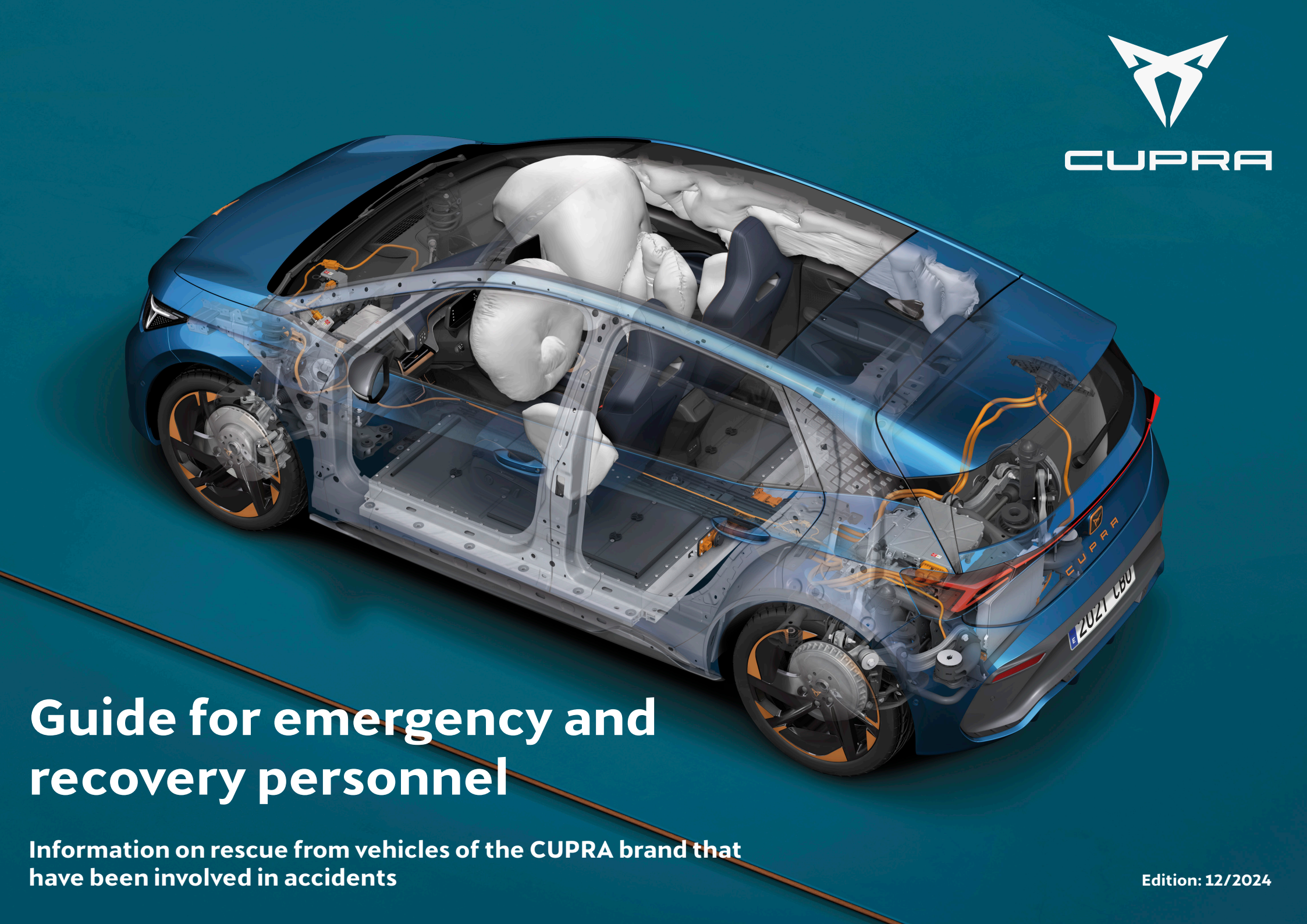

Guide for emergency and recovery personnel

Information on rescue from vehicles of the CUPRA brand that have been involved in accidents

Edition: 12/2024

Legal notice:

This guide was created exclusively for emergency and recovery personnel who are specially trained in technical assistance after road accidents and can therefore carry out the activities described in it.
Furthermore, the guide contains information about vehicles intended for sale in the European Union.
It does not contain any information about vehicles intended for sale outside the European Union.
Specifications and special equipment in CUPRA vehicles, and the range of vehicles made by SEAT, S.A., are subject to constant changes.
SEAT, S.A. therefore explicitly reserves the right to modify or change the content of this guide at any time.
The information was up to date at the time it was written.

Please note:

The information contained in this guide is not intended for end customers, and also not for qualified workshops and dealerships.
End customers can find information on the functions of their SEAT, S.A. vehicle, as well as important vehicle and passenger safety information, in the vehicle wallet. Workshops and dealerships receive repair information from their accustomed sources.

Edition: 12/2024

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List of abbreviations

ABC	Extinguishing powder for fire classes A, B and C
AGM	Absorbent Glass Mat
BEV	Battery Electric Vehicle
AC	Alternating current
CAFS	Compressed Air Foam System
DC	Direct current
CO_2	Carbon dioxide
DGUV	German Statutory Accident and Insurance Association
eHYBRID	CUPRA models with plug-in hybrid drive
ESG	Tempered safety glass
EV	Electric Vehicle, powered exclusively by an electric motor
ISO	International Organization for Standardization
MOT	Technical Inspection Authority
Li-Ion	Lithium-ion
MHEV	Mild Hybrid Electric Vehicle
PHEV	Plug-in Hybrid Electric Vehicle. The battery can be charged using the combustion engine or via a charging connector
SRS	Supplemental restraint system
VDA	German Association of the Automotive Industry
VSG	Laminated safety glass

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Preface

The driver, the vehicle and the surroundings are the key factors whose interaction is critical for road safety.

The vehicle has a number of tasks when an accident occurs, including:

- Keeping the passenger compartment as rigid as possible to ensure a space for survival.
- Dissipating the impact energy using intelligent structural concepts and elements.
- Using an optimised restraint system – consisting of airbags and seat belts with belt tensioners and belt force limiters – to effectively protect the occupants.
- Using safety systems to minimise the hazards from service fluids and powertrain components.

CUPRA vehicles have proven in international tests that they are among the safest. However, accidents and the associated injuries can never be ruled out. This means a short, fast and effective chain of rescue is as essential as ever.

This includes versions and equipment that CUPRA offers directly. Retrofit solutions and conversions are not taken into account.
This guide was created in accordance with ISO 17840 and is intended to help emergency and recovery personnel do their jobs by providing the necessary information on the technology used in SEAT, S.A. vehicles. Technical innovations such as new materials or new drive technologies require a modified approach when performing a rescue from a vehicle that has been in an accident.
The processes and procedures in the different countries around the world are usually governed by official instructions or guidelines issued by legislators, or the rescue organisation itself. If information about the procedure is provided in this guideline for rescue services, they should be considered as suggestions only for these reasons.
The information is intended in particular for the training and development of emergency and recovery personnel. Appropriate rescue sheets for SEAT, S.A. vehicles are available for use at the scene of an accident.

The latest version can be found at www.cupraofficial.com

Edition: 12/2024

0. Rescue sheet (s)

Edition: 12/2024

CUPRA provides rescue sheets for all models and vehicle variants.

The current CUPRA rescue sheets are also available at www.cupraofficial.com:

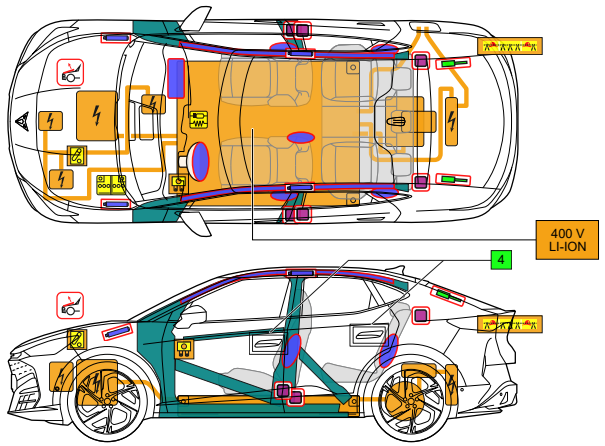
The illustration shown here includes an example of the first page of the rescue sheet for the CUPRA TAVASCAN in accordance with ISO 17840-1:2022.

	The rescue sheets for all vehicles launched in the market since 2020 are compiled in accordance with ISO 17840 in the current version in each case and may differ from one another. The rescue sheets for vehicles before 2020 feature the manufacturer's layout.
	From 2024 all newly created rescue sheets will be published in all European languages.

CUPRA **TAVASCAN**

5 doors / 5 seats / SUV

From 2024



Nota: The illustration shows the maximum possible range of equipment.

	Airbag		Stored gas inflator		Seat belt pretensioner		SRS control unit		Pedestrian protection active system
	Gas strut / Preloaded spring		High strength zone		Zone requiring special attention		Battery low voltage		Fuse box disabling high voltage
	Battery pack, high-voltage		High voltage power cable		High voltage component		Low voltage device that disconnects high voltage		
			Cable cut						

Brand	Type	Launch year	Internal reference	Creation date	Output	Version no.	Page
CUPRA	TAVASCAN	2024	VSS-KR10E50	14/03/2023	23/07/2024	1	1 / 4

Area of application

This guide for emergency and recovery personnel is valid for all vehicles made by CUPRA that are represented in this chapter.
The models may be equipped with petrol and diesel drives. Hybrid and electric vehicles are equipped with a high-voltage drive. The range of vehicle models may vary from country to country.
CUPRA's most prominent models are included, as an example, on this and the following pages.
The current CUPRA model range can be found at www.cupraofficial.com or on the country-specific websites:

Identification of drive types

 Vehicle on fuel of liquid group 2	 Vehicle on fuel of liquid group 1
 Hybrid Electric Vehicle on fuel of liquid group 2	 Electric Vehicle

Current range of CUPRA models

 **Tavascan**	 **Terramar**	 **Born**
 **León**	 **León Sportstourer**	 **Formentor**
 **Ateca**		

	The vehicle-specific drive types are described on the rescue sheets.

1. Identification / recognition

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Distinguishing features of CUPRA models

Recognition of the vehicle model and its drive type plays a central role after an accident. Depending on the vehicle model or drive type, specific procedures must be taken into account as part of a rescue and recovery operation.

Along with the CUPRA logo, the individual models can be identified by the respective body shape, body size and the individual vehicle design.

The illustrations on this page show examples of the position of the logo on different models.

CUPRA logo	
	CUPRA logo in the radiator grille
	CUPRA logo on the rear lid
	CUPRA logo on the bonnet

Distinguishing features of vehicles with combustion engine

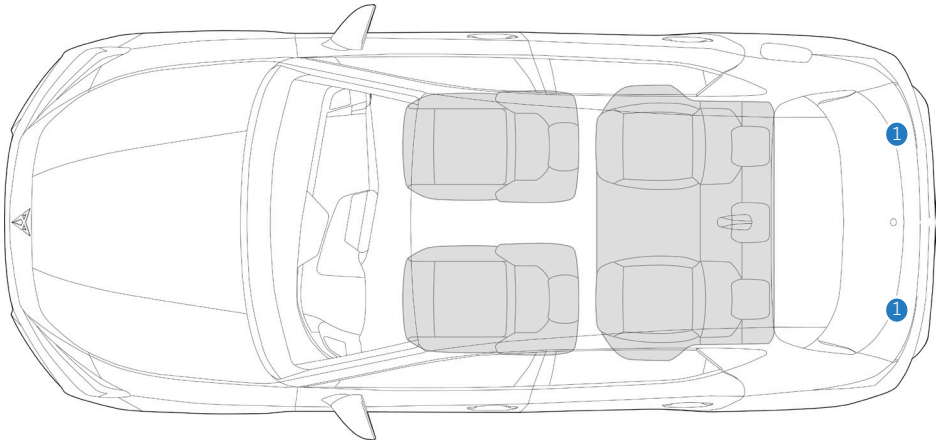
CUPRA models with conventional combustion engines (petrol/diesel) can be identified by the following features.

	The vehicle-specific distinguishing features are described on the rescue sheets.

Features on the vehicle

Exhaust tubes

Features on the exterior of the vehicle



1 Visible exhaust system

Distinguishing features of high-voltage vehicles

CUPRA models with a high-voltage drive are available with plug-in hybrid drive (PHEV) or a fully electric drive (BEV).

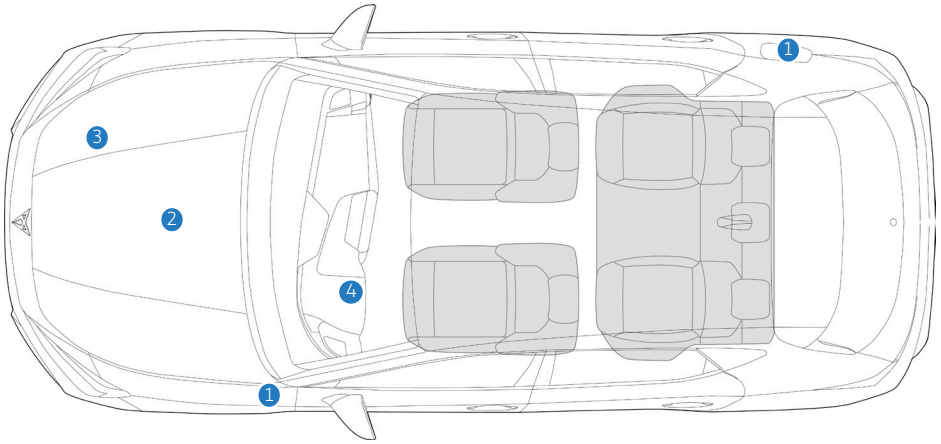
	The electric drive motor is silent. The display in the instrument cluster (power meter) provides feedback as to whether the electric drive is switched to OFF, or READY for operation.
	The vehicle-specific distinguishing features are described on the rescue sheets.

Features on the vehicle

Charging socket lid on the BORN

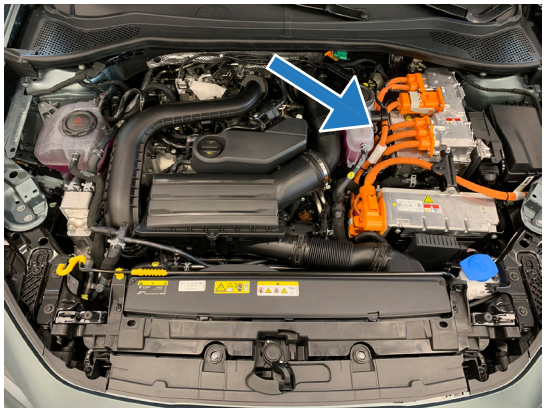
Charging socket lid on the LEÓN eHybrid (plug-in hybrid)

Features on the exterior of the vehicle



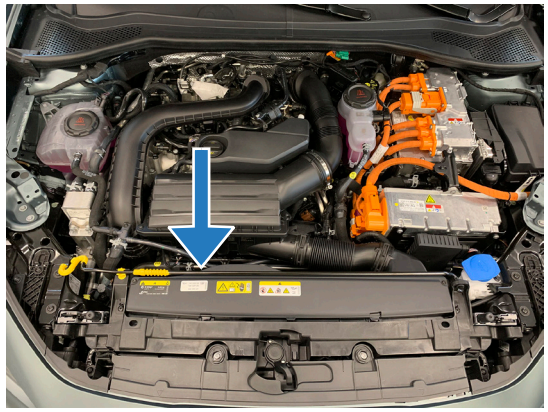
1. Charging sockets in the radiator grille or in the front or rear wings
2. Orange-coloured cables in the vehicle front end
3. Warning sticker in the vehicle front end
4. Specific displays for electric models on the instrument cluster

Features in the front end



Orange-coloured high voltage power cables in the engine compartment

Warning displays on the eHybrid



Electrical hazard labels in the motor compartment.

Features in the passenger compartment

Digital instrument cluster with power display (power meter) and OFF or READY display. The example shown belongs to the eHybrid family.

Classification of the electrification variants

After an accident, electrified vehicles pose different hazards to emergency and recovery services than those presented by conventionally powered vehicles. This makes it crucial to identify these vehicles as soon as possible.

CUPRA offers various electrification variants, which differ in terms of primary energy source, voltage, type of driving machine and electric range.

A distinction is made between the following variants without external charging socket:

Mild-Hybrid Electric Vehicle (MHEV)

And the following variants with external charging socket:

Plug-In Hybrid Electric Vehicle (PHEV)
Battery Electric Vehicle (BEV)

	Mild hybrid (MHEV)	Plug-in hybrid (PHEV)	Battery Electric Vehicle (BEV)
Voltage	12-48 V	300-450 V	300-950 V
Electric drive motor	10-15 kW	60-120 kW	> 150 kW
Electric driving range		Approx. 100 km	> 200 km
Energy source			
Models (examples)	León León Sportstourer Formentor	León León Sportstourer Formentor	Born Tavascan

The different electrification concepts are shown in the table. Mild hybrid vehicles (MHEV) with on-board electrical system voltages of up to 48 volts are not high-voltage vehicles. These vehicles also do not differ externally from the conventional CUPRA vehicles of the respective model.
All other variants listed are high-voltage vehicles.

