

## **Owner's Manual & Safety Instructions**

**▲ WARNING**

Read this manual before using this product.  
Failure to do so can result in serious injury.  
**SAVE THIS MANUAL.**



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**General Safety Warnings:** Read all safety warnings, instructions, illustrations and specifications provided with this appliance. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

The term “appliance” in the warnings refers to your mains-operated (corded) appliance or battery-operated (cordless) appliance.

### 1) **Work area safety**

- a) Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- b) Do not operate appliances in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.

### 2) **Electrical safety**




- a) Appliance plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) appliances. Unmodified plugs and matching outlets will reduce risk of electric shock.
- b) Avoid bodily contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- Do not expose appliances to rain or wet conditions. Water entering an appliance will increase the risk of electric shock.
- Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the appliance. Keep the cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- e) If operating an appliance in a damp location is unavoidable, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.

### **3) Personal safety**

- a) Stay alert, watch what you are doing and use common sense when operating the appliance.
- b) Ensure the switch is in the OFF-position before disconnecting and picking up or carrying the appliance.

### **4) Appliance use and care**

- a) Do not use the appliance if the switch does not turn it ON and OFF. Any appliance that cannot be controlled with the switch is dangerous and must be repaired.
- b) Disconnect the plug from the source before making any adjustments, changing accessories, or storing appliances. Such preventive safety measures reduce the risk of starting the appliance accidentally.
- c) Store idle appliances out of the reach of children and do not allow persons unfamiliar with the appliance or these instructions to operate the appliance.
- d) Maintain appliances and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the appliance's operation. If damaged, have the appliance repaired before use. Many accidents are caused by poorly maintained appliances.

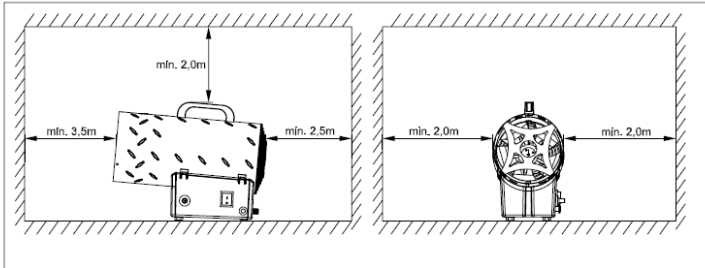
SYMBOL	DESCRIPTION
	Read the manual before set-up and/or use.
	Do not dispose with household waste.
	Conforms to relevant safety standards.

### Technical Data:

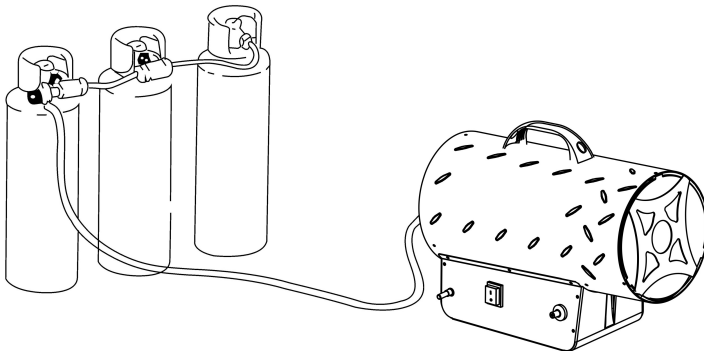
Use only in a well ventilated area and away from combustible materials

- NOT to be used for the heating of habitable areas of domestic premises, for use in Public buildings, refer to national regulations.
- After use turn off the gas supply at the cylinder valve.
- Ensure that the fan is operating correctly before lighting the burners.

Model	PH15KW
Rating	102,360BTU (30kw)
Fuel Consumption	2.18kg/h
Fuel Orifice Port Size	<b>1.30mm</b>
Air Flow Temp.	430°C
Type Of Gas	For use with LPG only
Gas Supply Pressure	700mBar
Electricity Input	220-240V~ 50Hz
Ignition	piezo
Primary Flame Control	Thermal Probe Operated Gas Valve
Overheating Protection	95°C
Insulation Grade	Class I

