
Overview

This standard is about assessing an electric vehicle and isolating it to make it safe to work on. It also covers re-energising the vehicle once the required work has been carried out.

For the purposes of this standard, an electric vehicle is any vehicle that is in part or wholly electrically propelled. This would include:

- Hybrid (HEV) - to include mild/micro hybrid vehicles where the voltage is considered dangerous.
- Plug-in Hybrid (PHEV)
- Extended Range Electric Vehicle (ER-EV) or Range Extended Electric Vehicle (RE-EV)
- Battery Electric Vehicle (BEV) or Pure Electric Vehicle (PEV)
- Fuel Cell Electric Vehicle (FCEV).

Warning: It has been recommended by industry experts that only those with suitable training and experience on working with electric vehicles should carry out the functions below.

Performance criteria

You must be able to:

P1 Locate relevant information about the **vehicle** and use it to determine any potential hazards

P2 Identify any potential hazards by carrying out a dynamic risk assessment of the **vehicle**

P3 Identify high voltage components and cabling

P4 Notify all relevant persons of your intention to work on a high voltage **vehicle**

P5 Select and use correct personal protective equipment when isolating and re-energising the high voltage system

P6 Ensure the work area is clearly identified and made safe, following workplace procedures

P7 Follow the manufacturer's procedures to isolate and re-energise the high voltage system

P8 Work in a way which minimises the risk of:

P8.1 injury to yourself and others

P8.2 damage to your working environment

P8.3 damage to other vehicle systems, components and units

P9 Prepare, check and use all the appropriate test equipment following manufacturer's instructions

P10 Follow the manufacturer's recommendations to ensure residual voltage is within manufacturer's specification when isolating the high voltage system

P11 Use suitable **testing methods** to evaluate the performance of the re-energised high voltage system accurately, ensuring that it performs to the manufacturer's operating specifications and legal requirements

P12 Follow workplace procedures in case of emergency

P13 Refer any problems with the process to a relevant person in your workplace

P14 Ensure records are accurate, complete and passed to the relevant person(s) promptly in the format required.

IMIEV04

Isolate and re-energise high voltage systems in an electric vehicle



Knowledge and understanding

You need to know and understand: