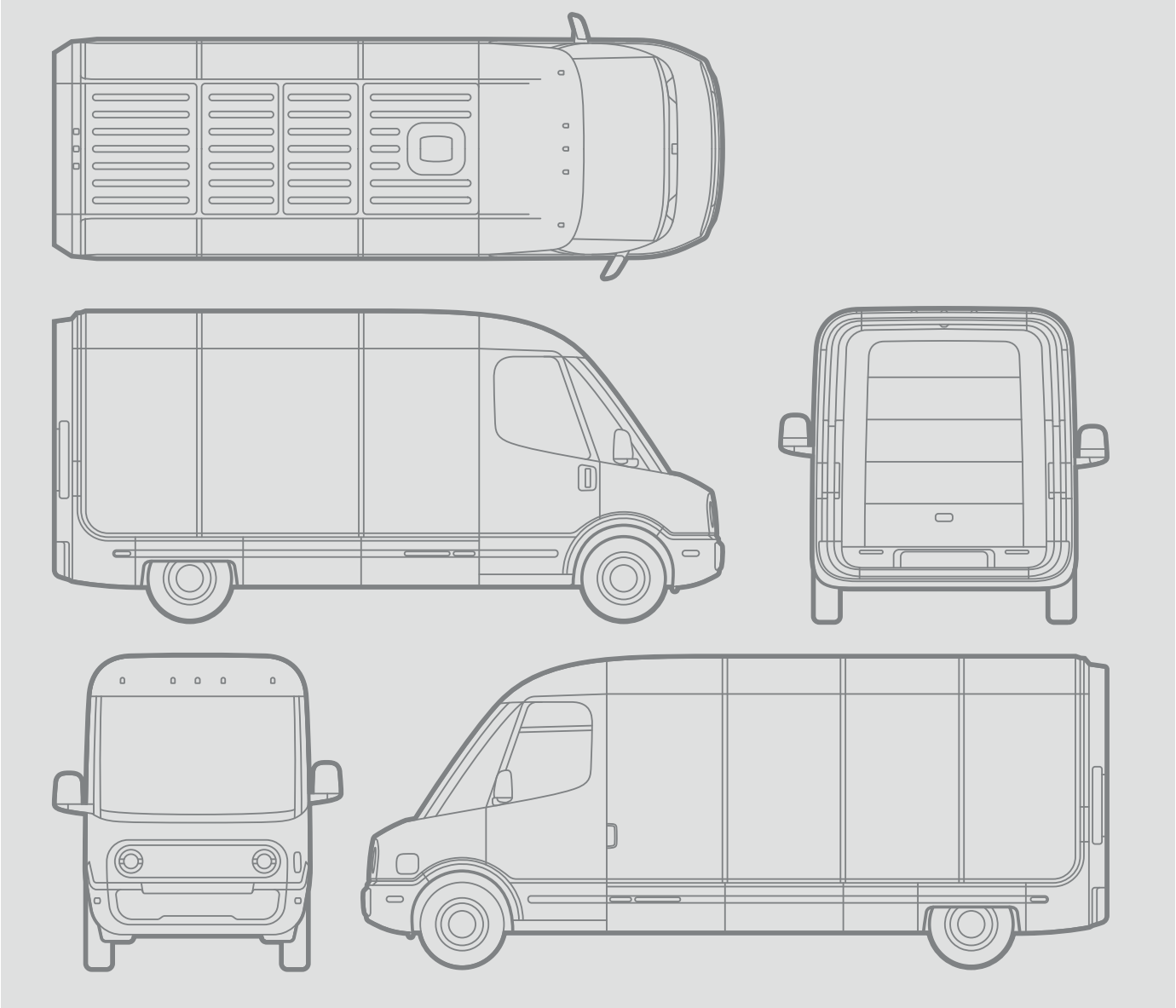
RIVIAN

September 2024

Electric Delivery Van + Rivian Commercial Van

Emergency Response Guide



The images provided in this document are for illustrative purposes only. Depending on the product details and market region, the information in this document may appear slightly different from your product.

Contents

Summary

This Emergency Response Guide provides information and suggested best practices for mitigating an emergency with a Rivian electric vehicle.

RISKS: Fire, Electrocution, and Inhalation Hazards

- High-voltage lithium-ion battery fires in electric vehicles differ from gasoline fires because of the chemical reaction in the battery and high-voltage electricity. Both types of fires can be very dangerous, but an electric fire may present different risks. As in gasoline vehicle fires, inhalation hazards exist from combustion byproducts such as toxic and/or flammable gases.
- Always wear personal protective equipment (PPE), including a self-contained breathing apparatus (SCBA), and use the right tools.

First Secure the Vehicle and Disconnect High Voltage

- Make sure the vehicle is parked and secured from rolling. Stabilize the vehicle if it's not upright or is on an unstable surface.
- Disconnect the high-voltage by severing either low-voltage cut loop to disconnect the battery from the vehicle.

Avoid Electrocution

- Certain locations on the vehicle are unsafe to cut during a rescue operation/extrication.
- De-energize the electric circuit or disconnect any damaged or burning vehicle that is connected to a charger.

Considerations During a Rescue Operation/Extrication

- Some high-strength steel components may require special equipment.
- Beware of pressurized components that could rupture, fail, or suddenly release during a fire.

Be Careful When Moving or Storing a Vehicle

- Use caution when lifting the vehicle or working with submerged vehicles.
- Tow Rivian electric vehicles on a flatbed only.
- After the fire is extinguished, store the vehicle away from other vehicles and buildings.

Avoid High-Voltage Dangers

Note the following instructions for avoiding high-voltage dangers when responding to an emergency involving a Rivian vehicle:

- The vehicle is designed to isolate and disable the high-voltage system in a crash. However, not all crashes will disable the high-voltage system. The battery pack remains high voltage. Always assume the vehicle is energized and that high voltage is active.
- Never cut or damage the Do Not Cut locations on the vehicle.
- Never touch or let tools come in contact with orange high-voltage cables.
- Don't touch any other exposed electrical parts and cables until high voltage has been disabled.
- Don't touch any exposed high-voltage battery parts or components.
- Use a high-voltage insulated tool when cutting the cut loop, if possible.
- Wear personal protective equipment (PPE) and rubber insulating gloves (class 0) with protectors.

Recommended Tools for Rivian Vehicle First Responders

You will need the following tools to respond to an emergency related to a Rivian vehicle:

- Rubber insulating gloves (class 0) with protectors
- Personal protective equipment
- Wheel chocks (or large blocks of wood)
- Metal circular saw
- Hydraulic cutter
- Hydraulic spreader
- Thermal imaging camera
- Halligan bar
- Insulated cable cutter
- Rescue stabilization jacks

Identify the Rivian Electric Delivery Van and Rivian Commercial Van

This guide covers the Electric Delivery Van 500 and 700 and the Rivian Commercial Van 500. The 700 is longer and wider than the 500 and has greater capacity. Both size vehicles are shown below (700 on top). For simplicity, images of the 500 are used throughout this guide to represent both size variants.

Electric Delivery Vans are part of the Amazon fleet and are painted in Amazon blue. RIvian Commercial Vans are part of various fleets and are painted in different colors, but all vans are the same otherwise, with minor differences not related to handling rescues or battery fires.

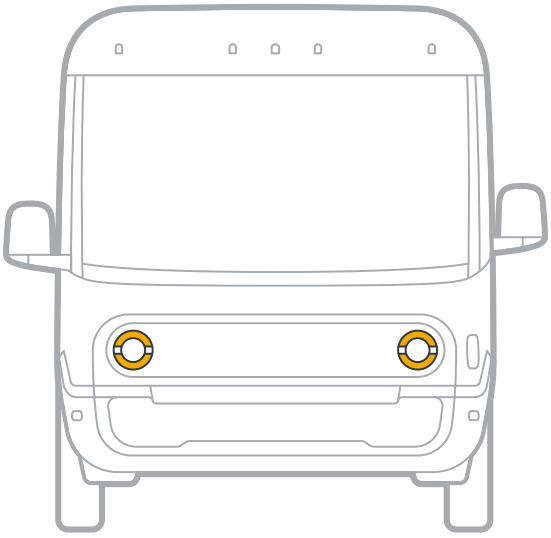
Identify an Electric Delivery Van or Rivian Commercial Van by these features:

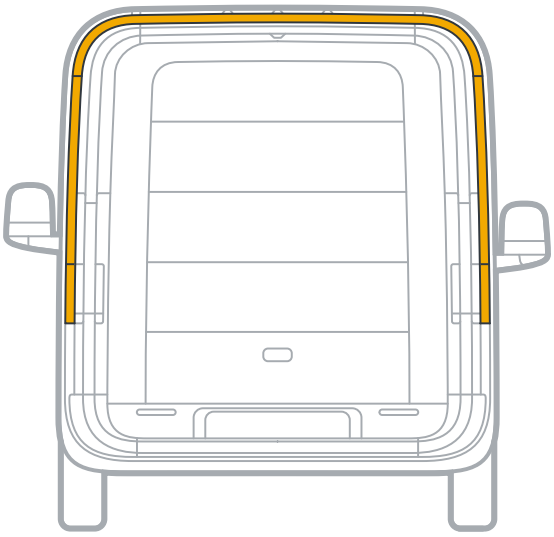
Front

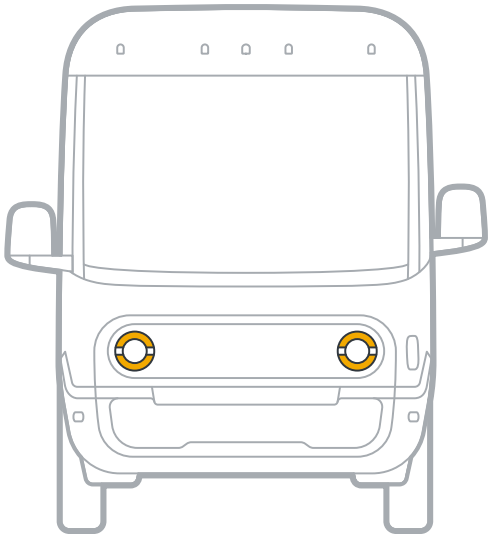
- Round daytime running lights/parking lights

