



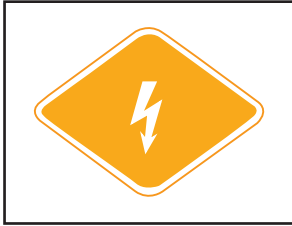
QV-E

EMERGENCY RESPONSE GUIDE

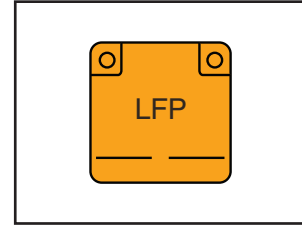


INFORMATION FOR FIRST AND SECOND RESPONDERS

EMERGENCY RESPONSE GUIDE



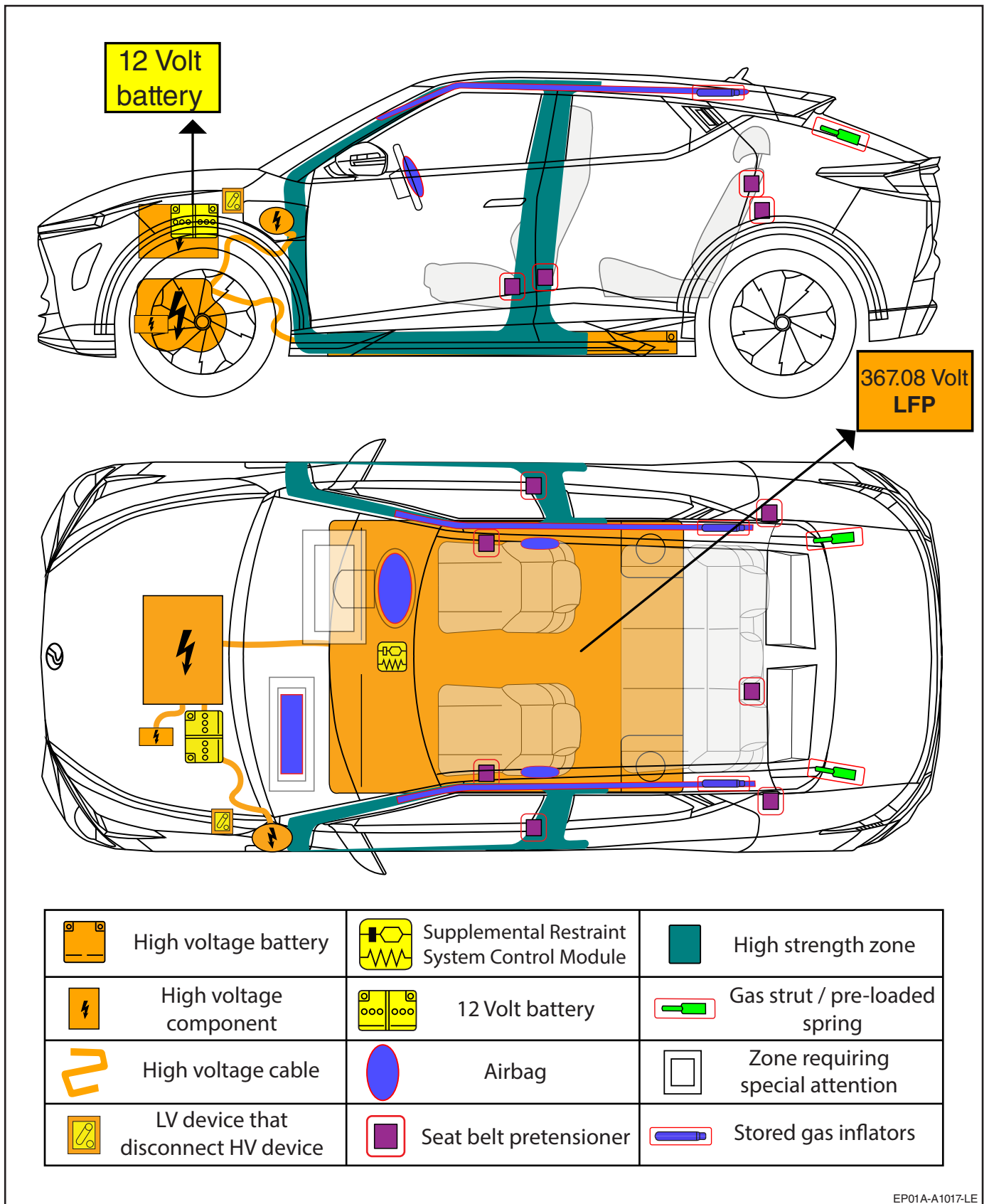
**PERODUA
MODEL QV-E
ELECTRIC**



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0. Rescue sheet



1. IDENTIFICATION / RECOGNITION

1.1 Identifying a Perodua QV-E

The following procedures apply when handling a Perodua QV-E at an emergency scene. Always ensure that your actions comply with your department's standard operating procedures, guidelines, and relevant laws. In the event of a collision, the electric vehicle's high voltage safety systems may be compromised, posing a risk of electric shock. Proceed with caution and wear the appropriate personal protective equipment (PPE), including high voltage rated gloves and boots. Remove all metallic jewellery, such as rings and watches, before beginning any work.



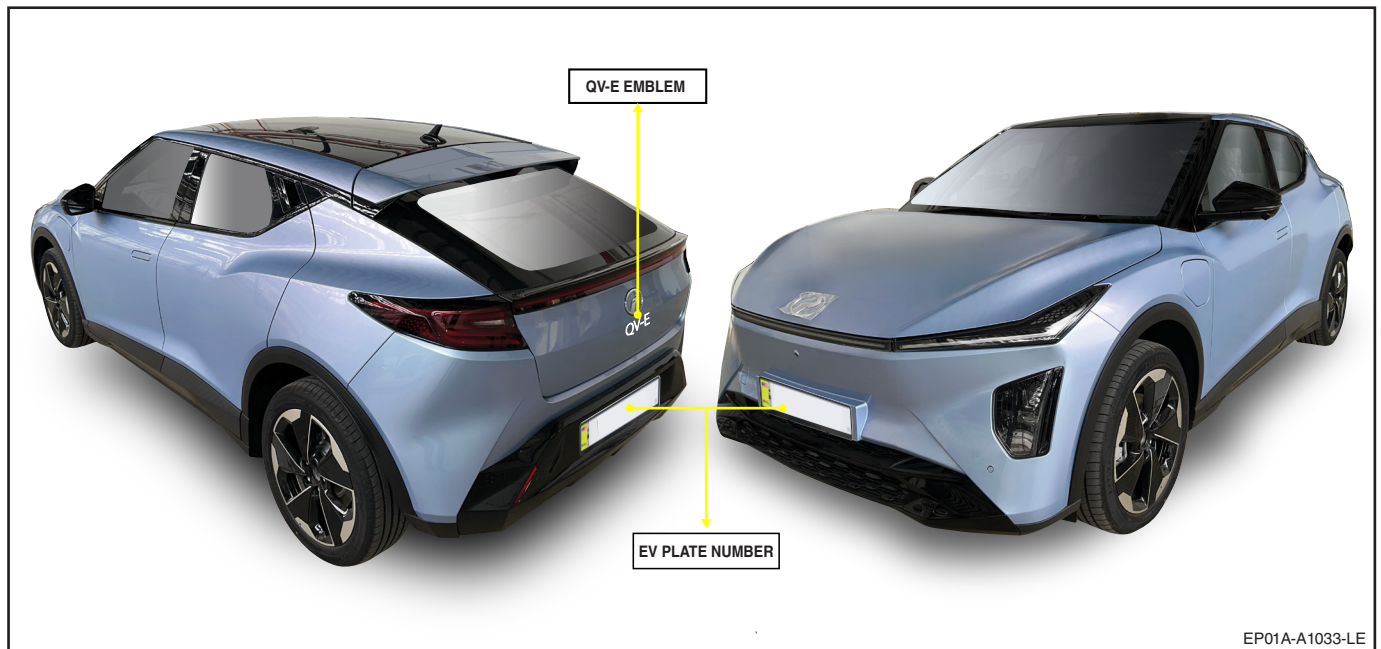
WARNING

The absence of engine noise does not mean the vehicle is turned off. It may still move silently or restart instantly until it is completely powered down. Always wear the appropriate personal protective equipment (PPE).

■ BADGING

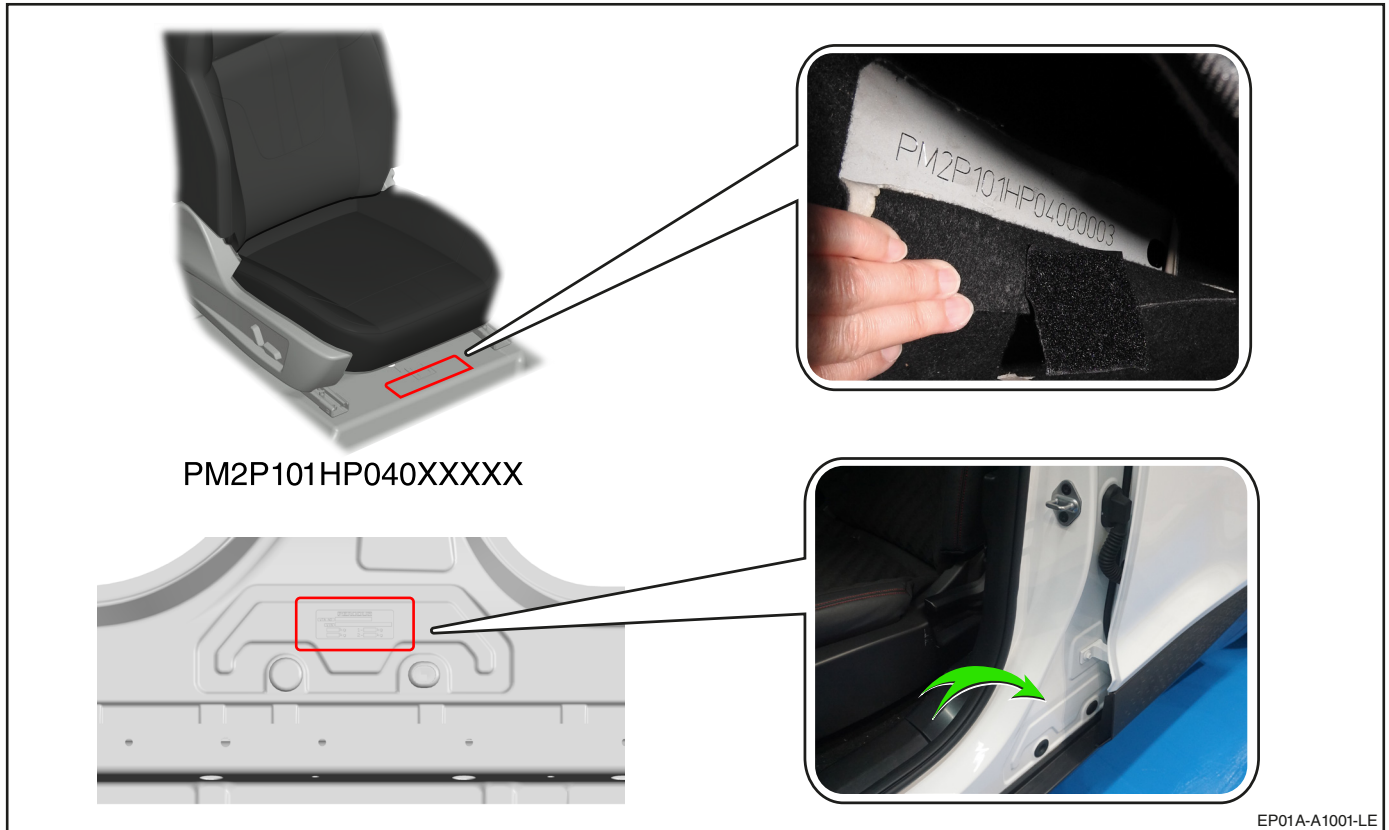
Perodua QV-E can be identified by its badges and appearance. The vehicle badges is mainly on the front hood and liftgate, highlighting its model identity.

NOTE: The green background on a quarter of the number plate indicates that the vehicle is an electric vehicle (EV).



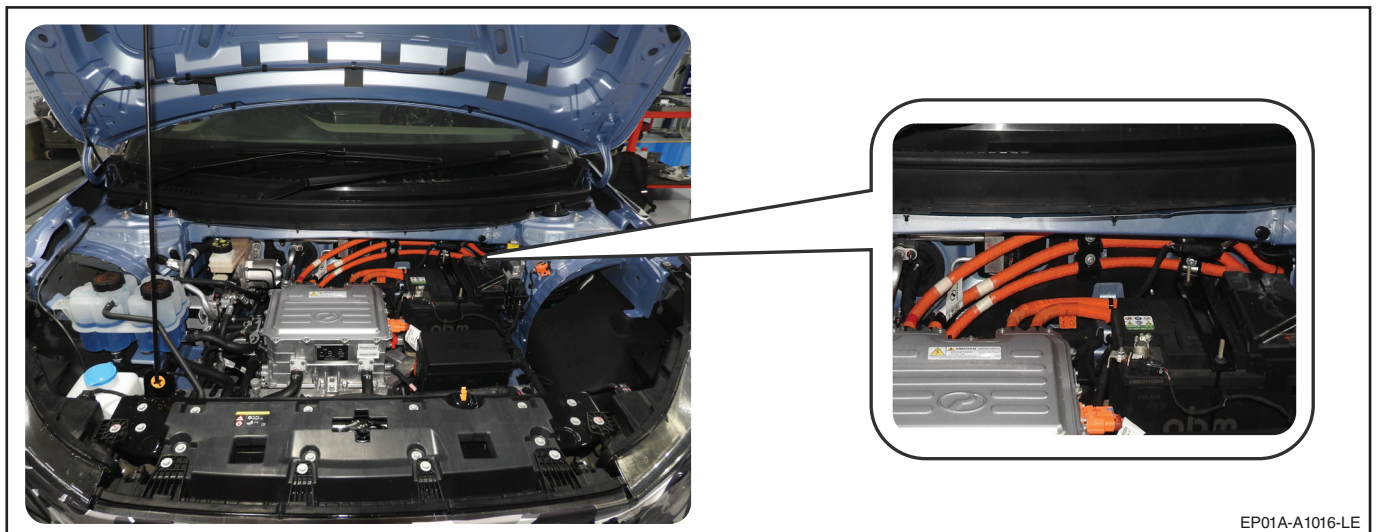
■ VIN LABEL

- The Vehicle Identification Number (VIN) of an electric car can be identified by the presence of the letter “H” in the eighth position, as illustrated in the image below. This specific character indicates the vehicle’s electric powertrain configuration..
- The VIN can be found:
 1. Underneath the front driver seat.
 2. In the passenger side center pillar.



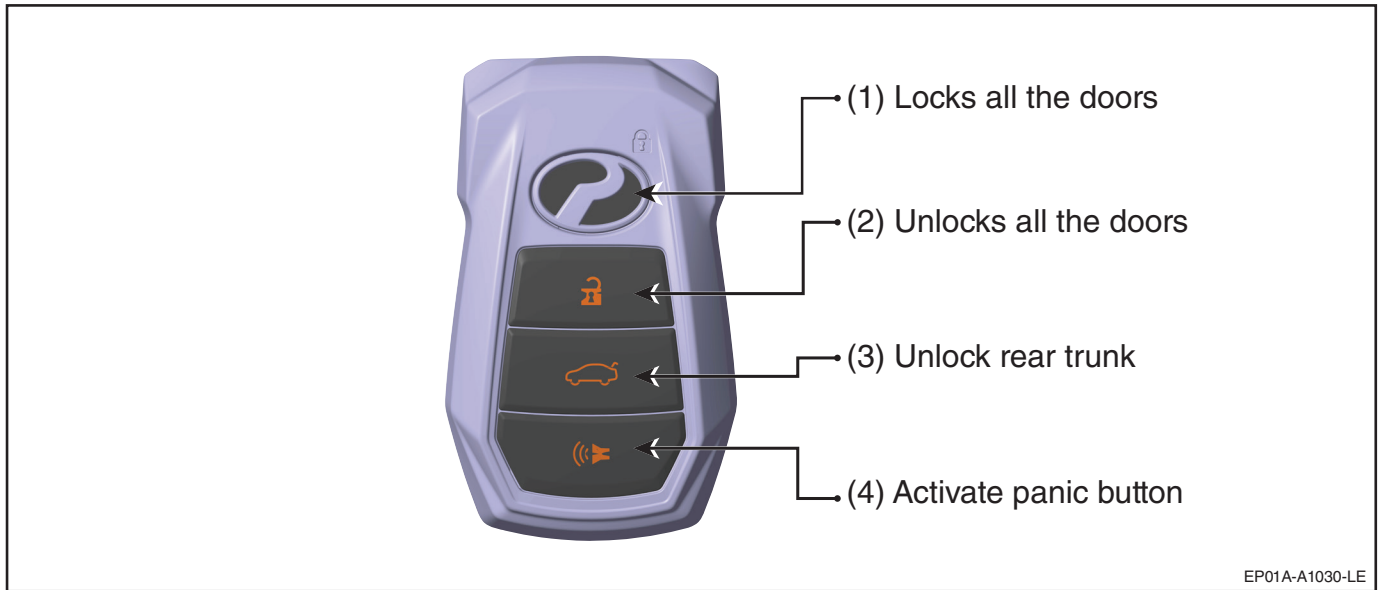
■ MOTOR COMPARTMENT

There are orange colored high voltage electrical cables in the motor compartment.



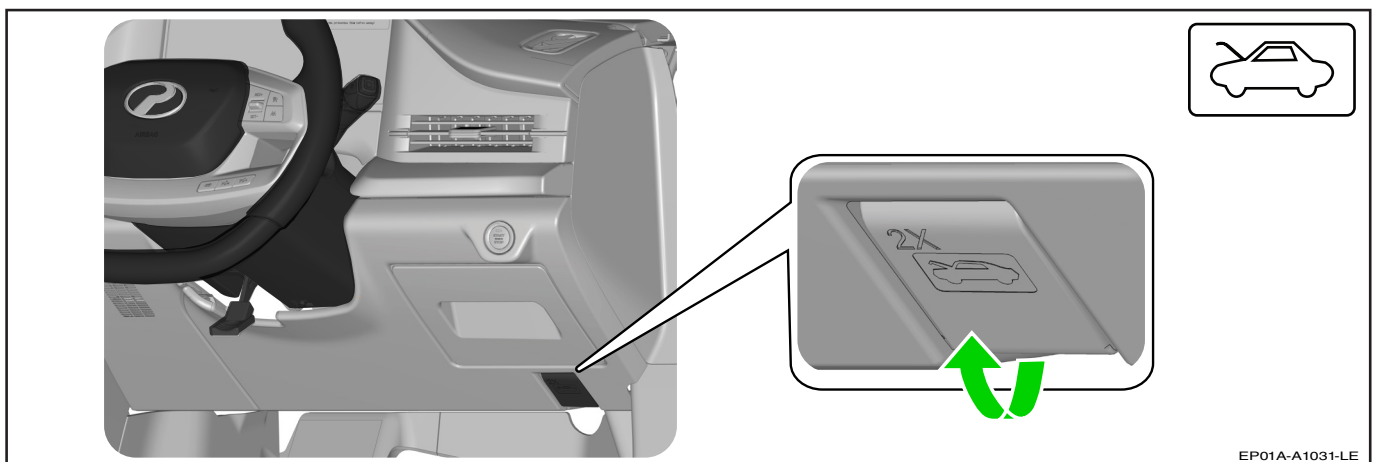
■ KEY

The key fob, It allows you to press buttons to unlock, lock, open the rear trunk, and start driving your Perodua QV-E Use the key buttons as shown below.



■ OPENING THE HOOD

- The Perodua QV-E doesn't use a traditional Internal Combustion Engine (ICE). Instead, the space where the engine would normally be is now occupied by a high voltage electric system.
- To open the hood, pull the release lever located beneath the dashboard on the driver's side, just above the (footwell). The lever is marked with a car icon showing an open hood.
 - Pull the lever 2x - it will release the primary latch



2. IMMOBILISATION / STABILISATION / LIFTING

2.1 Immobilisation

The next step is to secure the vehicle to prevent any accidental movement that could pose a risk to emergency responder or civilians. When the Perodua QV-E is damaged in a crash, the vehicle may appear to be shut off when it is not because the engine emits little to no sound. When the “READY” mode light is illuminated on the Instrument Panel, the vehicle may capable move silently using the electric motor. Responders should approach the vehicle from the sides and stay away from the front or rear as they are potential paths for vehicle movement. **Always chock the wheels.** Follow the proper immobilisation procedures outlined below to enhance safety on scene.



WARNING

Exercise caution to avoid damaging the battery pack during vehicle stabilisation.



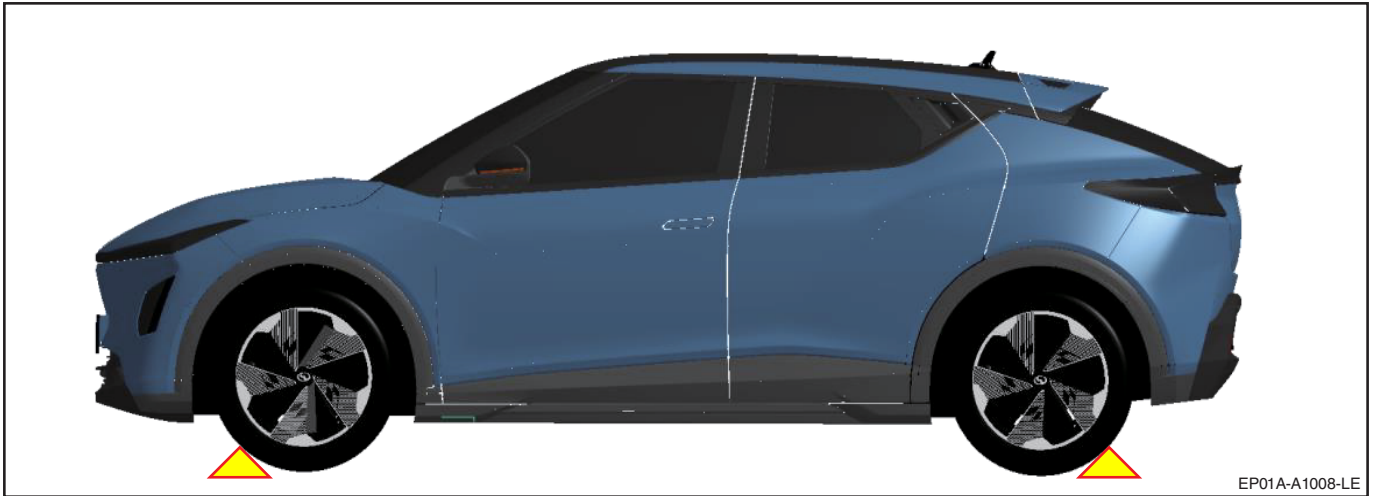
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- 1 Depress the brake pedal to stop the vehicle completely.
- 2 Set the shift position to **P** to engage the Electric Parking Brake.
- Check that the shift position indicator shows **P** and the parking brake indicator is illuminated.
- 3 Press the power switch to stop the EV system.
- 4 Slowly release the brake pedal.
- 5 Make sure to take the key and store the key in safety box 2 meter away from vehicle

2.2 Stabilisation / Lifting point

■ VEHICLE STABILISATION

After the vehicle is turned off, use wheel blocks to stabilize the vehicle.

