

**Jeep**<sup>®</sup>

**2022 GRAND CHEROKEE 4xe**

**HYBRID SUPPLEMENT**



4x4

Jeep

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GETTING TO KNOW YOUR  
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# INTRODUCTION

Dear Customer,



The all-new Jeep® Grand Cherokee continues to build on its proud legacy as the most celebrated SUV ever, while raising the bar in luxury and performance. With legendary 4x4 capability, this vehicle breaks new ground in exceptional performance, comfort, and functionality. We have improved on-road refinement and premium styling and craftsmanship inside and out. With an unsurpassed blend of refined sophistication, dynamic performance, cutting edge technologies, and levels of elegance, the new Jeep® Grand Cherokee carries an attractive presence and capability that is uncommon in its class, unquestionably Jeep® brand, and unmistakably world class.

This Hybrid Supplement has been prepared with the assistance of service and engineering specialists to acquaint you with the operation and maintenance of your vehicle. Within this information, you will find a description of the hybrid services that FCA US LLC offers to its customers. Please take the time to read all of this publication carefully before driving your vehicle for the first time. Following the instructions, recommendations, tips, and important warnings in this manual will help ensure safe and enjoyable operation of your vehicle. For additional information, refer to your vehicle's Owner's Manual.

Following the instructions and recommendations provided herein will help ensure safe and reliable operation of your vehicle. After you have read the booklet, it should be stored in the vehicle for convenient reference and remain with the vehicle when sold.

When it comes to service, remember that authorized dealers know your Jeep® best, have factory-trained technicians, genuine Mopar® parts, and care about your satisfaction.

## SYMBOLS KEY

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






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

## SYMBOL GLOSSARY

Some car components have colored labels with symbols indicating precautions to be observed when using this component. It is important to follow all warnings when operating your vehicle. See below for the definition of each symbol → page 40.

### NOTE:

Warning and Indicator lights are different based upon equipment options and current vehicle status. Some telltales are optional and may not appear.

Red Warning Lights	
	Hybrid Electric Vehicle System Service Warning Light → page 40
	Plug Status Fault Warning Light → page 40
	Torque Limited Warning Light → page 41
	Traction Battery Coolant Fluid Level Low Warning Lights → page 41
	Traction Battery Failure Warning Light → page 41

### Red Warning Lights



Hybrid Electric Vehicle System Failure Warning Light  
 ⇨ page 41



Electrical Machine and Controller is Hot Warning Light  
 ⇨ page 41

### Yellow Warning Lights



PHEV Traction Battery Cut-off Warning Light  
 ⇨ page 41

### Green Indicator Lights



Ready To Drive Indicator Light  
 ⇨ page 41



Plug Status Indicator Light  
 ⇨ page 41



Max Regeneration Indicator Light  
 ⇨ page 42

### White Indicator Lights



Max Regeneration Indicator Light  
 ⇨ page 42



Electric Mode Indicator Light  
 ⇨ page 42



Hybrid Mode Indicator Light  
 ⇨ page 42



e-Save Indicator Light  
 ⇨ page 42

# GETTING TO KNOW YOUR VEHICLE

## HIGH VOLTAGE BATTERY

Your vehicle is equipped with a Lithium-ion high voltage battery that is used to power the electric powertrain systems and the 12 Volt vehicle electrical system.

The high voltage battery is located underneath the vehicle.

Lithium-ion batteries provide the following benefits:

- Lithium-ion batteries are much lighter than other types of rechargeable batteries of the same size.
- Lithium-ion batteries hold their charge; they only lose approximately three percent of their charge per month.
- Lithium-ion batteries have no memory, which means that you do not have to completely discharge them before recharging, as with some other batteries.
- Lithium-ion batteries can be recharged and discharged thousands of times.

### High Voltage Battery Service Disconnect

The high voltage battery service disconnect is located under the load floor of the cargo area, at the front left side.

If your vehicle requires high voltage battery service, see an authorized dealer.

#### WARNING!

- Never try to remove the high voltage battery service disconnect. The high voltage battery service disconnect is used when your vehicle requires service by a qualified technician at an authorized dealership. Failure to follow this warning can result in electrical shock, toxic emissions, fire, and other hazards which can cause death or serious injury including severe burns, respiratory injuries, and blindness.

*(Continued)*

#### WARNING!

- The high voltage battery and battery case have no parts that you or an unqualified technician can service. Under no circumstances should you or an unqualified technician open, disassemble, penetrate, or tamper with the high voltage battery, battery case, their cables, or connectors. Damage to these components can result in electrical shock, toxic emissions, fire, and other hazards which can cause death or serious injury including severe burns, respiratory injuries, and blindness. You should take the vehicle to an authorized dealership for any service or maintenance on these high voltage components.
- The high voltage system can be hot during and after starting, and when the vehicle is shut off or charging. Be careful of both the high voltage and the high temperature. Failure to do so can result in severe burns.



### Disposal of the High Voltage Battery

Your vehicle's high voltage battery is designed to last the life of your vehicle. See an authorized dealer for information on the disposal of the battery if it should require replacement.

#### WARNING!

Your vehicle contains a sealed Lithium-ion high voltage battery. If the battery is disposed of improperly, there is a risk of electrical shock and toxic emissions which can cause severe burns, respiratory injuries, fires, and other hazards resulting in serious injury or death.

### General Information

The vehicle is also equipped with a Battery Management system that is designed to:

- Ensure safe operation
- Maximize driving range
- Maximize the life expectancy of the high voltage battery

### NOTE:

During vehicle start up and shut down, a clicking noise may be heard from within the vehicle. When the vehicle is preparing to start, the high voltage battery contactors inside the battery are closed to make the stored electricity inside available for vehicle use. After the vehicle is shut down, the contactors open to electrically isolate the battery from other vehicle systems. The clicking noise is the sound of these contactors as they open and close during normal operation.

#### WARNING!

In the event of a collision:

- If your vehicle is still drivable, pull off the road and place the transmission in the PARK position, apply the parking brake, and turn the vehicle off.
- Check your vehicle to see if there are exposed high-voltage parts or cables. To avoid electrical shock which can result in serious injury or death, never touch wiring, connectors, and other high-voltage parts, such as the inverter unit and the Lithium-ion battery.
- If the vehicle receives a strong impact to the floor while driving, stop the vehicle in a safe location and check the floor.

*(Continued)*

#### WARNING!

- Leaks or damage to the Lithium-ion battery may result in a fire and toxic emissions which can cause severe burns, respiratory injuries, and other serious injuries or death. If you discover these leaks, contact emergency services immediately. Since the fluid leak may be Lithium Manganate from the Lithium-ion battery, never touch the fluid leak inside or outside of the vehicle. If the fluid contacts your skin or eyes, wash these areas immediately with a large amount of water and obtain immediate medical attention to help avoid serious injury.
- If a fire occurs inside your vehicle, leave the vehicle as soon as possible. Only use a type ABC, BC, or C fire extinguisher that is meant for use on electrical fires. Using a small amount of water, or the incorrect fire extinguisher can result in serious injury or death from electrical shock.
- If you are not able to safely assess the vehicle due to vehicle damage, do not touch the vehicle. Leave the vehicle and contact emergency services. Advise first responders that this is a hybrid-electric vehicle.
- In the event of an accident that requires bodywork, refer to an authorized dealership.

## BATTERY CONDITIONING

In extreme temperatures, high or low, the high voltage battery may need to be conditioned, and therefore may require the vehicle to be plugged in prior to the next use of the vehicle.

If the ambient temperature is 5 °F (-15 °C) or below at vehicle shut down, the instrument cluster will display the message “Plug In Vehicle To Condition Battery”.

If the battery temperature is below -22 °F (-30 °C), or 131 °F (55 °C) or above, the vehicle will NOT start:

- If the vehicle is plugged in at these battery temperatures, the vehicle will not start and the instrument cluster will display the message “Please Leave Key In RUN – Battery Conditioning Needed” until battery conditioning is complete.
- If the vehicle is not plugged in at these battery temperatures, the vehicle will not start and the “Plug In Vehicle To Condition Battery” message will be shown in the instrument cluster display.

### NOTE:

- When the “Please Leave Key In RUN – Battery Conditioning Needed” message is displayed, keep the ignition in the RUN position for the battery to recover. Place the ignition back in the OFF position when the message disappears, and then start the vehicle. When this message is displayed, do not operate any air conditioning controls.
- Under these high or low temperatures, while the vehicle is plugged in and the ignition is in the OFF position, the vehicle may “wake up” to precondition the high voltage battery for use.
- It is recommended that the vehicle be plugged in overnight when possible to maximize the electric range of the vehicle.

The messages will only be displayed when the ignition is in the RUN position and the high voltage battery is not ready to provide propulsion power. The messages will also display if there was a failed attempt to achieve READY state when the high voltage battery cell temperatures were either too cold, or too hot.

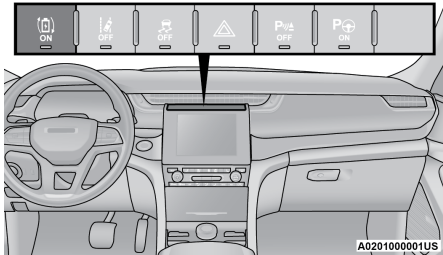
## REGENERATIVE BRAKING SYSTEM (RBS)

Your vehicle has an RBS. The RBS replenishes the vehicle's high voltage battery during deceleration, and is particularly useful in stop-and-go city traffic. The electric motors, which propel the vehicle forward, can operate as generators when braking. The RBS recharges the high voltage battery under certain braking conditions by recapturing energy that would otherwise be lost while braking. The electric power that is generated goes back into the high voltage battery for later use, for example when acceleration is desired.

The RBS uses conventional hydraulic friction brakes, regenerative braking, or a combination to slow the vehicle. If the system detects slippery conditions while braking, ONLY friction is used to slow the vehicle. The RBS can result in extended life of the hydraulic service brakes; however, all inspection, scheduled maintenance, and service intervals for the vehicle service brakes must be followed.

## Max Regeneration

Max Regeneration is a supplemental feature of the RBS. When activated, it will use the RBS to help slow the vehicle when the driver releases the accelerator pedal. This feature allows you to moderately reduce driving speed without pressing the brake pedal. It is always necessary to apply the brake pedal to bring the vehicle to a complete stop.



**Max Regeneration Button**

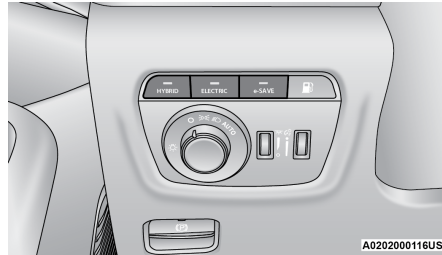
This feature can be activated by pressing the Max Regeneration button, located above the radio screen.

### NOTE:

The Max Regeneration feature will remain on once selected, even after the vehicle is restarted.

## E-SELEC MODE

This system allows the driver to select different modes by pushing the following buttons located above the headlight switch.



**E-Selec Mode Switch**

- Hybrid: Prioritizes electric range first, then gas range.
  - Automatically switches between using gas and battery for greatest efficiency and performance.
  - Best heating/cooling and acceleration performance.
- Electric: Prevents the engine from running, unless you absolutely need it.
  - Driving in electric mode allows the vehicle to use up to the full capability of the electric drivetrain, and if the electric drivetrain is operating at its peak power, then pressing the accelerator pedal more will not result in more power. To access the full capability of the engine plus electric motors, switch to Hybrid or e-Save.
- e-Save: Aims to maintain a high level of SOC/Electric range for later use. It can be customized in settings to increase the SOC to predefined levels..
  - e-Save settings can be found in the Uconnect Hybrid Electric App.
  - When e-Save is selected on a fully charged vehicle, the SOC will drop slightly for optimal performance.
  - The Battery Save setting aims to maintain the SOC at the current level. Under heavy load, such as while pulling a trailer, SOC may decrease. When coasting, the SOC may increase.
  - The Battery Charge setting uses power from the engine to increase SOC to the selected target. If the SOC is above the target when e-Save mode is activated, then the vehicle will automatically switch between gas and battery until SOC reaches the target.
  - The e-Save mode button must be pressed to activate Battery Save or Battery Charge.

## HIGH VOLTAGE CHARGING OPERATION

### SAE J1772 CHARGING INLET

Your vehicle uses an industry standard SAE J1772 charge inlet (vehicle charge inlet) for both AC Level 1 (120 V) and AC Level 2 (240 V) charging.



**Vehicle Charge Inlet Location**

Open the charge port door by pushing near the rear outer edge of the door, near the center to unlatch. To close the charge port door, engage the door latch by pushing on the rear outer edge near the center.

### AC LEVEL 1 CHARGING (120 VOLT, 12 AMP)

Your vehicle is equipped with a 120 Volt AC, SAE J1772 Level 1 Electric Vehicle Supply Equipment (EVSE), also referred to as a Portable Charging Cordset (EVSE). AC Level 1 charging requires a conventional NEMA 5-15R 120 Volt AC grounded wall outlet along with the Portable Charging Cordset (EVSE) provided with the vehicle.

#### WARNING!

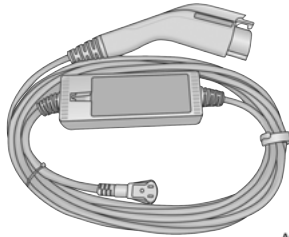
Please be sure to follow the warnings below. Failure to do so may result in serious injury or death

- Discontinue use of the Portable Charging Cordset (EVSE) immediately if the plug or outlet becomes hot to the touch or if you notice any unusual odors.
- Do not use the Portable Charging Cordset (EVSE) in building structures that use fuse-based circuit protection. Use only with electrical circuits protected by circuit breakers.
- Do not use the Portable Charging Cordset (EVSE) if other devices are plugged into the same circuit.

*(Continued)*

#### WARNING!

- When unplugging the Portable Charging Cordset (EVSE) from the wall outlet, be sure to pull by the plug, and not the cord.
- Do not pull, twist, bend, step on or drag the cord of the Portable Charging Cordset (EVSE).
- Stop using the Portable Charging Cordset (EVSE) immediately if charging stops before it's completed when the plug or cord is moved or adjusted.
- Do not use the Portable Charging Cordset (EVSE) if the plug has a loose connection with the wall outlet or if the wall outlet is damaged or rusted.
- If in any doubt about the wall outlet and/or circuit, contact a qualified electrician.
- Do not use if a malfunction occurs or if the Portable Charging Cordset (EVSE) has been damaged in any manner. It is recommended that you contact an authorized dealership.
- There are no user serviceable parts inside the Portable Charging Cordset (EVSE). Do not attempt to repair or service the Portable Charging Cordset (EVSE), doing so will void the New Vehicle Warranty.



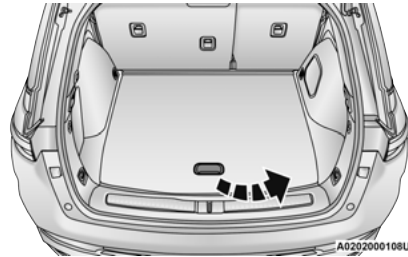
A020200072US

Portable Charging Cordset (EVSE)

The EVSE is stored in the rear cargo area below the load floor. To access this area, lift the handle of the load floor cover, and remove the EVSE from the storage bag in the rear cargo area on the right side.

