

LAVOR

SIMPLY STRONGER

User's Manual & Operating Instructions

Model Numbers FF70 / FF125 / FF175 / FF215



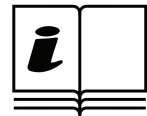
FF70



FF125



FF175



CONSUMER: READ AND SAVE THESE INSTRUCTIONS

⚠ DANGER **GENERAL HAZARD WARNING:**
READ AND UNDERSTAND ALL OF THE INSTRUCTIONS IN THIS MANUAL BEFORE ASSEMBLING, STARTING, OR SERVICING THE HEATER. Be sure to comply with the instructions and warnings provided with this heater. Failure to comply can result in fire or explosion that can cause property loss, bodily injury, or loss of life. Only persons who can follow and understand these instructions should operate or service this heater.

⚠ DANGER **NOT FOR USE IN RESIDENTIAL LIVING AREAS OR IN ENCLOSED SPACES WITHOUT ADEQUATE VENTILATION. INDOOR USE PERMITTED ONLY FOR THE TEMPORARY HEATING OF BUILDINGS OR STRUCTURES UNDER CONSTRUCTION, ALTERATION OR REPAIR.** This is an unvented portable heater that uses air (Oxygen) from within the area in which it is used. Failure to provide adequate combustion and ventilation air will result in asphyxiation, carbon monoxide poisoning, bodily injury or death. Refer to "Ventilation" on Page 7.

⚠ WARNING This appliance shall be installed in accordance with the rules in force, and used only in sufficiently ventilated space. Consult instructions before installation and use of this appliance.

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Safety Information

▲ WARNING FIRE, BURN, INHALATION AND EXPLOSION HAZARD. Keep combustibles such as; building materials, paper or cardboard a safe distance away from the heater as recommended by these instructions. Never use the heater in spaces which contain products such as gasoline, solvents, paint thinners, dust particles, volatile or airborne combustibles or any unknown chemicals. This is an unvented portable heater. It uses air (Oxygen) from the area in which it is used. Adequate combustion and ventilation air must be provided. Refer to “Ventilation” on page 7. Bulk fuel storage should be a minimum of 25 feet from heater.

▲ WARNING DO NOT OPERATE THIS HEATER UNTIL YOU HAVE READ AND THOROUGHLY UNDERSTAND THESE SAFETY AND OPERATING INSTRUCTIONS.
Failure to comply with the precautions and instructions provided with this heater can result in death, serious bodily injury, property loss or damage from the hazards of fire, soot production, explosions, burns, asphyxiation or carbon monoxide poisoning. Only persons who can read and understand these instructions should use or service this heater.

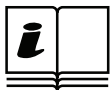
▲ WARNING DO NOT START THE HEATER WHEN EXCESS OIL HAS ACCUMULATED.

▲ WARNING DO NOT START THE HEATER WHEN THE CHAMBER IS HOT.

THE INSTALLATION OF THIS HEATER SHALL COMPLY WITH THE REGULATIONS OF THE AUTHORITIES HAVING JURISDICTION.

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience or and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

***i* Look for this icon throughout the manual for helpful tips on how to assemble, use and clean your KFA Heater.**



Read The Instruction manual: When this symbol is marked on a product, it means that the instruction manual must be read.



WARNING! Never touch heater until heater has cooled off.

Safety Information

▲ WARNING RISK OF INDOOR AIR POLLUTION!

The products described in this manual are paraffin direct-fired, forced air heaters. Kerosene forced air heaters are primarily intended for use for temporary heating of buildings under construction, alteration or repair. Direct-fired means that all of the combustion products of the heater enter the heated space. This appliance is rated at 98% combustion efficiency, but does produce small amounts of carbon monoxide. Carbon monoxide is toxic. Humans can tolerate

▲ WARNING CARBON MONOXIDE POISONING MAY LEAD TO DEATH!

only small amounts of carbon monoxide and so precautions should be taken to provide proper ventilation. Failure to provide proper ventilation in accordance with the instructions in this manual can result in death.

People with breathing problems should consult a physician before using this heater.

Early signs of carbon monoxide poisoning resemble the flu. Symptoms of improper ventilation / carbon monoxide poisoning are:

**Headache • Dizziness • Nausea • Dry Mouth
Sore Throat • Burning of Nose and Eyes**

If you experience any of these symptoms: **GET FRESH AIR AT ONCE!** Have your heater serviced and check for proper ventilation. Some people are more affected by carbon monoxide than others. These include: pregnant women, those with heart or lung problems, anemia or those under the influence of alcohol or at high altitudes.

Not For Indoor Use. Indoor use permitted only for the temporary heating of buildings under construction, alteration or repair! Provide at least a three square foot (2,800 sq cm) opening of outside air for every 100,000 Btu / Hr heater rating. Refer to "Ventilation" on page 7 for further instructions.

▲ WARNING RISK OF ELECTRIC SHOCK!

ALWAYS use only the electrical power (voltage and frequency) specified on the model plate of the heater. ALWAYS use only approved, grounded socket and properly rated extension cables. ALWAYS unplug the heater when not in use. ALWAYS install the heater so that it is not directly exposed to water spray, rain, dripping water, or wind. If the supply cord is damaged, it must be replaced by a special cord or assemble available from the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard

▲ WARNING RISK OF BURNS, FIRE AND EXPLOSION!

NEVER use fuels such as gasoline, benzene, paint thinners or other oil compounds in this heater. NEVER refill the heater's fuel tank while the heater is operating or still hot. This heater is **EXTREMELY HOT** while in operation. NEVER block air inlet (rear) or air outlet (front). NEVER use duct work in front or rear of heater. NEVER move or handle heater while still hot. NEVER transport heater with fuel in tank. NEVER use with an external fuel tank. Keep all combustible materials away from this heater.

▲ WARNING CAUTION! HOT WHILE IN OPERATION. DO NOT TOUCH. KEEP CHILDREN, ANIMALS, CLOTHING AND COMBUSTIBLES AWAY FROM HEATER.

Minimum Clearance From Combustibles					
	FF45	FF70	FF125	FF175	FF215
Top	4 ft (122 cm)	4 ft (122 cm)	4 ft (122 cm)	4 ft (122 cm)	4 ft (122 cm)
Sides	4 ft (122 cm)	4 ft (122 cm)	4 ft (122 cm)	4 ft (122 cm)	4 ft (122 cm)
Front	8 ft (244 cm)	8 ft (244 cm)	8 ft (244 cm)	8 ft (244 cm)	8 ft (244 cm)

ALWAYS locate heater on a stable and level surface. If your heater is equipped with a thermostat, once it is plugged in, it can start at anytime in accordance with the thermostat setting.

Specifications

Model #	FF45	FF70	FF125	FF175	FF215
Rating: kW	13.2	20.5	36.6	51.3	63.0
Fuel Consumption: L/Hr	1.32	2.00	3.60	5.07	6.17
Fuel Tank Capacity: Liters	19	19	38	49	49
Pump Pressure: PSI /BAR	3.0 / 0.21	3.7 / 0.26	4.5 / 0.31	7.5 / 0.52	8.0 / 0.55
Volts: AC/Hz	240VAC / 50Hz	240VAC / 50Hz	240VAC / 50Hz	240VAC / 50Hz	240VAC / 50Hz
Phase	Single	Single	Single	Single	Single

Specifications subject to change without notice.

