Charging

Before Charging

Check the following items before you start charging your vehicle.

■ Safety Checklist

- Make sure to use a dedicated and properly grounded circuit, that is rated for at least 15 amps.
 - ► Have an electrician inspect the outlet you are using to see if it meets these criteria.
- Make sure you plug the charging cable directly into the wall outlet dedicated to vehicle charging.
 - ▶ Do not use extension cords, adaptors, or multi-outlet plugs between the charging cable and the outlet.
- Make sure the charging cable is fully uncoiled before use.
- Make sure the control box, charging connector, and charging cable are free from any damage, including cracks or frays.
 - ▶ If you find any damage to the devices, contact a dealer.
- Make sure the charging connector and inlet are clean.
 - If you find any contamination or foreign object in the connector or inlet, contact a dealer.
- Make sure the charging cable is dry.
 - Check that there is no water in the immediate area, and that your hands are dry.

Note: Outlet needs to be in good shape. Worn or damaged outlet will not make good contact with the plug. Ensure that the plug is fully inserted and does not come out of the outlet after installation. A loose connection will cause excessive heat build up within the plug and damage it.

○ Charging
 ○

AWARNING

Using a 120 volt wall outlet that is rated less than 15 amps or one that is powering other devices can cause a fire, seriously injuring you or others.

When using the 120 volt charger, use a dedicated and properly grounded circuit rated 15 amps or more. Consult an electrician if you are not sure.

Charge the High Voltage battery using a Level 1 or 2 charger

There are two ways to charge the High Voltage battery; by using the Level 1 120 volt (15 amp) charger supplied with the vehicle plugged into a standard three-prong wall outlet, or by using a professionally installed Level 2 240 volt (32 amp) charger.

Charging with	Suggested full charging time
AC 240 V (Level 2)	2.5 hours*1
AC 120 V (Level 1)	12 hours*1

^{*1:}Charging time varies depending on conditions, such as the remaining battery level and the ambient temperature.

The suggested full charging time in this table indicates the hours it may likely take for the High Voltage battery to be fully charged.

○ Charging

AWARNING

Improper usage and handling of the 120 volt charger can cause a fire, seriously injuring you or others.

- Always insert the plug fully into a properly rated and grounded the wall outlet.
- Plug the charging cable directly to the wall outlet. Do not use extension cords or multi-plug adapters.
- Prevent the vehicle charging connector from becoming contaminated. Clean if necessary.







Canadian models

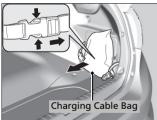
When the battery warming system is activated, the battery may take longer to charge.

When the 12-volt battery is disconnected, vehicle charging is not possible. After reconnecting the battery, turn the power system on, then turn it off. Confirm that charging is possible.

■ How to Charge (Level 1)



1. Put the transmission into P and set the power mode to OFF.



- Press and hold the lid open button on the remote transmitter, or press and hold the charge lid release button on the dashboard.
 - ► The lid opens.
 - ► The illumination lamp inside the charge lid comes on for a few minutes.
- 3. Open the trunk, and remove the bag.
- **4.** Open the bag, and take the charging cable out.
 - Do not tie or coil the cable when in use.

○ Charging
 ○

AWARNING

Charging the High Voltage battery under the following conditions is a potential source of electric shock and fire, which can result in serious injury or death:

- Charging the battery during an electric storm.
- Using the charging cable near water or handling with wet hands.
- Using a charger, whose case is broken or cracked or whose cable is frayed or damaged.

Never charge the vehicle in any of the above situations.

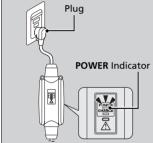
AWARNING

Using a charger that is damaged or modified can cause electrical shock and fire, which can result in serious injury or death.

Never disassemble or modify the charger. If the charger becomes damaged, stop using it and consult a dealer.



5. Open the vehicle's charge lid.



Charge Indicator

Charging Connector

- **6.** Insert the plug into a 120 volt wall outlet. ▶ Insert the plug completely until it stops.
- **7.** Check that the **POWER** indicator on the control box comes on.

- 8. Remove the cover from the charging connector. Align and insert the charging connector into the vehicle's inlet until you hear a click.
 - ► The charge indicator stops blinking, and stays on when charging starts.

○ Charging ○

NOTICE

Do not charge the vehicle with a vehicle cover on. It can cause a malfunction and damage the vehicle or charging components.