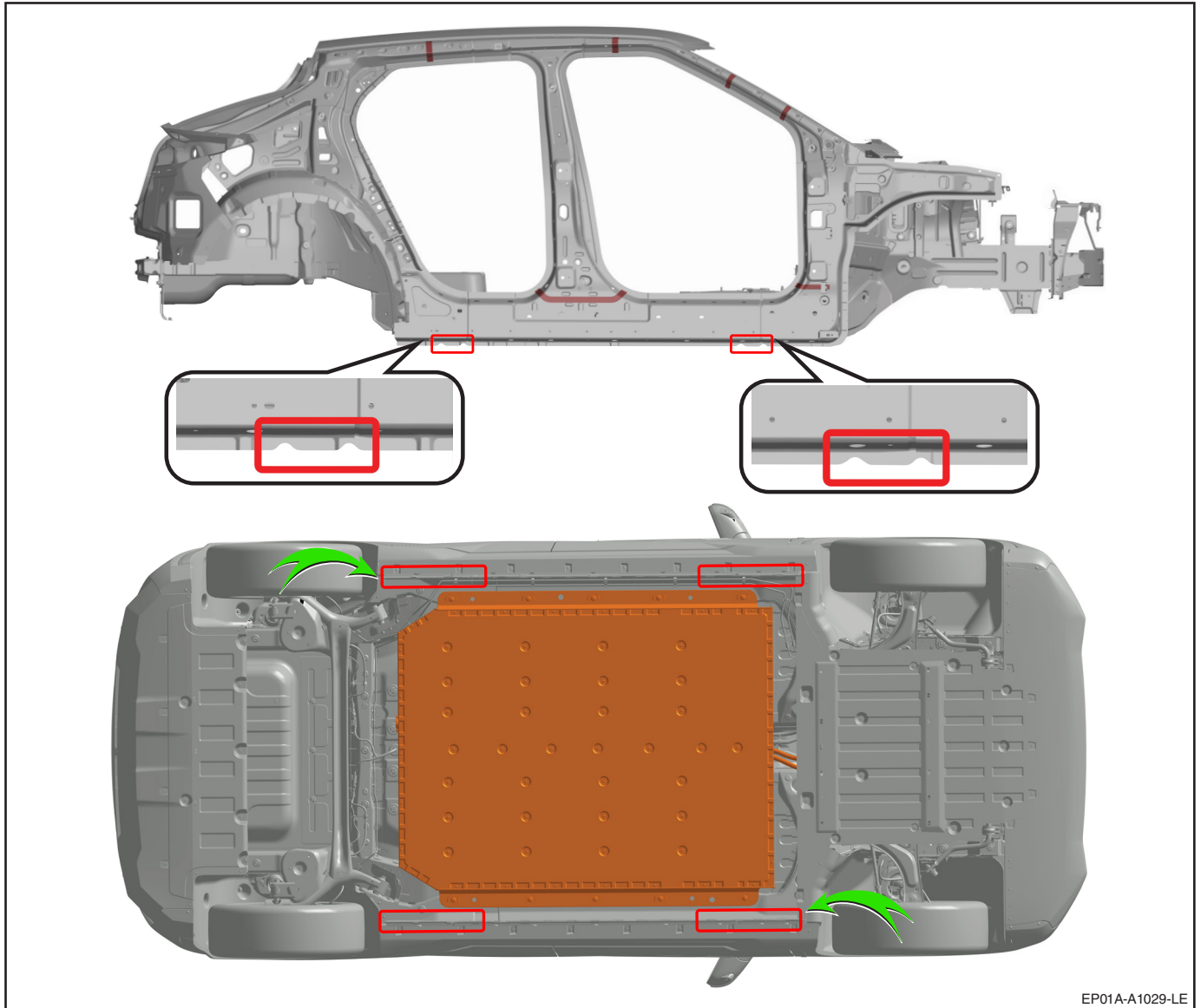


WARNING

The Perodua QV-E may appear to be powered off, as the electric motor operates with minimal or no audible noise. However, if the “READY” indicator is illuminated on the instrument panel, the vehicle is fully operational and capable of moving silently at any time. For safety always approach the vehicle from the sides, not from the front or rear, as those are potential paths of unexpected movement. Secure the vehicle using wheel chocks to prevent rolling. Follow the proper immobilisation procedure outlined below before performing any inspection, rescue, or service actions.

■ LIFTING POINT

When lifting a Perodua QV-E, always use a heavy-duty lifter that is rated to handle the vehicle's heavier weight, as EV typically weigh more than traditional internal combustion engine (ICE) cars due to their battery packs. When using hydraulic lifts, take extra care to lift the vehicle slowly and evenly to reduce stress on the battery pack and chassis. EV require more cautious positioning of the lifter to accommodate their unique design and high voltage components.

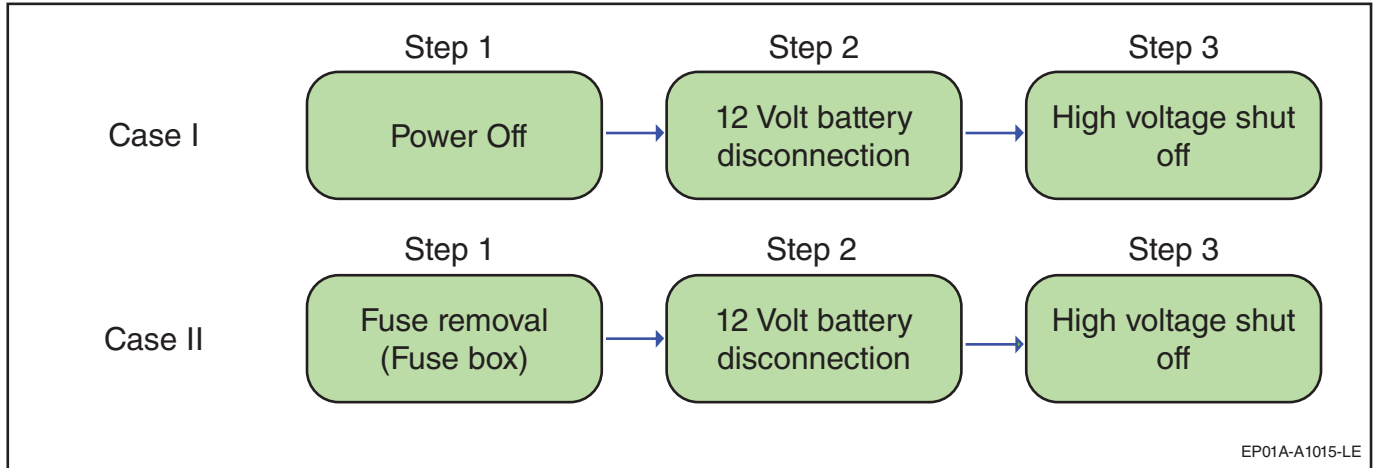


WARNING

The vehicle should only be lifted or moved only if first responders are trained and equipped at the technician level per the applicable country's national fire safety standards and familiar with the proper vehicle's lifting points. Always use caution to ensure you never come into contact with the high voltage battery or other high voltage components while handling the vehicle.

3. DISABLE DIRECT HAZARD / SAFETY REGULATION

The final step in the initial response process, after the vehicle has been immobilized, is to shut down the vehicle along with its Safety Restraint System (SRS) components and high voltage electrical system. Follow the steps below to safely disable the vehicle and stop the flow of electrical current.



3.1 Disabling the System –Smart Key System and “POWER” START/STOP Button

Check the instrument panel for the READY light. If the READY light is illuminated, it indicates that the vehicle is ON.

- 1 If the "READY" indicator light is not illuminated, the vehicle is off. Do not press the "POWER" START/STOP button because the vehicle may start (go into "READY" mode).
- 2 To turn OFF the system, press the **P** (Park) button to engage the Electric Parking Brake and press the POWER button.



■ WITHOUT DEPRESSING THE BRAKE PEDAL

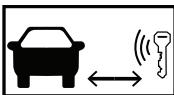
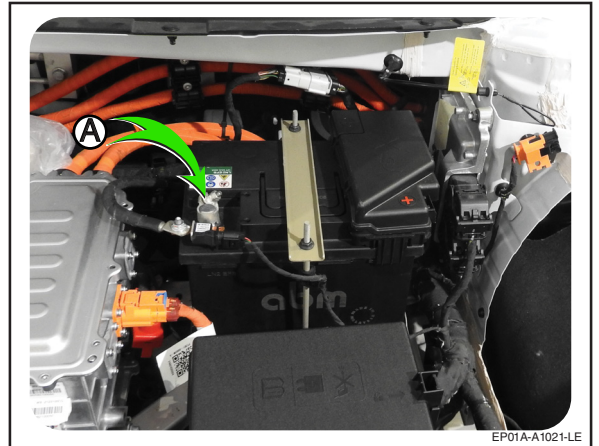
Pressing POWER button	Button Position / LED	Vehicle condition
One time	IGN ON	Electrical accessories are operational. (The warning lights can be checked before the vehicle is started.)
Two time	SLEEP	Off

■ WHILE DEPRESSING THE BRAKE PEDAL

Pressing POWER button	Button Position / LED	Vehicle condition
One time	READY	Ready to drive

■ STOP THE VEHICLE COMPLETELY

- 1 Press the **P** position switch. (Check that the shift position indicator shows **P** and the parking brake indicator is illuminated).
- 2 Set the parking brake.
- 3 Press the power switch. (The EV system will stop, and the meter display will be extinguished the shift position indicator will be extinguished a few seconds after the meter display).
- 4 Release the brake pedal and check that "READY" and other indicator animation is not shown on the meter.
- 5 If necessary, lower the windows, unlock the doors and open the tail gate as required, before disconnecting the negative terminal of 12 Volt battery **A**. Once the 12 Volt battery is disconnected, power controls will not operate.
- 6 Before disconnecting the negative terminal of 12 Volt battery **A**, remove the Smart Key at least 2 meters away from the vehicle to prevent accidental restart.



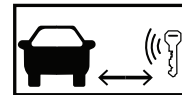
3.2 Use the following procedure to remove the Service Plug or Manual Switch Disconnect (MSD) and disable the high voltage battery:

■ BEFORE ISOLATION PROCEDURE

- 1 Ensure has co-partner together nearby the isolation area that standby together with the safety hook.
- 2 Check surrounding thermal existence using the infrared thermometer (if equipped).
- 3 Diagnose car condition.
- 4 Remove all the accessories (ring, watch, etc) and empty all pockets.
- 5 Ensure to wear jacket or non-synthetic materials attire.

■ DURING ISOLATION PROCEDURE

- 1 Put safety signage on the vehicle roof and set a barrier (1m) around the vehicle. Place the RED sign (High Voltage Enabled) on the front windscreen.
- 2 Check the 'READY' indicator (no fault) and ensure it appears inside the meter.
- 3 Turn vehicle IG off and remind customer to not turn on the vehicle using phone apps.
 - a) Remove the smart key from the vehicle.
 - b) Put the smart key into the locked safety box and placed it 5m away from the vehicle.
- 4 Remove the negative (–) terminal cable from the low voltage battery.
- 5 Check all the PPE specification & physical condition. Check the rubber insulated glove specification, physical condition & air leak. Ensure that the glove is 1000V AC rms, EN 60903, Class 0. Ensure no physical damage such as torn, cracked, & leak. Perform air leak test by rolling up the glove, placed near face, hear and feel if there's any air leakage.
 - b) Check face shield specification and physical condition. Ensure no physical damage such as cracked.
 - c) Wear all checked PPE.



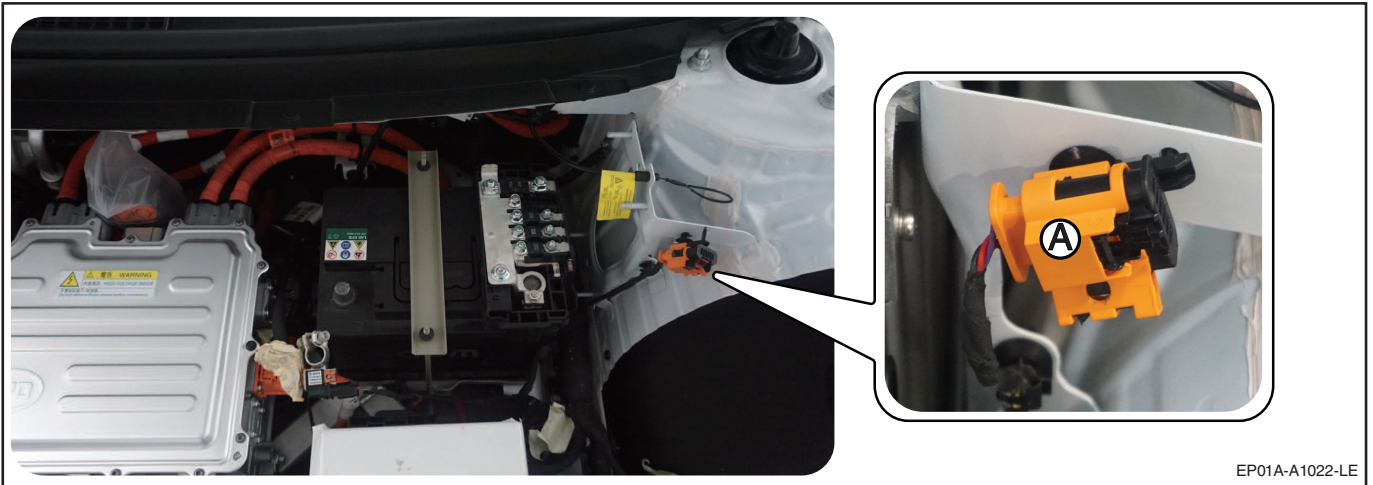
WARNING

Proper Personal Protective Equipment (PPE) is required to perform this procedure:

- Synthetic gloves.
- High Voltage (HV) insulating rubber gloves, 1000V AC rms, EN 60903, Class 0.
- Leather gloves.
- Insulating rubber mat and electrical hazard rated or rubber soled boots.
- Non-synthetic clothing and jacket or coverall.
- Face shield.

- 6 Release Service Disconnect Switch by using one-hand rules.

