

LPG – cold starting

Description:



LPG fuel containing contamination not present historically is being placed on the UK market. The fuel standard BS 4250 does not provide adequate controls for this contamination.

Use of contaminated fuel can cause deposits in the fuel system leading to, for example, blocked vaporisers and sticking valves.

Repeated starting attempts on affected equipment can release unburned LPG and present a risk of fire.

Operation and maintenance practices should be revised until the fuel supply chain can guarantee fuel quality suitable for ICE use.

Advice for Operators:



Park LPG fuelled vehicles in well-ventilated areas free from flammable material, particularly when parking overnight or for longer periods.

Do **not** park vehicles where LPG might accumulate, e.g. near to drains or inspection pits.

If the engine of an LPG truck does not start within the normal few seconds:

- Do **NOT** continue to crank the engine over
- Do **NOT** repeat the normal engine starting procedure
- Do **NOT** spray volatile agents into the air intake in an attempt to aid starting
- Do **NOT** apply shock or heat in an attempt to free the system
- Secure the truck against further starting attempts
- Close the shut-off valve on the gas bottle
- Ensure the area is well ventilated
- Contact your truck supplier and request a check of the LPG system on your truck



Notes:

- i. Users of LPG fuelled trucks with push button starters where momentary operation engages the starter until the engine is running should consult their supplier.
- ii. Released LPG will not naturally disperse – do **not** return to a non-starting truck and re-attempt starting until it has been checked by a competent person.
- iii. Only competent, LPG trained maintenance technicians should work on LPG systems – do **not** assume that you have these skills.
- iv. Failure modes and the extent of component replacement required can vary by equipment type and degree of contamination experienced. If in any doubt, consult your truck supplier for advice.
- v. For an HSE Safety Bulletin on this topic visit www.hse.gov.uk/safetybulletins/forklift-fires.htm.