

# PORTABLE FORCED AIR HEATERS “USER’S MANUAL”

## DuraHeat®

MODEL:

DFA45

DFA65

DFA120

DFA170T



C US



C US  
LISTED

Before the first use of this heater, please read this USER’S MANUAL very carefully. This USER’S MANUAL has been designed to instruct you as to the proper manner in which to assemble the heater, maintain the heater, store the heater, and most importantly, how to operate the heater in a safe and efficient manner. Please keep this manual for future reference.

**WORLD MARKETING OF AMERICA, INC.**

**RT. 22 WEST, P.O. BOX 192**

**MILL CREEK, PA 17060**

**1-800-776-9425 (9 AM - 4 PM EST)**

**MON. - FRI. ONLY**

**[www.yourheater.com](http://www.yourheater.com)**

**NEVER LEAVE THE HEATER  
UNATTENDED WHILE BURNING!**

**DANGER - IMPROPER USE OF THIS HEATER CAN RESULT IN SERIOUS INJURY OR DEATH FROM BURNS, FIRE, EXPLOSION, ELECTRICAL SHOCK AND/OR CARBON MONOXIDE POISONING.**

**WARNINGS:**

**1. RISK OF INDOOR AIR POLLUTION!**

- **Use this heater only in well ventilated areas.** Provide at least a three-square foot (2800 sq. cm.) opening of fresh outside air for each 100,000 BTU/hr. of heater rating.
- People with breathing problems should consult a physician before using the heater.
- **Carbon monoxide poisoning:** Early signs of carbon monoxide poisoning resemble the flu, with headaches, dizziness and/or nausea. If you have these signs, the 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, persons with heart or lung disease or anemia, those under the influence of alcohol, or those at high altitudes.
- Never use this heater in living or sleeping areas.

**2. RISK OF BURNS/FIRE/EXPLOSION!**

- **NEVER** use any fuel other than 1-K kerosene in this heater. #1 fuel oil is the only acceptable substitute.
- **NEVER** use fuel such as gasoline, benzene, paint thinners or other oil compounds in this heater. **(RISK OF FIRE OR EXPLOSION)**
- **NEVER** use this heater where flammable vapors may be present.
- **NEVER** refill the heaters fuel tank while heater is operating or is still hot.
- This heater is **EXTREMELY HOT** while in operation. Keep all combustible materials away from heater. **Minimum Clearances:** Outlet: 8 feet (250cm) / Sides, top and rear: 4 feet (125cm)
- **NEVER** block air inlet (rear) or air outlet (front) of heater.
- **NEVER** use duct work in front or rear of heater.
- **NEVER** move or handle heater while still hot.
- **NEVER** transport heater with fuel in it's tank.
- When used with an optional thermostat or if equipped with a thermostat (DFA170T) heater may start at any time.
- **ALWAYS** locate heater on a stable and level surface.
- **ALWAYS** keep children and animals away from heater.
- Bulk fuel storage should be a minimum of 25 ft. from heaters, torches, portable generators or other sources of ignition. All fuel storage should be in accordance with federal, state or local authorities having jurisdiction.

**3. RISK OF ELECTRIC SHOCK!**

- Use only the electrical power (voltage and frequency) specified on the model plate of the heater.
- Use only a three-prong, grounded outlet and extension cord.
- **ALWAYS** install the heater so that it is not directly exposed to water spray, rain, dripping water or wind.
- **ALWAYS** unplug the heater when not in use.

**CALIFORNIA RESIDENTS:** This heater produces carbon monoxide, which is listed by the State of California as a reproductive toxin under Proposition 65.

**MASSACHUSETTS RESIDENTS:** Massachusetts state law prohibits the use of this heater in any building which is used in whole or in part for human habitation. Use of this heating device in Massachusetts requires local fire dept. permit (M.E.L.C. 148, Section 10A.)

**CANADIAN RESIDENTS:** Use of this heater shall be in accordance with authorities having jurisdiction and CSA Standard B139.

**NEVER LEAVE THE HEATER  
UNATTENDED WHILE BURNING!**

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### **1. INTRODUCTION**

Please read this USER'S MANUAL carefully. It will show you how to assemble, maintain, and operate the heater safely and efficiently to obtain full benefits from its many built-in features.

