

HEATFAST®

Propane Forced-Air Construction Heater

HF45G / HF60G / HF125G / HF160G



ANSI Z83.7-2017 / CSA 2.14-2017

READ AND SAVE THESE INSTRUCTIONS

Carefully read and understand these instructions before assembling, operating, or servicing this heater. You may injure yourself or others if you do not follow the instructions. This manual has been designed to instruct you on the proper manner in which to assemble, maintain, store, and most importantly, how to operate the heater in a safe and efficient manner. Do not allow anyone who has not read these instructions to assemble, light, adjust or operate the heater.

THIS HEATER IS DESIGNED AND APPROVED FOR USE AS A CONSTRUCTION HEATER IN ACCORDANCE WITH STANDARD ANSI Z83.7 CSA 2.14. CHECK WITH YOUR LOCAL FIRE SAFETY AUTHORITY IF YOU HAVE QUESTIONS ABOUT APPLICATIONS.

This Heater Shall Be Installed And Operated In Accordance With The Regulations Of Local Authorities Having Jurisdiction, 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





CALIFORNIA PROPOSITION 65 WARNING:

This product can expose you to chemicals including carbon monoxide, which is known to the State of California to cause cancer, birth defects and/or other reproductive harm. For more information, go to www.P65warnings.ca.gov



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-  **DANGER** indicates a hazardous situation which, if not avoided, will result in death or serious injury.
-  **WARNING** indicates a hazardous situation which, if not avoided, could result in death or serious injury.
-  **CAUTION** indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
-  **NOTICE** indicates practices unrelated to personal injury which, if not avoided, may result in property damage

 **GENERAL HAZARD WARNING**

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 HAZARDS OF FIRE, EXPLOSION, BURN, ASPHYXIATION, CARBON MONOXIDE POISONING, AND / OR ELECTRICAL SHOCK.

ONLY PERSONS WHO CAN UNDERSTAND AND FOLLOW THESE INSTRUCTIONS SHOULD USE OR SERVICE THIS HEATER.

IF YOU NEED ASSISTANCE OR HEATER INFORMATION SUCH AS AN INSTRUCTIONS MANUAL, LABEL, ETC. CONTACT THE MANUFACTURER.

 **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 THINNER, DUST PARTICLES OR UNKNOWN CHEMICALS.

 **WARNING: NOT FOR HOME OR RECREATIONAL VEHICLE USE.**

 **WARNING: RISK OF CARBON MONOXIDE POISONING**

- Use this heater only in well ventilated areas! Provide at least a three square feet (2,800 sq cm) opening of outside air for every 45,000 BTU/Hr. of heater rating.
- People with breathing problems should consult a physician before using the heater.
- Early signs of carbon monoxide poisoning resemble flu-like symptoms such as headaches, dizziness, and/or nausea. If you have these symptoms, your heater may not be working properly.
- Get fresh air at once! Have the heater serviced.
- Some people are more affected by carbon monoxide than others. These include pregnant women, those with heart or lung problems, anemia, those under the influence of alcohol, or at high altitudes.
- Never use this heater in living or sleeping areas.

 **DANGER:**

THIS HEATER IS DESIGNED AND INTENDED FOR SPACE-HEATING OF BUILDINGS UNDER CONSTRUCTION AND FOR SPOT HEATING WHEN THE PRODUCTS OF COMBUSTION ARE DISCHARGED OUTDOORS.



**WARNING: Never leave the heater unattended while operating.
Disconnect the heater from its power source when not in use.**



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, CO₂, And NO₂ considered to be hazardous to health and potentially life threatening.
- Do not use in unventilated areas
- Know the signs of CO and CO₂ poisoning:
 - Headaches, stinging eyes
 - Dizziness, disorientation
 - Difficulty breathing, feelings 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, CO₂, and NO₂ 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.
- 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.

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

CO	50 ppm
CO ₂	5000 ppm
NO ₂	N/A

USA-Ceiling Limit

(Short Term Exposure Limit = 15 minutes)

CO	N/A
CO ₂	N/A
NO ₂	5 ppm

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

CO	
CO ₂	
NO ₂	5 ppm

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

CO	100 ppm
CO ₂	15000 ppm (WSBC) 30000 ppm (Reg 833)
NO ₂	1.0 ppm (WSBC) 5.0 ppm (Reg 833)



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OPERATING PRECAUTIONS

This is a propane, direct-fired, propane heater. This heater was designed and certified as a construction heater in accordance with ANSI Z83.7-2017 / CSA 2.14-2017. The intended use of this heater is the temporary heating of buildings under construction, alteration or repair or for spot heating when the products of combustion are discharged outdoors. Check with your local fire safety authority if you have any questions about the application of this heater. Other standards govern the use of fuel gases and heat producing products in specific applications. Your local authority can advise you about these.