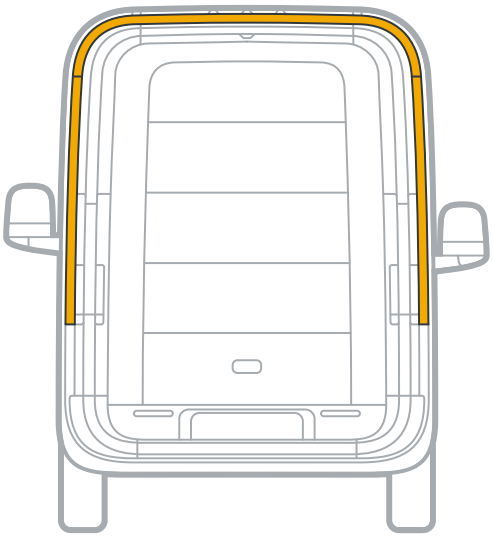
Rear

- Supplemental tail lamps



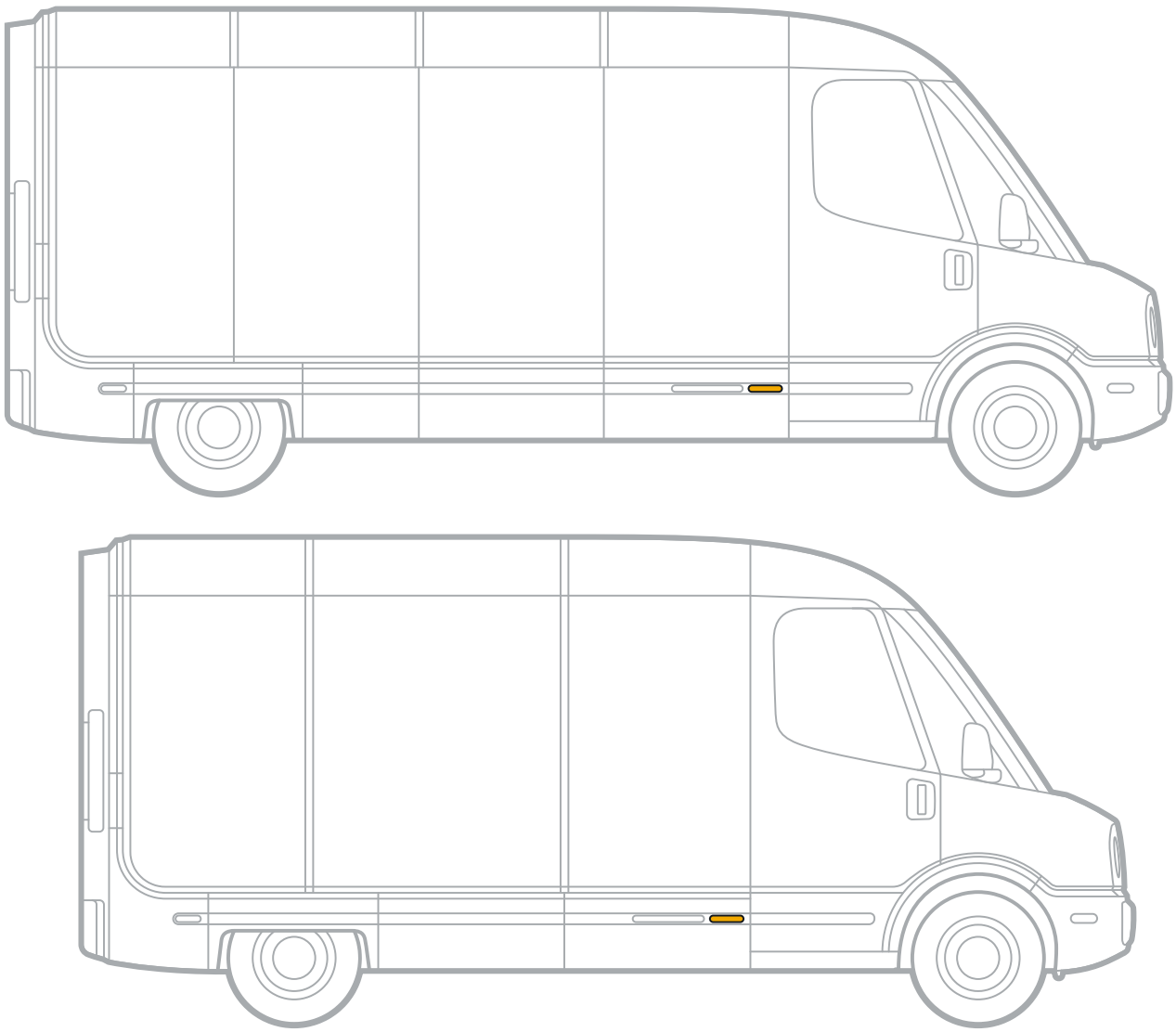






Side

- Rivian name on panel behind door



Secure the Vehicle

In an emergency, always chock the wheels, put the vehicle in **P** (Park), and stabilize the vehicle.

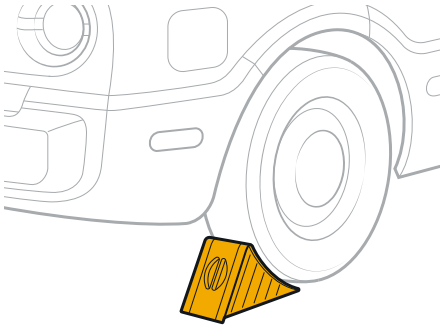
Rivian recommends these high-voltage insulated tools:

- Wheel chocks (or large blocks of wood)
- Rubber insulating gloves (class 0) with protectors
- Personal protective equipment
- Rescue stabilization jacks

Chock the Wheels and Put the Vehicle in Park

Follow these steps to secure the vehicle and protect people from being hit or crushed.

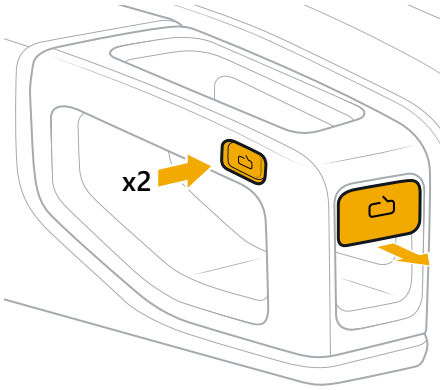
1. Chock the wheels to prevent the vehicle from moving. Chock at least one wheel on each side of the vehicle.



DANGER

Vehicle may move suddenly.

2. Open the driver or curbside door. The vehicle unlocks the doors when a crash is detected. If the exterior handles don't work, break the glass. If you're using the inside driver door panel, press the e-release button twice. Or, pull once on the emergency release lever on the front of the armrest.



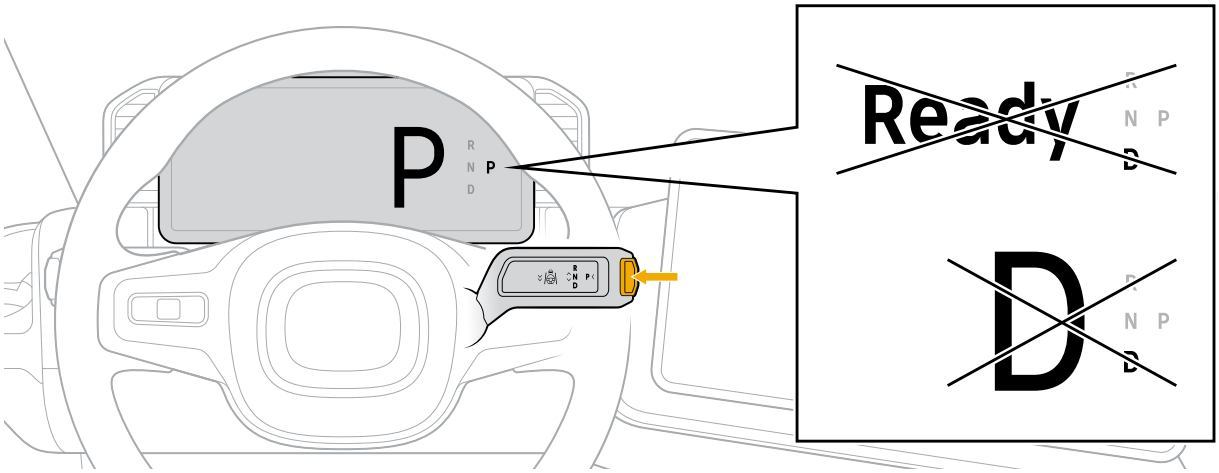
IMPORTANT

Don't press buttons on the key fob that would lock the doors.

2. Shift into **P** (Park).

   Press the button on the end of the lever on the right side behind the steering wheel.

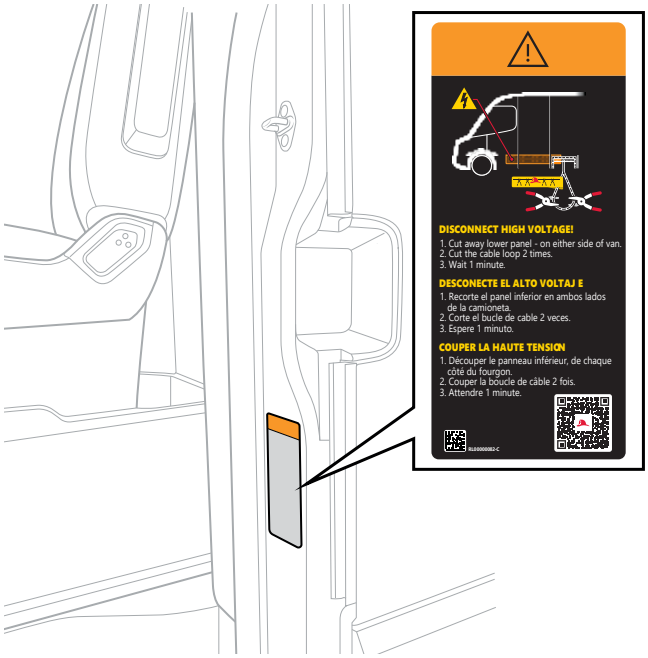
> **NOTE**
> The display shows **P** when you put the vehicle in **P** (Park).