### **2. FEATURES**

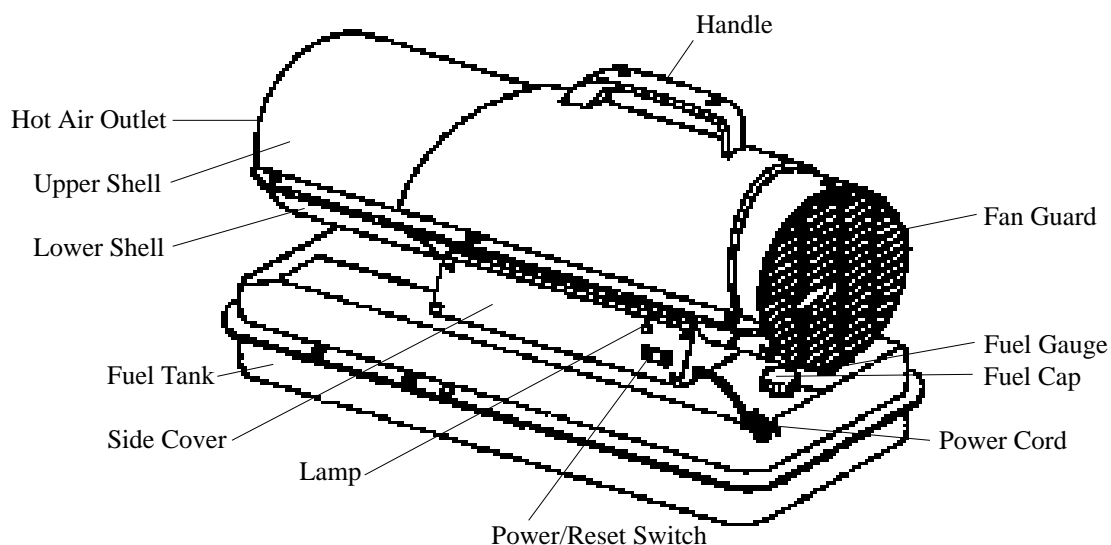


Figure 1. DFA45/DFA65 MODEL

**NEVER LEAVE THE HEATER  
UNATTENDED WHILE BURNING!**

Figure 2. DFA120 MODEL

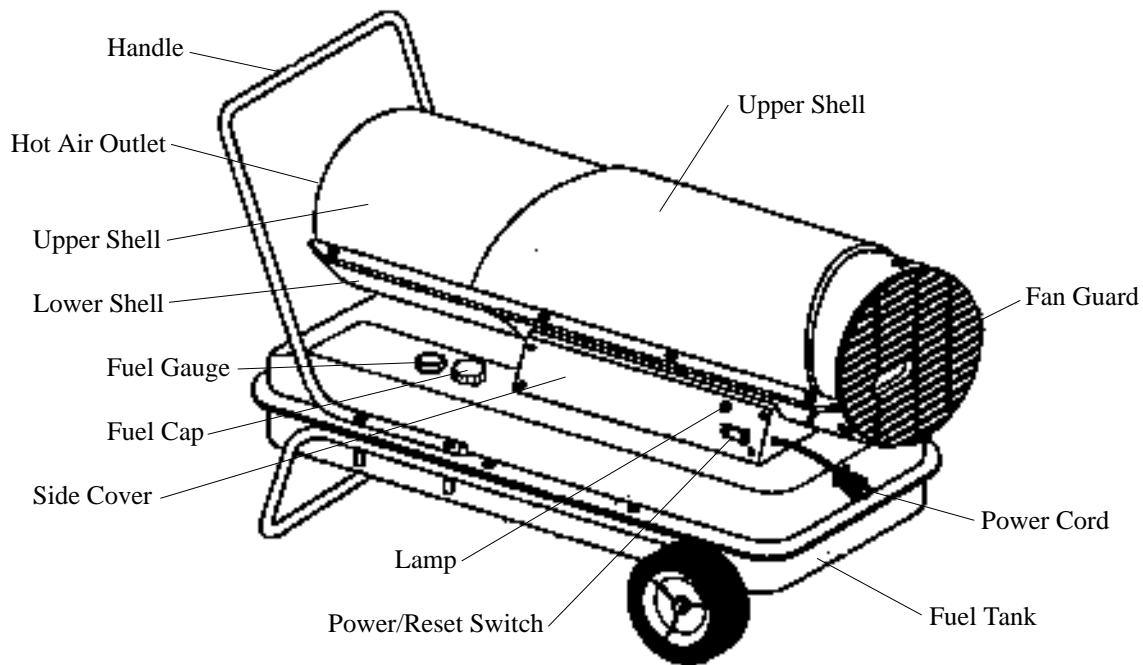
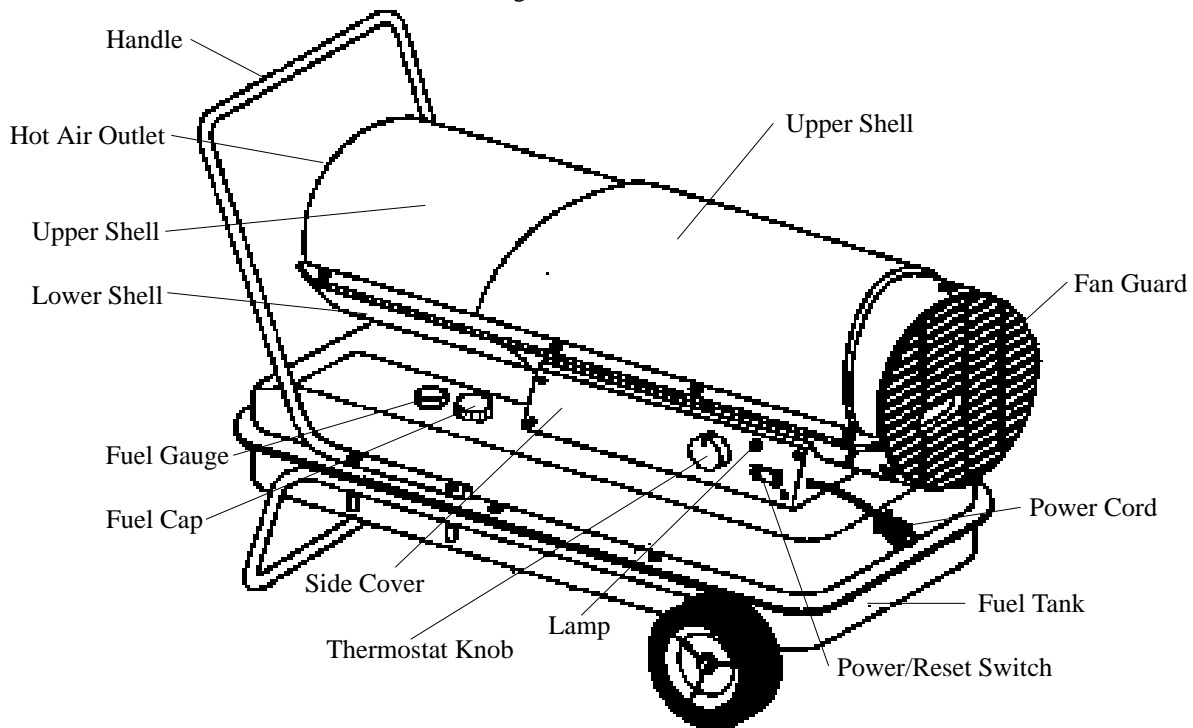


Figure 3. DFA170 T MODEL



**NEVER LEAVE THE HEATER  
UNATTENDED WHILE BURNING!**

### **3. UNPACKING AND ASSEMBLY**

1. REMOVE THE HEATER AND ALL PACKING MATERIALS FROM THE BOX. (Fig. 4)

NOTE: Save the shipping carton and packing materials for future storage.

	<b>DFA45/ 65</b>	<b>DFA120</b>	<b>DFA170T</b>
Wheel Support Frame	No	Yes	Yes
Wheels	No	Yes	Yes
Handle	Yes	Yes	Yes
Screws and Nuts	Yes	Yes	Yes
Axle	No	Yes	Yes
Split Pin and Washer	No	Yes	Yes

