System.....	284
Cornering Lights.....	126
Courtesy Transportation Program.....	358
Covers	
Underhood Access.....	281
Cruise Control	
Adaptive.....	193
Light.....	108
Super.....	216
Cupholders.....	83

Customer Assistance	
Offices.....	355
Text Telephone (TTY) Users.....	355
Customer Information	
Publications Ordering Information.....	361
Customer Satisfaction Procedure.....	351
Customer Support	
and Online Account.....	355
Cybersecurity.....	363

D

Damage Repair, Collision.....	359
Danger, Warning, and Caution.....	2
Dashboard.....	4
Data Collection	
Infotainment System.....	364
OnStar.....	364
Data Recorders, Event.....	363
Daytime Running Lights.....	123
Defensive Driving.....	167
Delayed	
Charging Override.....	265
Locking.....	14
Destination.....	142
Diagnostics	
Connected Services.....	371
Digital	
Key.....	15

Disabled Vehicle	
Transporting.....	332
Distracted Driving.....	166
Dome Lights.....	126
Door	
Ajar Light.....	108
Delayed Locking.....	14
Locks.....	13
Operation.....	17
Power Locks.....	14
Driver	
Assistance Systems, Advanced.....	231
Attention Assist.....	256
Attention Assist Light.....	108
Information Center (DIC).....	114
Mode Control.....	188
Mode Control Light.....	105
Teen.....	154
Drive Systems	
All-Wheel Drive.....	182
Drive Unit	
Electric.....	178
Driving	
Assistance Systems.....	241
Defensive.....	167
for Better Energy Efficiency.....	166
Hill and Mountain Roads.....	170
If the Vehicle is Stuck.....	172
Impaired.....	167

Loss of Control.....	169
Off-Road Recovery.....	169
One-Pedal.....	181
Vehicle Load Limits.....	172
Wet Roads.....	169
Winter.....	171

E

Electric	
Brake Boost.....	182
Drive Unit.....	178
Parking Brake.....	183
Parking Brake Light.....	101
Electrical	
Equipment, Add-On.....	277
Requirements for Battery Charging.....	277
Electrical System	
Fuses and Circuit Breakers.....	295
Instrument Panel Fuse Block.....	300
Overload.....	294
Rear Compartment Fuse Block.....	303
Electronic Stability Control (ESC) Off	
Light.....	105
Emergency	
OnStar.....	366
Energy Efficiency	
Driving.....	166
Engine	
Cooling System.....	284

F

Entry Lighting.....	127
Event Data Recorders.....	363
Exit Lighting.....	128
Extender, Seat Belt.....	52
Exterior	
Lighting Battery Saver.....	130
Flashers, Hazard Warning.....	125
Flat Tire.....	328
Floor Mats.....	341
Fluid	
Brakes.....	287
Washer.....	286
FM Radio.....	134
Folding Mirrors.....	28
Four-Wheel	
Steering.....	189
Steering Light.....	105
Frequency Statement	
Radio.....	361
Fuses	
Fuses and Circuit Breakers.....	295
Instrument Panel Fuse Block.....	300
Rear Compartment Fuse Block.....	303
Underhood Compartment.....	296

G

Garage Door Opener.....	118
Programming.....	118
Gauges	
Battery.....	96
Odometer.....	96
Power Indicator.....	97
Speedometer.....	96
Trip Odometer.....	96
Warning Lights and Indicators.....	94
General Information	
Service and Maintenance.....	343
Towing.....	277
Vehicle Care.....	279
Global Positioning System (GPS).....	143
Glove Box.....	83
GM Mobility Reimbursement Program.....	356
Guidance	
Problems with the Route.....	144

H

Hands-On Steering Assist.....	203
Hands-On Steering Assist Light.....	103
Hazard Warning Flashers.....	125
Headlights	
Aiming, Front.....	293
Controls.....	121
High-Beam On Light.....	107

Leveling Control.....	125
Off Reminder.....	123
Service System Indicator.....	107
System, Automatic.....	124
Head Restraints.....	37
Heated	
and Cooled Front Seats.....	43
and Cooled Rear Seats.....	45
Mirrors.....	29
Steering Wheel.....	90
Heating and Cooling.....	159
High-Beam	
On Light.....	107
Systems.....	122
High-Speed Operation.....	317
High Voltage	
Battery Gauge.....	96
Devices and Wiring.....	294
Hill	
and Mountain Roads.....	170
Start Assist (HSA).....	184
Hood.....	19, 280
Horn.....	90
How to Wear Seat Belts Properly.....	47

