



## FORCED AIR PORTABLE PROPANE HEATER 100K BTU

ITEM: 96957



### OWNER'S MANUAL AND SAFETY INSTRUCTIONS

SAVE THIS MANUAL: KEEP THIS MANUAL FOR SAFETY WARNINGS, PRECAUTIONS, ASSEMBLY, OPERATING, INSPECTION, MAINTENANCE AND CLEANING PROCEDURES. WRITE THE PRODUCT'S SERIAL NUMBER ON THE BACK OF THE MANUAL NEAR THE ASSEMBLY DIAGRAM (OR MONTH AND YEAR OF PURCHASE IF PRODUCT HAS NO NUMBER).

FOR QUESTIONS PLEASE CALL OUR CUSTOMER SUPPORT: (909) 628 0880 MON-FRI 9AM TO 3PM PST

# IMPORTANT SAFETY INFORMATION



## GENERAL SAFETY WARNINGS

Read these instructions for use carefully. Familiarise yourself with the appliance before connecting it to a gas cylinder. Keep these instructions for future reference. This instruction manual contains important information necessary for the proper assembly and safe use of the appliance. Follow all warnings and instructions when using the appliance. If you have questions about assembly, operation, servicing or repair of this product, please call Customer Service at 909.628.0880.

## CARBON MONOXIDE HAZARD

- This appliance can produce carbon monoxide which has no odor.
- **NEVER** use this appliance in an enclosed space such as a camper, tent, car or home.
- Keep propane tank(s) below 100°F (37.8°C). Check heater for damage before each use. Do not use a damaged heater. Use only the hose and factory preset regulator provided with the heater. Check hose before each use of heater. If highly worn or cut, replace with hose specified by manufacturer before using heater.
- Do not alter heater. Keep heater in its original state. Do not use heater if altered.
- FAILURE TO COMPLY WITH THE PRECAUTIONS AND INSTRUCTIONS PROVIDED WITH THIS HEATER, CAN RESULT IN DEATH, SERIOUS BODILY INJURY AND PROPERTY LOSS, OR DAMAGE FROM THE HAZARDS OF FIRE, EXPLOSION, BURN, ASPHYXIATION, CARBON MONOXIDE POISONING, AND/OR ELECTRICAL SHOCK.
- Carbon Monoxide (CO) poisoning produces flu-like symptoms, watery eyes, headaches, dizziness, fatigue and possibly death. You can't see it and you can't smell it. It's an invisible killer. If these symptoms are present during operation of this product get fresh air immediately.
- For outdoor use only.
- **Keep out of reach of children.**

## EXPLOSION FIRE HAZARD

- **WARNING:** Using this heater in a residential garage requires that the heater is positioned so that it is protected against any possible damage by a moving vehicle, etc. It must be positioned so that the base of the heater is no less than 18 inch (450mm) above the garage floor or 8 ft (2450mm) in repair garages. The heater must be placed on a stable surface. Do not place it on a chair, ladder, etc. Raising the heater will reduce BUT NOT eliminate the possibility of lighting the vapor of any flammable liquids which may be improperly stored or accidentally spilled. If the smell of gasoline is present, DO NOT operate this heater until the area has been properly ventilated.
- **NEVER** install or remove propane tank while outdoor stove is lighted, near flame, pilot lights, other ignition sources or while outdoor stove is hot to touch.
- During operation, this product can be a source of ignition. Never use the heater in spaces that contain or may contain volatile or airborne combustibles, or products such as gasoline, solvents, paint thinner, dust particles or unknown chemicals. Minimum clearances from combustible materials: 12 inches from the sides & 48 inches from the top.
- This product is fueled by propane gas. Propane gas is invisible, odorless, and flammable. An odorant is normally added to help detect leaks and can be described as a "rotten egg" smell. The odorant can fade over time so leaking gas is not always detectable by smell alone.