Features

Models: FF45 / FF70

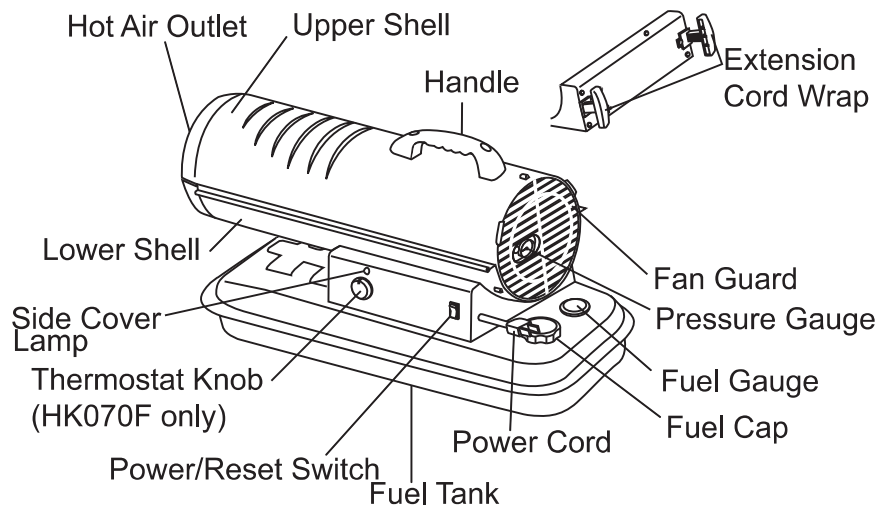


Figure 1

Models: FF125 / FF175 / FF215

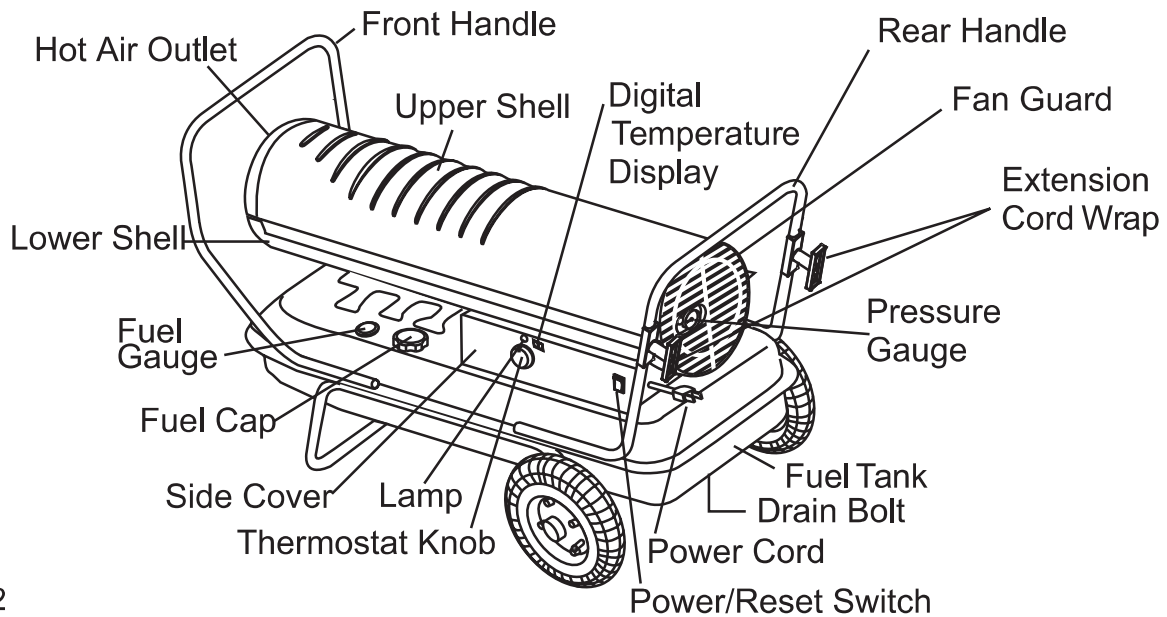


Figure 2

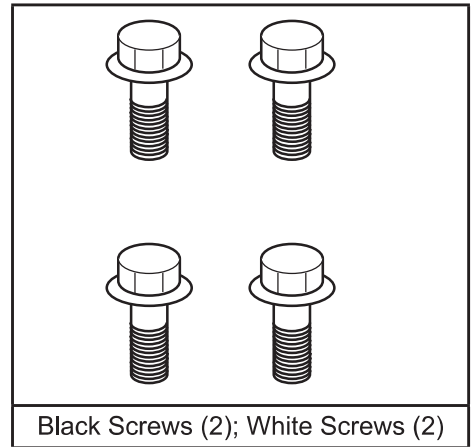
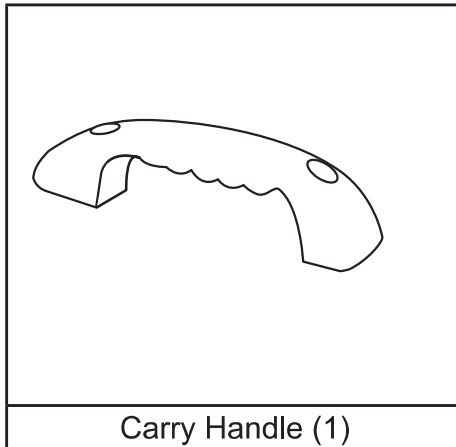
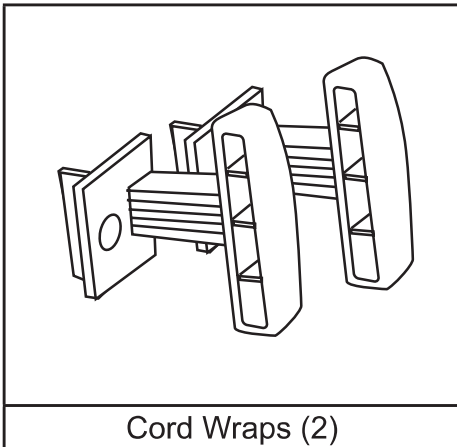
Assembly Instructions

Models: FF45 / FF70

- Remove the heater and all packaging materials from the shipping carton

Note: Save the box and packaging materials for future storage.

What's In The Box



Carry Handle Assembly

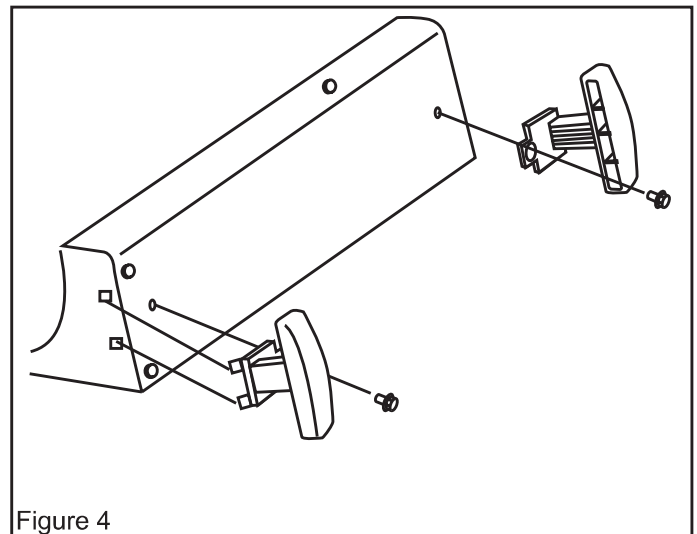
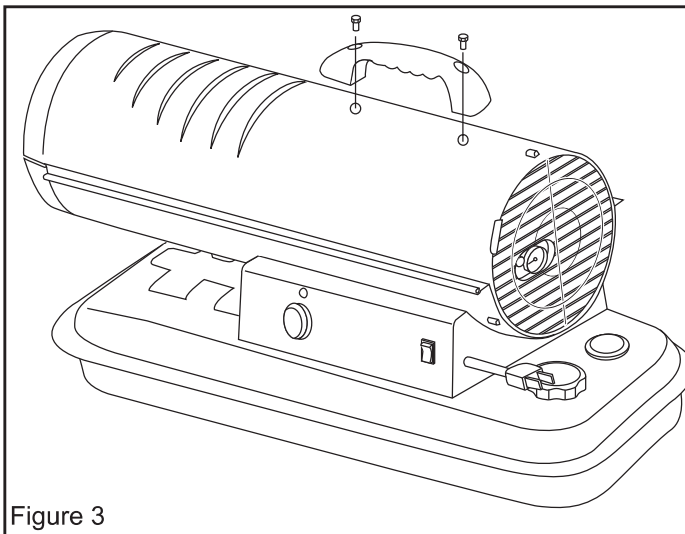
1. Align holes in the upper housing with the 2 holes in the handle as shown in Figure 3.
2. Insert screws and tighten firmly.

Cord Wrap Assembly

1. Insert tabs into square slots in shell support and line up screw holes as shown in Figure 4.
2. Insert screws and tighten firmly.

Tools Needed:

- Phillips Head Screw Driver



Assembly Instructions

Models: FF125 / FF175 / FF215

- Remove the heater and all packaging materials from the shipping carton.