Key for energy sources

	Conventional fuels such as petrol and diesel
	Battery operation
	Battery operation with charging option via socket

2. Immobilisation / stabilisation / lifting

Edition: 12/2024

Stabilising or securing a vehicle reduces the risks that may result from unwanted movements of the vehicle after an accident.

The modern vehicle systems such as start/stop system or Auto Hold function (HOLD button) or new silent drive systems convey the impression that the vehicle is switched off.
However, depending on the accident situation, these systems could lead to the vehicle starting and rolling away unintentionally.
It is therefore recommended to ensure that the ignition is OFF or the power meter is OFF before starting the rescue operation and to thus deactivate the vehicle's drive system. For further information, see chapter 3 "Disable direct hazards / safety regulations".

Depending on the situation, it is also recommended to secure the vehicle against unwanted movements (rolling, tilting, slipping) by means of wheel chocks, suitable supports or the attachment of slings.

	In electric vehicles, the vehicle's drive system is automatically deactivated after an accident with triggering of the airbags has been identified in vehicles.
	In hybrid vehicles, it is recommended to always locate an accessible high-voltage device that disconnects high voltage to de-energise the high-voltage system. Also see chapter 3 Disable direct hazards / safety regulations.

	The vehicle-specific rescue sheets describe the recommended procedure for deactivating the high-voltage cut-out connections.
	When the 12V vehicle battery has been disconnected, all functions of the electrical system stop working (this applies in particular to the hazard warning lights, interior lighting and electric seat adjustment). For further information, see chapter 4 Access to the occupants and chapter 9 Important additional information.

Preventing the vehicle from rolling away

CUPRA models may be equipped with a manual gearbox or an automatic gearbox. To prevent the vehicle from rolling away or moving off accidentally, the gear lever must first be placed in the “Neutral” (for a manual gearbox) or in the “P” position for automatic gearboxes. Next:

1. Select the correct/appropriate gear
2. Locate parking brake
3. Apply the parking brake

	If necessary, secure the vehicle with suitable wheel chocks to prevent it from rolling away unintentionally or secure it with belts.

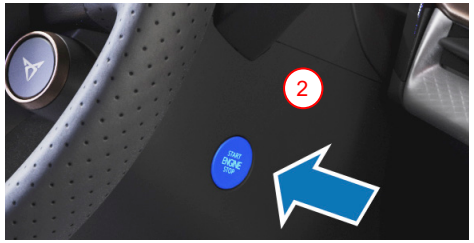
Vehicles with automatic gearbox without selector lever: press P button and activate the electric handbrake.

If further securing methods are necessary, the following vehicle areas can be used for this: vehicle pillars, members, wheels, axles, towing eyes or optionally the ball coupling.

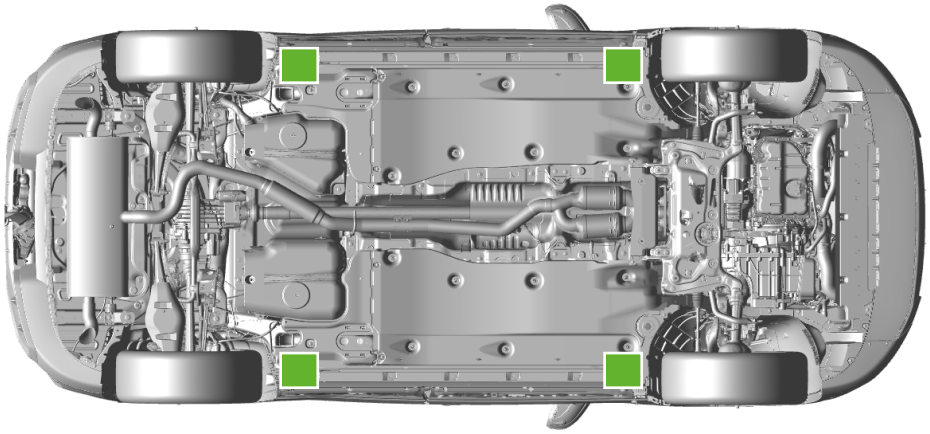
Lifting the vehicle

Lifting the vehicle may be necessary to rescue injured persons. Make sure that sensitive parts such as the high-voltage battery, drive train, fuel tank or exhaust system are not damaged if possible.

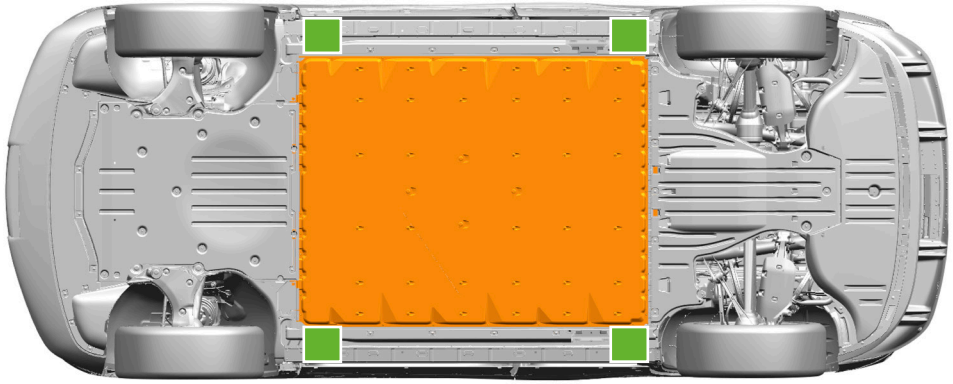
	Use firmly anchored components when lifting or securing vehicles that have been involved in an accident. Do not use high-voltage components or exhaust systems.
	For deformed vehicles, the emergency and recovery personnel on site must decide at which points to lift the vehicle.
	The vehicle-specific points for lifting are indicated on the rescue sheets.
	If possible, lift the vehicle at the indicated lifting points.



1. Engage the electric parking brake.
2. Switch off the ignition.
3. Secure the vehicle to prevent it from moving.



Combustion engine vehicle lifting points [CUPRA Terramar].



Electric vehicle lifting points [CUPRA Tavascan]

3. Disable direct hazards / safety regulations

Edition: 12/2024

Recognition and elimination of hazards to life and limb plays a major role in dangerous situations. This chapter describes the appropriate preventive measures that minimise the risks to accident victims and rescue personnel.

	Wear appropriate protective clothing as liquids or gases may leak and cause injury or explosion. Avoid contact with these substances as much as possible during rescue and recovery operations.

In hazard situations, the following procedure is recommended:

1. Warn surroundings about hazards (switch on hazard warning lights, are activated automatically after an accident)
2. Immobilise the vehicle, see chapter 2 Immobilisation / stabilisation / lifting
3. De-energise the vehicle electrical system
   Deactivating the high-voltage system
   Disconnecting the 12-volt vehicle battery (depending on situation)
   Disconnecting the 48-volt battery

	In the event of an accident in which airbags are deployed, the high-voltage system and the 48V electrical system are automatically deactivated. The high-voltage system is de-energised approx. 20 seconds after deactivation.

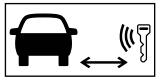
Switching off the ignition

CUPRA models are equipped with a START-ENGINE-STOP button. This may be located on the steering column, the multi-function steering wheel or in the centre console.

The following possibilities, amongst others, must be kept in mind:

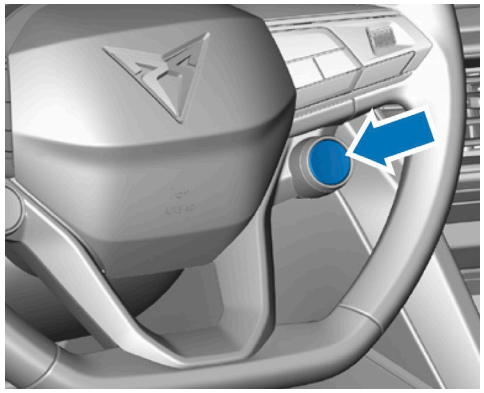
- Vehicle with a “KEYLESS Entry” system, the key can be located anywhere inside the vehicle (e.g. in the driver’s pocket or in a compartment inside the vehicle).
- Use the ignition key, if there is one, to switch the vehicle to OFF.

If the vehicle features a START-ENGINE-STOP button that can be used to deactivate the vehicle, press this.



Then remove the remote control key, key card or smartphone from the vehicle and keep at a minimum distance of 5 metres to prevent unintentional switching on.

Vehicle with START-ENGINE-STOP button in the centre console.



Vehicle with START-ENGINE-STOP button on the multi-function steering wheel.

Vehicle with START-ENGINE-STOP button on the steering column.

	To prevent accidentally switching on the vehicle, move the key to a minimum distance of 5 metres.
	If the START-ENGINE-STOP button is pressed and the brake pedal is simultaneously operated, the vehicle may switch to driving readiness mode. Observe the information on the rescue sheets!
	In vehicles with high-voltage drive, the power meter in the instrument cluster provides feedback as to whether the electric drive is switched off OFF or ready for operation READY.

Opening and closing the bonnet

Depending on the situation, it may be necessary to open and close the bonnet. The following section describes the standard procedure (the 2-lock system is not taken into account).

	Further information can be found in the vehicle-specific Owner Manual.

In the footwell on the driver's side: release lever for the bonnet.

On the bonnet: opening lever.

Deactivating the high-voltage system

CUPRA vehicles with battery-electric drive (BEV) or plug-in drive (PHEV) are equipped with a high-voltage system with a voltage of over 300 volts.

The high-voltage system is disconnected from the high-voltage battery immediately when the airbag deployment is detected. Activation of the high-voltage system can then only be performed by a suitable qualified workshop. In addition, displays or warnings can be displayed on the dash panel.

High-voltage vehicles from CUPRA have several emergency cut-out connections. These are located on the fuse box, in the vehicle front end or at the rear of the vehicle. They provide emergency personnel with an easily accessible way of safely deactivating the high-voltage system. Further information is provided on the following pages under Disconnecting the high-voltage system from the vehicle.

	The electric drive motor is silent in vehicles with a high-voltage drive. The display in the instrument cluster (power meter) indicates whether the electric drive is switched off (OFF) or ready for operation (READY).

	The vehicle's drive system can be activated by occupying the driver seat and pressing the brake pedal in Electric Vehicles.
	In the event of accidents in which airbags are deployed, the high-voltage system is automatically deactivated. The high-voltage system is de-energised approx. 20 seconds after deactivation.
	In all other cases, an emergency cut-out connection can be used to deactivate the high-voltage system. In particular, using an emergency cut-out connection prevents the system from switching on again unintentionally.

Depending on the circumstances of the accident the engine compartment may not be accessible (e.g. in the event of a car/truck underride accident). For this reason, in general, there are two cut-out connections for deactivating the high-voltage system: one under the bonnet and one in the passenger compartment fuse box. In BEV vehicles there is also a cut-out connection in the rear of the vehicle.

These emergency cut-out connections indicated by yellow tags only carry the 12-volt electrical system voltage, which means they can be safely disconnected by the emergency personnel using the procedure described on the tags.

	Disconnection of a marked emergency cut-out connection only disables the high-voltage system. Safety systems such as airbags or belt tensioners are still supplied with voltage by the 12V electrical system.
	If the airbag has not been deployed, the 12V electrical equipment may still be supplied with electrical energy from the high-voltage battery via the DC converter after the electrical system 12V battery has been disconnected!
	Even after deactivating the high-voltage system, there is still energy inside the high-voltage battery. The high-voltage battery must therefore neither be damaged nor opened during the rescue measures.
	Do not touch damaged high-voltage components, and cover them using suitable means if necessary! Wear personal protective equipment in accordance with the local standards!
	The positions of the emergency cut-out connections and the procedure for disabling the vehicle are shown on the rescue sheets.

At the scene of the accident

Depending on the accident situation, restraint systems, e.g. airbags, may have been deployed. The emergency and recovery services at the scene of the accident decide how to proceed with the rescue and recovery.

	Rapid or strong smoke development on the accident vehicle may indicate a thermal reaction of the high-voltage battery, see also Is the high-voltage battery affected by the fire?.

Minor accident

Initially, no damage is visible and the restraint systems have not been deployed.

1. Warn surroundings of hazards
   Switch on hazard warning lights, set up warning triangle
2. Immobilise vehicles
   2. Immobilisation / stabilisation / lifting
3. Deactivate the high-voltage system by removing the fuse at the fuse carrier or disconnecting alternative emergency cut-out connections

Severe accident

The restraint systems were deployed. There is initially no visible damage to the high-voltage battery.

1. Warn surroundings of hazards
   Switch on hazard warning lights, set up warning triangle
2. Immobilise vehicles
   2. Immobilisation / stabilisation / lifting
3. The high-voltage system was deactivated automatically

	Damage or deformation of the high-voltage battery on the accident vehicle may indicate a thermal reaction of the high-voltage battery, see also Is the high-voltage battery affected by the fire?.
	Depending on the accident situation, it may be necessary to additionally deactivate the high-voltage system manually at an emergency cut-out connection.

Parked or stationary vehicle

If a parked vehicle is damaged by an accident, restraint systems or airbags are generally not deployed. The high-voltage system is not automatically deactivated. When the ignition is switched off, no warnings can be displayed on the dash panel.

1. Deactivate the high-voltage system by removing the fuse at the fuse carrier.

Vehicle at charging station

If a charging vehicle is damaged by an accident, restraint systems or airbags are generally not deployed. The high-voltage system is not automatically deactivated. When the ignition is switched off, no warnings can be displayed on the dash panel.

1. Disconnect charging cable as usual (see vehicle's Owner Manual).
2. Alternatively, Disconnecting from the charging station (emergency release).
3. Deactivate the high-voltage system by removing the fuse at the fuse carrier or using one of the alternative methods.

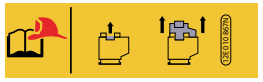
	The high-voltage components are marked with warning signs, see also Warning labels for high-voltage components. High-voltage cables are orange.

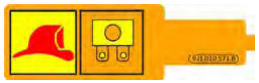
Identification of emergency cut-out connection

The emergency cut-out connections for deactivating the high-voltage system are uniformly marked on the models in the Volkswagen Group. The pictograms on the labels explain the procedure.

Until 2023, the labels were produced according to our own specifications and installed in the models. New labels coordinated with EURO NCAP are currently used. These labels will also be used for all models in the Volkswagen Group in the future.

Previous identification

	Indicates the emergency cut-out connection in the passenger compartment (pulling out the fuse on the fuse carrier)
	Indicates the emergency cut-out connection in the vehicle front end (opening the maintenance connector for high-voltage system)
	Indicates the emergency cut-out connection in the boot or rear of the vehicle (cutting through the marked cable)

New identification (as of León 2024)	
	Indicates the emergency cut-out connection in the passenger compartment (pulling out the fuse on the fuse carrier)
	Indicates the emergency cut-out connection in the vehicle front end (opening the maintenance connector for high-voltage system)
	Indicates the emergency cut-out connection in the boot or rear of the vehicle (cutting through the marked cable)

Disconnecting the high-voltage system from the vehicle

	The electric drive motor is silent in vehicles with a high-voltage drive. The display in the instrument cluster (power meter) indicates whether the electric drive is switched off (OFF) or ready for operation (READY). Observe the information on the rescue sheets.

If the high-voltage system is also to be disconnected manually, observe the following sequence:

1. First use the High-voltage cut-out connection on fuse carrier. if this cannot be reached, then use the
   1. High voltage cut-out connection in the front of the vehicle (maintenance connector) or
   2. High-voltage cut-out connection in the rear of the vehicle.

There are at least two cut-out connections in current CUPRA models. One is in the fuse carrier and another is installed in the vehicle front end. In electric vehicles there is an additional third cut-out connection in the rear of the vehicle.
Different procedures may be necessary, depending on the vehicle type and equipment. The way in which the vehicle is disabled depends on the accident situation and the vehicle equipment.

	The installation location of the emergency cut-out connections and the required procedures can be found on the rescue sheets of the different vehicles.
	Maximum certainty that the high-voltage system is deactivated can only be provided if an emergency cut-out connection provided by the manufacturer is disconnected and the 12-volt vehicle electrical system battery is disconnected.

