

## CHANGING THE GAS CYLINDER – PROPANE

1. Turn the equipment off by turning the handwheel on the cylinder valve fully clockwise to the OFF position.
2. Wait until the flame has gone out completely. If the flame does not go out, call the hire company immediately.
3. Make sure that there are no naked flames nearby, and that the room is well ventilated.
4. Unscrew the regulator connecting union using the correct spanner. This union has a left hand thread.
5. Put the regulator assembly to one side, taking care not to damage the hose and union assembly.
6. Take any plastic protective plug out of the valve on the new cylinder and save it for refitting to the old cylinder.
7. Check that the valve connection on the new cylinder is the same as the one on the old cylinder, and that the threads are undamaged. If it is different. Do not try to fit the new cylinder. This could be very dangerous. Refit the old cylinder, and contact the hire company.
8. If the valve connections are the same, move the empty cylinder to a safe location. Position the new one to the side of the heater where it will be clear of the heat, but without straining the gas hose. Remember to take care – the new cylinder will be heavier than the empty one.
9. Fit to the empty cylinder any plastic protective plug kept from the new cylinder.
10. Check that the threaded connection on the regulator is clean and undamaged. Carefully fit the connector by hand – it has a left hand thread. When the connector is

threaded properly, do it up hand tight, then tighten fully using the correct spanner.

11. If you suspect that the cylinder connection is not gas tight, do not try to light the heater. Check that the valve handwheel is turned fully clockwise to the OFF position. Contact the hire company immediately.

## USING LPG SAFELY

1. Keep gas cylinders upright at all times – whether in use, in store or being moved.
2. If you suspect that there is a gas leak, turn off the equipment using the control tap. Put out any naked lights or other sources of ignition. Ventilate the area by opening windows and doors.
3. Never look for a leak with a naked flame – this is always extremely dangerous. Use soapy water.
4. If the cylinder is leaking, call the fire brigade and evacuate the area.
5. Do not attempt to repair any suspected leaks. Contact the hire company immediately.
6. In some conditions frost may form on a gas cylinder that is in use. This indicates that the cylinder is not big enough to provide the flow of gas that you are using. Contact the hire company. Do not try to warm the cylinder to remove the frost. Take care when you are handling a frosty cylinder as the cold can cause ‘frost burns’.
7. Handle cylinders carefully when you are moving them. Do not drop them off vehicles – get an assistant to help you lower them safely.
8. Keep unused and empty cylinders away from heat at all times.
9. If your equipment develops a leak or does not work properly, do not attempt to repair it. Contact the hire company.

# Liquefied Petroleum Gas

The rules and procedures in force where people are at work may require the person responsible for this equipment to carry out a specific risk assessment.

## It is important to read this entire leaflet BEFORE using using Liquefied Petroleum Gas

1. Plan your work and think ahead to make sure you will always be working safely.
2. LPG is highly flammable and must always be used with great care.
3. LPG is used to provide a source of heat or light, to power internal combustion engines, and in flame cutting equipment.
4. LPG equipment and the heavy cylinder can cause injury or damage if not used in a careful and controlled way.
5. If you have not used LPG before, find out how to use it safely and learn about the potential hazards before you start.
6. You may need some items of personal protective equipment appropriate to the equipment you are using, and the job you are doing.
7. LPG must not be used by minors, or by anyone under the influence of drug or alcohol.
8. LPG is designed for use by an able bodied adult. Anyone with either temporary or permanent disability must seek expert advice before using it.



## BEFORE STARTING WORK - EMERGENCY

1. Users of LPG must be prepared for emergency action in case of a serious accident occurring.
2. An accident is most likely to involve fire. However, LPG can also cause harm through skin or eye contact, or inhalation.
3. If an LPG cylinder is leaking but the gas has not ignited, close the valve if it is safe to do so. If this does not stop the leak, call the fire brigade immediately. Extinguish all naked flames. Evacuate the area, including other floors in the building. Ventilate the area if it is safe to do so.
4. If there is a fire, evacuate the area immediately. Call the fire brigade. Take great care – LPG cylinders may explode violently in a fire.

(continued overleaf)

Please keep this leaflet safely as it may be required for future reference



**BEFORE STARTING WORK  
EMERGENCY (...continued)**

5. If there is an accident involving skin or eye contact, a 'cold burn' may result. Irrigate the affected area with tepid water for 15 minutes. Apply a sterile dry dressing and treat as for a normal burn. Seek medical advice as soon as possible.
6. If LPG has been inhaled, and the victim is unconscious, do not attempt rescue. Call the emergency services. If you have inhaled LPG. Seek medical attention immediately.