This is an unvented portable direct-fired propane heater and all of the products of combustion are released into the area being heated. This heater operates at close to 100 percent combustion efficiency but still produces carbon monoxide (CO) a deadly gas. Carbon Monoxide can build up and failure to provide adequate ventilation could result in poisoning and death.

Know the signs of CO and CO₂ poisoning:

- Headaches, stinging eyes
- Dizziness, disorientation
- Difficulty breathing, feeling of being suffocated

Monitor levels of CO when operating this heater. DO NOT USE IN UNVENTILATED AREAS.



WARNING: RISK OF CARBON MONOXIDE POISONING

- Use this heater only in well ventilated areas! Provide at least a three square feet (2,800 sq cm) opening of outside air for every 45,000 BTU/Hr. of heater rating.
- People with breathing problems should consult a physician before using the heater.
- Early signs of carbon monoxide poisoning resemble flu-like symptoms such as headaches, dizziness, and/or nausea. If you have these symptoms, your heater may not be working properly.
- Get fresh air at once! Have the heater serviced.
- Some people are more affected by carbon monoxide than others. These include pregnant women, those with heart or lung problems, anemia, those under the influence of alcohol, or at high altitudes.
- Never use this heater in living or sleeping areas.



DANGER:

An odorant has been added to LPG (propane) to give that gas a distinctive smell. That smell makes it easier to detect a leak. Some people cannot smell the odorant and must rely on electronic leak sensors.

If you detect a leak,

- DO NOT enter the premises if you notice a strong gas odor.
- EXTINGUISH all flames and heat sources.
- DO NOT smoke, or create a spark or a flame.
- DO NOT turn on any electrical switches, appliances or lights as an electrical charge could create a spark.
- DO NOT operate your garage door.
- DO NOT use your telephone.
- CLOSE all propane (LP) gas tanks.
- VACATE the area until declared safe by firefighters.
- KEEP OUT of low areas; Propane is lighter than air and settles in low lying areas.



WARNING: RISK OF ELECTRIC SHOCK

- EQUIPMENT MUST BE GROUNDED.
- Use only the power (voltage) specified for this heater. Refer to the model plate on the heater.
- Use only a three-prong grounded outlet and extension cord.
- ALWAYS install heater so that it is not directly exposed to water spray, rain, dripping water, or wind.
- ALWAYS disconnect the heater from its power source when not in use.



**WARNING: Never leave the heater unattended while operating.
Disconnect the heater from its power source when not in use.**

 **WARNING:**

1. Inspect the heater before each use and at least annually by a qualified service person. DO NOT operate a damaged heater.
2. Inspect the hose assembly prior to each use of the heater. If there is evidence there is excessive abrasion or wear, or the hose is cut, replace the hose prior to operating the heater. Use only the hose specified by PowerFast Products.
3. The hose assembly shall be protected from traffic, building materials and contact with hot surfaces both during use and while in storage.
4. DO NOT modify the heater or operate a heater which has been modified from its original condition.
5. Use only propane gas.
6. Use only VAPOR WITHDRAWAL propane supply. If there is any question about vapor withdrawal, ask your propane dealer.
7. Mount the propane cylinders vertically (shutoff valve up). Secure them from falling or being knocked over and protect them from damage.
8. Locate propane containers at least 6 ft. (1.83 m) in the U.S. and 10 ft. (3 m) in Canada from any propane cylinder.
9. DO NOT direct the heater discharge toward any propane cylinder located within 20 ft. (6 m).
10. KEEP heater clear and free of combustible materials, gasoline and other flammable vapors and liquids.
11. KEEP CHILDREN, CLOTHING, PETS AND COMBUSTIBLES AWAY FROM HEATER.
12. Operate only on a stable, level surface.
13. Do not use with duct work. Do not restrict inlet (air intake) or outlet (discharge opening).
14. Do not move, handle or service this heater while hot or burning.
15. Do not adjust the heater combustion tube elevation while heater is running or hot. Adjustments to elevation should only be made after the heater has cooled to the touch.
16. Store the heater indoors when not in use.
17. Disconnect the hose assembly from the propane cylinder when the heater is not in use. Store the propane cylinder in accordance with the Standard for the Storage and Handling of Liquefied Petroleum Gases, NFPA 58 and Natural Gas and Propane Installation Code, CSA B149.1.