Use rescue equipment with caution and consideration near high-voltage components

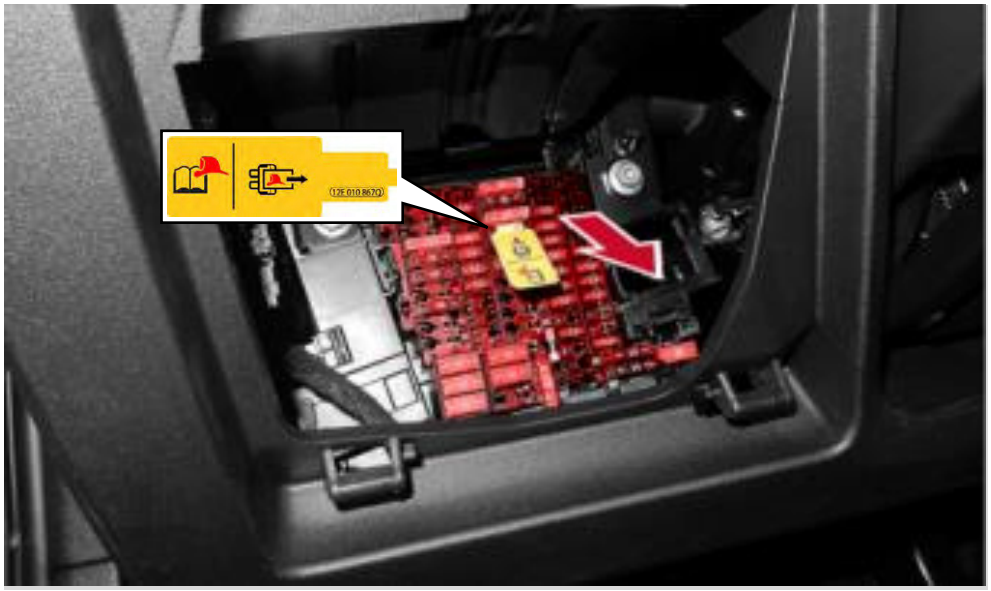
Regardless of whether the vehicle is a hybrid or electric vehicle, the following points always apply in rescue operations at high-voltage vehicles.

	Improper handling of high-voltage components can prove fatal due to high voltage and the associated potential flow of current through the human body.
	Do not perform any work on badly damaged high-voltage components. One of the accessible emergency cut-out connections should also be opened. If the airbags have not deployed, the vehicle must be disabled by the emergency and recovery personnel using an emergency cut-out connection. The high-voltage system has been de-energised after approx. 20 seconds. If the airbags have deployed, the high-voltage system will have already been switched off; this means the emergency and recovery personnel can act immediately.
	Even after disabling the high-voltage system, there is still electrical energy inside the high-voltage battery. The high-voltage battery must therefore neither be damaged nor opened during the rescue measures. If the high-voltage battery has been damaged due to the effects of an accident, avoid any contact with the high-voltage battery or with any liquids and vapours escaping from the high-voltage battery.
	Do not touch damaged high-voltage components, and cover them using suitable means if necessary! Wear personal protective equipment in accordance with the local standards!

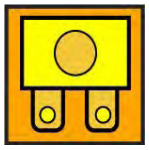
High-voltage cut-out connection in passenger compartment

This cut-out connection is located in the fuse carrier, in the passenger compartment, in the area of the dash panel and marked with a yellow tag. In this case, the high-voltage system is disconnected and deactivated by pulling the appropriately labelled fuse out of its holder.

The connectors in the high-voltage battery open and disconnect it from the rest of the high-voltage system, which is then de-energised after 20 seconds have passed.

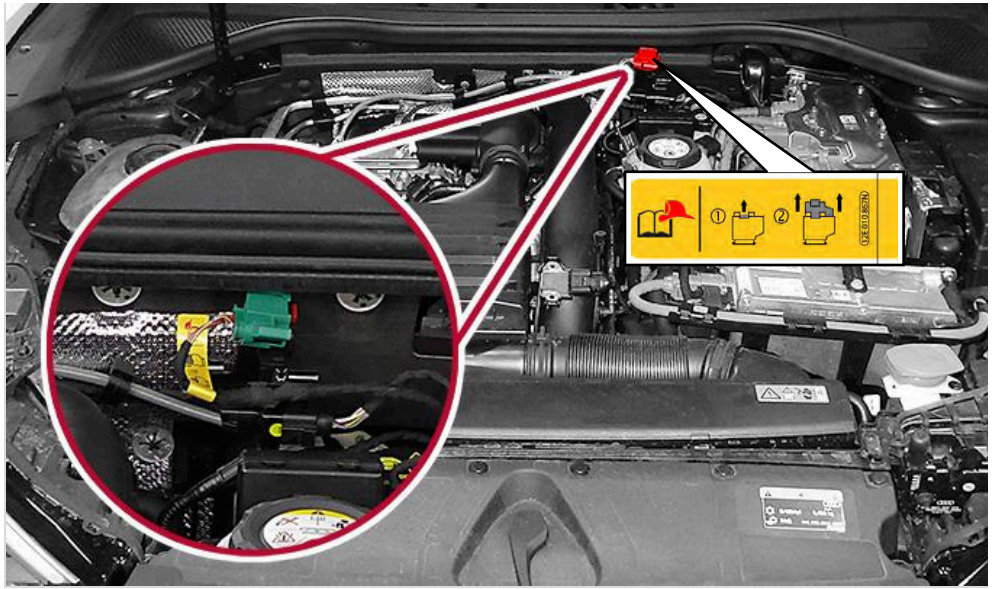


Cut-out connection in the passenger compartment, fuse carrier in the dash panel. See also New identification (as of León 2024).

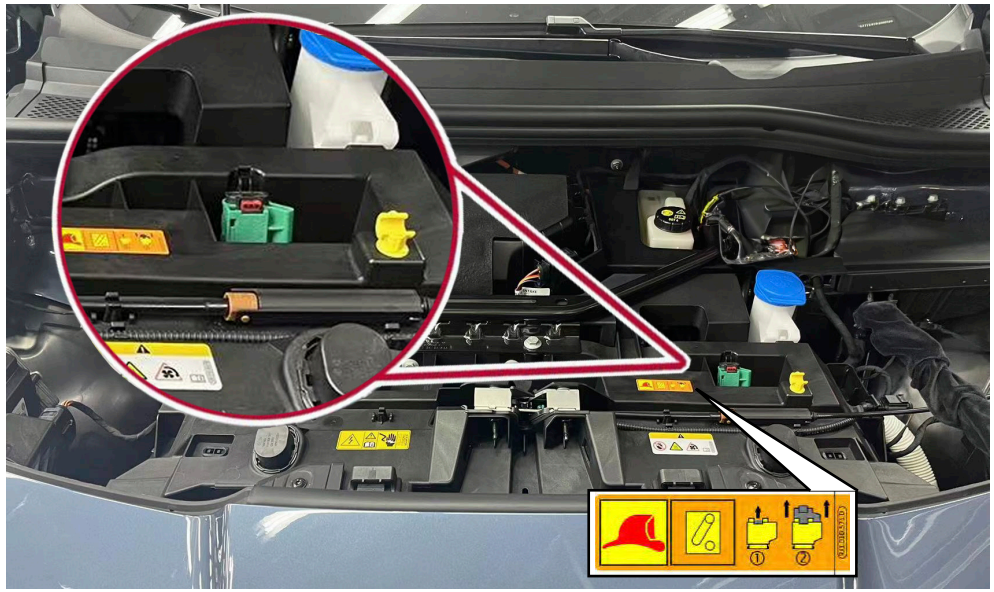
	Identification/pictogram of the emergency cut-out connection on the fuse carrier on the rescue sheet

High voltage cut-out connection in the vehicle front end

The low-voltage maintenance connector for the high-voltage system in the vehicle front end is used as an emergency cut-out connection for high-voltage systems in plug-in hybrid electric vehicles (PHEV) and electric vehicles (BEV).
The connector has a green connector housing and a tab for release. The connector is clearly identified as an emergency cut-out connection by a yellow label on the connection cable.
Activation after this can only be carried out by a suitable qualified workshop.
The vehicle front end is usually accessed by pulling the Bowden cable in the left front footwell. This unlocks the bonnet, which can then be raised. Please refer to the Owner' Manual of the vehicle if necessary.



Cut-out connection in the front end of hybrid vehicles. See also New identification (as of LEÓN 2024).



Cut-out connection in front end of electric vehicles. For vehicles before TAVASCAN, see also, previous identification.

	Identification/pictogram of the emergency cut-out connection on the rescue sheet
	If the label of the emergency cut-out connection in the vehicle front end is not visible, an additional sticker may be attached nearby.

Procedure for deactivating the high-voltage system using the emergency cut-out connection:

Pull out the red tab

Press and hold the red tab and, while doing so, pull out the back connector until it locks in position.

High-voltage cut-out connection at the rear of the vehicle

For some models, there may be an additional cut-out connection in the rear of the vehicle. In this case, a cable labelled with a yellow tag must be cut.

	Indicates the emergency cut-out connection in the boot or rear of the vehicle (cutting through the marked cable)

Cut-out connection in the rear of the vehicle behind the right tail light cluster (Example TAVASCAN)

Disconnecting the 12-volt battery

Situations at the scene of an accident may require the 12-volt vehicle electrical system to be deactivated in order to reduce the risks to accident victims or emergency services (e.g. subsequent triggering of airbags).

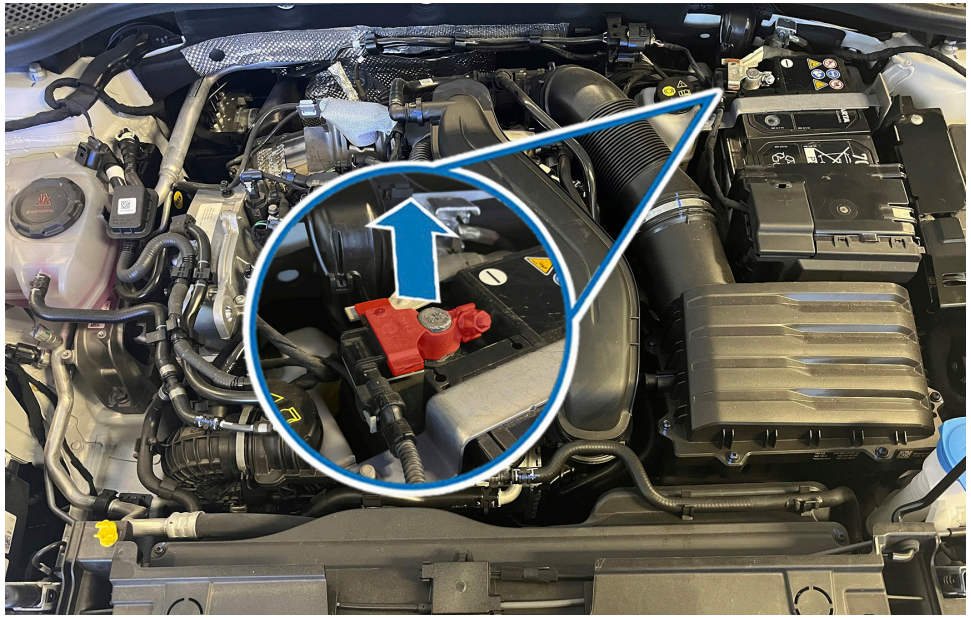
Disabling the vehicle electrical system not only reduces the risk of fire caused by short circuits, but also the risk of delayed deployment of airbags or seat belt pretensioners. When deactivating the vehicle electrical system, it must also be ensured that the power supply to any trailers attached is disconnected.

	If several vehicle electrical system batteries are installed, all must be disconnected so that the vehicle is de-energised.
	For vehicles where access to the vehicle electrical system battery is not possible: CUPRA has installed an accessible ground cable from the battery to the body; disconnect this. Always insulate the ground cable after disconnecting it to reduce the risk of arcing.
	Always disconnect the negative terminal from the battery first and then the positive terminal. To avoid the risk of arcing, the battery terminals should be insulated.

	When the 12 V supply has been disconnected, all functions of the electrical system stop working (this applies in particular to the hazard warning lights and electric seat adjustment). Further information in chapter 4 Access to the occupants and 9 Important additional information must be observed.
	The fitting location and procedure necessary for deactivating the 12-volt vehicle electrical system voltage is described in the CUPRA rescue sheets.

Typical fitting locations

Depending on the requirements, the 12-volt vehicle electrical system battery is located in the vehicle front end or in the boot.



Location in the vehicle front end (Example FORMENTOR ICE).

Location in the boot (Example LEÓN PHEV).

Disconnecting the 48-volt battery

Today's vehicles feature intelligent drive systems and a variety of driver assist systems. A number of them are operated using an additional 48-volt electrical system with a lithium-ion battery installed.

CUPRA models with a 48-volt electrical system (in addition to the 12-volt electrical system) are also referred to as mild hybrid vehicles (MHEV). These vehicles are not high-voltage vehicles.

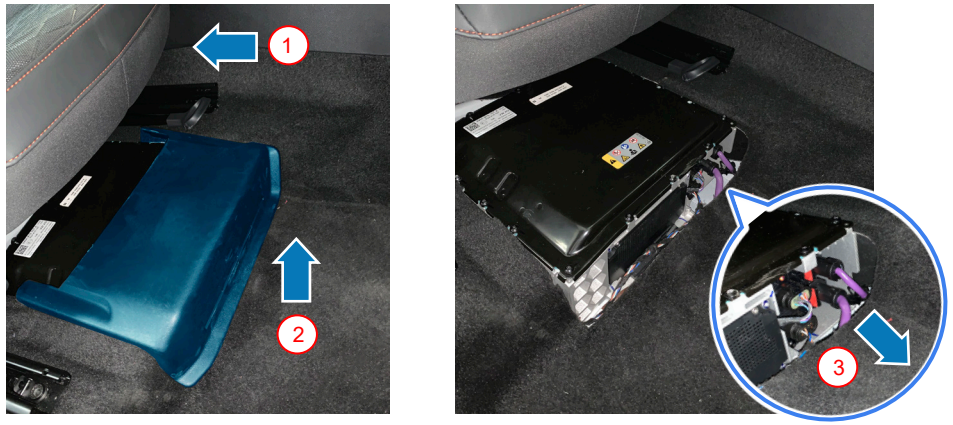
For example, this system is used for the advanced Start-Stop system with help from a belt-driven starter-alternator.

	In the event of an accident in which airbags are deployed, the 48-volt electrical system (additional to the 12V electrical system) is automatically disabled.
	The 48-volt vehicle electrical system must be disconnected in order to de-energise the vehicle.

The specific danger associated with the 48-volt voltage level can be controlled appropriately and to the same extent as with conventional 12-volt electrical system batteries if the special points to note are known.

	When disconnecting the 48-volt battery, there is a danger of an electric arc! Wear appropriate protective equipment!
	Lithium-ion batteries can self-ignite either immediately or after a delay when damage occurs or they are not used properly, or re-ignite after fire-fighting measures. Wear appropriate protective equipment!
	In some CUPRA models there is a 48-volt lithium-ion battery installed in addition to the conventional 12-volt battery.
	The procedure for disconnecting the 48-V battery is described in the rescue sheets.

1. Move the passenger seat backward
2. Remove the protective cover of the 48V battery
3. Disconnect all connectors



Disconnecting the 48-volt vehicle electrical system in mild hybrid vehicles (MHEV).

Disconnecting from the charging station (emergency release)

Vehicles parked at a charging station or wall box for charging can be disconnected from these in an emergency.

If regular disconnection is not possible, the vehicle can be released manually using the action described on the rescue sheet. The manual release is always located on the rear of the charging socket.

	The procedure for operating the manual release mechanism for the charging connector on the vehicle is described on the rescue sheets.

	Public charging stations may be connected to the public power grid at more than 1,000 volts. If this is the case, the correspondingly larger safety distances must be observed when responding to fires.
	Observe existing regional and national contingency plans and safety instructions for emergency and recovery personnel for public charging stations and wall boxes.
	The charging connections and the appearance of public and private charging stations differ depending on the manufacturer and country. See also chapter 1 Identification / recognition.

Another difference is the type of voltage used for charging. Charging stations and wall boxes charge with alternating voltage or direct voltage.
A system that uses direct voltage (DC) supplies the battery directly via the charging socket. If alternating voltage (AC) is used to charge the high-voltage battery, the battery charger in the vehicle functions as a voltage converter.

Example positions for manual release from the charging station (LEÓN PHEV):

1. **Locate and pull the yellow ring located on the left side of the vehicle front end.**
2. **Disconnect the charger.**

4. Access to the occupants

Edition: 12/2024

Access to the occupants plays a central role in rescue activities following an accident.

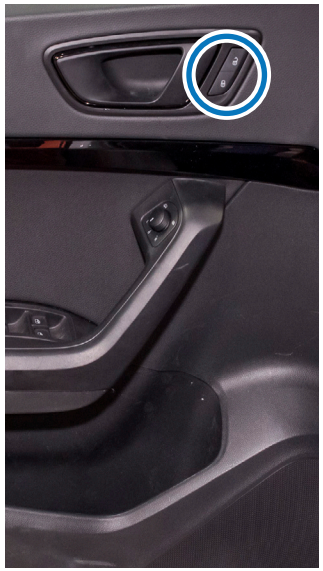
Depending on the accident situation, the emergency and recovery forces have various redundant access options to the occupants.

