



smart#3

Emergency Rescue Manual

Foreword

This manual introduces the methods of vehicle emergency rescue and related notes and warnings.

The vehicle is equipped with a high voltage battery. Failure to follow the instruction and related notes and warnings in this manual may lead to serious personal injury or death.


This manual is only intended to be used by qualified professional rescue personnel.

Read this manual in advance to understand the relevant information of the vehicle, so as to ensure the safety of rescue operations.

Important information related to this manual


In order to better understand the contents of this manual, you need to know some important information.

Prompt information

 **WARNING** Danger due to not observing the warning notes


Warning notes draw your attention to hazards that may endanger the health or life of you or others.

► Observe the warning notes.

 **NOTE** Damage to property due to failure to observe warning notes on material damage

Warning notes on material damage inform you of risks which could lead to vehicle damage.

► Observe warning notes on material damage.

 **Helpful information**
Useful instructions or further information that could be helpful.

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About this vehicle

This vehicle is a pure electric vehicle, which is propelled by electric motor.

The vehicle has 2 different types of battery, one is a 12 V battery, and the other is a high voltage battery used to drive the vehicle. The high voltage battery is enclosed in an aluminum box and installed at the bottom of the vehicle.

A charging gun can be used to charge the high voltage battery, and the kinetic

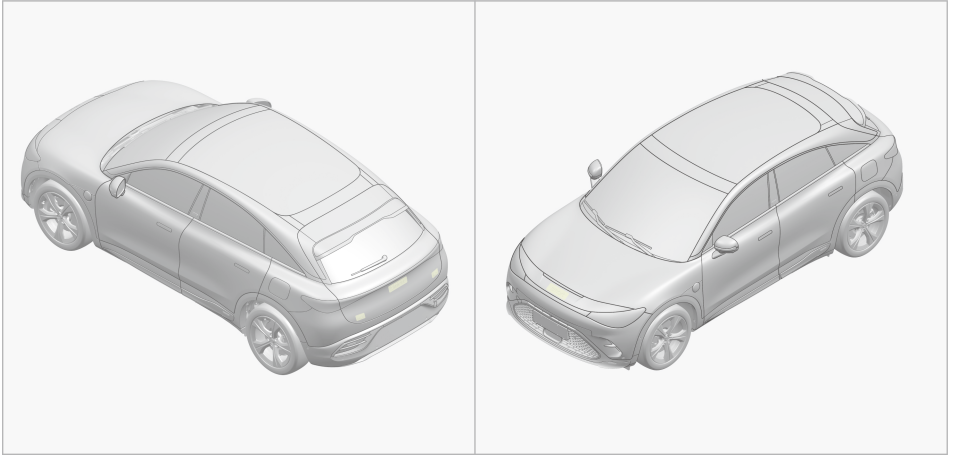
energy can be converted into electric energy to charge the high voltage battery when braking or going downhill.

Vehicle appearance

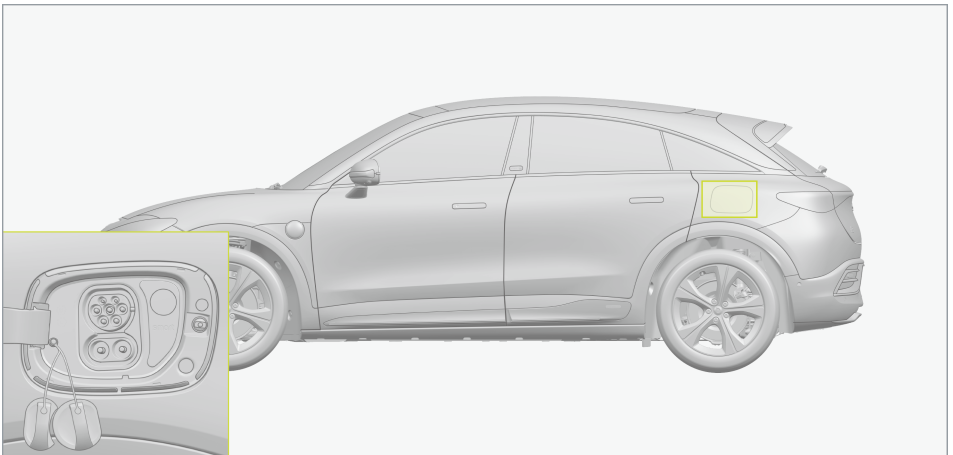
Vehicle logo

You can identify the vehicle type by its logo and appearance.


The vehicle logo is mainly on the front bumper and liftgate.