I

Identification	
Windshield Radio Frequency.....	361
Immobilizer.....	27

Indicators

Pedestrian Ahead.....	104
Service Headlight System.....	107
Vehicle Ahead.....	104
Warning Lights and Gauges.....	94
Infants and Young Children, Restraints.....	65
Information	
Publication Ordering.....	361
Infotainment	
Passenger.....	138
Using the System.....	133
Inspection	
Multi-Point Vehicle.....	345
Instrument Cluster.....	95
Instrument Panel Overview.....	4
Interior	
Rearview Mirrors.....	30
Introduction.....	2, 131

J**Jump**

Starting.....	328

K

Keys.....	6
Digital.....	15
Remote.....	7
Remote Operation.....	7

L

Labeling, Tire Sidewall.....	312
Lane	
Keep Assist Light.....	103
Lap-Shoulder Belt.....	49
LATCH System	
Replacing Parts after a Crash.....	78
LED Lighting.....	293
Liftgate.....	22
Lighting	
Ambient.....	128
Entry.....	127
Exit.....	128
Illumination Control.....	126
LED.....	293
Lights	
Adaptive Cruise Control.....	108
Air Suspension.....	106
Airbag Readiness.....	98
Antilock Brake System (ABS)	
Warning.....	102
Automatic Emergency Braking (AEB)	
Disabled.....	103
Automatic Vehicle Hold (AVH).....	102
Battery Fault.....	100
Brake System Warning.....	101
Charge Cord Connected.....	100
Charging System.....	100

Cornering.....	126
Cruise Control Light.....	108
Daytime Running.....	123
Dome.....	126
Door Ajar.....	108
Driver Attention Assist.....	108
Driver Mode Control.....	105
Electric Parking Brake.....	101
Electronic Stability Control (ESC), Off....	105
Exterior Lighting Battery Saver.....	130
Four-Wheel Steering.....	105
Gauges and Indicators.....	94
Hands-On Steering Assist.....	103
High-Beam On.....	107
Lane Keep Assist.....	103
Low State of Charge.....	100
On Reminder.....	107
Reading.....	127
Seat Belt Reminders.....	97
Security.....	107
Service All-Wheel Drive.....	102
Service Electric Parking Brake.....	102
Service Vehicle Soon.....	101
Super Cruise.....	108
Tire Pressure.....	106
Traction Control System (TCS)/	
Electronic Stability Control Light.....	104
Traction Off.....	104
Vehicle Ready.....	107

Locks

Automatic Door.....	14
Delayed Locking.....	14
Door.....	13
Lockout Protection.....	15
Power Door.....	14
Safety.....	15
Steering Column.....	26
Loss of Control.....	169
Lower Anchors and Tethers for Children	
(LATCH System).....	71
Low-Profile Tires.....	312
Low State of Charge Light.....	100
Lumbar Adjustment	
Front Seats.....	40

M

Maintenance

Recommended Fluids and Lubricants....	347
Records.....	348
Schedule.....	344
Maps.....	142
Massage	
Seats.....	40, 45
Media	
Avoiding Untrusted Devices.....	137
Memory Seats.....	40
Messages	
Propulsion Power.....	117

Vehicle.....	116
Vehicle Speed.....	118
Mirrors	
Automatic Dimming Rearview.....	30
Convex.....	28
Folding.....	28
Heated.....	29
Interior Rearview.....	30
Power.....	28
Rear Camera.....	30
Tilt in Reverse.....	30
Modes	
Car Wash.....	178
Driver Control.....	188
Power.....	176
Monitor System, Tire Pressure.....	318
Multi-band Antenna.....	137
Multi-Point Vehicle Inspection (MPVI).....	345

N

Navigation	
Connected Services.....	370
Destination.....	142
Symbols.....	142
Using the System.....	141
New Vehicle Break-In.....	176
Night Vision System.....	249
Noise	
Reducing Tires.....	312

O

Odometer.....	96
Trip.....	96
Off-Road	
Recovery.....	169
Older Children, Restraints.....	64
One-Pedal Driving.....	181
Online Account and Customer Support.....	355
OnStar.....	364
Additional Information.....	366
Emergency.....	366
Overview.....	365
Security.....	366
Overview.....	132
Instrument Panel.....	4
Owner Checks and Services.....	346