### Moving, Transporting, And Storage Instructions

After use, the EVSE should be placed in the storage bag and put back in the cargo storage area. If the EVSE will be left outside the vehicle, be sure to protect the device's connection end from moisture, dirt, and debris accumulation and contamination.



A0202000108US

Lift Load Floor Cover Handle



A0202000109US

EVSE Storage Bag Location

2

### WARNING!

**INSTRUCTIONS PERTAINING TO A RISK OF FIRE OR ELECTRIC SHOCK:** Electrical shock, fire, and other serious hazards can occur if the Portable Charging Cordset (EVSE) is not used properly. This vehicle uses a high voltage current. Failure to follow the proper charging instructions in this publication can cause serious injury or death. There are no serviceable parts in the Portable Charging Cordset (EVSE). Do not open, disassemble, penetrate, or tamper with the Portable Charging Cordset (EVSE). Failure to follow this warning can result in electrical shock, fire, property damage, and death or serious injury.

### NOTE:

The EVSE is used for AC Level 1 charging only.

### WARNING!

**IMPORTANT SAFETY INSTRUCTIONS PERTAINING TO A RISK OF FIRE OR ELECTRIC SHOCK:** This publication contains important instructions and warnings that should be followed during charging operations. Failure to follow these warnings and instructions can result in electrical shock and fire which can cause death or serious injury.

- Read this entire publication before using the Portable Charging Cordset (EVSE).
- Do not put fingers or objects into the Portable Charging Cordset (EVSE) connector.

(Continued)

**WARNING!**

- Do not use the Portable Charging Cordset (EVSE) if the flexible power cord is frayed, broken, has cracked insulation, or any other signs of damage.
- Do not use the Portable Charging Cordset (EVSE) if the enclosure or the connector is broken, cracked, open, or shows any other indication of damage.
- Do not use the Portable Charging Cordset (EVSE) with an extension cord or plug adapters.
- The Portable Charging Cordset (EVSE) may attempt to reset and run after a power interruption.
- There are no user serviceable parts inside the Portable Charging Cordset (EVSE). Do not attempt to repair or service the Portable Charging Cordset (EVSE) yourself – personal injury may result.

*(Continued)*

**WARNING!**

- When using a charging station with the Portable Charging Cordset (EVSE) attached, ensure the charging station's cable is not visibly damaged before plugging into the vehicle.
- Do not allow children to operate the Portable Charging Cordset (EVSE). Adult supervision is mandatory when children are in proximity to the charge station that is in use.
- Do not use a charge station or vehicle charge inlet that is worn or damaged with the AC Level 2 charging cable. Plugging into worn or damaged receptacles may cause damage to the Portable Charging Cordset (EVSE) and vehicle.
- Ensure that the Portable Charging Cordset (EVSE) is always stored in a safe place. Do not expose the EVSE J1772 vehicle connector to rain or wet conditions. Avoid allowing water or other liquids to pour or drip onto the vehicle connection end of the J1772 EVSE connector. If water penetrates the electrical device, the risk of electrical shock increases. Ensure that all plugs and cables are free of moisture before using the Portable Charging Cordset (EVSE).

*(Continued)*

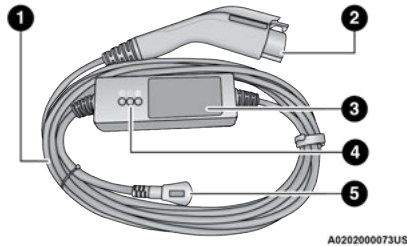
**WARNING!**

- In a collision, a loose Portable Charging Cordset (EVSE) in the vehicle could cause injury. It could fly around in a sudden stop and strike someone in the vehicle. Do not store the Portable Charging Cordset (EVSE) on the cargo load floor, or in the passenger compartment.
- The Portable Charging Cordset (EVSE) has been tested for use in temperatures ranging from -40° F to 122° F (-40° C to 50° C).
- The Portable Charging Cordset (EVSE) should be stored at temperatures between -40° F and 176° F (-40° C and 80° C).
- **SAVE THESE INSTRUCTIONS.**

## Portable Charging Cordset (EVSE)

The EVSE is compliant with SAE J1772, and applicable for use with vehicles fitted with standard SAE J1772 charge inlets. The EVSE includes:

- A Charge Connector
- A NEMA 6 rated enclosure with a Charge Current Interrupt Device (CCID) with status indicator display
- An AC Power Cord with a NEMA 5-15P right angle plug
- An indoor/outdoor charge cable, EV-rated
- A Status Indicator Display



Portable Charging Cordset (EVSE)

- 1 – Charge Cable
- 2 – Charge Connector
- 3 – EVSE Enclosure
- 4 – Status Indicator Display
- 5 – AC Plug

## Grounding Instructions

### For A Grounded, Cord-Connected Product:

This product must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for an electric current to reduce the risk of electric shock. This product is equipped with a cord having 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.

### WARNING!

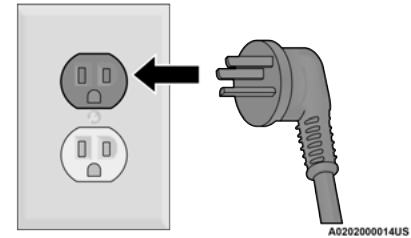
**INSTRUCTIONS PERTAINING TO A RISK OF FIRE OR ELECTRIC SHOCK:** Do not use the Portable Charging Cordset (EVSE) on electrical circuits with two-prong outlets; use with improper outlets could result in electric shock, fire, property damage, and death or serious injury. Check with a qualified electrician if you are in doubt as to whether the wall outlet is properly grounded. Do not modify the plug prongs provided with the Portable Charging Cordset (EVSE) – if it does not fit the outlet, you must have a proper outlet installed by a qualified electrician.

## Charging Cordset (EVSE) Installation And Operating Instructions

1. Insert the AC plug of the EVSE into a 15 A, or 20 A, 120 VAC, 60 Hz, grounded wall receptacle. Do not use an extension cord, outlet/plug adapter, or a worn outlet. The EVSE will not operate safely unless it is plugged directly into the wall receptacle.

### NOTE:

The EVSE should be plugged into a dedicated circuit, not a circuit shared with other devices drawing electricity on the circuit.

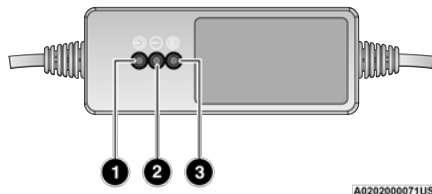


AC Plug And Wall Receptacle

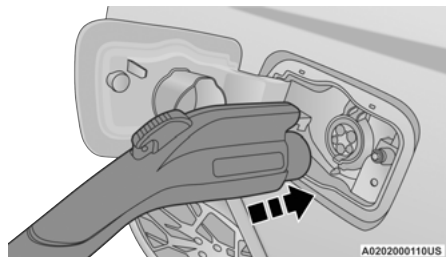
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2. Check to see if the charging cable is ready to charge by reviewing the indicator lights.

**Portable Charging Cordset (EVSE) Indicator Lights**

- 1 – AC Power Indicator Light
- 2 – Fault Indicator Light
- 3 – Check Outlet Indicator Light

**Inserting The Charge Connector Into The Vehicle Charge Inlet**

4. When the vehicle commences charging, the green indicator light will turn on.

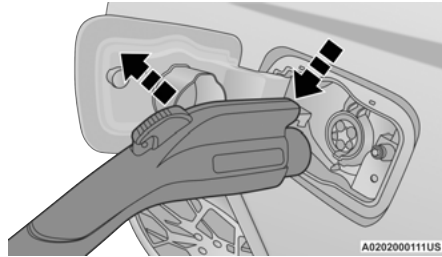
**NOTE:**

The vehicle should start charging automatically. If not, please check the following:

- Portable Charging Cordset (EVSE) – The EVSE status indicators illuminate green, red, or yellow to identify the charging status ↪ page 15.
- Wall Receptacle – Check whether the wall receptacle is functional (no power outage) and/or plug the EVSE into a different wall receptacle.



- **Charging Schedule** — Check whether the charging schedules have been enabled. If enabled, check that you are within the scheduled time and day of the week. If a charging schedule has been enabled in the vehicle, and it is outside the time and day of the week, you may override the schedule for this charging event by plugging in the charge connector, unplugging it, and then plugging it back into the vehicle charge inlet. Complete the double plug sequence within 10 seconds for it to override the set schedule.
  - **Hood Ajar** — Check whether the hood is open. Charging is disabled while the hood is open, and will resume when the hood closes.
5. To stop the charging process, disconnect the vehicle charge connector first and then the charging cable from the wall receptacle. To disengage the vehicle coupler, remove the connector from the vehicle charge inlet by pressing the button on the connector.



**Removing The Charge Connector From The Vehicle Charge Inlet**

6. Close the inlet door when an EVSE is not connected to the vehicle.

**NOTE:**

It is good practice to keep the ignition in the OFF position while conducting Level 1 charging. This minimizes any additional vehicle loads the EVSE has to support. The additional electrical loads will extend the high voltage battery charging time.

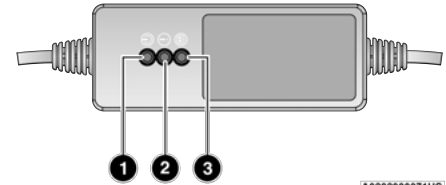
## Troubleshooting Using The Status Indicator Display

If the vehicle is not charging properly, consult the status indicator lights.

The **Green LED** signals correct operation of the system.

The **Red LED** signals a failure in the charging system.

The **Yellow LED** signals a failure with the outlet.



**LED Indicator Lights**

1 — Green LED

2 — Red LED

3 — Yellow LED

**16 GETTING TO KNOW YOUR VEHICLE**

Any faults in charging are displayed by the LEDs, either steady or flashing, located on the status indicator display of the EVSE. Refer to the table below.

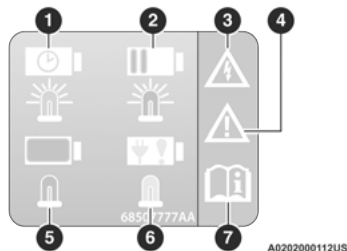
<b>Portable Charging Cordset (EVSE) Charging System Failure</b>				
<b>Green LED</b>	<b>Red LED</b>	<b>Yellow LED</b>	<b>Description</b>	<b>Action/Consequences</b>
OFF	OFF	OFF	Charging cable not connected to the domestic charging socket or power failure in the domestic power supply mains.	
ON	OFF	OFF	There are no faults in the domestic power supply mains, so the charging cable can be connected to the charge inlet on the vehicle.	
ON	ON (Flashing)	ON	Overheating at the charging socket of the domestic power supply mains.	When the normal temperature is reached, the system will make a new charge attempt at a lower current level.
ON	OFF	ON (Flashing)	Charging to a lower current level due to overheating of the charging socket of the domestic power supply mains.	
ON	ON	ON (Flashing)	Overheating at the charging socket of the domestic power supply mains.	Carefully disconnect the charge cable from both the vehicle and power outlet and wait for the plug and outlet to return to normal temperatures. Then, reconnect the cable to the power outlet and vehicle and charge again. Contact a certified electrician in case of a new anomaly.
ON	ON (2 Blinks)	ON (2 Blinks)	Lack of grounding cable in the charging socket of the domestic power supply mains.	The system will make a new charge attempt after 30 seconds (6 attempts in total).

Portable Charging Cordset (EVSE) Charging System Failure				
Green LED	Red LED	Yellow LED	Description	Action/Consequences
ON	ON	ON (2 Blinks)	Lack of grounding cable in the charging socket of the domestic power supply mains.	The new charge attempt failed. Disconnect the charge cable from the vehicle and the outlet and reconnect it, then try to charge again. Contact a certified electrician in case of a new anomaly.
ON (Flashing)	OFF	OFF	Domestic mains power incorrectly supplied.	The system will make a new charge attempt after 30 seconds (6 attempts total). If the fault persists, disconnect the charge cable from the vehicle and the outlet and reconnect it, then try to charge again. Contact a certified electrician in case of a new anomaly.
ON	ON (Flashing)	OFF	Charge Current Interrupt Device (CCID) fault trip over one second after relay closure. Cordset retrying to charge the vehicle.	The system will make a new charge attempt after 30 seconds (6 attempts in total).
ON	ON	OFF	Charge Current Interrupt Device (CCID) fault, Retry Exhausted or Retry is disallowed if trips within one second of relay closure.	The new charge attempt failed. Disconnect the charge cable from the vehicle and the outlet and reconnect it, then try to charge again. Contact an authorized dealer in case of a new anomaly.
ON	ON	OFF	Dispersion of the electricity on the vehicle.	Disconnect the charge cable from the vehicle and the outlet and reconnect it, then try to charge again. Contact an authorized dealer in case of a new anomaly.

Portable Charging Cordset (EVSE) Charging System Failure				
Green LED	Red LED	Yellow LED	Description	Action/Consequences
ON	ON (Flashing)	OFF	Electric charging current too high.	The system will make a new charge attempt after 30 seconds (6 attempts total).
ON	ON (7 Blinks)	OFF	Electric charging current too high.	The new charge attempt failed. Disconnect the charge cable from the vehicle and the outlet and reconnect it, then try to charge again. Contact an authorized dealer in case of a new anomaly.
ON	ON (2 Blinks)	OFF	Charging abnormality on the vehicle.	The system will make a new charge attempt after 30 seconds (6 attempts total). If the fault persists, disconnect the charge cable from the vehicle and the domestic power outlet and reconnect it, then try to charge again. Contact an authorized dealer in case of a new anomaly.
ON	ON (3 Blinks)	OFF	Charging cable failure.	
ON	ON (4 Blinks)	OFF		
ON	ON (5 Blinks)	OFF		
ON	ON (6 Blinks)	OFF		

Guidelines for preventing fire and electric shock:

- Ensure the charging cable is positioned so it will not be stepped on, tripped over, or otherwise subjected to damage or stress.
- There are no user serviceable parts inside.
- Do not use the charging cable if it is visibly damaged. Contact an authorized dealer for service.
- Do not place fingers, or any other objects inside the charge connector.
- Do not allow children to operate this device. Adult supervision is mandatory when children are in proximity when the charging cable is in use.
- Do not use the charging cable with an extension cord.
- Do not connect or disconnect the components of the charging cable while it is in use.



Charging Inlet Warning Label

- 1 – Charging Timer Set
- 2 – Charging Procedure In Progress
- 3 – Risk Of Electric Shock
- 4 – Dangerous Situation
- 5 – Charging Procedure Complete
- 6 – Fault In Charging Procedure
- 7 – Reference Supplement

**NOTE:**

During normal operation, the charge connector or AC plug may feel warm. If either one feels hot during charging, unplug the charging cable and have a qualified electrician inspect the wall receptacle before you continue charging → page 66.