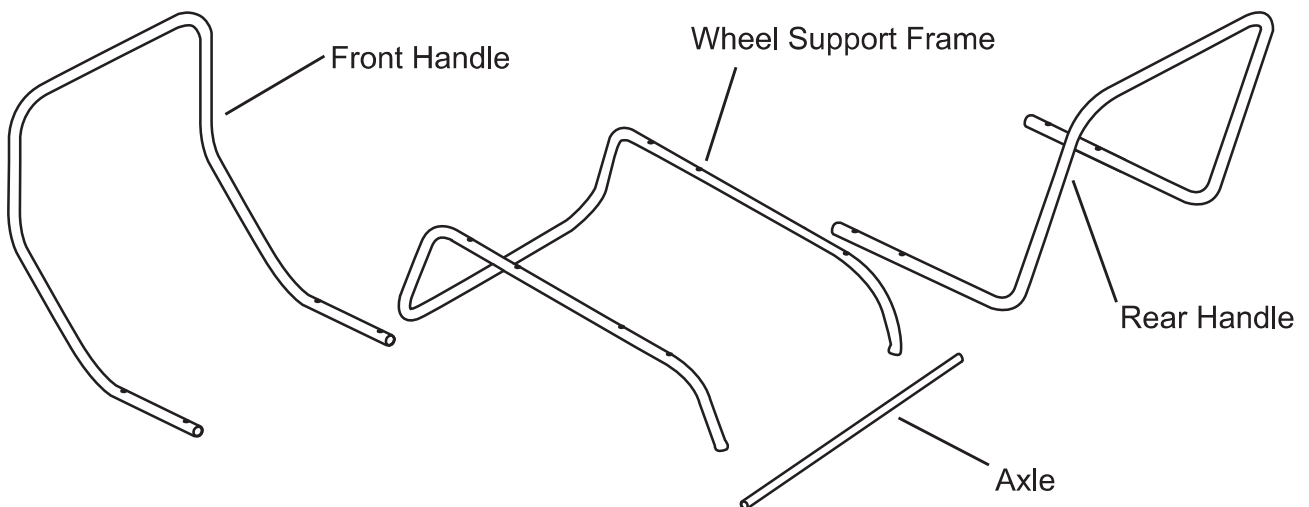
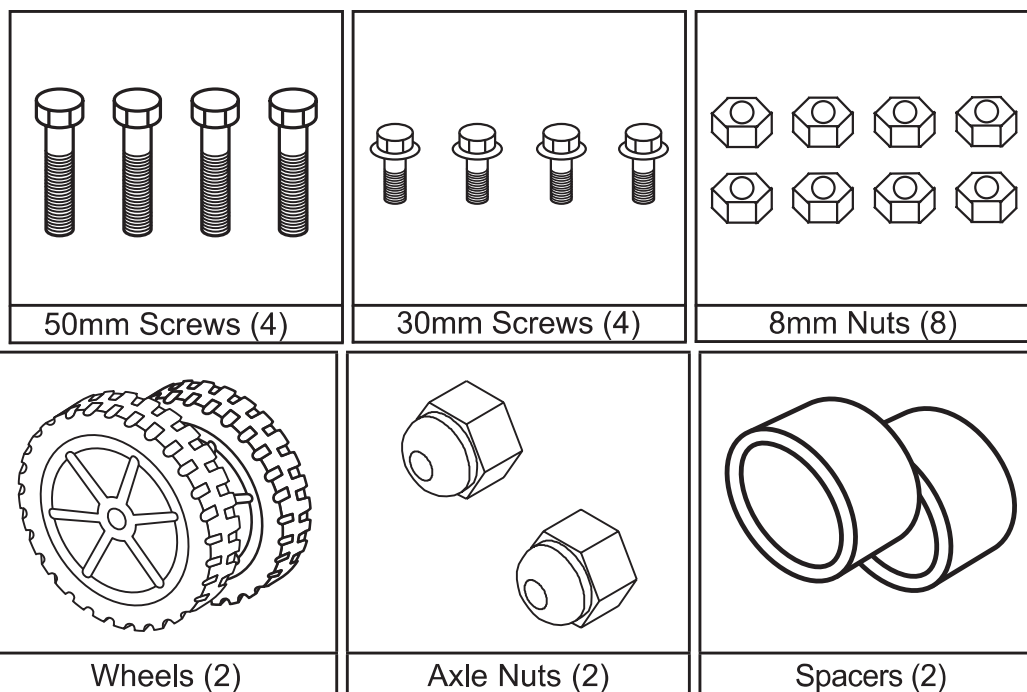
i *Tip: Be sure to remove the axle from the side of the Styrofoam packaging.*

Tools Needed:

- Phillips Head Screw Driver
- 8 mm open end wrench
- 19 mm open end wrench

i *Tip: Use a power screwdriver and locking wrench for easier assembly.*

What's In The Box

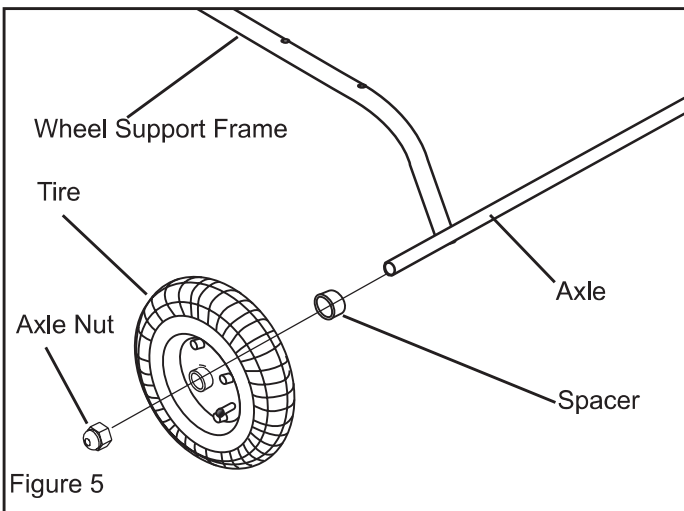


Assembly Instructions

Models: FF125 / FF175 / FF215

1. Insert axle through holes in wheel support.
2. Slide washer, then spacer onto axle.
3. Slide wheel onto axle and hold in place with the axle nuts. (See Figure 5).

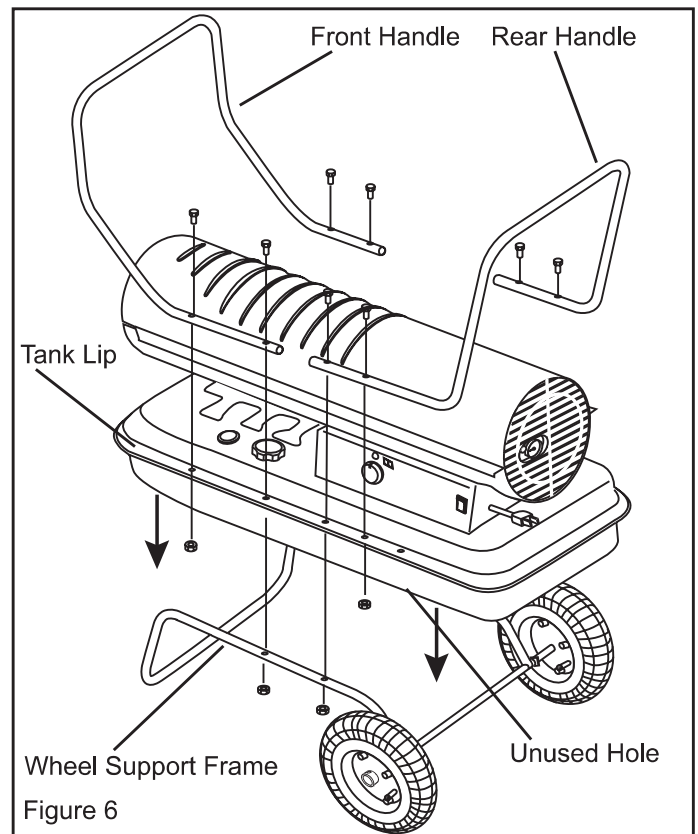
10. Secure the rear handle with (2) short screws (30 mm) and (2) nuts and tighten firmly
11. Replace wheels and tighten with the wheel nuts.
12. Tilt heater back down onto wheels and check all screws and nuts to make sure they are secure.



i **Tip: Do not tighten the nuts fully. You will need to remove the wheels in a later step.**

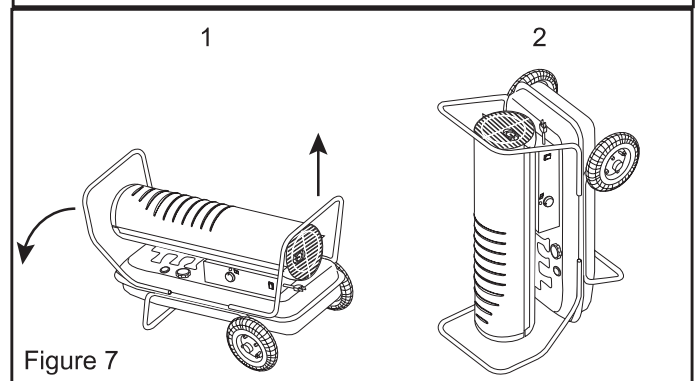
4. Place heater on wheel support and line up holes on the fuel tank lip.
5. Attach front handle with (2) long screws (50 mm) and (2) nuts through the second hole from the front on both sides of the tank lip and wheel support frame and tighten firmly.
6. Insert (2) short screws (30 mm) through the first hole from the front in the tank lip and tighten firmly. Make certain all (4) screws are secure.
7. Attach rear handle with (2) long screws (50 mm) and (2) nuts through the third hole from the rear of the heater on either side. (See Figure 6)
8. Tilt the heater up gently so it is resting on the front handle.

i **Tip: You will secure the back of the rear handle in a later step by tilting the heater up the front handle as shown in figure 7**



NOTE: DO NOT do this if there is fuel in the tank.