P

Park	
Assist.....	233, 235
Parking	
Brake and P (Park) Mechanism Check....	292
Parking Assist	
Automatic.....	237
Parking or Backing	
Assistance Systems.....	233
Passenger	
Airbag Status Indicator.....	99

Compartment Air Filter.....	164
Infotainment.....	138
Sensing System.....	58
Pedestrian	
Ahead Indicator.....	104
Safety Signal.....	90
Perchlorate Materials Requirements,	
California.....	279
Phone	
Bluetooth.....	146, 147
Plug-In Charging.....	260
Port	
USB.....	137
Power	
Door Locks.....	14
Indicator Gauge.....	97
Mirrors.....	28
Modes.....	176
Protection, Battery.....	129
Seat Adjustment.....	37
Windows.....	32
Pregnancy, Using Seat Belts.....	52
Privacy	
Vehicle Data Recording.....	363
Problems with Route Guidance.....	144
Program	
Courtesy Transportation.....	358
Proposition 65 Warning	
California.....	1

Propulsion	
Power Messages.....	117
Publication Ordering Information.....	361

R

Radiator.....	284
Radio	
FM.....	134
Frequency Identification, Windshield...	361
Frequency Statement.....	361
Reception.....	136
Satellite.....	136
Reading Lights.....	127
Ready Indicator.....	107
Rear	
Camera Mirror.....	30
Climate Control System.....	162
Seat Reminder.....	44
Seats.....	44
Rearview Mirrors	
Automatic Dimming.....	30
Reclining Seatbacks.....	38
Recognition	
Voice.....	145
Recommended Fluids and Lubricants.....	347
Recorder	
Surround Vision.....	259
Records	
Maintenance.....	348

Recreational Vehicle Towing.....	334
Regenerative Braking.....	185
Reimbursement Program, GM Mobility.....	356
Reminder	
Headlights Off.....	123
Lights On.....	107
Seat Belt.....	97
Remote	
Key.....	7
Key Operation.....	7
Start.....	12
Replacement Parts	
Airbags.....	63
Replacing	
Airbag System.....	63
LATCH System Parts After a Crash.....	78
Seat Belt System Parts after a Crash.....	53
Reporting Safety Defects	
Canadian Government.....	362
General Motors.....	362
U.S. Government.....	362
Requirements	
Electrical Battery Charging.....	277
Reverse Rim Wheels.....	325
Reverse Tilt Mirrors.....	30
Ride Control Systems	
Air Suspension.....	189
Roads	
Driving, Wet.....	169

Roadside Assistance Program.....	356
Roof	
Smart Glass.....	35
Rotation	
Monitor, Tires.....	322
Tires.....	322

S

Safety	
Locks.....	15
Pedestrian Signal.....	90
System Check.....	52
Safety Defects Reporting	
Canadian Government.....	362
General Motors.....	362
U.S. Government.....	362
Satellite Radio.....	136
Scheduling Appointments.....	358
Seat Belts.....	45
Buckle To Drive.....	46
Care.....	52
Extender.....	52
How to Wear Seat Belts Properly.....	47
Lap-Shoulder Belt.....	49
Reminders.....	97
Replacing after a Crash.....	53
Use During Pregnancy.....	52
Seats	
Head Restraints.....	37

Heated and Cooled, Front.....	43
Heated and Cooled, Rear.....	45
Lumbar Adjustment, Front.....	40
Massage.....	40, 45
Memory.....	40
Power Adjustment, Front.....	37
Rear.....	44
Rear Seat Reminder.....	44
Reclining Seatbacks.....	38
Securing Child Restraints.....	78, 80
Security	
Light.....	107
OnStar.....	366
Vehicle.....	25
Vehicle Alarm.....	25
Self-Sealing Tires.....	311
Service.....	164
Maintenance Records.....	348
Accessories and Modifications.....	279
All-Wheel Drive Light.....	102
Doing Your Own Work.....	279
Electric Parking Brake Light.....	102
Maintenance, General Information.....	343
Parts Identification.....	349
Scheduling Appointments.....	358
Vehicle Soon Light.....	101
Servicing the Airbag System.....	62
Settings.....	151
Signals, Turn and Lane-Change.....	125