# IMPORTANT SAFETY INFORMATION

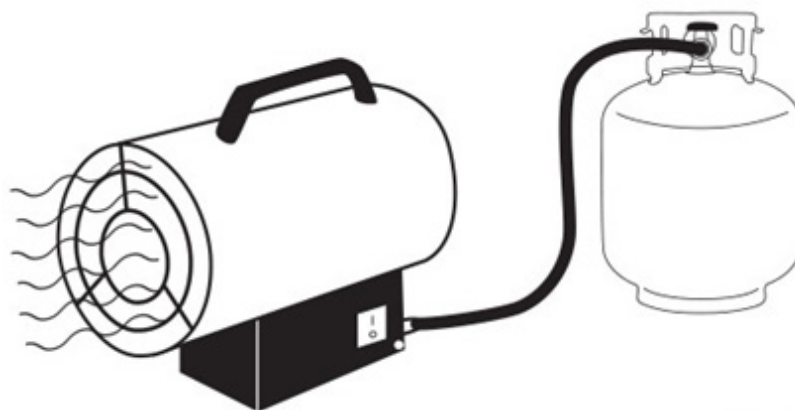
- Propane gas is heavier than air and leaking propane will sink to the lowest level possible. It can ignite by ignition sources including matches, lighters, sparks or open flames of any kind many feet away from the original leak. **Use only propane gas set up for vapor withdrawal.**
- Propane gas should be stored or used in compliance with local ordinances and codes or with ANSI/NFPA 58. **Turn off propane when not in use.**
- **CALIFORNIA PROPOSITION 65:WARNING:** Fuels used in gas or oil fired appliances and the products of combustion of such fuels, contain Chemicals known to the State of California to cause cancer, birth defects or other reproductive Harm. This product contains chemicals, including lead and lead compounds, known to the State of California to cause cancer, birth defects or other reproductive harm. Wash hands after
- Keep all connections and fittings clean. Inspect propane cylinder and stove propane connections for damage before attaching.
- Locate heater on stable and level surface if heater is hot or operating. Not intended for use on finished floors. Never block air inlet (bottom of shell) or air outlet (around top of shell) of heater. Do not leave heater unattended.

**WARNING: Not for home or recreational vehicle use. WARNING: FIRE, BURN, INHALATION, AND EXPLOSION HAZARD, KEEP SOLID COMBUSTIBLES, SUCH AS BUILDING MATERIALS, PAPER OR CARDBOARD, A SAFE DISTANCE AWAY FROM THE HEATER AS RECOMMENDED BY THE INSTRUCTIONS. NEVER USE THE HEATER IN SPACES WHICH DO OR MAY CONTAIN VOLATILE OR AIRBORNE COMBUSTIBLES, OR PRODUCTS SUCH AS GASOLINE, SOLVENTS, PAINT THINNERS, DUST PARTICLES OR UNKNOWN CHEMICALS.**

- Provide adequate ventilation. Before using heater, provide at least a six-square-foot opening of fresh, outside air. This heater produces carbon monoxide, which is listed by the State of California as a reproductive toxin under proposition 65.
- Install and use heater with care. Follow all local ordinances and codes. In the absence of local ordinances and codes refer to the standard for storage and the natural gas installation code, CSA B149.1. This instructs on the safe storage and handling of propane gas. Use only propane gas set up for vapor withdrawal.
- Provide adequate ventilation. Before using heater, provide at least a six-square-foot opening of fresh, outside air. This heater produces carbon monoxide, which is listed by the State of California as a reproductive toxin under proposition 65. For indoor or outdoor use. Clearance from combustibles **MUST** be at least 40 inches. The heater must be located at least 6 ft (1.83m) in the US; or 10ft (3m) in Canada, from any propane gas container.
- The heater is designed for use as a construction heater in accordance with ANSI Z83.7, CSA 2.14. Other standards govern the use of fuel gases and heating products for specific uses. Your local authority can advise you about these. Construction heaters are to provide temporary heating of building under construction, alteration or repair. Properly used, the heater provides safe economical heating. Products of combustion are vented into the area being heated. We cannot foresee every use which maybe made of our heaters. **CHECK WITH YOUR LOCAL FIRE SAFETY AUTHORITY IF YOU HAVE QUESTIONS ABOUT HEATER USE.**
- Install and use heater with care. Follow all local ordinances and codes. In the absence of local ordinances and codes refer to the standard for storage and the natural gas installation code, CSA B149.1. This instructs on the safe storage and handling of propane gas. Use only propane gas set up for vapor withdrawal.
- Do not use heater in occupied dwellings or in living or sleeping quarters. Do not use heater in a basement or below ground level. Propane gas is heavier than air. If a leak occurs, propane gas may sink to the lowest possible level. Keep appliance area clear and free from combustible materials, gasoline, paint thinner and other flammable vapors and liquids. Dust is combustible. Do not use heater in areas with high dust content.