Figure 4. DFA45/DFA65 MODEL

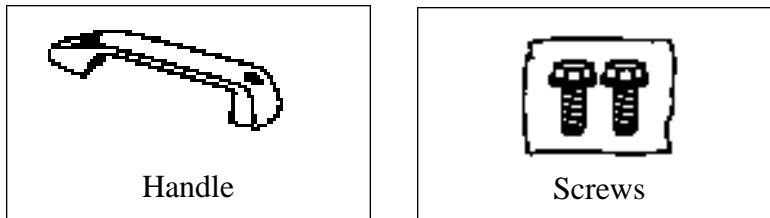
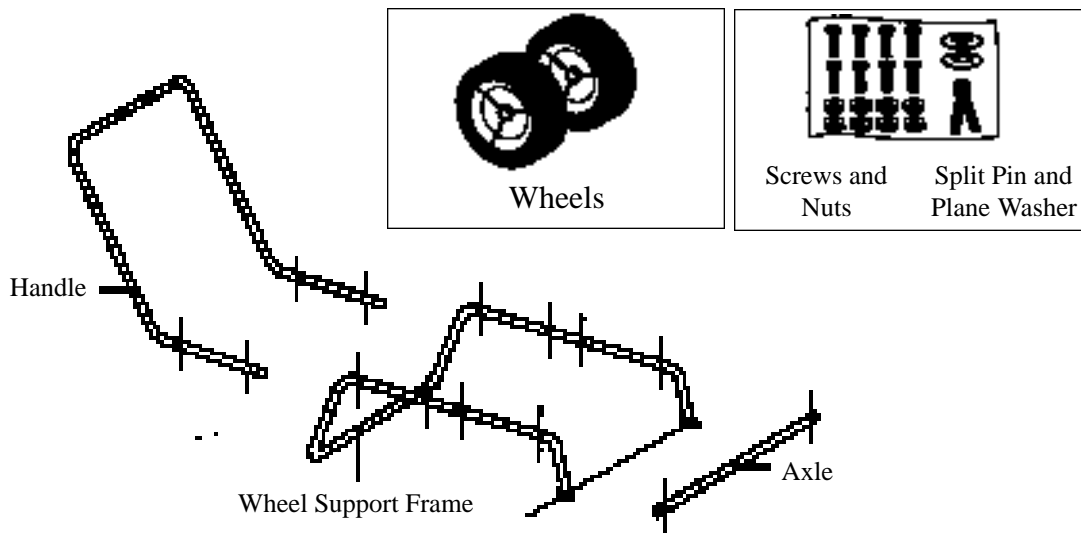


Figure 5. DFA120 MODEL/DFA170T MODEL



**NEVER LEAVE THE HEATER  
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2. ASSEMBLING

A. For DFA45/DFA65 Model only (Figure 6)

**Tools Required**

- Medium Phillips Screwdriver

1. Align the holes on the upper shell with the 2 mounting holes on the handle as shown in Figure 6.
2. Secure each hole with a screw.

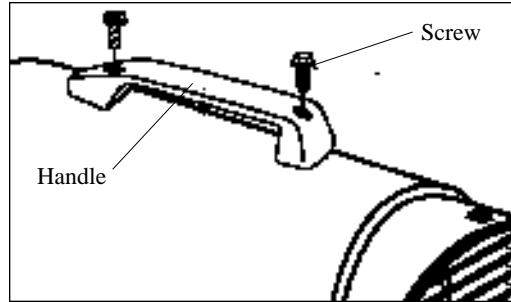


Figure 6

B. For DFA120 and DFA170T only (Figure 7)

These models are furnished with wheels and handles. Wheels, handles, and the mounting hardware are found in the shipping carton.

**Tools Required**

- Medium Phillips Screwdriver
- M5 Open or Adjustable Wrench
- Long Nose Pliers

1. Slide axle through wheel support frame. Install wheels on axle.

**NOTE:** When installing wheels, point extended hub of wheels toward wheel support frame (see Figure 7)

2. Place plane washers and split pin on axle ends and bend split pins with long nose pliers to secure.
3. Place heater on wheel support frame. Make sure air inlet end (rear) of heater is over wheels. Align the holes on fuel tank flange with holes on wheel support frame.
4. Position the handle on top of fuel tank flange. Insert screws through handles, fuel tank flange, and wheel support frames as shown in Figure 7 and attach nut finger tight after each screw is inserted.
5. After all screws are inserted, tighten nuts firmly.

**CAUTION: DO NOT OPERATE heater without support frame assembled to tank.**

**NEVER LEAVE THE HEATER  
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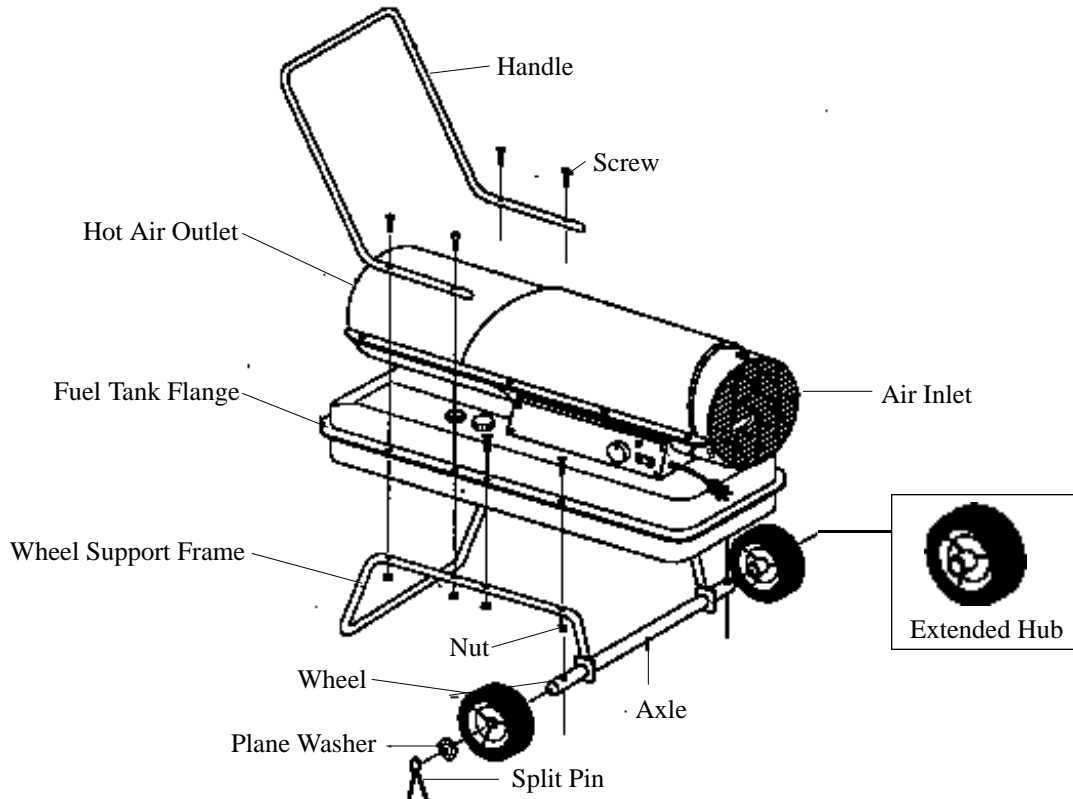


Figure 7. Wheel and Handle Assembly, DFA120/DFA170T MODELS ONLY

#### **4. KEROSENE (1-K)**

It is **EXTREMELY IMPORTANT** for the proper operation of this heater that you use the correct grade of kerosene. The correct grade of kerosene is identified as 1-K kerosene.