Vehicle charging port



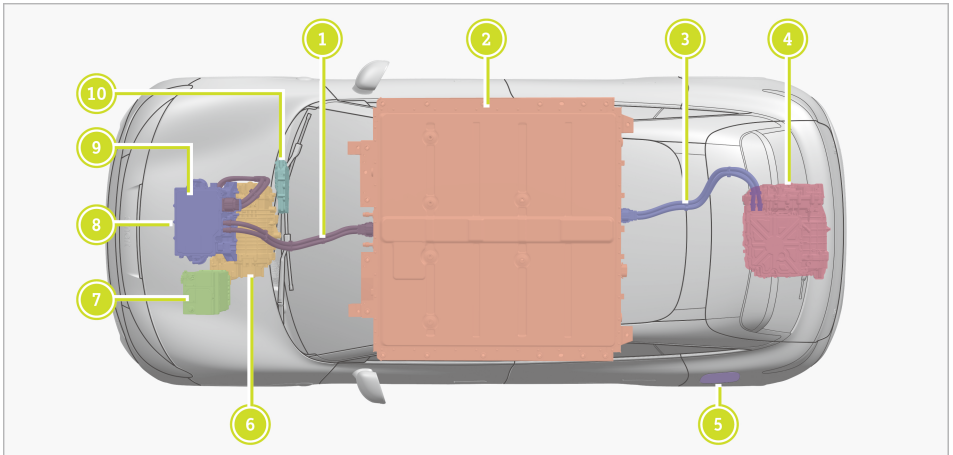
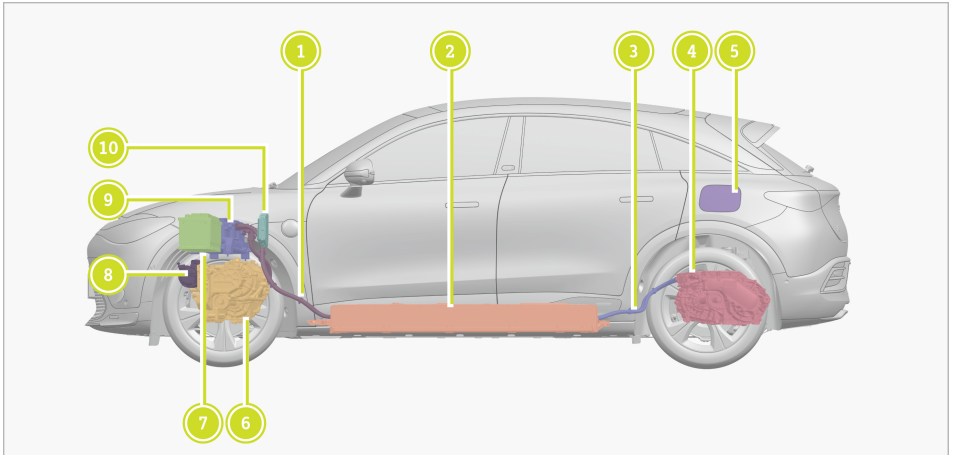
Vehicle parameters

Items	Specification
Vehicle length	4400 mm
Vehicle width	1844 mm
Vehicle height	1556 mm
Front wheel track	1584 mm
Rear wheel track	1601 mm
Wheelbase	2785 mm
 The vehicle identification plate on the passenger side B pillar also contains the vehicle model, gross vehicle weight rating and other information.	


Vehicle manufacturer information

Items	Information
Manufacturer	Zhejiang Haoqing Automobile Manufacturing (Xi'an Branch) Co., Ltd.
Address	666 Geely Avenue, Jingwei New Town, Economy and Technology Development Zone, Xi'an, Shanxi Province
Distributor	Proton New Energy Technology Sdn. Bhd.
Address	Proton Centre Of Excellence, KM33.8 Westbound Shah Alam Expressway, 47600 Subang Jaya, Selangor D.E.
Roadside assistance number	1800-22-88-77
smart official website	https://my.smart.com/service/

Location of the 12 V battery and high voltage components



- | | |
|-------------------------------|---|
| 1 High voltage harness | 7 12 V battery |
| 2 High voltage battery | 8 Air conditioning compressor |
| 3 High voltage harness | 9 High and low voltage charging system assembly |
| 4 Rear electric drive system | 10 High voltage coolant heater |
| 5 Charging port cover | |
| 6 Front electric drive system | |

 The high voltage battery in the illustration is an example. Depending on the model configuration, the high voltage battery of the actual vehicle

may be different from the illustration. Refer to the actual vehicle.

High voltage battery information

High voltage battery specifications





Items	Specification 1	Specification 2
High voltage battery number	1	1
Dimension (length*width*height)	1569*1450*150 mm	1837.6*1450*150 mm
Rated voltage	392 V	380 V
Rated capacity	169 A·h	130.5 A·h
Weight (without coolant)	390 kg	409.5 kg







- Different vehicle models are equipped with different high voltage batteries.
- The high voltage battery is installed at the bottom of the vehicle.

Personal protective equipment





When contacting and handling the high voltage system, maintain and use the following personal protective equipment correctly.

- When handling the high voltage system, wear safety glasses.
- When contacting the high voltage components, wear insulated gloves rated 1000 V and operate the high voltage system with insulated tools.
- Have an insulated rescue hook ready.
- Have fire extinguishers suited for high voltage battery ready.
- Do not work alone, always work in pairs to prevent accidents when help is needed.

Name	Picture	Remarks
Acid and alkali resistant gloves		Use in case of high voltage battery electrolyte leakage
Insulated rescue hook		Use in case of electric shock
Dry powder fire extinguisher		For putting out fire
Fire blanket		