 **Release Manual Switch Disconnect (MSD) by using one-hand rules.**



WARNING



Electrocution Risk / Explosive Risk

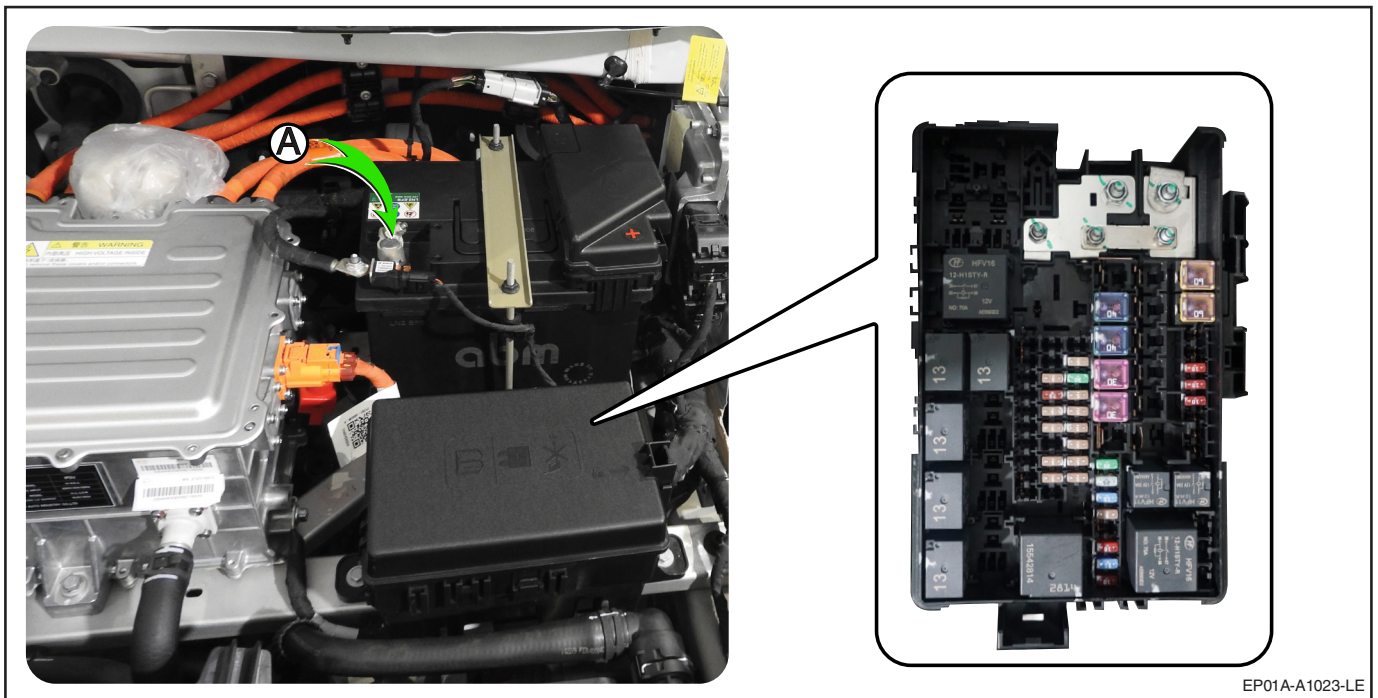
- Before performing any emergency response procedures, ensure the vehicle is disabled and wait at least 10 minutes to allow the high voltage system's capacitor to discharge, reducing the risk of electrocution.
- Exposed wires or cables may be visible inside or outside the vehicle. To avoid serious injury or death from electric shock, never touch any cables or wires before the high voltage system has been properly disabled.
- SRS (Supplemental Restraint System) components may remain powered for up to 3 minutes after the 12 Volt electrical system is shut off or disabled. To avoid accidental airbag deployment and potential injury, always disconnect the battery cable and wait at least 3 minutes before beginning any work.

Failure to follow any of these instructions may result in serious injury or death from accidental deployment of the airbag system.

3.3 Disabling the System –IG (Ignition) Fuse Removal

■ FUSE REMOVAL

- 1 Open the hood. *Refer to page 4.
- 2 Remove the motor compartment fuse box cover.
- 3 If the vehicle cannot be shut down using the "POWER" START/STOP button, remove the IG1 and IG2 fuses or relays from the fuse box located in the motor compartment. If these specific fuses cannot be identified, remove all fuses and relays from the fuse box as a precautionary measure.
- 4 To prevent the risk of accidental restart, disconnect the negative (–) terminal of the 12 Volt battery Ⓐ, located in the motor compartment.



4. ACCESS TO OCCUPANTS

4.1 Extraction Operations

- The Perodua QV-E is an electric vehicle equipped with high voltage components, requiring first responders to exercise extreme caution during occupant extraction. Before starting any extraction procedures, responders must follow the "Identify, Immobilize, and Disable" steps as detailed in the Emergency Response Guide Manual.



WARNING

Be careful to not damage the battery pack while stabilizing / lifting the vehicle

NOTE: The seats are electrically powered and may not function after a collision.

NOTE: After a collision, the doors may not unlock from the outside. Extrication may be required.

NOTE: The windshield, on Perodua QV-E are made of laminated safety glass. The side windows and rear liftgate glass is tempered glass.

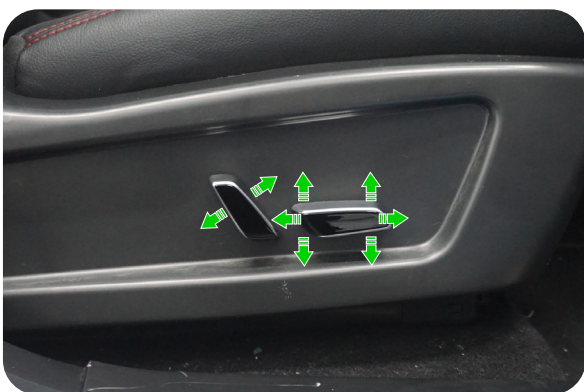
OPENING DOOR FROM OUTSIDE



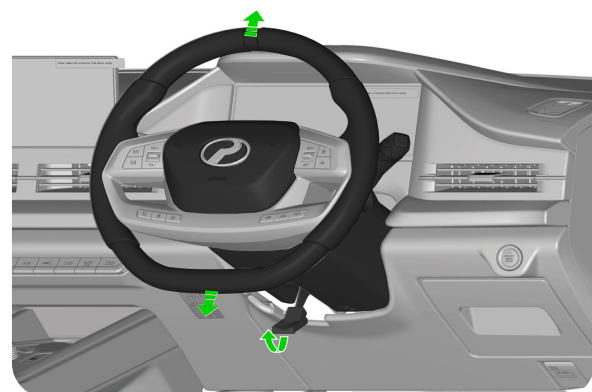
OPENING DOOR FROM INSIDE



SEAT ADJUSTMENT



STEERING TILT ADJUSTMENT



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4.2 Extraction tools and procedure

- When responding to an incident involving a Perodua QV-E, first responders are advised to follow their organization's standard operating procedures for managing vehicle emergencies.
- When performing cutting operations on the vehicle, first responders must exercise extra caution around the airbag system, orange coloured high voltage cables, and other high voltage components to avoid damaging them, as this could pose a risk of electric shock or explosion.

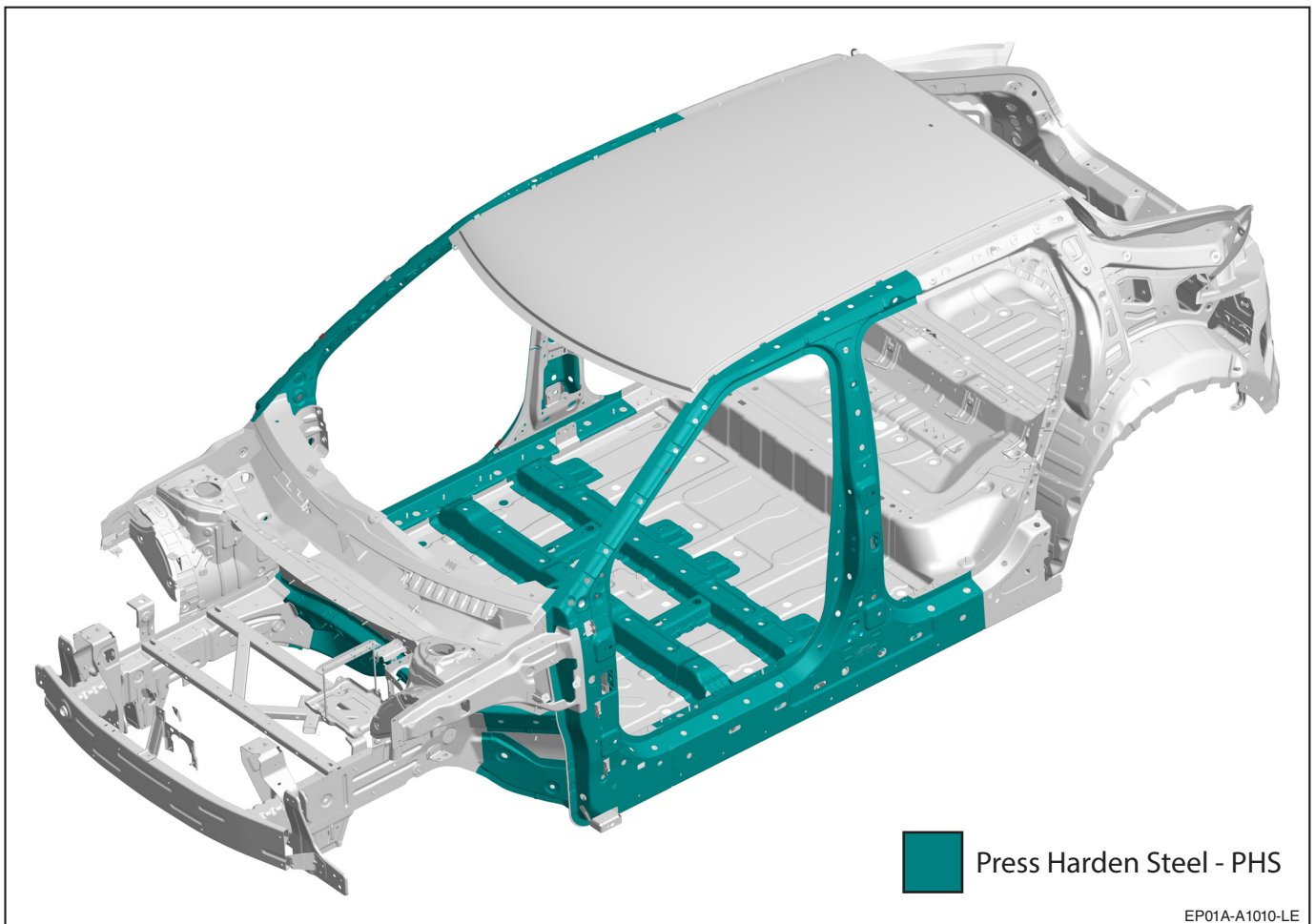


WARNING

Electrical and mechanical release systems may be damaged or malfunction after a collision.

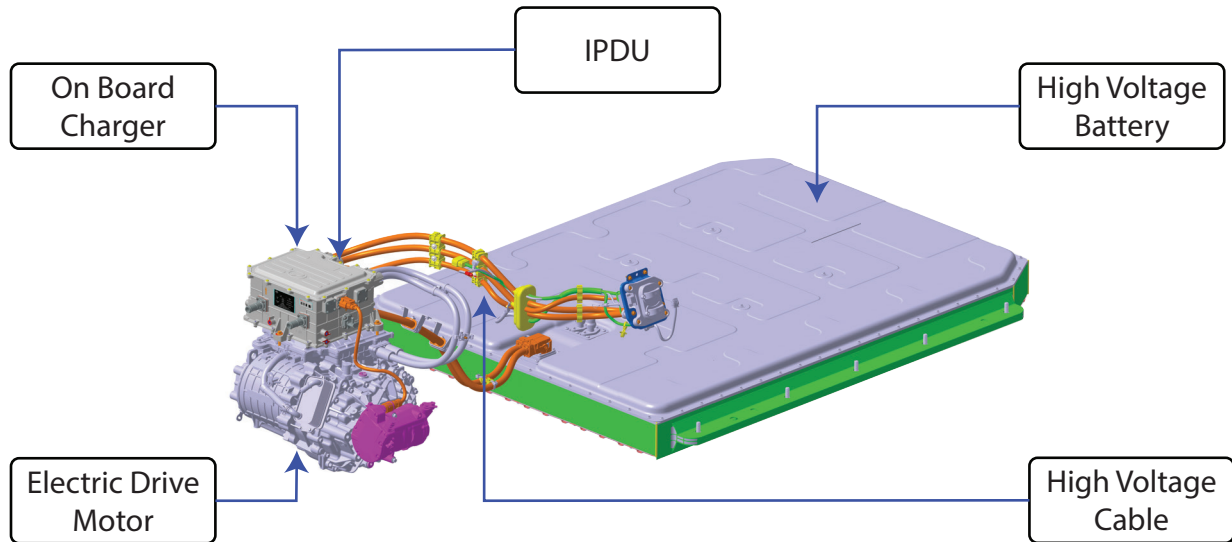
4.3 Location of ultra-high strength steel

- In these images, Press Harden Steel (PHS) is used in the green teal colored areas. Depending on the tools used, (PHS) can be challenging or extremely difficult to cut. If necessary, use an alternative technique which are not damaged and to prevent a risk of electric shock or explosion.