1-K Kerosene has been refined to virtually eliminate contaminants such as sulphur, which can cause a rotten egg odor during operation of the heater. #1 fuel oil may be used if 1-K kerosene is not available.

**KEROSENE SHOULD ONLY BE STORED IN A BLUE CONTAINER THAT IS CLEARLY MARKED "KEROSENE". NEVER STORE KEROSENE IN A RED CONTAINER.**

Red containers are associated with gasoline.

**NEVER** store kerosene in the living space. Kerosene should be stored in a well ventilated place outside the living area.

**NEVER** use any fuel other than 1-K kerosene (#1 fuel oil is an acceptable substitute.)

**NEVER** use fuel such as gasoline, benzene, alcohol, white gas, camp stove fuel, paint thinners, or other oil compounds in this heater. These are volatile fuels that can cause explosion or uncontrolled flames.

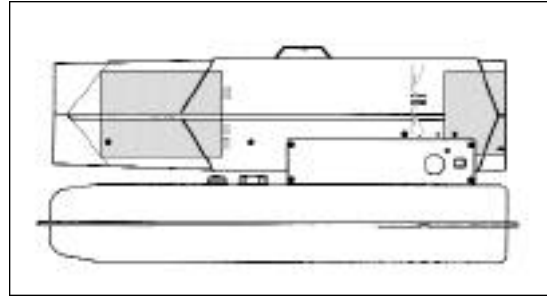
**NEVER** store kerosene in direct sunlight or near a source of heat.

**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.**

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## **5. OVERVIEW OF HEATERS DESIGN**

**Fuel System:** This heater is equipped with an electric air pump that forces air through the air line connected to the fuel intake and then through a nozzle in the burner head. When the air passes in front of the fuel intake it causes fuel to rise from the tank and into the burner nozzle. This fuel and air mixture is then sprayed into the combustion chamber in a fine mist.



**“Sure Fire Ignition:** The electronic ignitor sends voltage to a specially designed spark plug. The spark plug ignites the fuel and air mixture described above.

**The Air System:** The heavy duty motor turns a fan that forces air into and around the combustion chamber. Here the air is heated and then forced out the front of the heater.

### **The Safety System:**

**A. Temperature Limit Control:** This heater is equipped with a Temperature Limit Control designed to turn off the heater should the internal temperature rise to an unsafe level. If this device activates and turns your heater off it may require service.

MODELS	Internal Shut-Off Temp. Plus/Minus 10 Degrees	Reset Temperature Plus/Minus 10 Degrees
DFA120/DFA170T	230°F/110°C	194°F/90°C
DFA45/DFA65	176°F/80°C	122°F/50°C

Once the temperature falls below the reset temperature you will be able to start your heater.

**NOTE: For your safety the temperature limiting safety device built into this heater will allow the heater to run continuously when the ambient temperature is below 80°F/24°C.**

**B. Electrical System Protection:** This heaters electrical system is protected by a fuse mounted to the PCB Assembly that protects it and other electrical components from damage. If your heater fails to operate check this fuse first and replace as needed.

<b>FUSE TYPES:</b>	DFA45	125 volt/2 amps
	DFA65	125 volt/2 amps
	DFA120	125 volt/4 amps
	DFA170T	125 volt/5 amps

**C. Flame-Out Sensor:** Utilizes a photocell to monitor the flame in burn chamber during normal operation. It will cause the heater to shut-off should the burner flame extinguish.



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## **6. FUELING YOUR HEATER**

**NEVER FILL THE HEATER FUEL TANK IN THE LIVING SPACE: FILL THE TANK OUTDOORS.**

**DO NOT OVERFILL YOUR HEATER AND BE SURE HEATER IS LEVELED.**

**IMPORTANT NOTICE REGARDING FIRST IGNITION OF HEATER:**

The first time you light the heater, it should be done outdoors. This allows the oils, etc. used in manufacturing the heater to burn off outside.

**WARNING!!: NEVER REFILL HEATER FUEL TANK WHEN HEATER IS OPERATING OR STILL HOT.**

## **7. OPERATION**

### **A.) VENTILATION**

**RISK OF INDOOR AIR POLLUTION/USE HEATER ONLY IN WELL VENTILATED AREAS.**

Provide a fresh air opening of at least three square feet (2800 sq. cm) for each 100,000 BTU/Hr. rating. Provide extra fresh air if more heaters are being used.

Example:

A DFA170T heater requires one of the following:

- a two-car garage door raised six inches (15.24 cm)
- a single-car garage door raised nine inches (22.86 cm)
- two, thirty-inch (76.20 cm) windows raised twelve inches (30.48 cm)

### **B.) OPERATION**

#### **TO START HEATER**

1. Fill fuel tank with kerosene or No. 1 fuel oil.
2. Attach fuel cap.
3. Plug power cord of heater into three-prong, grounded extension cord. Extension cord must be at least six feet long.

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 30.5 meters) long, use 16 AWG conductor.
- 101 to 200 feet (30.8 to 61 meters) long, use 14 AWG conductor.

4. Turn “THERMOSTAT CONTROL Knob” to desired setting (DFA170T) and push power switch to “ON” position, power indicator lamp will light and heater will start. If heater does not start, the thermostat setting may be too low, turn “THERMOSTAT CONTROL Knob” to higher position to start heater. If heater still does not start, turn power switch to “OFF” and then to “ON” position. (See Figure 8 and 9). If heater still does not start, see Troubleshooting Guide on page 13.



Figure 8. DFA45/65/120 Models



Figure 9. DFA170T Model

**NOTE:** For your safety the temperature limiting safety device built into this heater will allow the heater to run continuously when the ambient temperature is below 80°F/24°C.

**NOTICE:** The major electrical components of this heater are protected by a safety fuse mounted to the PCB board. 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.

**NEVER LEAVE THE HEATER  
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#### **TO STOP HEATER**

1. Turn switch to "OFF" and unplug power cord.

#### **TO RESTART HEATER**

1. Wait 10 seconds after stopping heater.
2. Repeat steps under to start heater.

### **8. LONG TERM STORAGE OF YOUR HEATER**

1. Drain fuel tank through fuel cap opening.
2. Using a small amount of kerosene, swirl and rinse the inside of the tank.