> **DANGER**
> If the display shows **Ready**, the vehicle is in high voltage on mode. Immediately press the brake and press **P** on the end of the drive stalk to shift into **P** (Park).

Emergency Responder Information Label

There is a label for emergency responders on the driver's door pillar with information on severing the cut loop and a QR code to download this Emergency Response Guide.



Lift the Vehicle Safely

Rivian recommends you use the following tools to lift the vehicle:

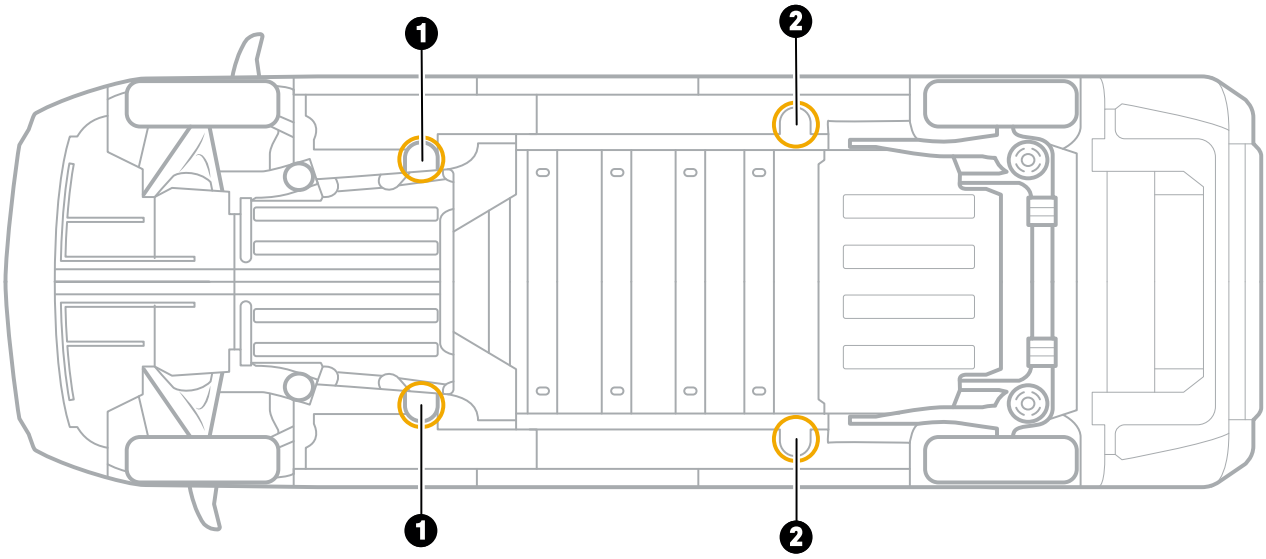
- Rubber insulating gloves (class 0) with protectors
- Personal protective equipment
- Rescue stabilization jacks

Use Safe Lift Points

Lift the vehicle at these points only.

NOTE
There are triangles stamped on the lower body panels marking the lift point locations.

IMPORTANT
Do not use jacks or lifting equipment, such as airbags, under the battery pack.



Item	Description
1	Front jack location (frame rail)
2	Rear jack location (frame rail)

Disconnect the High Voltage

Before you attempt to disconnect the high voltage by severing a cut loop, take note of the following safety guidance:

Do

- Wear personal protective equipment (PPE) appropriate for the situation.
- Wear rubber insulating gloves (class 0) with protectors until you have verified the vehicle is de-energized.
- Use an insulated cutting tool if available.

Don't

- Cut into or penetrate any other cables or "Do Not Cut" locations.
- Touch any **orange** electrical cables.
- Touch electrical or high-voltage battery components.

Don't Attempt If

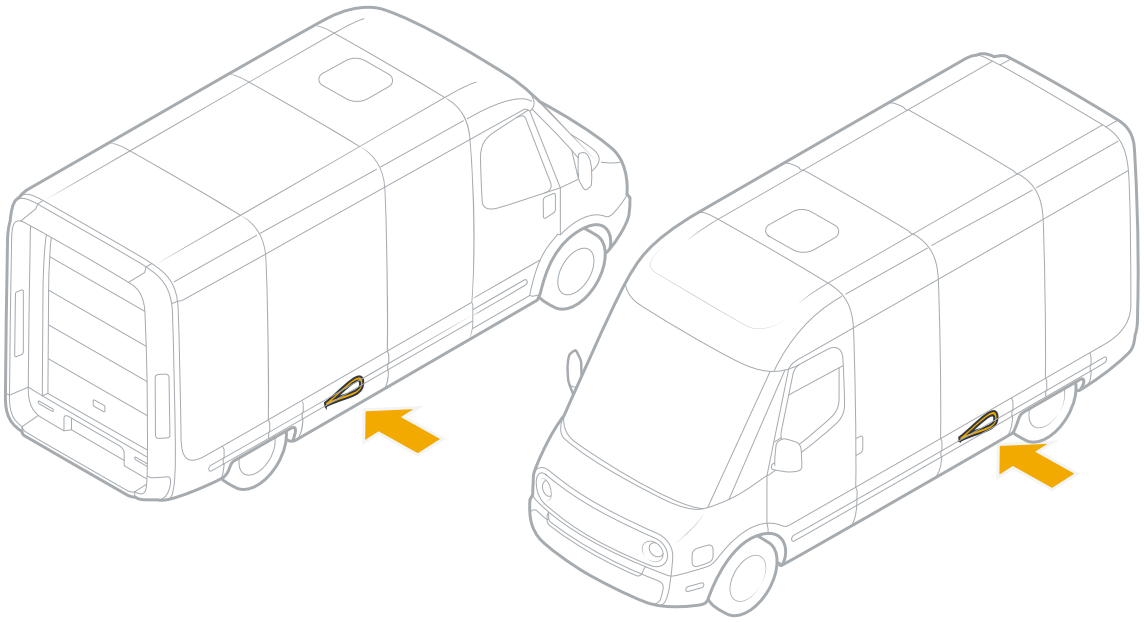
- Cut loop (low-voltage) cables are inaccessible and can't be easily cut.
- Vehicle is on fire.
- Vehicle is in standing water or is submerged.
- You see a sign of potential fire, such as
  - Sparks
  - Detached cables
  - Increased temperature
  - Smoke or smell
  - Hissing, gurgling, or bubbling
  - Leaking fluid

Disconnect the High Voltage by Cutting a Cut Loop

There are two cut loop locations along the side of the vehicle. The cut loops are low-voltage circuits that enable power from the high-voltage battery and supplementary restraint system (SRS). The cut loop is red with an identifying label.

DANGER

Cutting either loop disconnects both the high voltage battery and the SRS systems within one minute.



Disconnect High Voltage

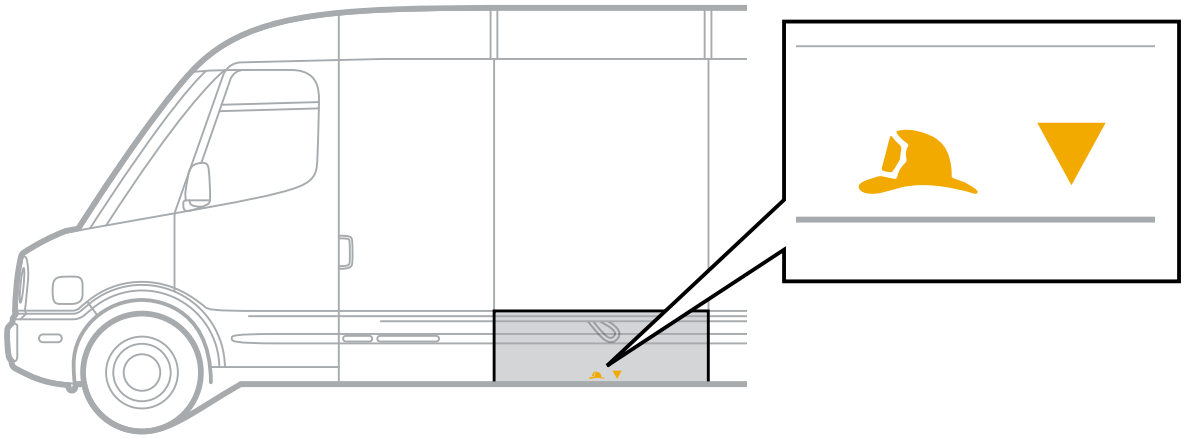
Rivian recommends you use the following tools to cut the cut loop to disconnect high voltage on the side of the vehicle:

- Rubber insulating gloves (class 0) with protectors
- Personal protective equipment
- Halligan bar
- Insulated cable cutter

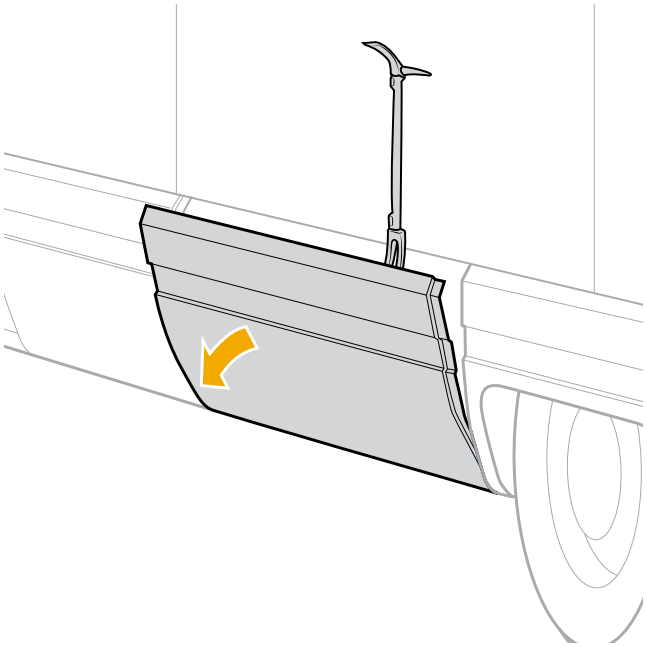
To disconnect the high-voltage cable, follow these steps:

1. Locate the lower side panel along either side of the vehicle. Look for the stamped firefighter hat.

> **NOTES**
>
> The cut loop is in the same location for 700 and 500, but the second panel is wider on the 500.
>
> There is no manual override cable in the passenger compartment.



