

#### HF45K / HF75K / HF125K / HF175K / HF215K



#### **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.

#### **CANADIAN RESIDENTS:**

THIS HEATER SHALL BE OPERATED IN ACCORDANCE WITH THE REGULATION OF AUTHORITIES HAVING JURISDICTION AND CSA STANDARD B139.

#### **U.S. RESIDENTS:**

THE INSTALLATION OF THIS HEATER SHALL BE IN ACCORDANCE WITH THE REGULATION OF **AUTHORITIES HAVING JURISDICTION AND NFPA 31** 

This is an unvented oil direct-fired heater intended for space heating of buildings under construction and for temporary space heating of completed buildings when the products of combustion are discharged outdoors.

### 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



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.

> **Not for Use in Living Areas Suitable for Outdoor Use**



A Subsidiary of U.S. Stove Company 227 Industrial Dr., South Pittsburg, TN PH: (423) 837-5155 www.powerfastproducts.com



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.

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.

WARNING:

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.



- 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

Residents of New York City, NY:

New York Fire Code prohibits the storage, handling and use of kerosene fueled heaters for space heating. Any person violating that provision may be punished by a fine of up to \$10,000 and a term of imprisonment of up to 6 months.

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.

**Residents of Massachusetts:** 

Massachusetts State Law prohibits the use of this heater in any building which is used whole or in part for human habitation. Use of this device requires local fire department permit (M.G.L.C. 148, Section 10A)



WARNING:					
<ul> <li>DO NOT START HEATER WHEN CHAMBER IS HOT.</li> <li>DO NOT START HEATER WHEN EXCESS FUEL HAS ACCUMULATED IN THE CHAMBER.</li> <li>NOT FOR USE WITH AN EXTERNAL FUEL TANK.</li> <li>DO NOT USE GASOLINE OR CRANKCASE DRAINING, NAPHTHA OR VOLATILE FUELS.</li> <li>DO NOT FILL THE TANK WHILE THE UNIT IS OPERATING.</li> <li>FOR USE ON NON-COMBUSTIBLE FLOORING WITH MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS.</li> <li>HOT WHILE IN OPERATION. DO NOT TOUCH.</li> <li>KEEP CHILDREN, CLOTHING, PETS AND COMBUSTIBLES AWAY FROM HEATER.</li> </ul>	<ul> <li>STORE FUEL ACCORDING TO FEDERAL, STATE, AND/OR LOCAL AUTHORITIES.</li> <li>ALWAYS FILL THE HEATER OUTDOORS AND KEEP AWAY FROM OPEN FLAME.</li> <li>EQUIPMENT MUST BE GROUNDED.</li> <li>NEVER HANDLE HEATER WHILE HOT.</li> <li>NEVER TRANSPORT HEATER WITH FUEL IN THE TANK.</li> <li>WHEN USED WITH AN OPTIONAL THERMOSTAT OR IF EQUIPPED WITH A THERMOSTAT, THE HEATER MAY START AT ANY TIME.</li> <li>ALWAYS LOCATE THE HEATER ON A STABLE AND LEVEL SURFACE.</li> </ul>				
<ul> <li>NEVER POINT THE HEATER TOWARD A PROPANE CYLINDER.</li> <li>KEEP BULK FUEL STORAGE A MINIMUM OF 25 FEET (8 METERS) FROM HEATER.</li> </ul>	<ul> <li>ALLOW THE HEATER TO COOL BEFORE HANDLING OR TRANSPORTING.</li> <li>BEFORE MOVING THE HEATER, WAIT UNTIL THE HEATER HAS COMPLETELY COOLED AND BE CERTAIN THE FUEL CAP IS SECURELY AND TIGHTLY CLOSED.</li> </ul>				
	<b>A</b>				
WARNING: Do Not Tamper With The Heater. Have A Competent Serviceman Make Any Necessary Adjustments Or Repairs.	<ul> <li>WARNING:</li> <li>NEVER block the air inlet (rear) or air outlet (front)</li> <li>NEVER attach duct work in front or in rear of the heater.</li> </ul>				