**WARNING!**

**INSTRUCTIONS PERTAINING TO A RISK OF FIRE OR ELECTRIC SHOCK:** Do not use the Portable Charging Cordset (EVSE) with an outlet that is worn or damaged. Failure to follow this warning can result in electrical shock, fire, property damage, and death or serious injury.

## AC LEVEL 2 CHARGING (240 VOLT, 40 AMP)

AC Level 2 (240 Volt) charging requires a 240 Volt, Level 2 EVSE (Charging station). A 40 Amp Level 2 EVSE for home installation is recommended.

The EVSE connect to a 40 Amp circuit breaker and delivers 32 Amp maximum to the vehicle.

When using public charging stations, ensure the charging station is ready to provide charge and the vehicle is in PARK before the charge connector is plugged into the vehicle's charge inlet. You will hear a "click" when the charge connector is inserted correctly and is coupled with the vehicle's charge inlet.

**NOTE:**

The vehicle should start charging automatically. If not, please check the following:

- Charging Station – Check the indications and instructions at the charging station.
- Charging Schedule – Check whether the charging schedule is enabled and if so, whether the vehicle is currently within the scheduled charge time/day (weekday/weekend). If the charging schedule is enabled within the vehicle, you may override it for this charging event by plugging in the charge connector, unplugging it, and then plugging it back into the vehicle charge inlet. Complete the double plug sequence within 10 seconds for it to override the set schedule.
- Hood Ajar – Check whether the hood is open. Charging is disabled while the hood is open, and will resume when the hood closes.

To stop the charging process:

- Press the button located on the EVSE vehicle connector.
- Remove the connector from the vehicle charge inlet.
- Plug the charge handle into the EVSE station and coil the charging cord onto its holder. Do not leave the charging cord lying on the ground.

## CHARGING TIMES

The following factors determine the time it takes to charge the high voltage battery:

- The high voltage battery's current state of charge
- The type of EVSE used (Level 1 - 120 V or Level 2 - 240 V)
- Ambient temperature
- Whether the vehicle's ignition is in the RUN position during charging

### NOTE:

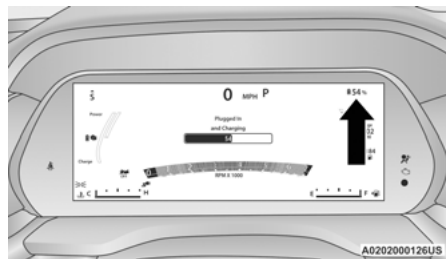
- The following charging times are estimates based on charging a high voltage battery that has a <1% State Of Charge (SOC) value displayed in the instrument cluster.
- Charging times will vary based on the age, condition, state of charge, available current being provided to the charger from its energy source, and temperature of the high voltage battery.
- Charging times may be longer if a thermal self-protection reduces the charging current from the EVSE.
- If the vehicle's ignition is in the ON/RUN position, the vehicle charge indicator may not indicate greater than a 99% state of charge, and will continue to charge the vehicle, due to the vehicle loads.

Type of EVSE	Estimated Charge Time
Level 1 (120 V/12 A)	Approximately 12-13 hours
Level 2 (240 V/32 A)	Approximately 2-3 hours

## VEHICLE CHARGE INDICATORS

### Instrument Cluster High Voltage Battery Display

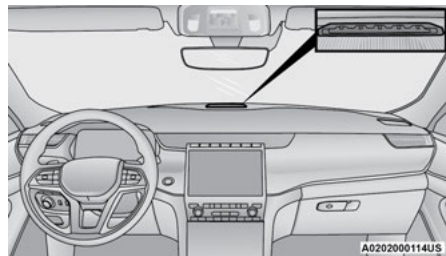
There is a battery display indicator located on the instrument cluster. The battery display will indicate the current state of charge for the high voltage battery, with the percentage value located to the right of the symbol. When plugged in, the battery symbol also indicates the battery level along with messages about the charge or whether the system is waiting to charge due to the charge schedule. These will appear unless there is a charging fault. A green plug telltale will be shown in the cluster, as well as applicable messaging when charging.



High Voltage Battery Display

### Instrument Panel State Of Charge Indicator

In addition to the battery display in the instrument cluster, your vehicle is equipped with a visual state of charge indicator. The state of charge indicator is made up of five lights that are mounted to the top center of the instrument panel, which will illuminate when the vehicle is plugged into the EVSE.



State Of Charge Indicator

The state of charge indicator provides a visual indication of the high voltage battery's charge status during charging. It is also used to indicate a charging problem as well as waiting for a scheduled charge to begin.

**NOTE:**

The lights scroll one at a time when the vehicle is plugged in outside of its charging schedule time/day of the week, and it is waiting on the schedule to begin charging.

In extreme hot or cold environments, the lights on the state of charge indicator may not illuminate. Charge status is available in the instrument cluster display. In the event of an error in the charging process, the outer two lights will blink.

When the hood is open, the lights on the state of charge indicator will not be illuminated.

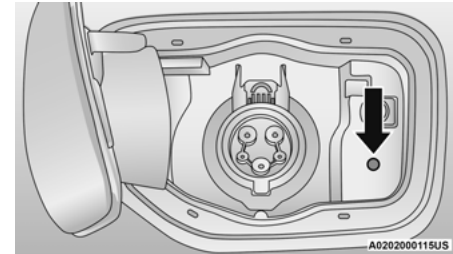
Number Of Indicator Lights Illuminated	Percent Of Battery Charge
1st light blinks	0 - 20%
1st light on, 2nd light blinks	21 - 40%
1st and 2nd lights on, 3rd light blinks	41 - 60%
1st, 2nd, and 3rd lights on, 4th light blinks	61 - 80%

Number Of Indicator Lights Illuminated	Percent Of Battery Charge
1st, 2nd, 3rd, and 4th lights on, 5th light blinks	81 - 99%
All five lights on	100%
Two outer lights are blinking	Indicates an error in the charging process
Lights turn on one at a time from left to right (when looking at the front of the vehicle)	Indicates system is waiting for scheduled time in charge schedule to begin charging
All lights turn on, then immediately turn off	Indicates a successful plug-in

**NOTE:**

For each segment of lights illuminated indicating the percent of battery charge, two different blink rates are used. A blink rate of 1 second on/1 second off indicates that the first half is charging. The blink rate will increase to 0.5 second on/0.5 second off to indicate that the second half is charging. When the battery is fully charged, the blinking stops and the lights remain illuminated as charging continues.

Next to the charging inlet, there is an LED that changes color based on charging status.



**Charging Inlet LED Location**

LED Charging Inlet	
LED Light Color	Status
Blue	Indicates that the system is waiting for a scheduled recharge.
Flashing Green	Charging process in place.
Solid Green	Indicates the vehicle is fully charged.
Blinking Red	Indicates a fault in the charging system.

## HYBRID ELECTRIC PAGES

Within your Uconnect system is the Hybrid Electric App that allows you to see your vehicle's power flow, understand your driving history, and set a charging schedule for your vehicle's high voltage battery. To access this App, press the Apps button on the main menu bar of the radio's touchscreen, and locate the Hybrid Electric App. Pressing the app icon brings you to a set of hybrid electric pages: Power Flow, Driving History, Charging Schedule, e-Save, and Charge Settings (if equipped).



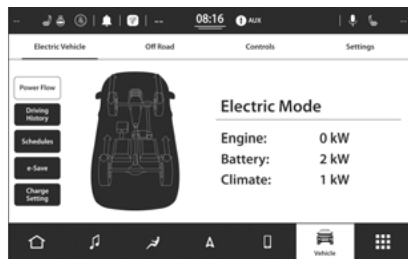
Apps Menu Screen

## Power Flow

The Power Flow screen shows the current power readings for all of the following:

- **Engine** - Shows the amount of power (in kW) the engine is generating. Based on vehicle operating conditions, this power is used to: propel the vehicle, provide passenger compartment heating, power vehicle electrical loads, and charge the high voltage battery. Engine operation is controlled to maximize fuel economy.
- **Battery** - Shows the amount of power (in kW) the high voltage battery is currently providing/absorbing. A negative kW indicates the vehicle's high voltage battery is charging.
- **Climate** - Shows the amount of power (in kW) the Climate Control system is using to maintain the current interior temperature.

Power Flow paths are indicated by the direction of the arrows on the touchscreen.

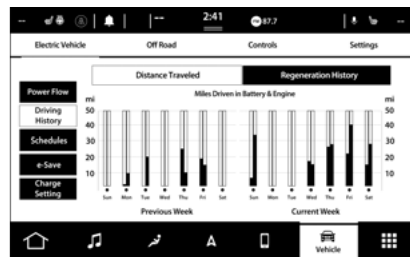


Power Flow Screen

## Driving History

The Driving History screen shows the miles (km) driven in both Full Electric and Hybrid (battery and engine powered) modes for both the previous week and the current week. The data is displayed in a bar graph: Electric mode in teal and Hybrid mode in blue.

On the bar graph, miles (km) driven on the same day in Electric mode (battery only) are always shown below miles (km) driven in Hybrid mode. When one day of the week exceeds 100 miles (160 km) driven, the values for miles (km) driven in Electric and Hybrid modes will be listed above the bar graph in respective colors (teal for Electric and blue for Hybrid).



Driving History Screen



## Charging Schedule

To set a charging schedule, select the Hybrid Electric App on the touchscreen and follow these steps:

1. Select “Schedules”.



**Charging Schedules Screen**

2. Select one of the two charging schedules by pressing the appropriate arrow on the right side of the screen.
3. Select if Scheduled Charging should “Charge Until Full”.
4. Set the Charge Start Time: Hours, Minutes, and AM/PM.

### NOTE:

This is to occur every week (as long as the vehicle is connected to the EVSE).



**Set Charge Schedule**

5. When done, press the back arrow. The active schedule will be indicated by the check mark to the right of the schedule event line. The Event Action and Time will be displayed.
6. To add another Scheduled Charging event, repeat these steps.

### NOTE:

A maximum of two independent Scheduled Charging events can be scheduled at a given time.

If “Charge Until Full” is selected, the vehicle must be plugged in within five minutes of the start time. The following are situations in which “Charge Until Full” may not be honored:

- If selected for five days (Monday through Friday), and the vehicle is plugged in five or more minutes after the start time on any of those days, “Charge Until Full” will not be honored for that day. “Charge Until Full” will resume on the next day at the scheduled time.

- If there are multiple plug/unplug events after first being plugged in within five minutes, “Charge Until Full” will not be honored for that day.
- If other schedules (Charge Interval, etc.) are set at a later time in addition to “Charge Until Full” being selected, and the vehicle is plugged in five or more minutes after the scheduled start time, “Charge Until Full” will not be honored for that day. The next available schedule will be followed.

### NOTE:

- If the charging schedule is not enabled, the vehicle will charge whenever plugged in. It is not necessary to set up the charging schedule to charge the vehicle.
- If the vehicle is plugged in outside of the charging schedule set in the Uconnect system (and Charge Until Full is not selected), the vehicle’s battery will not charge. Charging will only begin immediately if the vehicle is plugged in within the time and day of the week set in the schedule. Otherwise, charging will automatically begin when the selected charge time/day of the week occurs or whenever the vehicle is plugged in with no charge schedule set.
- Scheduled Charging may be bypassed and charging will begin automatically if the high voltage battery state of charge is below its optimal operating point.

- If the vehicle is turned off outside of the charging window, a radio pop-up message will be displayed, which provides an option to begin charging the vehicle immediately. The pop-up message asks the driver if they would like to “Charge Now?” and provides other information, including the next charging schedule start time and estimated time to charge the battery to 100%. If within one hour of selecting “Yes,” the vehicle is connected to a powered EVSE, the vehicle will immediately begin to charge (temporarily ignoring any set charge schedule). To fully deactivate the charge schedule, refer to the “Schedules” feature within the Hybrid Electric app.
- The charging schedule can also be overridden if the EVSE is plugged in, unplugged, and then plugged in a second time to the vehicle. This “double plug sequence” will override the schedule that is set in the radio, and begin charging the vehicle immediately. The double plug sequence must be completed within 10 seconds for it to override the programmed schedule.
- If “Charge Until Full” is selected, and the vehicle is plugged in after the start time of the schedule, the vehicle will start charging when it reaches the start time the next day. If you would like to begin charging immediately, and continue charging until the vehicle is fully charged, you can select the “Charge Now” option or use the double plug override option.

## SCHEDULE BYPASS

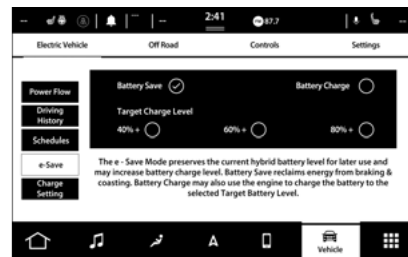
### NOTE:

If the vehicle is turned off outside of the charging window, a radio pop-up message will be displayed. The pop-up message asks the driver if they would like to “Charge Now?” and provides the next charging schedule start time and estimated time to charge the battery to 100%. If within one hour of selecting “Yes”, the vehicle is connected to a powered EVSE, the vehicle will immediately begin to charge (temporarily ignoring any set charge schedule). To fully deactivate the charge schedule, select the “Enable Schedule” checkbox until the check mark is removed from the box.

The charging schedule can also be overridden if the EVSE is plugged in, unplugged, and then plugged in a second time to the vehicle. This double plug sequence will override the set schedule in the Hybrid Electric App, and begin charging the vehicle immediately. The double plug sequence must be completed within 10 seconds for it to override the programmed schedule.

## e-Save

The fourth screen within the Hybrid Electric App is the e-Save screen. From this screen, you can specify the behavior of the e-Save drive mode:



**e-Save Screen**

- **Battery Save** - Maintains the high voltage State of Charge at its current level under most driving scenarios.

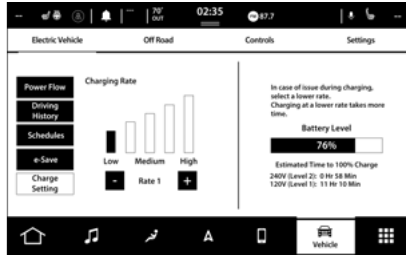
### NOTE:

The State of Charge may increase if there is sufficient energy capture through regenerative braking.

- **Battery Charge** - Uses additional power from the gas engine to increase the high voltage State of Charge, up to 40%, 60%, or 80% capacity.

## Charge Settings – If Equipped

The fifth screen within the Hybrid Electric App is the Charge Setting screen. From this screen, you can select the rate at which your vehicle charges. Rate selections 1 (low rate of charge) through 5 (high rate of charge) are available. The lower the selected rate, the longer amount of time it will take for your vehicle to reach a full charge.



Charge Setting Screen

The Charge Setting can be adjusted by pressing the “+” or “-” buttons, and the estimated time until full charge will update on the right side of the screen to reflect the selected Charge Setting.

### NOTE:

- The Charge Setting will be saved each time the vehicle is turned off, then back on again.
- For information on jump starting your vehicle, refer to the “In Case Of Emergency” chapter in the Owner’s Manual.