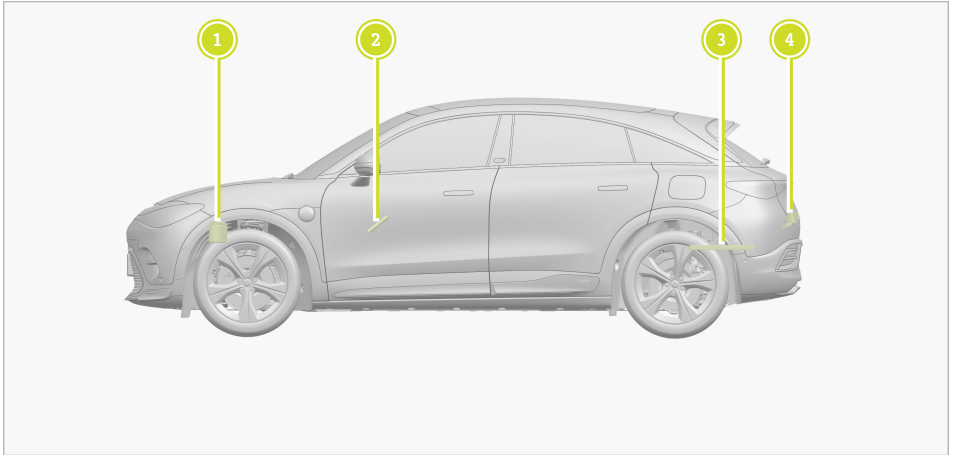
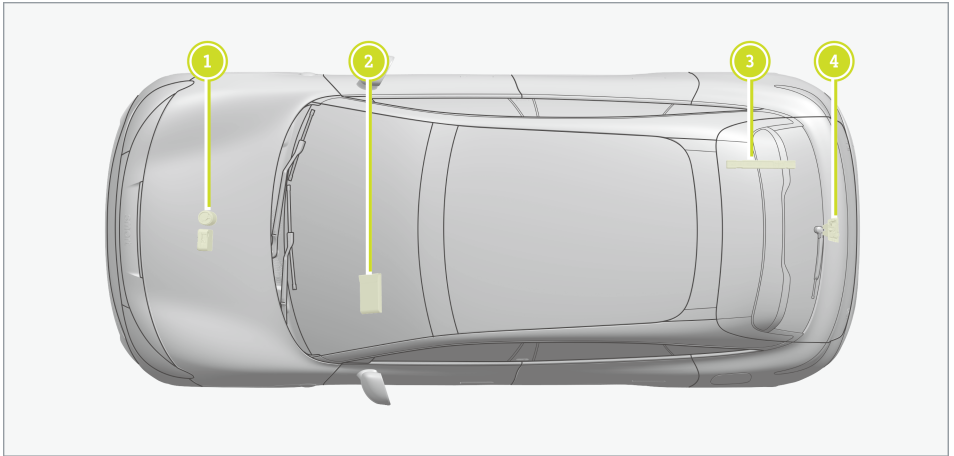
Name	Picture	Remarks
High voltage insulated gloves		Used to prevent high voltage electric shock
Insulated cap		
Safety glasses		
Insulated shoes		
Insulation tape		Cover the damaged harness to provide protection and prevent electric shock. The tape shall wrap around all exposed or damaged wires
Insulated tool		For operating high voltage system components

High voltage safety label

No.	Safety label name	Safety label sample	Safety label definition
1	High voltage warning label		Danger! High voltage component, do not touch.
2	High voltage component warning label		Danger! High voltage component, do not remove the cover.
3	High voltage battery label		High voltage battery basic information
4	High voltage harness		High voltage harness color requirement: orange

Vehicle emergency equipment

Location of the emergency equipment



1 Tyre repair kit

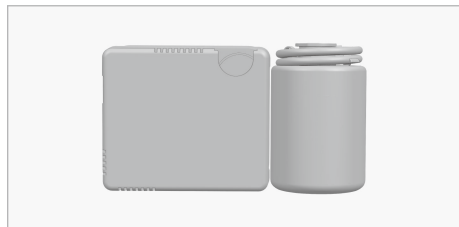
2 Safety vest

3 Warning triangle

4 Liftgate lock

Tyre repair kit

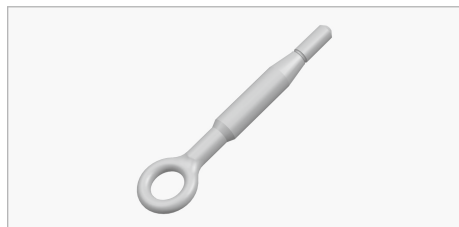
When necessary, you may use the tyre repair kit.



The tyre repair kit is inside the tool kit in the front luggage compartment.

Fitting the tow bar

Use the tow bar when towing the vehicle.

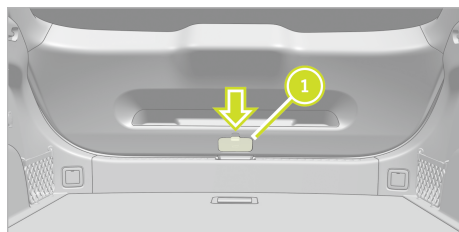


The tow bar is inside the tool kit in the front luggage compartment.

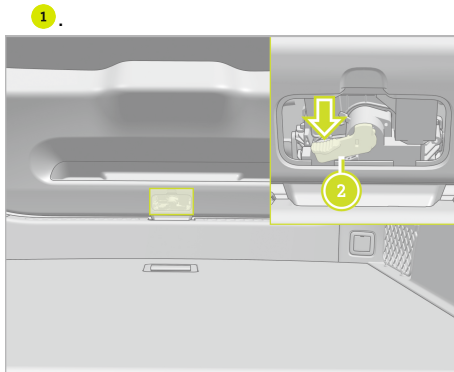
Unlocking the liftgate mechanically

If the battery is low or the lock mechanism is broken, the liftgate can be opened from the inside mechanically. The operation steps are as follows:

1. Fold the second row seat backrest forward.



2. Press the clip and remove the trim panel

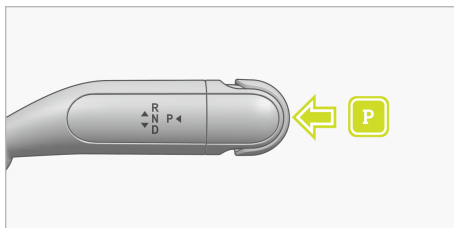


3. Press the unlock switch **2** and the lift-gate unlocks.

Parking and stabilizing the vehicle

Parking brake

Press the park **P** button on the steering column gear selector to shift the vehicle to park **P**.