5. STORED ENERGY / LIQUID / GASES / SOLIDS

5.1 High voltage system



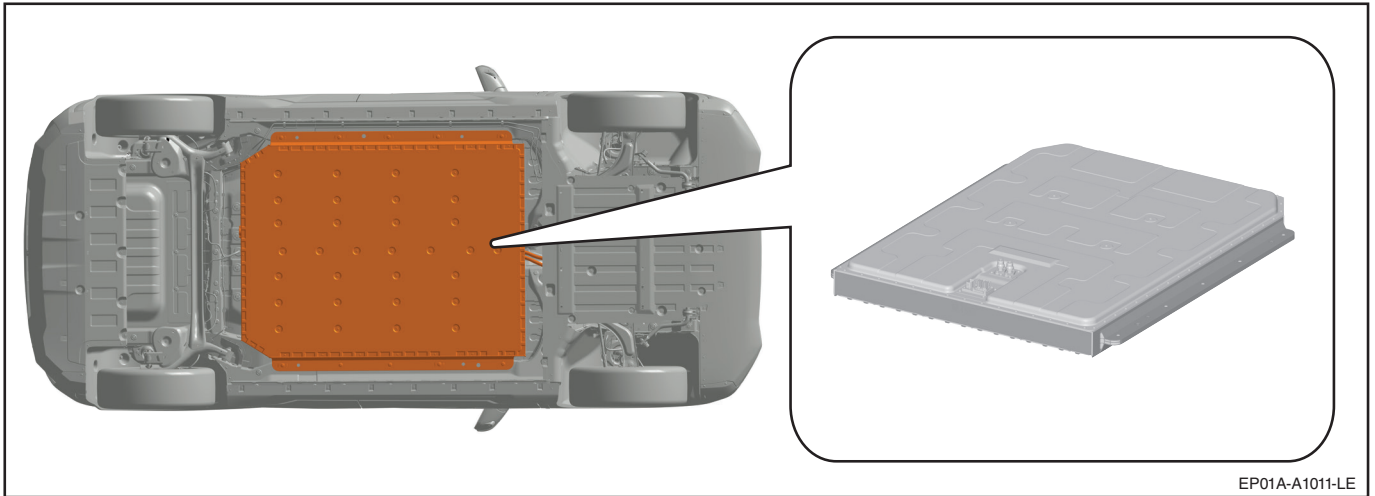
On Board Charger (OBC)	On-Board Charger: Battery charging equipment (AC→DC)
IPDU	Intelligent Power Distribution Unit (PDU + OBC + DCDC)
Electric Drive Motor	When current flows through the coil, it generates a rotating magnetic field and generates motor torque.
High Voltage Cable	Transmitting electric power from the battery to the motor and other components
High voltage battery	Supplies electric energy to traction motor and stores generated electric energy.

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5.2 High voltage & low voltage battery

■ HIGH VOLTAGE BATTERY

The high voltage lithium-ion battery, located beneath the chassis of the Perodua QV-E, it stores and supplies electrical energy to the traction motor.

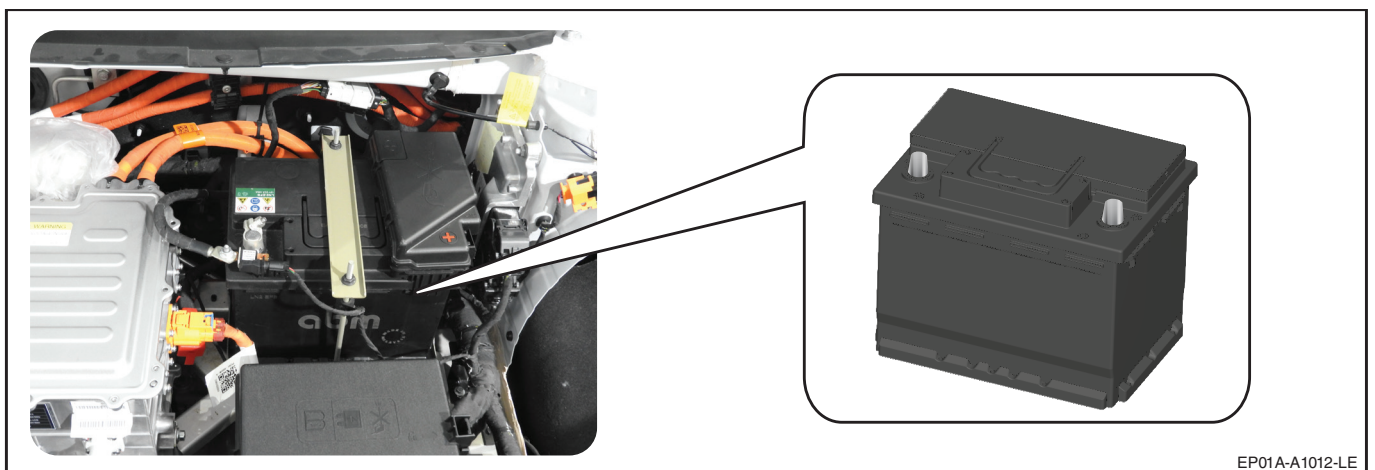


WARNING

The cells in the HV battery are sealed, and there isn't enough electrolyte present to form a liquid pool. Any clear liquid observed is most likely water. The coolant, on the other hand, is blue in colour.

■ 12 VOLT BATTERY

When the vehicle's hood is opened, the 12 Volt battery becomes accessible. The 12 Volt battery is located on the left side of the electric motor compartment and powers the vehicle's standard electronic systems, such as the radio, lights, door locks, power windows, and more.

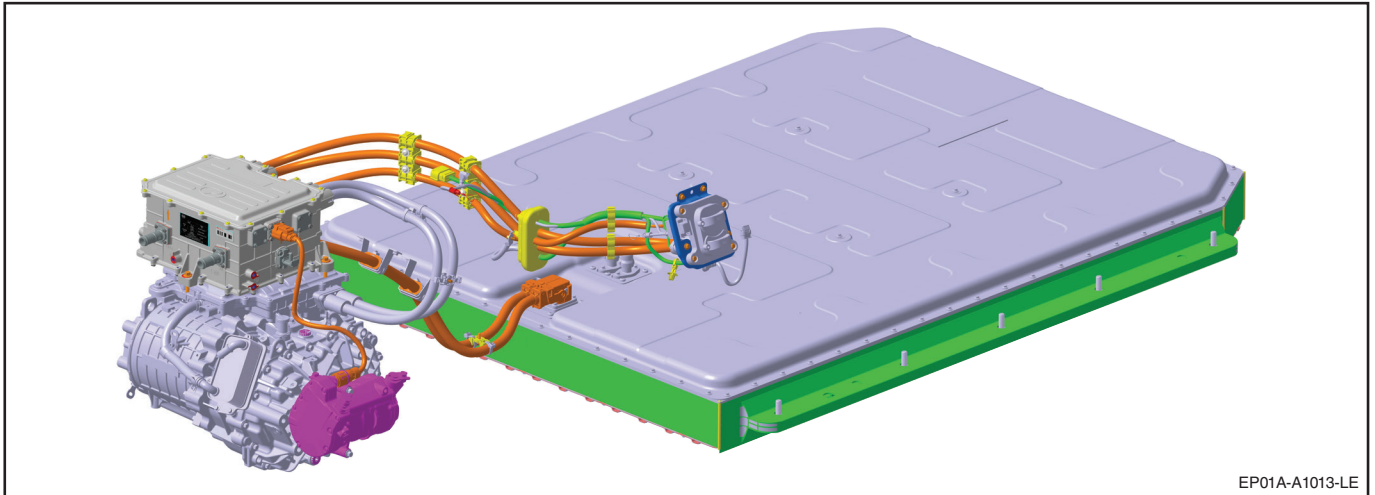


WARNING

Care should always be taken to not make contact with the positive and negative battery terminals when disconnect the negative battery terminal.

5.3 High voltage orange cabling

- In accordance with Society of Automotive Engineers (SAE) standards, high voltage cables are coloured orange. These cables run beneath the vehicle floor, connecting the high voltage battery to the IPDU, motor, charging port, air conditioning compressor, and other high voltage components located at the front of the vehicle.
- Orange coloured cables located under the hood, beneath the floor in the battery compartment, or along the underside of the vehicle indicate that the vehicle is electric.



CAUTION




- Do not cut or disconnect the high voltage orange cables or connectors until the high voltage system has been properly disabled (refer to page 8).
- Exposed cables or wires may be present both inside and outside the vehicle. It is crucial never to touch any metal chassis wires, cables, connectors, or electrical components until the high voltage system has been fully disabled and you have confirmed that none of these components are connected to or shorted against the vehicle's chassis. This precaution helps prevent the risk of electric shock or damage..

Failure to follow any of these instructions may result in serious injury or death by electrocution

6. IN CASE OF FIRE

6.1 Fire fighting operations

Strict precautions must be taken while conducting fire fighting operations due to following Reasons:

- Lithium-ion batteries contain a gel electrolyte that can release gases, ignite, and produce sparks when exposed to temperatures exceeding 300°F (149°C). This can cause the vehicle to burn rapidly, often with a flare-like effect. Even if a high voltage battery fire seems to be extinguished, there is still a risk of delayed or renewed fires.
- Always use a thermal imaging camera to confirm that the high voltage battery is completely cooled before leaving the scene. Inform all emergency responders and nearby civilians about the risk of battery reignition. 
- If the high voltage battery has been involved in a fire, submerged in water, or damaged in a collision, the vehicle should be stored outdoors in an open area with a safety perimeter of at least 50 feet. Alternatively, the vehicle or battery pack can be secured behind a protective barrier made of earth, steel, concrete, or solid masonry.
- Burning batteries may release harmful gases such as hydrogen fluoride, carbon monoxide, and carbon dioxide. Responders must wear NIOSH/MSHA-approved full-face self-contained breathing apparatus (SCBA) and full protective gear. Even if the high voltage battery pack is not directly involved in a fire, approach the vehicle with extreme caution.





WARNING

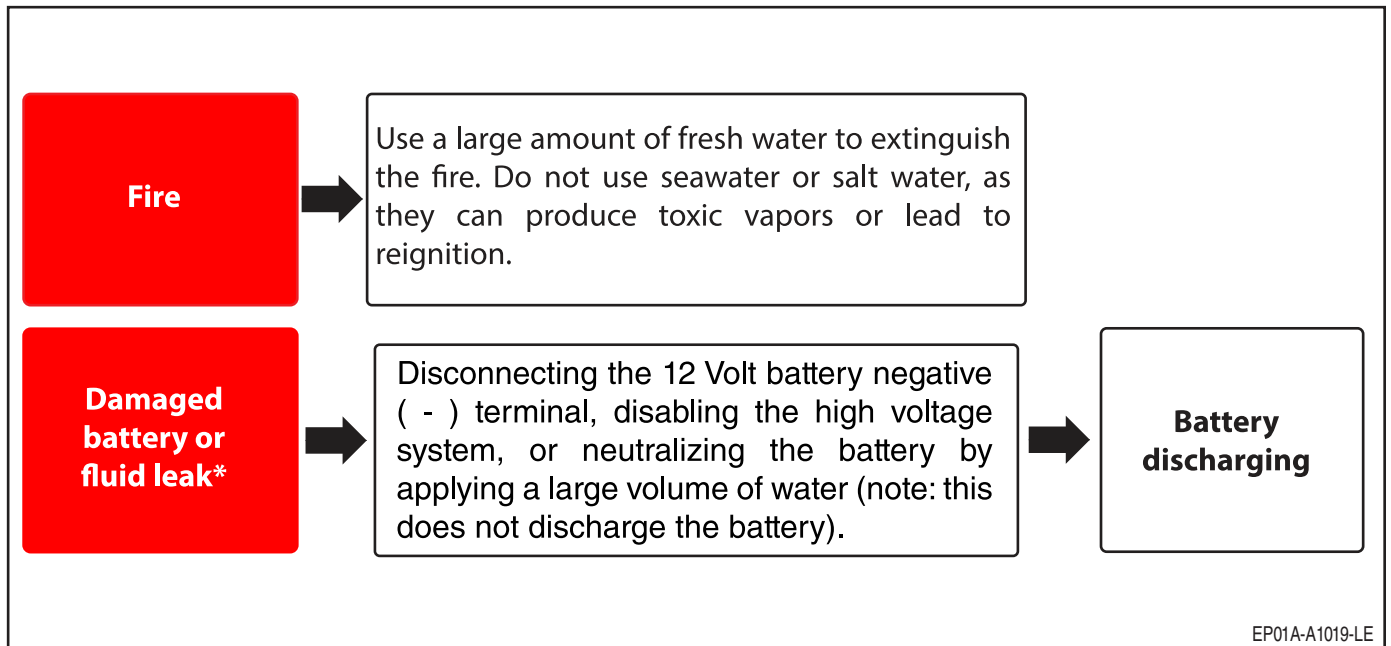


Heat and flames can severely damage airbag inflators, stored gas inflation cylinders, gas struts, and other critical components, potentially leading to unexpected dangerous overheating and even explosions of the inflation cylinders. To ensure safety, always perform thorough knockdown of flames and cool the area adequately before entering a hot zone.

6.2 Extinguishers

- Small fires that do not involve the high voltage battery should be extinguished using an ABC fire extinguisher. (ex. Fire caused by wiring harnesses, electrical components, etc.)
- Do not attempt to extinguish high voltage battery fires using a small amount of water, as this could increase the risk of electric shock. Instead, use large volumes of water a minimum of 2,650 gallons to effectively cool the battery.  Firefighters should not hesitate to apply additional water as needed. Always ensure the battery is completely cooled before considering the fire fully extinguished to prevent the possibility of reignition.
- Battery fires may take as long as 24 hours to cool down completely. Once the flames are extinguished and visible smoke has diminished, it's important to use a thermal imaging camera to continuously monitor the temperature of the high voltage battery and check whether it's increasing or decreasing.  The vehicle must not be released to secondary responders such as police or towing crews until the battery shows no signs of fire, smoke, unusual noises like popping or hissing, or heat for at least 45 minutes. Before leaving the scene or transferring the vehicle's custody, confirm that the battery is fully cooled. Always inform secondary responders about the ongoing risk of battery reignition and recommend that they tilt or reposition the vehicle to drain any trapped water, which helps reduce the chance of reignition.
- Due to the risk of reignition, a Perodua QV-E involved in submersion, fire, or a collision that has damaged the high voltage battery should be stored in an open area at least 50 feet (15 meters) away from any structures or exposures.

6.3 How to deal with the situation



***If electrolyte leakage or any damage to the high voltage battery casing is observed, do not attempt to handle the battery and immediately contact qualified personnel.**

■ VEHICLE FIRE

- 1 A large volume of water at least 2,650 gallons must be used to effectively cool the battery.
- 2 Applying water to the exterior of the high voltage battery casing can aid in cooling the battery. However, never attempt to penetrate or open the battery casing to apply water directly, as this can cause serious damage or safety hazards.
- 3 Fully submerging the vehicle in a water-filled container is an effective technique for extinguishing battery fires.



■ HIGH VOLTAGE BATTERY DAMAGE AND FLUID LEAKS

If leakage of electrolyte solution or any damage to the lithium-ion battery casing is detected, first responders should wear appropriate personal protective equipment (PPE) and apply a large volume of water to the battery pack to neutralize it. This neutralization helps stabilize the battery pack's thermal condition but does not discharge the battery

- 1 Do not put any smoke, spark, or flame around the vehicle.
- 2 Do not touch or step on the spilled electrolyte solution.
- 3 If electrolyte leak occurs, wear appropriate solvent resistant PPE and use soil, sand, or a dry cloth to clean up the spilled. Be sure to adequately ventilate the area.



CAUTION



Electrolyte Irritation

The high voltage battery contains electrolyte solution. To avoid exposure to electrolyte solution and serious personal injury, always wear appropriate solvent resistant PPE (Personal Protective Equipment) and SCBA (Self-Contained Breathing Apparatus).

- Electrolyte solution is an eye irritant. In the event of contact with eyes, rinse with plenty of water for 15 minutes.
- Electrolyte solution is a skin irritant. Therefore, in the event of contact with skin, wash off with a soap.
- Electrolyte liquid or fumes coming into contact with water will create vapors in the air from oxidization. These vapors may irritate skin and eyes. In the event of contact with vapors, rinse with plenty of water and consult a doctor immediately.
- Electrolyte fumes (when inhaled) can cause respiratory irritation and acute intoxication. Inhale fresh air and wash mouth with water. Consult a doctor immediately.

■ HIGH VOLTAGE BATTERY REIGNITION BY STRANDED ENERGY

Damaged cells in the high voltage battery can experience thermal runaway* and reignition.

To prevent reignition, responding emergency personnel need to be aware of the risk of stranded energy* which remains in the damaged cells and lead to reignition.

i***Thermal runaway** : The root cause of thermal runaway is generally due to short-circuiting inside a battery cell and a resulting increase in the cell's internal temperature.

During thermal runaway, the battery generates intense heat that can rapidly spread from a single cell to multiple cells in a domino-like chain reaction, escalating the risk of fire and further damage.

i***Stranded energy** : Energy remains stored inside any undamaged battery cells after the accident. That stranded energy could cause a high voltage battery to reignite multiple times after fire fighters have successfully extinguished the initial fire.

■ HOW TO PREVENT REIGNITION (MITIGATING STRANDED ENERGY RISK)

Use a thermal imaging camera to ensure the high voltage battery is completely cooled. This step is essential to detect any residual heat that could pose a risk of reignition or thermal runaway, ensuring the scene is safe before leaving the incident scene.



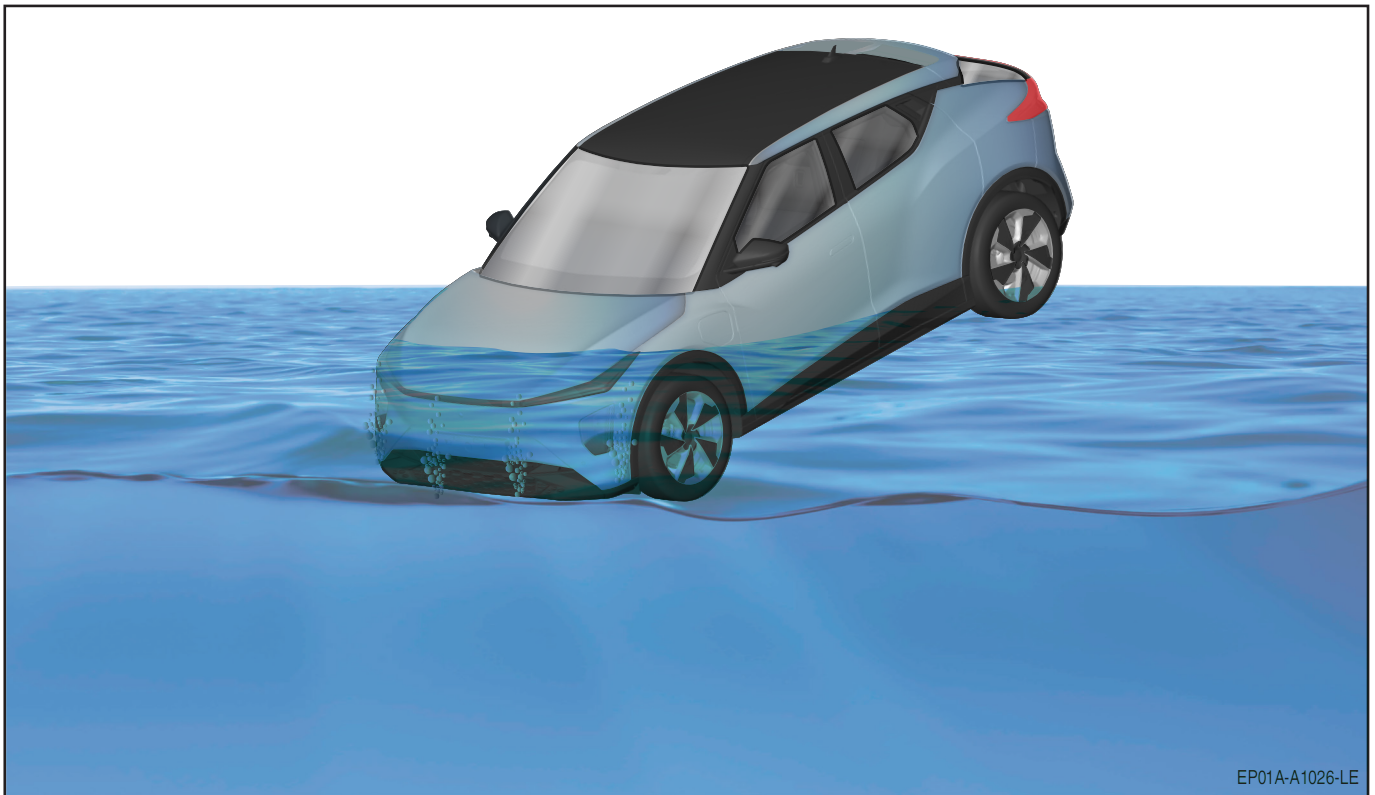
Always advise second responders that there is a risk of the battery reigniting.

- 1 12 Volt battery (–) terminal disconnection (To depower battery management system).
- 2 High voltage shut off *refer to page 7.
- 3 Discharging the high voltage battery *refer to page 25-25.

7. IN CASE OF SUBMERSION

7.1 Submerged or Partially Submerged Vehicles

- In some emergencies, a vehicle may be submerged. The Perodua QV-E does not have high voltage components on its body or frame, so it is safe to touch these areas if the vehicle is not severely damaged, whether it is underwater or on land.
- In the event the vehicle is submerged or partially submerged, remove the vehicle from the water before attempting to disable the vehicle. Drain the water from the vehicle. Use one of the methods described in page 8-12 to disable the vehicle. Then, discharge the battery by referring to page 25-26.



CAUTION



If severe damage causes high voltage components to become exposed, responders should take appropriate precautions and wear appropriate insulated personal protective equipment.

Do not attempt to remove a safety plug or manual switch disconnect (MSD) while the vehicle is in water.

Failure to follow these instructions can lead to death or serious injury by electrocution.

8. TOWING / TRANSPORTATION / STORAGE

8.1 Towing and Transportation

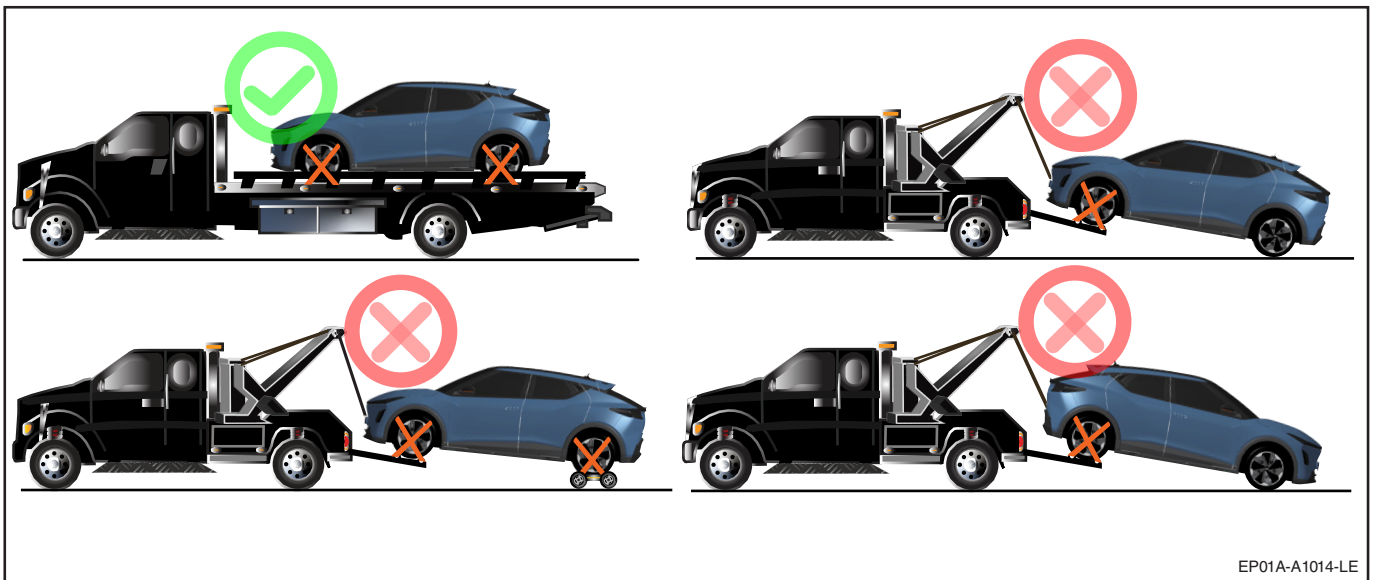
The drive units in the Perodua QV-E can produce power when the wheels turn. Always transport the vehicle with all four tires lifted off the ground, and ensure the wheels cannot rotate at any time during transport.



WARNING



- Never transport the vehicle with the tires in a position where they can spin. Doing so can lead to significant damage and overheating. In rare cases extreme overheating may cause the surrounding components to ignite.
- Possible battery re-ignition! after a fire incident, store outside at a safe distance **(50 FT/15 M)** from other vehicles and structures!

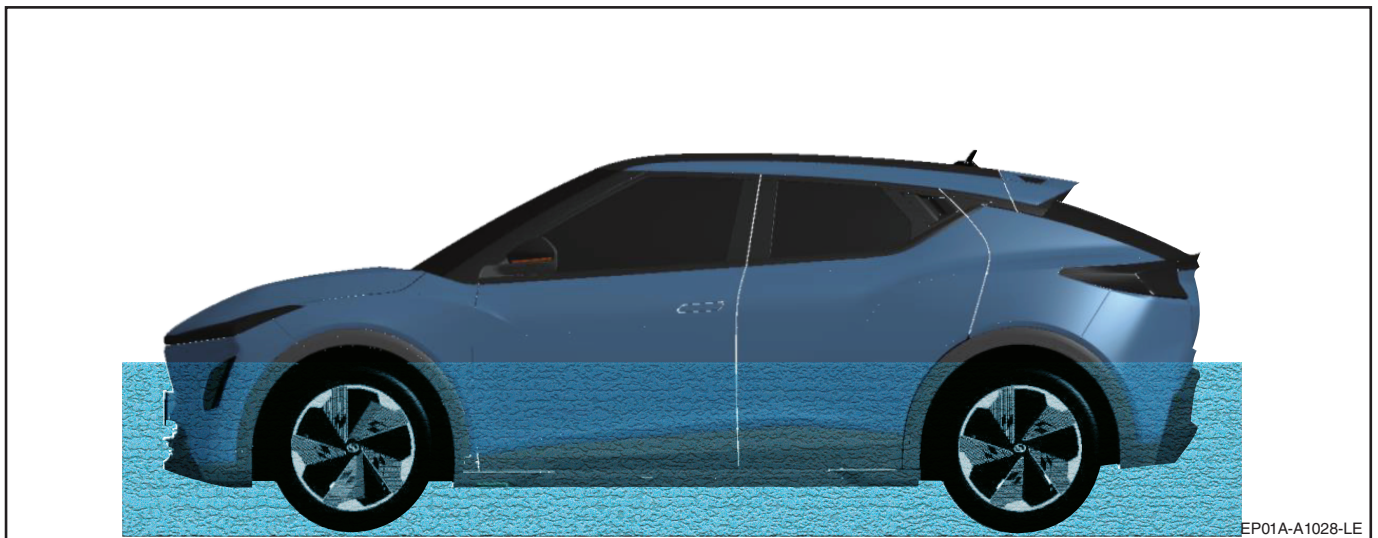


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The recommended method for transporting the vehicle is using a flatbed truck, where the vehicle can be positioned facing either direction. If a rollback truck is unavailable, wheel lifts and dollies must be employed to keep all four wheels off the ground. When transporting with dollies, the speed should not exceed the manufacturer's specified limit. Perodua specifically recommends transporting the vehicle facing forward, with the front wheels lifted and the rear wheels resting securely on the dollies.

8.2 Storage of damaged vehicle with the damaged battery

- 1 Before storing a damaged vehicle, drain all fluids and water, then disconnect the negative (–) terminal of the 12 Volt battery.
- 2 Additionally, drain any water inside the battery or vehicle, and remove the service plug from the high voltage battery before storing a damaged vehicle.
- 3 Position the vehicle in an open area, keeping it clear of any structures, other vehicles, or buildings.
- 4 Then, continuously monitor the vehicle until the discharging process is fully completed.
- 5 If the battery can be removed from the vehicle by moving the vehicle on a lift, remove and discharge the battery.
- 6 If the battery can't be removed, set up a water pool until the entire battery is submerged. (See below)
- 7 Water pool condition : tap water or pond water that does not contain salt.
- 8 Maintain this water level for at least 90 hours.
- 9 Put salt into the water pool to make 3.5% salt water.
- 10 Wait for additional 48 hours in salt water.
- 11 Then, drain the water and dry it.
- 12 DO NOT USE SALT WATER FOR THE FIRST STEP.
- 13 A large volume of flammable gas can be generated in salt water due to electrolysis.
- 14 After the vehicle has been submerged in pure water for a minimum of 90 hours, add salt to the water pool.



Battery discharging

8.3 Battery Storage

- 1 To store the damaged battery safely, the battery must be discharged properly.
- 2 If the battery can be removed from the vehicle, discharge the battery to lower the risk of reignition.
- 3 Ensure that all smoke, sparks, and flames surrounding the vehicle are completely extinguished to prevent any risk of reignition or further damage.



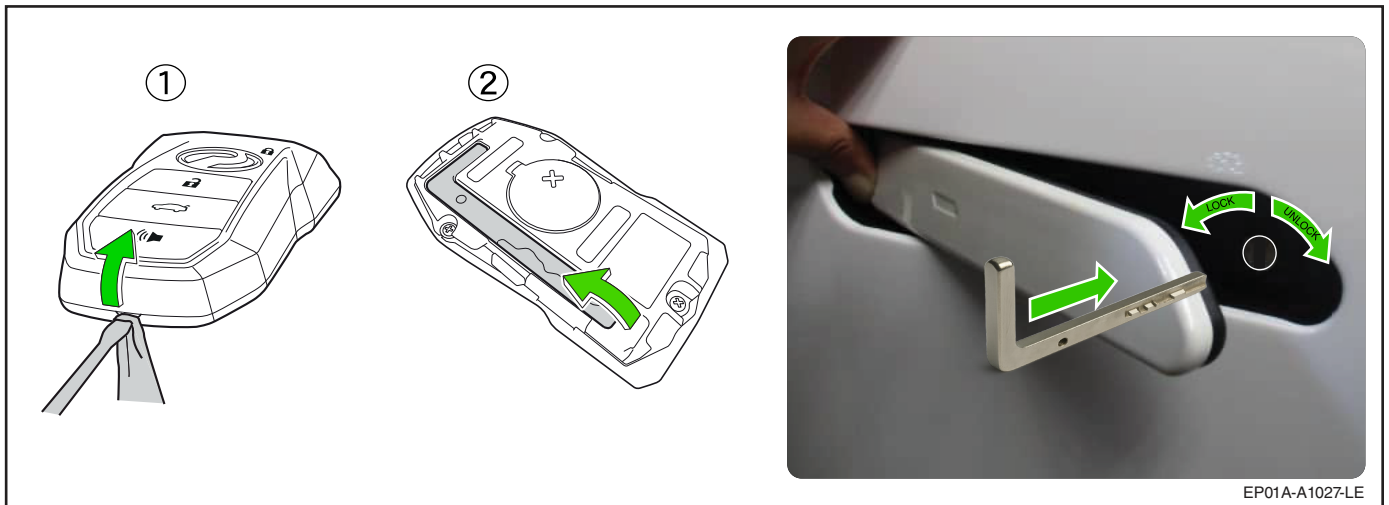
CAUTION



- Electrolyte solution is an eye and skin irritant, so exercise caution.
 - Do not touch or step on the spilled electrolyte.
 - If electrolyte leakage occurs, wear appropriate solvent-resistant PPE and clean up the spill using soil, sand, or a dry cloth. Ensure the area is well ventilated during the cleanup.
- 4 Use fresh water without any salt content, such as tap water or pond water.
 - 5 Immerse the battery completely in water for a minimum of 90 hours to ensure thorough cooling and neutralization.
 - 6 Next, add salt to the water pool to achieve a 3.5% salt concentration.
 - 7 Allow the battery to remain submerged in the saltwater solution for an additional 48 hours in salt water.
 - 8 Afterward, carefully remove the battery from the water pool, thoroughly drain any remaining liquid, and dry it completely.

9. IMPORTANT ADDITIONAL INFORMATION

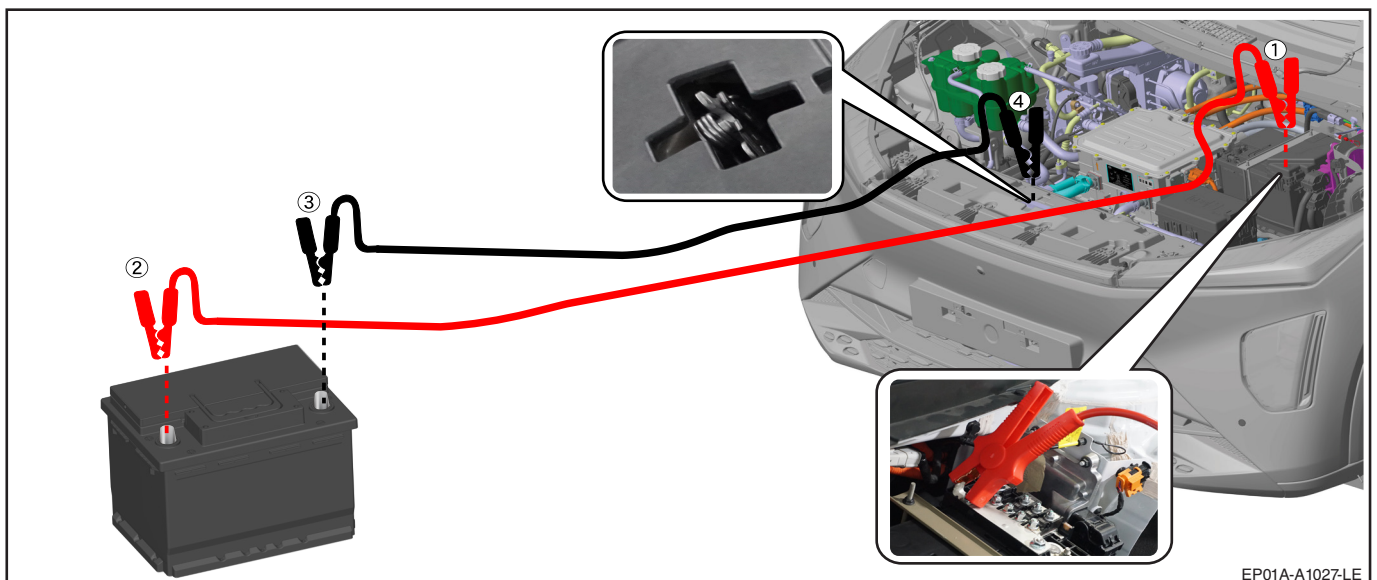
9.1 How to open the door when 12 voltage battery is flat



9.2 Jump starting

■ JUMP STARTING

Do not attempt to jump-start the high voltage battery, as it is not designed for jump-starting. If the high voltage battery is fully discharged, the vehicle must be towed as described on the *page 24*. For a discharged 12 Volt battery, refer to the “Emergency Starting” section in the Owner’s Manual for detailed instructions, or connect jumper cables following the sequence shown in the image and disconnect them in reverse order.



 **CAUTION**



Do not attempt to jump start the Perodua QV-E high voltage battery.

Failure to follow these instructions will lead to serious bodily injury or death by electrical shock.

■ JUMP STARTING PROCEDURE

- 1 Connect the jumper cable in the following order:
 - Clamp the positive jumper cable to the “+” terminal of your vehicle.
 - Clamp the other positive jumper cable to the “+” terminal of the rescue vehicle.
 - Clamp the negative jumper cable to the “-” terminal of the rescue vehicle.
 - Clamp the other negative jumper cable to the vehicle.
- 2 Start the EV system or engine of the rescue vehicle. Increase the EV system speed slightly and maintain at that level for approximately 5 minutes to recharge the LV battery (12 V) of your vehicle.
- 3 Open and close any of the doors of your vehicle with the power switch “OFF”.
- 4 Maintain the EV system or engine speed of the rescue vehicle and start the EV system of your vehicle by turning the power switch to “READY”.
- 5 Make sure the “READY” indicator comes on. If the indicator light does not come on, contact an authorised Perodua Service Centre.
- 6 Once the EV system has started, remove the jumper cables in the exact reverse order from which they were connected.
- 7 Install the battery fuse box cover. Once the EV system starts, have the vehicle inspected at an authorised Perodua Service Centre as soon as possible.

