

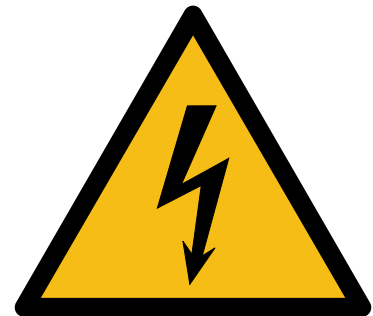
**SI 2188**

For technical personnel only!

1/2

SERVICE INFORMATION

HIGH VOLTAGE – BROKEN DOWN VEHICLES AND VEHICLES INVOLVED IN AN ACCIDENT



IDENTIFYING HIGH-VOLTAGE VEHICLES

Vehicles with a high-voltage system can be identified by various features:

- Designations on the vehicle, e.g. electric drive, hybrid, plug-in hybrid
- "E" as the last digit of a German number plate
- Electric charging connection, potentially as a second connection next to the tank opening in hybrid vehicles
- Appropriate information in the vehicle registration certificate
- Orange high-voltage wires or plugs
- Stickers with warning notices that refer to high voltage
- Charging indicators in the display

THE RESCUE SHEET

The rescue sheet shows components relevant to the rescue such as airbags, belt tensioners, battery, the fuel tank or body reinforcements in a vehicle diagram. The rescue sheet helps the fire brigade to quickly and safely identify the optimum points to apply rescue equipment such as spreaders and hydraulic cutters. Rescue sheets / rescue data sheets contain information such as:

- Installation location of the battery or batteries
- Location of the high-voltage isolating device
- Positions of the high-voltage cables
- Further components in the high-voltage system

**WHEN TOWING HYBRID AND ELECTRIC VEHICLES, NOTE THE FOLLOWING:**

- Minimum qualification 1S
- Always follow the manufacturer's specifications.
- For safety reasons, the drive wheels must not rotate.
The vehicle should be transported using a flatbed vehicle.

In the case of vehicles involved in an accident, also note the following:

- Visually inspect the vehicle for structural battery damage.
- If structural battery damage is present: Evacuate the area and call the fire brigade.
- If there is no structural battery damage: Monitor the battery temperature and call the fire brigade if the temperature rises.
- If necessary, deactivate the high-voltage system according to the manufacturer's specifications (minimum qualification 2S).

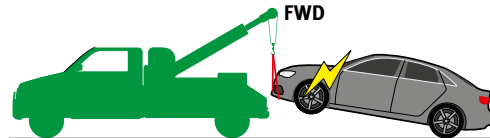
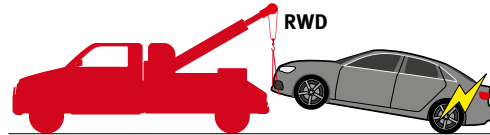
WHEN VEHICLES ARRIVE IN THE REPAIR SHOP AFTER AN ACCIDENT

Unlike vehicles with a combustion-only engine, reconditioning must not be started immediately on hybrid and electric vehicles.

- Follow the manufacturer's instructions.
- Externally intact battery ≠ intact battery
- Internal uncontrolled reactions ("thermal runaway") = fire
- Park the vehicle in a quarantine area (secured area with safety distances) for a certain period of time.
- Mark the vehicle with a warning sign.
- Disconnect the high-voltage battery if it is possible to do so safely.
- If the airbag has been triggered, the high-voltage system is automatically disconnected. Nevertheless, the voltage-free status must be determined.
- Continuously monitor the battery temperature in accordance with the manufacturer's specifications. If the temperature increase exceeds the manufacturer's specifications: Call the fire brigade.
- (Damaged) high-voltage batteries are classified as hazardous goods. They may be shipped only by trained personnel (qualification 3S*). Transport and storage only in accordance with the manufacturer's specifications.

**ATTENTION**

In case of fire: Call the fire brigade. Lithium-ion cells require a special extinguishing process that cools and removes oxygen.

AWD, FWD and RWD**FWD****RWD****AWD, FWD and RWD**

Towing to be performed according to type of drive

Disclaimer

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*) This information sheet predominantly considers German and European standards. Please note: The relevant applicable statutory provisions and safety provisions may differ between countries.

All content, including pictures and diagrams, is subject to change.



You can find further information on high voltage on our website.