



Technical Publication

Using Calor Gas Safely - Butane

Butane Cylinders 4.5 kg, 7kg, 12Kg & 15 kg Sizes

1. Do when using Calor Butane

- **Do** treat a cylinder with care to ensure that the valve is not damaged.
- **Do** when using 4.5 kg cylinders, always use the correct black sealing washer for a gas tight seal.
- **Do** always use cylinders in the upright position unless specifically designed for liquid offtake
- **Do** return cylinders 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** try to exchange full for empty cylinders out of doors. A change indoors should only be done away from any sources of ignition such as, open fires, boilers, electric heaters, pilot lights, lit cigarettes etc. The appliance must also be switched off and preferably allowed to cool before the cylinder change takes place.
- **Do** be careful when lifting cylinders. Full cylinders weigh approximately twice the nett weight shown on the cylinder

2. Don't when using Calor Butane

- **Don't** subject a cylinder to heat as the pressure inside could build up to exceed the safe limit
- **Don't** attempt to unscrew or disconnect a clip-on or screw-on regulator or valve wheel from any cylinder if the flame does not go out when the regulator is turned off. Leave appliance alight and call your local Calor Gas retailer.
- **Don't** when using a 4.5kg cylinder use the rubber washer from the protective black cap as a sealing washer.
- **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 an 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** attempt to force a regulator of one size on to a cylinder's valve of another size. If you have any difficulties contact your Calor Gas Retailer and have the appliance checked.
- **Don't** improvise or modify your gas appliance. Always ask your Calor Gas retailer for advice and do not let unqualified people tamper with or service your appliance. It could become unsafe to use.
- **Don't** obstruct access to cylinders



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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 BSEN12864**

5. Flexible Hoses

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 damage.

Hoses fitted to cabinet heaters must be marked BS3212 type 2 (or BSEN1763 Class B) and be of 8mm inside diameter.

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 leak 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

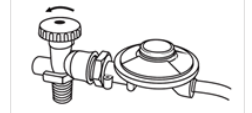
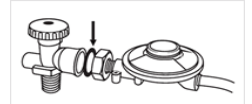
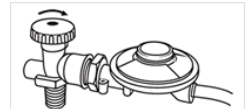
- Immediately raise the alarm and call the **Fire Brigade** advising them of the presence of LPG.
- Shut all valves on cylinders.
- Keep cylinders cool by water spray if possible.
- Ring the **Calor Gas Emergency Service** number **08457 444 999**

7. Connecting a 4.5kg Butane Cylinder

A 4.5kg cylinder takes a regulator which screws on to the valve outlet. The regulator has a connecting nut that incorporates a black sealing washer. Do not use the rubber washer from the black cap as a sealing washer.

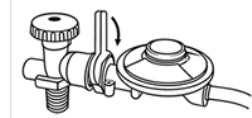
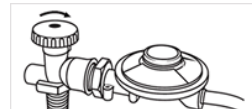


1. Check that the valve handwheel is off by turning clockwise
2. Remove protective black cap and retain for future use
3. Inspect the black sealing washer on the regulator for damage before connecting. *Replace the washer if faulty*
4. Fit the connecting nut (left hand thread) to the cylinder using a suitable spanner. Tighten firmly, but do not over tighten as this can damage the washer
5. When gas is required, turn the valve handwheel anticlockwise.



8. Disconnecting a Butane 4.5KG Cylinder

1. Never disconnect the Regulator (or connecting nut) with the valve open
2. Turn the valve hand wheel off (clockwise rotation)
3. Wait until the burner and pilot lights have gone out. If the flame does not go out, turn the valve hand wheel anticlockwise back to on; leave the appliance alight and call your gas supplier
4. Disconnect the Regulator (left hand thread) with a suitable spanner
5. Screw the protective black-cap back on to the cylinder valve

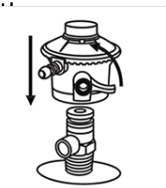


9. Connecting 7Kg, 12Kg and 15Kg Butane cylinders

There are various 21mm regulators available. Please refer to your manufacturers instructions for guidance on how to connect and disconnect the regulator.

7kg, 12kg and 15kg Butane Cylinders have a 21mm valve and must only be used with a 21mm regulator

1. Turn the orange cap so that the arrow is pointing to the gap in the shroud
2. Remove the orange safety cap by pulling the lanyard out, then up. Do not use tools and leave hanging
3. Check the black sealing washer is fitted inside the cylinder valve
4. Ensure the regulator switch is in the disconnect position
5. Fit the 21mm regulator, to the cylinder valve, as per the manufacturers instructions
6. When gas is required, turn the switch to the position defined in the manufacturers instructions

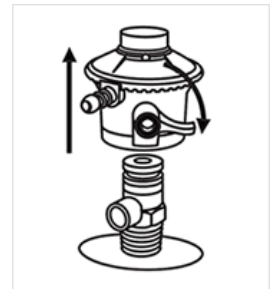


If the regulator on/off switch gets stuck when turning the supply on, it means that the regulator has been connected incorrectly. In this event the regulator must be disconnected and the correct steps to reconnect repeated from the beginning

10. Disconnecting 7Kg, 12Kg and 15Kg Butane cylinders

There are various 21mm regulators available. Please refer to your manufacturers instructions for guidance on how to connect and disconnect the regulator.

1. Never disconnect the Regulator with the switch in the on position
2. Turn the regulator switch to the off position
3. Wait until the burner and pilot lights have gone out. If the flame does not go out, turn the switch back to on; leave the appliance alight and call your gas supplier
4. To remove the regulator from the cylinder valve please refer to the manufacturers instructions
5. Replace the orange safety cap onto the cylinder valve of the empty or part full cylinder, when not in use



The information in this document is intended to give guidance and believed to be accurate and represent good practice at the time of publication. It does not replace the need to consult other formal documents where further information may be required.

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