MINIMUM CLEARANCE (FROM NORMAL COMBUSTIBLE MATERIAL)		
Clearance	ft	m
From floor	0	0
From outlet	6	1.8
From sides	2	0.6
From top	3	0.9
Locate 10ft from canvas or plastic tarpaulins or similar coverings and secure them to prevent flapping or movement due to wind action		



WARNING: Never leave the heater unattended while operating. Disconnect the heater from its power source when not in use.

SPECIFICATIONS

MODEL	HL45G	HF60G	HF125G	HF160G
Rating BTU/h	45k	40-50-60k	90-110-125k	120-135-155k
Fuel Consumption	2.1 lb/h	1.8/2.3/2.8 lb/h	4.4/5.1/5.8 lb/h	5.5/6.2/7.2 lb/h
Electrical Input	120V/60Hz/0.5A	120V/60Hz/0.5A	120V/60Hz/1.03A	120V/60Hz/1.03A
Manifold Pressure	11" W.C.	11" W.C.	8.7" W.C.	6.2" W.C.

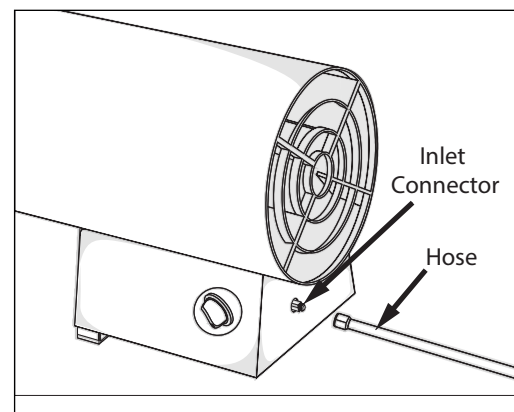
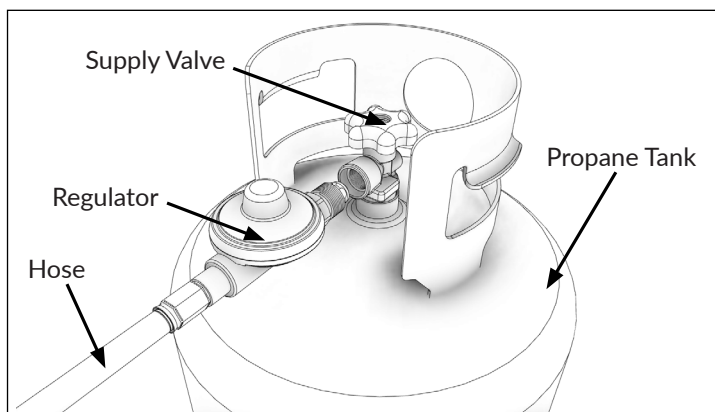
OPERATING INSTRUCTIONS

UNPACKING

1. Remove the heater from the carton.
2. Remove all packing materials applied to the heater for shipment.
3. Remove all items from the carton.
4. Check the heater for shipping damage. If heater is damaged, promptly inform PowerFast Products Group at (423) 837-5155.

INSPECTION AND PREPARATION

1. Check the heater for possible shipping damage. If there is visible damage or a missing part, immediately contact PowerFast Products Group for assistance at (423) 837-5155.
2. Inspect the hose assembly prior to using the heater. If there is evidence there is excessive abrasion or wear, or the hose is cut, replace the hose prior to operating the heater.
3. **DO NOT CONNECT THE POWER CORD TO AN OUTLET UNTIL YOU HAVE FINISHED THE PREPARATION.**
4. Connect the POL fitting of hose and regulator assembly to the propane cylinder by rotating the POL nut counterclockwise into the propane cylinder's valve outlet and securely tighten with a wrench.
5. Connect the hose to the heater by rotating the hose fitting clockwise.
6. Securely tighten all gas connections with a wrench.
7. Open the cylinder's gas valve and check all gas connections with a soap and water solution. **DO NOT USE A FLAME.** If bubbles appear, there is a leak. Tighten all of the connections and retest for leaks.
8. Unloosen the adjustment knob, set the heater to the desired height, and tighten the knob.