Unlocking the vehicle doors

Locked doors (exterior door handle does not open the door) can be unlocked normally as follows:

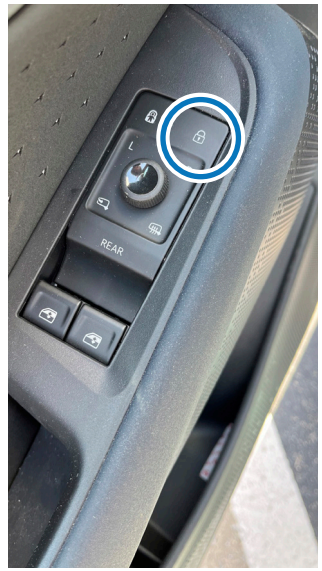
- Remote control buttons
- Button in the door trim
- Button in the centre console
- Manual vehicle key / optional Keyless

Button on the vehicle key



Door unlock button in the ATECA

Door unlock button in the LEÓN



Door unlock button in the TAVASCAN

	You can find specific information about the vehicle in the vehicle's on-board documentation or rescue sheets.
	In the event of an accident in which airbags are deployed, all doors and the boot lid are automatically unlocked. Door can be opened pulling the door handle with force.

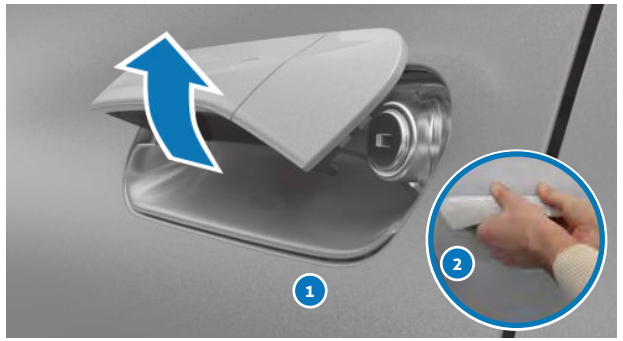
Electrically assisted door handles

In the CUPRA TAVASCAN, operation of the door handles on the inside and outside is electrically assisted. The doors can be conveniently unlocked with very little effort. In the event of a crash, considerably greater force may be required to unlock and open the doors.

	In the event of an accident or failure of the 12-volt vehicle electrical system, significantly greater forces are required to open the doors.
	In the event of an accident in which airbags are deployed, all doors and the boot lid are automatically unlocked.
	After serious accidents, it may also be necessary to use tools.
	When possible, the electric convenience systems should be used for the rescue prior to disconnection of the battery.

Exterior door handles

With electrically assisted door handles, all doors can be unlocked and opened with little effort. To open, reach into the handle recess and fold the door handle up slightly. If the electrical assistance is interrupted or has failed, the door handle must be levered upwards with greater force.



(1) Convenience opening: lift the door handle slightly and open the door.

(2) Emergency opening: lever door handle far upwards with greater force and open door.

In special situations, the vehicle can be manually unlocked and opened from the outside as follows using a manual key:

1. Use the vehicle key to prise off the cap in clockwise direction.
2. Insert the key bit into the lock cylinder.
3. To unlock the vehicle, turn the manual key counter-clockwise.
4. To open the door, pull firmly on the driver door handle.

Remove the lid by levering with the key

Unlock turning the key

If necessary, the vehicle doors can also be unlocked and opened from the inside by operating the interior door handle.

	When the childproof lock is activated, opening the doors of the second seat row not possible from inside. To open the door from the inside, the childproof lock must first be deactivated mechanically or electrically.

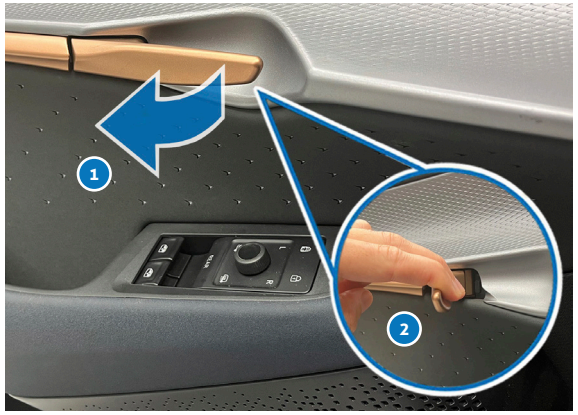
Deactivate the childproof lock mechanically using the key.

Deactivate the childproof lock electronically in the door trim.

Interior door handles

With electrically assisted door handles, the doors can also be conveniently operated from the inside. To do this, fold down the interior door handles slightly and open the doors.
The doors can also be opened by pulling the door handle further if the electrical assistance is interrupted or has failed. Access to the interior door handles is possible:

- Via an adjacent door
- By opening a side window:
  - Using the key
  - Using the buttons in the door trim
- Removing the window



The door handle on the TAVASCAN is shown as an example

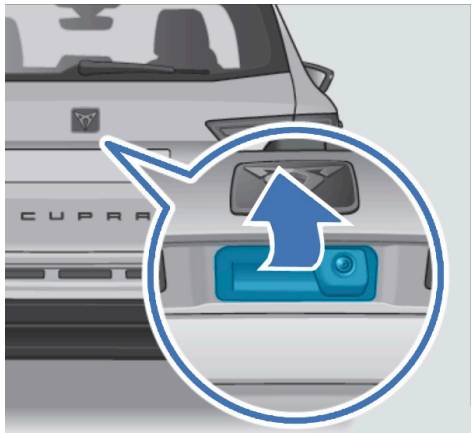
1. **Convenience opening: fold down the door handle slightly and open the door.**
2. **Emergency opening: lever door handle far to the rear with greater force and open door.**

	There is a risk of injury when the vehicle windows are broken. Wear appropriate protective equipment!
	When the anti-play protection is activated, operation of the windows of the 2nd seat row is not possible. To open the windows, the anti-play protection must be deactivated.

	After accidents with airbags deployed, the windows move to a crash position (gap of approx. 5 cm). If necessary, the window can be broken out outwards by gripping it inside.

Access via boot lid

Depending on the equipment variant, the boot lid can be unlocked as follows:



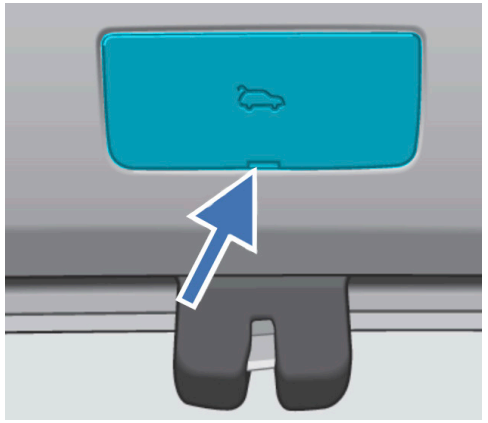
Button on the boot lid

Button on the remote control

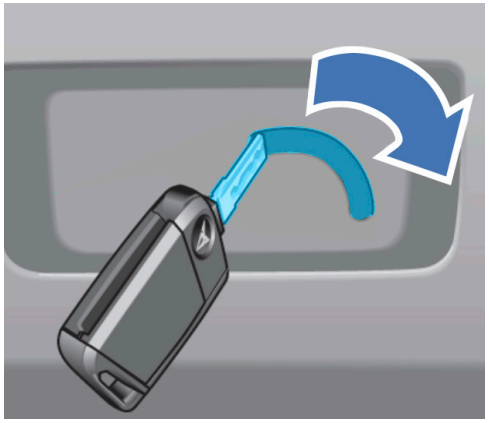
The boot lid is opened by pressing the electric button in the boot lid in unlocked state. Some models have an optional electric opening function for the boot lid.

	In the event of an accident in which airbags are deployed, all doors and the boot lid are automatically unlocked.
	If the 12-volt supply is interrupted, it is not possible to open the boot lid in spite of unlocking.
	If necessary, the boot lid can be opened manually from the inside. Please observe the notes in the vehicle-specific Owner's Manual.

If necessary, the boot lid can be opened manually from the inside. The boot lining has a slot that allows accessing the emergency opening mechanism.



Remove the access cover to the emergency unlocking mechanism

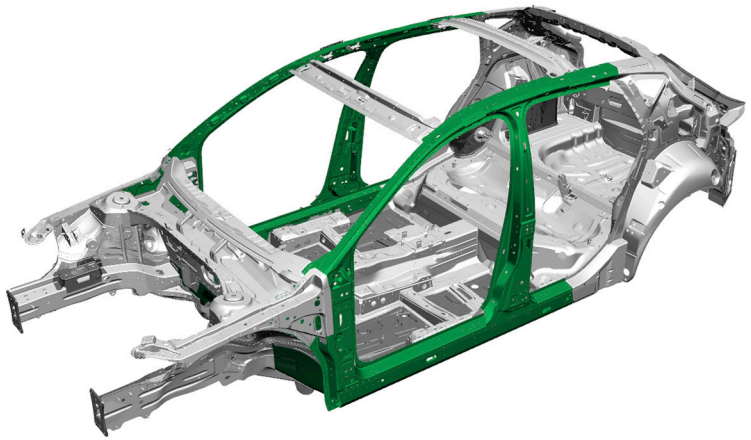


Enter the key in the slot and slide it to unlock

Body reinforcements

A high level of safety for the vehicle occupants is achieved in particular by a rigidly designed passenger compartment.

The reinforcement of the body is achieved by using high-strength and hot-formed steels with larger wall thicknesses in a multi-shell structure.



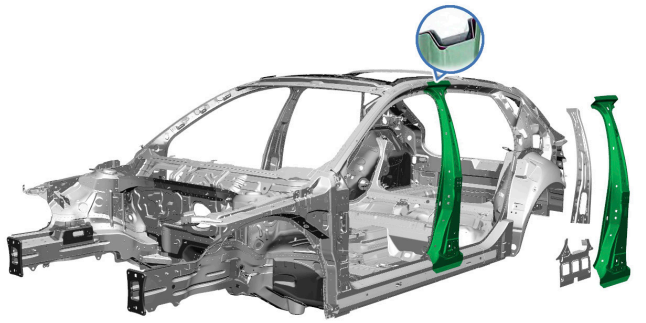
Body with reinforced passenger compartment

The reinforced areas are indicated on the model-specific rescue sheets. High-performance cutting equipment must be used in these areas when carrying out rescue activities.

	There is a risk of injury when the vehicle windows are broken. Wear appropriate protective equipment!
	Avoid sensitive components such as airbags, fuel tanks, pipes or high-voltage components. Information about the position of reinforcements can be found on the vehicle-specific rescue sheets.
	Labelling of high-strength areas in the rescue sheets.

B-pillar

The B-pillar in particular is reinforced using high-strength and hot-formed steels and a multi-shell structure. In addition, modern B-pillars have a larger cross-section.
The pillar is additionally reinforced around the belt guide, which makes it more difficult to cut through. These areas should therefore be deliberately avoided.



B-pillar with multi-shell structure

	The easiest point to cut through vehicle pillars is the area above the belt height adjuster! The pillar can also be cut through in the lower area. However, note that the cross-section of the pillar is very large and that the belt tensioner is usually located there.
	Always observe the rescue sheets.
	Labelling of high-strength areas in the rescue sheets.

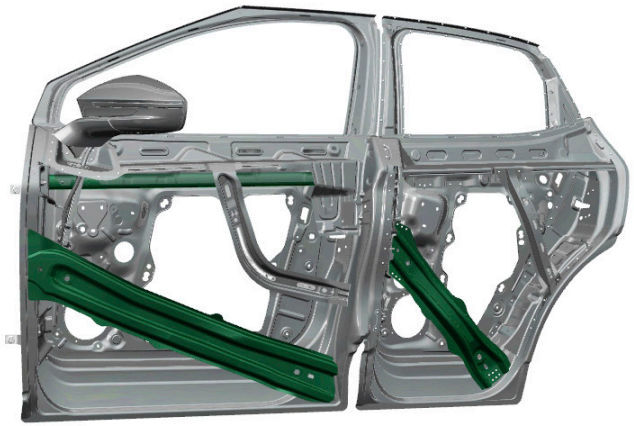
Sill beam

In modern vehicles, high-strength and multi-shell steels are used to reinforce the sill beams. These increase safety in the event of side collisions. The electric vehicles in particular feature reinforced sill beams to protect the high-voltage battery.

Side impact protection in the door area

The impact protection in the door area of CUPRA vehicles is made of steel tubes or steel profiles. The tubes or sections are arranged horizontally or diagonally behind the outer door panels.

The high-strength sections can be cut through with powerful cutting equipment. The steel tube is installed above the door lock and provides the vehicle with support in the event of a head-on collision, while the steel profiles below the door lock are relevant in the case of a side impact.



Side impact protection in the doors

	The location of particular reinforcement measures in the individual vehicles can be found on the rescue sheets.
	Labelling of high-strength areas in the rescue sheets.

Glazing

The windows in CUPRA vehicles are made of tempered or laminated safety glass.

The windscreen is always made of laminated safety glass (VSG) and the side and rear windows are made of tempered safety glass (ESG) or laminated safety glass, depending on the equipment. In CUPRA vehicles, panoramic glass roofs are always made of tempered safety glass.

Tempered safety glass (ESG)

Tempered safety glass (ESG) is thermally pretreated glass that can withstand high loads. When broken it crumbles into small granular pieces.
Tempered safety glass is used for side windows, rear windows, sliding sunroofs and the panoramic glass roof.

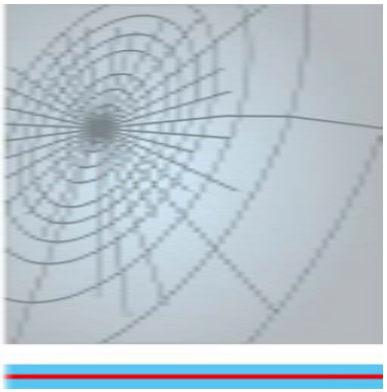
	Intact windows can suddenly burst during rescue work at the vehicle. Depending on the accident situation and the scope of emergency work, the windows should be removed first. Windows can be removed by concentrated impact using an automatic punch or an emergency hammer, for example. The windows should first be secured by masking off.

Laminated safety glass (VSG)

Laminated safety glass (VSG) consists of two panes of glass with a layer of film in between. The glass remains largely intact when damaged. It is used for windscreens and sometimes for side windows.

	Because laminated safety glass windows cannot suddenly burst, they only have to be removed if it is necessary for the rescue work. Laminated safety glass windows can be removed using special glass saws or metal cutting claws.

Tempered safety glass



Laminated safety glass

	Protect the occupants from glass splinters before removing the glass panes.
	Information about the window versions installed is also described in the respective rescue sheets for more recent models.

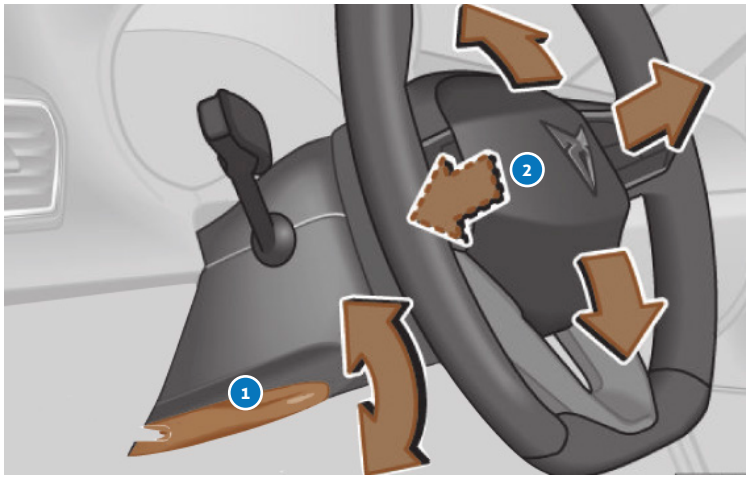
Driver seat and steering wheel adjustment mechanisms

Depending on the situation at the scene of the accident, the emergency and recovery services decide whether it is necessary to adjust the seats or the steering wheel to rescue the occupants.

