

High Voltage Harness Routing

Passenger CAR : European OEM

BACKGROUND AND CHALLENGE

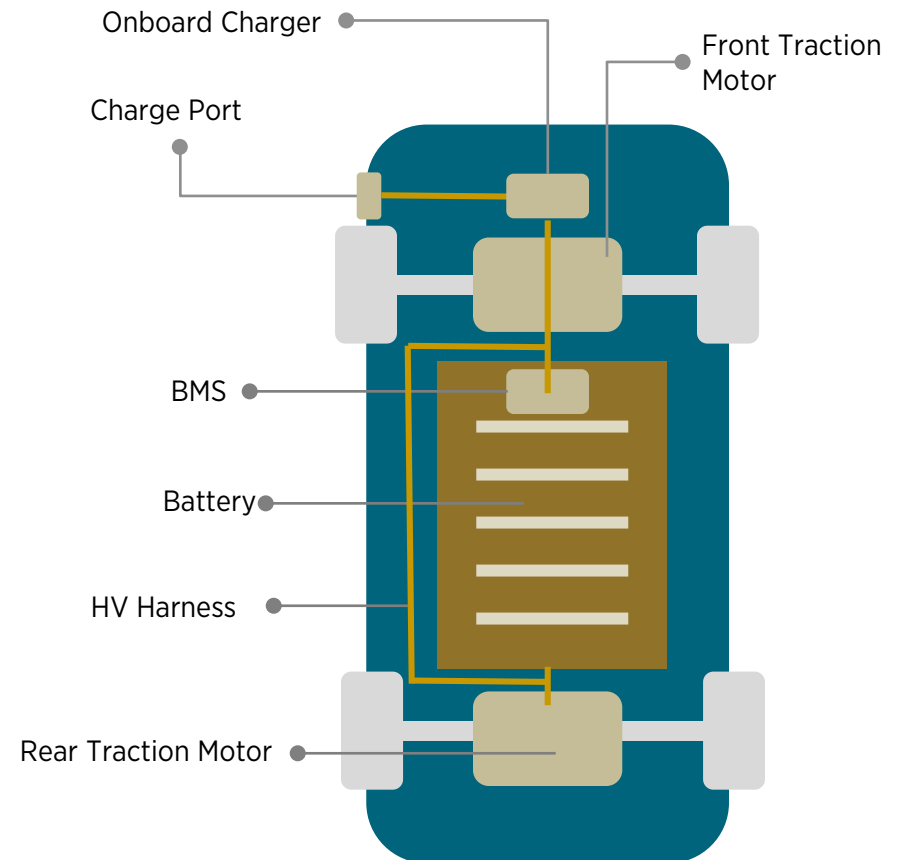
HV Harness routing is challenging in the modern car due to higher electrical features that need to be packaged in proximity. Electromagnetic interference is generated by the HV harness with the adjacent electrical aggregates.

SCOPE OF WORK

Design of the High voltage Harness routing, electrical packaging of the modules and design of the supports.

SOLUTION

- Electrical Packaging of charge port, onboard charger BMS and other HV modules
- High voltage Harness routing of the electrical modules
- Bracket and support Design
- DFA/DFM/DFS
- Fastening solutions
- Static and Dynamic Analysis
- Structural CAE Analysis.
- Detailed Engineering drawing



IMPACT

- Complete High voltage Harness design and Electrical Packaging was handled by Tata Elxsi.
- The project was completed as per the milestones set by the customer