#### 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.

<ul> <li>Do not use this heater for heating human living quarters.</li> <li>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.</li> <li>Do not use in unventilated areas</li> <li>Know the signs of CO and CO<sub>2</sub> poisoning: <ul> <li>Headaches, stinging eyes</li> <li>Dizziness, disorientation</li> <li>Difficulty breathing, feelings of being suffocated.</li> </ul> </li> <li>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</li> </ul>	<ul> <li>Hazard</li> <li>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</li> <li>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.</li> <li>Provide ventilation air exchange, either natural or mechanical, as required to maintain acceptable indoor air quality.</li> <li>Ensure that the flow of combustion and ventilation air exchange cannot become obstructed.</li> <li>As the building "tightens up" during the construction phases ventilation may need to be increased.</li> </ul>		
USA 8-Hr Time weighted average (OSHA 29 CFR 1926.55 App A)	USA-Ceiling Limit (Short Term Exposure Limit = 15 minutes)		
CO 50 ppm	СО	N/A	
CO <sub>2</sub> 5000 ppm	CO <sub>2</sub>	N/A	
NO <sub>2</sub> N/A	NO <sub>2</sub>	5 ppm	
Canada 8-Hr Time weighted average WorkSafe BC OHS Guidelines Part 5.1 and Ontario Workplaces Reg 833	Canada STEL (15 minutes Reg 833/1 hour WSBC WorkSafe BC OHS Guidelines Part 5.1 and Ontario Workplace Reg 833		
со	СО	100 ppm	
$CO_2$ NO <sub>2</sub> 5 ppm	CO <sub>2</sub>	15000 ppm (WSBC) 30000 ppm (Reg 833)	
	NO <sub>2</sub>	1.0 ppm (WSBC) 5.0 ppm (Reg 833)	

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

#### WARNING: MINIMUM CLEARANCE FROM COMBUSTIBLES

 FONT
 10 ft / 3.0 m

 SIDES
 3 ft / 1.0 m

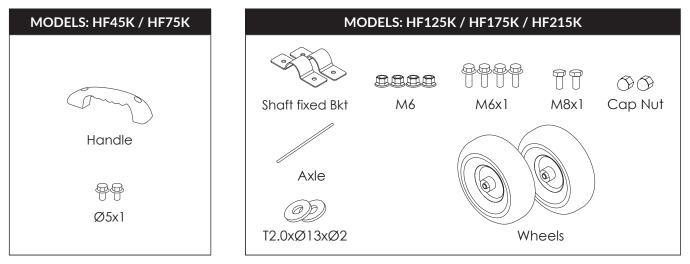
 TOP
 3 ft / 1.0 m

FOR USE ON NON-COMBUSTIBLE FLOORING WITH MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS.

#### **PRODUCT FEATURES**

GENERAL SPECIFICATIONS							
Model	Type of Fuel	BTU Rating	Pump Pressure	Fuel Tank Capacity	Fuel Consumption	Electrical Input	Fuse
HF45K	Kerosene	45,000 BTU	3.3 PSI	5.3 Gal	0.32 gal/h	120V, 60Hz /1.2 Amp	250V/10 Amp
HF75K	Kerosene	75,000 BTU	3.2 PSI	5.3 Gal	0.55 gal/h	120V, 60Hz /1.3 Amp	250V/10 Amp
HF125K	Kerosene	125,000 BTU	5.2 PSI	10.6 Gal	0.95 gal/h	120V, 60Hz / 2.1 Amp	250V/10 Amp
HF175K	Kerosene	175,000 BTU	6.0 PSI	13.2 Gal	1.32 gal/h	120V, 60Hz / 2.5 Amp	250V/10 Amp
HF215K	Kerosene	210,000 BTU	7.0 PSI	13.2 Gal	1.58 gal/h	120V, 60Hz / 2.7 Amp	250V/10 Amp

#### PARTS LIST



#### 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 Product Group at (423) 837-5155.

#### TOOLS REQUIRED FOR ASSEMBLY

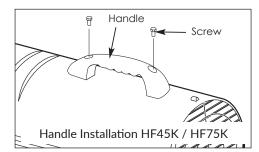
- Medium Phillips screwdriver
- M5 open, or adjustable wrench