Connect the power cord to a 3-prong, grounded extension cord adequately rated for this application.

Extension Cord Wire Requirements:

- 6 to 10 feet (1.8 to 3 meters) long, use 18 AWG conductor.
- 11 to 100 feet (3.4 to 30.5 meters) long, use 16 AWG conductor.
- 101 to 200 feet (30.8 to 61 meters) long, use 14 AWG conductor.



**WARNING: Never leave the heater unattended while operating.
Disconnect the heater from its power source when not in use.**

LIGHTING INSTRUCTIONS

1. The Fan will operate automatically when the heater is powered up to an electrical outlet.
2. Allow the heater fan to run for 20 seconds to purge fuel (the first time you use the heater this step is unnecessary).
3. Slowly open the main gas valve at the propane cylinder.
4. Depress and rotate the valve control knob to the “★” position to ignite the fuel.
5. After the heater lights, keep the knob depressed for 30 seconds or until the thermocouple warms sufficiently to maintain combustion.
6. If the heater does not remain lit, repeat the lighting instructions.
7. Turn the knob to the desired heat setting.

SHUTDOWN INSTRUCTIONS

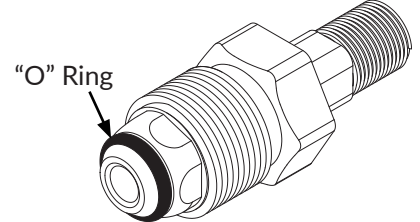
1. Tightly close the gas valve at the propane cylinder.
2. Allow the heater to purge any remaining gas from the hose.
3. Turn the control knob to the “O” position.
4. Disconnect the power cord from the power source.
5. Disconnect the hose assembly from the cylinder and store the cylinder outdoors.
6. Allow the heater to cool before moving or adjusting the heater.

RESTARTING AFTER SHUTDOWN

1. Securely close the gas valve at the propane cylinder.
2. Disconnect the heater from its power source.
3. Restart following “Start” procedure.

STORAGE AND MAINTENANCE

1. Inspect the heater before and after each use, and at least annually by a qualified service technician.
2. Inspect the hose assembly for abrasions or wear, or for cuts. If damaged, replace the hose prior to operating the heater. Before each use, check the soft “O” ring seal of the POL fitting. If the “O” ring is cut, scuffed, or otherwise damaged, replace it before using the heater.
3. Turn off the gas at the LP-gas supply cylinder(s) when the heater is not in use.
4. Store the propane cylinder in accordance with the Standard for the Storage and Handling of Liquefied Petroleum Gases, NFPA 58 and Natural Gas and Propane Installation Code, CSA B149.1. Store the cylinder outdoors and in accordance with Chapter 5 of the standard for Storage and Handling of Liquefied Petroleum Gases ANSI/NFPA 58 and CSA B 149.1, Natural Gas and Propane Installation Code.



SERVICING

At least annually, have the heater inspected and serviced by a qualified service technician. NEVER use a heater that has been modified from its original condition. For original manufacturer’s parts, contact PowerFast Products Group at (423) 837-5155.

For Troubleshooting Or Technical Support:
Call PowerFast Product Group At: (423) 837 - 5155
Or
Visit Us Online At: www.powerfastproducts.com