**General Information:**

- 1.1. The heaters mentioned in this manual must only be used outdoors or in well ventilated surroundings.
- 1.2. For every KW it is necessary to have permanent ventilation of  $25\text{cm}^3$ , equally distributed between the floor and high level, with a minimum outlet of  $250\text{cm}^3$ .
- 1.3. Gas cylinders must be used and kept in accordance with current regulations.
- 1.4. Never direct the hot air flow towards the cylinder.
- 1.5. Use only the supplied pressure regulator.
- 1.6. Never use the heater without its cover.
- 1.7. Do not exceed  $100\text{W}/\text{m}^3$  of free room. The minimum volume of the room must be larger than  $100\text{m}^3$ .
- 1.8. Do not obstruct the inlet or outlet sections of the heater.
- 1.9. If the heater has to work for a long period at its maximum capacity, it's possible that ice will form on the cylinder. This is due to excessive vapor withdrawal. Not for this reason, or for any other, should the cylinder be heated. To avoid this effect, or at least to reduce it, use a large cylinder or two cylinders linked together (Figure1).



- 1.10. Do not use the heater in cellars, basements or in any room below the ground level.
- 1.11. In case of malfunction, please contact the technical assistance service.
- 1.12. After use, turn the gas cylinder tap off.
- 1.13. The gas bottle must always be replaced following safety rules away from any possible source of ignition.
- 1.14. The gas hose must not be twisted or bent.
- 1.15. The heater must be placed where there is no risk of fire, the hot air outlet must be at least 3m from any flammable wall or ceiling and must never be directed towards the gas bottle.
- 1.16. Only use original gas hose and spare parts.
- 1.17. Heaters described in this leaflet are not intended for domestic use.
- 1.18. In the case that a gas leak is found or suspected, immediately close the gas cylinder, switch the heater off and do not use it again until it has been checked by a qualified service centre. If the heater is installed indoors, provide good ventilation by opening door and windows completely.
- 1.19. If in any doubt contact your supplier.

### **Installation:**

- 2.1 Connect the heater to a suitable electric socket /230V~50Hz
- 2.2 Make sure that the machine is properly earthed.
- 2.3 Connect the gas supply hose to the pressure regulator and connect the regulator to a suitable LPG cylinder.
- 2.4 Open the tap of the cylinder and check the supply hose and fittings for a gas leak. For this operation it is recommended to use an approved leak detector.
- 2.5 NEVER USE NAKED FLAMES.
- 2.6 For automatic appliances, connect the room thermostat to the socket on the appliance and adjust it to the required temperature.

**Application use:**

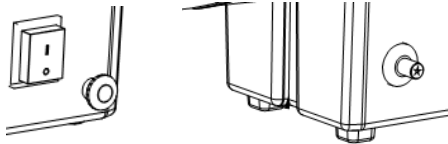
1. Check the heater for possible shipping damage.
2. Connect the hose and regulator assembly to the LPG cylinder by rotating the nut counterclockwise into the LPG cylinder's valve outlet and securely tighten.
3. Open the cylinder's gas valve and check all gas connections with a soap and water solution.
4. Connect power cord to well-grounded 220-240V~, 50Hz source of power.

**3.1 IGNITION / Manual ignition**

- a. Turn the power switch to position I and check that the fan starts running correctly. (Fig 2.)



- b. Push the gas valve button and push repeatedly the piezoelectric lighter until the flame lights up. (Figure. 3-4)



- c. As the flame lights up, keep the valve button pushed for 10 seconds approx. Should the heater stop when the valve button has been released, wait one minute and repeat the starting operation keeping the valve button pushed for a longer time.
- d. Regulate the gas flow pressure according to the thermal power desired, by turning the wheel of the pressure reducer anticlockwise to increase the pressure or clockwise to decrease.
- e. Contact your supplier should any problems continue.



**!!! WARNING**

**Asphyxiation Hazard**

1. Do not use in unventilated areas.
2. The flow of combustion and ventilation air must not be obstructed.
3. Proper ventilation air must be provided to support the combustion air requirements of the heater being used.
4. Lack of proper ventilation air will lead to improper combustion.
5. Improper combustion can lead to carbon monoxide poisoning leading to serious injury or death. Symptom of carbon monoxide poisoning can include headaches, dizziness and difficulty in breathing.