### ASSEMBLY

#### FOR MODELS HF45K AND HF75K ONLY

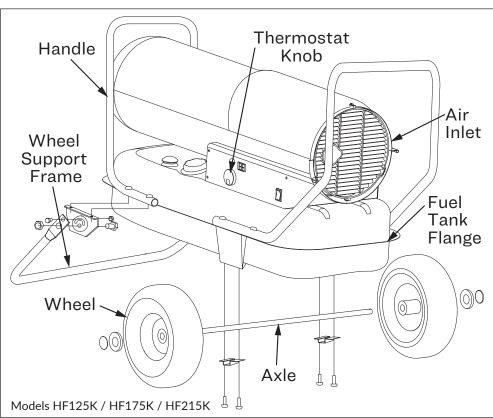
- 1. Align the holes in the upper housing with the two mounting holes on the handle as shown.
- 2. Secure handle through holes provided.



#### FOR MODELS WITH WHEELS

These models come complete with wheels and handles. Wheels, handles and mounting hardware are located in the shipping carton.

- 1. Loosely secure the Axle Bracket to the Wheel Support Frame.
- 2. Slide the axle through the Axle Bracket.
- 3. Install the wheels on the axle, with the valve facing outward.
- 4. Place the flat washers and fastening nut on the axle ends.
- 5. Tighten the Axle Brackets.
- 6. Position the Height Adjustment Pipe to align the hole as shown.
- 7. Insert and tighten the bolt (M8).



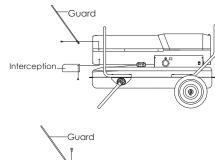
### **GUARD ASSEMBLY (FOR CANADA ONLY)**

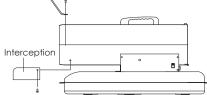
#### TO ATTACH THE GUARD

- 1. Remove the screws from the upper shell and set aside.
- 2. Align the holes in the Guard with the holes in the upper shell as shown.
- 3. Secure the guard to the upper shell by inserting and tightening the screws.

#### TO ATTACH THE INTERCEPTOR

- 1. Remove the screws from the lower shell and set aside.
- 2. Align the holes in the Interceptor with the holes in the lower shell as shown.
- 3. Secure the Interceptor to the lower shell by inserting and tightening the screws.





### PREPARATION FOR STARTING YOUR HEATER

Visually inspect the heater for signs of damage. If any damage is found do not operate the heater. Contact PowerFast Product Group for assistance at (423) 837-5155. Read, understand, and follow all of the instructions before assembling, operating or servicing this heater.

#### FUELING THE HEATER

Make certain the heater is level. Remove the fuel cap and fill the fuel tank with clean kerosene for optimal performance of this heater. This heater has been factory approved for use with JP8/Jet A, #1 and #2 Fuel Oil, #1 and #2 Diesel. Diesel does not burn as clean as 1-K kerosene, and care should be taken to provide more fresh air ventilation to accommodate any added contaminants that may be produced during operation of the heater. In extreme cold temperatures, it is recommended a fuel stabilizer formulated to remove condensation and to prevent the fuel from gelling be added to the fuel tank. Do not overfill the fuel tank. Replace the fuel cap after filling the fuel tank.

- NEVER store kerosene in the living space. Kerosene should be stored in a well ventilated area outside the living area.
- NEVER store kerosene in direct sunlight or near a source of heat.
- NEVER use kerosene that has been stored from one season to the next. Kerosene deteriorates over time. OLD KEROSENE WILL NOT BURN PROPERLY IN THIS HEATER.
- Use 1-K kerosene in this heater. #1 fuel is a suitable substitute.

#### WARNING:

- DO NOT START HEATER WHEN THE HEATER IS HOT.
- DO NOT START HEATER WHEN EXCESS FUEL HAS ACCUMULATED IN THE CHAMBER.
- NOT FOR USE WITH AN EXTERNAL FUEL TANK.
- DO NOT USE GASOLINE OR CRANKCASE DRAINING, NAPHTHA OR VOLATILE FUELS.