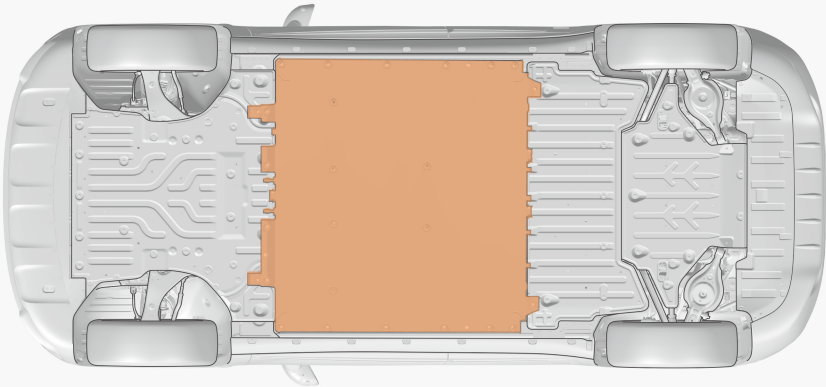
Shift to park **P** after the vehicle becomes stationary.

Stabilizing and lifting the vehicle

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



When lifting the vehicle, do not lift on the high voltage battery area (orange area) at the bottom of the vehicle.



- i** The high voltage battery in the illustration is an example. Depending on the model configuration, the high voltage battery of the actual vehicle may be different from the illustration. Refer to the actual vehicle.

Disconnect the high voltage system

High voltage system disconnecting methods

There are 2 methods to disconnect the high voltage system, manual and automatic:

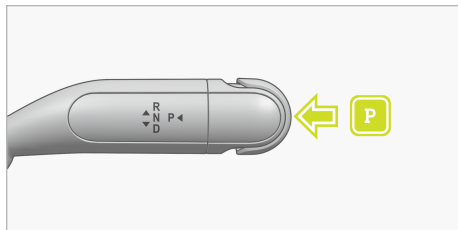
- Manually disconnect the high voltage system (→ Page 12)
- Automatically disconnect the high voltage system
In case of collision (causing airbag to be deployed) or some system malfunctioning, the high voltage system will be automatically disconnected.

⚠ WARNING Risk of accident when disconnecting the high voltage system


- ▶ When contacting any high voltage harness or components, always wear protective equipment correctly and disconnect the high voltage system.
- ▶ In order to avoid the risk of death due to electric shock, do not touch the high voltage battery components and wear personal protective equipment correctly even after the high voltage system is disconnected.
- ▶ Wrap the damaged high voltage components with insulation tape.

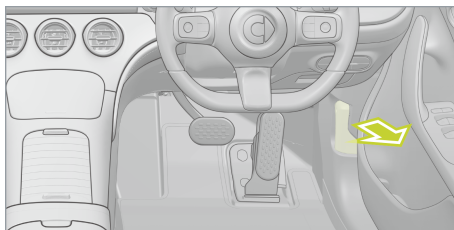
Manually disconnect the high voltage system

Manually disconnect the high voltage system

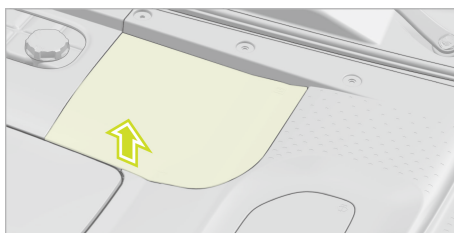


1. Press the park **P** button on the steering column gear selector to shift the vehicle to park **P**.

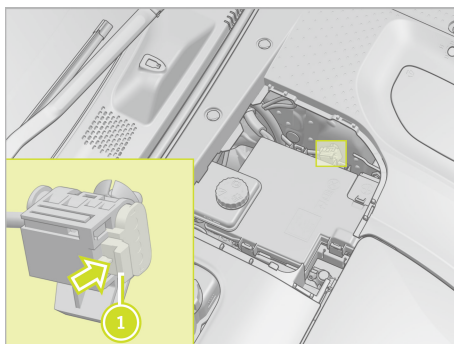
2. Operate on the centre display. Press and hold Power Off , wait for 10 seconds and make confirmation in the pop-up window.



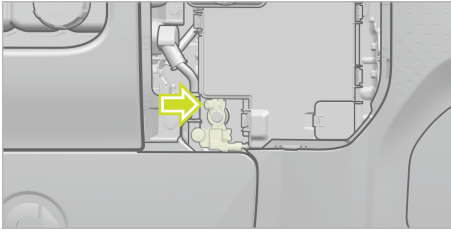
3. Pull the bonnet opening handle under the instrument panel on the driver side twice to open the bonnet.



4. Remove the 12 V battery cover.



5. First pull the tab **1** outward and press the tab in the direction of the arrow, then pull it out completely and disconnect the high voltage system.



6. Remove the nut for the 12 V battery negative cable and remove the 12 V battery negative cable.

i Make sure the terminal of the 12 V battery negative cable does not come in to contact with any metal parts of the vehicle body.

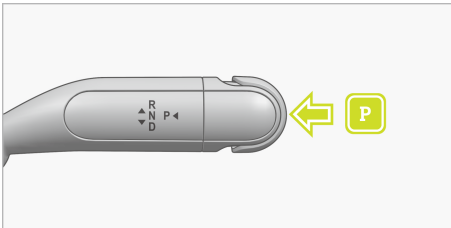
7. Wait at least 5 minutes until the high voltage capacitor is depleted, and then carry out the rescue.

i In case of emergency, rescue work can be carried out directly after disconnecting the vehicle high voltage system. However, personal protection equipment for insulation must be worn, otherwise serious injury or death may occur.