# IMPORTANT SAFETY INFORMATION

- The heater is designed and approved for use as a construction heater in accordance with the Standard for Gas-Fired Construction Heaters ANSI Z83.7 • CSA 2.14. CHECK WITH YOUR LOCAL FIRE SAFETY AUTHORITY IF YOU HAVE QUESTIONS ABOUT APPLICATIONS. Other standards govern the use of fuel gases and heat producing products in specific applications. Your local authority can advise you about these. the intended use is the temporary heating of a building or structure under construction, alteration, or repair.
- Keep children and animals away from heater. Never move, handle or service a hot or operating heater. Severe burns may result. Wait 15 minutes after turning heater off. To prevent injury, wear gloves when handling heater. Turn off propane supply to heater when not in use. Use only original replacement parts. This heater must use design-specific parts. Do not substitute or use generic parts. Improper replacement parts could cause serious or fatal injuries. Installation of this appliance at altitudes above 2000 ft (610 m) shall be in accordance with local codes, or in the absence of local codes, the National Fuel Gas Code, ANSI Z223.1/NFPA 54, or National Standard of Canada, Natural Gas and Propane Installation Code, CSA B149.1. The heater should be inspected before each use, and at least annually by a qualified service person.
- The hose assembly shall be visually inspected prior to each use of the heater. If it is evident there is excessive abrasion or wear, or the hose is cut, it shall be replaced prior to the heater being put into operation. The replacement hose assembly shall be that specified by the manufacturer. Blower or radiant type heaters shall not be directed toward any propane-gas container within 20 ft (6 m).



Rating(BTU/ hr)	Fuel Consumption (lb/h)		Supply Pressure		Manifold Pressure	Ignitor Gap	Size (inch)
	Minimum	Maximum	Max	Min	High		
70000- 1.46KGS/H	1.46KGS/H	2.08KGS/H	Bottle pressure	5 psi	11.0" w.c	5mm	27.56x11.4x18.9 (70x29x48 cm)

