

# LPGA APPROVED INSTALLER SCHEME

## PREMISES AND MANAGEMENT PROCEDURES AND SYSTEMS

Conversion of vehicles to operate on LPG should only take place in appropriately designed and equipped premises. UKLPG Code of Practice 11 gives guidance on garaging, repair and maintenance. UKLPG inspectors will, in particular, be looking to ensure that:

- installation work is carried out in a weather-proof garage area;
- there is adequate lighting;
- portable/hand held lights are flameproof;
- purge gases are able to be discharged safely;
- there is a pit or ramp equipment for working underneath vehicles whilst standing;
- if a pit is provided, gas detectors and forced ventilation are fitted;
- where necessary flameproof or intrinsically safe electrical equipment is installed;
- where welding or other hot-work is carried out there is a written scheme or a “permit to work” system in use;
- dry-powder fire extinguishers are readily available for immediate use;
- fire extinguishers are within test date.

If bulk LPG or LPG cylinders are stored on site or if there are refuelling facilities, the inspector will seek to ensure that:

- the storage tank location complies with required safety distances in COP1, Part 1 or Part 4 from buildings, property or sources of ignition;
- warning notices are posted;
- cylinders are kept in a suitable area per COP7;
- access for road tanker deliveries is satisfactory;
- refuelling facilities comply with safety distances in COP20.

Conversion of vehicles to operate on LPG generally requires few specialist tools; however, the inspector will expect to see:

- four gas analyser or compatible MOT analyser (Note: Preference should be given to types acceptable for MOT testing);
- flaring tool capable of flaring both 6 and 8mm copper or steel pipe with a double lap flare;
- pipe cutter suitable for copper pipe and steel pipe;
- lambda tester for testing the condition and the signal wire on the lambda sensor in the exhaust;
- Leak detection fluid

Companies will also be expected to hold an up to date copy of Code of Practice 11 and their LPG vehicle conversion equipment suppliers instruction literature.

Management procedures and systems vary immensely from company to company. Formal systems to BSENISO 9002 are encouraged; however these may not always be appropriate. The inspector will seek to establish that:

- customer requirements have been clearly established;
- orders to suppliers clearly identify the type of vehicle for which the conversion equipment is required (make, model, year, VIN, registration number);
- goods received from the supplier are clearly identified as being appropriate for the vehicle to be converted;
- before work commences an 'MOT' type emissions test has been carried out to ensure the vehicle is fit for conversion;
- after conversion emissions on the original fuel have not deteriorated (within the lists of the measurement method) and that those on LPG are an improvement on the original fuel;
- a Certificate of Conformity has been completed and the customer has been supplied with a Drivers' Operating Manual as described in COP11.