The 120 volt charger requires a properly grounded and dedicated 15 amp or greater circuit. For more information consult a dealer.

We recommend that a GFCI (ground-fault circuit interrupter) protected outlet be used to charge the vehicle. Follow the GFCI maker's installation instructions, or consult an electrician if you are not sure about installation requirements.

Inspect the charging cable plug and charging connector, as well as the vehicle's charge inlet, before use. If the plug or connector are dirty or otherwise contaminated, carefully clean them with a dry clean cloth before use. Do not wipe the metal part of the inlet and the charging connector. Also, if you are unable to clean the plug or connector, if the inlet is dirty, or if any are damaged or corroded, take the charging cable and vehicle to a dealer for inspection and possible repair.



■ When charging is completed

Press the release button on the charging connector to disengage it from the inlet.

The charge indicator goes off once charging is completed.

○ Charging ○

Before using a vehicle charging cable, inspect the cable for damage such as scratches, cracks, or tears. If you find any damage, do not use the charging cable; instead, take it to a dealer for inspection.

If a blackout or other electrical interruption occurs during vehicle charging, the vehicle will automatically resume charging once power is restored.

If available, use a 240 V AC level 2 charger. Using a level 2 charger takes less time than using a level 1 120 V AC charger.

If the ambient air is cold enough to lower the High Voltage battery temperature below -22F° (-30°C), charging may not start.

■ How to Charge (Level 2)



- Stop your vehicle at a station specified for electric vehicles. Park with the charge lid closest to the charge plug, just in front of the driver's door.
- **2.** Put the transmission into **P**.
- **3.** Turn off the power system.
- **4.** Press and hold the charge lid release button.
 - ► The lid opens.

The illumination lamp inside the charge lid comes on for a few minutes.

○ Charge the High Voltage battery using a Level 1 or 2 charger

The High Voltage battery may not be charged even if the charging connector is properly connected to the vehicle's inlet when the charging timer is set but the timer has not yet started.

To avoid damage to the charger, take these precautions:

- Do not hit the charging connector components with a hard object or drop them on the ground.
- Do not pull, twist, tangle, drag or step on the charging cable.
- Do not use or store near any sources of heat.
- Do not expose to liquids or use harsh chemicals to clean.

If you unplug the charging connector from the inlet, charging cancels automatically.

The charge speed slows down towards the completion of the battery charging. When the High Voltage battery temperature is low, the charge speed may slow or it may not be fully charged.







5. Open the vehicle's charge lid.

- **6.** To connect the cable to the vehicle, push the cable's charging connector until it clicks to the charge lid.
 - ➤ The charge indicator on the charge lid stays on.

■ When charging is completed

Press the release button on the charging connector to disengage it from the inlet.

The charge indicator goes off once charging is completed.

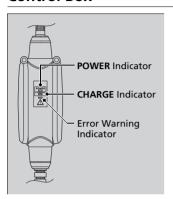
≥ How to Charge (Level 2)

The charge lid can be opened by remote transmitter.

The High Voltage battery may not be charged even if the charge connector is properly connected to the vehicle's inlet when the charging timer is set but the timer has not yet started.

Be sure to follow the instructions and safety precautions provided with the Level 2 charging equipment.

Control Box



Vehicle	Control Bo	x LED Statu	s Indicator	Charge	Explanatory notes Goes off Stays on			
Status	POWER	CHARGE		Indicator		Goes off	○ Stays on	- <u>C</u> Blinking
Initializing	0	•	•	•	Initial processing			
Stand by	0	•	•	- <u></u> Slowly	Ready and waiting for th	ne timer		
Charge	0	0	•	0	Comes on during charge	e.		
Completion	0	•	•	•	Charge end			

Vehicle	Control Bo	x LED Statu	ıs Indicator	Charge	
Status	POWER	CHARGE	⚠ (Error Warning)	Indicator	Explanatory notes • Goes off • Stays on • Allinking
Plug temperature rise detected	` Œ	● or <u>;</u>	•	0	A rise in plug temperature due to bad electrical contact between the outlet and the plug was detected. Check the connection between the outlet and the plug. Charging is carried out with a limited charging current.
Fault	Except above lighting patterns			O or ● or	There could be a problem with the electric supply or an internal failure. Contact a dealer. You don't have to charge before contacting the dealer.

■ What to do when you cannot start charging

If charging does not start, even if the **POWER** indicator comes on, and the charging connector is plugged in, perform one of the following solutions.