9. Remove the wheels to secure the second set of screws through the rear handle.



Operation

Fueling The Heater:

Paraffin

For optimal performance of this heater, it is strongly suggested that paraffin be used. Paraffin has been refined to virtually eliminate contaminants, such as sulfur, which can cause a rotten egg odor during the operation of the heater. Using diesel fuel can cause excess soot production. Do not use Bio-Diesel as this fuel will damage your heater's seals and filter.

▲ DANGER NEVER REFUEL THIS HEATER WHILE IT IS HOT OR OPERATING. FIRE OR EXPLOSION COULD RESULT.

▲ CAUTION NEVER FILL THE FUEL TANK INDOORS. ALWAYS FILL THE TANK OUTDOORS. BE SURE THAT THE HEATER IS ON LEVEL GROUND WHEN FUELING, AND NEVER OVERFILL THE TANK.

▲ WARNING DO NOT USE GASOLINE OR CRANKCASE DRAININGS.

- NEVER use fuel such as benzene, alcohol, white gas, camp stove fuel, paint thinners, or other oil compounds in this heater. THESE ARE VOLATILE FUELS THAT CAN CAUSE A FIRE OR EXPLOSION.
- 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.

NOTE: Kerosene should only be stored in a blue container that is clearly marked "Kerosene." Never store kerosene in a red container. Red is associated with gasoline.

Ventilation:

- Risk of indoor air pollution and Carbon Monoxide Poisoning. Use heater only in well ventilated areas.
- Refer to Safety Information on pages 1-2 for information about Carbon Monoxide Poisoning.
- ALWAYS provide a fresh air opening in the heated space of at least 2,800 cm² for each 29 kW of heater output. Provide a larger opening if more heaters are being used.

▲ DANGER CARBON MONOXIDE POISONING MAY LEAD TO DEATH!

Minimum Ventilation Opening Needed				
FF45	FF70	FF125	FF175	FF215
1.4 ft. ²	2.1 ft. ²	3.8 ft. ²	5.3 ft. ²	6.5 ft. ²
1300 cm ²	1951 cm ²	3530 cm ²	4924 cm ²	6039 cm ²

▲ WARNING This appliance is designed to operate safely at a minimum ambient temperature of -20° C.

▲ WARNING Use caution when servicing in wet areas. Disconnect power from the power mains and keep all electrical components from becoming wet. Only a qualified technician should service the heater

▲ WARNING A qualified technician is required to install, adjust and, where necessary, convert this heater for use with other fuel types.

Operation

Starting the Heater: (Ignition)

1. Fill the tank with kerosene or other approved fuel until needle on fuel gauge points to "F".
2. Replace fuel cap and tighten firmly.
3. Connect the heater to a three prong (grounded) power source. You must use a three prong (grounded) extension cord that is at least 1.8 meters long and is properly rated for this service.

Model FF45:

1. Complete steps 1-3 above.
2. Move power switch to "On" position. The power indicator light will illuminate and the heater will ignite. (See Figure 9)

NOTE: If if the heater still does not ignite, refer to "Troubleshooting Guide" on page 12.

i TIP: If the heater does not ignite; move switch to "Off" position, check steps 1-3 above and then move switch to "On" position.

Stopping / Restarting Heater:

- To stop the heater, move the power switch to the "Off" position and unplug the power cord.
- To restart the heater; wait 10 seconds and follow ignition steps.

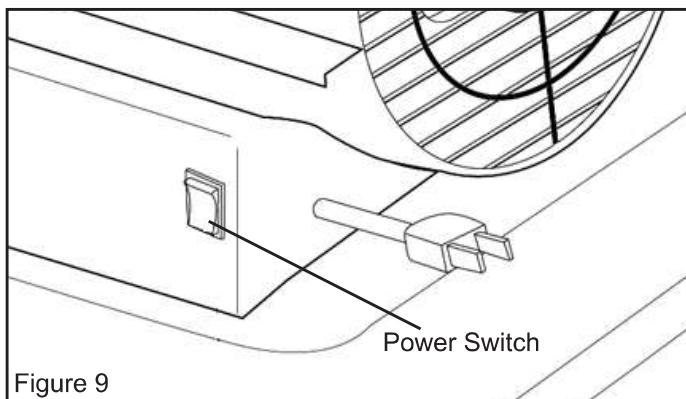


Figure 9

Models FF70 / FF125 /

FF175 / FF215:

1. Complete "starting heater ignition" steps 1-3 above.
2. Turn thermostat control knob to desired temperature setting. The thermostat set range is from 4.5 °C to 43.4 °C.
3. Move power switch to "On" position. The power indicator light and room temperature display will illuminate and heater will ignite. (See Figure 10)

i TIP: If the heater does not ignite, the thermostat may be set too low. Turn the control knob to a higher setting until the heater ignites. If the heater does not ignite; move switch to "Off" position, check steps 1-3 above and then move switch to "On" position.

NOTE: If if the heater still does not ignite, refer to "Troubleshooting Guide" on page 12.

NOTE: The FF45 and FF70 do not have a room temperature display feature.

The room temperature display will indicate the following:

- When the temperature is less than -17.8 °C the display says "LO".
- When the temperature is more that 37.3 °C the display says "HI".
- Between -17.8 °C and 37.3 °C the display shows actual temperature.

Stopping / Restarting Heater:

- To stop the heater, move the power switch to the "Off" position and unplug the power cord.
- To restart the heater; wait 10 seconds and follow ignition steps.

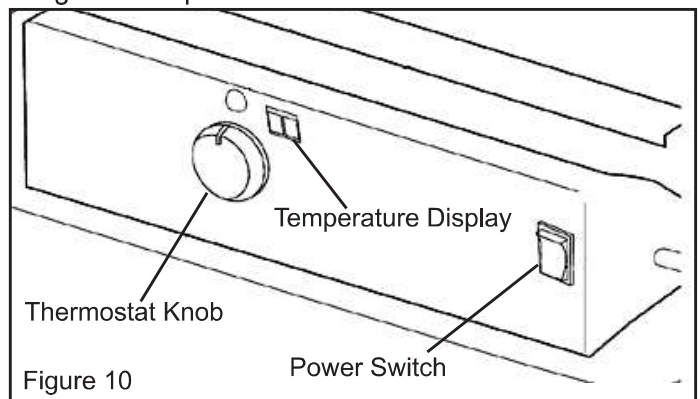


Figure 10

Maintenance

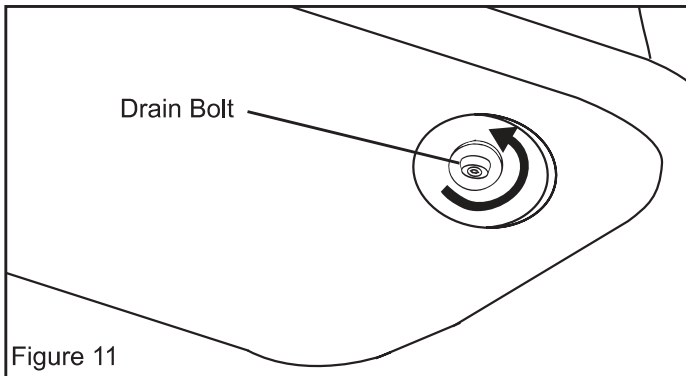
Long Term Storage:

Models FF45 / FF70:

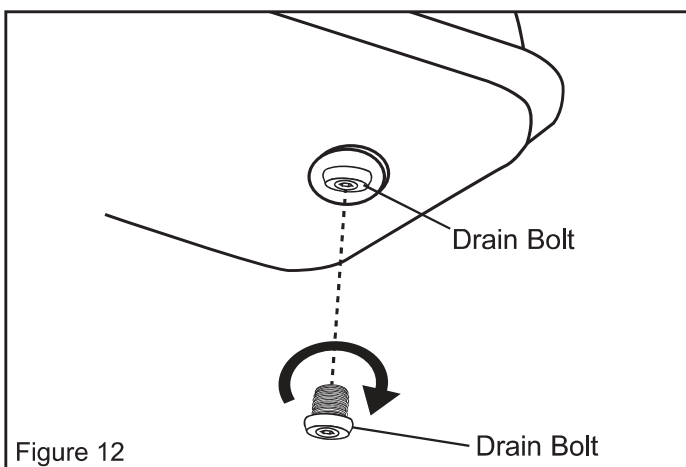
1. Use an approved siphon to drain fuel through the fuel cap opening.