**REFUELLING**

1. Do not use LPG where there is a danger of explosion.
2. Make sure that your work area is clear and safe and that no one is near to you or could distract you.
3. Protect other people from any hazards. Warn others to keep away, put barriers around your work area.

**OPERATORS**

1. Personal protective equipment (ppe) may be required when you use LPG equipment.
2. Anybody who is working near to you will also need to wear appropriate personal protective equipment.
3. You should wear safety boots (EN345 or BS1870/4972) when handling heavy cylinders.

**LPG GENERAL**

1. Propane is lighter than butane; it burns hotter and is primarily for industrial use. Fittings or regulators are not interchangeable with butane. It must not be used in domestic premises.
2. Butane is primarily for domestic use. The fittings or regulators are not interchangeable with propane.
3. LPG is heavier than air; therefore any leak will find its way to the lowest level and

**Before Starting Work...**



remain there unless there is good ventilation.

4. Most LPG cylinders must always be stored and used in the upright position.
5. Some speciality designed cylinders can be used on their side for use as fuel for a fork lift truck. These specially marked cylinders must not be used upright.
6. Whenever possible LPG cylinders should be changed in the open air.
7. The valves and couplings on propane cylinders all have left hand threads in. Remember that you will need to turn these the opposite way to normal threads.
8. Use a properly fitting spanner to tighten and loosen the connections on propane cylinders.
9. Check your equipment, hoses, regulators and tools. If anything is found damaged, do not use the LPG – contact the hire company.
10. Check on how your equipment operates before you start it up, you must know how to stop it.

**STORING GAS CYLINDERS**

1. Store only the minimum number of cylinders necessary. Storing large quantities of LPG requires a purpose built storage compound. Guidance for this should be sought from the hire company or other authoritative source.
2. Cylinders should be stored in a secure, well-ventilated area, preferably outdoors. Cylinders must not be stored in cellars or

basements where any leaks of the heavier-than-air-gases would collect.

3. The area should be clear of any fire risk and away from any source of heat or ignition.
4. Access to this storage area should be restricted to authorised persons.
5. Appropriate hazard warning signs and No Smoking signs should be displayed.
6. Cylinders should be stored upright, with full and empty cylinders kept distinctly separate. All valves should be closed, even on empty cylinders, as ingress of air into the cylinder would form a highly explosive mixture.
7. Cylinder valve caps and guards should be in place and secure.
8. Gas cylinders that are stored for a long time should be inspected periodically for leaks and general condition. Such cylinders should be raised off the ground to limit corrosion.

**TRANSPORTING GAS CYLINDERS**

1. Any driver who carries flammable gas cylinders must have received adequate training.
2. The cylinders must be secured, for transport, in the upright position.
3. Open vehicles are best suited to carry cylinders. If a closed van is used, the cylinders must be in a separate well ventilated compartment to that of the driver.
4. Drivers must not smoke while transporting cylinders or while near to cylinders.

**CHANGING THE GAS CYLINDER – BUTANE**

1. Turn the equipment off by turning the control tap to the OFF position.
2. Wait until the flame has gone out completely. If the flame does not go out, call the hire company immediately.
3. Make sure that there are no naked flames nearby, and that the room is well ventilated.
4. When the flame is out, turn the control tap right round to the DISCONNECT position. You may need to press a safety button as well to do this.
5. You can now lift the complete regulator assembly off the top of the cylinder. Take care not to damage the hose and regulator.
6. Take any protective plastic cover off the valve connection on the new gas cylinder, and save it for refitting to the old cylinder.
7. Check that the valve connection on the new cylinder is the same as the one of the old cylinder. If it is different, do not try to fit the new cylinder. This could be very dangerous. Refit the old cylinder, and contact the hire company.
8. If the valve connections are the same, remove the empty cylinder, and put it in a safe location. Put the new full cylinder in place in the heater. Remember to take care – the new one will be heavier than the empty one.
9. Fit to the old cylinder any protective plastic cover kept from the new cylinder.
10. Place the regulator in position on the valve, and turn the control tap to the OFF position. This will lock the regulator to the valve. The equipment is now ready for use.
11. If you suspect that the cylinder connection is not gas tight, do not try to light the equipment. Check that the control tap is in the OFF position. Contact the hire company immediately.