## IGNITION SWITCH

This feature allows the driver to operate the ignition switch with the push of a button as long as the key fob is in the passenger compartment.

### NOTE:

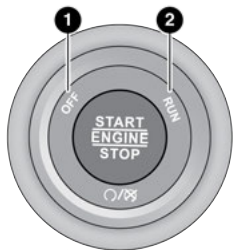
This vehicle is equipped with an automatic shutdown feature. If the vehicle is left with the ignition in the RUN position (engine not running) with gear selector in PARK for 30 minutes, it will automatically turn off the vehicle. If the driver door is opened, then closed while propulsion is active and the vehicle is in PARK, the vehicle will shut down. Notifications have been designed into this feature to raise awareness of the timed event. The instrument cluster display will show the message “Ready to Drive” accompanied with three audible chimes while exiting. The interior warnings will occur regardless of whether the key fob remains in the vehicle or is removed. The horn will sound three times, and the turn signals will flash if the key fob is removed from the vehicle and the ignition state is in READY mode.

To restart the vehicle, follow the normal process for starting your vehicle.

The START/STOP ignition button has several operating modes that are labeled and will illuminate when in position. These modes are OFF, ON/RUN, and START.

### NOTE:

- Pushing the START/STOP ignition button may only activate the Electric Propulsion system and not start the vehicle’s engine (if running the engine is not currently required by the Hybrid system). READY will show in the instrument cluster display whenever the vehicle is operating in Electric mode and the vehicle is stationary.
- If the vehicle’s ignition is in the ON/RUN position, the vehicle’s charge indicator may not display a value greater than 99% state of charge due to vehicle loads.



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Keyless Push Button Ignition

- 1 – OFF  
2 – ON/RUN

The ignition can be placed in the following positions:

#### OFF

- The vehicle is stopped
- Some electrical devices (e.g. power locks, alarm, etc.) are still available
- Mechanical power (Vehicle Propulsion) is not available

#### ON/RUN

- Driving position
- All electrical devices are available (e.g. climate controls, heated seats, etc.)

- As long as READY appears in the instrument cluster display, it does not matter if the engine is running or not, vehicle propulsion is available

#### START

- The vehicle will start

#### NOTE:

Vehicle propulsion is only available after the vehicle has passed through the START position.

#### Conditions Which May Cause The Engine To Run

#### NOTE:

These conditions may cause the engine to run when the high voltage battery requires an extended thermal conditional period.

- When the Hybrid Battery State of Charge (SOC) has reached <1%
- When applying maximum vehicle acceleration
- While maintaining the Exhaust System Catalyst Temperature in Hybrid or e-Save modes
- When the hood is open with the ignition in RUN, post-START mode
- When AutoStick Mode is in use
- When the engine is temporarily operating in Fuel and Oil Refresh Mode (e.g. if the system detects a stale fuel or aged oil condition after a long period without combustion engine operation)
- When the vehicle is started in very cold ambient temperatures

- When the vehicle is in a lower ambient temperature and may need to support passenger compartment heating

#### NOTE:

- In case the ignition switch does not change with the push of the START/STOP ignition button, the key fob may have a low or depleted battery. In this situation, a backup method can be used to operate the ignition switch. Put the nose side of the key fob (side opposite of the emergency key) against the START/STOP ignition button and push to operate the ignition switch. Replacement of the key fob battery is recommended.
- In extreme climates (hot or cold environments), the vehicle will need to be plugged in prior to starting the vehicle, or the vehicle may not start.

#### WARNING!

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

(Continued)

**WARNING!**


- Do not leave the key fob in or near the vehicle, or in a location accessible to children, and do not leave the Keyless Enter 'n Go™ Ignition in the RUN position. A child could operate power windows, other controls, or move the vehicle.
- Do not leave children or animals inside parked vehicles in hot weather. Interior heat buildup may cause serious injury or death.

**CAUTION!**

An unlocked vehicle is an invitation. Always turn the vehicle off, remove the key fobs from the vehicle, and lock all the doors when leaving the vehicle unattended.

**NOTE:**

If the brake is pressed and the ignition is placed in the RUN position with an EVSE connected to the vehicle, the instrument cluster display will not display the READY state. When the Electric Vehicle Supply Equipment (EVSE) is unplugged from the vehicle, the vehicle will go into the READY state. If the vehicle is not shifted out of PARK 30 minutes after being unplugged, the vehicle will disable the READY state. After an additional 30 minutes with no change in ignition status, the ignition will turn off and the vehicle will power down.

For more information on normal starting, see  page 43.

**REMOTE START — IF EQUIPPED****NOTE:**

**Remote Start while the vehicle is plugged in may not always start the engine.**



This system uses the key fob to start the vehicle conveniently from outside the vehicle while still maintaining security. The system has a range of 328 ft (100 m).

Remote Start also activates the Climate Control system in temperatures above 80 °F (26.7 °C), and the heated seats (if equipped) and heated steering wheel (if equipped) in temperatures below 40 °F (4.4 °C).

**NOTE:**

Obstructions between the vehicle and key fob may reduce this range.

**How To Use Remote Start**

Push and release the Remote Start button on the key fob twice within five seconds. The vehicle doors will lock, the turn signals will flash twice (if enabled in Uconnect Settings), and the horn will chirp twice (if enabled in Uconnect Settings). Then the engine/vehicle will start, and the vehicle will remain in the Remote Start mode for a 15 minute cycle.

Pushing the Remote Start button a third time shuts the vehicle off.

**NOTE:**

- With Remote Start, the vehicle will only run for 15 minutes.
- Remote Start can only be used twice.
- If an engine fault is present or fuel level is low, the vehicle will start and then shut down in 10 seconds.
- The parking lights will turn on and remain on during Remote Start mode.
- For security, power window and power sunroof (if equipped) operations are disabled when the vehicle is in Remote Start mode.
- The ignition must be placed in the ON/RUN position before the Remote Start sequence can be repeated for a third cycle.

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

- Gear selector in PARK
- Doors closed
- Hood closed
- Liftgate closed
- Hazard switch off

- Brake switch inactive (brake pedal not pressed)
- 12 Volt battery at an acceptable charge level
- Key fob Panic button not pushed
- System not disabled from previous Remote Start event
- Vehicle Security system indicator flashing
- Ignition in OFF position
- Fuel level meets minimum requirement
- Malfunction Indicator Light (MIL) is off while the vehicle's propulsion system is active

**WARNING!**

- Do not start or run an engine in a closed garage or confined area. Exhaust gas contains Carbon Monoxide (CO) which is odorless and colorless. Carbon Monoxide is poisonous and can cause serious injury or death when inhaled.
- Keep key fobs away from children. Operation of the Remote Start system, windows, door locks or other controls could cause serious injury or death.

**To EXIT REMOTE START MODE**

Push and release the Remote Start button one time or allow the Remote Start cycle to complete the entire 15 minute cycle.

In addition, the ignition can be placed in the RUN (Propulsion System Available) position by pushing the ignition button with the key fob inside the vehicle, and then pushing the ignition button one more time to place the ignition in the OFF position.

**NOTE:**

To avoid unintentional shutdowns, the system will disable for two seconds after receiving a valid Remote Start request.

Refer to the Owner's Manual for further information.

**SEATS**

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

**WARNING!**

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

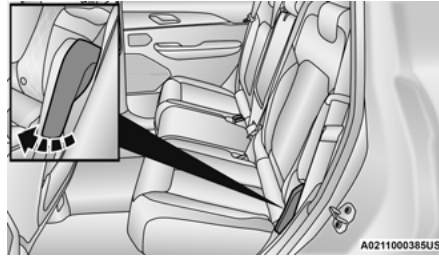
## MANUAL REAR SEAT ADJUSTMENT

### WARNING!

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

### Second Row Bench Seat Recline

To recline the rear seat, lean forward slightly and lift the recline lever located on the outboard side of the seat. Then, push the seat rearward to the desired position and release the lever. To return the seatback to its normal position, lean forward and lift the lever. To ensure the seatback is latched, use body pressure to lean forward and rearward.



Rear Seat Recline Lever

### WARNING!

Do not ride with the seatback reclined so that the shoulder belt is no longer resting against your chest. In a collision you could slide under the seat belt, which could result in serious injury or death.

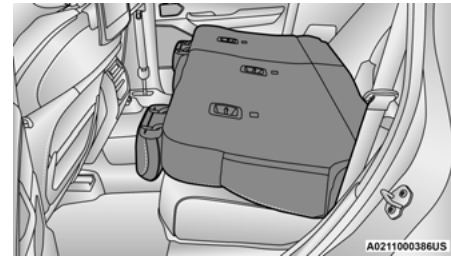
### Second Row Bench Seat Fold Flat

To provide additional storage area, each side of the rear bench seat can be folded flat. This allows for extended cargo space and still maintains some rear seating room.

### NOTE:

Prior to folding the rear seat, it may be necessary to position the front seat to its mid-track position. Also, be sure that the front seats are fully upright and positioned forward. This will allow the rear seat to fold down easily.

To lower the seatback, pull upward on the recline lever located on the outboard side of the seat, and let the seatback fold forward automatically. The outboard head restraints will automatically fold as the seat folds forward.



Second Row Bench Seat Folded Flat

To raise the seatback, unfold the seatback up into its original position and lock it into place. Then, manually raise the head restraints until they lock into place.

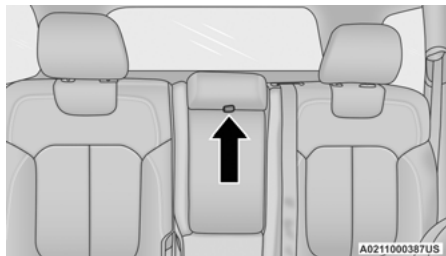
**WARNING!**

Be certain that the seatback is securely locked into position. If the seatback is not securely locked into position the seat will not provide the proper stability for child seats and/or passengers. An improperly latched seat could cause serious injury.

**Unfolding The Rear Armrest**

The center part of the rear seat can be used as a rear armrest with cupholders.

To unfold the armrest, pull the armrest tab to release it from the seat and pull forward.

**Armrest Tab Location****HEAD RESTRAINTS****WARNING!**

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

**Rear Seat Head Restraints**

The second row bench seat head restraints are not adjustable or removable. The outboard head restraints automatically fold forward when the seatback is folded, and do not return to their normal position when the seatback is raised. After returning the seatback to its upright position after a folding operation, raise the outboard head restraints until they are locked into place.

**WARNING!**

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

**HOOD****OPENING THE HOOD****WARNING!**

Always place the ignition in the OFF position before opening the hood. If the ignition is in the RUN position and the Propulsion System is active when the hood is opened, the engine will automatically start, and persons not clear of the vehicle could be injured by the engine's moving parts.



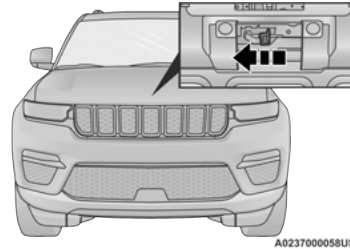
To open the hood, two latches must be released.

1. Pull the release lever located at the bottom of the driver's side of the instrument panel.



**Hood Release**

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



**Safety Latch Location**

**NOTE:**

- Vehicle must be at a stop and the gear selector must be in PARK.
- Electric drive mode will not be available while the hood is open. A message will show in the instrument cluster display to alert the driver.
- If the vehicle was actively charging the high voltage battery when the hood was opened, the vehicle will stop charging until the hood is closed.
- While lifting the hood, use both hands.
- Before lifting the hood, check that the wiper arms are not in motion and not in the lifted position.

## CLOSING THE HOOD

**NOTE:**

If the vehicle stopped charging the high voltage battery when the hood was opened, the vehicle will resume charging when the hood closes.

**WARNING!**

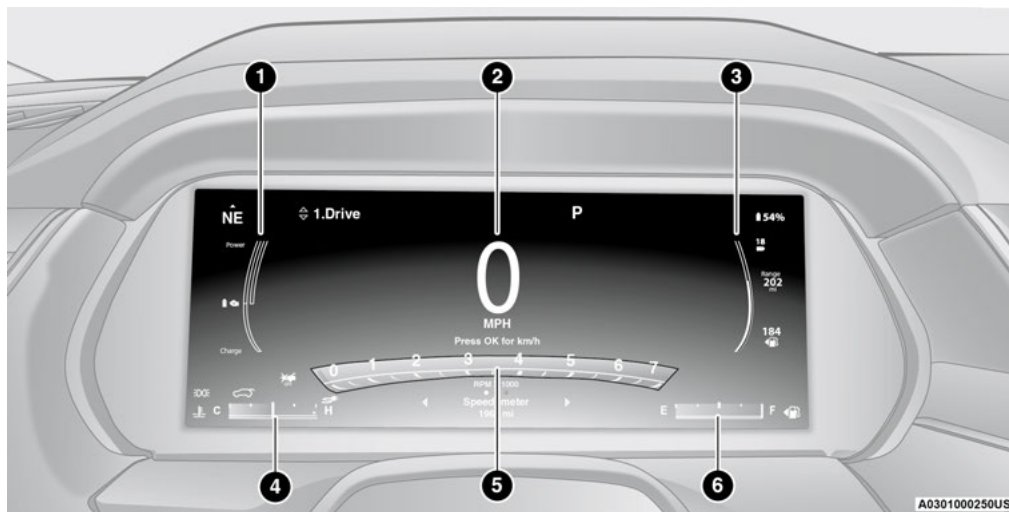
Be sure the hood is fully latched before driving your vehicle. If the hood is not fully latched, it could open when the vehicle is in motion and block your vision. Failure to follow this warning could result in serious injury or death.

**CAUTION!**

To prevent possible damage, do not slam the hood to close it. Lower hood to approximately 12 inches (30 cm) and drop the hood to close. Make sure hood is fully closed for both latches. Never drive vehicle unless hood is fully closed, with both latches engaged.

# GETTING TO KNOW YOUR INSTRUMENT PANEL

## INSTRUMENT CLUSTER



## INSTRUMENT CLUSTER DESCRIPTIONS

### 1. Power/Charge Gauge

- This gauge represents the source of the power utilized to accelerate the vehicle. The green outer ring represents the High Voltage (HV) battery output during acceleration, and input power during regeneration. The blue inner ring represents the engine output power.

### 2. Speedometer

- Indicates vehicle speed

### 3. Range to empty Gauge

- Displays battery range to empty
- Fuel range to empty
- Combined battery and fuel range

### 4. Temperature Gauge

- Displays engine coolant temperature. Any reading within the normal range indicates that the engine cooling system is operating satisfactorily.
- The pointer will likely indicate a higher temperature when driving in hot weather, up mountain grades, or when towing a trailer. It should not be allowed to exceed the upper limits of the normal operating range.

### WARNING!

A hot engine cooling system is dangerous. You or others could be badly burned by steam or boiling coolant. It is recommended to call an authorized dealer for service if your vehicle overheats  
 ⇨ page 54.