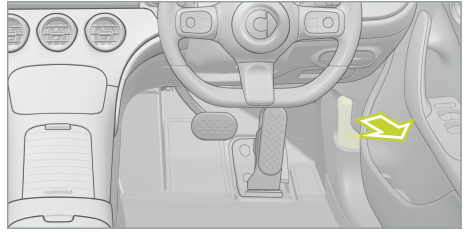
In case of emergency

i In case of emergency, choose one of the following methods to disconnect the high voltage system according to the actual situation.

Type 1



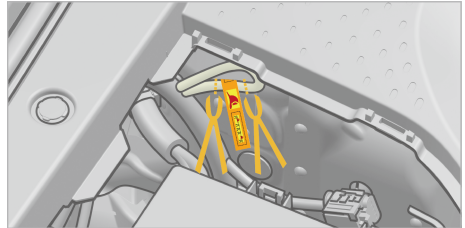
1. Press the park **P** button on the steering column gear selector to shift the vehicle to park **P**.



2. Pull the bonnet opening handle under the instrument panel on the driver side twice to open the bonnet.

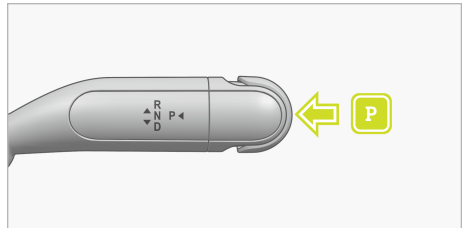


3. Remove the 12 V battery cover.

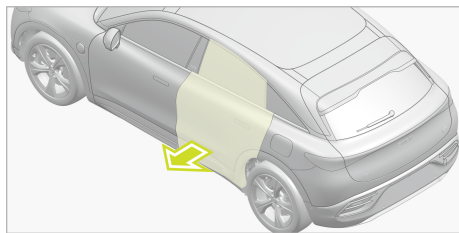


4. Cut off and remove the harness with rescue label.

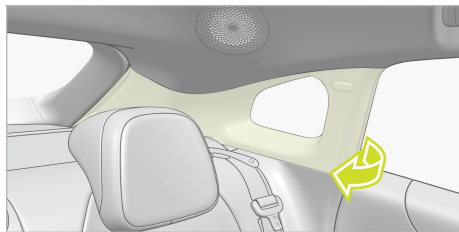
Type 2



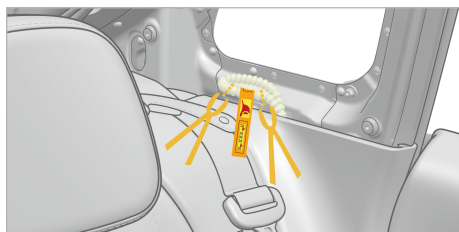
1. Press the park **P** button on the steering column gear selector to shift the vehicle to park **P**.



2. Open the left rear door.

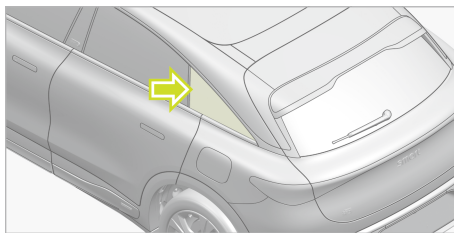


3. Remove the C pillar upper trim panel from the inside.

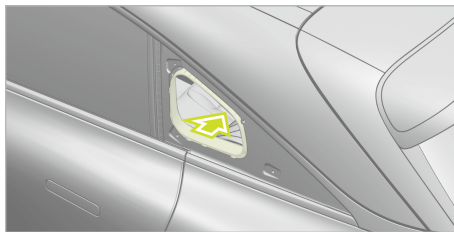


4. Cut off and remove the harness with rescue label.

Type 3



1. Break the quarter window.



2. Remove the C pillar upper trim panel from the outside.



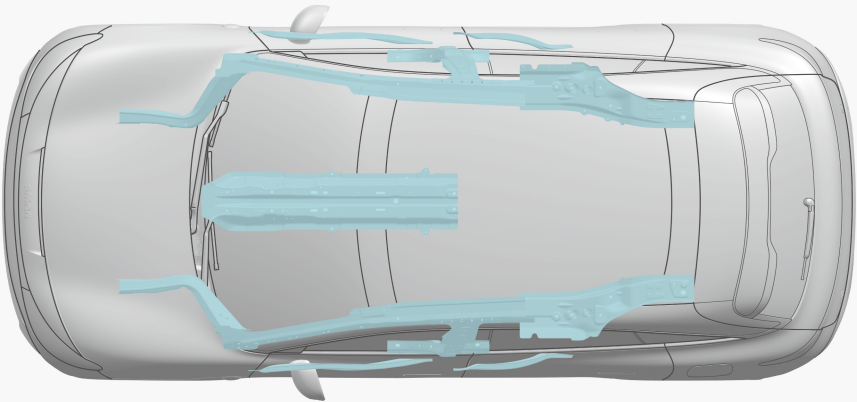
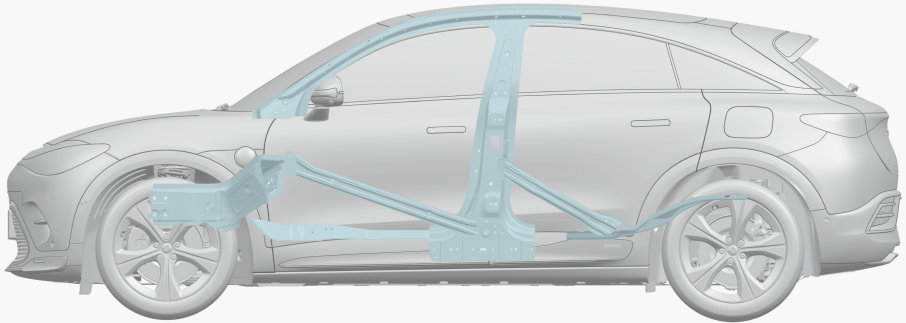
3. Cut off and remove the harness with rescue label.

