

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 it and the valve is not damaged.
- **Do** always use cylinders properly secured in the upright position unless specifically designed for liquid offtake (black coloured top or shroud).
- **Do** keep all cylinders in a safe, well ventilated place, outdoors in the open air, away from escape routes, stairs, rubbish, excessive vegetation, combustible and other flammable materials and not near to any corrosive, toxic or oxidant material.
- **Do** return the cylinder when empty or when not in use for long periods.
- **Do** read the operating instructions, emergency actions 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 net 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. Propane (LPG) is heavier than air and if there was an escape of LPG, the gas will collect at low level, can be asphyxiate, 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.
- **Don't** store Propane cylinders indoors.
- **Don't** use Propane cylinders indoors except when necessary for work processes and/or for short periods when Propane cylinders may be used indoors by trades people (e.g. plumbers)
- **Don't** smoke or use a mobile phone when changing a cylinder.
- **Don't** use Propane fuelled appliances at domestic or residential premises unless supplied from an external fixed installation.
- **Don't** use Propane fuelled appliances in high rise flats where piped gas supply is prohibited

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- **Don't** use Propane fuelled appliances for commercial and industrial applications inside buildings, warehouses etc. unless a specific risk assessment has been produced.
- **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. Carbon Monoxide detectors (complying with BS:EN:50291) are widely available and it is recommended that every property has one. 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 **0345 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**. Select a regulator with a means of protecting the downstream pipework or appliance from overpressure in the event of regulator malfunction. If a Regulator shows signs of wear, it should be replaced. **Regulators must be marked BS:3016 or BS:EN:12864 or BS:EN:16129. Any regulator marked BS:3016 will be over 10 years old and should be replaced.**

5. Flexible Hoses

Use only certified hoses to BS:3212 or BS:EN:1763-1 or BS:EN:16436-1 which **bear the year and name of manufacturer** or stainless steel convoluted hoses marked EN:10380 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 stiffness, wear, cracking, soft spots or other damage. It is recommended that rubber hoses should be replaced after 5 years service life.



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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. Dial 999 and call the **Fire Brigade** advising them of the presence of LPG.
- Tell everybody to leave the premises and go to a safe place well away from the installation/cylinder as an overheated cylinder may explode.
- Shut all valves on cylinders, if safe to do so.
- Keep cylinders cool by water spray if possible.
- Ring the **Calor Gas Emergency Service** number **0345 7 444 999**

7. Further Information

For further information, advice and guidance please refer to the following publications:-

- UKLPG User Information Sheet 028 'Safe Use of Propane and Butane Cylinders and Cartridges'
- Code of Practice 24: Part 1 - Use of LPG Cylinders: Use of LPG Cylinders at Residential and Similar Premises (July 2006)
- Code of Practice 24: Part 6 - Use of LPG Cylinders: The use of Propane in Cylinders at Commercial and Industrial Premises (May 2000)

The UKLPG produce over 30 Industry Codes of Practice which can be obtained from UKLPG. For a comprehensive publication list please access the UKLPG website www.uklpg.org.



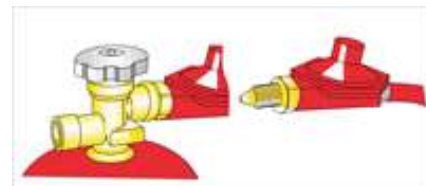
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8. Connecting 3.9Kg, 6Kg, 13Kg, 19Kg and 47Kg Propane Cylinders

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



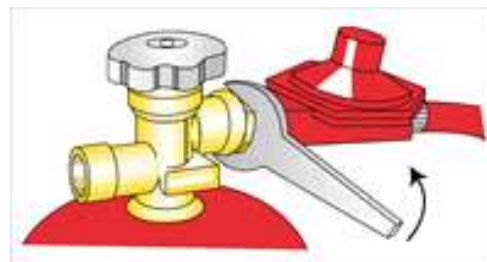
9. Disconnecting 3.9Kg, 6Kg, 13Kg, 19Kg and 47Kg Propane Cylinders



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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