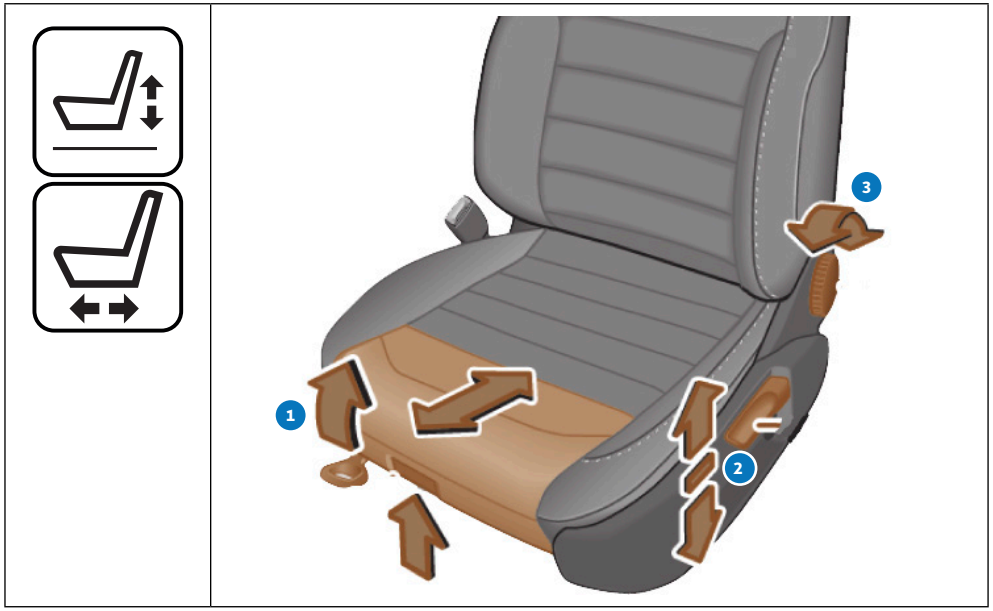
The seat systems and steering columns in CUPRA vehicle models may be operated mechanically or electrically.
The head restraints must also be removed if necessary.
To rescue occupants from the second and third row of seats, it may be necessary to move the front seats forward and fold down the backrests or remove individual seats.

	If rescue tools are used in the vehicle interior, ensure that sensitive parts such as the high-voltage battery or pyrotechnical belt tensioners are not damaged.
	In the event of an accident in which airbags are deployed, all doors and the boot lid are automatically unlocked.
	Depending on the equipment, electrically operated seats may be equipped with a convenient entry version. This function automatically moves the seat to various positions.

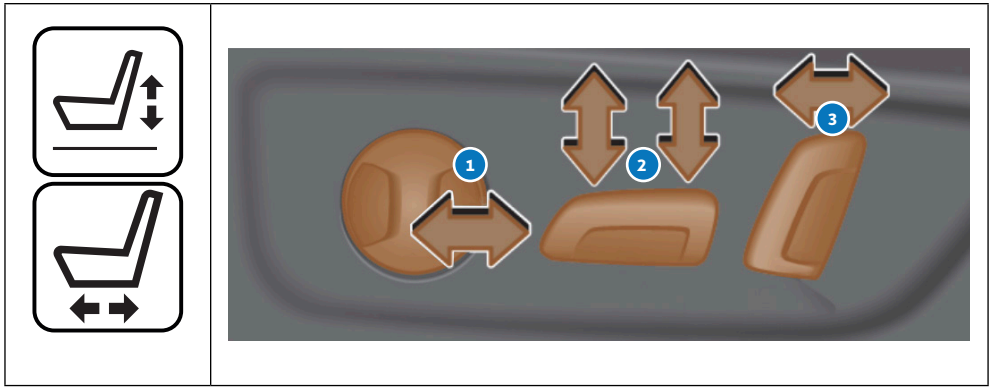
	When possible, the electric convenience systems should be used for the rescue prior to disconnection of the battery.



Mechanical steering column adjustment
1. **Unlock the steering column**
2. **Adjust the position**



Mechanical seat adjustment
1. **Longitudinal adjustment**
2. **Vertical adjustment**
3. **Backrest adjustment**



Electrical seat adjustment
1. **Longitudinal adjustment**
2. **Vertical adjustment**
3. **Backrest adjustment**

Electric convenience systems

Depending on the model series and vehicle equipment, CUPRA vehicles feature a range of electrically operated convenience systems, for example:

- Electric doors
- Electric windows
- Electric sliding sunroof
- Electric seat adjustment
- Electric unlocking, opening and closing of the boot

If the vehicle electrical system battery or batteries is/are disconnected, these systems can no longer be operated.

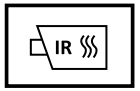
The battery should only be reconnected to the vehicle electrical system by workshop personnel.

5. Stored energy / liquids / gases / solids

Edition: 12/2024

Mainly carried service fluids

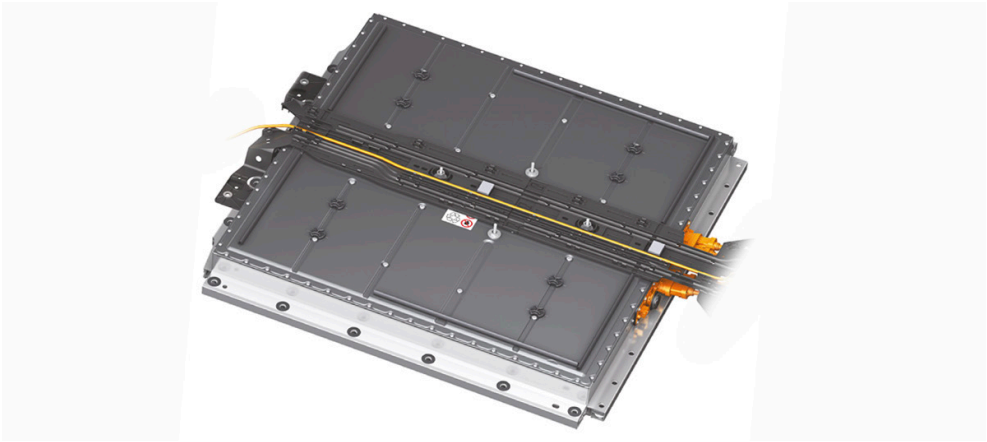
CUPRA models carry a wide range of service fluids. Only if you recognise a hazard during an emergency can you react appropriately and take suitable action to prevent it.

	If the battery system is mechanically deformed, there is a risk of a thermal reaction in the high-voltage battery. Monitor the temperature of the high-voltage battery! 
	With all energy carried or stored there is a risk of expansive discharge after an accident. (Pyrotechnical belt tensioners, airbags, gas struts, fuels, gases, etc.)
	Always wear appropriate protective equipment when handling leaking operating fluids.

Example list of possible stored forms of energy/ liquids/gases/solids:

Warning labels for high-voltage components

This is why extensive warning labelling comprises a part of the safety concept of high-voltage vehicles, for example.



Example of a high-voltage battery for the BORN

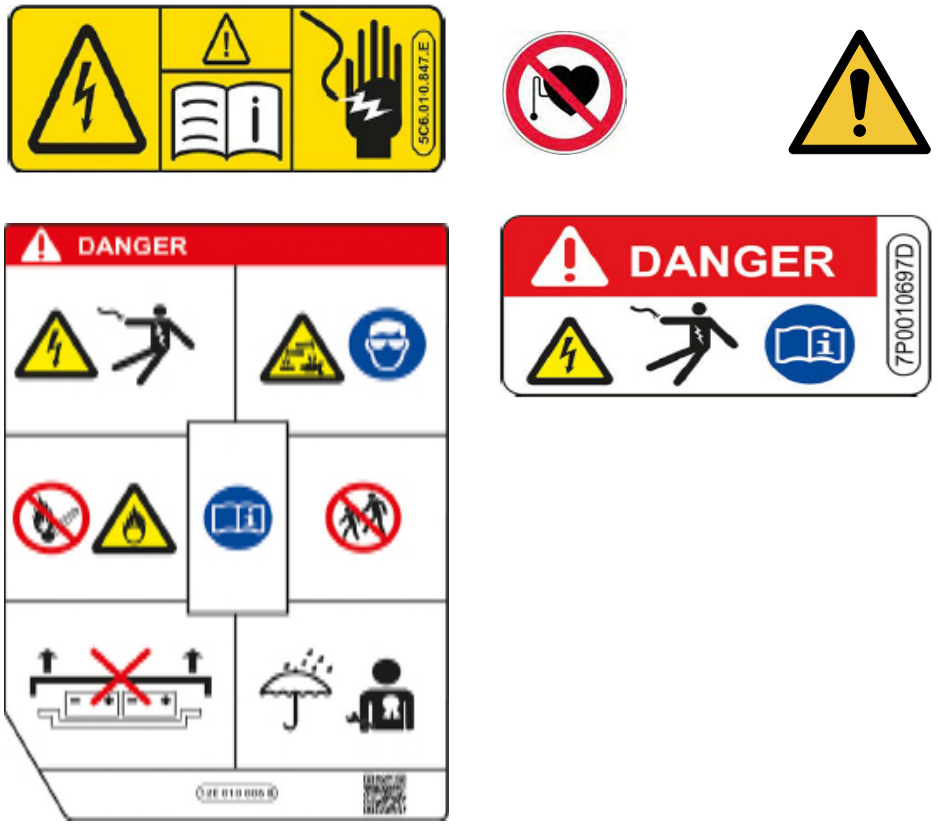
All high-voltage components are labelled with clear warning stickers. An exception to this are the high-voltage cables, which are immediately recognisable by the orange warning colour of their sheathing.
Three types of warning sticker are always used:

- Yellow stickers with a warning symbol for electrical voltage
- Stickers with the word “Danger” on a red background
- Stickers with a special warning for people with pacemakers

The yellow stickers refer to the high-voltage components that are installed near the sticker or concealed under covers.

The warning stickers with the “Danger” lettering indicate the high-voltage components directly.

Examples of warning stickers in high-voltage vehicles:



The high-voltage vehicle electrical system

Classification as a high-voltage component or high-voltage vehicle electrical system depends on the voltage type “AC” or “DC”.

Alternating voltages (AC) above a supply voltage of 30 volts and direct voltages (DC) above a supply voltage of 60 volts are generally referred to as high-voltage components or as a high-voltage vehicle electrical system.
Definition of terms used in vehicle construction (example CUPRA)

- Low voltage: of up to 60 volts (usually 12 volts and 48 volts)
- High voltage: from 60 volts to approx. 1,000 volts

	Even though the terms are based on the voltage, the actual danger from direct contact with electrical energy is the strength of the current that flows through the human body in a closed circuit. This means that, even at low voltage, contact with electrical energy can present a danger to life when the current rating is correspondingly high.
	Do not touch, cut or open high-voltage components and high-voltage batteries! Wear appropriate protective equipment!

	Only a few electrical components in high-voltage vehicles are operated using high voltage (e.g. high-voltage battery, high-voltage cables, power and control electronics for electric drive, electric drive motor/alternator, air conditioner compressor, external charging socket). All other electrical components, such as lighting, vehicle electronics etc. are supplied with power by the 12-volt vehicle electrical system voltage (passenger vehicle).

High-voltage batteries are rechargeable batteries. Various types of battery are used, depending on the manufacturer and the vehicle. They differ in the chemical components used in the battery cells for the anode, cathode and electrolyte, as well as in the shape of the battery cell (round, prismatic, pouch).

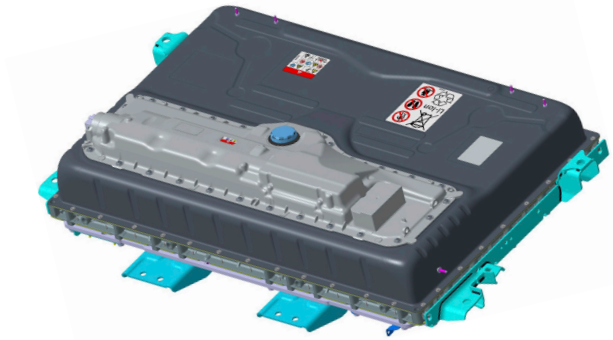
The possible locations of high-voltage batteries in CUPRA vehicles are:

- Below almost the entire underbody
- Below the underbody in front of the rear axle

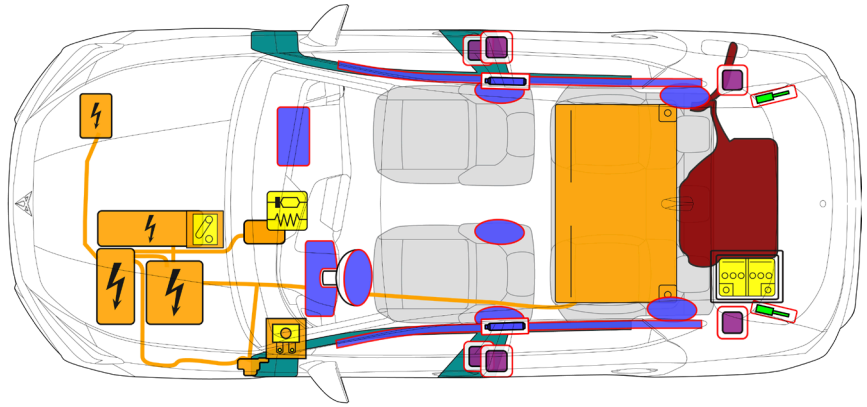
A high-voltage battery consists of many battery modules, which in turn consist of the battery cells themselves.
All high-voltage batteries are structurally protected in order to reduce the risk of electrolyte escaping from damaged battery cells to a minimum, for example after an accident. In the event of an accident, the high-voltage battery is protected from mechanical influences by a battery housing. This directs most of the impact energy into the vehicle structure.

	In addition to the high-voltage battery, CUPRA electric vehicles also have one 12V electrical system battery.

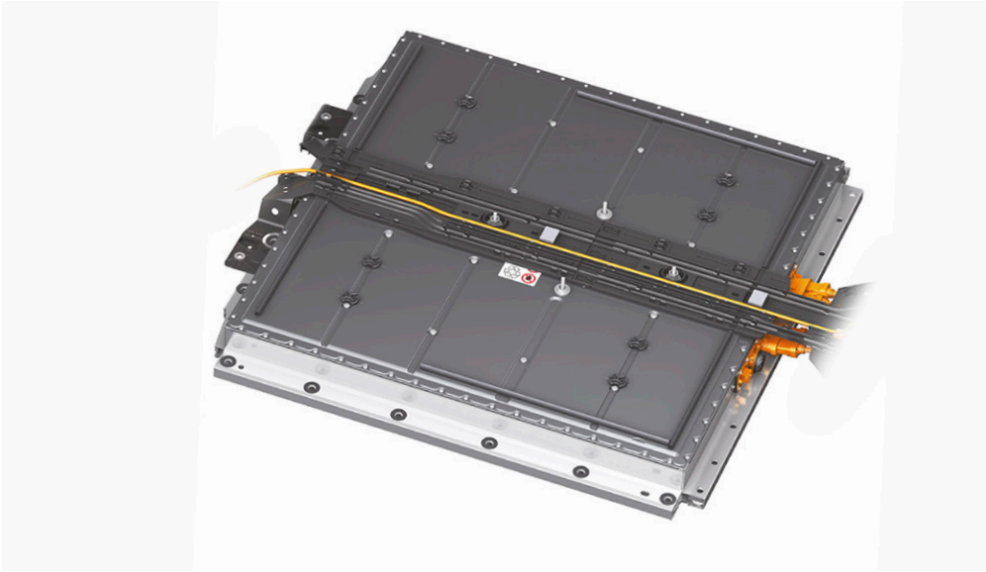
Battery systems



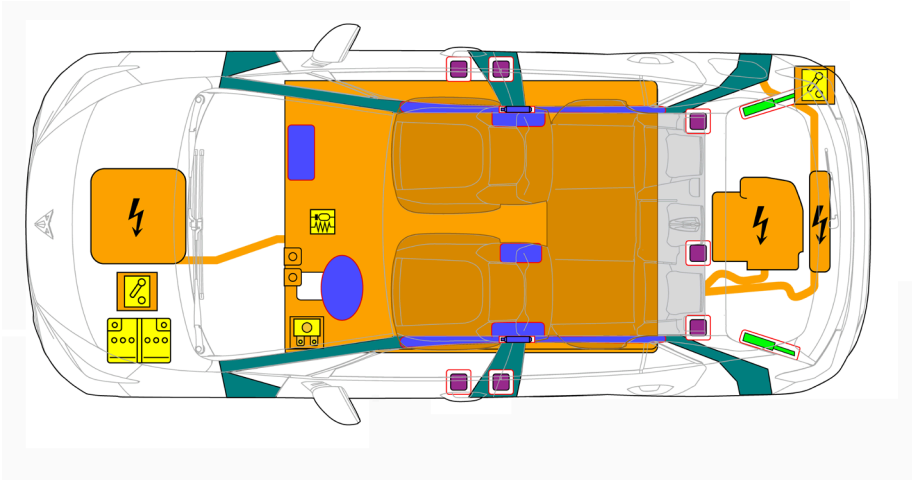
The high voltage battery of the LEÓN eHybrid



Fitting location of the high-voltage battery in the LEÓN eHybrid.