Cutting the vehicle body

High strength steel location

Do not cut vehicle parts at will. When it is necessary to cut the vehicle, it should be

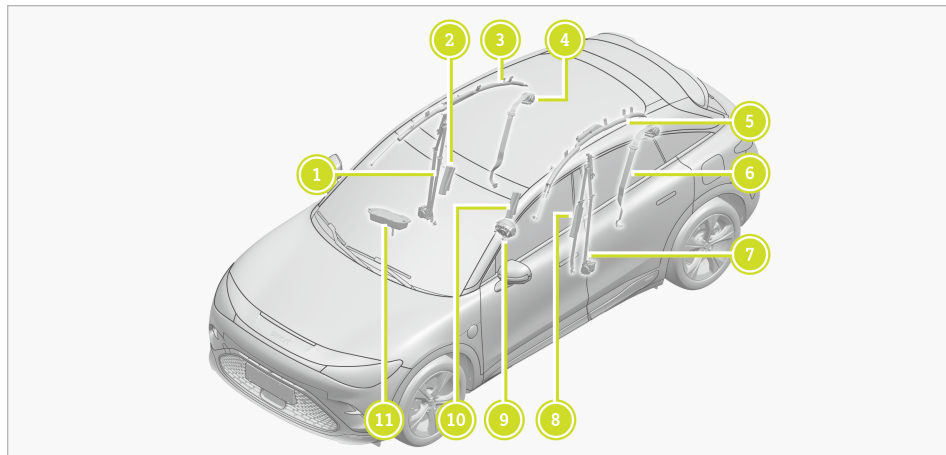
carried out by professional rescue personnel wearing correct personal protective equipment and using proper tools such as hydraulic scissors. Failure to follow these instructions may lead to serious injury or death.



Airbag components

It is strictly forbidden to cut the unde-
ployed airbag components, otherwise an
accidental deployment of the airbag may
lead to serious injury or death. Cutting can
be performed if the following conditions
are met:

- The airbag is deployed.
- The negative cable has been discon-
nected from the 12 V battery for more
than 3 minutes, and the high voltage
system is switched off.



- 1 Front passenger seat belt
- 2 Front side airbag
- 3 Right air curtain
- 4 Right side second row seat belt
- 5 Left air curtain
- 6 Left side second row seat belt

- 7 Driver's seat belt
- 8 Front side airbag
- 9 Driver's airbag
- 10 Far side airbag
- 11 Passenger airbag

Areas prohibit cutting

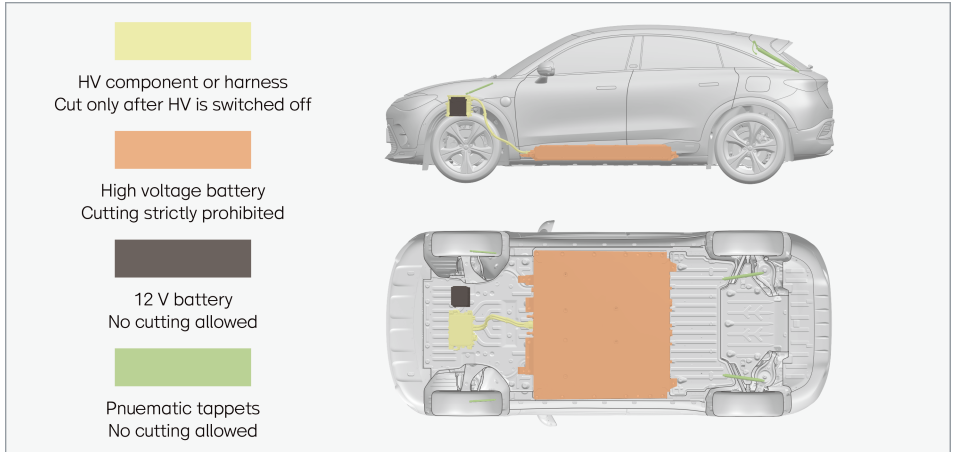
The yellow areas in the figure below are high voltage components and harnesses. Make sure that the high voltage system is disconnected (→ Page 12) before cutting.

The orange areas in the figure below are the areas which are prohibited from being cut. It is strictly forbidden to cut or smash these parts, otherwise high voltage

electric shock, fire, explosion and other accidents may occur, which may lead to serious injury or death.

The black area in the figure below is the 12 V battery, no cutting is allowed.

The green areas in the figure below are the pneumatic tappets, no cutting is allowed.



- i** The high voltage battery in the illustration is an example. Depending on the model configuration, the high voltage battery of the actual vehicle may be different from the illustration. Refer to the actual vehicle.

Emergency rescue procedure

Vehicle on fire

⚠ WARNING Risk of accident when the vehicle is on fire

- ▶ When the vehicle is on fire, it could still be powered on! Do not touch any part of the vehicle without wearing personal protective equipment correctly.
- ▶ When the vehicle is on fire, the high voltage components could still be powered on! Cutting, crushing or touching high voltage parts may cause death or serious injury. Do not touch any part of the vehicle.
- ▶ If there are passengers in the vehicle when carrying out rescue, help the passengers escape. When wearing personal protective equipment correctly, try to open the door by pulling the door handle.
- ▶ When the door cannot be opened, smash the door glass by hitting the corners with a sharp and hard object to help passengers escape through the window.
- ▶ Call the fire department immediately after getting away from the vehicle.