Models FF125 / FF175 / FF215:

1. Drain fuel through the drain hole in the bottom of the fuel tank.
2. To remove the drain bolt, unscrew the drain bolt counterclockwise and remove from the drain hole in the tank. (See Figure 11)



3. Using a small amount of paraffin, rinse and swirl the kerosene inside of the fuel tank, empty the tank fully.
4. To replace the drain bolt; push the drain head fully into the drain hole and screw clockwise. (See Figure 12)



IMPORTANT: Never store leftover paraffin between seasons, using old fuel can damage heater.

Service:

⚠ WARNING Never service heater while it is plugged in or hot!

DO NOT TAMPER WITH THE UNIT. HAVE A COMPETENT SERVICEMAN MAKE ANY NECESSARY ADJUSTMENT OR REPAIRS.

Use only original equipment parts. The use of alternate or third party components can cause unsafe operating conditions.

We suggest following a maintenance schedule as follows:

FUEL / FUEL TANK:

Flush tank every 200 hours of operation or as needed.

i TIP: Follow the long term storage instructions to flush the tank.

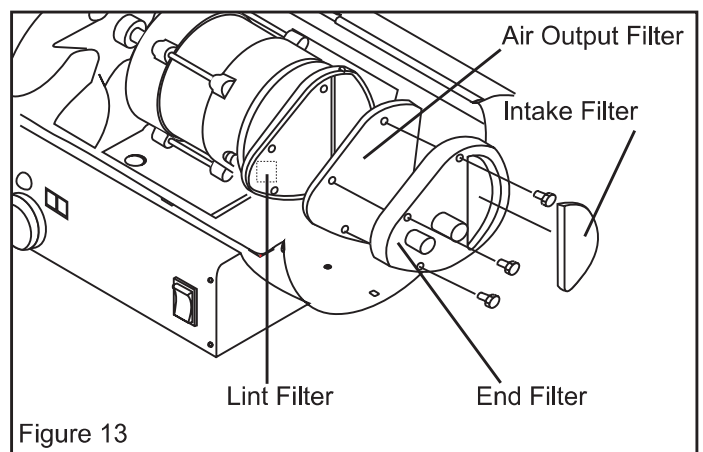
DO NOT flush with water, use fresh paraffin only.

AIR FILTERS:

The air intake filter should be replaced or washed with soap and water and dried thoroughly every 500 hours of operation or less depending on conditions.

The output and lint filters should be replaced every 500 hours of operation or less depending on conditions.

NOTE: Use of diesel fuel may require additional maintenance

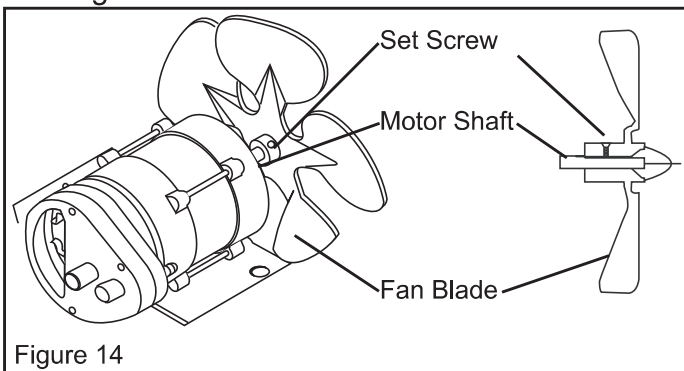


Maintenance

Service (Continued):

FAN BLADES:

Blades should be cleaned at least once per heating season, depending on conditions. Remove all accumulated dust and dirt with a damp cloth, taking care not to bend any of the fan blades. Be sure the blades are dry before re-starting the heater. For fan assembly removal see Figure 14.



FUEL FILTER:

The fuel filter should be cleaned at least twice per heating season. Clean the filter by rinsing it in clean kerosene. Contaminated fuel could make cleaning the fuel filter necessary immediately.

NOTE: To remove the filter from models 45 / FF70 turn filter 90° clockwise. To remove the filter from models 125 / 175 / FF215 turn filter 90° counter-clockwise. See Figure 15.

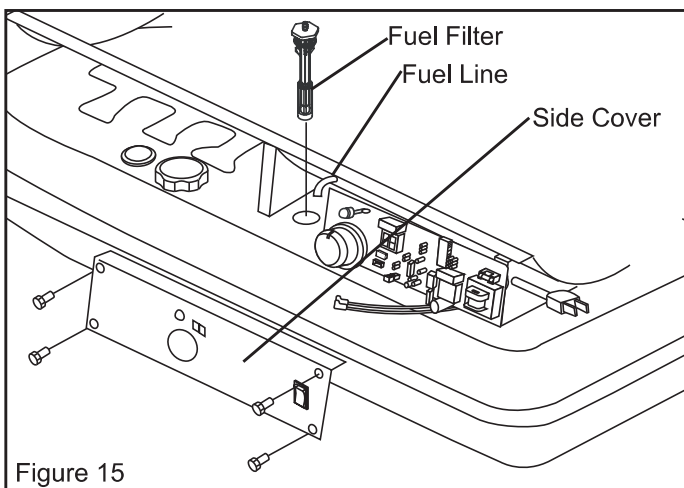


Figure 15

SPARK PLUG:

Clean and re-gap every 600 hours of operation, or replace as needed. After removing the spark plug, clean the terminals with a wire brush. Re-gap the terminals to 0.140" (3.5mm) See Figure 16.

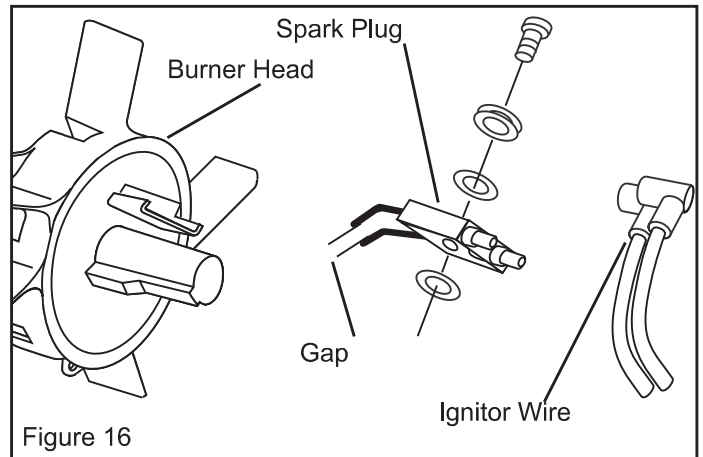


Figure 16

PHOTOCELL:

The photocell should be cleaned using a cotton swab dipped in alcohol or water at least once per heating season, or more depending on conditions. See Figure 17.

