# MODEL No's: LP351, LP351S, LP451, LP451S, LP601, LP601S

Thank you for purchasing a Sealey Propane Heater. Manufactured to a high standard this product will, if used according to these instructions and properly maintained, give you years of trouble free performance.

IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS AND CAUTIONS. USE THIS PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. PLEASE KEEP INSTRUCTIONS SAFE FOR FUTURE USE.

# **SAFETY INSTRUCTIONS**

#### 1.1 PLUG & MAINS POWER SUPPLY

vour Sealev dealer.

WARNING! It is the responsibility of the owner and the operator to read, understand and comply with the following: You must check all electrical products, before use, to ensure that they are safe. You must inspect power cables, plugs, sockets and any other connectors for wear or damage. You must ensure that the risk of electric shock is minimised by the installation of appropriate safety devices. A Residual Current Circuit Breaker (RCCB) should be incorporated in the main distribution board. We also recommend that a Residual Current Device (RCD) is used. It is particularly important to use an RCD with portable products that are plugged into a supply which is not protected by an RCCB. If in any doubt consult a qualified electrician. You may obtain a Residual Current Device by contacting

You must also read and understand the following instructions concerning electrical safety.

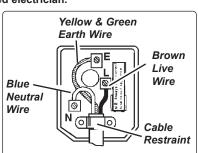
- The Electricity at Work Act 1989 requires all portable electrical appliances, if used on business premises, to be tested by a qualified 1.1.1 electrician, using a Portable Appliance Tester (PAT), at least once a year.
- The Health & Safety at Work Act 1974 makes owners of electrical appliances responsible for the safe condition of those appliances and 1.1.2 the safety of the appliance operators. If in any doubt about electrical safety, contact a qualified electrician.
- 1.1.3 Ensure that the insulation on all cables and on the appliance is safe before connecting it to the power supply. See 1.1.1 and 1.1.2 and use a Portable Appliance Tester.
- Ensure that cables are always protected against short circuit and overload.
- Regularly inspect power supply cables and plugs for wear or damage and check all connections 1.1.5 to ensure that none are loose.
- Important: Ensure that the voltage marked on the appliance matches the power supply to be 1.1.6 used and that the plug is fitted with the correct fuse - see fuse rating on right.
- **DO NOT** pull or carry the appliance by the power cable. 1.1.7
- **DO NOT** pull the plug from the socket by the cable. 1.1.8
- DO NOT use worn or damaged cables, plugs or connectors. Immediately have any faulty item 1.1.9 repaired or replaced by a qualified electrician. When an ASTA/BS approved UK 3 pin 13 amp plug is damaged, cut the cable just above the plug and dispose of the plug safely. Fit a new plug according to the following instructions (UK only - see diagram on right).
  - a) Connect the GREEN/YELLOW earth wire to the earth terminal 'E'.
  - b) Connect the BROWN live wire to the live terminal 'L'.
  - c) Connect the BLUE neutral wire to the neutral terminal 'N'.
  - d) After wiring, check that there are no bare wires, that all wires have been correctly connected, that the cable outer insulation extends beyond the cable restraint and that the restraint is tight.
- 1.1.10 If an extension reel is used it should be fully unwound before connection. A reel with an RCD fitted is preferred since any appliance plugged into it will be protected. The cable core section is important and should be at least 1.5mm<sup>2</sup>, but to be absolutely sure that the capacity of the reel is suitable for this product and for others which may be used in the other output sockets, we recommend the use of 2.5mm<sup>2</sup> section cable.

#### **GENERAL SAFETY** 12

- WARNING! Disconnect heater from mains supply before servicing or performing maintenance. Replace or repair damaged parts. П Use genuine parts only. Unauthorised parts may be dangerous and will invalidate the warranty.
- Store gas cylinders in accordance with regulations applicable to such appliances.
- Ensure nothing is standing or passing in front of the heater. Mandatory minimum distance from the heater is 1 metre.
- Use the supplied pressure regulator only.
- Ensure continuous ventilation is provided to the heater operating area. A ventilation opening must run to the outside of the premises where the heater is to be operated. The opening must be 25cm2 for every kW and must also be set at an equal distance from the upper and lower parts of the heater operating area.
- Ensure that the heater is correctly turned off when not in use.
- DO NOT use the heater if damaged. Take immediate action to repair or replace damaged parts. Use an authorised service agent only.
- **DO NOT** allow untrained persons to ignite the heater.
- DO NOT operate the heater without the cover.
- DO NOT exceed the 100W/m<sup>3</sup> limit considering the volume of the empty operating area.
- DO NOT use a naked flame to try and ignite the heater.
- DO NOT use the heater near flammable material liquids, solids or gases.
- DO NOT leave the heater unattended at any time whilst in use.
- **DO NOT** obstruct the air inlet and outlet sections of the heater.
- DO NOT point the heater at the gas cylinder.
- Keep the heater clean and in good working order and store in a safe area, out of the reach of children.
- o WARNING! If the heater is used for prolonged periods at maximum power, ice may form on the propane cylinder. This is due to excessive evaporation. In such a case DO NOT use the heater to de-ice the cylinder.
- WARNING! Air contaminants taken into the heater will damage the unit, cause health problems and safety issues.

Example: Body shop filler dust and overspray dust will clog the burner diffuser, contaminate the combustion chamber and damage the internal parts of the heater. If contaminants are present the heater must be supplied with ducted clean air.

Please note that any parts damaged by filler dust or overspray dust will not be covered by warranty. Additionally a cleaning charge will be made for any heaters damaged by filler dust or overspray dust.



**FUSE RATING 5 AMP** 

## 2. INTRODUCTION & TECHNICAL SPECIFICATIONS

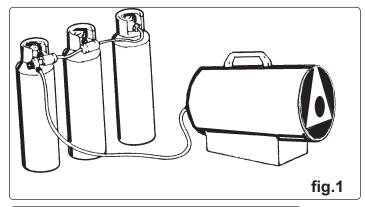
These propane space heaters have many advantages that far outweigh their small additional running costs. The fuel is more efficiently burned and they are odourless, except for a few seconds during start-up. Fan assisted and fitted with a piezoelectric ignition system for trouble-free starting, each model is available in a durable paint finish or with a stainless steel body for improved corrosion resistance and a more stylish appearance. Supplied with a propane gas regulator and hose.

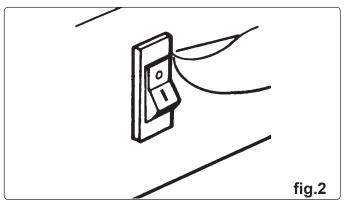
	LP351, LP351S	LP451, LP451S	LP601, LP601S
Output (Propane):	10kW	12kW	14.9kW
Output (EN1596):	10.9kW	13.2kW	16.5kW
Output (Propane):	34,000Btu/hr	40,900Btu/hr	51,000Btu/hr
Output (EN1596):	37,190Btu/hr	45,040Btu/hr	56,300Btu/hr
Air Flow:	500m³/hr	500m³/hr	500m³/hr
Fuel Consumption:	0.70kg/hr	0.85kg/hr	1.06kg/hr
Electrical Input:	230V - 50Hz - 28W	230V - 50Hz - 28W	230V - 50Hz - 28W
Length	340mm	390mm	390mm
Width:	215mm	215mm	215mm
Height:	320mm	320mm	320mm
Fuel:	Propane	Propane	Propane
Heated Volume:	8,600ft <sup>3</sup> / 244m <sup>3</sup>	10,300ft <sup>3</sup> / 292m <sup>3</sup>	12,800ft³ / 362m³

#### 3. INSTALLATION

**Note:** If you use a small gas cylinder the heater may not operate at maximum efficiency. We recommend the use of two or more cylinders linked in parallel to achieve maximum continuous efficiency (fig.1).

- 3.1 Connections
- 3.1.1 Check heater and gas cylinder to ensure that they are in good condition. If not, stop and contact your supplier immediately.
- 3.1.2 Site the heater and gas cylinder in the operational area.
- 3.1.3 Connect the heater to an electric socket, ensuring that the machine is correctly earthed. See safety instructions.
- 3.1.4 Connect the gas supply hose to the heater and then connect the fixed pressure regulator end of the hose to the gas cylinder (left hand thread).
- 3.1.5 Gradually open the tap of the gas cylinder. Check hose and fittings for gas leaks.
- □ WARNING! DO NOT USE A NAKED FLAME! To check for leaks, we recommend the use of a foamy soap solution or leak detector spray.



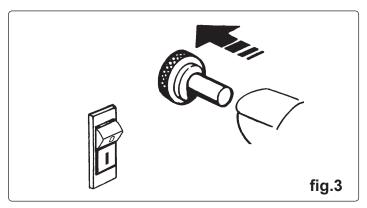


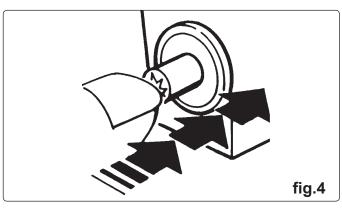
## 4. IGNITION

☐ IMPORTANT: To ensure continuous ventilation to the heater area, a ventilation opening must connect to the outside of the premises where the heater is to operate. The opening must be 25cm² for every kW, and must be set at an equal distance from upper and lower parts of heater operating area.

#### 4.1 Switching Heater On

- 4.1.1 Turn the fan switch to position "I" and check that the fan starts running (fig.2).
- 4.1.2 Push the gas valve button (yellow) in and hold (fig.3), then press repeatedly on the ignition lighter button (red), until the flame ignites.
- 4.1.3 After the flame ignites, and the heater starts, keep the gas valve button pushed in for a further 10 seconds and then release it (fig.4).
- 4.1.4 If the heater stops when the gas valve button is released, leave the fan on but wait for one minute and repeat the starting operation, after which hold the gas valve in for longer than 10 seconds before releasing.
- 4.2 Switching Heater Off
- 4.2.1 Shut off the gas cylinder tap. Allow the fan to continue running until the flame shuts down, then turn the fan switch to position "O".





□ **WARNING!** If the flame shuts down during operation, before repeating the ignition operations make sure the fan is not jammed, and the air inlet and outlet are completely free of obstructions. If the flame shuts off during normal operation due to overheating the cause of the problem must be determined and corrected before repeating the ignition procedure.

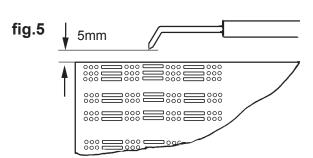
#### 5. COOL AIR FAN

- The heater may also be used as a cool air fan, as follows:
- 5.1 Remove the gas supply hose and plug the heater into the mains electrical power supply.
- 5.2 Switch on the fan. The unit will now blow out cool air only.

#### **MAINTENANCE**

Maintenance and repair must be carried out by trained/authorised personnel only. Contact your dealer for your nearest service agent.

- WARNING! Before commencing service or maintenance disconnect the unit from the electrical power and the gas supply. Use authorised parts only. Unauthorised parts may be dangerous and will invalidate the warranty.
- 6.1 Check the gas supply hose condition and change if necessary.
- Check the starting electrode gap (fig.5). 6.2
- 6.3 Check the ignition unit, safety thermostat, and thermocouple condition and ensure that they are clean.
- Caution: Wear safety goggles to perform this operation.
- Clean inside the heater unit and the fan blade with compressed air. 6.4



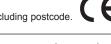
## **TROUBLESHOOTING**

PROBLEM	POSSIBLE CAUSE	SOLUTION
The fan motor does not work.	There is no electrical supply.     The motor has locked.	<ol> <li>Check mains power supply, wire, plug, fuse.</li> <li>Unlock the motor with appropriate tool.</li> </ol>
The ignitor does not spark.	Electrode has the wrong gap.     Faulty connection.	Check and reset the electrode to the correct position (fig.5).     Check and connect correctly the ignitor and the electrode.
No gas flow to the burner.	<ol> <li>The cylinder gas tap is closed.</li> <li>The cylinder is empty.</li> <li>Nozzle is blocked.</li> </ol>	<ol> <li>Open the gas tap.</li> <li>Replace the cylinder.</li> <li>Remove and clean the nozzle, check for leaks by using a foamy soap solution or leak detector spray. DO NOT USE FLAME to find leak.</li> </ol>
The burner starts, but it stops as the gas valve is released.	The thermocouple is not warm enough.     The safety override has activated because the fan does not work.	Repeat the starting operation keeping the button pushed for a longer time.     See above "Motor does not work".
The heater stops during operation.	Excessive gas supply.     Insufficient air flow.     Insufficient gas due to ice formation on the cylinder.	Check the pressure reducer, and replace if necessary.     Check that the motor is working correctly.     Check and if necessary use a larger gas cylinder or multiple cylinders connected parallel.

NOTE: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice. **IMPORTANT:** No liability is accepted for incorrect use of this product.

WARRANTY: Guarantee is 12 months from purchase date, proof of which will be required for any claim.

INFORMATION: For a copy of our latest catalogue and promotions call us on 01284 757525 and leave your full name and address, including postcode.





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