**Fuel Type:** Propane Vapor Only

**Ignition Type:** Piezo Ignition

**Minimum Operating Temperature:** 20 °F (-29 °C) Surrounding Air



**SAVE THESE WARNINGS**

# ASSEMBLY

**The Fuel System:** The hose/regulator assembly attaches to the propane gas supply. This provides fuel to the heater.

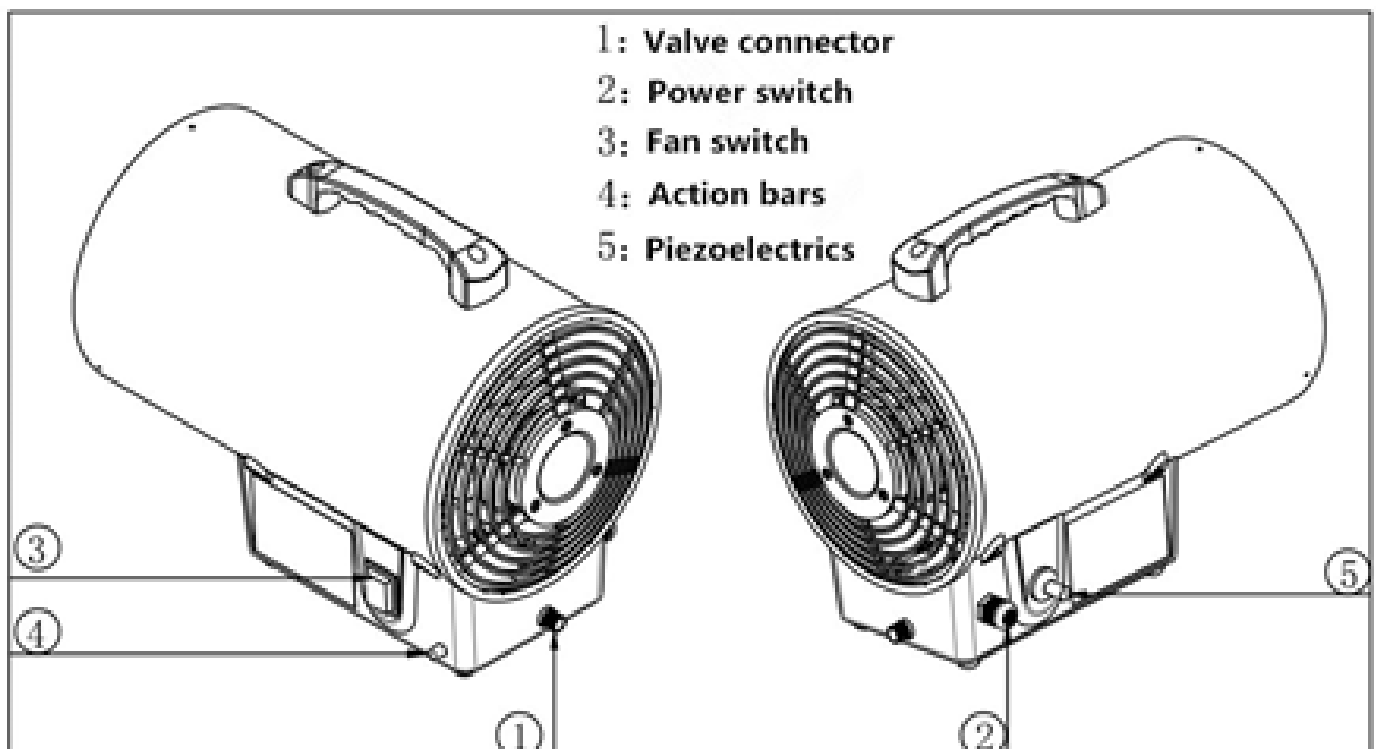
**The Ignition System:** The piezo ignitor lights the burner fuel supply on the machine.

**The Automatic Control System:** The automatic control valve shuts off the heater if the flame goes out. Propane supply

You must provide propane gas and tank(s). Use this heater only with a propane vapor withdrawal supply system. Installation must conform to local codes or, in the absence of local codes, with the standard for the Storage and Handling of Liquefied Petroleum Gases ANSI/NFPA 58 and the Natural Gas and Propane Installation Code CSA B149.1. Your local library or fire department will have this booklet. The amount of propane gas ready for use from propane tanks varies. Two factors decide this amount: **1.** The amount of liquid propane gas in tank(s). **2.** The temperature of tank(s). The chart below shows the minimum number of 100 pound tanks or one larger tank may be needed in colder weather. Your local propane gas dealer will help you select proper supply system.

