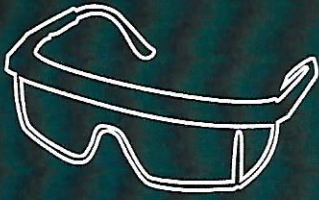


The HSG261 mentions on page 41 under roadside repairs and recovery that,



“...employees don’t try to handle any hazardous substances, or do specialist work, unless they have received appropriate training and have access to the necessary equipment (including protective clothing). For example, vehicles with significant structural damage may create additional risks, from escape of fuel or exposure to high-voltage or stored electrical energy in electric hybrid vehicles.”

(The Health and Safety Executive, 2009) pg. 41 paragraph 174.

“Electric/hybrid vehicles can have parts of the electrical system operating at 650 volts dc with batteries operating at around 280 volts. Most of these parts of the vehicle will tend not to be serviceable (i.e. they are replaced rather than repaired). Special precautions may be required for road rescue/recovery and electric/hybrid vehicle manufacturers have produced information for non-dealership personnel and have dealt directly with the emergency services to discuss different rescue scenarios.”

(The Health and Safety Executive, 2009) Page 76, Paragraph 351.



However, there is little to no guidance for working on these vehicles except to refer to manufacturer guidelines. Paragraph 353 outlines “repairs following an accident, fault finding or work on the electrical system may involve access to potentially dangerous electrical systems. As with all electrical work, the person undertaking the work must be competent to do so” (The Health and Safety Executive, 2009).

3.1.2 The Implementation and use of Autogas licensing

The UKLPG trade association for the Liquid Petroleum Gas (LPG) industry regulates individual installation technicians to ensure that they meet the BS EN 1949:2002 standards. The standards apply to installation and maintenance of LPG on Road vehicles, Mobile Homes and Caravans. The Department for Transport (DfT) set out that, although there is no statutory regulation regarding the installation and use of these systems on Great Britain’s roads, the vehicle must comply with internationally agreed safety standards (UNECE Regulation 67.01). The regulation includes specific provisions to ensure the safety of LPG fuel systems and requirements for the tank.

Interestingly, the training and quality assured programmes are conducted within the Health and Safety Executive (HSE) Safe installation and use of F-Gas systems and appliances framework within Gas Safety Regulations (HSE Safe installation and use of gas systems and appliances, 2013). Some of the criteria covered by training are:

- To prevent fire from the leakage of LPG after installation and during use
- To minimise the risk of asphyxiation should a leak or accumulation of gas occur in an enclosed space particularly in spaces where occupants sleep (for caravan or mobile home installations)
- To ensure correct installation, exchange, disconnect, service, repair, breakdown and commission closed flued LPG fires
- To test and direct purge of pressure systems up to 7 bar.

Many of the other aspects of the regulation refer to the loss of LPG to the atmosphere and the contribution to greenhouse emissions. Although the LPG regulation is not in any way connected to the Hybrid and Electric vehicle regulation