- If the harness smokes and catches fire, use carbon dioxide or dry powder fire extinguisher to put out the fire.
- If smoke is inhaled accidentally, transfer the patient and seek medical attention as soon as possible.
- Call the fire department immediately.

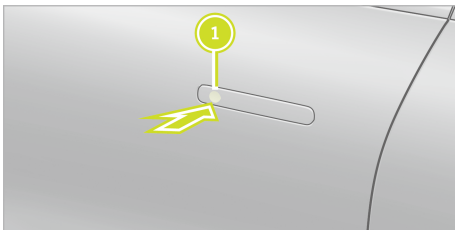
If the high voltage battery emits smoke, it means that the high voltage battery is heating up. When personal protective equipment, such as the helmet, mask, respirator, fire suits, gloves, and insulated boots etc., is worn correctly, use a high pressure water gun to cool down and extinguish fire at a distance.

After the flame and smoke are obviously weakened, the thermal imaging camera can be used to actively measure the temperature of the high voltage battery and monitor the heating or cooling. Only move the vehicle after making sure that it will not re-ignite.

After the fire is extinguished, make sure that the high voltage battery is completely cooled down in case the high voltage battery catches fire again.

Before the vehicle leaves the accident scene, the high voltage battery must be cooled down completely. Make sure to inform the transportation personnel that there is a risk for the high voltage battery to re-ignite.

When the vehicle door handles are not popped out in an emergency situation:



Press the frontal section **1** of the door handle, pull the door handle.

When the vehicle is on fire and personal safety is not at risk, perform the following if the condition allows:

Vehicle flooding

⚠ WARNING Risk of accident cause by vehicle flooding

- ▶ The damage caused by the vehicle being soaked in water may not be obvious. When handling the vehicle soaked in water, it is necessary to wear and use the correct personal protective equipment correctly, otherwise serious injury or death by electric shock may occur.
- ▶ Before contacting any high voltage system component in water, make sure that the rescue personnel wear personal protective equipment correctly to avoid electric shock.
- ▶ Before handling the vehicle, the high voltage system of the vehicle must be disconnected. After the vehicle leaves the flooded area, the vehicle must be completely dried to prevent electric leakage.

High voltage battery leakage

The high voltage battery contains electrolyte. Be sure to wear personal protective equipment correctly to prevent personal injury from contacting electrolyte.

⚠ WARNING Risk of accident from high voltage battery leakage

- ▶ The substances in the battery may cause respiratory tract and lung allergy. If electrolyte or smoke is inhaled accidentally, breathe fresh air and seek medical attention immediately.
- ▶ When the skin comes into contact with electrolyte or smoke, the substances in the battery may cause skin allergy and chemical burns. The contaminated clothes should be replaced immediately and the skin should be washed with soap and water. If chemical burns or continuous irritation occur, seek medical attention immediately.
- ▶ When the skin is exposed to the electrolyte for a long period of time, the substances in the battery may cause local inflammation through skin absorption.
- ▶ When the eyes contact with the electrolyte, the substances in the battery may cause serious allergy and chemical burns. Open the eyelids and flush the eyes with water right away for more than 15 minutes until there is no chemical residue, and then seek medical attention immediately.
- ▶ Electrolyte is highly flammable.
- ▶ In case of electrolyte leakage, wear personal protective equipment correctly and clean the spilled electrolyte with dry cloth. Make sure the contaminated area is well ventilated.

If electrolyte leakage or any damage to the high voltage battery casing is observed, the rescue personnel must wear personal protective equipment correctly. It is forbidden to touch the electrolyte with hands. The electrolyte can be diluted and neutralized with lime powder, and cannot be diluted with water. The neutralization process will help stabilize the thermal state of the high voltage battery, and will not discharge the high voltage battery.

Characteristics of the high voltage battery electrolyte:

- Transparent color
- Sweet taste
- Similar viscosity to water

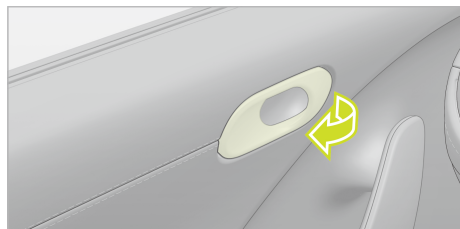
Other liquids:

- The washer fluid, brake fluid and coolant etc. of vehicles are the same as those of conventional vehicles.

Emergency evacuation

When life is endangered, be sure to take escape as the first choice. Follow the following methods to escape from the scene as quickly as possible.

Unlocking the doors to evacuate



Manually pull the inner door handle to unlock and open the door.

- ① The other 3 doors can be unlocked and opened by the inner door handle individually.
- ① If the rear doors cannot be opened after being unlocked, it may be locked by the child lock. Open the door from the outside of the vehicle or lower the glass and reach the door handle to open from the inside.
- ① When the door cannot be opened, smash the door glass by hitting the corners with a sharp and hard object to escape through the window.

Opening the liftgate mechanically to evacuate

For liftgate mechanical open procedures, refer to (→ Page 10).