**NEVER** mix water with the kerosene as it will cause rust inside the tank. Pour the kerosene out making sure that you remove it all.

**IMPORTANT:** Do not store kerosene over summer months for use during next heating season. Using old fuel could damage heater.

- Reinstall fuel cap. Properly dispose of old and dirty fuel.
- Store heater in dry well ventilated area. Make sure storage place is free of dust and corrosive fumes.
- Store the heater in the original box with the original packing material and keep the USER'S MANUAL with the heater.

### **9. MAINTENANCE**

**WARNING!!: NEVER SERVICE HEATER WHILE IT IS PLUGGED IN OR WHILE HOT!**

**USE ORIGINAL EQUIPMENT REPLACEMENT PARTS. Use of third party or other alternate components will void warranty and may cause unsafe operating conditions.**

#### **A.) FUEL TANK**

FLUSH EVERY 200 HOURS OF OPERATION OR AS NEEDED (SEE STORAGE ABOVE)

#### **B.) AIR INTAKE FILTER**

WASH AND DRY WITH SOAP AND WATER EVERY 500 HOURS OF OPERATION OR AS NEEDED.

- Remove screws along each side of heater using M5 nut-driver.
- Lift upper shell off.
- Remove fan guard.
- Wash or replace air intake filter.
- Reinstall fan guard and upper shell.

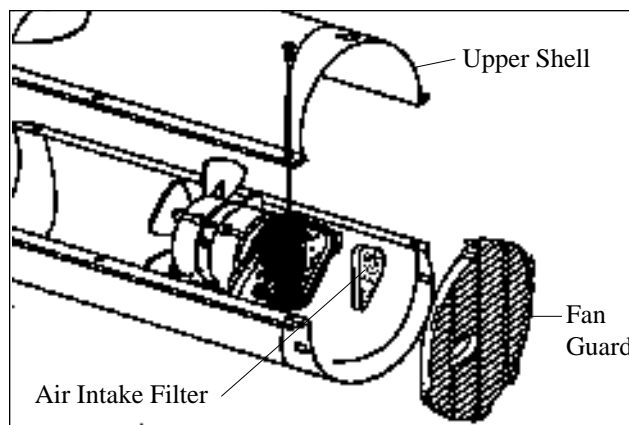


Figure 10

**NEVER LEAVE THE HEATER  
UNATTENDED WHILE BURNING!**

### C.) AIR OUTPUT FILTER, LINT FILTER

REPLACE EVERY 500 HOURS OF OPERATION  
OR ONCE A YEAR.

- Remove upper shell and fan guard (See page 9).
- Remove filter end cover screws using M5 nut driver.
- Remove filter end cover.
- Replace air output and lint filter.
- Reinstall filter end cover.
- Reinstall fan guard and upper shell.

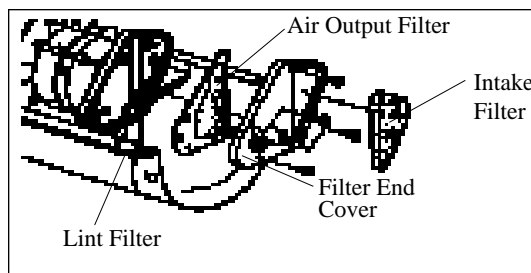


Figure 11.

### D.) FAN BLADES

CLEAN EVERY SEASON OR AS NEEDED.

- Remove upper shell (See page 9).
- Use M6 allen wrench to loosen set screw which holds fan blade to motor shaft.
- Slip fan blade off motor shaft.
- Clean fan blade using a soft cloth moistened with kerosene or solvent.
- Dry fan blade thoroughly.
- Reinstall fan blade on motor shaft. Place fan blade hub flush with end of motor shaft.
- Place set screw on flat of shaft. Tighten set screw firmly (40-50 inch-pounds/4.5-5.6 N-m).
- Reinstall upper shell.

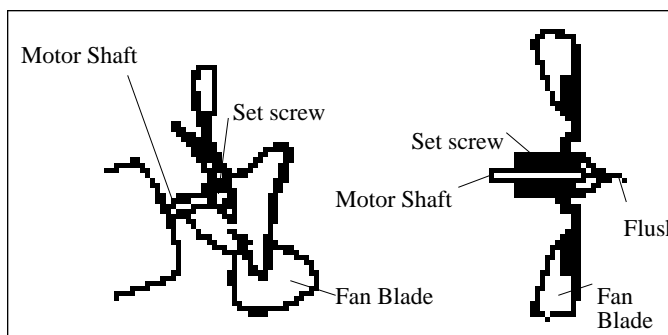


Figure 12.

### E.) NOZZLE

REMOVE DIRT IN NOZZLE AS NEEDED (SEE PAGE 13).

- Remove upper shell (See page 9).
- Remove fan blade (See Section D above).
- Remove fuel and air line hoses from burner head.
- Remove ignitor wire from spark plug.
- Remove three screws using medium phillips screwdriver and remove burner head from combustion chamber.
- Remove spark plug from burner head using medium phillips screwdriver.
- Carefully remove nozzle from burner head using 5/8" socket wrench.
- Blow compressed air through face of nozzle. (this will remove any dirty in nozzle)
- Reinstall nozzle into burner head tighten firmly. (80~110 inch-pounds)
- Install spark plug in burner head.
- Attach burner head to combustion chamber.
- Attach ignitor wire to spark plug.
- Attach fuel and air line hoses to burner head.
- Reinstall fan blade and upper shell.

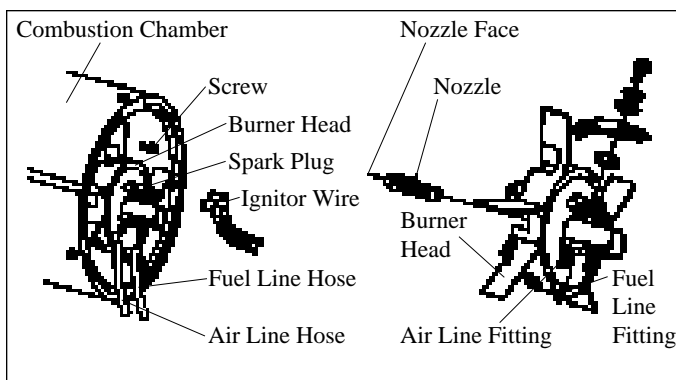


Figure 13.

**NEVER LEAVE THE HEATER  
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## **F.) SPARK PLUG**

CLEAN AND REGAP EVERY 600 HOURS OPERATION OR REPLACE AS NEEDED.

- Remove upper shell (See page 9).
- Remove fan (See page 10).
- Remove ignitor wire from spark plug.
- Remove spark plug from burner head using medium phillips screwdriver.
- Clean and regap spark plug electrodes to 3.5mm gap.
- Install spark plug in burner head.
- Attach ignitor wire to spark plug.
- Reinstall fan and upper shell.

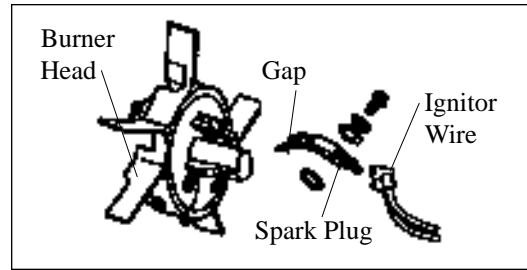


Figure 14.

## **G.) PHOTO CELL**

CLEAN PHOTOCCELLANNUALLY OR AS NEEDED.

- Remove upper shell (See page 9).
- Remove photocell from it's mounting. Clean with cotton swab.

TO REPLACE: Remove side panel near on/off switch.

- Disconnect wires from circuit board and remove photocell.
- Install new photocell and attach wires to circuit board.
- Replace fan and upper shell.



Figure 15

## **H.) FUEL FILTER**

CLEAN OR REPLACE TWICE A HEATING SEASON OR AS NEEDED.

- Remove side cover screws using medium phillips screwdriver.
- Remove side cover.
- Pull fuel line off fuel filter neck.
- Remove fuel filter assembly.
- Wash fuel filter with clean fuel and replace in tank.
- Attach fuel line to fuel filter neck.
- Reinstall side cover.

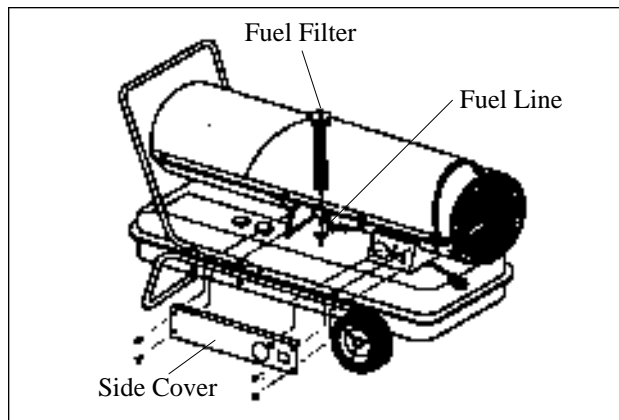


Figure 16

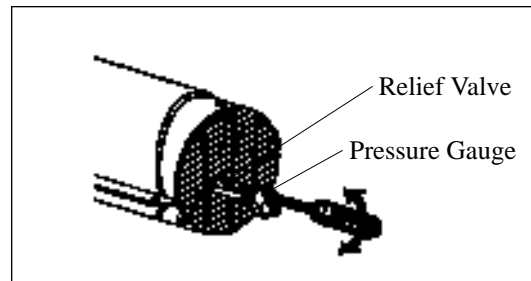
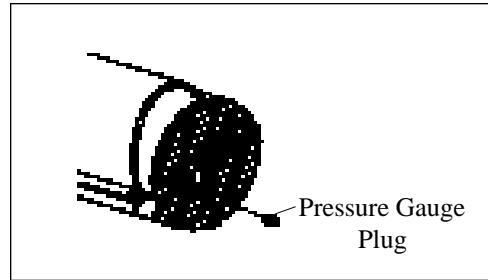
**NEVER LEAVE THE HEATER  
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### I.) PUMP PRESSURE ADJUSTMENT

- Remove pressure gauge plug from filter end cover.
- Install accessory pressure gauge.
- Start heater (See Operation, page 8)
- Adjust pressure (Using a flat blade screwdriver)  
Turn relief valve to right to increase pressure. Turn relief valve to left to decrease pressure. Set pump pressure as noted below correct pressure for each model.
- Stop heater (See Operation, page 8)
- Remove pressure gauge. Replace pressure gauge plug in filter end cover.

MODEL	PUMP PRESSURE
DFA45	3.5 psi
DFA65	3.5 psi
DFA120	4.5 psi
DFA170T	6.5 psi

Figure 17.