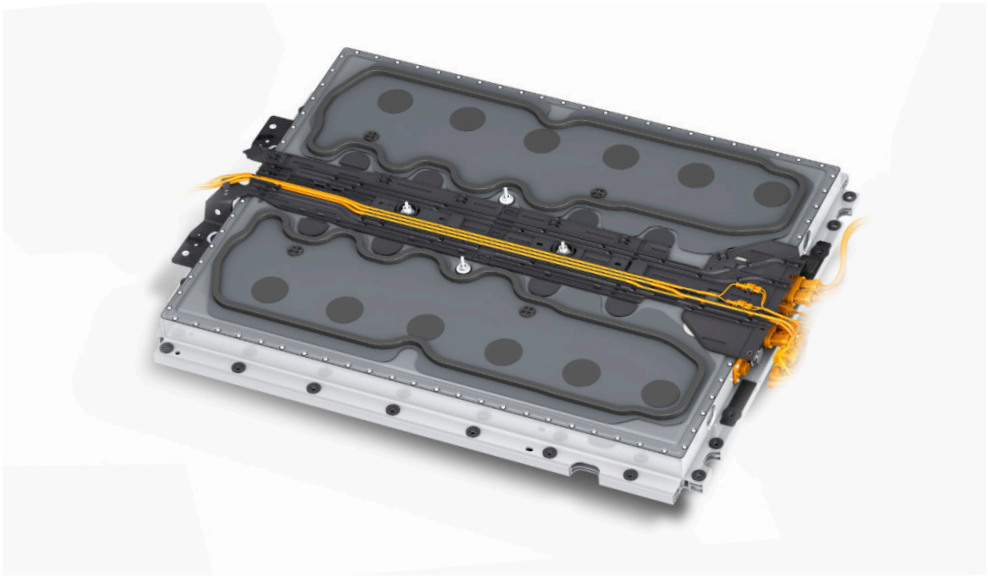


The high voltage battery of the BORN

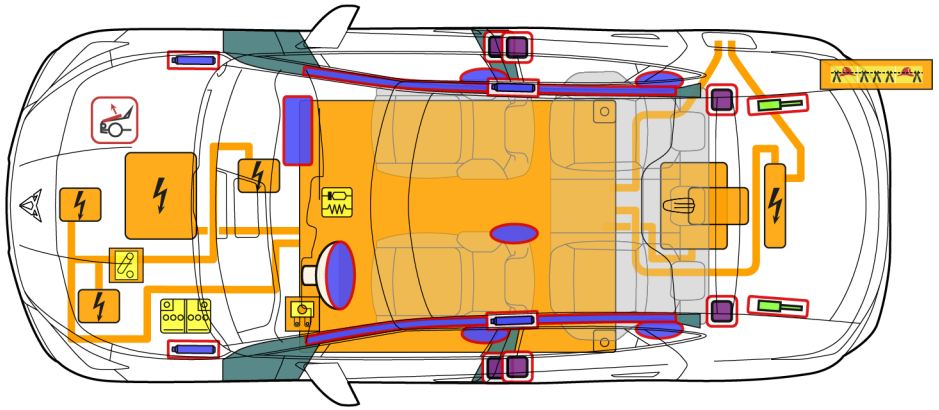


Fitting location of the high-voltage battery in the BORN

Battery systems



The high voltage battery of the TAVASCAN



Fitting location of the high-voltage battery in the TAVASCAN

Air conditioning system

The refrigerants R1234 yf and R744 (CO2) are used for the air conditioning systems. More detailed information on the different refrigerants can be found on the following web page:

https://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp

High-voltage battery – cooling system

In normal operating conditions, there is no danger of exposure to the contents of the battery.

	If refrigerant escapes from the battery cooling system, there is a risk of a thermal reaction in the high-voltage battery. Monitor the temperature of the high voltage battery!
	**Acute toxicity** In the event of outgassing of the high voltage battery, toxic vapours may form. Wear appropriate protective equipment!
	Vehicle-specific information is also described in the respective rescue sheets.

12-volt electrical system battery

12-volt vehicle batteries in lead-acid technology are primarily used in the CUPRA models. The 12-volt lead batteries differ in terms of a leak-proof technology (completely black box and “AGM” lettering on the label) and a technology that is not leak-proof in the event of damage to the housing (identifiable by the black cover and transparent box). Both technologies use “sulphuric acid” as the electrolyte.

 	**Explosive** There may be a highly explosive gas mixture in the battery. No flames, sparks, open light and smoking near the battery! Wear appropriate protective equipment! “Explosive” sticker on the battery.
	**Corrosives** Escaping electrolyte can cause severe burns to skin.
	Vehicle-specific information is also described in the respective rescue sheets.

AGM batteries

Batteries with fiberglass technology, also known as AGM (Absorbed Glass Mat) batteries, keep the electrolyte absorbed in the fiberglass in case of impact, and are therefore safe in the event of leaks.
This battery type can be identified by the AGM lettering on the battery cover and the completely black battery housing.

	**Corrosives** Escaping electrolyte can cause severe burns to skin.
	Vehicle-specific information is also described in the respective rescue sheets.

Lithium-ion battery (48 volts)

In addition to the conventional 12V battery, some CUPRA models are fitted with a 48V lithium-ion battery, located below the passenger seat.

	Lithium-ion batteries can self-ignite or reignite after extinguishing the fire! Wear appropriate protective equipment!
	**Corrosives** Escaping electrolyte can cause severe burns to skin.
	**Acute toxicity** In the event of outgassing of the lithium-ion battery, toxic vapours may form. Wear appropriate protective equipment!
	Vehicle-specific information is also described in the respective rescue sheets.

Further information is available from the Battery Association of the Zentralverband Elektrotechnik- und Elektronikindustrie e. V. (German Central Electrical Engineering and Electronics Industry Association).
https://www.zvei.org/en/association/sections/batteries-section

Flammable materials

Examples of these include:

- Plastics
- Electrolytes
- Resins
- Magnesium
- Gases or other flammable liquids

Resins are used for bonding carbon fibres, magnesium components are found in the engine compartment.

	Avoid skin contact and inhaling electrolyte vapours, as electrolyte is combustible, corrosive and irritating. Wear appropriate protective equipment!
	**Environmental hazard** Contaminated extinguishing water must be dealt with according to the national procedures for emergency and recovery personnel.

6. In case of fire

Edition: 12/2024

General information on vehicle fires

In principle, all country-specific regulations, work instructions and guidelines issued by the respective fire-fighter associations and public authorities on how to proceed in the event of a vehicle fire must be observed. When possible, the fire must be prevented from spreading to the energy storage unit (fuel tank and battery).

All the usual and familiar extinguishing agents such as water, foam, CO2 or powder can be used.
Which extinguishing agent is to be used with which extinguishing method can only be decided at the deployment site, and is highly dependent on the actual situation and the equipment available.

	If the airbags did not deploy during the accident, they may deploy in the event of a vehicle fire.

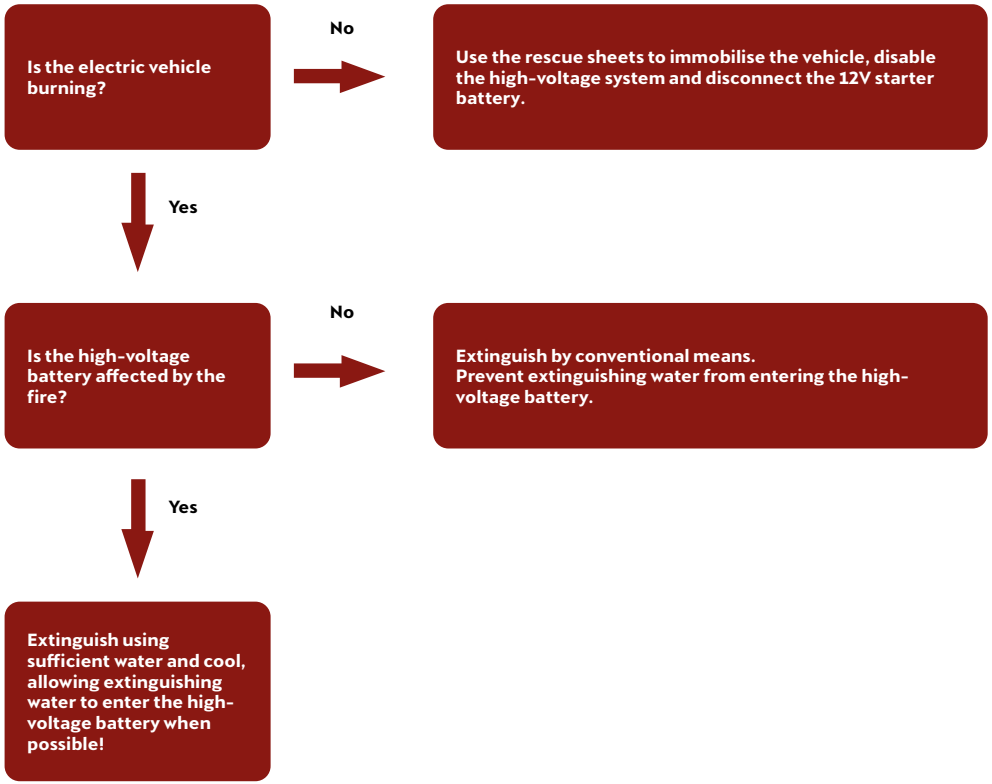
Fire in high-voltage vehicles

Dealing with high-voltage vehicles is usually no more dangerous than dealing with petrol or diesel vehicles, however a number of points do differ.
Knowledge of these differences can be important for the rescue operations in the event of accidents involving passenger vehicles.

The following distinction must be made in the event of a vehicle fire with high-voltage vehicles:

- **Vehicle fire without a high voltage battery catching fire:**
  As is the case for a passenger vehicle with a conventional drive, all conventional and familiar extinguishing agents such as water, foam, CO2 or powder can be used in case of a “normal” fire in a hybrid or electric vehicle (PHEV or BEV), without the high-voltage battery catching fire depending on requirements and/or availability.
- **Vehicle fire with a high voltage battery catching fire:**
  Smoke, flying sparks, darting flames from the battery may indicate that the lithium-ion battery is involved in the fire.
  When a high-voltage battery catches fire, it should be extinguished with water whenever possible and then be cooled.
  In this case, it must be ensured that sufficient water is used and, when possible, the extinguishing water enters the high-voltage battery through the openings caused by the fire or collision.
  The jet of water should be aimed as directly as possible at the battery.
  The installation position of the high-voltage battery can be found in the rescue sheet for the respective model.

The decision about which measures are suitable is made at the deployment site by the fire brigade, and is highly dependent on the actual situation (e.g. progress of the fire and time at which the fire brigade arrives) and the equipment available.



Flow chart for fires in electric vehicles

If severe damage occurs (e.g. a dented, broken or cracked housing), a lithium-ion battery may react to the effect of water or effect of the fire immediately or only after a delay. This is why signs of a reaction (e.g. smoke, heat, noises, sparks etc.) must be observed during activities on a vehicle with a lithium-ion battery which has been in an accident.

In the event of a reaction by the lithium-ion battery, protective measures and countermeasures must be initiated.
Smoke hazardous to the human health is produced from fires in electric or hybrid vehicles, just as it is in vehicles with a conventional drive. This is why the corresponding personal protective equipment is recommended.

6. In case of fire

In the event of a fire, outgassing of the high-voltage battery should be expected, as the battery features mechanical safety mechanisms that open, for example in the event of an increase in temperature or pressure due to a fire, and therefore result in deliberate “outgassing” and pressure release.

Extinguishing a vehicle with a high-voltage battery and extinguishing a burning high-voltage battery is possible. According to the VDA (German Association of the Automotive Industry) guide on rescue and recovery in accidents, water is the most suitable extinguishing agent and there is no fundamental difference from fighting a fire in a conventionally powered vehicle.

If the high-voltage battery is involved in a fire, large quantities of water are required to cool or extinguish an undamaged high-voltage battery that is reacting.

Following a reaction, the lithium-ion battery must be cooled with water until it has reached a temperature approximately equivalent to ambient temperature. The use of a thermal imaging camera or an IR thermometer is recommended.

	After putting out the fire, there may still be dangerous voltages.
	When batteries are not completely burnt out, they may ignite again. Extinguished vehicles must be moved to a safe position; the vehicle may have to be watched.

	A sufficient safety distance must be maintained. The corresponding self-contained respiratory protection equipment must be worn!
	Evaporations and gases can be suppressed by spraying jets of water.
	Defective cells may burst, causing an exothermic reaction.
	A fire may break out some time after the accident, as there may be a residual risk of delayed fire. This is particularly the case if the high-voltage energy storage units are damaged (see also chapter 8 Towing / transportation / storage). An electrical hazard may also persist. High-voltage components must not be touched and suitable personal protective equipment must be worn. High-voltage cables may have been damaged by the heat.
	Further information can be found in the respective rescue sheets.

7. In case of submersion

Edition: 12/2024

In case of submersion

A vehicle that is immersed in water must be dealt with in the same way as a damaged vehicle that has been in an accident.
The safety and security regulations must be observed, and the procedure to eliminate immediate dangers must be followed, see chapter 3. “Disable direct hazards / safety regulations”.

In case of submersion of a high voltage vehicle

- When it is in the water, the high-voltage system does not present an increased risk of electric shock.
- The same instructions apply. See chapter 3. “Disable direct hazards / safety regulations”.
- The recovery procedure is the same as for conventional vehicles.

Source: German Association of the Automotive Industry (VDA), Guide for accident assistance and recovery of vehicles with high voltage systems, FAQ.

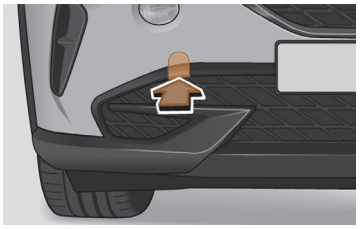
	In the event that water enters the high-voltage battery, electrolysis may be triggered and cause a deflagration of oxyhydrogen gas.
	The high-voltage system must be deactivated (see chapter 3. “Disable direct hazards / safety regulations”). Wear appropriate protective equipment!

	In the case of heavily soaked vehicles, it is recommended to de-energise the system, Disconnecting the 12-volt vehicle battery or Disconnecting the 48-volt vehicle battery due to the danger of electrolysis.

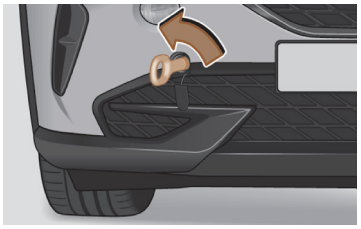
8. Towing / transportation / storage

Recovering vehicles involved in accidents

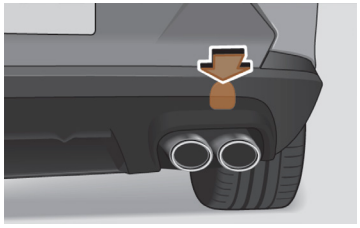
When loading, transporting and storing, the instructions in the rescue sheets must be observed.



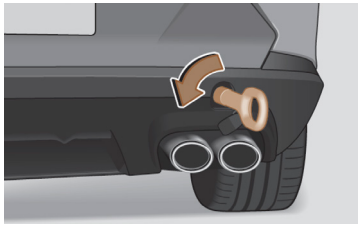
Access cover to the front towing eye



Fastening of the front towing eye



Access cover to the rear towing eye

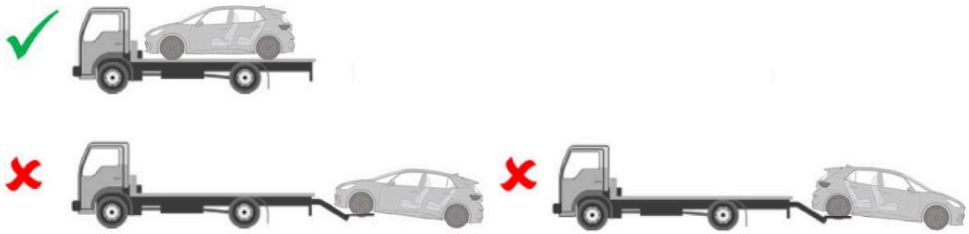


Fastening of the rear towing eye

	The rescue and emergency services on site decide on the respective procedure.

Recovering high-voltage vehicles involved in accidents from a danger area

Vehicles with high-voltage batteries should, in principle, be transported away on flatbed vehicles.



The high-voltage system must be disabled prior to transport, see section 3 “Disable direct hazards / safety regulations”.

Before transporting the vehicle away (e.g. by a towing company), the condition of the lithium-ion battery should be checked again. The vehicle may only be loaded and transported away if the vehicle does not show any signs of a reaction near the lithium-ion high-voltage battery for an extended period, see the flow chart on the next page.