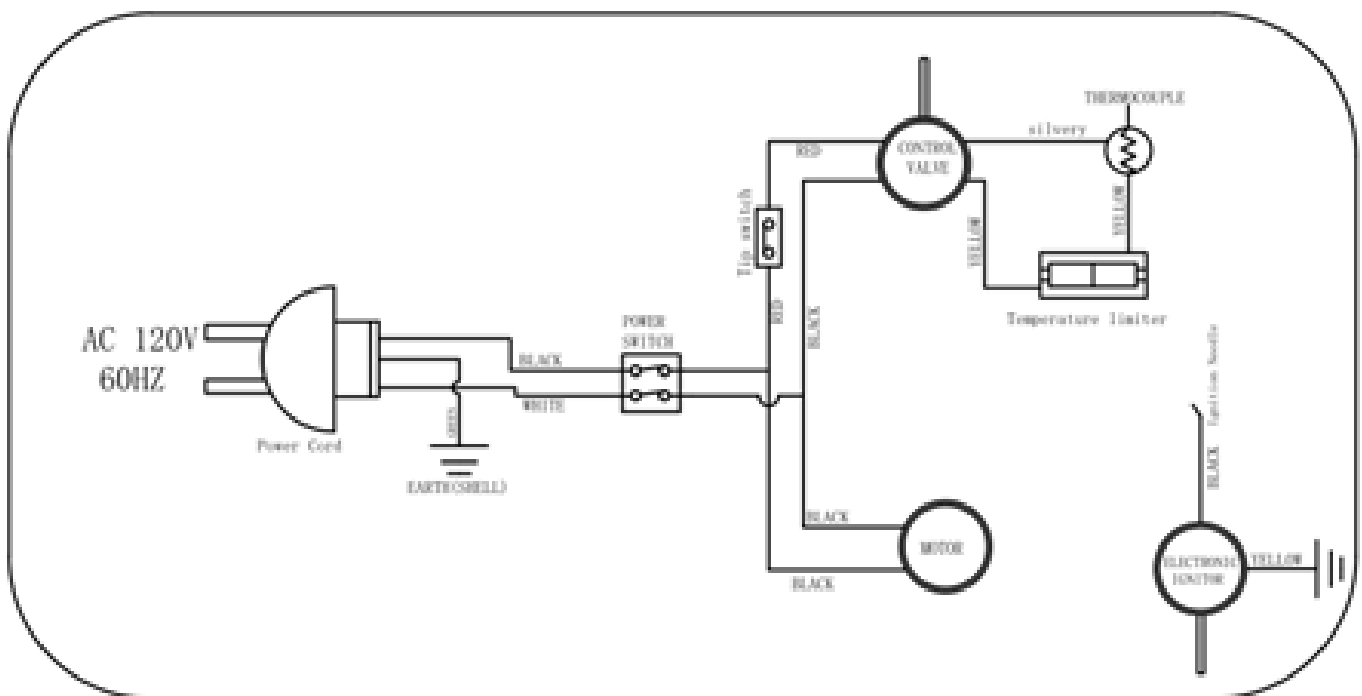
AVERAGE TEMP °F AT TANK LOCATION	NUMBER OF TANKS (100LBS)
60°F (15.56°C)	1
40°F (4.44°C)	1
32°F (0°C)	1
20°F (-6.67°C)	1
10°F (-12.22°C)	2
0°F (-17.78°C)	2

**WARNING:** Provide at least a 2.5 square feet (23 square meters) opening of fresh, outside air while running heater. If proper fresh, outside air ventilation is not provided, carbon monoxide poisoning can occur. Provide proper fresh, outside air ventilation before running heater.