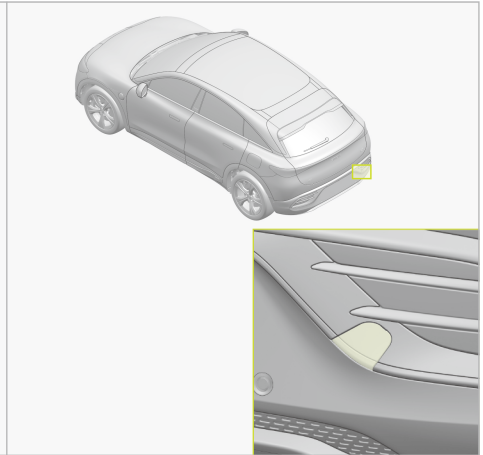
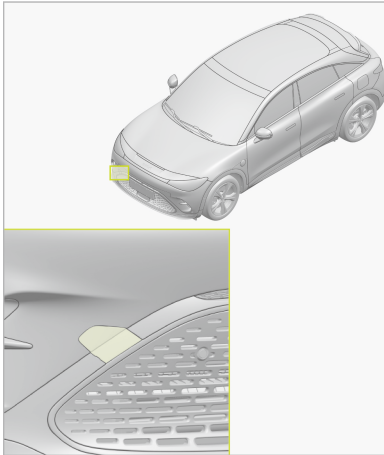
Using the tow bar

In some cases, the tow bar can be used to pull the vehicle onto a flatbed trailer.

- The position and ground clearance of the vehicle determine whether the vehicle can be pulled onto the flatbed trailer with the tow bar.
- If the slope of the trailer is too steep or the ground clearance of the vehicle is

insufficient, pulling the vehicle with the tow bar may cause damage.

- If necessary, use the trailer's lifting device to lift the vehicle.
1. Take out the tow bar (← Page 10) from the tool kit in the front luggage compartment.



2. Remove the front tow bar cover.
3. Install the tow bar in position with hands and tighten it with a tool.
4. After use, return the tow bar and front tow bar cover to their original positions.

NOTE Notes on using the tow bar

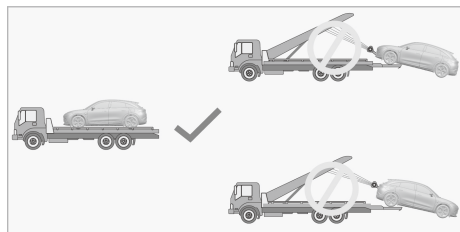
Before towing the vehicle away, make sure there is no safety risk. In case of deformation, liquid leakage, smoke and other conditions of vehicle high voltage battery, safety risk shall be addressed first.

Vehicle transportation

⚠ WARNING Risk of vehicle damage due to transporting the vehicle incorrectly

- ▶ When transporting the vehicle, keep all 4 wheels off the ground. smart recommends using flatbed trailers for vehicle transportation. During transportation, all 4 wheels must be off the ground, or the electric motor will be seriously damaged.
- ▶ Before transporting, turn off the vehicle, turn on the hazard warning light, close the doors and lock vehicle.

Recommended transport vehicles



Flatbed trailers or similar transport vehicles are approved vehicle transportation methods.

- ① During the transfer of the vehicle onto the flatbed trailer by means of a winch or moving out of the parking space for aligning with the flatbed trailer, the tyres are allowed to rotate slowly within 10 meters only after the towing mode is enabled.

⚠ WARNING Risk of accident when transporting the vehicle

- ▶ When the vehicle is pulled onto the flatbed trailer, no person or object is allowed behind the flatbed trailer, otherwise serious injury or death may occur.
- ▶ When transporting the vehicle, passengers are not allowed to stay in the vehicle, otherwise an accident may occur and cause serious injury or death.

Towing mode

Activating the towing mode

1. Make sure the keyfob is in the vehicle.
2. Open and close the driver's door once.
3. Press and hold the hazard warning light switch for over 7 seconds until the warning lamps on the driver information display self-diagnoses.
4. Shift to neutral **N** and release the electric parking brake.
5. In case of warning messages, press the button on the right of the steering wheel to clear the warning messages on the driver information display.

- ① The electric parking brake does not automatically engage under the towing mode. Be aware of risk of vehicle rolling away.

- ① If the towing mode cannot be activated or the centre display cannot be accessed, the vehicle can be loaded to the approved transporter using tow brackets/small wheels/assist wheels. Be sure to check the manufacturer's specifications and recommended load capacity before using tow brackets/small wheels/assist wheels.

Deactivating the towing mode

The towing mode is deactivated when one of the following conditions is met:

1. The vehicle is shifted to park **P** and locked from outside.
2. The vehicle is shifted to drive **D** or reverse **R**.

Vehicle storage

If the vehicle is left unattended, the high voltage system must be disconnected. For specific instructions (→ Page 12). Attach a high voltage warning label at a conspicuous position of the vehicle, and place a high voltage warning board at a suitable position to remind pedestrians to prevent accidents.

⚠ WARNING Risk of accident due to storing the vehicle incorrectly

Pay special attention to the following conditions when storing a vehicle:

- ▶ Do not park the vehicle in a place with high temperature and heat source.
- ▶ The vehicle should be placed in a clean and dry environment.
- ▶ The exit route must be free and unobstructed.
- ▶ It is forbidden to disassemble the high voltage battery assembly, hit it with heavy objects, or puncture any part with sharp tools. It is forbidden to use metal to directly connect the positive and negative poles of the high voltage battery assembly. Avoid contact with corrosive objects and prevent high voltage battery external short-circuiting.
- ▶ In case of flooding, fire or collision of the high voltage battery, the vehicle shall be kept in an open area, and a

safety zone of at least 15 meters shall be set around the vehicle to avoid contact with people and vehicles.



Danger
High Voltage

High voltage warning label



High voltage warning board

