

Power Battery Installation/Removal

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Safety Information

Operation Requirements

- All operations on high-voltage components can be carried out by specially trained technicians only.
 - Proper personal protective equipment (PPE) must be worn during such operations.
- ✓ Special insulating gloves
 - ✓ Special insulating shoes
 - ✓ Special insulating tools
 - ✓ Insulation meter for insulation monitoring
 - ✓ Goggles



Insulating gloves



Goggles



Protective shoes



Protective gloves

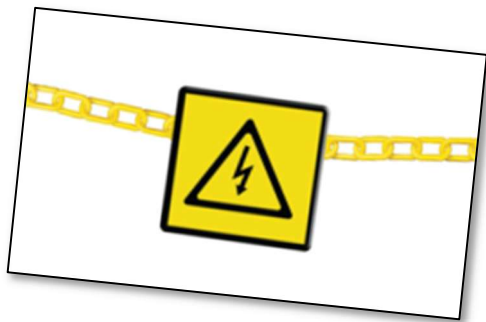


Safety helmet



Insulating tools

- Warnings in production environment
- ✓ Warning marks and warning lines must be set in high-voltage electrical commissioning and maintenance areas.
- ✓ Never operate the high-voltage equipment in the rain or with water involved.
- ✓ Never allow the internal occupants to operate the vehicle during high-voltage charging.



General Preventive Measures

In no case can you contact the open high-voltage wires/components in the accident vehicle before disconnecting the high-voltage onboard network.

The working position for high-voltage battery cell repair shall be clean (no grease, dirt or debris), dry (no fluid spilled) and free of splashing sparks (not in the vicinity of body maintenance area). Therefore, always keep away from the vehicle cleaning sites (cleaning workshop) or body repair positions. Movable bulkhead shall be used for separation purpose when necessary.

To prevent unauthorized entry into the working position (unqualified, clients, visitors, etc.), or when the intrinsic safety of high-voltage equipment cannot be guaranteed, or unclear conditions occur, isolation strips shall be used. A yellow warning sign with Lightning icon is recommended to set up in the working area after leaving.



If the casing or internal high-voltage components are damaged (excluding minor scratches), contact the technical support department. For safety's sake, immediately stop the operation on high-voltage battery cell.

Special care shall be taken when plugging in/out the insulating connector wire of high-voltage battery cell, voltage in the thin orange wire may cause damage. DO NOT drag the wire for any purposes (e.g. pulling the plug off)! Insert it in a safe manner when plugging in.

Protective Equipment

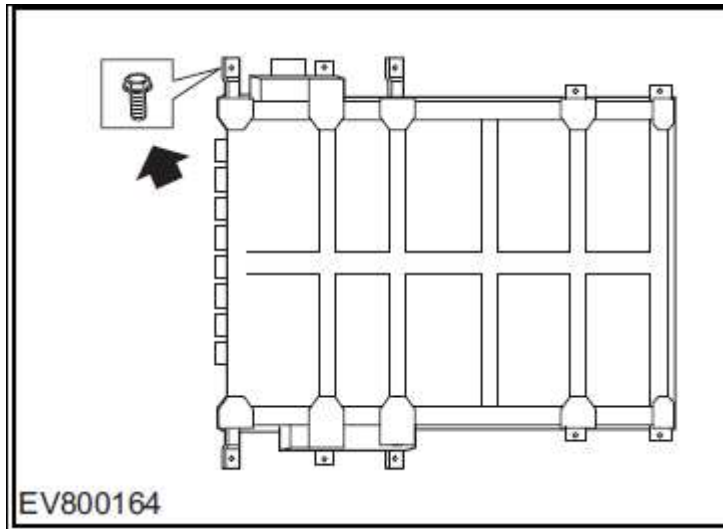
A movable lifting platform for removal/installation of high-voltage battery cell.