NEVER FILL THE FUEL TANK IN LIVING SPACE

• ALWAYS FILL THE FUEL TANK OUTDOORS AWAY FROM LIVING AREAS.

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The first time you light the heater, it should be done OUTDOORS. This allows the oils, and other lubricants used in the manufacturing process to be burned off outside.

#### 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.
- 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.
- 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.
- People with breathing problems should consult a physician before using the heater.
- Get fresh air at once! Have the heater serviced.

#### CONNECTING TO THE POWER SOURCE

After filling the fuel tank with approved fuel, connect the plug to a 3-prong, grounded extension cord adequately rated for this application.

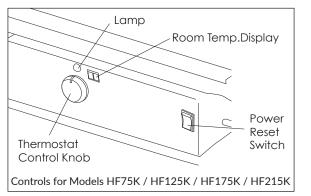
Extension Cord Wire Size Requirements:

- 6 to 10 feet (1.8 to 3 meters) long, use 18 AWG conductor.
- 11 to 100 feet (3.4 to 30.53 meters) long, use 16 AWG conductor.
- 101 to 200 feet (30.8 to 61 meters) long, use 14 AWG conductor.



#### ADJUSTING THE THERMOSTAT

- Turn the Thermostat Control Knob clockwise to the desired heat setting. Push the Power Switch to the "ON" position. The Power Indicator Lamp will light and the heater will start.
- If heater does not start, the thermostat setting may be lower than the ambient temperature.
- Turn the Thermostat Control Knob to a higher temperature setting.
- If the heater still does not start, turn the Power Switch "OFF". Wait 10 seconds, Turn the Power Switch "ON". NOTE: The major electrical components of this heater are protected by a safety fuse mounted to the PCB board located behind the Right Side Panel. If your heater fails to start, check this fuse first and replace as necessary. You should also check your power source to insure that proper voltage and frequency are being supplied to the heater.

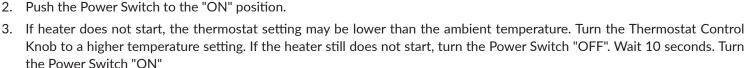


#### SHUTTING DOWN THE HEATER

- 1. Push the Power Button to the "OFF" position.
- Wait for heater to cool, then unplug the heater from 2. its power source.

#### **RESTARTING THE HEATER**

- 1. Wait 10 seconds after powering down the heater.
- 2. Push the Power Switch to the "ON" position.



#### **RESTARTING THE HEATER AFTER SAFETY SHUTDOWN**

- 1. Push the Power Button to the "OFF" position.
- 2. Unplug the heater from its power source.
- 3. Wait 10 seconds for the system to reset.
- 4. Plug the heater into its power source.
- 5. Push the Power Button to the "ON" position.

### MAINTENANCE

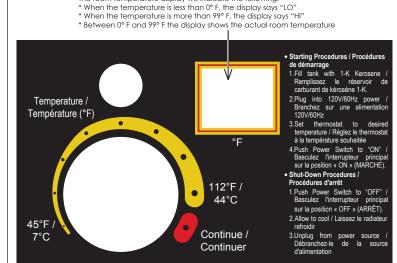
WARNING: DO NOT TAMPER WITH THE HEATER. HAVE A COMPETENT SERVICEMAN MAKE ANY NECESSARY ADJUSTMENTS OR REPAIRS.

WARNING: DISCONNECT THE HEATER FROM ITS POWER SOURCE BEFORE SERVICING.

WARNING: HOT WHILE IN OPERATION. DO NOT TOUCH. ALLOW HEATER TO COOL BEFORE SERVICING.



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



The room temperature display will indicate the following:

#### **BEFORE OPERATING THIS HEATER**

Visually inspect for damage. Some parts may have become loose or were damaged from handling. Be certain the fuel cap is securely fastened and check that the drain plug (if applicable for your model) is installed properly. Replace or repair any damaged parts before operating this heater. USE ORIGINAL EQUIPMENT REPLACEMENT PARTS. Use of third party or other alternate components will void the warranty and may cause unsafe operating conditions. If you need replacement parts or require assistance, contact PowerFast Product Group at (423) 837-5155.