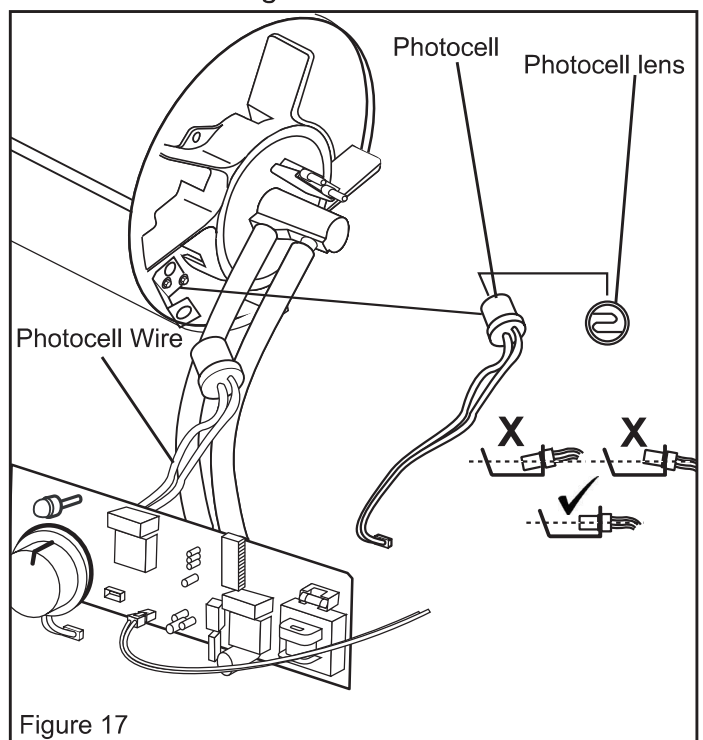


Figure 17

Maintenance

PUMP PRESSURE:

While heater is operating, turn adjusting screw clockwise to increase, counter-clockwise to decrease pressure. Correct pump pressure is as follows:

Model Number	Pump Pressure
FF45	3.0 PSI / 0.21 BAR
FF70	4.0 PSI / 0.28 BAR
FF125	4.5 PSI / 0.31 BAR
FF175	7.5 PSI / 0.52 BAR
FF215	8.0 PSI / 0.55 BAR

Tolerance $\pm 10\%$

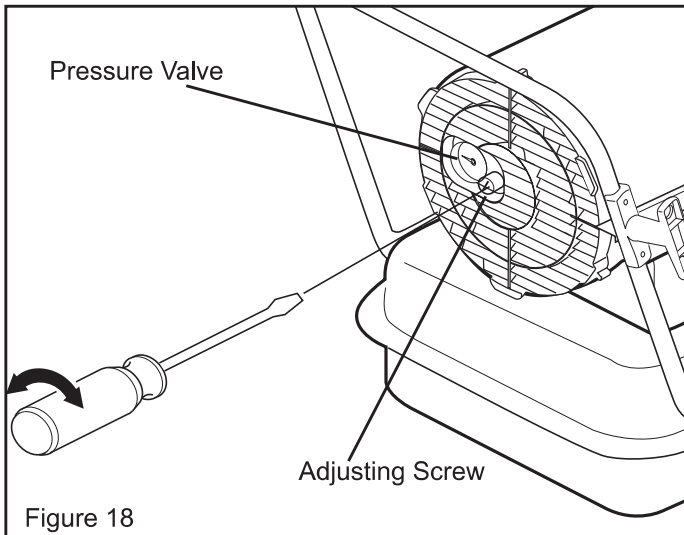


Figure 18

NOZZLES:

Nozzles should be cleaned or replaced at least once per heating season. Contaminated fuel could make this necessary immediately. To clean dirt from nozzle, blow compressed air through nozzle front. It may be necessary to soak the nozzle in paraffin to loosen any dirt particles.

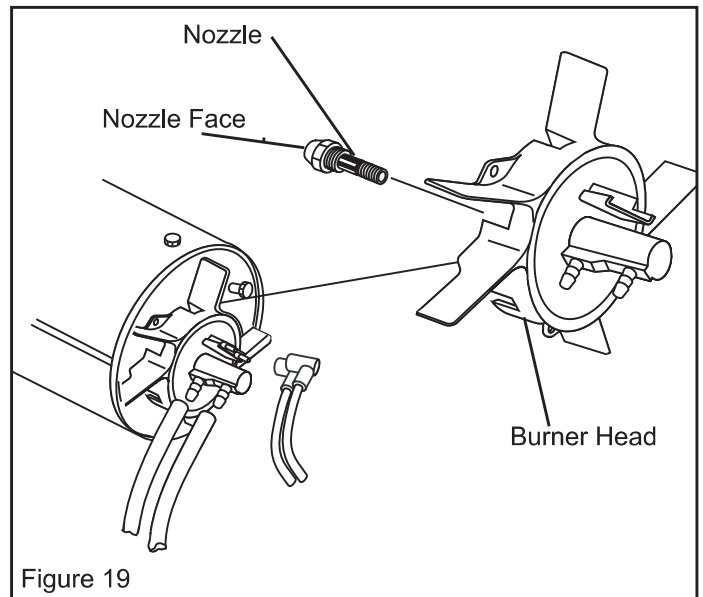


Figure 19

Wiring Diagram

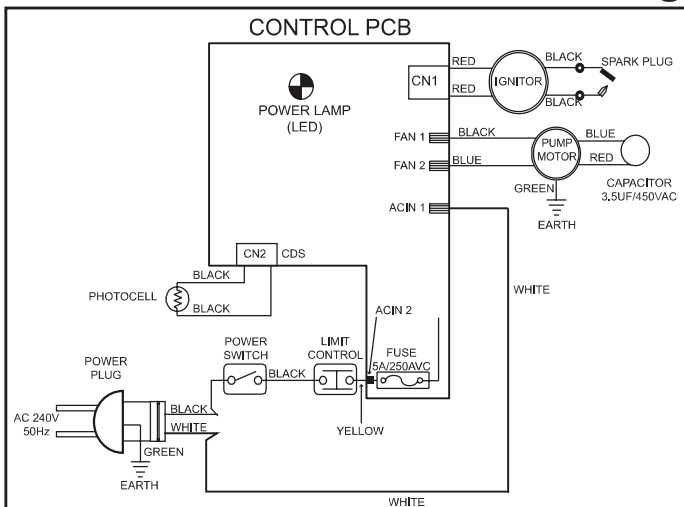


Figure 20: FF45

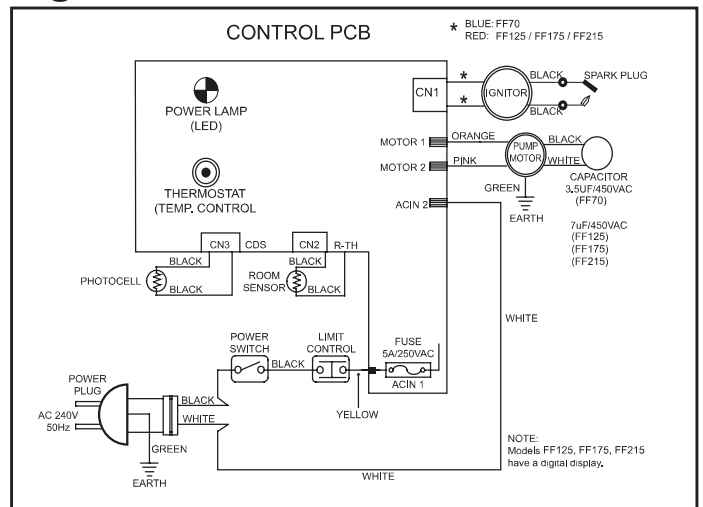
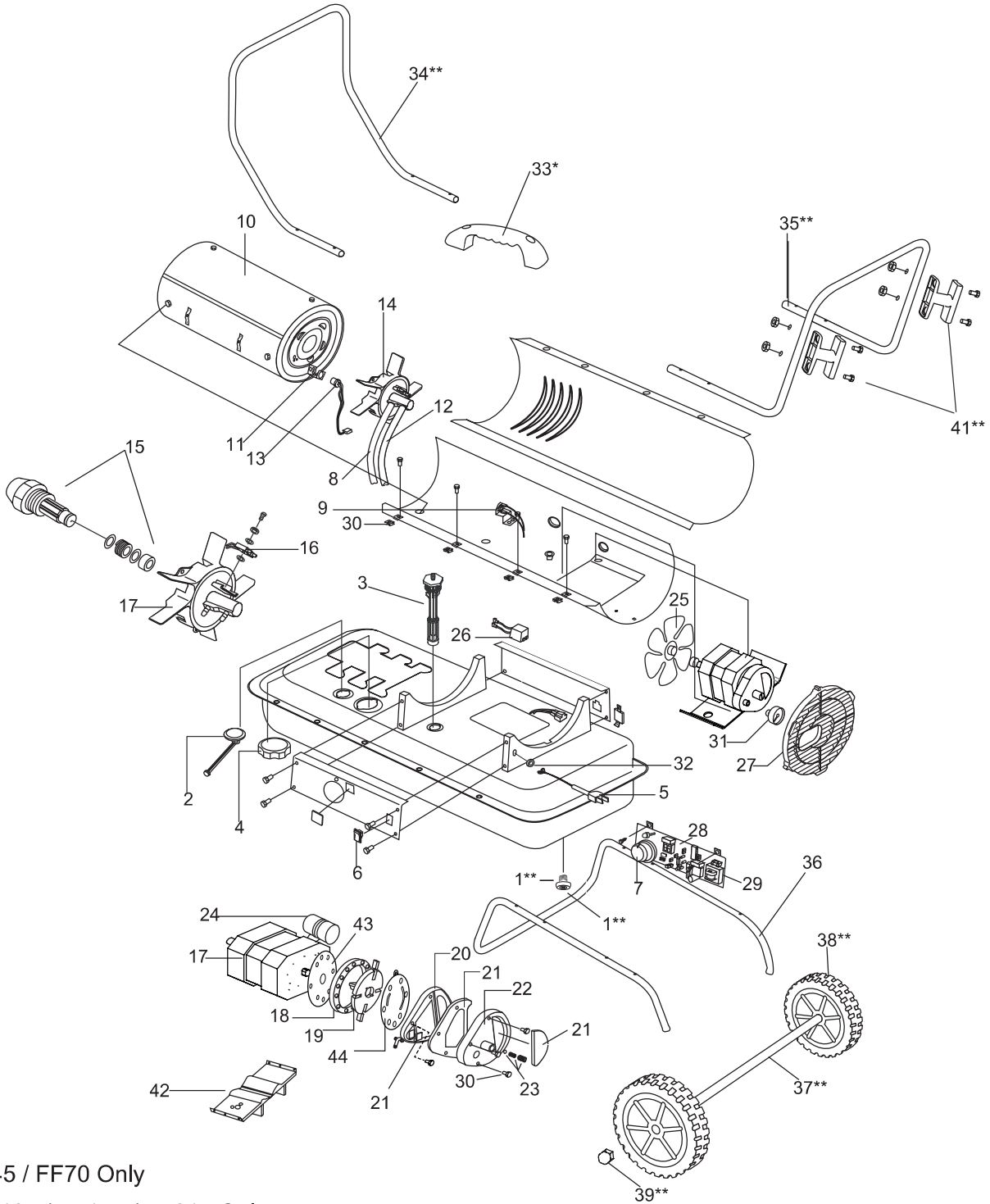