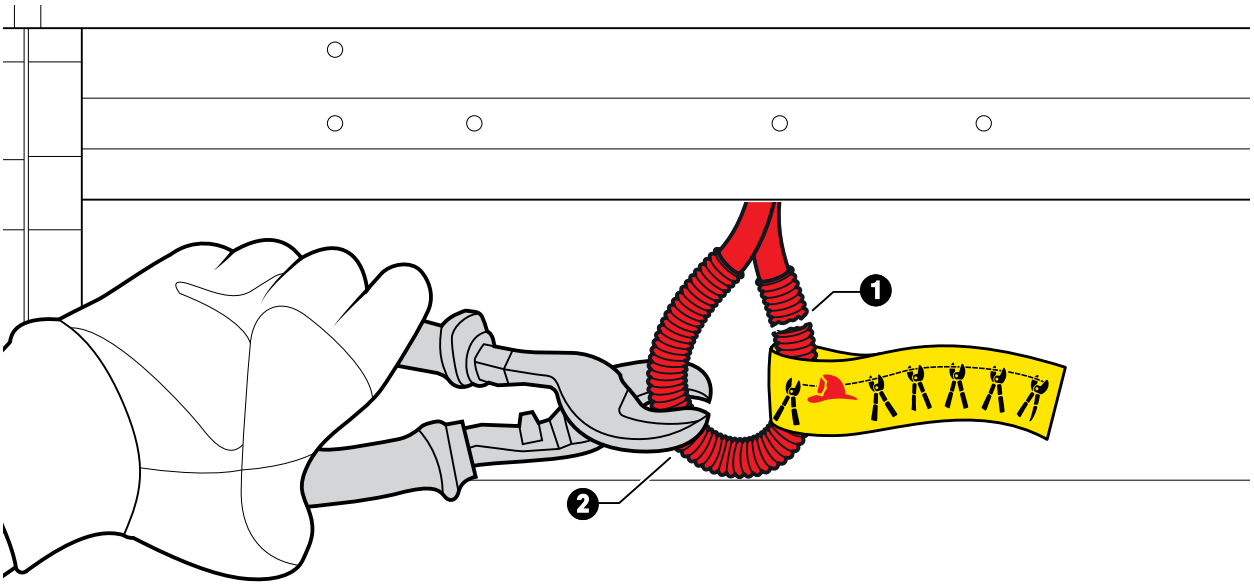
2. Use a halligan bar to pry off the panel to expose the cut loop.



3. Find the loop of electrical cable with the yellow cut tag. Cut the loop at one end [1] and at the other end [2].

DANGER

When you cut in two places and remove a section of the cable, it helps prevent the ends of the cable from touching again. If the ends of the cable touch, it could restore high voltage, which could result in death.



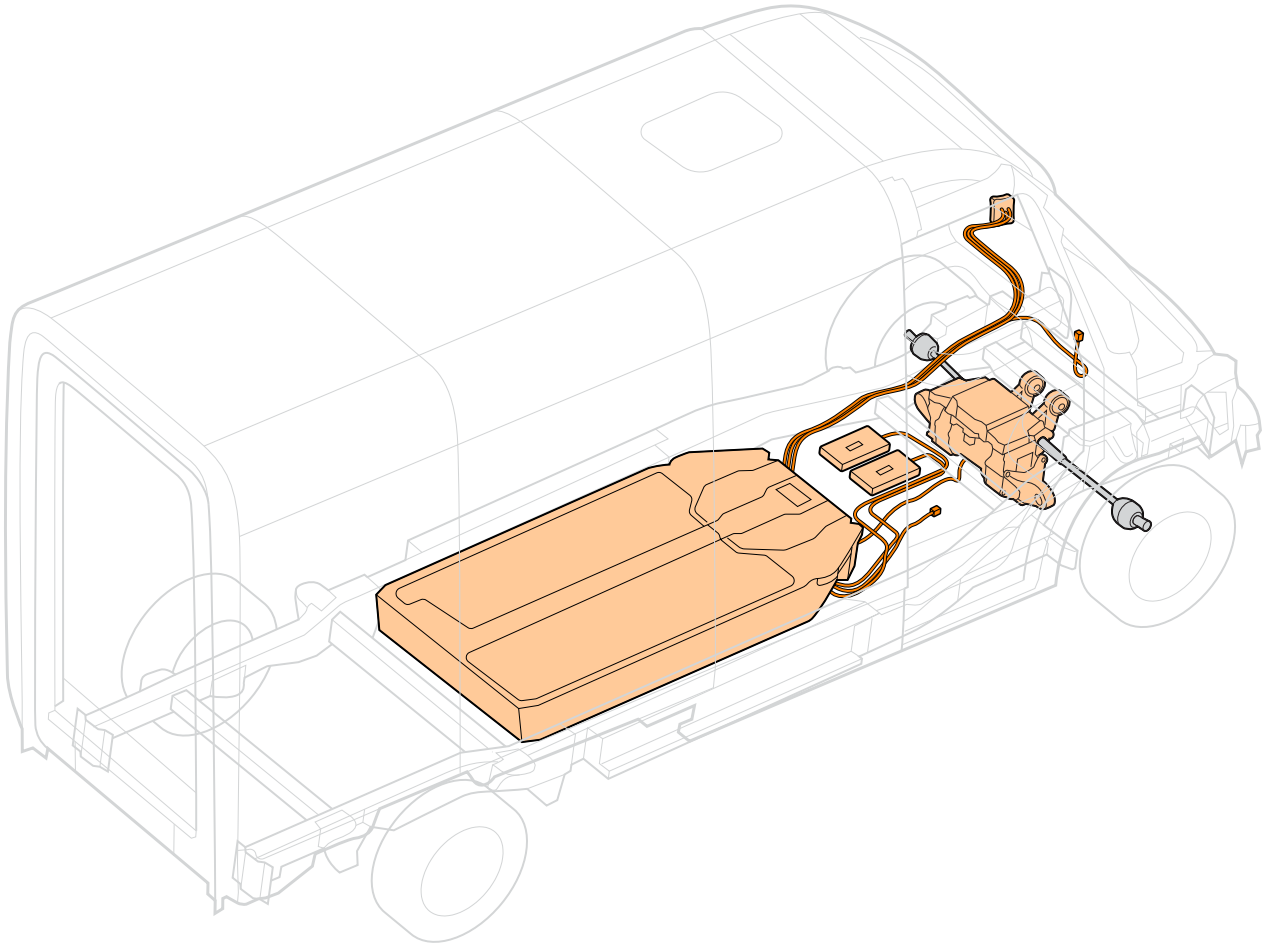
4. Wait one minute to allow the airbags and seat belt system to discharge any remaining energy.

Do Not Cut

Never cut or damage the highlighted areas.

NOTE

The actual location of components and cables may vary.



DANGER

- You could be injured, electrocuted, or die if you cut, pierce, or damage the highlighted areas.
- These areas contain lithium-ion battery packs, high-voltage cables (up to 450 V), traditional car batteries (12 V), compressed gas, and triggering devices.

Extricate Occupants

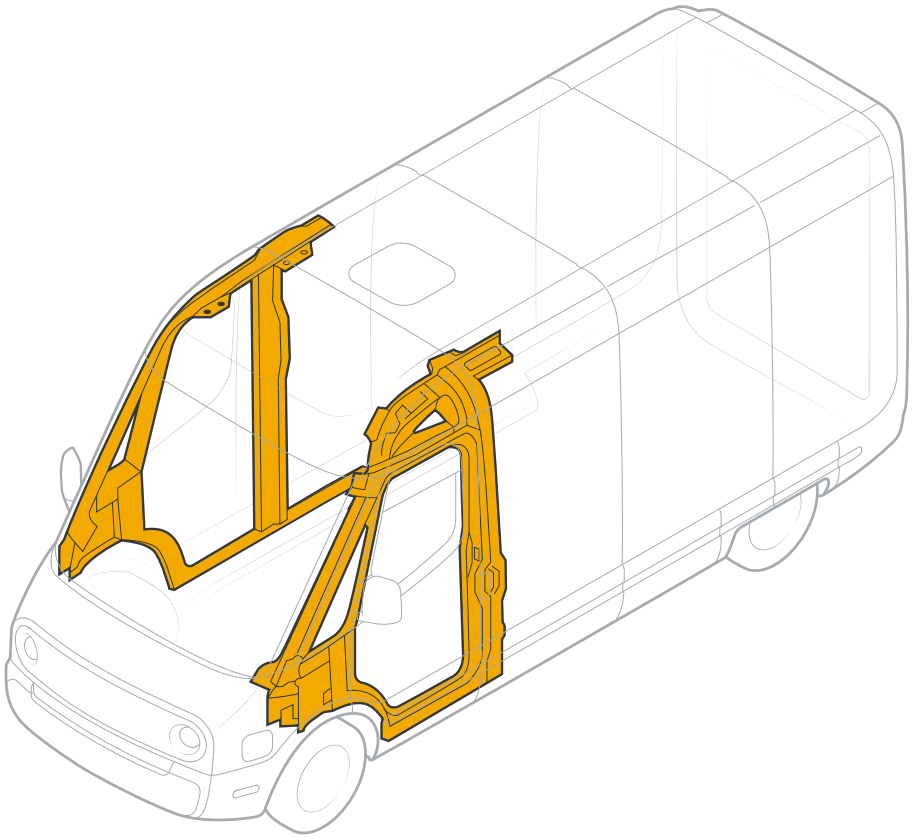
Rivian recommends you use the following tools to extricate occupants:

- Personal protective equipment
- Hydraulic cutter
- Hydraulic spreader
- Metal circular saw
- Rubber insulating gloves (class 0) with protectors, if high-voltage battery subcomponents are exposed and present a risk of direct contact

Cut High-Strength Steel

The highlighted areas contain high-strength steel to protect passengers. Use a hydraulic cutter to cut these areas. Cutting through this material may take longer than expected.

Wear personal protective equipment (PPE) when cutting high-strength steel.



DANGER

Never cut or damage the Do Not Cut areas.