**FUEL GAS ODOUR**

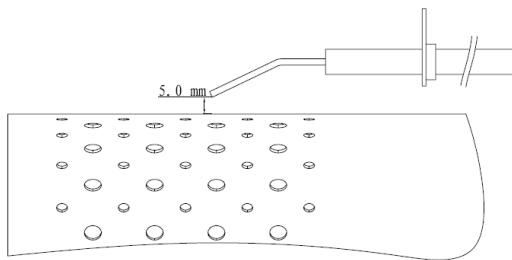
LP gas and natural gas have man made odorants added specifically for detection of fuel gas leaks.

If a gas leak occurs you should be able to smell the gas. Since Propane (LP) is heavier than air you should smell for the gas odour low to the floor. **ANY GAS SMELL THIS MOTH BE ACTED ON IMMEDIATELY!**

1. Do not take any action that could ignite the gas. Do not operate any electrical switches. Do not pull any power supply or extension cords. Do not light matches or any other source of flame. Do not use your telephone.
2. Get everyone out of the building and away from the area immediately.
3. Close all propane (LP) gas tank or cylinder fuel supply valves, or the main fuel supply valve located at the meter if you use natural gas.
4. Propane (LP) gas is heavier than air and may settle in low areas.
5. Use your neighbor's phone and call your fuel gas supplier and your fire department. Do not re-enter the building or area.
6. Stay out of the building and away from the area from the area until declared safe by the firefighters and your fuel gas supplier.
7. **FINALLY**, let the fuel gas service person and the firefighters check for escaped gas. Have them air out the building and area before you return. Properly trained service people must repair any leaks, check for further leakages, and then relight the appliance for you.

### Maintenance:

- 4.1. The repairs or maintenance operations must only be carried out by qualified personnel.
- 4.2. The unit must be checked by a qualified technician at least once a year.
- 4.3. Regularly check the conditions of gas hose, and gas regulator if it must be replaced only use original spare parts.
- 4.4. Before starting any maintenance operation on the heater disconnect from both gas and electrical supply's.
- 4.5. If the unit has not been used for a long period we advise that a technician carries out a general check up before using. It is important to control the following:
  - 4.5.1. Check the starting electrode position (see Figure.5).



PROBLEM	CAUSES	SOLUTIONS
The motor does not work	No electricity supply	Check the terminal board with a tester
	The safety thermostat is on	Wait about one minute then restart
The motor works, but the burner does not light up and after few seconds the heater stops	The cylinder gas tap is closed	Open the gas tap
	The cylinder is empty	Use a new cylinder
	The nozzle is obstructed	Remove the nozzle and clean it.
	The solenoid gas valve is not open	Check that the solenoid valve works
	There is no spark	Check the position of electrode
The burner lights up but after few seconds the heater stops	No connection with the earthing system	Check and connect properly
	Defective connection between sensor and safety device	Check and connect properly
	Defective safety device	Replace the safety device
The heater stops during operation	Excessive gas supply	Check the pressure reducer and if required replace it
	Insufficient air flow	Check that the motor works properly
	Insufficient gas supply due to ice formation on the cylinder	Check and use a larger cylinder or two cylinders connected together.

**Seller Details:**

**DECLARATION OF CONFORMITY**



EC – Declaration of Conformity according to;

- Machinery Directive 2006/42/EC
- Restriction of Hazardous Substances Directive 2011 / 65 / EU
- Electromagnetic Compatibility Directive 2014/30/EU

We, Toolsave Limited, located at Unit C, Manders Ind. Est., Old Heath Road, Wolverhampton, WV1 2RP, United Kingdom, declare in exclusive responsibility that the Propane Gas Heater meets the essential health and safety requirements of the above-mentioned directives.

To ensure presumption of conformity, the product has been assessed for compliance with the following directives and standards either in part or in full.

Directive	Requirements and / or Standards applied
Machinery Directive 2006/42/EC	EN 61029-1:2009+A11:2010 EN 61029-2-1A:2012+A11:2013
RoHS 2 Directive 2011 / 65 / EU	Directive 2011/65/EU
Electromagnetic Compatibility Directive 2014/30/EU	EN 55014-1:2006/A2:2011 EN 55014-2:1997/A2:2008 EN 61000-3-2:2014 EN 61000-3-11:2000

TCF reference no.: PH15KW

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10/08/2020





**TOOLSAVE**

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