Figure 21: FF70 / FF125 / FF175 / FF215

Troubleshooting Guide

Problem	Possible Cause	Solution
Heater Ignites, but main PCB shuts off after a short period of time. Lamp flickers and LED display shows "E1".	<ol style="list-style-type: none"> 1. Incorrect pump pressure. 2. Dirty input, output or lint filter. 3. Dirty fuel filter. 4. Nozzle is dirty. 5. Photocell lens is dirty. 6. Photocell not installed properly. 7. Photocell is defective. 8. Improper electrical connection between main PCB and photocell. 	<ol style="list-style-type: none"> 1. Adjust pump pressure. 2. Clean / replace air or lint filter. 3. Clean / replace fuel filter. 4. Clean / replace Nozzle. 5. Clean / replace photocell. 6. Adjust photocell position 7. Replace photocell 8. Check wiring connections (see wiring diagrams on page 11).
Heater will not operate or motor runs for a short time. Lamp flickers and LED display shows "E1".	<ol style="list-style-type: none"> 1. No paraffin in the fuel tank. 2. Incorrect pump pressure. 3. Corroded spark plug or incorrect plug gap. 4. Dirty fuel filter. 5. Dirty nozzle. 6. Moisture in fuel tank. 7. Improper electrical connection between transformer and circuit board. 8. Ignitor wire not connected to spark plug. 9. Defective ignitor. 	<ol style="list-style-type: none"> 1. Fill tank with fresh paraffin. 2. Adjust pump pressure. 3. Clean / replace spark plug. 4. Clean / replace fuel filter. 5. Clean / replace nozzle. 6. Rinse fuel tank with clean, fresh paraffin. 7. Inspect all electrical connections. (See wiring diagrams on page 11.) 8. Re-attach ignitor wire to spark plug. 9. Replace ignitor.
Fan does not operate when heater is plugged in and power switch is in the "ON" position. The lamp is flickering or and LED display shows "E1" or "E2".	<ol style="list-style-type: none"> 1. Thermostat is set too low (does not apply to FF45 model). 2. Broken electrical connection between main PCB and motor. 	<ol style="list-style-type: none"> 1. Rotate thermostat to a higher setting 2. Inspect all electrical connections (see wiring diagrams on page 11).
Lamp is flickering and LED display shows "E3".	<ol style="list-style-type: none"> 1. Thermostat switch has failed. 	<ol style="list-style-type: none"> 1. Replace thermostat switch (see Wiring diagrams on page 11).
Poor combustion and / or excess soot production.	<ol style="list-style-type: none"> 1. Dirty input, output or lint filter. 2. Dirty fuel filter. 3. Poor quality of fuel. 4. PSI is too high or too low. 	<ol style="list-style-type: none"> 1. Clean / replace air or lint filter. 2. Clean / replace fuel filter. 3. Flush fuel tank and refuel heater. 4. Use proper pressure.
Heater does not turn on and the lamp is not lit.	<ol style="list-style-type: none"> 1. Temperature limit sensor has overheated. 2. No electrical power. 3. Fuse is blown. 4. Improper electrical connection between temperature limit sensor and circuit board. 	<ol style="list-style-type: none"> 1. Push power switch to "OFF" and allow heater to cool for 10 minutes. Restart heater. 2. Check power cords for proper connection and test the power supply. 3. Check / replace the fuse. 4. Inspect all electrical connections (see wiring diagrams on page 11).

Exploded View



*FF45 / FF70 Only

**FF125 / FF175 / FF215 Only



NEVER LEAVE HEATER UNATTENDED WHILE BURNING OR WHILE CONNECTED TO A POWER SOURCE

Parts List

▲ WARNING ALWAYS contact the manufacturer of this heater before replacing any parts other than those specified or recommended in the servicing instructions.

#	Part	FF45		FF70	
		Previous	Current	Previous	Current
1	Drain Bolt	N/A	N/A	N/A	N/A
2	Fuel Gauge	70-007-0110	01.04.70.004510001	70-007-0115	01.04.70.004510001
3	Fuel Filter	70-003-0100	01.02.70.004510003	70-003-0100	01.02.70.004510003
4	Fuel Cap - Large Plastic	70-006-0120	70-006-0140	70-006-0120	70-006-0140
5	Power Cord	70-034-0270	01.04.70.404520223	70-034-0270	01.04.70.404520223
6	Power Switch	70-038-0110	01.04.70.004510015	70-038-0110	01.04.70.004510015
7	Thermostat Control Knob	N/A	N/A	On PCB	On PCB
8	Air Line	70-035-0100	01.03.70.004510005	70-035-0200	01.03.70.004510005
9	Thermostat Limit Control	70-019-0100	01.04.22.004010173	70-019-0100	01.04.22.004010173
10	Combustion Chamber Assembly	70-011-0100	70-011-0100	70-011-0200	70-011-0200
11	Photocell Bracket	70-010-0101	01.01.70.004510020	70-010-0101	01.01.70.004510020
12	Fuel Line	70-036-0100	70-036-1010	70-036-0200	70-036-1010
13	Photocell	70-016-0100	01.04.70.004510008	70-016-0100	01.04.70.004510008
14	Burner Head Assembly	70-014-0101	01.01.70.004510017	70-014-0101	01.01.70.004510017
15	Nozzle Kit	70-015-0100	70-015-0100	70-015-0200	70-015-0200
16	Spark Plug Kit	70-052-0100	70-052-0100	70-052-0100	70-052-0100
17	Motor	70-021-0501	01.04.70.104520034	70-021-0501	01.04.70.104520034
18	Pump Body	70-020-0101	01.01.70.004510021	70-020-0101	01.01.70.004510021
19	Rotor Kit	70-022-0100	70-022-0100	70-022-0100	70-022-0100
20	End Pump Cover	70-020-0102	01.01.70.004510023	70-020-0102	01.01.70.004510023
21	Filter Kit	70-054-0100	70-054-0100	70-054-0100	70-054-0100
22	End Filter Cover	70-020-0103	01.02.70.007010022	70-020-0103	01.02.70.007010022
23	Pump Adjustment Kit	70-055-0100	70-055-0100	70-055-0100	70-055-0100
24	Capacitor	On Motor	On Motor	On Motor	On Motor
25	Fan	70-024-0100	01.01.70.004510025	70-024-0200	01.01.70.007010034
26	Ignitor	70-037-0120	01.04.70.104520033	70-037-0120	01.04.70.104520033
27	Fan Guard	70-016-0700	01.02.70.004510014	70-016-0700	01.02.70.004510014
28	Main PCB Assembly	70-027-0160	01.04.70.104520037	70-027-0160	01.04.70.407020169
29	Fuse	70-027-0120	01.04.70.104520039	70-027-0120	01.04.70.104520039
30	Clip Nut	70-001-0105	70-001-0106	70-001-0105	70-001-0106
31	Air Pressure Gauge	N/A	N/A	70-025-0100	01.04.70.007010016
32	Cord Bushing	70-033-0100	01.02.70.004510002	70-033-0100	01.02.70.004510002
33	Handle	70-001-0103	01.02.70.004510015	70-001-0103	01.02.70.004510015
34	Front Handle	N/A	N/A	N/A	N/A
35	Rear Handle	N/A	N/A	N/A	N/A
36	Wheel Support Frame	N/A	N/A	N/A	N/A
37	Wheel Axle	N/A	N/A	N/A	N/A
38	Wheel	N/A	N/A	N/A	N/A
39	Wheel Nut	N/A	N/A	N/A	N/A
40	Hardware Kit (not pictured)	70-056-0100	70-056-0100	70-056-0100	70-056-0100
41	Cord Wrap	N/A	N/A	N/A	N/A
42	Motor Supporter	N/A	N/A	70-020-0600	01.01.70.004510703