Using a Hydraulic Ram

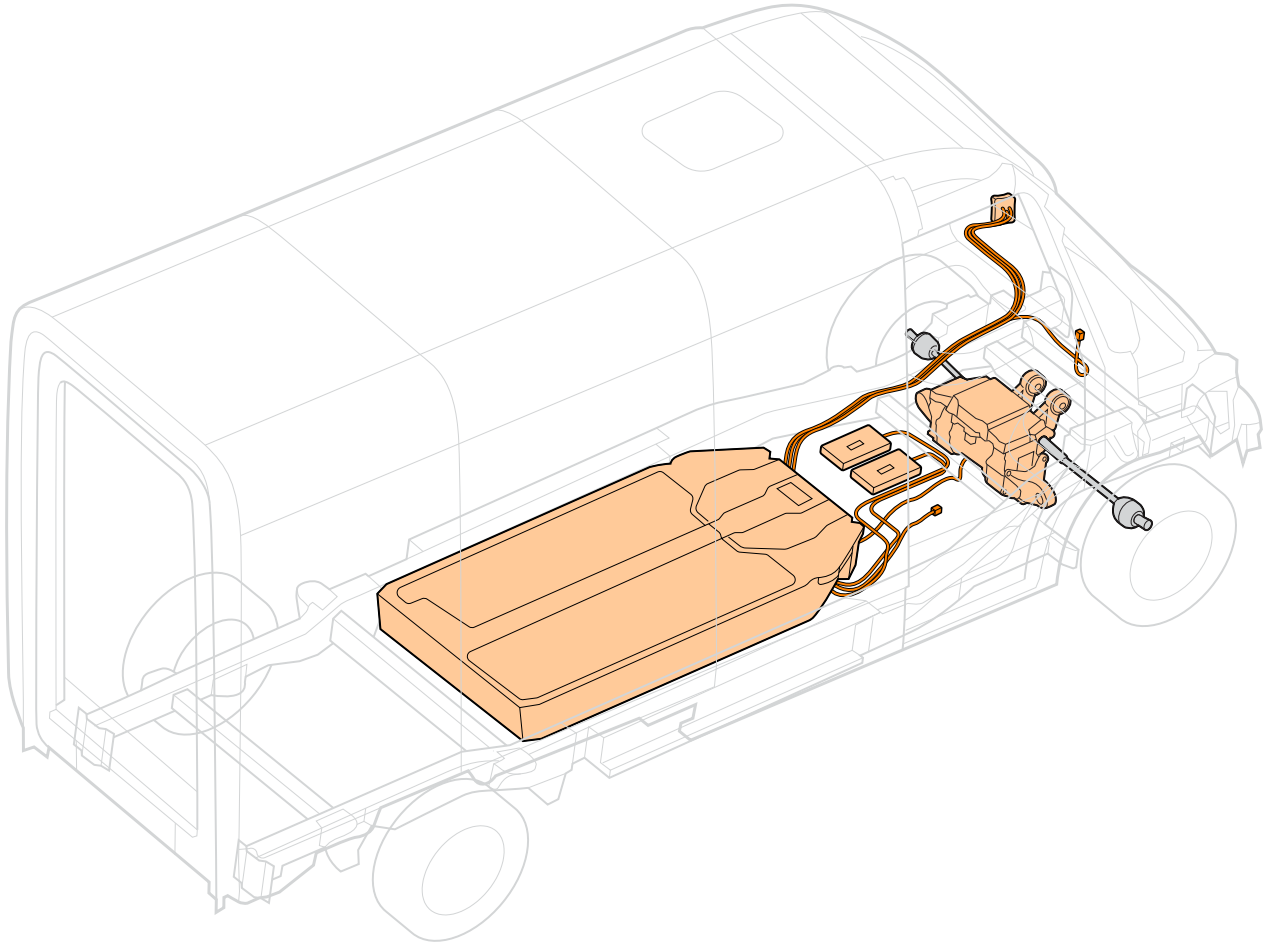
If you need to use a hydraulic ram to rescue occupants, stay above the floor level and do not use the floor inward of the door sill. This is to avoid contacting or damaging the high voltage battery pack below.

Handle a Damaged High-Voltage Battery

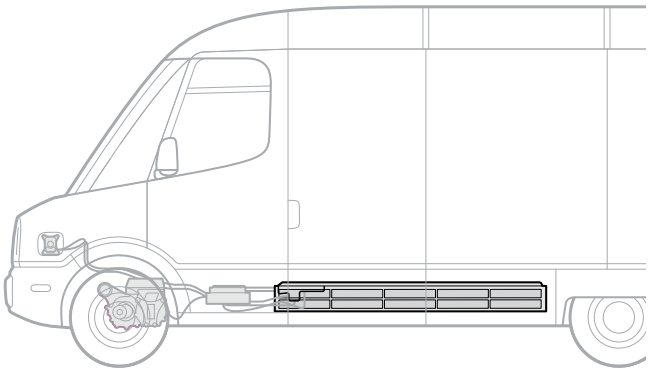
Rivian vehicles use a lithium-ion high-voltage battery (up to 450 V) and high-voltage cable next to the axles.

> **NOTE**
> All high-voltage cables are colored orange.

In case of fire, do not cut the battery or cables in an attempt to cool it down.



A damaged battery poses a potential electrical hazard that could release harmful and flammable gases.

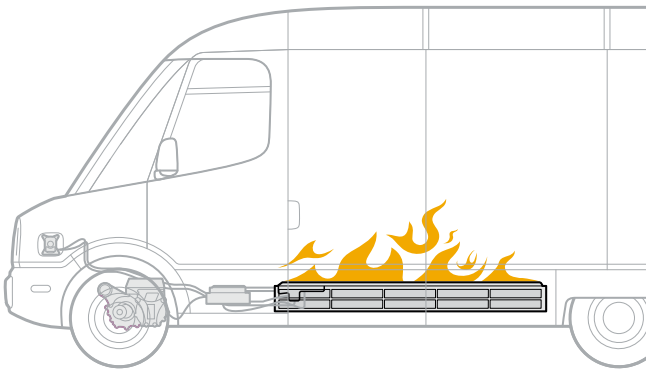


DANGER

The flammable gases that leak from the battery could ignite.

After a fire, clean up by sweeping debris into a pile. Return all debris to the vehicle or containers.

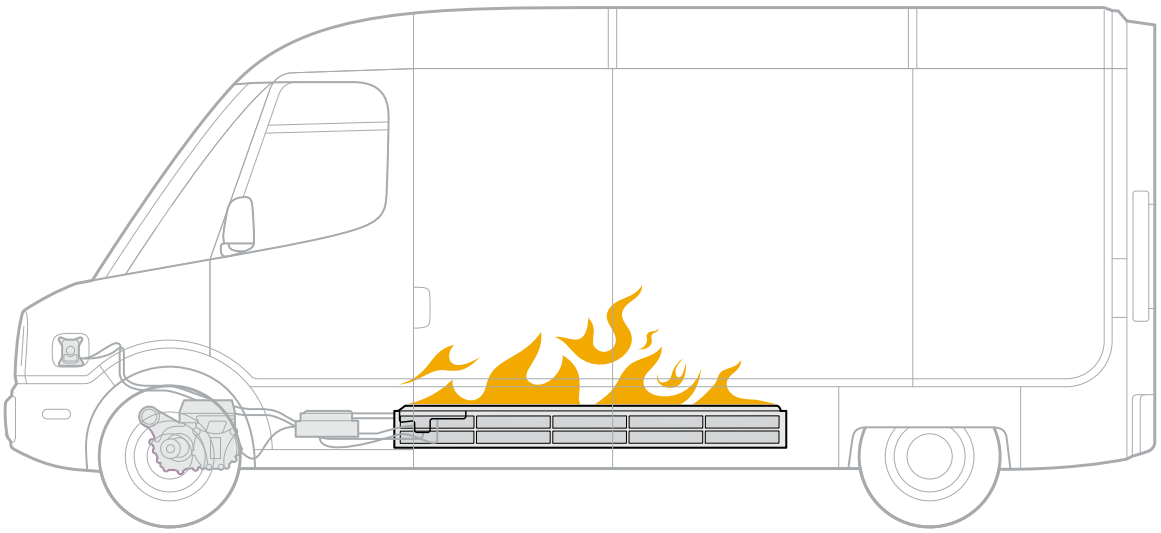
To prevent runoff into nearby storm drains or other waterways, you may deploy fluid gathering materials such as booms or powders to limit runoff contamination.



WARNING

- Water applied to the battery pack can become caustic or could cause a chemical reaction and burn the skin. To prevent burns, apply more water for dilution. Rinse tools and clothing to decontaminate them.
- Avoid inhaling battery fire materials. Use PPE to limit contact as much as possible.

Extinguish a Vehicle Fire



IMPORTANT

Rivian believes that electric vehicle fires are best addressed with defensive firefighting and management of the environment to minimize risk. Only attempt to extinguish a fire if you have a specific need to do so.