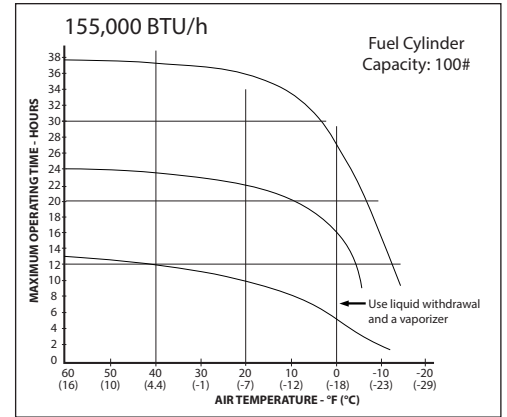
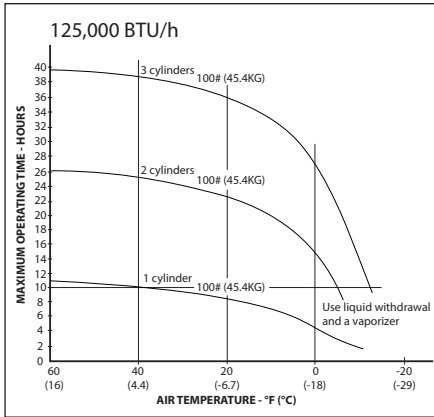
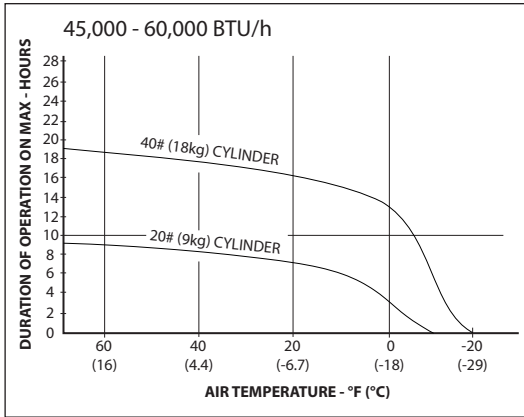
WARNING: Never leave the heater unattended while operating.
Disconnect the heater from its power source when not in use.