### CAUTION!

Driving with a hot engine cooling system could damage your vehicle. If the temperature gauge reads "H" pull over and stop the vehicle. Idle the vehicle with the air conditioner turned off until the pointer drops back into the normal range. If the pointer remains on the "H", turn the engine off immediately and call an authorized dealer for service.

### 5. Tachometer

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

### 6. Fuel Gauge

- The pointer shows the level of fuel in the fuel tank when the Keyless Push Button Ignition is in the ON/RUN position.



- The fuel pump symbol points to the side of the vehicle where the fuel door is located.

### NOTE:

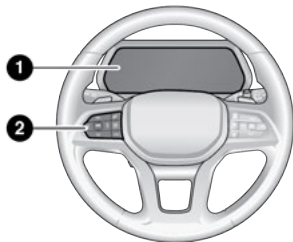
The Instrument Cluster Warning Indicators will illuminate briefly for a bulb check when the ignition is first cycled.

## INSTRUMENT CLUSTER DISPLAY

Your vehicle is equipped with an instrument cluster display, which offers useful information to the driver. With the ignition in the OFF mode, opening/closing of a door will activate the display for viewing, and display the total miles or kilometers in the odometer. Your instrument cluster display is designed to display important information about your vehicle's systems and features. Using a driver interactive display located on the instrument panel, your instrument cluster display can show you how systems are working and give you warnings when they are not. The steering wheel mounted controls allow you to scroll through and enter the main menus and submenus. You can access the specific information you want and make selections and adjustments.

## INSTRUMENT CLUSTER DISPLAY LOCATION AND CONTROLS

The Instrument Cluster Display is located in the center of the instrument cluster.

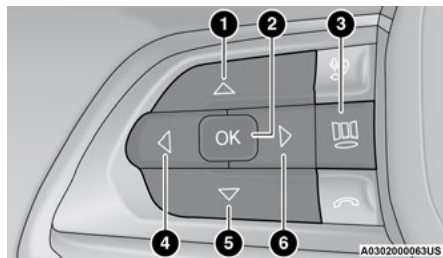


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### Instrument Cluster Display Location and Controls

- 1 – Instrument Cluster Display Screen
- 2 – Instrument Cluster Display Controls

The system allows the driver to select information by pushing the following buttons mounted on the steering wheel:



### Instrument Cluster Display Control Buttons

- 1 – Up Arrow Button
- 2 – OK Button
- 3 – Menu Button
- 4 – Left Arrow Button
- 5 – Down Arrow Button
- 6 – Right Arrow Button

#### 1. Up Arrow Button

Push and release the **up** ▲ arrow button to scroll upward through the main menu.

#### 2. OK Button

Push the **OK** button to access/select the information screens or submenu screens of a main menu item. Push and hold the **OK** button for one second to reset displayed/selected features that can be reset.

#### 3. MENU Button

Push the **MENU** button to access/select the information screens or submenu screens of the Home Screen display. Push and hold the **OK** button to enter edit mode.

#### 4. Left Arrow Button

Push the **left** ◀ arrow button to return to the main menu from an info screen or submenu item.

#### 5. Down Arrow Button

Push and release the **down** ▼ arrow button to scroll downward through the main menu.

#### 6. Right Arrow Button

Push and release the **right** ▶ arrow button to access the information screens or submenu screens of a main menu item.

## OIL LIFE RESET

- Your vehicle is equipped with an engine oil change indicator system. The "Oil Change Due" message will display for approximately five seconds after a single chime has sounded, to indicate the next scheduled oil change interval has been reached. The engine oil change indicator system is duty cycle based, which means the engine oil change interval may fluctuate due to ambient temperatures, engine warm-up and personal driving style.
- Unless reset, this message will continue to display each time the ignition is placed in the ON/RUN position.
- To reset the oil change indicator, refer to the following procedure.

### NOTE:

This procedure should only be performed after scheduled maintenance is completed. Resetting oil life other than when associated with a scheduled maintenance may result in damage due to not properly maintaining the engine oil.

- Without pressing the brake pedal, push the ENGINE START/STOP button and place the ignition in the ON/RUN position (do not start the vehicle).

- Push the **OK** button to enter the instrument cluster display menu screen.
- Push and release the **down** ▾ arrow button to access the "Vehicle Info" menu screen.
- Push the **left** ◀ arrow button or **right** ▶ arrow button to access the "Oil Life" submenu.
- Hold the **OK** button to reset the "Oil Life" to 100%.
- Push the **up** ▲ arrow button to exit the instrument cluster display menu screen.

### Secondary Method For Oil Life Reset Procedure

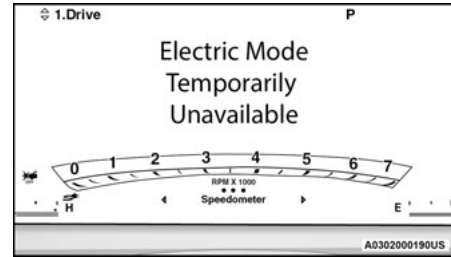
- Without pushing the brake pedal, place the ignition in the ON/RUN position (do not start the engine).
- Fully press the accelerator pedal, slowly, three times within 10 seconds.
- Without pushing the brake pedal, place the ignition in the OFF position.

### NOTE:

If the indicator message illuminates when you start the vehicle, the oil change indicator system did not reset. If necessary, repeat this procedure.

## ELECTRIC MODE TEMPORARILY UNAVAILABLE

If Electric Mode is unavailable, the reason will display for five seconds at start up. If your check engine light comes on, see an authorized dealer immediately.



Electric Mode Temporarily Unavailable Message

See the following information for the most common reasons the Electric Mode would be unavailable:


### Operator choices that can inhibit Electric Mode

- Transmission control using Paddle Shifters - Return to auto mode to use Electric Mode.
- Heavily depressed accelerator pedal position, requesting high power demand - Beyond the limits of the electric drivetrain, will cause engine to run, enabling the powertrain to produce its full combined power available in Hybrid mode.

- Sustained high speed operation in Electric Mode - Using the engine is more efficient for high speeds than Electric Mode.
- Transfer case and drive mode selection - eSave/ Hybrid/Sport, Sand, Mud, 4WD Low/Hybrid will run the engine.
- Electric range is depleted - You need to recharge to enjoy Electric Mode, or you can continue normally in Hybrid.
- Hood open (or a hood switch fault) - This is to prevent unexpected engine starts with the hood open.

#### Thermal protection that can inhibit Electric Mode

- Engine, transmission or engine starting belt too cold - Some systems require warm-up to function properly if the ambient temperature is below 32°F (15°F in Electric mode).
- Electric cabin heating capacity limits (or electric cabin heater fault) - Unlike Battery Electric Vehicles (BEV's), the PHEV can warm the cabin more efficiently with engine heat when operating below 15°F outside temperature.

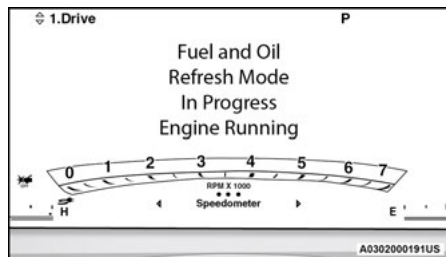
- HV battery, motors or contactors over temperature - This is a temporary hardware protection feature. Vehicle performance will resume once protection is no longer required. If the vehicle performance is accompanied with a Malfunction Indicator Lamp (MIL)  have the vehicle serviced at an authorized dealership.

#### Component protection that can inhibit Electric Mode

- HV battery undervoltage - Sustained EV operation at high speed, especially with aftermarket wheels and tires, can induce this.
- Other electric propulsion system faults indicated by a MIL - Please see an authorized dealer for service.
- Fuel and Oil Refresh Mode - See the following section.

#### Fuel And Oil Refresh Mode

Since it is possible to operate this vehicle for extended periods of time without running the gas engine, the fuel within the vehicle's fuel tank can become stale or the engine oil's lubricating properties can be reduced. To prevent engine and/or fuel system damage due to stale fuel, as well as maintaining internal engine lubrication, this vehicle is equipped with a Fuel and Oil Refresh Mode.



**Fuel and Oil Refresh Mode Message**

The vehicle will automatically enter into the Fuel and Oil Refresh Mode to minimize potential for stale fuel, and to ensure lubrication of internal engine components. When operating in this mode, the gas engine will run to provide vehicle propulsion (electric only operation is inhibited). A message will be displayed in the instrument cluster whenever Fuel and Oil Refresh Mode is active.

The vehicle will automatically exit the Fuel and Oil Refresh Mode when fuel and lubrication conditions have been satisfied. If the vehicle enters Fuel and Oil Refresh Mode, due to fuel which has been in the fuel tank for a long period of time (becoming stale fuel), the engine will run whenever the vehicle is operational (no electric only operation) until the low fuel level warning is activated. It is also possible to exit the Fuel and Oil Refresh Mode sooner by adding a minimum of four gallons of new fuel to the vehicle's fuel tank.

**NOTE:**

If the vehicle enters Fuel and Oil Refresh Mode to maintain engine lubrication, adding fuel will not exit the mode sooner.

If the vehicle enters Fuel and Oil Refresh Mode to maintain engine lubrication properties, the engine may run for a period of up to 2.5 hours when fully warm whenever the vehicle is operational (no electric only operation). If the vehicle is shut down before conditions to exit the refresh mode have been satisfied, the engine may run for additional time on subsequent trips. Oil refresh may take significantly longer in freezing temperatures.

**NOTE:**

- Frequent short trips at low ambient temperature conditions where the engine does not reach normal operating temperatures are more likely to trigger the Fuel and Oil Refresh Mode.
- Electric drive mode will be temporarily unavailable while the Fuel and Oil Refresh Mode is active. Do not attempt to return to Electric Mode until the Fuel and Oil Refresh Mode cycle is complete.

**CAUTION!**

If the instrument cluster instructs you to change the engine oil, do not reset the service indicator without changing the oil. Engine damage may result.

**INSTRUMENT CLUSTER DISPLAY MENU ITEMS****NOTE:**

The instrument cluster display menu items display in the center of the instrument cluster. Menu items may vary depending on your vehicle features.

**Energy Economy**

Push and release the **up**  $\triangle$  or **down**  $\nabla$  arrow button until Energy Economy is highlighted in the instrument cluster display. Push the **left**  $\triangleleft$  or **right**  $\triangleright$  arrow button to scroll through the following information submenus:

- Average Energy Economy gauge + value (hold **OK** to reset)
- Current Energy Economy gauge + value
- Range to Empty

**Hybrid Info**

Push and release the **up**  $\triangle$  or **down**  $\nabla$  arrow button until Hybrid Info is highlighted in the instrument cluster display. Push the **left**  $\triangleleft$  or **right**  $\triangleright$  arrow button to scroll through the following information submenus:

**Range to Empty**

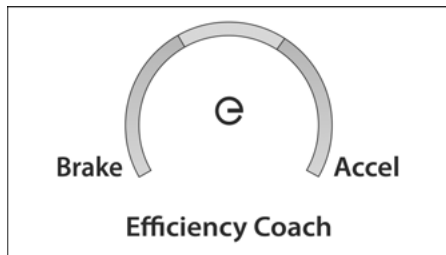
- Electric Range
- Hybrid Range
- Total Range

**Efficiency Coach**

Efficiency Coach will monitor your current driving to help you drive as efficient as possible.

- “Accel” is based on amount of acceleration (Different from MPG).
  - The gauge will only move up when accelerator pedal is pushed (or accelerating with Cruise Control or ACC).
  - Above a certain rate of change will be considered inefficient.
  - The color of the gauge bar will change from green to yellow to orange.
- “Brake” is based on amount of deceleration (slowing down).
  - The gauge will only move down when brake pedal is pushed (or decelerating with Cruise Control or ACC).
  - The color of the gauge bar will change from green to yellow to orange.

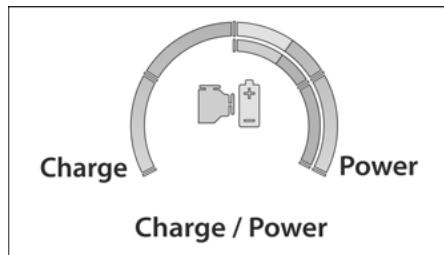
- The gauge bar color will transition smoothly up and down, and have a gradual change based on efficiency.
  - Center of gauge is 0% Accel and 0% Brake.
  - +/-0-35% of gauge fills green, +/-36-80% yellow, and +/-81-100% orange (with a blend between each color).



Efficiency Coach Gauge

### Charge/Power

- Charging is represented by the gauge filling on the left hand side.
- Power is represented by the gauge filling on the right hand side.

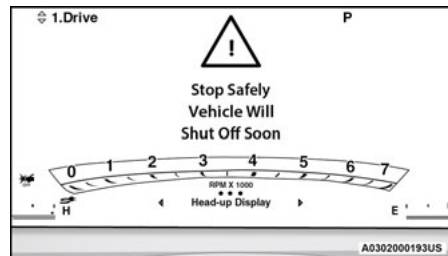


Charge/Power Gauge

### E-Drive Mode

- Hybrid automatically adapts for most efficient driving.
- Electric mode saves fuel for later use.
- e-Save mode saves battery for later use.

### STOP SAFELY VEHICLE WILL SHUT OFF SOON



### Stop Safely Vehicle Will Shut Off Soon Warning Message

This warning will be displayed on the instrument panel display when the vehicle has determined an operational issue will occur shortly, which will cause the vehicle's propulsion system to turn off. If the light turns on while driving, stop the vehicle in a safe location as soon as possible. Have the vehicle transported to an authorized dealer.

- This is a high priority message
- This message will be displayed continuously
- Cannot be cleared with button press
- A single chime will sound



## Trip Info

Push and release the **up**  $\blacktriangle$  or **down**  $\blacktriangledown$  arrow button until Trip Info is highlighted in the instrument cluster display. Push the **left**  $\blacktriangleleft$  or **right**  $\blacktriangleright$  arrow button to scroll through the Trip A and Trip B submenus. The Trip information will display the following:

### Trip A

- Distance Electric
- Distance with Engine On
- Distance Total
- Average Energy Economy
- Elapsed Time

Hold the **OK** button to reset feature information.

### Trip B

- Distance Electric
- Distance with Engine On
- Distance Total
- Average Energy Economy
- Elapsed Time

Hold the **OK** button to reset feature information.

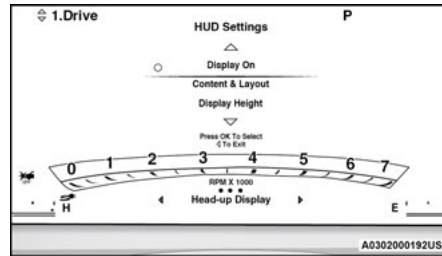
## HEAD UP DISPLAY — IF EQUIPPED

### NOTE:

The HUD feature Settings are available at any vehicle speed.