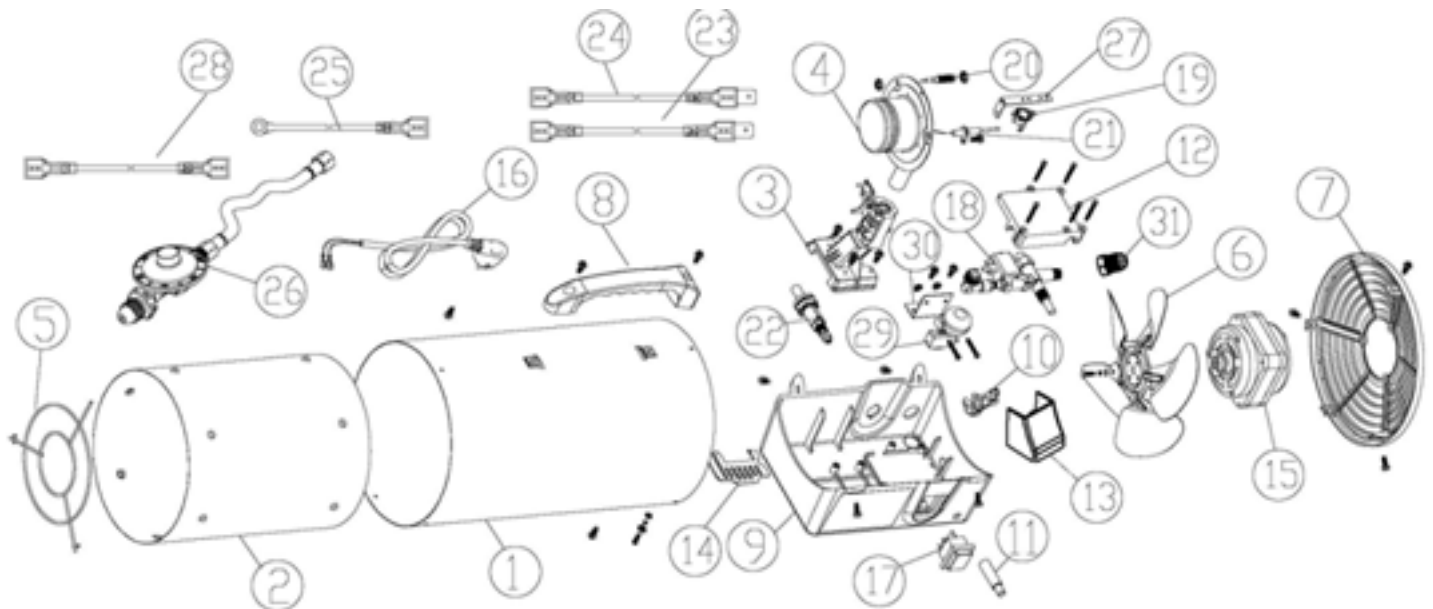
## IGNITION STEPS

- 1: First connect the pressure reducing valve to the cylinder and heater equipment.
- 2: Open the valve of the cylinder and check the connecting pipe with soap bubbles to ensure that there is no air leakage in the pipeline.
- 3: Connect the power supply and turn on the fan switch to check if the fan is running normally.
- 4: Press the valve lever of the valve for 3 to 5 seconds, then press the piezo igniter to ignite.





# OPERATION



NO#	Part Name
1	Housing assembly
2	combustion chamber
3	Burner stand
4	Burner assembly
5	Front grille
6	Fan
7	Motor grille
8	Handle
9	plastic Base
10	Cable clip
11	Valve button
12	plastic valve cover
13	Switch cover
14	wire clamps
15	Motor assembly
16	Power cord
17	power switch
18	gas vavle assembly
19	thermal protector
20	Thermocouple
21	Ignition cable with electrode
22	Ignitor
23	Electromagnetic valve wires #1
24	Electromagnetic valve wires #2
25	Electromagnetic valve ground wire
26	Regulator and hose assembly
27	thermal protector bracket
28	tip-over switch wire
29	tip-over switch
30	tip-over switch bracket
31	adapter connector

## REPLACEMENT PARTS

**WARNING:** Use only original replacement parts. This heater must use design-specific parts. Do not substitute or use generic parts. Improper replacement parts could cause serious or fatal injuries. This will also protect your warranty coverage for parts replaced under warranty. Parts warranty and non-warranty: contact authorized dealers of this product. If they can not supply original replacement parts, either contact your nearest parts central or manufacturer.

## STORAGE

**CAUTION:** Disconnect heater from propane supply tank(s). when the heater is to be stored indoors, the connection between the propane supply cylinder(s) and the heater shall be disconnected and the cylinders) removed from the heater and stored in accordance with Standard for Storage and Handling of Liquefied Petroleum Gases, NFPA 58 and Natural Gas and Propane Installation Code, CSA B149.1.

# MAINTENANCE

**WARNING:** Never attempt to service heater while it is connected to propane supply, operating or hot. Severe burns can occur.

1. Keep heater clean.
2. Inspect heater before each use. Check connections for leaks. Apply mixture of liquid soap and water to connections. Bubbles forming show a leak that must be corrected. Correct all leaks at once.
3. The hose assembly shall be visually inspected prior to each use of the heater. If it is evident there is excessive abrasion or wear, or the hose is cut, it shall be replaced prior to the heater being put into operation. The replacement hose assembly shall be that specified by the manufacturer.
4. Have heater inspected yearly by a qualified service person. The heater needs to be maintained once a year.