#### **AIR INTAKE FILTER**

Dirty Intake Filters can cause an imbalance in the fuel-to-air mixture, resulting in rough starting, poor combustion and odors. Never operate a heater without the filters in place.

Remove and wash the intake with a mild detergent and water. Thoroughly dry and replace the filter. Clean the filters every 500 hours as needed.

#### AIR OUTPUT FILTER AND LINT FILTER

The Output and the Lint Filter are not designed to be cleaned and reused. Do not wash these filters. Replace dirty filters at the start of each season.

#### **REPLACING AIR FILTERS**

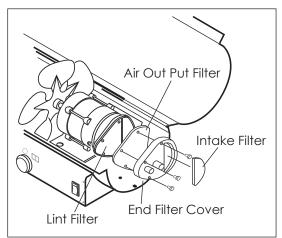
- 1. Remove Upper Shell and Fan Guard.
- 2. Remove End Filter Cover screws using a medium Phillips screwdriver.
- 3. Remove End Filter Cover.
- 4. Replace the Air Intake Filter, Air Output Filter, and Lint Filter.
- 5. Reinstall End Filter Cover.
- 6. Reinstall Fan Guard and Upper Shell.

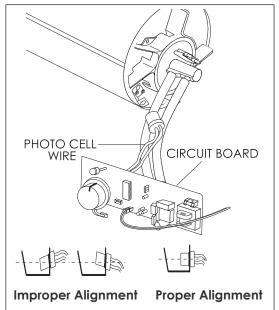
#### PHOTOCELL

The optical lens can become dirty or clouded in use. Clean the lens using isopropyl alcohol or water and a soft cloth or cotton swab every 500 hours or as needed.

#### **REPLACING THE PHOTOCELL**

- 1. Remove Upper Shell.
- 2. Remove Right Side Panel.
- 3. Disconnect wires from circuit board (PCB).
- 4. Twist to loosen Photocell from the Photocell Bracket.
- 5. Clean lens or replace Photocell.
- 6. Insert Photocell into Photocell Bracket.
- 7. Properly align the Photocell within the Bracket.
- 8. Attach wires to circuit board.
- 9. Reinstall Right Side Panel.
- 10. Secure Upper Shell.







#### NOZZLE AND SPARK PLUG

Contaminated fuel, build-up of carbon, and accumulated dirt can affect the performance of these parts. Clean or replace these parts every 500 hours or as needed to ensure optimal performance of the heater.

#### **REPLACING THE NOZZLE**

- 1. Remove Upper Shell.
- 2. Disconnect Air and Fuel Lines from the Nozzle Rod.
- 3. Remove ignitor wires from the Spark Plug.
- 4. Remove Spark Plug from the Nozzle Rod using a Phillips screwdriver.
- 5. Twist the Nozzle Rod counterclockwise to remove it from the Burner Head.
- 6. Carefully remove the Nozzle from the Nozzle Rod using a 5/8" socket wrench.
- 7. Soak the nozzle in clean 1-K Kerosene to loosen particles.
- 8. Inject compressed air into the front opening of the nozzle to loosen particulate. **WEAR SAFETY GLASSES.**
- 9. Install new (or cleaned) Nozzle into Nozzle Rod and tighten firmly.
- 10. Reassemble by reversing steps listed above.

#### **REPLACING THE SPARK PLUG**

- 1. Remove Upper Shell.
- 2. Remove igniter wire from Spark Plug.
- 3. Remove Spark Plug from Nozzle Rod using medium Phillip screwdriver.
- 4. Clean and re-gap the Spark Plug electrodes to 0.140 inches (3.5 mm) gap.
- 5. Reinstall Spark Plug into Nozzle Rod.
- 6. Attach igniter wires to Spark Plug.
- 7. Secure Upper Shell.

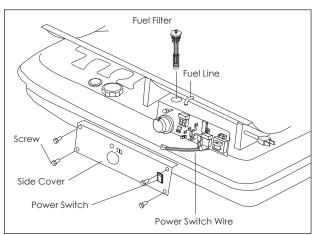
### SEASONAL MAINTENANCE SCHEDULE

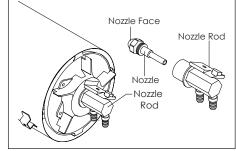
#### **FUEL FILTER**

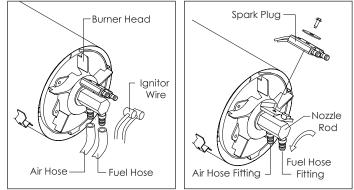
The Fuel Filter should be cleaned or replaced at the start of the season and as needed throughout the season to ensure optimal performance by the heater. Clean the Fuel Filter by rinsing the screen with clean 1-K Kerosene.

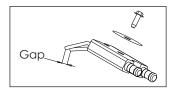
Replacing the Fuel Filter

- 1. Remove the Right Side Panel screws using a medium Phillips screwdriver.
- 2. Remove Side Cover.
- 3. Disconnect the Fuel Line from the Fuel Filter neck.
- 4. Turn Fuel Filter counterclockwise 90 degrees using an adjustable wrench.
- 5. Pull upwards and remove.
- 6. Wash Fuel Filter with clean 1-K Kerosene.









- 7. Insert Fuel Filter in the Fuel Tank and using adjustable wrench turn the Filter 90 degrees clockwise.
- 8. Attach Fuel Line to Fuel Filter neck.
- 9. Reinstall side cover with screws provided.

#### ADJUSTING PUMP PRESSURE

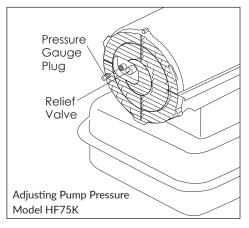
After hours of use it may be necessary to adjust the Pump Pressure.

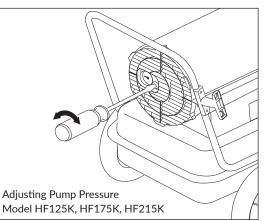
#### If the heater is not producing a strong flame:

Increase the pressure by turning the adjustment screw clockwise.

#### If the heater is producing a flame that extends beyond the end of the heater:

Reduce the pressure by turning the adjustment screw counterclockwise.





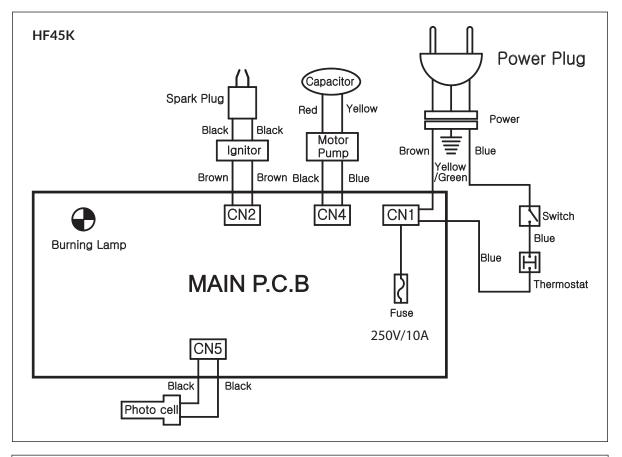
MODEL	HF45K	HF75K	HF125K	HF175K	HF215K
PUMP PRESSURE	3.3 PSI	3.2 PSI	5.2 PSI	6.0 PSI	7.0 PSI

