Technical Publication

Using Calor Gas Safely - Propane

Propane cylinders 3.9kg, 6kg, 13kg, 19kg and 47kg

1. Do when using Calor propane

- **Do** treat a cylinder with care to ensure that the valve is not damaged.
- **Do** always use cylinders in the upright position unless specifically designed for liquid offtake.
- **Do** return the cylinder when empty or when not in use for long periods.
- **Do** read the instructions and labels provided with your appliance and keep them handy for future reference.
- **Do** keep your appliance clean and have it serviced regularly by a competent person. Not only will this help to keep it safe but also means it will burn efficiently and therefore save money.
- **Do** ensure there is an adequate supply of fresh air in the room where your appliance is used. If a room has ventilators or grilles ensure these are open. If a room becomes stuffy, open a window or door immediately.
- **Do** be careful when lifting cylinders. Full cylinders weigh approximately twice the nett weight shown on the cylinder.
- If you have any queries please contact the retailer or outlet who sold you the cylinder.

2. Don't when using Calor propane

- **Don't** subject a cylinder to heat as the pressure inside could build up to exceed the safe limit.
- **Don’t** attempt to disconnect or unscrew a regulator from any cylinder if the flame does not go out when the cylinder handwheel is turned off. Leave appliance alight and call your local Calor Gas retailer.
- **Don't** store or use cylinders in cellars or below ground level. LPG is heavier than air and if there was an escape the gas will collect at low level, can be asphyxiating, and can become dangerous in the presence of a flame or spark. For the same reason do not store cylinders any closer than 2 metres from untrapped drains, unsealed gullies or openings to cellars.
- **Propane cylinders must not** be used for use indoors at domestic premises or in high rise flats where a piped gas supply is prohibited.
- **Don't** store propane cylinders indoors or in high rise flats where a piped gas supply is prohibited.
- **Don’t** attempt to force a regulator of one size on to a cylinder’s valve of another size. If you have any difficulties contact your retailer and have the appliance checked.
- **Don’t** improvise or modify your gas appliance. Do not let unqualified people tamper with or service your appliance; it could become unsafe to use. Always ask your Calor Gas retailer for advice.
- **Don’t** obstruct access to cylinders.
3. Carbon Monoxide

Carbon monoxide (CO) is a highly poisonous gas which can be produced if an appliance is not working correctly. It is difficult to recognise as it has no colour, smell or taste. Symptoms of CO poisoning are similar to that of a viral infection. It affects the mental ability causing a person to become incapable without knowing.

Symptoms of exposure to Carbon Monoxide
- Tightness across the forehead
- Headache
- Severe headache, weakness, dizziness, nausea, vomiting.
- Coma, intermittent convulsions
- Depressed heart action, slowed respiration.

If the exposure has been severe it may cause death.

If you suspect you are suffering from the symptoms below call the Calor Gas Emergency Service number on 0845 7 444 999.

4. The Regulator

A regulator must be included in the connection between the cylinder and the appliance, except for appliances designed to be supplied at cylinder pressure. The regulator is precisely set by the manufacturer to control the pressure of the supply and **Must Not Be Adjusted**. If a Regulator shows signs of wear, it should be replaced. **Regulators must be marked BS3016 or BS EN12864**

5. Flexible Hoses

Use only certified hoses to BS3212 or BSEN1763 which **bear the year and name of manufacturer** as LPG attacks and erodes natural rubber. Keep hose lengths as short as possible. All hoses must be secured with proper hose clips. Make sure that the hoses are kept clear of ‘hot spots’ and inspect them from time to time. Replace any hose that shows signs of wear, cracking or other damage.

6. Emergency Advice

If you suspect a leak, turn off the gas, open all the doors and windows and ensure there is no source of ignition nearby i.e. extinguish any cigarettes and switch off your mobile phone. Examine all pipes and connections. If the leak is not located, turn on the gas supply and brush over the connections with liquid detection fluid – it will bubble where there is a leak.

**NEVER USE A NAKED FLAME** to search for a leak. A suitably calibrated Explosimeter may be used for testing the concentration of LPG in the air, but Calor Propane has a special odorant added to help with the detection of leaks.

**In the Event of Fire**
- Immediately raise the alarm and call the **Fire Brigade** advising them of the presence of LPG.
- Shut all valves on cylinders.
- Keep cylinders cool by water spray if possible.
- Ring the **Calor Gas Emergency Service** number 08457 444 999
7. Connecting 3.9Kg, 6Kg, 13Kg, 19Kg and 47Kg Propane Cylinders

Propane cylinders have a ‘female’ valve connection. Check the connection is clean and undamaged. This is a ‘face to face’ seal and requires the correct size spanner and is to be fully tightened. (Left hand thread).

1. Check that the valve handwheel is OFF by turning clockwise
2. Remove the protective plug and leave hanging to replace later
3. Inspect the bullnose connection of the regulator for damage before connecting

NOTE: A gas tight seal is created by face to face connection between the bullnose & cylinder valve

4. Fit the connecting nut (left hand thread) to the cylinder, using the correct spanner.
   **Note that Propane cylinder connections must be tight**
5. Ensure appliances are turned off
6. When gas is required turn the valve handwheel anti-clockwise
7. Check for gas soundness using leak detection solution

8. Disconnecting 3.9Kg, 6Kg, 13Kg, 19Kg and 47Kg Propane Cylinders

1. Turn the handwheel OFF (clockwise rotation). Wait until the burner/pilot light has gone out
2. Change over valves
   a. If the installation does not have a changeover valve fitted, turn off the gas tap, if fitted, to an appliance.
   b. For installations with a changeover valve, it is only necessary to turn off the empty cylinder.
3. Close the valve handwheel OFF by turning clockwise.
   **N.B. Never remove the Regulator (or connecting nut) with the cylinder valve open**
4. Remove the Regulator (or connecting nut- left hand thread) with the correct spanner
5. Replace the protective plug into the valve outlet

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