**NOTE: USE ONLY ORIGINAL EQUIPMENT REPLACEMENT PARTS.**

**Use of alternate or third party components will void any warranty and may cause unsafe operation condition.**

**NEVER LEAVE THE HEATER  
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## **10. TROUBLE SHOOTING GUIDE**

<b>TROUBLE</b>	<b>POSSIBLE CAUSE</b>	<b>CORRECTIVE ACTION</b>
<b>Heater ignites but MAIN PCB assembly shuts heater off after a short period of time. (Lamp is flickering)</b>	<ol style="list-style-type: none"> <li>1. Wrong pump pressure</li> <li>2. Dirty Air Output, Air Intake and Lint Filter</li> <li>3. Dirty Fuel Filter</li> <li>4. Dirt in Nozzle</li> <li>5. Dirty Photocell Lens</li> <li>6. Photocell Assembly not properly installed. (Not seeing the flame)</li> <li>7. Bad electrical connection between photocell and MAIN PCB assembly</li> <li>8. Defective photocell</li> </ol>	<ol style="list-style-type: none"> <li>1. See Pump Pressure Adjustment, page 12.</li> <li>2. See Air Output, Air intake and Lint Filters, page 10.</li> <li>3. See Fuel Filter, page 11.</li> <li>4. See Nozzle, page 10.</li> <li>5. Clean Photocell Lens, page 11.</li> <li>6. Make sure photocell boot is properly seated in bracket, page 11.</li> <li>7. Check electrical components</li> <li>8. Replace photocell</li> </ol>
<b>Heater will not ignite but motor runs for a short period of time. (Lamp is flickering)</b>	<ol style="list-style-type: none"> <li>1. No fuel in tank</li> <li>2. Wrong pump pressure</li> <li>3. Carbon deposits on spark plug and/or improper gap</li> <li>4. Dirty fuel filter</li> <li>5. Dirt in nozzle</li> <li>6. Water in fuel tank</li> <li>7. Bad electrical connection between ignitor and MAIN PCB assembly</li> <li>8. Ignitor wire is not attached to spark plug</li> <li>9. Defective ignitor</li> </ol>	<ol style="list-style-type: none"> <li>1. Fill tank with kerosene</li> <li>2. See Pump Pressure Adjustment, page 12.</li> <li>3. See Spark Plug, page 11.</li> <li>4. See Fuel Filter, page 11.</li> <li>5. See Nozzle, page 10.</li> <li>6. Flush fuel tank with clean kerosene, page 9.</li> <li>7. Check electrical connections, See wiring diagram, page 14.</li> <li>8. Attach ignitor wire to spark plug. See Spark Plug, page 11.</li> <li>9. Replace ignitor.</li> </ol>
<b>Fan does not turn when heater is plugged in and power switch was in the “ON” position (Lamp is on or flickering)</b>	<ol style="list-style-type: none"> <li>1. Thermostat setting is too low (DFA170T model)</li> <li>2. Bad electrical connection between motor and MAIN PCB assembly</li> </ol>	<ol style="list-style-type: none"> <li>1. Turn thermostat control knob to a higher setting</li> <li>2. Check electrical connections, See Wiring Diagram, page 14.</li> </ol>
<b>Heater ignites but shuts off quickly (Lamp is on)</b>  OR  <b>Heater will not turn-on (Lamp is off)</b>	<ol style="list-style-type: none"> <li>1. Ambient temperature is too high</li> <li>2. Temperature limit safety device is overheated</li> <li>3. No electrical power</li> <li>4. Blown fuse</li> <li>5. Bad electrical connection between temperature limit safety device and PCB board</li> </ol>	<ol style="list-style-type: none"> <li>1. Heater cannot be operated in temperatures above 85°F/24°C See page 7.</li> <li>2. Turn power switch to “OFF” and allow to cool (about 10 min.). Then turn power switch to “ON” position.</li> <li>3. Check to insure heater cord and extension cord are plugged in. Check power supply.</li> <li>4. Replace safety fuse in PCB board.</li> <li>5. Check electrical connections. See Wiring Diagram, page 14.</li> </ol>

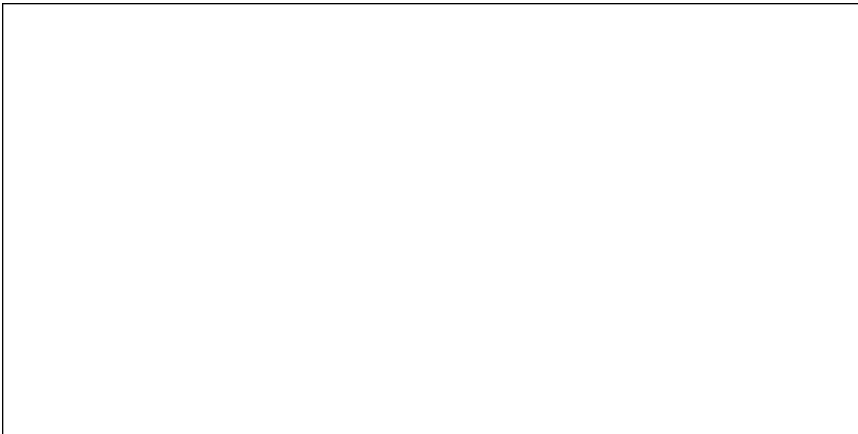
NEVER LEAVE THE HEATER  
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## **11. WIRING DIAGRAM**

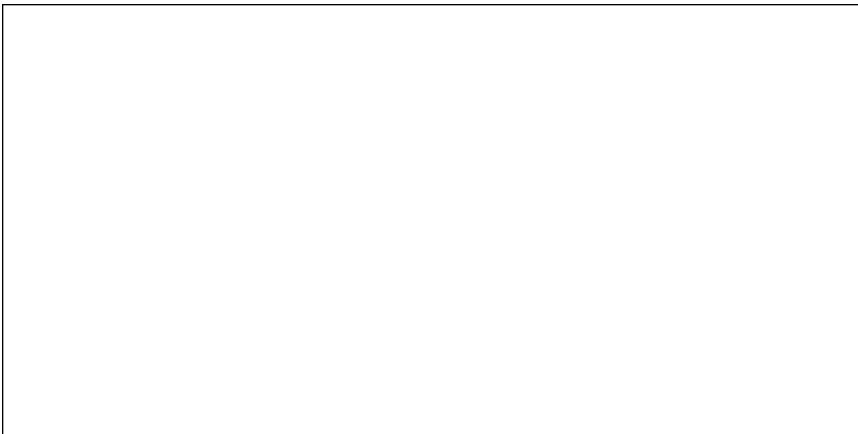
### **A. WIRING DIAGRAM (DFA45/DFA65)**



### **B. WIRING DIAGRAM (DFA120)**

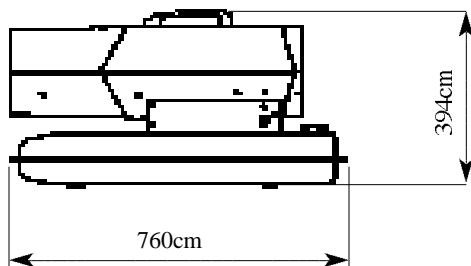


### **C. WIRING DIAGRAM (DFA170T)**

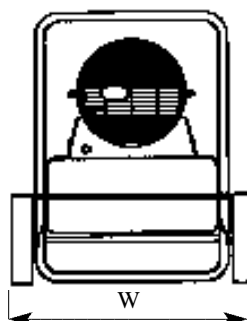
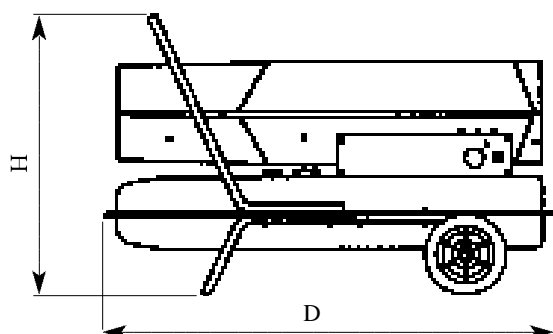