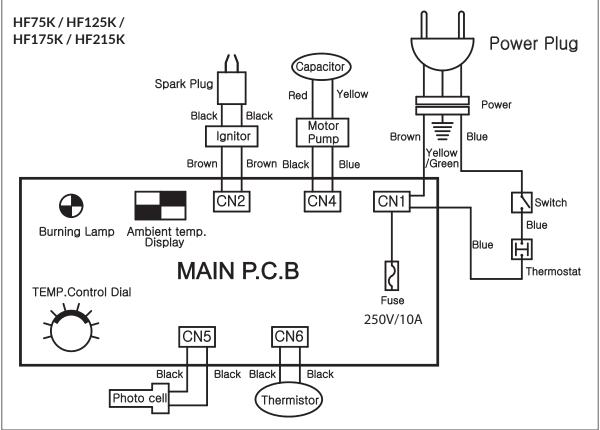
## TROUBLESHOOTING

	POSSIBLE CAUSE	CORRECTIVE ACTION
	Photocell (Flame Color Checking Sensor) Error	
E1	Oil Shortage Bad Photocell (Flame Sensor) Incomplete Combustion Contamination of Fuel Filter Ignition Failure	Charge Fuel (Fill the fuel if needed) Check and clean or replace Photocell (Flame Sensor) Using Designated Fuel Clean or replace Fuel Filter Check Wire Connection Check Spark Plug For Normal Firing (clean or replace if needed)
	Temperature Sensor (Thermister) Error	
E2	Bad Connection or Sensor Error	Check Wire Connection Replace Sensor
LO	Below 1°F	Normal
HI	Over 99°F	Normal
ОН	Heater stops when the temperature reaches to 140°F	Restart After Cooling
CN	Continuously operating without set- temperature	Normal
Blinking	Error during operation	Check Error Code Reset to Restart