Power Battery Installation/Removal

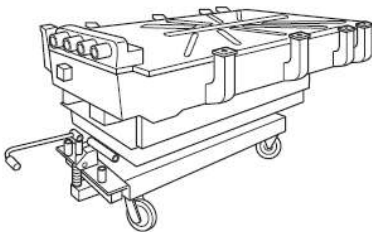
Battery (including power controller - BMS) Replacement

Removal

1. Power off the vehicle and wait for 3-5 min.
2. Remove the service switch.
3. Lift the vehicle to a proper height.
4. Remove the electric pedal assembly.
5. Disconnect the harness connector from the battery.
6. Support the rear battery with a proper bracket.
7. Release 8 clamps connecting the rear battery with the front battery.
8. Remove 10 bolts connecting the rear battery to the body.

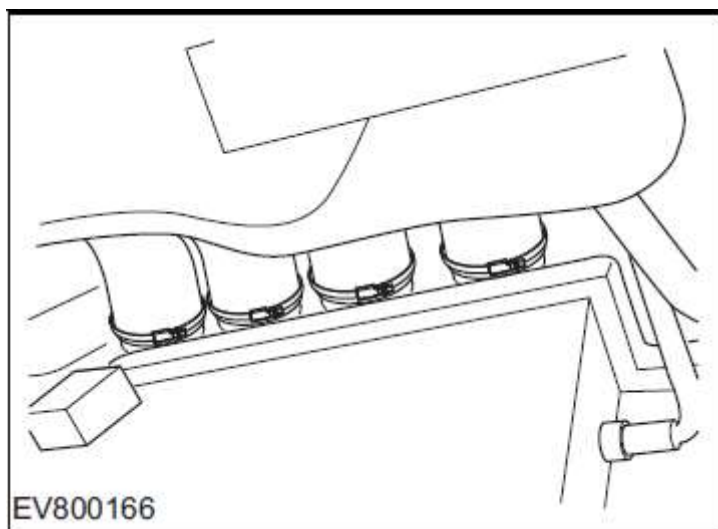


9. Drag the bracket of battery towards the rear part of vehicle, disconnect the rear battery from the front battery, lower down the bracket to remove the rear battery.



10. Support the front battery with a bracket.

11. Release 4 clamps securing the front battery to the battery air duct.



12. Unscrew 10 bolts connecting the front battery to the body.
13. Drag the bracket of battery towards the rear part of vehicle, disconnect the front battery from the battery air duct, lower down the bracket to remove the front battery.

Installation

1. Installation is the reverse of removal.

Observe the following precaution:

- Tighten the bolts securing the battery to the body to 110 ± 5 Nm.

Measures During/After Operations

- ✓ After removing the high-voltage battery cell, visually check for any mechanical damage and record if any.
- ✓ Immediately report the identifiable mechanical damages or discrimination marks of high-voltage components to the professionals.
- ✓ Never repair the high-voltage wires (with orange casing) and its plugs and stoppers. Replace the whole wire in principle in case of any damage.
- ✓ While working in the vicinity of high-voltage components (marked by the tag and orange casing), always protect such components from damage.

Transportation Requirements

Before transportation, the following measures shall be taken to protect the power battery:

- ✓ Protect the service switch, high-voltage harness connectors and terminals with insulating tapes.
- ✓ Entry to the locations for storing power batteries is forbidden to non-professionals.
- ✓ Never place power batteries in a wet or watery place.
- ✓ Never expose power batteries to the sun.
- ✓ Use insulating guard plates to protect the whole power battery before transportation.

During the period between the battery cell module inspection and transfer of battery cell module to waste disposal/transportation companies, the certified transportability of battery cell module shall be maintained by the professionals.

In the transfer process, the influence of storage conditions and other possible events which may have impacts on the determined transportability shall be taken into consideration.

The transportation will be divided into three steps in accordance with the *Hazardous Materials Transportation Act*.

1. Check the transportability
2. Prepare for transportation
3. Transport