SIZE AND CAPACITY OF PROPANE CYLINDERS REQUIRED

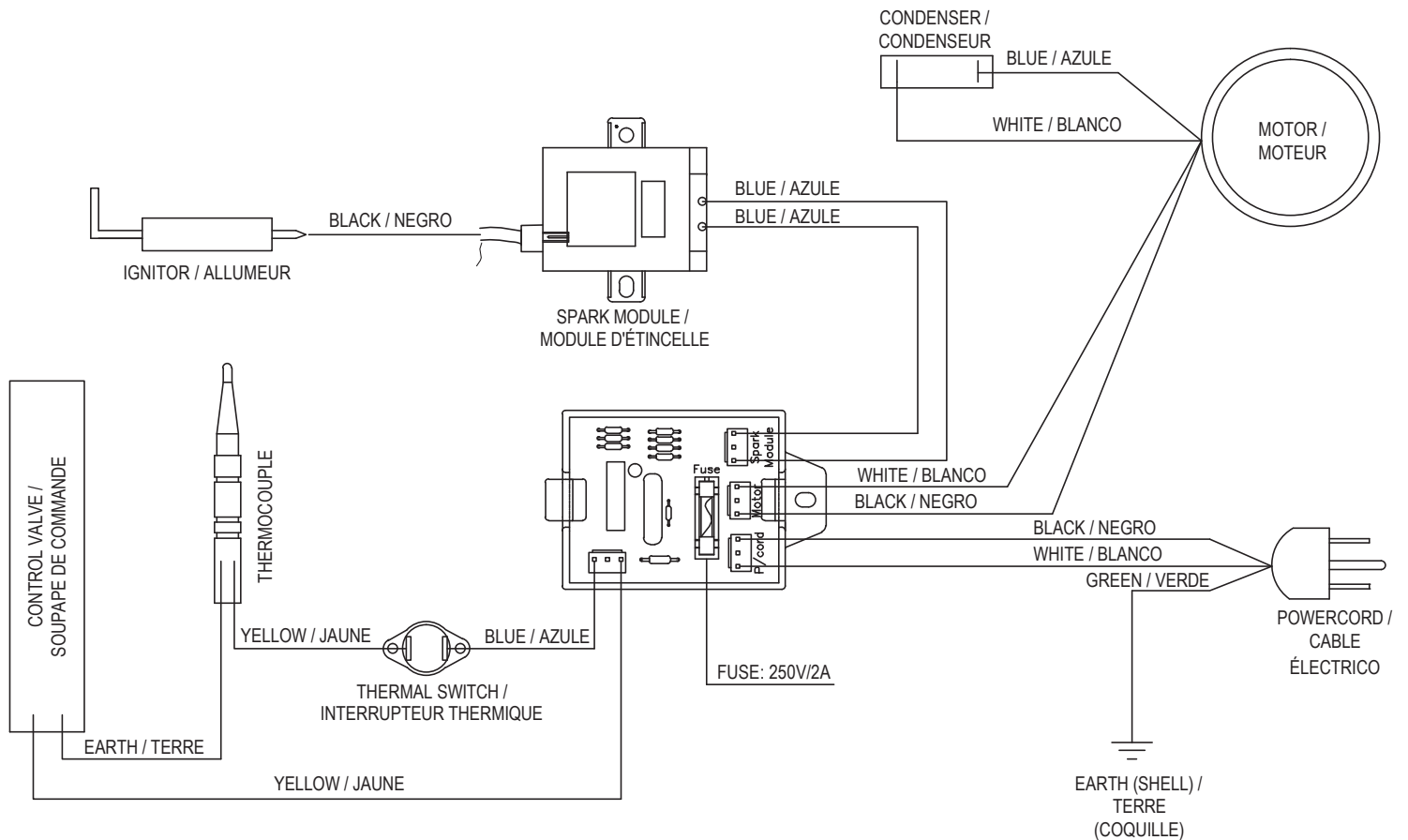
SIZE AND CAPACITY OF PROPANE CYLINDERS REQUIRED

The charts below show the approximate size of the cylinder required for these heaters. To use the chart:

1. Select the lowest air temperature expected (at the bottom of the chart).
2. Move straight up to time of operation desired (left side of chart).
3. Read the cylinder size required.