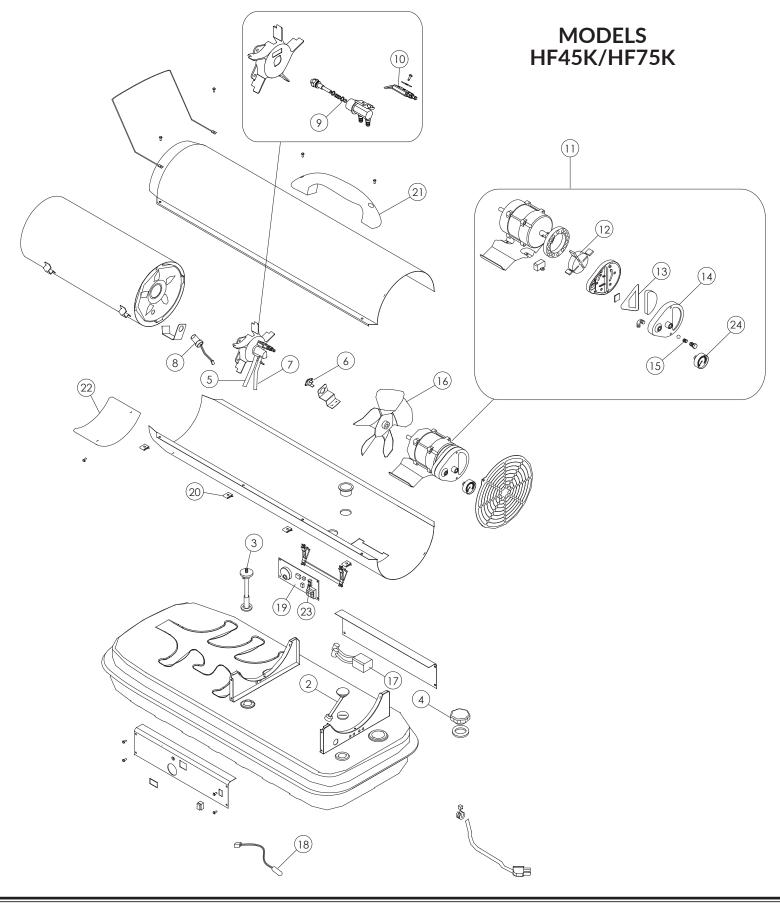


### **CIRCUIT DIAGRAM**



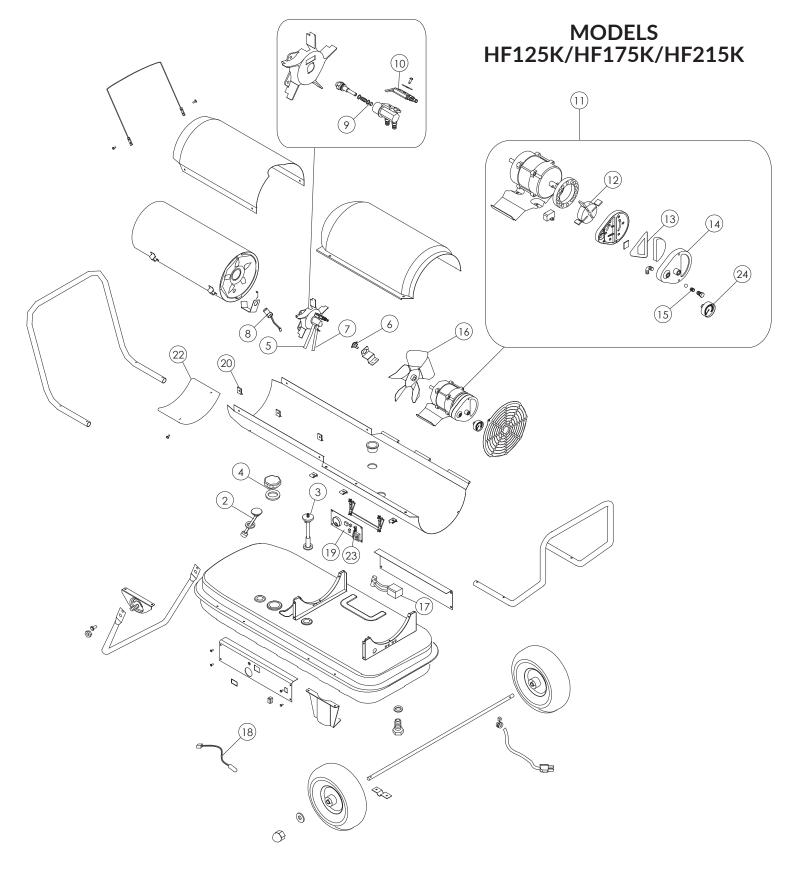


### PARTS DIAGRAM





### PARTS DIAGRAM





### PARTS LIST

KEY	DESCRIPTION	MODEL	PART NO
1	Drain Plug	HF125K, HF175K, HF215K	893090
	Fuel Cause	HF45K, HF75K	892822
	Fuel Gauge Assembly	HF125K, HF175K, HF215K	892823
	Evel Eller	HF45K, HF75K	892824
3	Fuel Filter Assembly	HF125K, HF175K, HF215K	892825
4	Fuel Cap Assembly	,	892826
		HF45K, HF75K	892813
5	Air Line	HF125K, HF215K	892814
		HF175K	892815
6	Thermostat Limit C	80719	
	Fuel Line	HF45K, HF75K	893091
7		HF125K, HF215K	893092
		HF175K	893093
8	Photocell	80819	
	Nozzle Assembly	HF45K	893094
		HF75K	892827
9		HF125K	892828
		HF175K	892829
		HF215K	892830
10	Spark Plug	80729	
	Motor & Pump Assembly	HF45K	80821
		HF75K	80742
11		HF125K	80743
		HF175K	80744
		HF215K	80745

KEY	DESCRIPTION	MODEL	PART NO
12	Rotor Kit	HF45K, HF75K, HF125K, HF175K	893075
		HF215K	893076
13	Air Filter Kit		892831
14	End Filter Cover		892816
15	Pump Adjustment k	Kit	83759
		HF45K	893082
		HF75K	893083
16 Fan Assembly	Fan Assembly	HF125K	893084
		HF175K	893085
		HF215K	893086
		HF45K, HF75K	80727
17	17 Igniter	HF125K, HF175K, HF215K	80726
18	Thermistor	tor HF75K, HF125K, HF175K, HF215K	
19	РСВ	80728	
20	Clips	83790	
21	Top Handle HF45K, HF75K		892819
22	Heat Shield	HF45K, HF75K	893077
		HF125K, HF175K, HF215K	893074
23	Fuse 250V/10A	80818	
24	Pressure Gauge	81322	

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





# 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.

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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 #: \_\_\_\_\_