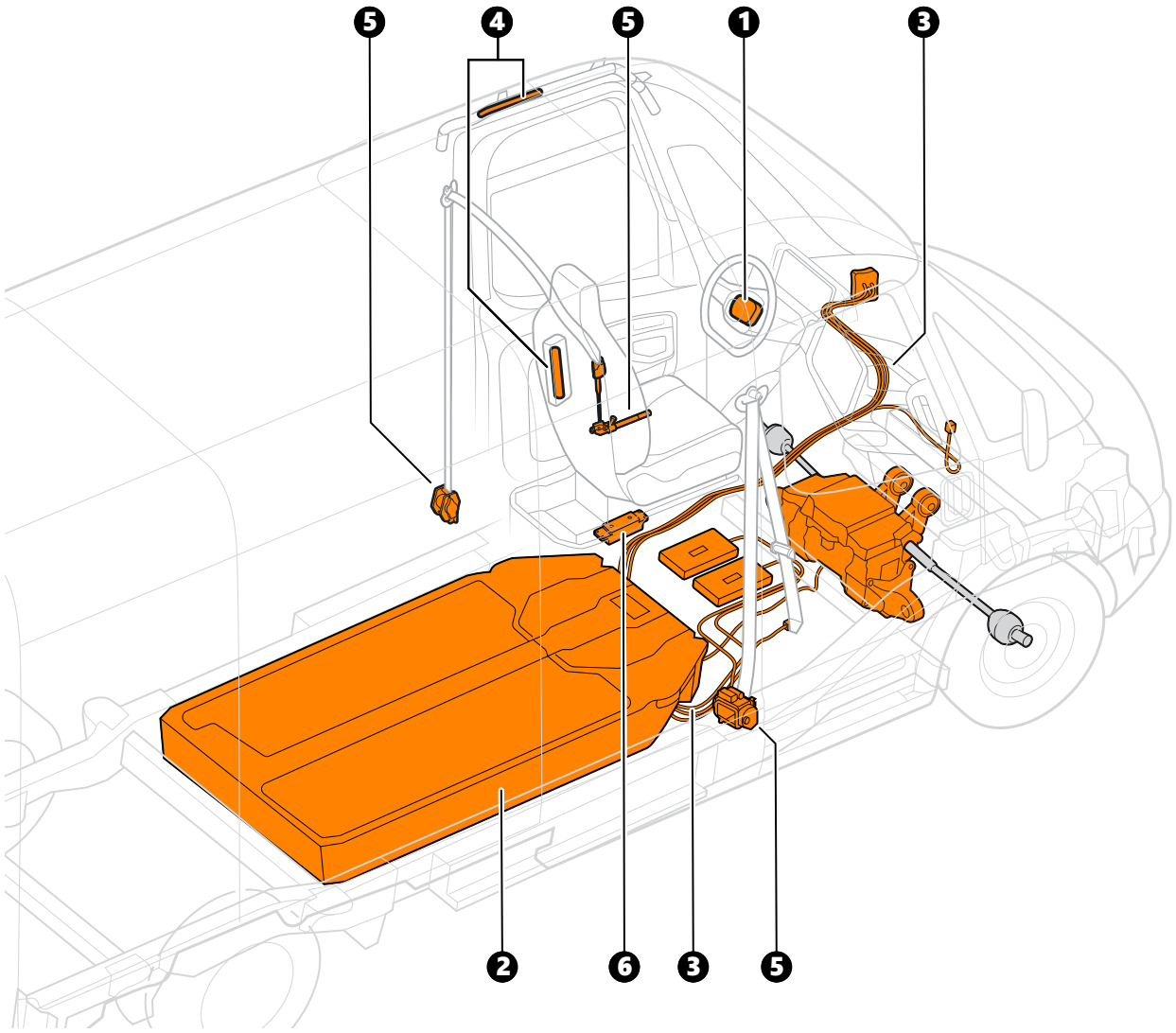
Perform these steps to extinguish a vehicle battery fire.

1. Wear proper Personal protective equipment (PPE) with full SCBA when approaching any vehicle fire.
2. Use a sustained, high-volume water application. A minimum of 2,000-3,000 gallons (7,500-11,500 liters) will be needed. Consider an established water supply, a tender, or additional units to shuttle water to the pumping engine.
3. If water is not readily available, use defensive firefighting tactics to prevent the fire from spreading until a clear need to extinguish the fire is identified and water is available. If necessary, use CO_2, dry chemicals, or other fire-extinguishing agents to suppress the fire, for example, to extricate passengers, until water is available.
4. Use a thermal imaging camera (TIC) or infrared (IR) to monitor the battery temperature during the cooling process. Look for ambient temperatures at or below 212°F (100°C) to indicate the battery pack is cooling down. Temperatures above this limit indicate a potential for continued battery cell thermal events.
5. Continue evaluating the battery structure and apply water directly to any exposed areas. Submerge loose battery cells or modules in water for at least 24 hours.

IMPORTANT

- Only firefighters should extinguish a high-voltage battery fire.
- Use a hand-held extinguisher only to protect occupants as they exit the vehicle or for small fires that don't involve the high-voltage battery.
- Foam may suppress, but will not extinguish, a battery fire.

Sudden Rupture Risks



Item	Description
1	Airbag
2	High-voltage battery
3	High-voltage cable
4	Gas inflation cylinders
5	Seat belt pretensioners
6	HV pyro switch

NOTE

It's safe to use water to put out the fire on a Rivian vehicle because of the properties of current flow and voltage. Undamaged high-voltage electrical systems are normally isolated from the chassis.

DANGER

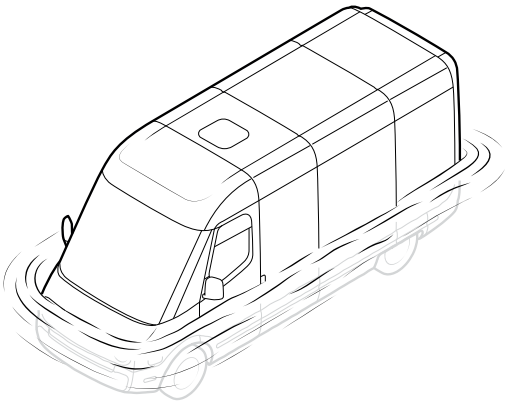
- Do not cut the battery. This can cause injury, electrocution, or death.
- The lithium-ion battery packs are high-voltage (up to 450 V).
- An undetected fire can remain inside the high-voltage battery.

Remove a Submerged Vehicle from Water

Rivian recommends that you wear personal protective equipment (PPE) when removing the vehicle from water.

Always remove a submerged vehicle from water before you attempt to tow or transport it.

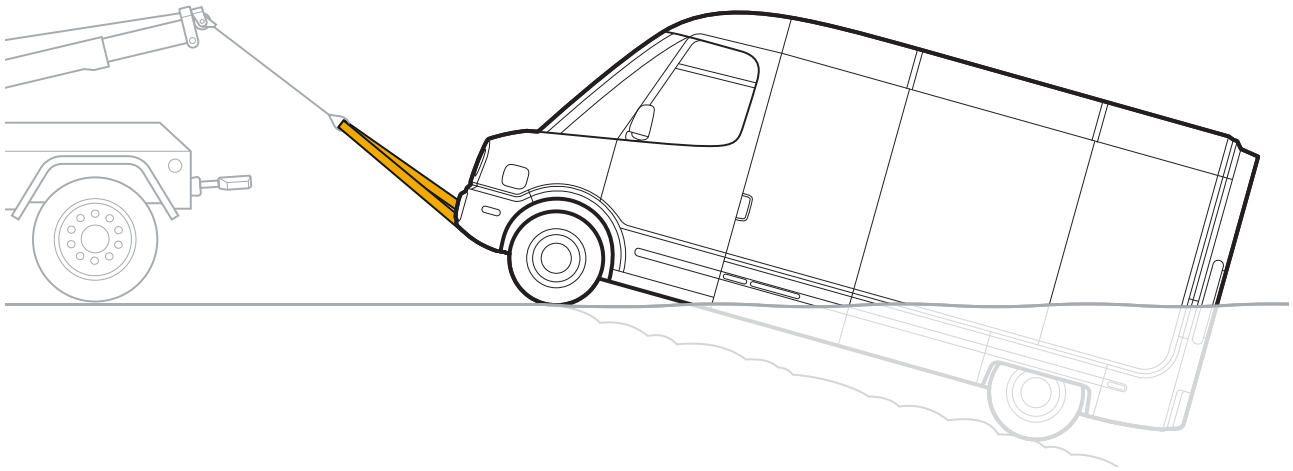
For safety, don't try to recover a submerged vehicle from the water by yourself. Get help.



DANGER

- If the battery is damaged, water may have entered the battery case. Use extreme caution and wear personal protective equipment (PPE) if you enter the water or attempt to tow the vehicle.
- Never attempt to charge a high-voltage battery that has been submerged, is gassing, or exhibits signs of external damage.

Recover a Submerged Vehicle



You may see small bubbles in the water near the vehicle (microbubbling). This isn't a sign that the water is electrified or will cause a shock.

DANGER

When handling an emergency, always approach an electric vehicle from the side. Electric vehicles can run silently, and a damaged high-voltage battery can remain energized, allowing the vehicle to move unexpectedly.

Recover the Vehicle

WARNING

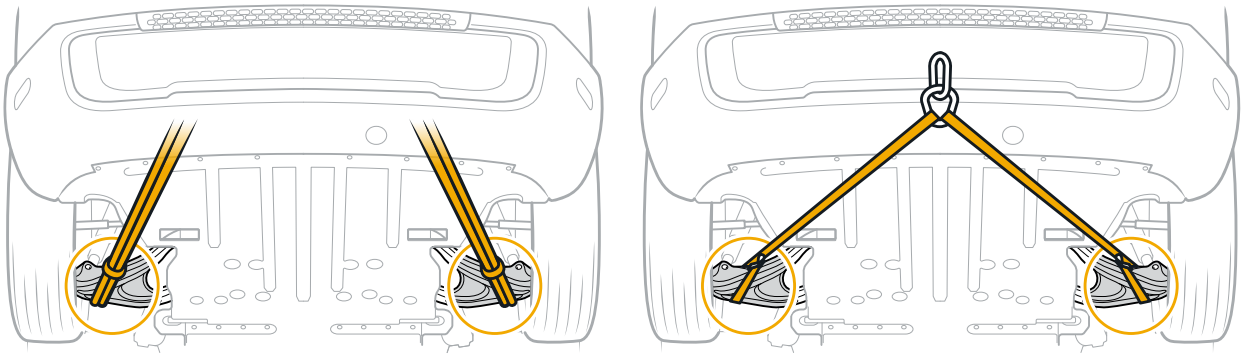
- Only transport the vehicle on a flatbed tow truck with a 21 ft (6.4 m) minimum flatbed length.
- Fire hazard. Towing Rivian vehicles with any wheels on the ground can lead to significant damage and overheating. Extreme overheating can cause a fire.
- Damage caused by improper towing is not covered under warranty.
- Be aware of overhead clearance limits. The vehicle height is 9 ft 7 in (2.92 m).

Prepare the Vehicle for Recovery

1. Ensure the front wheels face forward and are parallel with the vehicle.
2. Put the vehicle in **P** (Park) and chock the wheels.
3. Connect the vehicle to the tow truck winch with 3 ft (1 m) endless loops or a nylon bridle through the lower control arms.

CAUTION

To prevent damage, don't use the tow eye to connect to the tow truck and don't use j-hooks to connect to any suspension components.



4. Press and hold the brake pedal.
5. In the center display, go to **Safety**. Turn on **Park brake release**. Choose **Start Release**.