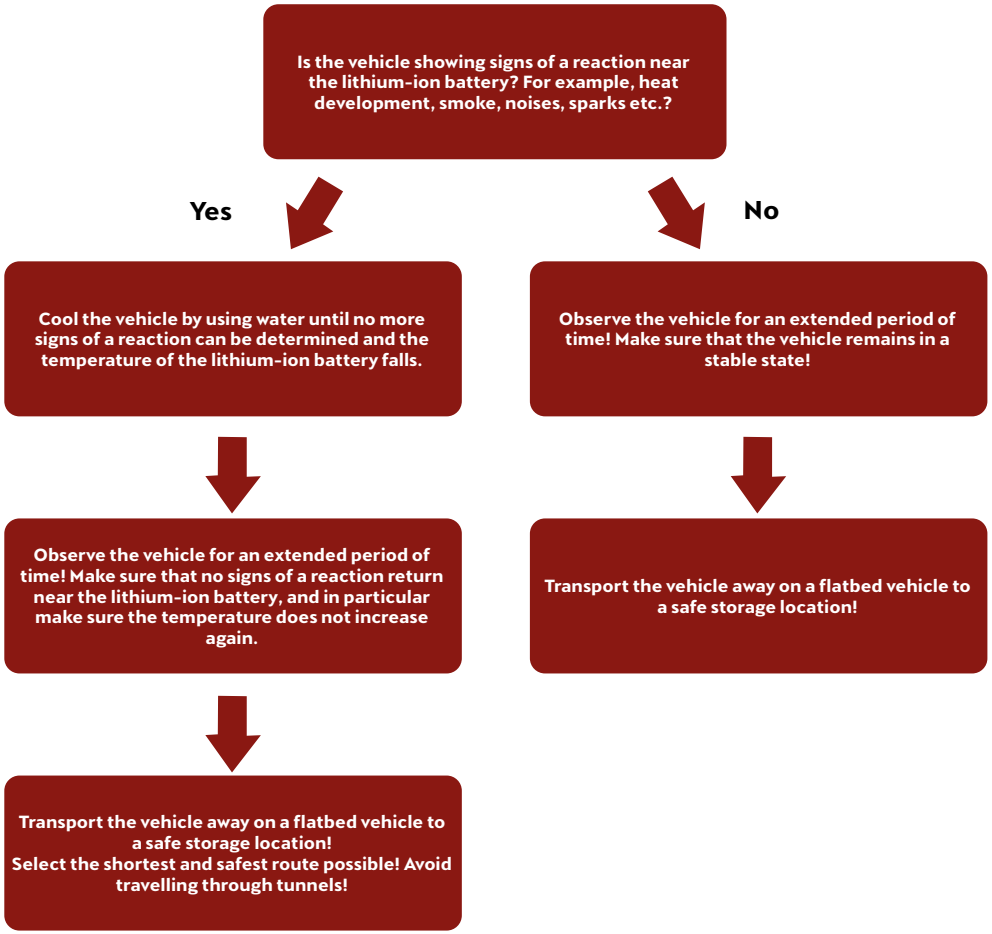
If vehicles that have been in accidents have a damaged battery or the battery exhibits anomalies, wait until the reaction of the lithium-ion battery has abated before loading, so that no further reaction need be expected on the transport route, see the flow chart on the next page. The shortest and safest route possible must be selected. Travelling through tunnels should be avoided.
If there is any need or doubt, it may be necessary to have the breakdown truck accompanied by a fire engine.
Vehicles with a damaged high-voltage battery should be transported to a safe storage location.
After transport, electric or hybrid vehicles that have been in accidents should not be

parked in enclosed buildings, but outdoors at a sufficient distance from other vehicles, buildings and combustible objects or surfaces.

Preference should be given to using designated “quarantine areas” at the storage location. The vehicle that was involved in the accident must be parked outdoors in a suitable location due to the potential which exists, in theory, for the lithium-ion battery to still react. The parking space must be marked accordingly (signs/fencing).
A minimum distance of five metres must be maintained to other vehicles, buildings or flammable objects. The distance can be reduced by taking appropriate measures, e.g. fire barriers etc.
The persons responsible at the towing company, the workshops and, if relevant, the scrapyard must be made aware of the special features of and risks presented by the vehicle.

	Lithium-ion batteries can self-ignite or reignite after extinguishing the fire!
	In the event that vehicles that have been in accidents have a damaged high-voltage battery or the battery exhibits anomalies: deactivate the high voltage system (see chapter 3. “Disable direct hazards / safety regulations”). Park the vehicle at a safe distance of at least five metres from buildings and other vehicles (quarantine area).
	When loading the vehicle, take care not to damage the high-voltage components. If possible, lift the vehicle at the indicated lifting points.

	Vibrations during transport may cause high-voltage batteries to self-ignite again.
	Recommendations for specific vehicles can be found on their rescue sheets.
	Whenever possible, monitor any changes in temperature using corresponding devices, e.g. IR camera, for an extended period.
	A large metal container, e.g. container, is recommended for transporting away a high-voltage energy storage unit or parts thereof that have been disconnected from the vehicle. The condition of the high-voltage energy storage unit must be observed (e.g. development of smoke, noises, sparks, development of heat) and flooding of the metal container must be prepared.
	Further information can be found in chapter 5. “Stored energy / liquids / gases / solids” (lithium-ion battery disconnected from the vehicle).



Flow chart for towing electric vehicles.

9. Important additional information

Edition: 12/2024

Modern vehicles have extensive occupant protection systems which can vary according to the vehicle type and specification package.

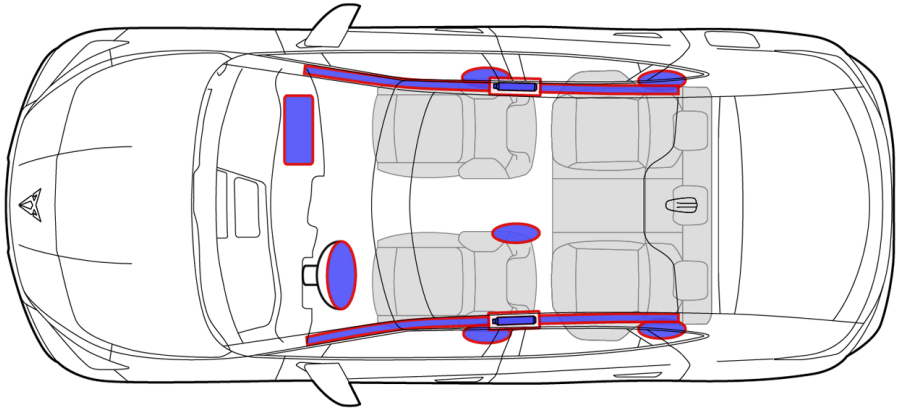
Airbag

A current vehicle with maximum equipment includes the following main components:

- Airbags
- Airbag control unit
- Sensors
- Seat belt pretensioner

Preloaded springs or pyrotechnics are used to trigger it. The job of the electronics integrated in the airbag control unit is to detect vehicle deceleration and acceleration and decide whether to deploy protection systems.
In addition to the sensors in the airbag control unit, sensors e.g. in the front doors are also used to detect vehicle deceleration and acceleration during an accident. Only once they have evaluated the information from all sensors do the electronics in the airbag control unit decide whether and when to activate the safety components.
Depending on the nature and severity of the accident, they may only deploy the belt tensioners or the tensioners together with the airbags, for example.
The control unit is indicated as follows on the rescue sheets:

	Identification of airbag control unit on the rescue sheet



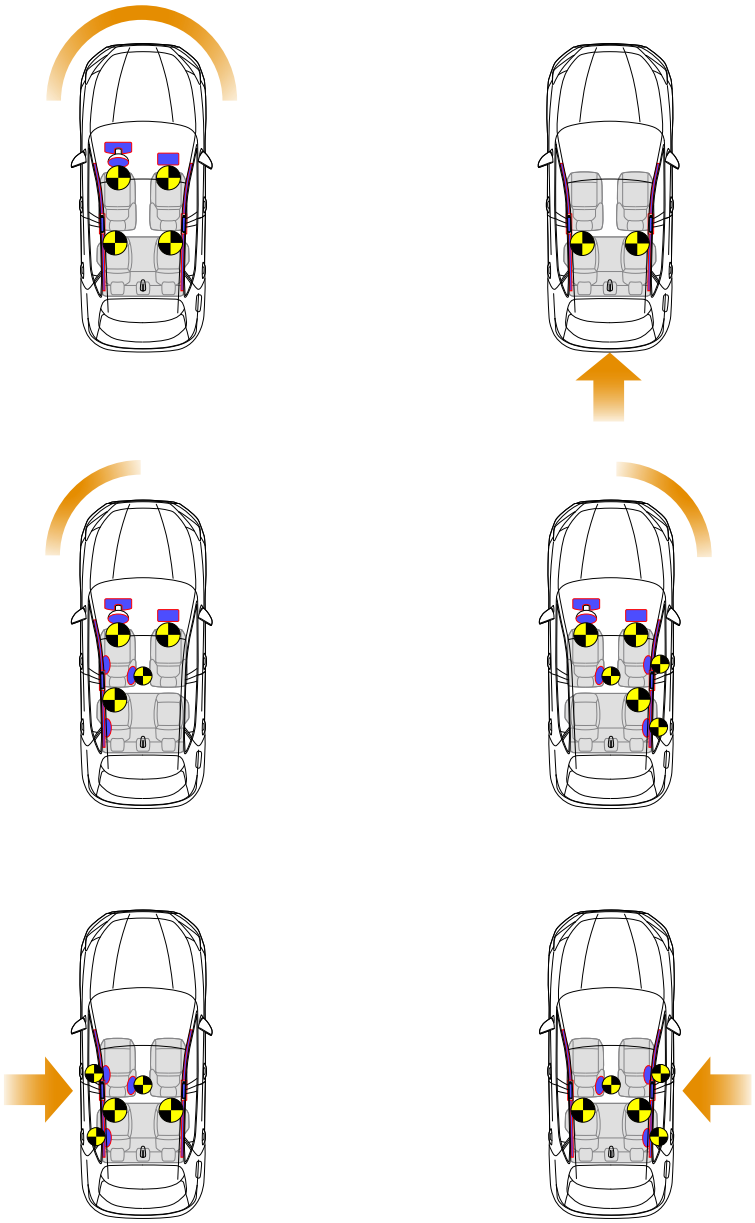
Airbags in today's vehicle models (Example Tavascan)

Only those safety systems which afford protection in the specific accident situation are deployed.

In addition to the main function for controlling the airbags, the airbag control unit may also have the following functions:

- Emergency release of the central locking
- Switching on the interior lights
- Switching off the fuel pump
- Switching on the hazard warning lights
- Transmission of a signal to send the eCall
- Opening the windows after an accident
- Switching off the air conditioning

Gas generators produce the quantity of gas required for inflating the airbags, filling the airbags within milliseconds. The inflated airbags protect vehicle occupants who are wearing seatbelts from striking the inner body contours (e.g. the steering wheel, dash panel etc.) in the event of a severe accident.
Depending on the installation location and requirements, stored gas inflators of various designs or modes of action are used.
The activation of the airbags in the cases described below occurs alongside the activation of the seat belt pretensioner.

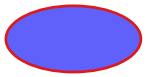


The safety systems are deployed depending on the type of accident or direction of impact

1. The presence of the side airbag in the rear seats depends on the vehicle model/ equipment.
2. The activation of the curtain airbag in frontal and rear collisions depends on the vehicle model.

The safety systems are deployed depending on the type of accident or direction of impact (ms = milliseconds).

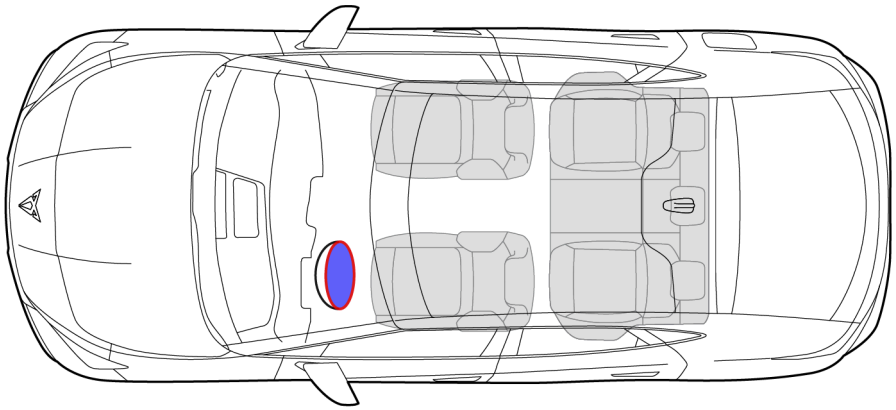
Airbags are indicated in the rescue sheets as symbols or outlines as follows:

	Driver airbag, front passenger airbag, side or centre airbag, knee airbag and curtain airbag.

Front airbag

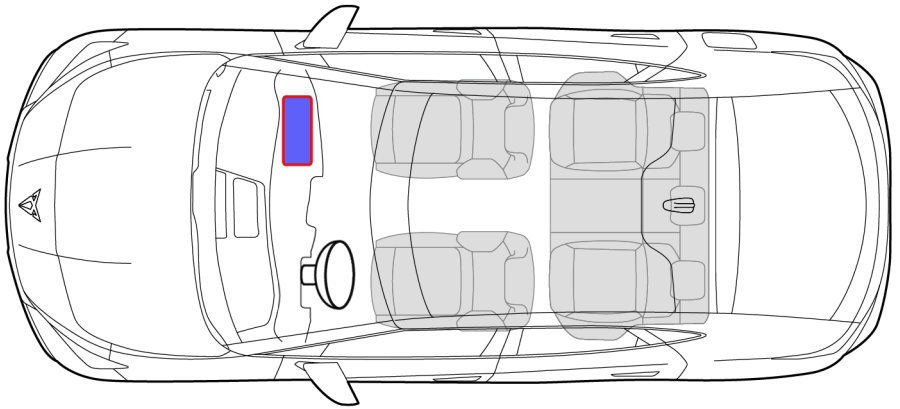
Driver airbag

The driver airbag unit essentially consists of a cap, the airbag and a stored gas inflator. It is fitted in the steering wheel and electrically connected to the airbag control unit via a contact unit.
The airbag is folded up under the cap and its shape and size are designed so that it inflates as protection between the driver and steering wheel.
The driver airbag is inflated by a stored gas inflator. The unfolding airbag breaks the cap on the steering wheel along a special seam and is instantly filled with gas. The entire process from ignition of the stored gas inflator to the fully inflated airbag only takes a few milliseconds.
Vents on the side facing away from the driver reduce the kinetic energy of the upper body impact by allowing the gas to escape at a controlled rate.



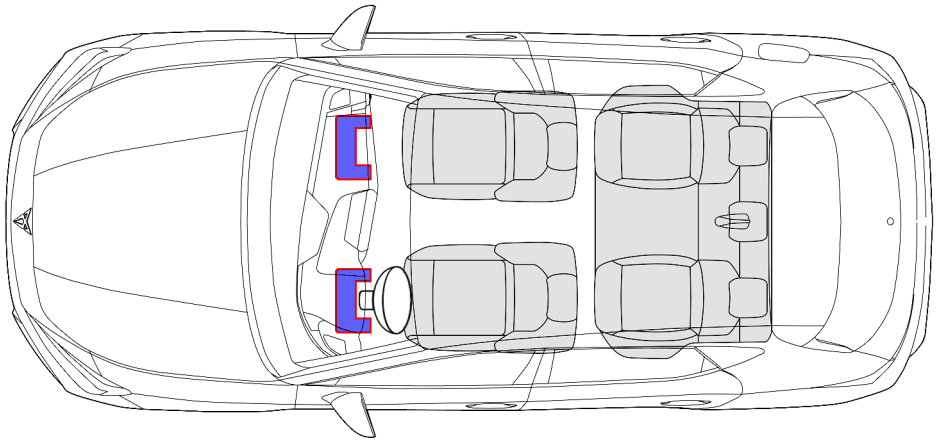
Front passenger airbag

The airbag unit for the front passenger is located in the dash panel in front of the passenger seat. Because the airbag unit is further from the occupant, the front passenger airbag has a much larger volume. The action, function and process sequence of the front passenger airbag are comparable to those of the driver airbag.



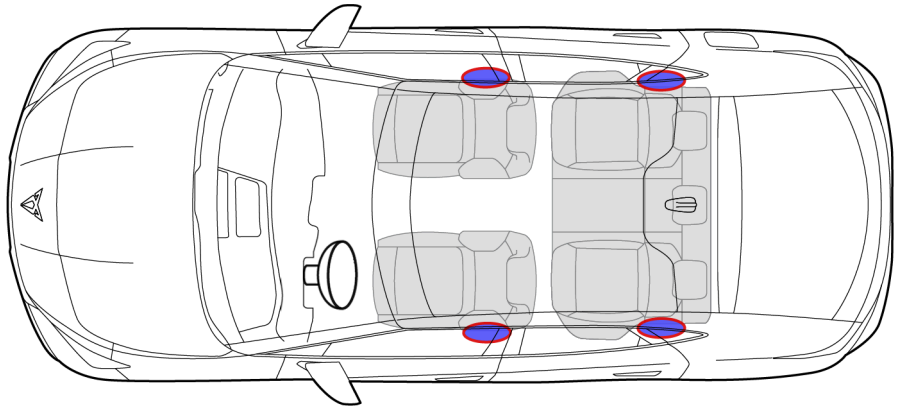
Knee airbag

The design of the knee airbag is similar to that of the front passenger airbag. It is located in the footwell trim below the dash panel.
The knee airbag is always deployed together with the driver airbag. Single-stage stored gas inflators are used to inflate the knee airbags.
The deployment of the knee airbag reduces the occupants' risk of knee and leg injury, and connects the occupant sooner to the vehicle's deceleration.



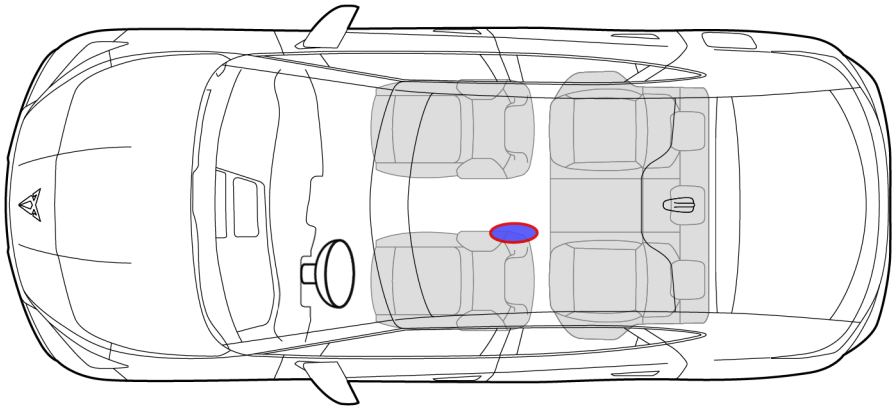
Side airbag

In a lateral collision, side airbags protect the occupant's thorax and pelvis on that side of the vehicle and reduce the impact on the occupant. They inflate at the side between the occupant's upper body and any trims that protrude, and therefore distribute the force of the impact on the occupant more evenly, who is thereby paired with the motion of the intrusion early on. The side airbags are installed in the backrest of the driver and front passenger seats, and on the outer seats in the 2nd row of seats in a number of CUPRA models. This guarantees a uniform distance to the vehicle occupants in every seat position.



Centre airbag

Centre airbags are installed in the driver seat armrest on the tunnel side. They prevent a collision between the heads of the driver and the front passenger, and prevent the driver from being thrown too far to the passenger side if it is unoccupied.

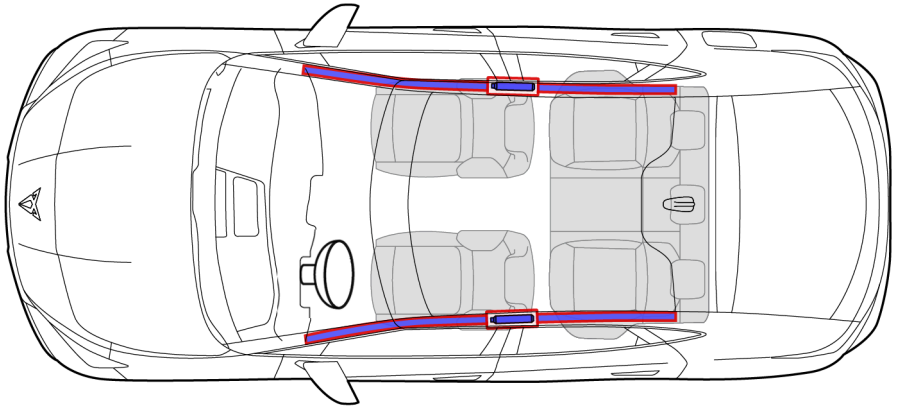


Curtain airbag

Curtain airbags protect the head in the event of a side impact. They consist of a large airbag which usually extends from the A-pillar to the C-pillar in the top part of the interior of the vehicle passenger compartment.

Depending on the vehicle model, the stored gas inflators may be installed in the roof area, in the B-pillar or between the B- and C-pillars, or in the rear roof area. The exact installation position is described on the rescue sheets.
In contrast to front and side airbags, the curtain airbag can retain its internal pressure for some time after being deployed. This is to provide protection if the vehicle subsequently overturns or secondary collisions occur.

Both the side and curtain airbags are deployed by the airbag control unit when a limit configured in it is reached. A side impact is detected by lateral acceleration sensors or pressure sensors in the doors.



Airbag stored gas inflators

Pyrotechnic generators

The pyrotechnic generators consist of a housing containing a solid propellant charge with an ignition unit. When the solid propellant is ignited, the airbag is filled with non-toxic gas.

Procedure:

- The igniter is activated by the airbag control unit.
- The propellant charge is ignited and quickly combusts.
- The gas thus produced flows through the metal filter into the airbag.

Hybrid stored gas inflators

The hybrid stored gas inflators consist of a housing containing a highly compressed gas, combined with a solid propellant charge and an ignition unit. The design and shape of the generator housing are adapted to the installation conditions. These generators are usually tubular. The main components are the pressure vessel for the airbag inflation gas, and the pyrotechnic load which is integrated in the pressure vessel or flange-mounted on it. The solid propellant is used in tablet or ring form. The stored and compressed gas is a mixture of inert gases, for example argon and helium. Depending on the stored gas inflator design, it is pressurised to between 200 bar and 800 bar.

- When the solid propellant is ignited, it opens the pressure vessel, producing a gas mixture consisting of the solid propellant and the inert gas mixture. The igniter is activated by the airbag control unit and the propellant charge is ignited.

Do not damage the stored gas inflators during rescue work.
The compressed gas in the pressure vessel and the pyrotechnic propellants may pose a hazard to the emergency services and the occupants.

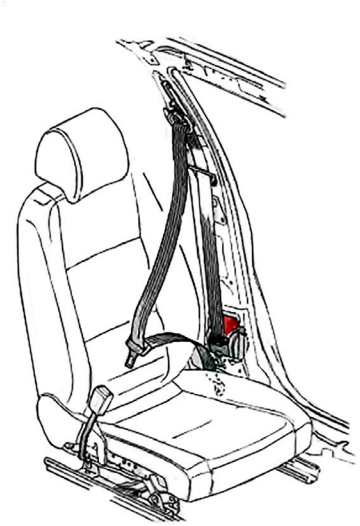
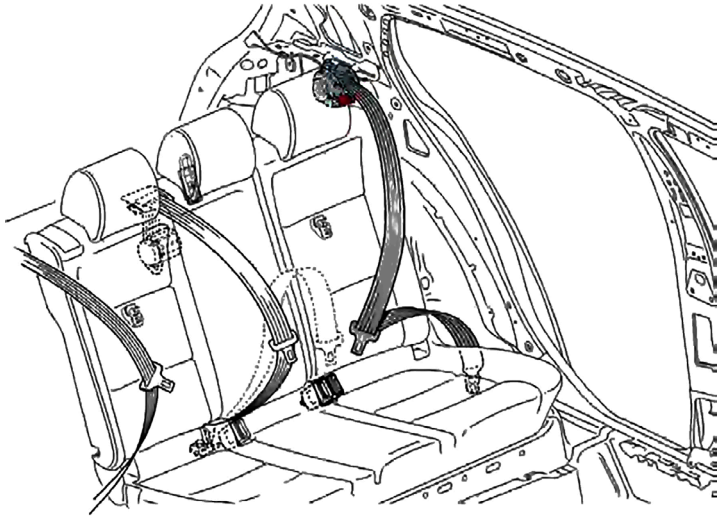
Seat belt pretensioner

In the event of a crash, seat belt pretensioners retract the belt in the opposite direction to which it is being pulled – this reduces slack (a gap between the belt and the body). This acts as soon as possible to prevent the occupant from being thrown forward (relative to the motion of the vehicle). A seat belt pretensioner can retract the seat belt by up to 200 mm within 10 milliseconds. The seat belt pretensioners are integrated in the belt system. However, they may be installed in different locations depending on the type of vehicle (for example in the B-pillar, in the sill beam beside the seat for the front ones, and in the C-pillar and in the backrest of the central rear seat for the rear ones) and have different functional principles. Some seats may use up to two seat belt pretensioners.

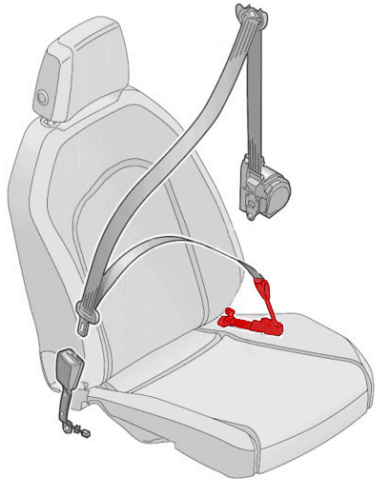
	This means seat belt pretensioners should not be damaged with rescue equipment if at all possible. Avoid hammering on this area.
	The belt also locks if the vehicle is at a steep angle, has overturned, or possibly if the seat belt pretensioner has been damaged by the accident.
	Non-deployed seat belt pretensioners with mechanical activation can still be deployed even after the battery is disconnected.
	If the situation allows, the seat belt should be taken off or cut off as soon as possible.

	Identification of seat belt pretensioners on the rescue sheet

Seat belt pretensioner installation variants

Variant	Location
	**Variant 1** In the front seats, the three-point seat belt consists of a compact pretensioner with a mechanical or electrical pyrotechnic device and is installed in the B-pillar. **Installation variant 1 – Compact seat belt pretensioner in the B-pillar**
	**Variant 2** In the rear seats, the three-point seat belts consist of a compact pretensioner with a mechanical or electrical pyrotechnic device and are installed behind the respective rear seat backrest or in the side shelves in the rear of the vehicle (behind the outer seats). **Installation variant 2 – Compact seat belt pretensioner in the rear shelf**

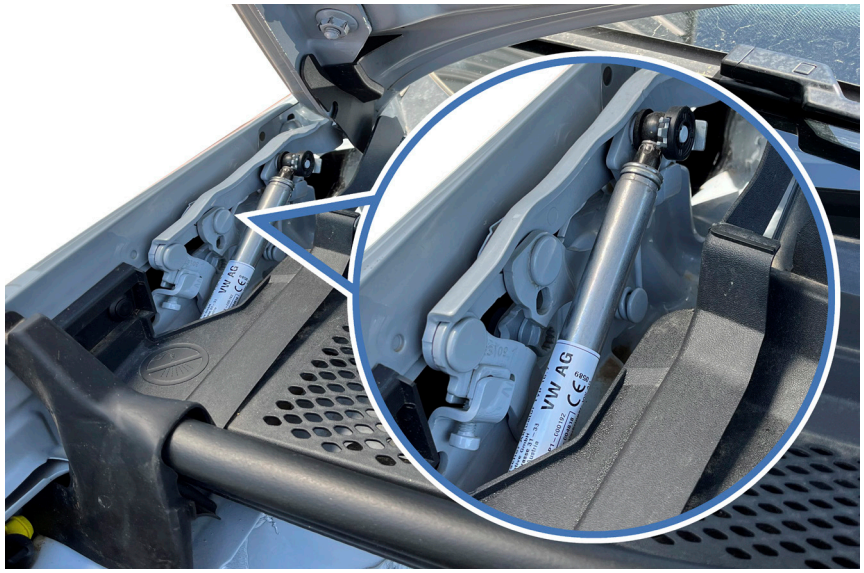
Seat belt pretensioner installation variants

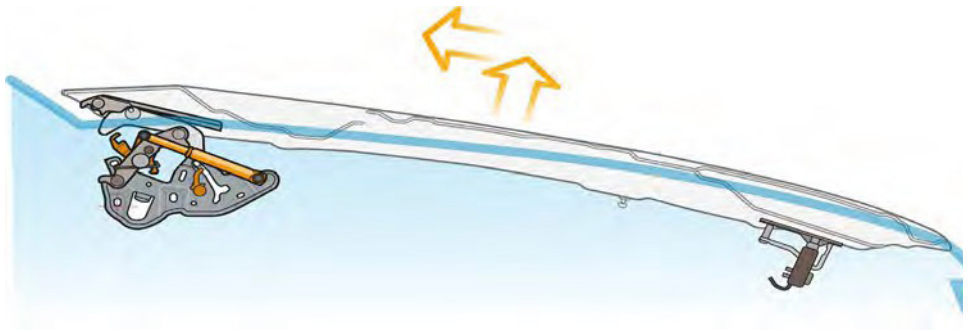
Variant	Location
	**Variant 3** In the front seats, the three-point seat belt and the lap belt pretensioner are installed separately. The seat belt consists of a compact pretensioner with a mechanical or electrical pyrotechnic device and is installed in the B-pillar while the lap belt pretensioner with an electrical pyrotechnic device is installed in the side member next to the B-pillar. **Installation variant 3 – Lap seat belt pretensioner in the side member next to the B-pillar**

Active bonnet

To ensure optimum protection for pedestrians, the CUPRA TAVASCAN is equipped with an active bonnet.
In the event of a collision with a pedestrian, the front and rear of the active bonnet are raised by preloaded gas struts and pyrotechnic propellants.

This increases the space between the bonnet and engine. The bonnet can absorb more impact energy in this position, thereby reducing the severity of injury caused by the engine.





Example of an active bonnet with pyrotechnic actuator.

	Do not damage the stored gas inflators during rescue work. The compressed gas in the pressure vessel and the pyrotechnic propellants may pose a hazard to the emergency services and the occupants.
	Identification of active bonnet on rescue sheet

10. Explanation of pictograms used

Components, functions and measures that have to be taken into account during a rescue operation are indicated by special pictograms.

The pictograms are used:

- To indicate, together with the rescue sheet illustration, where the respective components/functions are located in the vehicle (for details, see ISO 17840-1 and ISO 17840-2).
- To indicate a specific function or danger; they can be used in the sections of the additional pages of the rescue sheet or the guide for emergency personnel
- To show how to identify the type of drive
- To indicate fire extinguishing measures

Importance:
1 = Information that is essential for the rescue depending on the vehicle type/model
2 = Optional information which provides additional support for rescue measures

The following tables list the pictograms used by CUPRA for passenger cars and light commercial vehicles and the components and functions to be taken into account.

	A number of pictograms may be adapted to reflect the actual size and shape. A combination of simple forms can also be used.

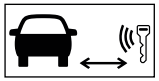
Pictograms for recognising the type of drive

	Vehicle on fuel of liquid group 1; diesel
	Vehicle on fuel of liquid group 2; petrol
	Hybrid Electric Vehicle on fuel of liquid group 2; petrol/electric
	Electric vehicle

Pictograms concerning access to the components

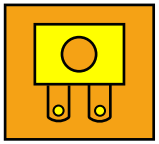
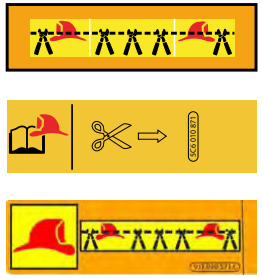
	Bonnet
	Boot

Pictograms concerning disabling of the vehicle (excluding high voltage)

	Remove smart key

Pictograms concerning disabling of the vehicle high voltage (EV and PHEV)

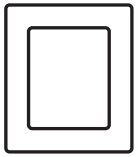
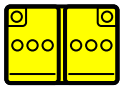
- Orange = high-voltage system (class B voltage)
- Yellow = control of the high-voltage system by the low-voltage system
- Orange coloured frame = procedure for disabling the high-voltage vehicle

	Dangerous voltage
	Fuse box disabling high voltage
	Cable cut
	Low voltage device that disconnects high voltage

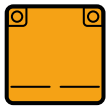
Pictograms concerning access to the occupants

	Steering wheel, tilt control
	Seat height adjustment
	Seat adjustment, longitudinal
	Lifting point; central support

Other vehicle related pictograms

	Airbag
	Stored gas inflator
	Seat belt pretensioner
	Gas strut / Preloaded spring
	Pedestrian protection active system
	High strength zone
	Zone requiring special attention
	Battery, low voltage

Other vehicle related pictograms

	SRS control unit
	Battery pack, high-voltage
	High voltage component
	High voltage power cable
	Fuel tank content Diesel
	Fuel tank content gasoline/ethanol
	Air-conditioning system

Pictograms related to fire fighting and safety

	General warning sign
	Warning, Electricity
	Use thermal Infrared camera
	Use water to extinguish the fire
	Use wet foam to extinguish the fire
	Use ABC powder to extinguish the fire
	Do not extinguish with water

10. Explanation of pictograms used

Worldwide standard symbols

	**Explosive**
	**Flammable**
	**Gases under pressure**
	**Corrosives**
	**Hazardous to the human health**
	**Acute toxicity**

Worldwide standard symbols

	**Environmental hazard**

Symbols used in this guide

	**Warning: potentially explosive materials**
	**Note**