Push and release the **up**  $\blacktriangle$  or **down**  $\blacktriangledown$  arrow button until the Settings Menu icon/title is highlighted in the instrument cluster display. Push and release the **left**  $\blacktriangleleft$  or **right**  $\blacktriangleright$  arrow button until the HUD Menu icon/title is highlighted in the instrument cluster display. Push and release the **OK** button to enter HUD. Use the **up**  $\blacktriangle$  or **down**  $\blacktriangledown$  arrow button to select a setting, then push and release the **OK** button to adjust the setting.

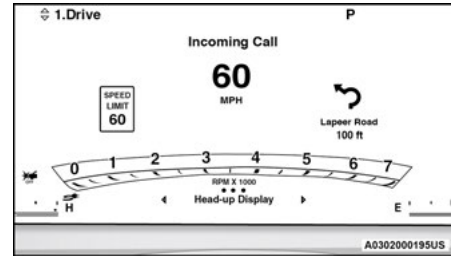
- ON/OFF



### HUD ON/OFF

When “Display On” is selected, the HUD will display on the windshield. When it is not selected, no display on the windshield.

- Content and Layout
  - **Simple:** Speed, Speed Limit
  - **Standard:** Speed, Speed Limit, Navigation



### Standard Mode

When “Standard” mode is selected, the HUD image is split into thirds with the speed limit indicator shown to the left, vehicle speed in the center, and turn-by-turn navigation to the right.

- **Advanced:** Speed, Speed Limit, Navigation, Driver Assist (ACC/Cruise, Active Lane Management, Active Driving Assist), Gear



**Advanced Mode**

When “Advanced” mode is selected, the HUD displays the vehicle speed, turn-by-turn navigation, speed limit, driver assist function(s), and current gear.

- **Custom 1:** Speed, Speed Limit
- **Custom 2:** Speed, Speed Limit, Navigation
- **Custom 3:** Speed, Speed Limit, Navigation, Driver Assist (ACC/Cruise, Active Lane Management, Active Driving Assist)
- **Custom 4:** Speed, Speed Limit, Navigation, Driver Assist (ACC/Cruise, Active Lane Management, Active Driving Assist), Gear

- Display Height
- Brightness

**NOTE:**

- The HUD basic settings (Brightness, Display Height and Non Custom layouts), are controlled through the Settings Screen in the Instrument Cluster → page 33.

**NOTE:**

If current theme is set to Digital, tachometer will not display while in the Settings menu.

## WARNING LIGHTS AND MESSAGES

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

## RED WARNING LIGHTS

### Hybrid Electric Vehicle System Service Warning Light



This warning light will illuminate when service to the hybrid electric system is needed. It will be accompanied by a message in the cluster. If the telltale stays on or continues to come on, contact an authorized dealer as soon as possible.

### Plug Status Fault Warning Light



This warning light will illuminate when a plug status fault is detected (when vehicle not in motion). It will be accompanied by a cluster message indicating the type of fault. You may receive one of the following messages if a fault is detected:

- **Service Charging System** – If you see a service charging system message, it is recommended to unplug and plug in again, or try a different charging station. If an issue continues, contact an authorized dealer.
- **Issue Detected Check External Charging Station** – If you see an issue detected message, the charging station might be powered off, have an internal fault or be scheduled to charge later. It is recommended to try a different charging station. If an issue continues, then contact an authorized dealer.

**NOTE:**

- Older or non-compliant J1772 EVSE models may not support charging of this vehicle. If this vehicle does not charge, it may be connected to a non-compliant Level 2 EVSE, and will flash indicators. Please identify this failure to the site operator and/or EVSE provider.
- Before this vehicle can be driven, the EVSE Charging Cord must be disconnected from the vehicle.

**Torque Limited Warning Light**

This warning light illuminates when vehicle acceleration is limited due to a reduction in engine or electric motor performance. If the telltale stays on or continues to come on, contact an authorized dealer as soon as possible.

**Traction Battery Coolant Fluid Level Low Warning Light**

This indicator will illuminate when the high voltage battery coolant fluid is low. Contact an authorized dealer if illumination persists.

**Traction Battery Failure Warning Light**

This light alerts the driver that there is a failure in the Traction Battery System. Contact an authorized dealer if illumination persists.

**Hybrid Electric Vehicle System Failure Warning Light**

This light alerts the driver that there is a failure in the Hybrid Electric Vehicle System. Contact an authorized dealer if illumination persists.

**Electrical Machine and Controller is Hot Warning Light**

This light alerts the driver that the electrical machine and controller is overheated. Contact an authorized dealer if illumination persists.

**YELLOW WARNING LIGHTS****PHEV Traction Battery Cut-off Warning Light**

This telltale will turn on to indicate the PHEV Traction Battery system is not functioning properly. Contact an authorized dealer if illumination persists.

**GREEN INDICATOR LIGHTS****Ready To Drive Indicator Light**

This indicator light will illuminate to indicate that the vehicle has enough power to be driven, regardless of the speed of the vehicle.

**Plug Status Indicator Light**

When plugged in, the green plug indicator light will illuminate if the Electric Vehicle Supply Equipment (EVSE) charging plug is securely attached to the charging port. This indicates that the plug is detected, but doesn't mean it is charging. It may be accompanied with a cluster message indicating the charge status:

- Plugged In And Charging
- Plugged In And Waiting to Charge On A Set Schedule
- Plugged in and Charging Complete

**NOTE:**

The vehicle cannot be driven until it is unplugged.

### Max Regeneration Indicator Light



This indicator light will illuminate to indicate that Max Regeneration is on and capable.

When the switch is pressed, the following instrument cluster messages will be seen:

- “Max Regeneration On” – appears when the feature is turned on.
- “Max Regeneration Off” – appears when the feature is turned off.
- “Max Regeneration Unavailable” – appears when the feature is requested, but the vehicle is unable to comply. LED will flash for five seconds to indicate unavailability ↪ page 8.

### WHITE INDICATOR LIGHTS

#### Max Regeneration Indicator Light



This indicator light will illuminate to indicate that Max Regeneration is on and not ready.

When the switch is pressed, the following instrument cluster messages will be seen:

- “Max Regeneration On” – appears when the feature is turned on.
- “Max Regeneration Off” – appears when the feature is turned off.
- “Max Regeneration Unavailable” – appears when the feature is requested, but the vehicle is unable to comply. LED will flash for five seconds to indicate unavailability ↪ page 8.

### Electric Mode Indicator Light



This light alerts the driver that the Electric mode is currently active.

### Hybrid Mode Indicator Light



This light alerts the driver that the Hybrid mode is currently active.

### e-Save Indicator Light



This light alerts the driver that the e-Save mode is currently active.

# STARTING AND OPERATING

## STARTING THE ENGINE

Before starting your vehicle, adjust your seat, adjust the inside and outside mirrors, fasten your seat belt, and if present, instruct all other occupants to buckle their seat belts.

### WARNING!

- Before exiting a vehicle, always come to a complete stop, then shift the automatic transmission into PARK and apply the parking brake.
- Always make sure the keyless ignition node is in the OFF position, key fob is removed from the vehicle and vehicle is locked.
- Never leave children alone in a vehicle, or with access to an unlocked vehicle. Leaving children in a vehicle unattended is dangerous for a number of reasons. A child or others could be seriously or fatally injured. Children should be warned not to touch the parking brake, brake pedal or the gear selector.

*(Continued)*

### WARNING!

- Do not leave the key fob in or near the vehicle, or in a location accessible to children, and do not leave the ignition of a vehicle equipped with Keyless Enter 'n Go™ in the ON/RUN position. A child could operate power windows, other controls, or move the vehicle.
- Do not leave children or animals inside parked vehicles in hot weather. Interior heat buildup may cause serious injury or death.

## NORMAL STARTING

### Achieving Vehicle READY Using The ENGINE START/STOP Button.

1. The transmission must be in PARK or NEUTRAL.
2. Press and hold the brake pedal while pushing the ENGINE START/STOP button once.
3. The READY indicator will appear in the instrument cluster display when the vehicle is in Ready to Drive mode, which may include the start of the engine depending on conditions such as battery state of charge and engine temperature.

4. If you wish to terminate Ready to Drive mode, push the button again.

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

The ENGINE START/STOP button operates similar to an ignition switch by providing two positions: OFF and ON/RUN. To change the ignition mode without starting the vehicle (to power certain accessories), follow these steps:

1. Start with the ignition in the OFF position.
2. Push the ENGINE START/STOP button one time, without the brake pedal being pressed, to place the ignition in the ON/RUN position (instrument cluster will display "Ignition or Accessory On").

### NOTE:

The vehicle is not able to be driven in the Ignition or Accessory On mode, see "Achieving Vehicle READY Using The ENGINE START/STOP Button" previously defined in this section for further information.

3. Push the ENGINE START/STOP button a second time, without the brake pedal being pressed, to return the ignition to the OFF position (instrument cluster will display “OFF”).

### NOTE:

Only press one pedal at a time while driving the vehicle. Torque performance of the vehicle could be reduced if both pedals are pressed at the same time. If pressure is detected on both pedals simultaneously, a warning message will display in the instrument cluster ↪ page 33.

## AFTER STARTING

To optimize energy efficiency, the vehicle will automatically control engine operation.

## TO TURN OFF THE VEHICLE USING THE ENGINE START/STOP BUTTON

1. Place the gear selector in PARK, then push and release the ENGINE START/STOP button.
2. The ignition button indicator will return to the OFF position.
3. If the gear selector is not in PARK, with vehicle speed less than 5 mph (8 km/h), when the ENGINE START/STOP button is pushed, the instrument cluster display will display a “Vehicle Not In Park” message, and the vehicle will remain running.
4. If the gear selector is not in PARK, with vehicle speed greater than 5 mph (8 km/h), when the ENGINE START/STOP button is pushed continuously for at least two seconds (or three short pushes in a row), the vehicle ignition will exit the Ready to Drive mode and enter ON/RUN position. Never leave a vehicle out of the PARK position, or it could roll.

### NOTE:

- This vehicle is equipped with an automatic shut-down feature. If the vehicle is left in a READY state (vehicle running) with the gear selector in PARK for 30 minutes, the vehicle will automatically turn itself off.
- The vehicle provides automatic notification using a three horn chirp alert, cluster chiming, and a cluster message (“Key Fob Has Left The Vehicle”) if the vehicle was not turned off (still “Ready to Drive”) and a valid key fob for the vehicle is not detected within the passenger cabin, following the opening and closing of any passenger compartment door (requires all doors to be closed before the key fob check will occur). These automatic alerts are to remind the driver to turn off the vehicle before leaving it, as well as, to let the driver know that the vehicle’s key fob may have been unintentionally removed from the vehicle by an exiting passenger. After providing the horn chirp alert, additional auto chirps will be inhibited until the gear selector has been moved out of PARK or ignition cycled.

## REFUELING THE VEHICLE

1. Put the vehicle in the PARK position.
2. Push the fuel filler door release button (located above the headlight switch).



Fuel Filler Door Release Button

3. Pushing the button will initiate a sequence of events to depressurize the fuel system. A message will display in the cluster when the vehicle is ready to be fueled.



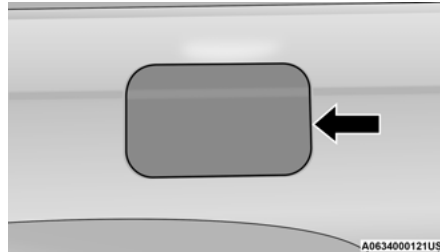
Instrument Cluster Message

**NOTE:**

- After pushing the release button you will have 20 minutes to fuel the vehicle; beyond 20 minutes you will need to push the release button again.
  - The fuel door should take 15 seconds to open under normal conditions. It may take longer to open in some situations, such as high ambient temperatures or high altitudes.
  - If you hear a hissing sound, wait to begin fueling the vehicle until after the hissing sound stops.
4. The fuel door pops away from the vehicle when it has been released. To finish opening the fuel door, manually rotate it away from the vehicle.

**NOTE:**

- If the service station fuel pump repeatedly clicks off (stops delivering fuel) before the fuel tank has been filled, push the fuel door release button again.
- If pushing the fuel door release button a second time does not correct the problem, try using a different fuel pump. If premature fuel pump shutoff continues to be a problem, take the vehicle to an authorized dealer for service.
- If the fuel door does not re-latch upon closure, push the fuel door release button again to reset the latch. If pushing the fuel door release button a second time does not correct the problem, take the vehicle to an authorized dealer for service.



Fuel Filler Door

**NOTE:**

In certain cold conditions, ice may prevent the fuel door from opening. If this occurs, lightly push around the perimeter of the fuel door to break the ice buildup and re-release the fuel door using the inside release button. Do not pry on the door.

5. There is no fuel filler cap. Two flapper doors inside the pipe seal the system.
6. Insert the fuel nozzle fully into the filler pipe, the nozzle opens and holds both flapper doors while refueling.
7. Fill the vehicle with fuel. When the fuel nozzle "clicks" or shuts off the fuel tank is full.
8. Wait five seconds before removing the fuel nozzle to allow excess fuel to drain from nozzle.
9. Remove the fuel nozzle and then close the fuel door. Engage the fuel door latch by pushing on the rear outer edge near the center.

**WARNING!**

- Never have any smoking materials lit in or near the vehicle when the fuel door is open or the tank is being filled.
- Never add fuel when the engine is running. This is in violation of most state and federal fire regulations and may cause the Malfunction Indicator Light to turn on.
- A fire may result if fuel is pumped into a portable container that is inside of a vehicle. You could be burned. Always place fuel containers on the ground while filling.

**CAUTION!**

To avoid fuel spillage and overfilling, do not “top off” the fuel tank after filling.

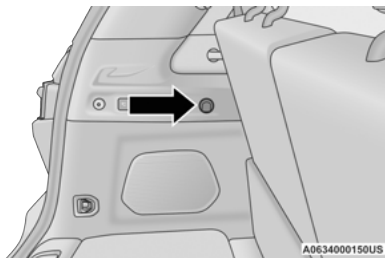
**Emergency Fuel Door Release**

1. Place the vehicle's ignition in the RUN position (Propulsion System Active (PSA) not active, make sure the READY indicator is not on).

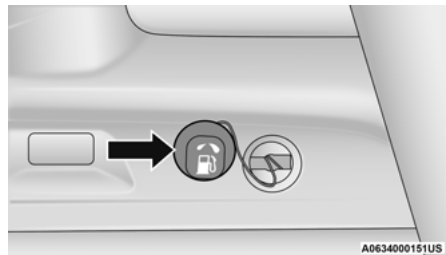
**NOTE:**

If this is not performed, then the tank vent valve will not open. This will result in premature fuel pump shutoffs.

2. Open the liftgate.
3. Locate the grocery hook on the left side of the vehicle on the rear side panel.

**Rear Side Panel**

4. Rotate the hook a quarter turn and pull the hook out of the side panel.
5. Pull the grocery hook directly out with the release cable attached and gently pull to unlock the fuel filler door.

**Grocery Hook****NOTE:**

Excessive force may break cable tether.