NOTE

Park brake release turns off after 15 minutes. You can also turn it off by putting the vehicle in **P** (Park) or turning off **Park brake release** under **Safety** in the center display.

6. Release the brake pedal and confirm release of the electronic park brake.

   You can now load the vehicle onto the tow truck.

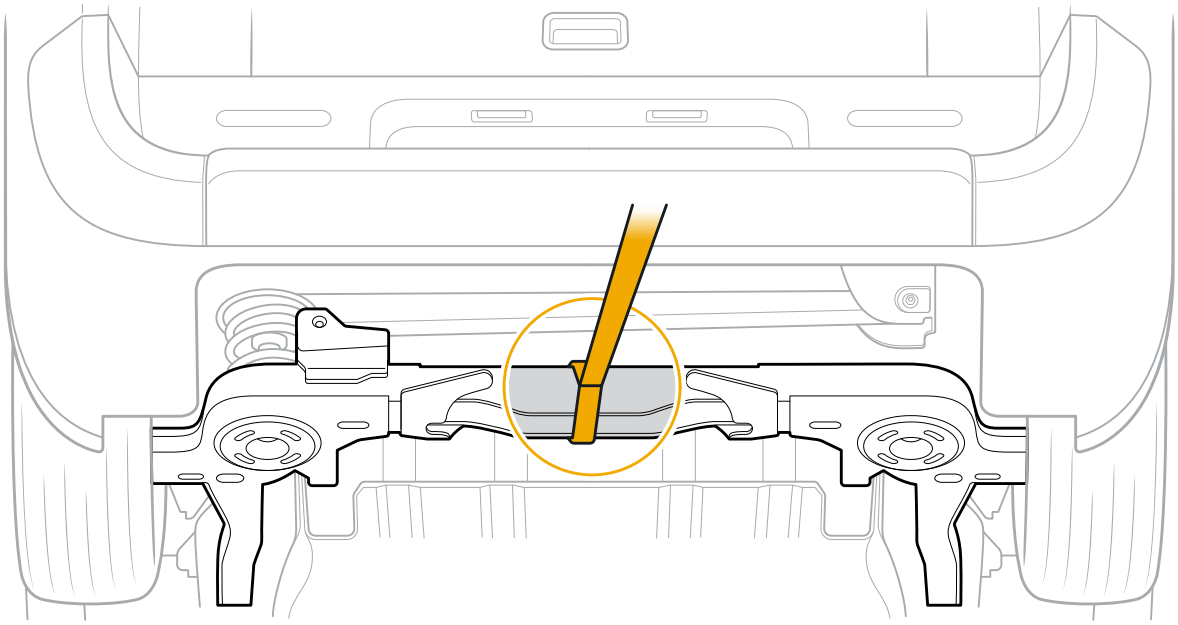
Connect to the Rear Axle

If you can't connect to the front control arms, you can recover the vehicle using the rear axle.

1. Ensure the front wheels face forward and are parallel with the vehicle.
2. Put the vehicle in **P** (Park) and chock the wheels.
3. Connect the vehicle to the tow truck winch with a nylon bridle or short endless loops through the rear axle.

CAUTION

To prevent damage, don't use the rear bumper step to connect to the tow truck.



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NOTE

Park brake release turns off after 15 minutes. You can also turn it off by putting the vehicle in **P** (Park) or turning off **Park brake release** under **Safety** in the center display.

6. Release the brake pedal and confirm release of the electronic park brake.

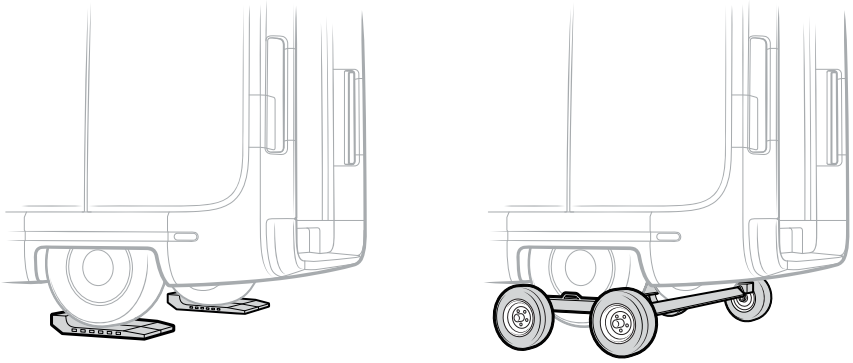
Lift the Rear Wheels

If you can't release the electronic park brake, lift the rear wheels to load the vehicle onto the tow truck.

DANGER

When the rear wheels are lifted, the vehicle can roll. Make sure to secure the vehicle and connect it to the tow truck before you lift the rear wheels.

1. Chock the front wheels to secure the vehicle.
2. Connect the vehicle to the tow truck using an endless loop through the front control arms or rear axle.
3. Lift the rear wheels using skates, a dolly, or a tow truck wheel lift.



4. With the rear wheels off the ground, position the vehicle to be loaded onto the tow truck bed.

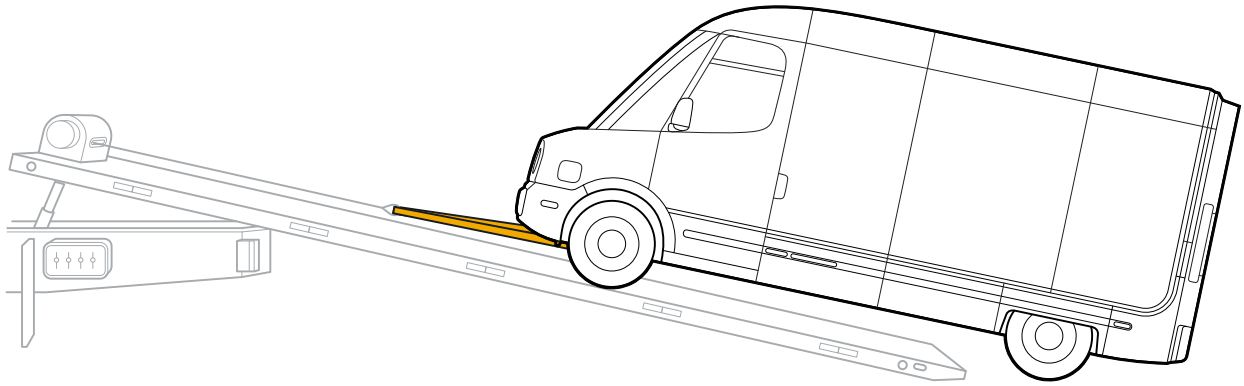
   You can now load the vehicle onto the tow truck.

NOTE

If using skates, use the skates to pull the vehicle all the way up the tow truck ramp.

Load the Vehicle onto the Tow Truck

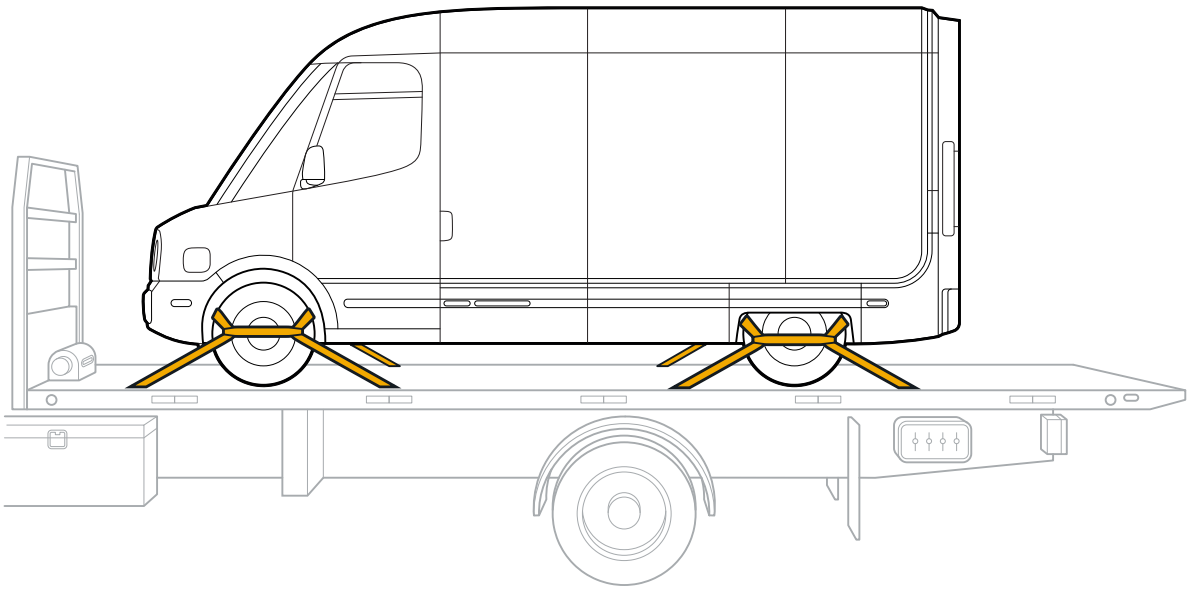
1. Ensure **Park brake release** is turned on.
2. Remove the wheel chocks.
3. Use the tow truck winch to pull the vehicle onto the tow truck bed.



4. Pull at 5 mph (8 km/h) or less to prevent damage to the powertrain.

   NOTE

   If you pull too fast, the vehicle stops and shifts into **P** (Park).
5. Tie down the vehicle using eight-point retention straps with two points of contact per corner.