Smart	
Glass Roof.....	35
Software Updates.....	134
Specifications and Capacities.....	349
Speedometer.....	96
Spoiler.....	178
Start	
Assist, Hill.....	184
Remote.....	12
Status	
Charging Feedback.....	265
Vehicle.....	115
Steering.....	168
Four-Wheel.....	189
Hands-On Assist.....	203
Heated Wheel.....	90
Wheel Adjustment.....	90
Wheel Controls.....	133
Storage	
Center Console.....	85
Compartments.....	83
Cupholders.....	83
Glove Box.....	83
Underhood.....	84
Storage Areas	
Cargo Management System.....	87
Stuck Vehicle.....	172
Summer Tires.....	312
Sun Visors.....	34

Super Cruise.....	216
Light.....	108
Surround	
Vision System.....	234
Symbols.....	3
Navigation.....	142
System	
Global Positioning.....	143
Systems	
Airbag.....	53
High Beam.....	122
Infotainment, Data Recording.....	364

T

Teen Driver.....	154
Text Telephone (TTY) Users.....	355
Theft-Deterrent Systems.....	27
Immobilizer.....	27
Tires.....	310
Buying New Tires.....	323
Chains and Other Traction Devices.....	328
Designations.....	313
Different Size.....	325
If a Tire Goes Flat.....	328
Inspection.....	321
Low-Profile.....	312
Noise Reducing.....	312
Pressure.....	316, 317
Pressure Light.....	106

Pressure Monitor Operation.....	319
Pressure Monitor System.....	318
Rotation.....	322
Rotation Monitor.....	322
Self-Sealing.....	311
Sidewall Labeling.....	312
Terminology and Definitions.....	314
Uniform Tire Quality Grading.....	325
Wheel Alignment and Tire Balance.....	327
Wheel Replacement.....	327
When It Is Time for New Tires.....	323
Winter.....	311
Towing	
General Information.....	277
Recreational Vehicle.....	334
Traction	
Control System (TCS)/Electronic Stability Control Light.....	104
Control/Electronic Stability Control.....	186
Off Light.....	104
Trademarks and License Agreements.....	156
Traffic	
Sign Assistant.....	255
Transportation Program, Courtesy.....	358
Transporting	
a Disabled Vehicle.....	332
Trip Odometer.....	96

TTY Users	
Customer Assistance.....	355
Turn and Lane-Change Signals.....	125

U

Underhood	
Access Covers.....	281
Compartment Fuse Block.....	296
Compartment Overview.....	283
Storage.....	84
Uniform Tire Quality Grading.....	325
Universal Remote System.....	118
Operation.....	120
Programming.....	118
Updates	
Software.....	134
USB Port.....	137
Using	
Infotainment System.....	133
Navigation System.....	141
Utility Interruption of Charging.....	276

V

Vehicle	
Ahead Indicator.....	104
Alarm System.....	25
Automatic Hold.....	185
Automatic Hold Light.....	102
Canadian Owners.....	2

Control.....	167
Data Recording and Privacy.....	363
Identification Number (VIN).....	349
Load Limits.....	172
Messages.....	116
Positioning.....	144
Ready Light.....	107
Security.....	25
Service Soon Light.....	101
Speed Messages.....	118
Status.....	115
Symbols.....	3
When to Charge.....	260
Vehicle Care	
Tire Pressure.....	316
Vehicle Security	
Steering Column Lock.....	26
Ventilation, Air.....	163
Visors.....	34
Voice Recognition.....	145

W

Warning	
Brake System Light.....	101
Caution and Danger.....	2
Hazard Flashers.....	125
Lights, Gauges, and Indicators.....	94
Warranty Information	
California.....	353

Washer Fluid.....	286
Wheels	
Alignment and Tire Balance.....	327
Different Size.....	325
Replacement.....	327
Reverse Rim.....	325
Where to Put the Restraint.....	69
Windows.....	32
Power.....	32
Windshield	
Radio Frequency Identification.....	361
Replacement.....	293
Wiper/Washer.....	91
Winter	
Driving.....	171
Tires.....	311
Wiper	
Blade Replacement.....	292
Wireless Phone Charging.....	93
Wiring, High Voltage Devices.....	294



Scan to Access

United States



Owner's Manuals
Warranty Information
Reference Guides
Links to GM Brand Websites
Many Additional Resources

Connected Services
1-888-4-ONSTAR

Canada



26CELESTIQ_enUS_19087394C