6. Wait 15 seconds and then begin fueling your vehicle.



## TRAILER TOWING

### TRAILER TOWING WEIGHTS (MAXIMUM TRAILER WEIGHT RATINGS)

Model	GCWR	Frontal Area	Maximum GTW	Maximum Trailer TW
PHEV 4x4 - Limited/ Overland/TrailHawk/Summit	12,125 lb (5,568 kg)	55 ft <sup>2</sup> (5.11 m <sup>2</sup> )	6,000 lb (2,722 kg)	600 lb (272 kg)
Refer to local laws for maximum trailer towing speeds.				

#### NOTE:

Vehicles not factory-equipped with a trailer tow package are limited to 3,500 lb (1,588 kg) GTW and 350 lb (158 kg) TW.

# SAFETY

## SAFETY FEATURES

### AUDIBLE PEDESTRIAN WARNING SYSTEM

Your vehicle is equipped with an Audible Pedestrian Warning system. The Audible Pedestrian Warning system uses distinct sounds to alert pedestrians that your vehicle is approaching. In addition, the system will indicate changes in vehicle speed by varying the relative volume.

The system uses two external speakers. One is located in the under-hood compartment and the other is in the rear of the vehicle. The Audible Pedestrian Warning system is active when the vehicle is not in PARK and is traveling at lower speeds. Depending on the selected gear (REVERSE, DRIVE or NEUTRAL), the system activates the corresponding speaker location based on the intended direction of travel or activates both speakers in NEUTRAL.

#### NOTE:

The system is active when driving in Electric mode only.

#### WARNING!

The Audible Pedestrian Warning system is not intended to avoid a collision. It is always the driver's responsibility to be attentive to the vehicle's distance between other vehicles, people, and objects, and most importantly brake application to ensure safe operation of the vehicle under all road conditions. Your complete attention is always required while driving to maintain safe control of your vehicle. Failure to follow this warning could result in a collision or serious personal injury.

## OCCUPANT RESTRAINT SYSTEMS

### SUPPLEMENTAL RESTRAINT SYSTEMS (SRS)

This supplement describes the features of the Occupant Restraint Systems that are unique to your hybrid vehicle. The vehicle's Owner's Manual contains the complete instructions for these

important safety features. Please read the complete instructions for the Supplemental Restraint Systems in the vehicle's Owner's Manual.

### Enhanced Accident Response System Reset Procedure

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

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

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

# SERVICING AND MAINTENANCE

## SCHEDULED SERVICING

Your vehicle is equipped with an automatic oil change indicator system. The oil change indicator system will remind you that it is time to take your vehicle in for scheduled maintenance.

Based on engine operation conditions, the oil change indicator message will illuminate. This means that service is required for your vehicle. Operating conditions such as frequent short-trips, trailer towing, and extremely hot or cold ambient temperatures will influence when the "Oil Change Required" message is displayed. Have your vehicle serviced as soon as possible, within the next 500 miles (805 km).

An authorized dealer will reset the oil change indicator message after completing the scheduled oil change.

### NOTE:

Under no circumstances should oil change intervals exceed 10,000 miles (16,000 km), 12 months or 350 hours of engine run time, whichever comes first. The 350 hours of engine run or idle time is generally only a concern for fleet customers.

### Once A Month Or Before A Long Trip:

- Check engine oil level.
- Check windshield washer fluid level.
- Check the tire inflation pressures and look for unusual wear or damage.
- Check the fluid levels of the coolant reservoir, brake master cylinder and fill as needed.
- Check function of all interior and exterior lights.



Mileage Or Time Passed (Whichever Comes First)	20,000	30,000	40,000	50,000	60,000	70,000	80,000	90,000	100,000	110,000	120,000	130,000	140,000	150,000
Or Years:	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Or Kilometers:	32,000	48,000	64,000	80,000	96,000	112,000	128,000	144,000	160,000	176,000	192,000	208,000	224,000	240,000
Inspect the front and rear axle fluid, change if using your vehicle for police, taxi, fleet, off-road or frequent trailer towing.		X			X			X			X			X
Inspect the brake linings, parking brake function.	X		X		X		X		X		X		X	
Inspect transfer case fluid.		X			X			X			X			X
<b>Additional Maintenance</b>														
Replace engine air cleaner filter.		X			X			X			X			X
Replace the cabin air filter.	To be replaced every 12,000 miles (19,000 km).													
Replace spark plugs – 2.0L. <sup>1</sup>					X						X			
Flush and replace the engine, power electronics, and battery coolant at 10 years or 150,000 miles (240,000 km), whichever comes first.									X					X
Replace accessory drive belt.														X
Inspect accessory drive belt tensioner and pulley, replace if necessary.														X
Change transfer case fluid - Normal Usage.											X			

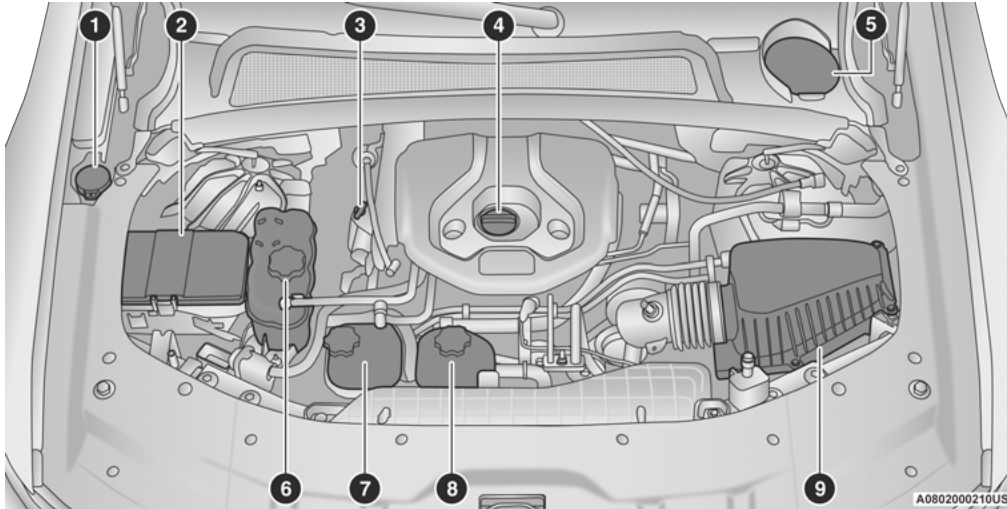
Mileage Or Time Passed (Whichever Comes First)	20,000	30,000	40,000	50,000	60,000	70,000	80,000	90,000	100,000	110,000	120,000	130,000	140,000	150,000
Or Years:	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Or Kilometers:	32,000	48,000	64,000	80,000	96,000	112,000	128,000	144,000	160,000	176,000	192,000	208,000	224,000	240,000
Change transfer case fluid – Severe Usage (police, taxi, fleet, off-road, or frequent trailer towing.)						X							X	
Replace PCV valve.									X					

1. The spark plug change interval is mileage-based only, yearly intervals do not apply.

### WARNING!

- You can be badly injured working on or around a motor vehicle. Do only service work for which you have the knowledge and the right equipment. If you have any doubt about your ability to perform a service job, take your vehicle to a competent mechanic.
- Failure to properly inspect and maintain your vehicle could result in a component malfunction and affect vehicle handling and performance. This could cause an accident.

## ENGINE COMPARTMENT — 2.0L HYBRID



- 1 — Washer Fluid Reservoir Cap
- 2 — Power Distribution Center (Fuses)
- 3 — Engine Oil Dipstick
- 4 — Engine Oil Fill
- 5 — Brake Fluid Reservoir Access

- 6 — Engine Coolant Reservoir
- 7 — Intercooler/Power Electronics Coolant Reservoir
- 8 — Battery Coolant Reservoir
- 9 — Engine Air Cleaner Filter

## VEHICLE MAINTENANCE

An authorized dealer has the qualified service personnel, special tools, and equipment to perform all service operations in an expert manner. Service Manuals are available which include detailed service information for your vehicle. Refer to these Service Manuals before attempting any procedure yourself.

### NOTE:

Intentional tampering with emissions control systems may void your warranty and could result in civil penalties being assessed against you.

### WARNING!

You can be badly injured working on or around a motor vehicle. Only do service work for which you have the knowledge and the proper equipment. If you have any doubt about your ability to perform a service job, take your vehicle to a competent mechanic.

## COOLING SYSTEM

### WARNING!

- Turn vehicle off and disconnect the fan motor lead before working near the radiator cooling fan.
- You or others can be badly burned by hot engine coolant (antifreeze) or steam from your radiator. If you see or hear steam coming from under the hood, do not open the hood until the radiator has had time to cool. Never open a cooling system pressure cap when the radiator or coolant bottle is hot.
- Do not put your hands, tools, clothing, and jewelry near the radiator cooling fan. The fan may start at any time, whether the ignition is on or off.



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Cooling Fan Warning Label

This vehicle is equipped with an electric cooling fan mounted behind the radiator that starts automatically, and may start at any time. Your vehicle may determine the fan needs to start and to run if vehicle coolant is too hot, or if the ambient air temperature is too high. Even after the vehicle is turned off, the fan may start without warning and run for several minutes. Be aware of this if you are working in the engine compartment. Always keep fingers and tools away from the fan blades.

The radiator fan and surrounding components must be serviced by an authorized dealer.

### Engine Coolant Checks

Check the engine coolant (antifreeze) protection every 12 months (before the onset of freezing weather, where applicable). If the engine coolant is dirty, the system should be drained, flushed, and refilled with fresh Organic Additive Technology (OAT) coolant (conforming to MS.90032) by an authorized dealer. Check the front of the A/C condenser for any accumulation of bugs, leaves, etc. If dirty, clean by gently spraying water from a garden hose vertically down the face of the condenser.

### NOTE:

If the engine coolant protection is changed, you must also adjust the coolant protection for the Electric/Battery Coolant systems → page 55.



Check the engine cooling system hoses for brittle rubber, cracking, tears, cuts, and tightness of the connection at the coolant recovery bottle and radiator. Inspect the entire system for leaks. **DO NOT REMOVE THE COOLANT PRESSURE CAP WHEN THE COOLING SYSTEM IS HOT.**

## Cooling System — Drain, Flush And Refill

### NOTE:

Some vehicles require special tools to add coolant properly. Failure to fill these systems properly could lead to severe internal engine or electrical system damage. If any coolant is needed to be added to the system please contact an authorized dealer.

If the engine coolant (antifreeze) is dirty or contains visible sediment, have an authorized dealer clean and flush with OAT coolant (conforming to MS.90032).

For proper maintenance intervals ⇨ page 50.

## Electric/Battery Coolant System

These coolant systems must be serviced by an authorized dealer. If the coolant level is below what is specified on the reservoir, contact an authorized dealer for service.

These systems require the use of high purity water, such as deionized, or distilled water, when mixing the water and coolant (antifreeze) solution. The use of lower quality water will reduce the amount of corrosion protection in the cooling systems. If the

coolant level of the battery coolant system is low, the Traction Battery Coolant Fluid Level Low Warning Light will be illuminated on the instrument cluster.

## Selection Of Coolant

For further information ⇨ page 65.

### NOTE:

- Mixing of engine coolant (antifreeze) other than specified Organic Additive Technology (OAT) engine coolant, may result in engine damage and may decrease corrosion protection. OAT engine coolant is different and should not be mixed with Hybrid Organic Additive Technology (HOAT) engine coolant or any “globally compatible” coolant. If a non-OAT engine coolant is introduced into the cooling system in an emergency, the cooling system will need to be drained, flushed, and refilled with fresh OAT coolant (conforming to MS.90032), by an authorized dealer as soon as possible.
- Do not use water alone or alcohol-based engine coolant products. Do not use additional rust inhibitors or antirust products, as they may not be compatible with the radiator engine coolant and may clog the radiator.
- This vehicle has not been designed for use with propylene glycol-based engine coolant. Use of propylene glycol-based engine coolant is not recommended.

- Some vehicles require special tools to add coolant properly. Failure to fill these systems properly could lead to severe internal engine damage. If any coolant is needed to be added to the system please contact an authorized dealer.

## Adding Coolant

Your vehicle has been built with an improved coolant (OAT coolant conforming to MS.90032) that allows extended maintenance intervals. This coolant (antifreeze) can be used up to ten years or 150,000 miles (240,000 km) before replacement. To prevent reducing this extended maintenance period, it is important that you use the same coolant (OAT coolant conforming to MS.90032) throughout the life of your vehicle.

Please review these recommendations for using Organic Additive Technology (OAT) coolant that meets the requirements of the manufacturer Material Standard MS.90032. When adding coolant:

- We recommend using Mopar® Antifreeze/Coolant 10 Year/150,000 Mile (240,000 km) Formula OAT that meets the requirements of the manufacturer Material Standard MS.90032.
- Mix a minimum solution of 50% OAT coolant that meets the requirements of the manufacturer Material Standard MS.90032 and deionized, or distilled water. Use higher concentrations (not to exceed 70%) if temperatures below  $-34^{\circ}\text{F}$  ( $-37^{\circ}\text{C}$ ) are anticipated.

**CAUTION!**

Use only high purity water such as deionized, or distilled water when mixing the water/ coolant (antifreeze) solution for the engine, battery or high voltage electronics cooling systems. The use of lower quality water will reduce the amount of corrosion protection in the engine cooling system.

Please note that it is the owner's responsibility to maintain the proper level of protection against freezing according to the temperatures occurring in the area where the vehicle is operated.

**NOTE:**

- Mixing coolant types is not recommended and can result in cooling system damage. If HOAT and OAT coolant are mixed in an emergency, have an authorized dealer drain, flush, and refill with OAT coolant (conforming to MS.90032) as soon as possible.
- Low pressure expansion bottles for power electronics and battery cooling require a special tool for removing the cap from the expansion bottle. For the battery coolant bottle, it is important to not add coolant if level is low. The vehicle should be taken to an authorized dealer for proper servicing of the battery coolant loop if this should occur.

**Cooling System Pressure Cap**

The cap must be fully tightened to prevent loss of engine coolant (antifreeze), and to ensure that engine coolant will return to the radiator from the coolant expansion bottle/recovery tank (if equipped).

The cap should be inspected and cleaned if there is any accumulation of foreign material on the sealing surfaces.

**WARNING!**

- Do not open a hot engine cooling system. Never add engine coolant (antifreeze) when the engine is overheated. Do not loosen or remove the cap to cool an overheated engine. Heat causes pressure to build up in the cooling system. To prevent scalding or injury, do not remove the pressure cap while the system is hot or under pressure.
- Do not use a pressure cap other than the one specified for your vehicle. Personal injury or engine damage may result.

**Disposal Of Used Coolant**

Used ethylene glycol-based coolant is a regulated substance requiring proper disposal. Check with your local authorities to determine the disposal rules for your community. To prevent ingestion by animals or children, do not store ethylene glycol-based coolant in open containers or allow it to remain in puddles on the ground, clean up any ground spills immediately. If ingested by a child or pet, seek emergency assistance immediately.

**Engine Coolant Level – 2.0L****WARNING!**

- Do not open a hot engine cooling system. Never add engine coolant (antifreeze) when the engine is overheated. Do not loosen or remove the cap to cool an overheated engine. Heat causes pressure to build up in the cooling system. To prevent scalding or injury, do not remove the pressure cap while the system is hot or under pressure.
- Do not use a pressure cap other than the one specified for your vehicle. Personal injury or engine damage may result.

