

# JUMP STARTING

If your vehicle has a discharged battery, it can be jump started using a set of jumper cables and a battery in another vehicle, or by using a portable battery booster pack. Jump starting can be dangerous if done improperly, so please follow the procedures in this section carefully.

## WARNING:

Do not attempt jump starting if the battery is frozen. It could rupture or explode and cause personal injury.

## CAUTION:

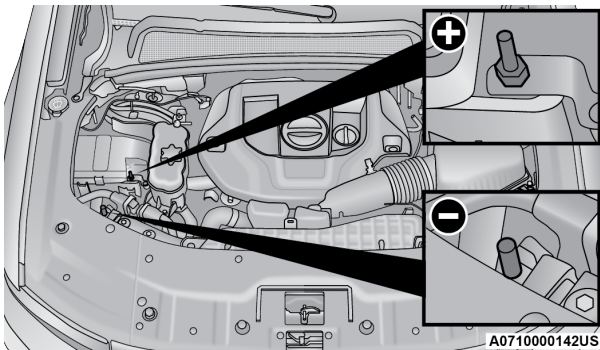
**Do not use a portable battery booster pack or any other booster source with a system voltage greater than 12 Volts or damage to the battery, starter motor, alternator or electrical system may occur.**

## Note:

When using a portable battery booster pack, follow the manufacturer's operating instructions and precautions.

## Preparations For Jump Start

The battery in your vehicle is located under the driver's front seat. There are remote terminals located under the hood to assist in jump starting.



### Jump Starting Posts

Remote Positive (+) Post
Remote Negative (-) Post

## Note:

The remote battery posts are viewed by standing on the right side of the vehicle looking over the fender. The positive battery post may be covered with a protective cap. Lift up on the cap to gain access to the positive battery post. Do not jump off fuses. Only jump directly off positive post which has a positive (+) symbol on or around the post.

See the following steps to prepare for jump starting:

1. Apply the parking brake, shift the automatic transmission into PARK (P) and turn the ignition OFF.
2. Turn off the heater, radio, and all electrical accessories.
3. If using another vehicle to jump start the battery, park the vehicle within the jumper cables' reach, apply the parking brake and make sure the ignition is OFF.

## Note:

Be sure that the disconnected cable ends do not touch each other, or either vehicle, until properly connected for jump starting.

**WARNING:**

Do not allow vehicles to touch each other as this could establish a ground connection and personal injury could result.

**WARNING:**

- Take care to avoid the radiator cooling fan whenever the hood is raised. It can start anytime the ignition switch is ON. You can be injured by moving fan blades.
- Remove any metal jewelry such as rings, watch bands and bracelets that could make an inadvertent electrical contact. You could be seriously injured.
- Batteries contain sulfuric acid that can burn your skin or eyes and generate hydrogen gas which is flammable and explosive. Keep open flames or sparks away from the battery.

## Jump Starting Procedure

**WARNING:**

Failure to follow this jump starting procedure could result in personal injury or property damage due to battery explosion.

**CAUTION:**

**Failure to follow these procedures could result in damage to the charging system of the booster vehicle or the discharged vehicle.**

**Note:**

Make sure at all times that unused ends of jumper cables are not contacting each other or either vehicle while making connections.

### Connecting The Jumper Cables

1. Connect the positive (+) end of the jumper cable to the remote positive (+) post of the discharged vehicle.
2. Connect the opposite end of the positive (+) jumper cable to the positive (+) post of the booster battery.
3. Connect the negative (-) end of the jumper cable to the negative (-) post of the booster battery.
4. Connect the opposite end of the negative (-) jumper cable to the remote negative (-) post (exposed metallic/unpainted post of the discharge vehicle) located directly in front of the underhood fuse box.

**WARNING:**

Do not connect the jumper cable to the negative (-) post of the discharged battery. The resulting electrical spark could cause the battery to explode and could result in personal injury.

5. Start the engine in the vehicle that has the booster battery, let the engine idle a few minutes, and then start the engine in the vehicle with the discharged battery.

**CAUTION:**

**Do not run the booster vehicle engine above 2,000 RPM since it provides no charging benefit, wastes fuel, and can damage booster vehicle engine.**

6. Once the engine is started, follow the disconnecting procedure.

### Disconnecting The Jumper Cables

1. Disconnect the negative (-) end of the jumper cable from the remote negative (-) post of the discharged vehicle.
2. Disconnect the opposite end of the negative (-) jumper cable from the negative (-) post of the booster battery.
3. Disconnect the positive (+) end of the jumper cable from the positive (+) post of the booster battery.

4. Disconnect the opposite end of the positive (+) jumper cable from the remote positive (+) post of the discharged vehicle.
5. Reinstall the protective cover over the remote positive (+) post of the discharged vehicle.

If frequent jump starting is required to start your vehicle have the battery and charging system tested at an authorized dealer.

**CAUTION:**

**Accessories plugged into the vehicle power outlets draw power from the vehicle's battery, even when not in use (i.e., cellular devices, etc.). Eventually, if plugged in long enough without engine operation, the vehicle's battery will discharge sufficiently to degrade battery life and/or prevent the engine from starting.**

## 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. Only a qualified service technician should access the high voltage battery service disconnect.

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.
- 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.
- 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.