NEVER LEAVE HEATER UNATTENDED WHILE BURNING OR WHILE CONNECTED TO A POWER SOURCE

#	Part	FF125		FF175	
		Previous	Current	Previous	Current
1	Drain Bolt	70-002-0115	01.01.70.012510246	70-002-0115	01.01.70.012510246
2	Fuel Gauge	70-007-0210	01.04.70.012510020	70-007-0210	01.04.70.012510020
3	Fuel Filter	70-003-0200	01.02.70.012510020	70-003-0200	01.02.70.012510020
4	Fuel Cap - Large Plastic	70-006-0140	70-006-0140	70-006-0140	70-006-0140
5	Power Cord	70-034-0270	01.04.70.412520228	70-034-0270	01.04.70.412520224
6	Power Switch	70-038-0110	01.04.70.004510015	70-038-0110	01.04.70.004510015
7	Thermostat Control Knob	On PCB	On PCB	On PCB	On PCB
8	Air Line	70-035-0300	01.03.70.004510005	70-035-0400	01.03.70.004510005
9	Thermostat Limit Control	70-019-0205	01.04.70.112520047	70-019-0100	01.04.22.004010173
10	Combustion Chamber Assembly	70-011-0300	70-011-0300	70-011-0400	70-011-0400
11	Photocell Bracket	70-010-0101	01.01.70.004510020	70-010-0101	01.01.70.004510020
12	Fuel Line	70-036-0300	70-036-1020	70-036-0400	70-036-1030
13	Photocell	70-016-0100	01.04.70.004510008	70-016-0100	01.04.70.004510008
14	Burner Head Assembly	70-014-0301	01.01.70.012510045	70-014-0401	01.01.70.012510045
15	Nozzle Kit	70-015-0300	70-015-0300	70-015-0400	70-015-0400
16	Spark Plug Kit	70-052-0200	70-052-0200	70-052-0200	70-052-0200
17	Motor	70-021-0511	01.04.70.412520219	70-021-0521	01.04.70.421520220
18	Pump Body	70-020-0101	01.01.70.019010089	70-020-0101	01.01.70.019010089
19	Rotor Kit	70-022-0200	70-022-0200	70-022-0200	70-022-0200
20	End Pump Cover	70-020-0102	01.01.70.004510023	70-020-0102	01.01.70.004510023
21	Filter Kit	70-054-0100	70-054-0100	70-054-0100	70-054-0100
22	End Filter Cover	70-020-0103	01.02.70.007010022	70-020-0103	01.02.70.007010022
23	Pump Adjustment Kit	70-055-0100	70-055-0100	70-055-0100	70-055-0100
24	Capacitor	70-020-0201	01.04.70.112520051	70-020-0201	01.04.70.112520051
25	Fan	70-024-0300	01.01.70.012510049	70-024-0400	01.01.70.017510077
26	Ignitor	70-037-0320	01.04.70.104520033	70-037-0320	01.04.70.104520033
27	Fan Guard	70-016-0200	01.02.70.012510024	70-016-0200	01.02.70.012510024
28	Main PCB Assembly	70-027-0220	01.04.70.412520222	70-027-0320	01.04.70.412520222
29	Fuse	70-027-0120	01.04.70.104520039	70-027-0120	01.04.70.104520039
30	Clip Nut	70-001-0105	70-001-0106	70-001-0105	70-001-0106
31	Air Pressure Gauge	70-025-0100	01.04.70.007010016	70-025-0100	01.04.70.007010016
32	Cord Bushing	70-033-0200	01.02.70.012510019	70-033-0200	01.02.70.012510019
33	Handle	N/A	N/A	N/A	N/A
34	Front Handle	70-042-0100	01.01.70.012510055	70-042-0200	01.01.70.017510082
35	Rear Handle	70-043-0100	01.01.70.012510056	70-043-0200	01.01.70.017510083
36	Wheel Support Frame	70-041-0101	01.01.70.012510057	70-041-0201	01.01.70.017510084
37	Wheel Axle	70-041-0115	01.01.70.012510053	70-041-0205	01.01.70.017510081
38	Wheel	70-041-0150	01.03.90.003610031	70-041-0150	01.03.90.003610031
39	Wheel Nut	70-041-0550	01.01.70.012510054	70-041-0550	01.01.70.012510054
40	Hardware Kit (not pictured)	70-056-0210	70-056-0210	70-056-0210	70-056-0210
41	Cord Wrap	70-032-0200	01.02.70.012510028	70-032-0200	01.02.70.012510028
42	Motor Supporter	70-020-0610	01.01.70.012510710	70-020-0610	01.01.70.012510710
43	Motor End Pump Gasket	N/A	N/A	N/A	01.01.70.021510097
44	Pump End Gasket	N/A	01.01.70.021510098	N/A	01.01.70.021510098



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#	Part	FF215	
		Previous	Current
1	Drain Bolt	70-002-0105	01.02.70.012510018
2	Fuel Gauge	70-007-0215	01.04.70.012510020
3	Fuel Filter	70-003-0200	01.02.70.012510020
4	Fuel Cap - Large Plastic	70-006-0140	70-006-0140
5	Power Cord	70-034-0270	01.04.70.412520224
6	Power Switch	70-038-0110	01.04.70.004510015
7	Thermostat Control Knob	On PCB	On PCB
8	Air Line	70-035-0500	01.03.70.004510005
9	Thermostat Limit Control	70-019-0200	01.04.70.021510031
10	Combustion Chamber Assembly	70-011-0500	70-011-0500
11	Photocell Bracket	70-010-0101	01.01.70.004510020
12	Fuel Line	70-036-0500	70-036-1040
13	Photocell	70-016-0100	01.04.70.004510008
14	Burner Head Assembly	70-014-0401	01.01.70.012510045
15	Nozzle Kit	70-015-0500	70-015-0500
16	Spark Plug Kit	70-052-0200	70-052-0200
17	Motor	70-021-0521	01.04.70.421520220
18	Pump Body	70-020-0401	01.01.70.019010089
19	Rotor Kit	70-022-0200	70-022-0200
20	End Pump Cover	70-020-0102	01.01.70.004510023
21	Filter Kit	70-054-0100	70-054-0100
22	End Filter Cover	70-020-0103	01.02.70.007010022
23	Pump Adjustment Kit	70-055-0100	70-055-0100
24	Capacitor	On Motor	On Motor
25	Fan	70-016-0220	01.02.70.012510024
26	Ignitor	70-037-0320	01.04.70.104520033
27	Fan Guard	70-016-0220	01.02.70.012510024
28	Main PCB Assembly	70-027-0320	01.04.70.412520222
29	Fuse	70-027-0120	01.04.70.104520039
30	Clip Nut	70-001-0105	70-001-0106
31	Air Pressure Gauge	70-025-0100	01.04.70.007010016
32	Cord Bushing	70-033-0200	01.02.70.012510019
33	Handle	N/A	N/A
34	Front Handle	70-042-0200	01.01.70.017510082
35	Rear Handle	70-043-0200	01.01.70.017510083
36	Wheel Support Frame	70-041-0201	01.01.70.017510084
37	Wheel Axle	70-041-0205	01.01.70.017510081
38	Wheel	70-041-0150	01.03.90.003610031
39	Wheel Nut	70-041-0550	01.01.70.012510054
40	Hardware Kit (not pictured)	70-056-0210	70-056-0210
41	Cord Wrap	70-032-0200	01.02.70.012510028
42	Motor Supporter	70-020-0610	01.01.70.012510710
43	Motor End Pump Gasket	N/A	01.01.70.021510097
44	Pump End Gasket	N/A	01.01.70.021510098



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