With the engine OFF and cold, the level of the engine coolant should be within the OK range between the ADD and FULL range on the dipstick.

1. Remove the cap with level dipstick from the engine coolant bottle.
2. Clean off the coolant from the dipstick.
3. Rest the cap on the opening of the coolant bottle without tightening the cap.
4. Remove the cap with dipstick and check the coolant level on the dipstick.

The radiator normally remains completely full, so there is no need to remove the radiator/coolant pressure cap unless checking for engine coolant freeze point or replacing coolant. Advise your service attendant of this. As long as the engine operating temperature is satisfactory, the coolant bottle need only be checked once a month.

When additional engine coolant is needed to maintain the proper level, only OAT coolant that meets the requirements of the manufacturer Material Standard MS.90032 should be added to the coolant bottle. Do not overfill.

## Cooling System Notes

### NOTE:

When the vehicle is stopped after a few miles/kilometers of operation, you may observe vapor coming from the front of the engine compartment. This is normally a result of moisture from rain, snow, or high humidity accumulating on the radiator and being vaporized when the thermostat opens, allowing hot engine coolant (antifreeze) to enter the radiator.

If an examination of the engine compartment shows no evidence of radiator or hose leaks, the vehicle may be safely driven. The vapor will soon dissipate.

- Do not overfill the coolant expansion bottle.
- Check the coolant freeze point in the radiator and in the coolant expansion bottle. If engine coolant needs to be added, the contents of the coolant expansion bottle must also be protected against freezing.
- If frequent engine coolant additions are required, the cooling system should be pressure tested for leaks.
- Maintain coolant concentration at a minimum of 50% OAT coolant (conforming to MS.90032) and deionized, or distilled water.
- Use only high purity water such as deionized, or distilled water when mixing the water/coolant solution for the engine, battery or high voltage

electronics cooling systems. The use of lower quality water will reduce the amount of corrosion protection in the cooling system.

- Make sure that the coolant expansion bottle overflow hoses are not kinked or obstructed.
- Keep the front of the radiator clean. If your vehicle is equipped with air conditioning, keep the front of the condenser clean.
- Do not change the thermostat for Summer or Winter operation. If replacement is ever necessary, install ONLY the correct type thermostat. Other designs may result in unsatisfactory factory engine cooling performance, poor gas mileage, and increased emissions.
- The coolant freeze point in the battery and power electronics loop should be checked by an authorized dealer as a special tool is required to remove the cap from those expansion bottles.
- Electric/Battery coolant system must be serviced by an authorized dealer. If the coolant level is below what is specified on the reservoir, contact an authorized dealer for service. These systems require the use of high purity water such as deionized, or distilled water when mixing the water and coolant solution. The use of lower quality water will reduce the amount of corrosion protection in the cooling systems.

## FUSES

### General Information

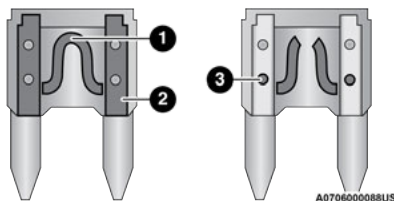
#### WARNING!

- When replacing a blown fuse, always use an appropriate replacement fuse with the same amp rating as the original fuse. Never replace a fuse with another fuse of higher amp rating. The use of a fuse with a rating other than indicated may result in a dangerous electrical system overload. If a properly rated fuse continues to blow, it indicates a problem in the circuit that must be corrected. Never replace a blown fuse with metal wires or any other material. Do not place a fuse inside a circuit breaker cavity or vice versa. Failure to use proper fuses may result in serious personal injury, fire and/or property damage.
- Before replacing a fuse, make sure that the ignition is off and that all the other services are switched off and/or disengaged.
- If the replaced fuse blows again, contact an authorized dealer.
- If a general protection fuse for safety systems (air bag system, braking system), power unit systems (engine system, transmission system) or steering system blows, contact an authorized dealer.

The fuses protect electrical systems against excessive current.

When a device does not work, you must check the fuse element inside the blade fuse for a break/melt.

Also, please be aware that using power outlets for extended periods of time with the engine off may result in vehicle battery discharge.



**Blade Fuses**

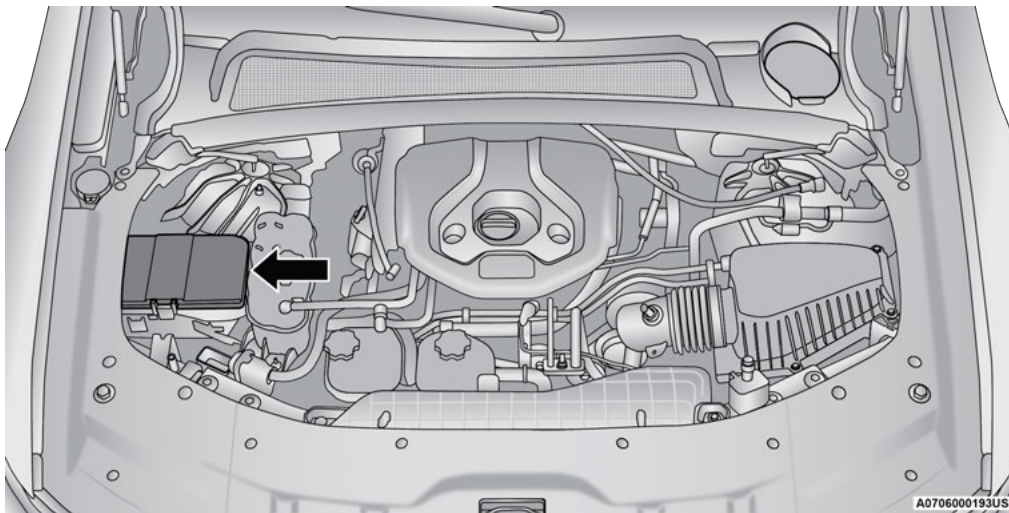
- 1 – Fuse Element
- 2 – Blade Fuse with a good/functional fuse element
- 3 – Blade fuse with a bad/not functional fuse element (blown fuse)

### Underhood Fuses

The Power Distribution Center (PDC) is located on the passenger side of the engine compartment, behind the headlamp. This center contains cartridge fuses, micro fuses, relays, and circuit breakers. A description of each fuse and component may be stamped on the inside cover, otherwise the cavity number of each fuse is stamped on the inside cover that corresponds to the following chart.

#### CAUTION!

When installing the power distribution center cover, it is important to ensure the cover is properly positioned and fully latched. Failure to do so may allow water to get into the power distribution center and possibly result in an electrical system failure.



### Power Distribution Center

See your owner's manual for a complete list of fuses.

**NOTE:**

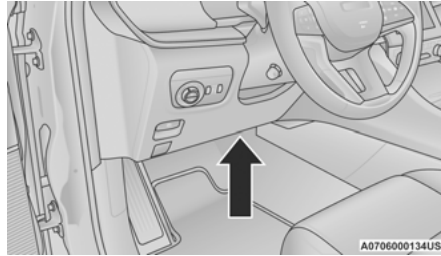
Fuses for safety systems must be serviced by an authorized dealer.

Cavity	Cartridge Fuse	Micro Fuse	Description
F01		Shunt	IDCM - DC Converter
F23A	-	10 Amp Red	Mod PIM PHEV

Cavity	Cartridge Fuse	Micro Fuse	Description
F55	-	15 Amp Blue	BPCM
F76	-	5 Amp Tan	IDCM
F79	-	10 Amp Red	FTIV All PHEV
F83	-	40 Amp Green	Trans Oil Pump
F94	-	10 Amp Red	Electric Chiller Valve
F95	-	10 Amp Red	Battery Cooler Heater
F96	-	5 Amp Tan	HV Electric Coolant Heater
F104A	-	15 Amp Blue	PECB Enable PHEV
F104B	-		High Temp Aux Pump / AHP Enable
F105A	-	15 Amp Blue	Low Temp Act Pump / BCP Enable
F105B	-		PECP-2 PHEV

## Interior Power Distribution Center

The Interior Power Distribution Center is located underneath the steering column on the driver's side of the vehicle. This center contains cartridge fuses, micro fuses, relays, and circuit breakers. Fuse numbers are labeled next to each fuse cavity, fuse descriptions correspond with the following chart.



**Interior PDC Location**

### NOTE:

Fuses for safety systems must be serviced by an authorized dealer.

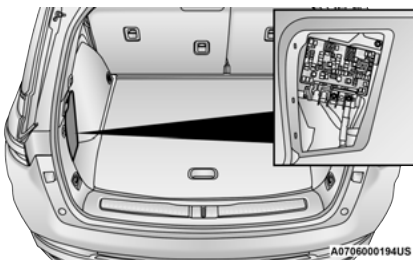
Cavity	Cartridge Fuse	Micro Fuse	Description
F08	-	15 Amp Blue	SW PHEV E-drive Mode
F11	-	5 Amp Tan	Electric AC Compressor (IOD) / Battery Charge Indicator / Charge Port Indicator (CPIM)

## Rear Power Distribution Center

The Rear Power Distribution Center is located under the left rear quarter trim panel in the rear cargo area. This center contains cartridge fuses, micro fuses, relays, and circuit breakers. The following chart corresponds to the fuses inside.

### NOTE:

Fuses for safety systems must be serviced by an authorized dealer.



**Rear Power Distribution Center Location**

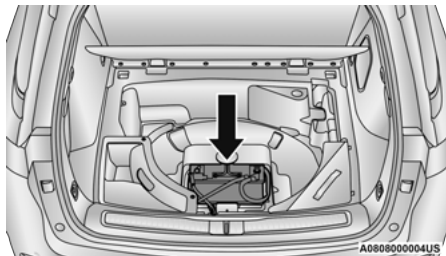
Cavity	Cartridge Fuse	Micro Fuse	Description
F15A	-	10 Amp Red	Pwr Inverter Mod (PIM) – Redundant Main Pwr Supply
F19A	-	10 Amp Red	Mod PIM
F19B	-		Quiet Vehicle Pedestrian Mod (QVPM)
F47	20 Amp Yellow	-	PIM – Park PAWL Motor
F85	-	15 Amp Blue	Power Inverter Mod (PIM) – Main Power Supply



## STORING THE VEHICLE

If the vehicle should remain stationary for more than a month, observe the following precautions:

- Park your vehicle in a covered, dry and possibly airy location with the windows open slightly.
- Check that the parking brake is not engaged.
- Disconnect the negative (-) terminal from the battery post and be sure that the battery is fully charged. During storage check battery charge quarterly. The 12 Volt battery is located in the rear of the vehicle underneath the spare tire.



**12 Volt Battery Location**

### NOTE:

Disconnecting the 12 Volt battery will prevent the High Voltage (HV) battery from accepting a charge from the Electric Vehicle Supply Equipment (EVSE). Also, the vehicle will not condition the HV battery (if needed and connected to a powered EVSE). If the HV battery is not able to condition itself and it becomes cold enough (or hot enough), the vehicle will not start until the HV battery's cell temperatures are between -22° F (-30° C) and 122° F (50° C).

- If you do not disconnect the battery from the electrical system, check the battery charge every 30 days.
- Whenever you leave the vehicle stationary for two weeks or more, idle the vehicle for approximately five minutes, with the air conditioning system on and high fan speed. This will ensure proper lubrication of the system, thus minimizing the possibility of damage to the compressor when the vehicle is put back into operation.
- Plug in the vehicle when not using it whenever possible.

### NOTE:

The hybrid has a feature of periodic wake-up that occurs every three weeks. This feature charges the 12 Volt battery from the HV battery. This will happen as long as the HV battery remains above the minimum state of charge ↪ page 43.

### CAUTION!

Before removal of the positive and negative terminals to the battery, wait at least a minute with ignition switch in the OFF position and close the driver's door. When reconnecting the positive and negative terminals to the battery be sure the ignition switch is in the OFF position and the driver's door is closed.

# TECHNICAL SPECIFICATIONS

## FUEL REQUIREMENTS

While operating on gasoline with the required octane number, hearing a light knocking sound from the engine is not a cause for concern. However, if the engine is heard making a heavy knocking sound, see a dealer immediately. Use of gasoline with an octane number lower than recommended can cause engine failure and may void the New Vehicle Limited Warranty.

### 2.0L HYBRID ENGINE

This engine is designed to meet all emission requirements, and provide satisfactory fuel economy and performance, when using high-quality unleaded regular gasoline having an octane rating of 87, as specified by the (R+M)/2 method. The use of 91 or higher octane premium gasoline will allow these engines to operate to optimal performance. This increase in performance is most noticeable in hot weather or under heavy load conditions, such as while towing.

## FLUID CAPACITIES

	US	Metric
<b>Fuel (Approximate)</b>		
2.0L Engine	19 Gallons	71.9 Liters
<b>Engine Oil With Filter</b>		
2.0L Engine	5 Quarts	4.7 Liters
<b>Cooling System *</b>		
2.0L Engine	10.9 Quarts	10.3 Liters
2.0L Engine Intercooler/Power Electronics Coolant (Contact an authorized dealer for service)	6 Quarts	5.7 Liters
Battery Coolant (Contact an authorized dealer for service)	6.4 Quarts	6.1 Liters
* Includes heater and coolant recovery bottle filled to MAX level.		

## ENGINE FLUIDS AND LUBRICANTS

Component	Fluid, Lubricant, or Genuine Part
Engine, Intercooler, Power Electric and Battery Coolant	We recommend using Mopar® Antifreeze/Coolant 10 Year/150,000 Mile (240,000 km) Formula OAT (Organic Additive Technology) meeting the requirements of the manufacturer Material Standard MS.90032.
Engine Oil – 2.0L Engine	We recommend using Mopar® API SP/GF-6A Certified SAE 5W-30 Full Synthetic Engine Oil which meets the requirements of the manufacturer Material Standard MS-13340. Equivalent full synthetic SAE 5W-30 engine oil can be used if it meets API SP/GF-6A Certification. If API SP/GF-6A or equivalent oil is unavailable then please contact a local dealership for recommendation.
	<p><b>CAUTION!</b></p> <p><b>Failure to use the recommended API SP/GF-6A or equivalent oil can cause engine damage not covered by the vehicle warranty.</b></p>
Engine Oil Filter	We recommend using a Mopar® Engine Oil Filter. If a Mopar® Engine Oil Filter is unavailable only use filters that meet or exceed SAE/USCAR-36 Filter Performance Requirements.
Fuel Selection – 2.0L Engine	87 Octane (R+M)/2 Method, 0-15% Ethanol.

## GENERAL INFORMATION

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

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

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

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

1. l'appareil ne doit pas produire de brouillage, et
2. l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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

1. es posible que este equipo o dispositivo no cause interferencia perjudicial y

2. este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

### NOTE:

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

This unit complies with ICES-003E of Innovation, Science, and Economic Development (ISED) Canada, and EMC Directive 2004/108/EC.

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