Cause	Solution
The timer has been set, but the start time is in the future.	Start charging using the smart entry remote. Press and hold the charge lid release button on the smart entry remote. ▶ The charge indicator on the charge lid comes on when charging starts.
	Change the customized setting of the charge timer to OFF using the driver information interface. ▶ The timer setting will be canceled.
The 12-volt battery is weak.	Check the 12-volt battery condition. If necessary, charge the battery.
The power mode is ON.	Set the power mode to ACCESSORY or VEHICLE OFF (LOCK).
The charging connector is not properly attached to the vehicle's inlet.	Disengage the connector from the inlet. Align and insert the connector into the inlet until you hear a click.

Note: The charging equipment provided with this vehicle has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

■ Charge Indicator on the Vehicle Side



Shows the High Voltage battery charging status.

If it blinks for a while, then stays on after the charge connector is plugged in, it indicates that the battery is being charged.

Indicator status	Explanation
Blinks slowly	 The charger is ready to charge the battery. Charging is programmed to start using the timer. ▶ The indicator goes off after about 15 seconds. The power mode is set to ON while the battery is being charged.
Stays on	The battery is being charged.
Goes off	Charging is complete.
Canadian models Blinks once after staying on for a few seconds.	 The battery has been fully charged and the battery heating system has been activated.
Blinks rapidly	 When the 12-volt battery is disconnected. After reconnecting the battery, turn the power system on, then turn it off. The charging connector is replugged in. Confirm that charging is possible. There is a problem with the charging system. The indicator goes off after 15 seconds. Charging does not start.

High Voltage Battery

The High Voltage battery gradually discharges even if the vehicle is not in use. As a result, if your vehicle is parked for an extended period of time, the battery level may get low. Keeping your vehicle's battery level low can shorten the battery life. To maintain the battery while the vehicle is not in use, recharge the battery at least once every three months.

The High Voltage battery life can also be affected by ambient temperature. In particular, when it is cold outside, the vehicle's driving range on electric power can be reduced, and a longer battery charging time is required. In addition, parking in extremely hot or cold environments can accelerate battery drain.

To help extend the lifespan of the battery, it is recommended that you fully charge the battery each time prior to driving.

U.S. models

Store the vehicle in a garage to insure that the temperature of the High Voltage battery does not drop too low.

Canadian models

■ Battery Warming System

Designed to prevent the temperature of the battery from dropping when outside temperatures drop, thereby maintaining starting and running efficiency. If the vehicle is plugged in when outside temperatures are low, the battery warming system will use the power from the charging equipment to maintain the temperature of the battery until the next time the vehicle is driven.

The High Voltage battery drains over time, and under some conditions, drains faster. When the battery life is shortened, this changes the vehicle's driving distance.

Be careful not to let the High Voltage battery drain too much. If the battery level becomes close to zero, it will make it impossible to start the engine.

■ Battery Warming System

If the vehicle is left unplugged in cold temperatures, the temperature of the battery will drop, possibly resulting in a loss of running efficiency. If left for an extended period of time in extremely cold temperatures, the vehicle may not start. We recommend that you plug in your vehicle when you are parking or storing your vehicle in cold temperatures.

Using a Timer

You can set the timer for the High Voltage battery charge using the driver information interface's customization feature.

The vehicle automatically begins charging at the scheduled time when the charging connector is connected to the vehicle.

■ Driver Information Interface



1. Press the (display/information) button and press or until Vehicle Settings appears on the display, then press the ENTER button.



2. Select Charge Timer Setup, then press the ENTER button.

■Using a Timer

Canadian models

When the battery warming system is activated, it may not sufficiently charge within the charging period that you have set.

Driver Information Interface

Timer: Select ON or OFF.

Mode: When **Timer** is **ON**, select the charging

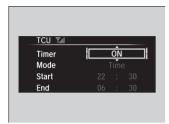
mode, **Full** or **Time**.

Full: Charging will continue until the battery is fully charged.

Time: The battery will be charged between the time you have designated to start and end.

Start: Set the time when to start the High Voltage battery charge.

End: Set the time when to end the High Voltage battery charging. You cannot set this when the **Full** mode is selected.



- **3.** Press the **ENTER** button to select the item you want to set.
- **4.** Press the ▲/▼ button to select when to start and end the charging, and the charging mode.
- **5.** Press the **ENTER** button again.