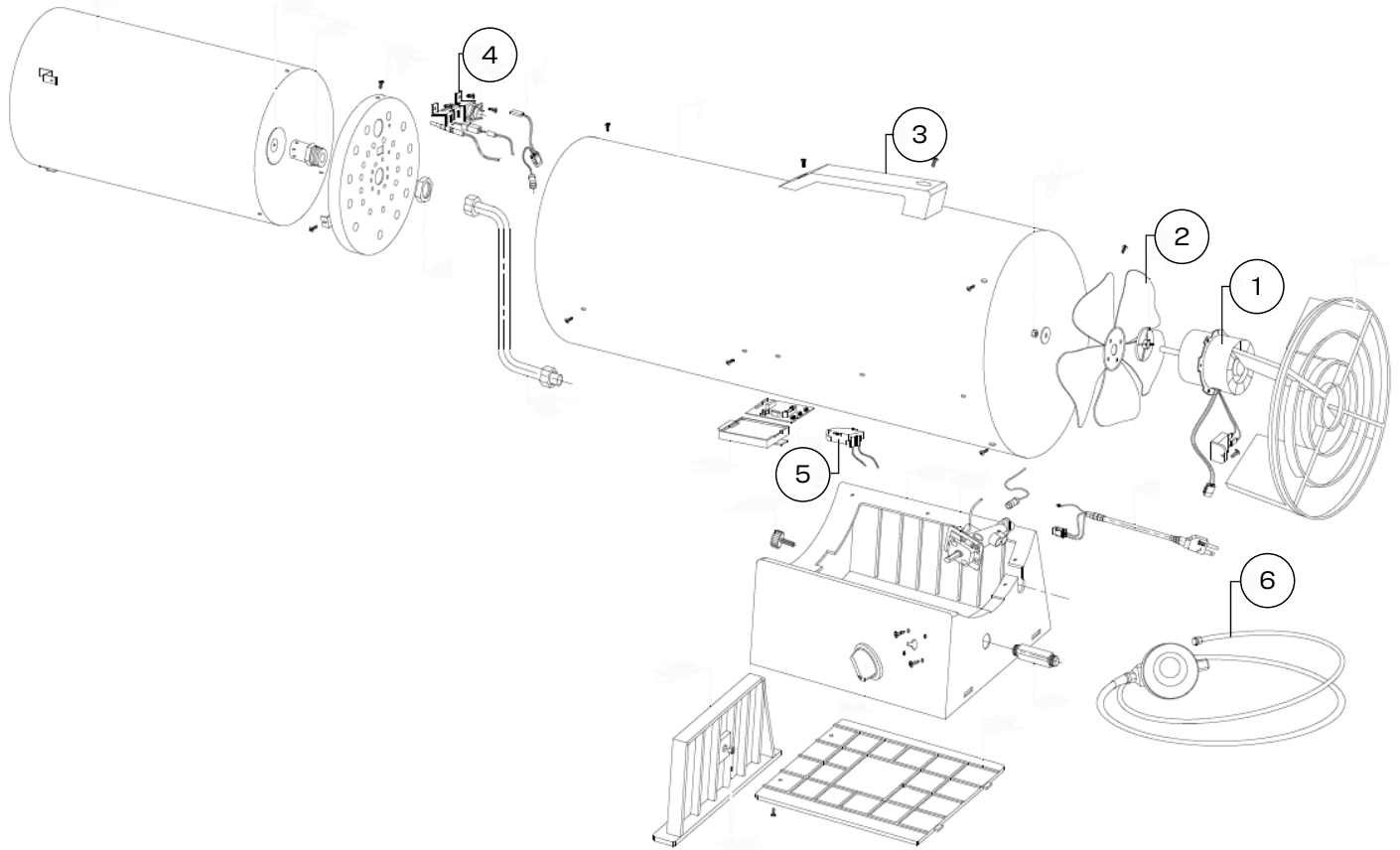


WIRING DIAGRAM



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PARTS DIAGRAM



KEY	DESCRIPTION	MODEL	PART NO
1	Motor Assembly	HF45G, HF60G	80835
		HF125G, HF160G	80836
2	Fan	HF45G, HF60G	893130
		HF125G, HF160G	893131
3	Handle		893127
4	Multi Bracket Assembly	HF45G, HF60G, HF125G	893128
		HF160G	893129
5	Spark Module		80837
6	Regulator Assembly	HF45G, HF60G	81323
		HF125G, HF160G	81324

In order to maintain warranty, components must be replaced using original manufacturers parts purchased through your dealer or directly from PowerFast Products Group (423) 837-5155. Use of third party components will void the warranty.



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Disconnect the heater from its power source when not in use.**



LIMITED WARRANTY

PowerFast warrants this product, to the original retail purchaser only, to be free from defects in material and workmanship for a period of one (1) year from the date of the initial purchase as evidenced on an invoice, canceled check, sales receipt, etc. In the event of a defect, this Limited Warranty shall be limited to the repair or replacement of parts, which prove defective under normal use and service within the limited warranty period, and which PowerFast deems at its reasonable discretion. THE LIMITED WARRANTY SET FORTH HEREIN IS THE SOLE WARRANTY PROVIDED TO PURCHASER AND IS IN LIEU OF ALL OTHER WARRANTIES AND REPRESENTATIONS, EXPRESS OR IMPLIED. POWERFAST MAKES NO REPRESENTATIONS OR WARRANTIES WHATSOEVER, EXPRESS OR IMPLIED, WITH RESPECT TO THE PRODUCT, OTHER THAN (i) THE LIMITED WARRANTY ABOVE, AND (ii) ANY IMPLIED WARRANTIES IMPOSED BY APPLICABLE LAW WHICH CANNOT BE WAIVED OR DISCLAIMED UNDER APPLICABLE LAW. ALL OTHER WARRANTIES OF ANY KIND, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY DISCLAIMED AND EXCLUDED TO THE FULLEST EXTENT NOT PROHIBITED BY APPLICABLE LAW. This Limited Warranty gives the purchaser specific legal rights; a purchaser may have other rights depending upon where he or she resides. Some states do not allow the exclusion or limitation of special, incidental or consequential damages, or state law may affect the duration of limitations, so the above exclusion and limitations may not be applicable.

OTHER LIMITATIONS: PowerFast disclaims all other warranties for products that are purchased from sellers other than authorized retailers or distributors. This product must be properly installed, maintained and operated in accordance with the instructions provided herein. Furthermore, PowerFast requires reasonable proof of the date of purchase from an authorized retailer or distributor. This Limited Warranty does not cover any operational failures or difficulties due to normal use and wear and tear, accident, abuse, misuse, alteration, misapplication, improper installation or improper maintenance or service by you or any third party. Failure to perform normal and routine maintenance on the product, shipping damage related to animals, and damage due to weather are not covered under this Limited Warranty. In addition, this Limited Warranty does not cover damage to the finish on the product, such as scratches, dents, discoloration, rust or other weather damage. This warranty does not apply to products purchased for rental use. PowerFast assumes no responsibility for any defects caused by third parties. PowerFast does not authorize any person or company to assume for it any other obligation or liability in connection with the sale, installation, use, removal, return, or replacement of its products, and no such representations are binding on PowerFast.

CLAIM PROCEDURE: All transportation costs for the return of the damaged product or parts will be the responsibility of the purchaser. Upon receipt of the product, PowerFast will examine it and determine if the product contains a defect. PowerFast will repair or replace and return the item, freight pr-paid. If PowerFast finds the item to be in normal operating condition, or not defective, the item will be returned freight collect. Purchaser shall specify the model number(s) and serial number(s) of any product(s) when making any claims with PowerFast. Please use the following to identify your product:

Model #: _____

Serial #: _____