## WARNING

### Air Quality Hazard

- Do not use this heater for heating human living quarters.
- Use of direct-fired heaters in the construction environment can result in exposure to levels of CO, CO<sub>2</sub>, and NO<sub>2</sub> considered to be hazardous to health and potentially life threatening.
- Do not use in unventilated areas
- Know the signs of CO and CO<sub>2</sub> poisoning
  - Headaches, stinging eyes
  - Dizziness, disorientation
  - Difficulty breathing, feels of being suffocated
- Proper ventilation air exchange (OSHA 29 CFR 1926.57) to support combustion and maintain acceptable air quality shall be provided in accordance with OSHA 29 CFR Part 1926.154, ANSI A10.10 Safety Requirements for Temporary and Portable Space Heating Devices and Equipment used in the Construction Industry or the Natural Gas and Propane Installation Codes CSA B149.1
  - Periodically monitor levels of CO, CO<sub>2</sub> and NO<sub>2</sub> existing at the construction site – at the minimum at the start of the shift and after 4 hours.
  - Provide ventilation air exchange, either natural or mechanical, as required to maintain acceptable indoor air quality

USA 8-Hr Time weighted average  
(OSHA 29 CFR 1926.55 App A)

CO	50 ppm
CO <sub>2</sub>	5000 ppm
NO <sub>2</sub>	

Canada 8-hr time weighted average  
WorkSafe BC OHS Guidelines Part 5.1  
and Ontario Workplaces Reg 833

25 ppm
5000 ppm
3 ppm (Reg 833)

USA – Ceiling Limit  
(Short Term Exposure Limit = 15 minutes)

CO	
CO <sub>2</sub>	
NO <sub>2</sub>	5 ppm

Canada STEL (15 minutes Reg 833/1 hour  
WSBC) WorkSafe BC OHS Guidelines Part 5.1  
and Ontario Workplaces Reg 833

100 ppm
15000 ppm (WSBC)
30000 ppm (Reg 833)
1.0 ppm (WorkSafeBC)
5.0 ppm (Reg 833)

- Ensure that the flow of combustion and ventilation air exchange cannot become obstructed.
- As the building 'tightens up' during the construction phases ventilation may need to be increased.



# TROUBLESHOOTING

Fan doesn't work	<ol style="list-style-type: none"> <li>1. No electricity</li> <li>2. Blade stalled by housing</li> </ol>	<ol style="list-style-type: none"> <li>1. Check power supply</li> <li>2. Repair/replace housing</li> </ol>
<u>Piezo</u> won't ignite	<ol style="list-style-type: none"> <li>1. Ignition cable damaged</li> <li>2. Ignition cable disconnected</li> <li>3. Distance between electrode and burner too large</li> </ol>	<ol style="list-style-type: none"> <li>1. Repair by a qualified person</li> <li>2. Adjust the distance to be within 3-8mm.</li> </ol>
No gas	<ol style="list-style-type: none"> <li>1. Gas cylinder is empty</li> <li>2. Gas valve on cylinder closed</li> <li>3. Gas valve of heater is not opened</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace with new gas cylinder</li> <li>2. Open the valve</li> <li>3. Attempt relight sequence correctly</li> </ol>
Flame goes out while heater working	<ol style="list-style-type: none"> <li>1. Thermocouple element was not heated enough</li> <li>2. Safety temperature control</li> <li>3. Restricted air-flow</li> </ol>	<ol style="list-style-type: none"> <li>1. Repeat ignition process and keep safety gas valve depressed for a minimum of <u>5 seconds</u>, then release slowly.</li> <li>2. Allow the heater to cool down for at least 10 minutes. Check for obstructions and then attempt relight sequence.</li> <li>3. Check heater inlet and <u>outlet</u>, remove any obstructions.</li> </ol>

## PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

**Record Product's Serial Number Here:** \_\_\_\_\_

**Note:** If product has no serial number, record month and year of purchase instead.

**Note:** Some parts are listed and shown for illustration purposes only and are not available individually as replacement parts.



**SAVE THESE INSTRUCTIONS.**

### Questions, problems, missing parts?



Before returning to your retailer, our exceptional customer service is here to help.

Call Us: 909.628.0880

Email Us: [customer@xtremepowerusa.com](mailto:customer@xtremepowerusa.com)

Hours of Operation: 9am - 4pm (Monday - Friday)

**PRODUCT MADE IN CHINA**