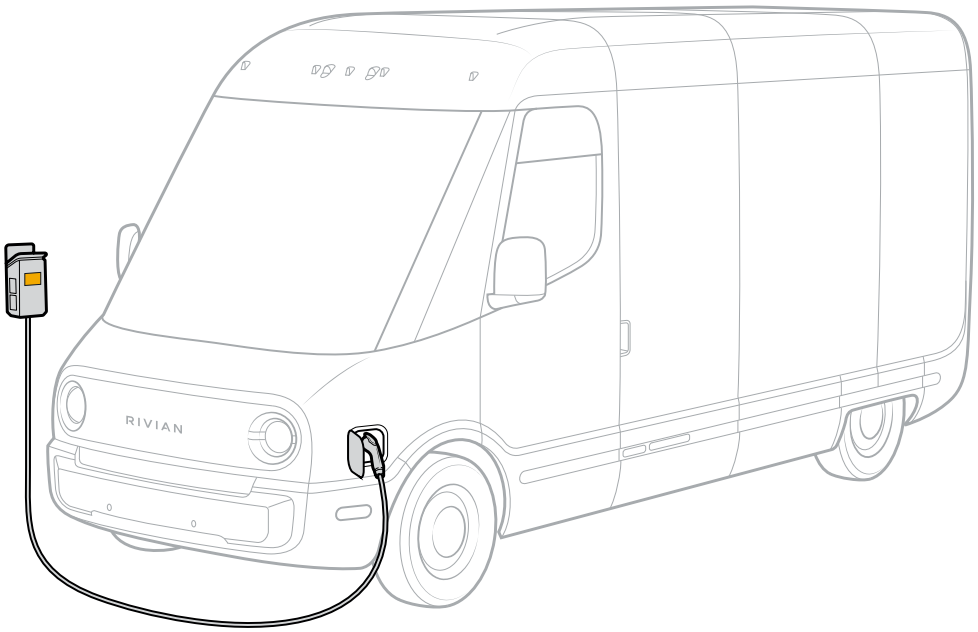


CAUTION

To prevent damage, ensure the straps don't contact the brake lines behind the tire.

6. Put the vehicle in **P** (Park).

Stop Charging in Case of an Emergency



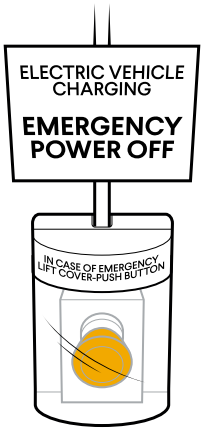
If a vehicle is damaged or on fire while connected to a charger during an emergency, the safest thing is to turn off the electricity. Shut down the Emergency Power Off for the charger and then inspect the situation. If a vehicle is damaged and at risk of a fire, you can attempt to disconnect the charging cable from the vehicle.

IMPORTANT

A Rivian vehicle includes software that automatically senses battery issues and shuts off charging. However, if the fire is not battery related or the vehicle continues charging, try the charge plug disconnection procedures below.

Shut Down the Emergency Power Off

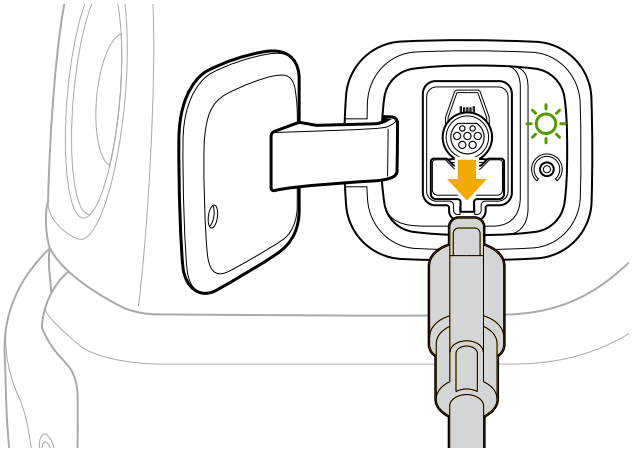
Use the Emergency Power Off to shut down the power to the charger. It's normally in the line of sight from the charger.



Remove the Charge Plug with a Key

Follow these steps to remove the charge plug:

1. Unlock the vehicle.
2. Remove the charge plug from the socket and place it on the charger.



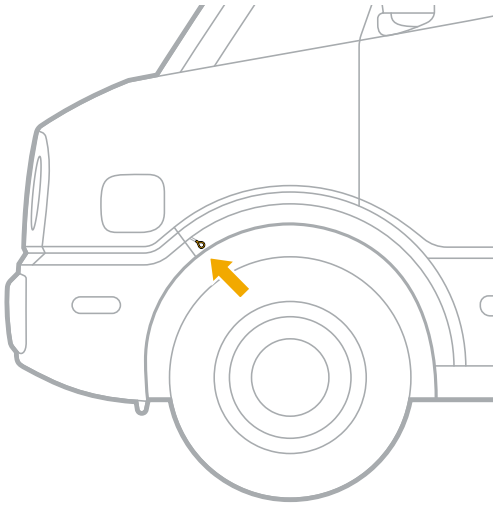
DANGER

Do not cut the charging cable. You never want to interrupt a high-voltage current flow. Doing this could cause injury, electrocution, or death.

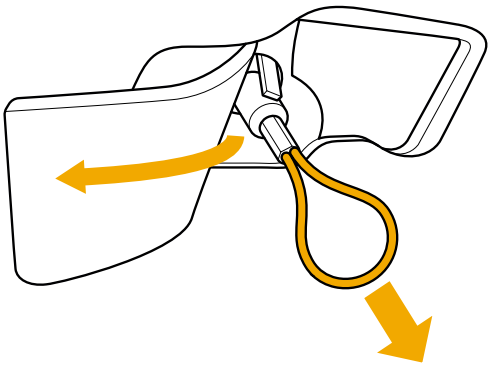
Manually Release the Charge Plug

If the charge plug won't release from the charge port after you stop a charge session, manually release it by following these steps:

1. Locate the release cable behind the access panel in the wheel liner on the driver side of the vehicle.



2. Open the access panel and gently pull the cable to release the charge plug.



3. Remove the charge plug from the charge port.

Store the Vehicle

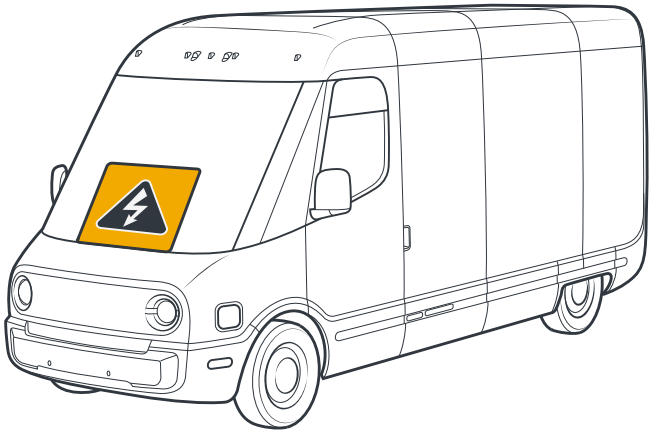
Be careful when storing a damaged Rivian electric vehicle after an accident or fire.

Be sure to secure it when you park it.

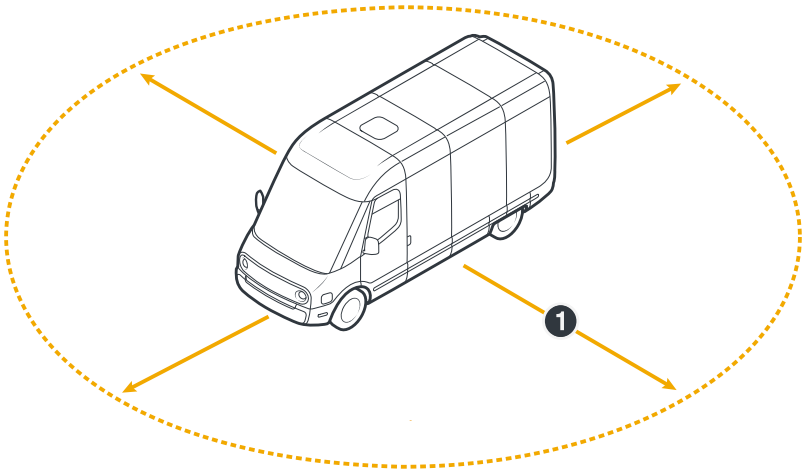
CAUTION

Don't use a forklift to move the vehicle. This could puncture the high-voltage battery or other components, and the vehicle weight could exceed the forklift's capacity.

1. Use signage or some other visual indicator to identify it as an electric vehicle.



2. Store the vehicle outside at least 50 ft (15 m) away from other vehicles, structures, or combustible material.



Item	Description
1	Store 50 ft (15 m) away.

NOTE

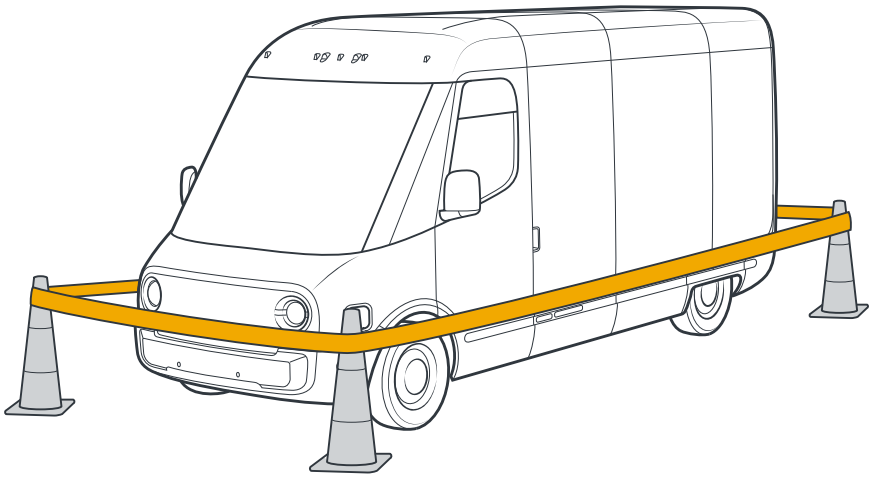
If this spacing can't be achieved, place the vehicle where it can quickly be towed or winched away. Consider access for fire personnel, fire apparatus, and a water supply, and leave space for fire personnel to periodically and quickly reassess with thermal imaging.

3. Notify others that the vehicle is on the property and ask them not to interact with it unless authorized.
4. Monitor a vehicle with a damaged high-voltage battery for signs of gas emissions, fire, or any potential issues from a leak. Leave the vehicle in the containment area for at least 24 hours.

WARNING

In some cases, lithium-ion batteries can self-ignite days after a major collision.

5. Rivian recommends creating a tape barrier around the vehicle in an isolated area of the lot.



DANGER

Energy that remains in a battery is especially concerning if the high-voltage components or battery are damaged. Exposed wiring and parts can also create an electrical safety hazard.