9.3 Airbag system (SRS: Supplemental Restraint System)

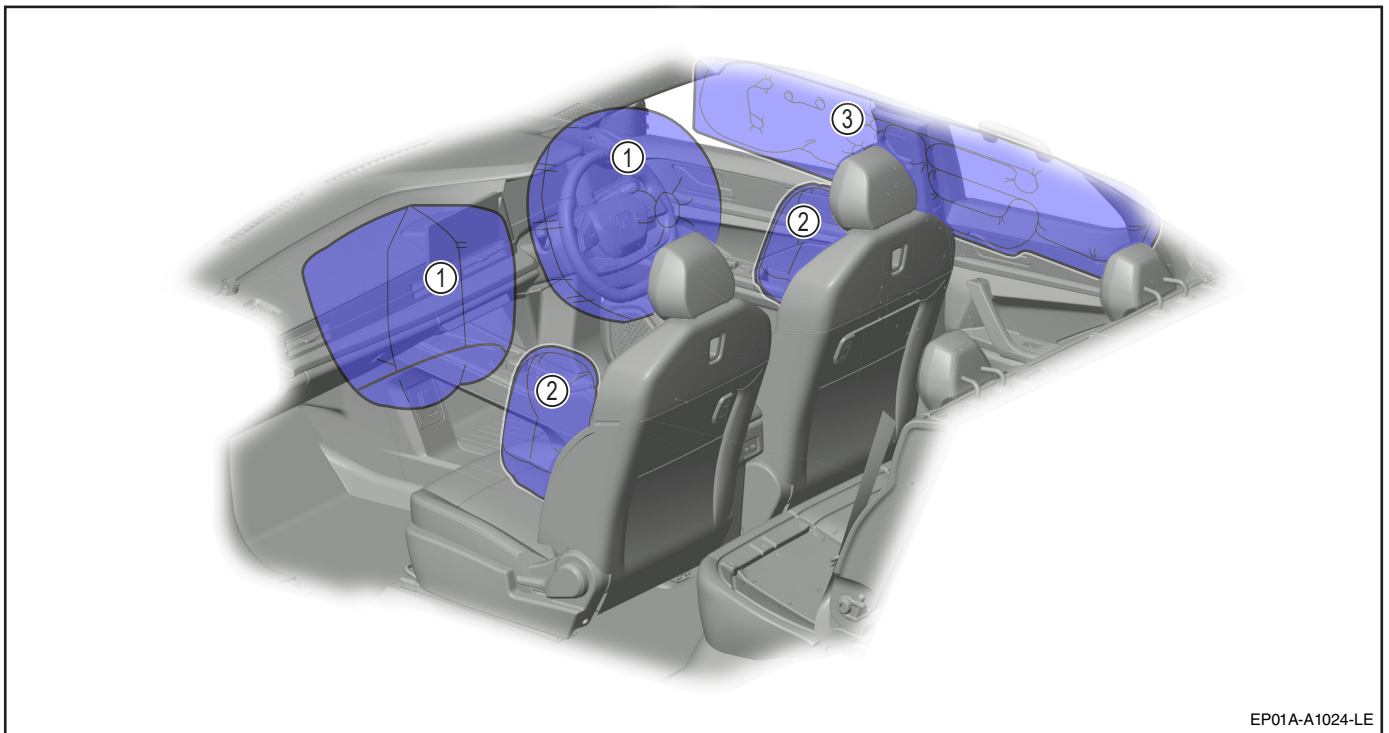
■ AIRBAG



CAUTION



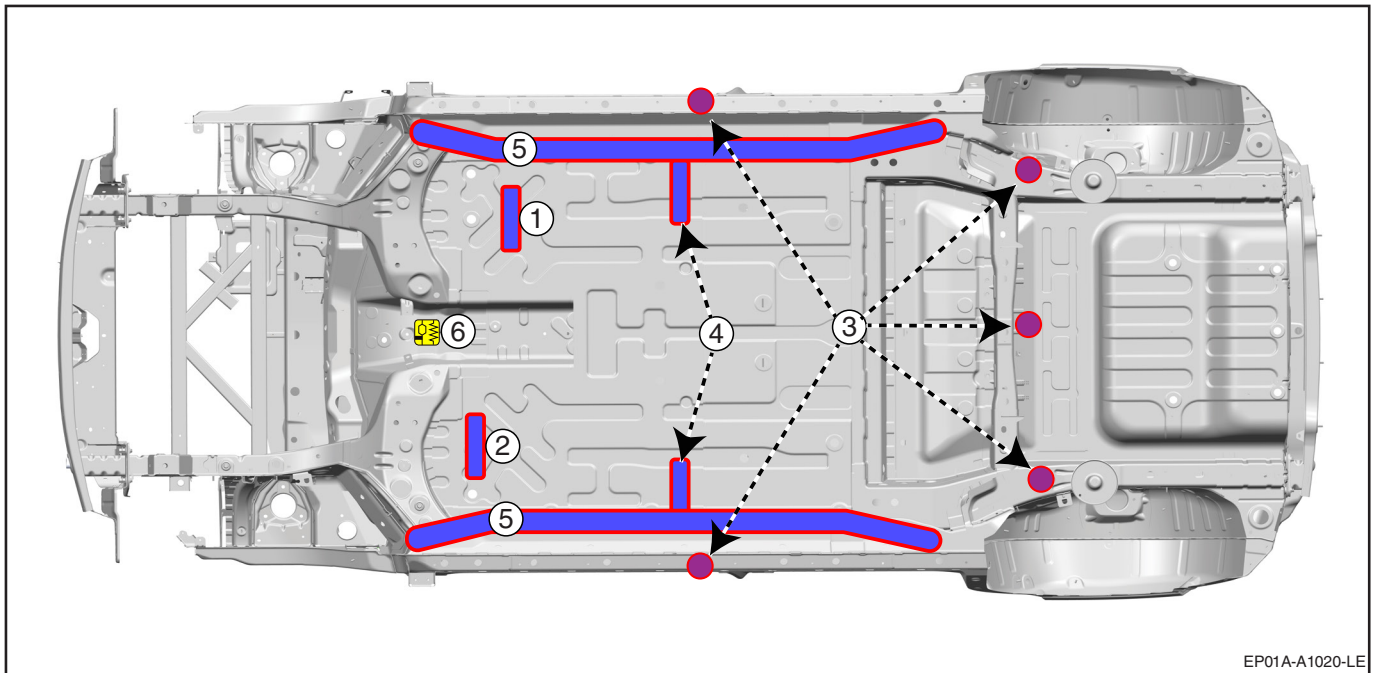
The Perodua QV-E is equipped with six airbags, strategically positioned as shown in the image below. Before performing any emergency procedures, ensure the ignition switch is turned off and disconnect the negative (–) terminal of the 12 Volt battery (located in the left-side motor compartment) to prevent accidental airbag deployment.



EP01A-A1024-LE

- ① Driver front airbag
- ① Passenger front airbag
- ② Passenger Side airbag
- ② Driver Side airbag
- ③ Passenger Curtain airbag

■ AIRBAG SYSTEM COMPONENTS



EP01A-A1020-LE

- ① Driver's front Airbag (DAB)
- ② Passenger's front Airbag (PAB)
- ③ Seat Belt Pretensioner (BPT)
- ④ Side Airbag (SAB)
- ⑤ Curtain Airbag (CAB)
- ⑥ Supplemental Restraint System Control Module (SRSCM)

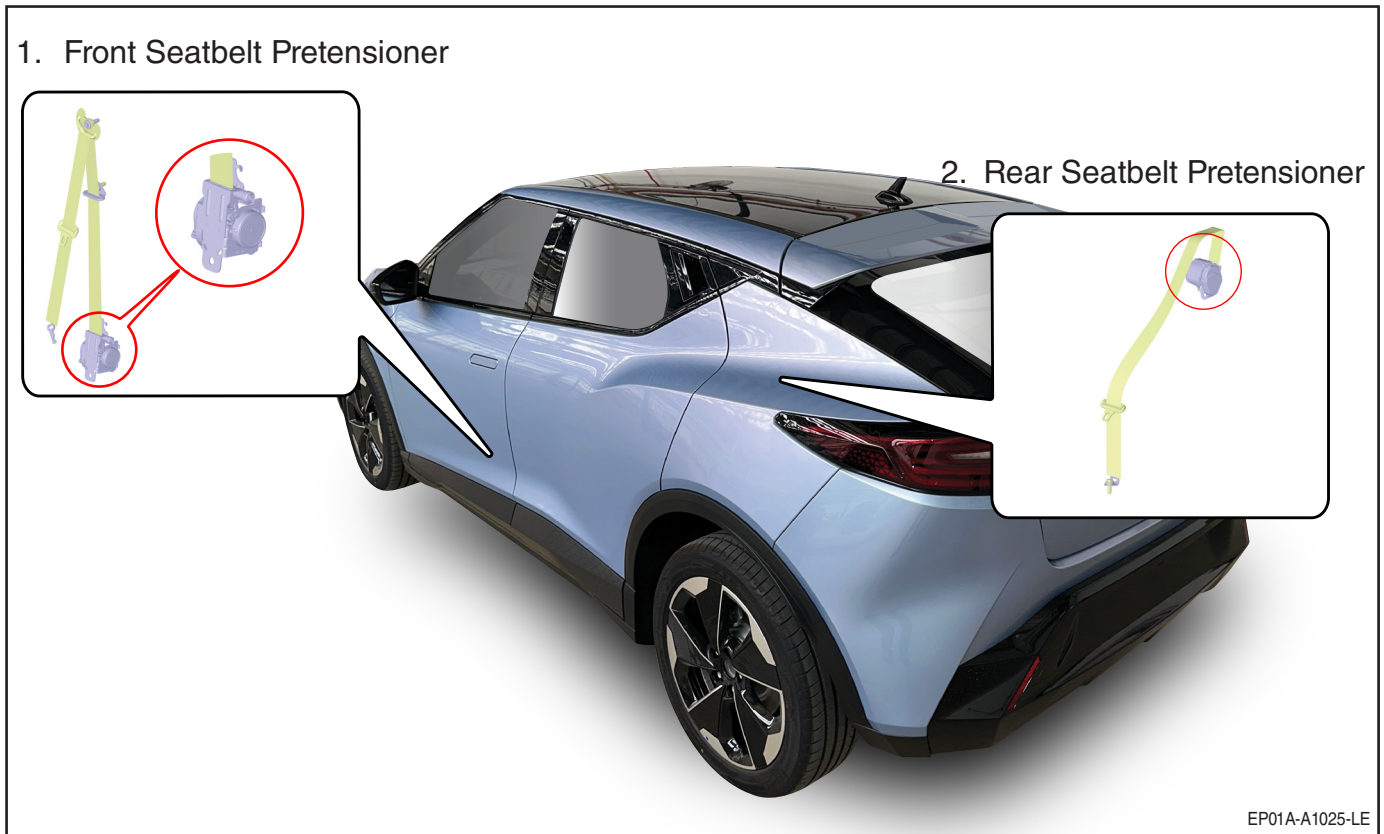


WARNING

The SRSCM contains an internal energy reserve that keeps it powered for a period after the low voltage power is disconnected. It will also remain powered after deploying any airbag or pretensioner. Do not touch the SRSCM within 10 seconds following airbag or pre-tensioner deployment.

■ SEAT BELT PRETENSIONER

In the Perodua QV-E, all seat belts are equipped with pretensioners. When the seat belt pretensioners are activated in a collision, a loud noise may be heard and fine dust, which may appear to be smoke, may be visible in the passenger compartment. These are normal operating conditions and are not hazardous. The seat belt pretensioner assembly mechanisms may become hot during activation and could take several minutes to cool down after they have been activated.



CAUTION



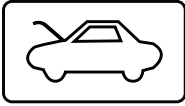







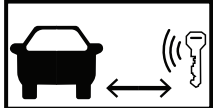


To avoid injuries caused by accidental deployment of undeployed airbags.

- Do not cut the red marking part shown in the image above.
- Make sure the vehicle ignition switch is turned off, disconnect the negative cable from the 12 Volt battery (located in the leftside of motor room) and wait 3 minutes or longer to allow the system to deactivate.

Failure to follow any of these instructions may result in serious injury or death from accidental deployment of the airbag system.

10. EXPLANATION PICTOGRAMS USED

	<p>Thermal Imaging Camera (TIC).</p>
	<p>Use large amount of water to extinguish.</p>
	<p>Open the hood.</p>
	<p>High voltage.</p>
	<p>Flammable.</p>
	<p>Poisonous.</p>
	<p>Acute toxicity.</p>
	<p>Explosive.</p>
	<p>Corrosives.</p>
	<p>Special access to put water in HV battery.</p>
	<p>Remove smart key to avoid accidental restart.</p>



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