**NEVER LEAVE THE HEATER  
UNATTENDED WHILE BURNING!**

## **12. SPECIFICATIONS**



**DFA45/DFA65**



	DFA120	DFA170T
H	589cm	629cm
D	853cm	993cm
W	483cm	522cm

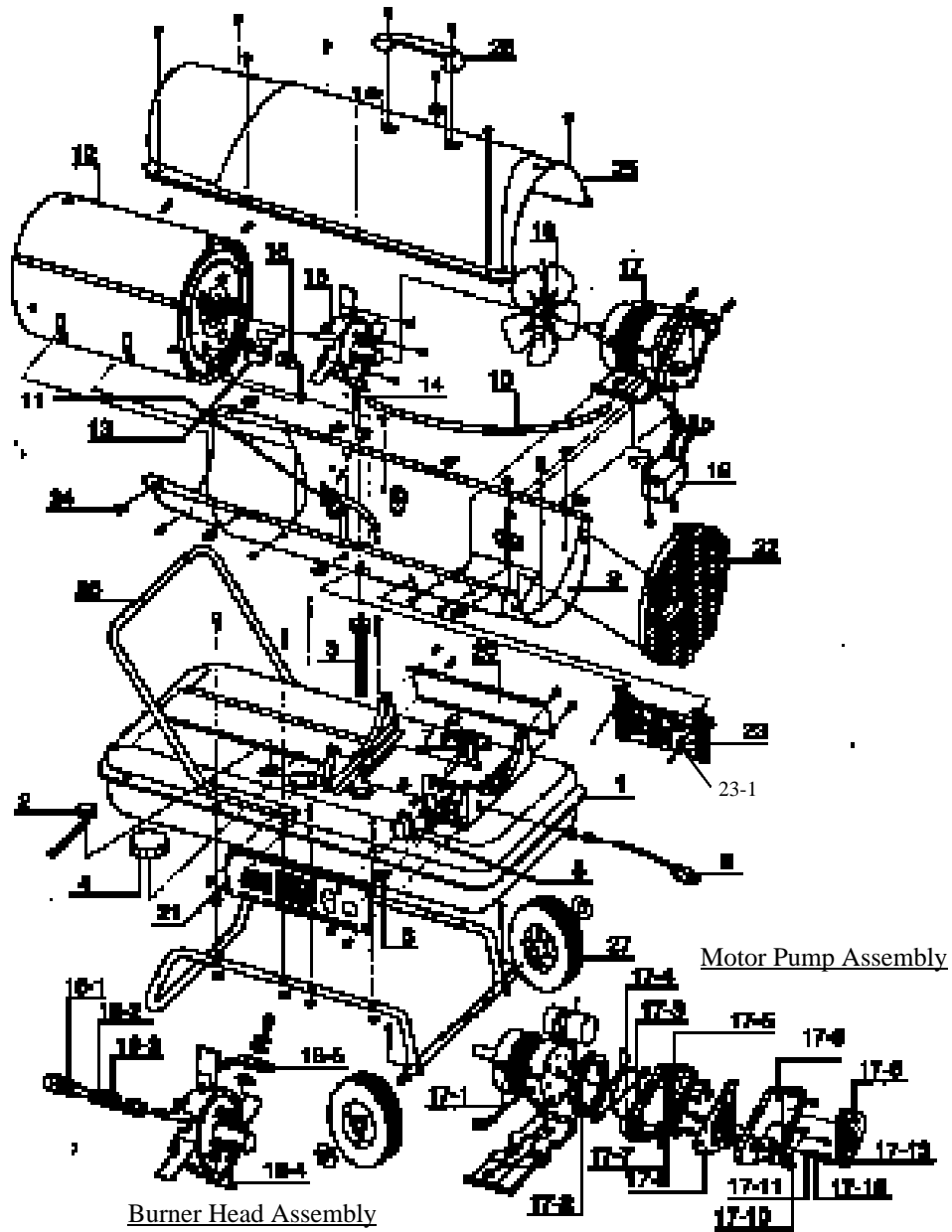
MODEL	DFA45	DFA65	DFA120	DFA170T
BTU/Hr.	45,000	65,000	120,000	170,000
Fuel Consumption - Gal./Hr.	.35	0.5	0.9	1.3
Fuel Tank Capacity - Gal.	5.0	5.0	10.0	13.0
Pump Pressure PSI	3.5	3.5	4.5	6.5
Volt/Hz	120VAC/60	120VAC/60	120VAC/60	120VAC/60
Amps	1.7	1.7	2.6	3.3
Phase	1	1	1	1
Weight lbs./kg.	32/14.5	32/14.5	55/25	62/28



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### 13. EXPLODED PARTS DRAWING

NOTE: SPECIFY MODEL NUMBER AND PART NUMBER WHEN ORDERING PARTS.



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#### **14. PARTS LIST**

KEY NO.	DESCRIPTION	PART NO.			
		DFA45	DFA65	DFA120	DFA170T
1	Fuel Tank Assembly	280-1004-02	280-1004-02	280-1004-01	280-1004-00
2	Fuel Gauge	282-1001-01	282-1001-01	282-1001-00	282-1001-00
3	Fuel Filter Assembly	287-4000-20	287-4000-20	287-4000-21	287-4000-21
4	Fuel Cap	282-2000-90	282-2000-90	282-2000-90	282-2000-90
5	Power Cord	140-9000-013	140-9000-013	140-9000-013	140-9000-013
6	Power Switch	110-9400-001	110-9400-001	110-9400-001	110-9400-001
7	Display P.C.B. Assembly	160-9200-072	160-9200-072	160-9200-027	160-9200-027
8	Thermostat Control Knob	-----	-----	-----	285-2103-00
9	Lower Shell	285-5103-00	285-5103-00	285-5104-00	285-5104-20
10	Air Line	578-5100-51	578-5100-51	287-5100-53	287-5100-53
11	Temperature Limit Control	154-9000-008	154-9000-008	154-9000-007	154-9000-007
12	Combustion Chamber	280-8000-02	280-8000-02	280-8000-01	280-8000-00
13	Photocell	FA1007	FA1007	FA1007	FA1007
14	Fuel Line	287-5100-50	287-5100-50	287-5100-52	287-5100-52
15	Photocell Assembly	126-9200-001	126-9200-001	126-9200-001	126-9200-001
16	Burner Head Assembly	Ref.	Ref.	Ref.	Ref.
16-1	Nozzle	FA1001	FA1002	FA1003	FA1004
16-2	Nozzle Seal Washer	-----	-----	285-8109-90	285-8109-90
16-3	Nozzle Seal Spring	-----	-----	285-8110-00	285-8110-00
16-4	Burner Head	284-7112-00	284-7112-00	284-7112-11	284-7112-10
16-5	Spark Plug	FA1008	FA1008	FA1009	FA1009
17	Motor and Pump Assembly	283-1000-42	283-1000-42	283-1000-41	283-1000-40
17-1	Motor	111-9000-985	111-9000-985	111-9000-984	111-9000-955
17-2	Pump Body	288-3100-00	288-3100-00	288-3100-00	288-3100-00
17-3	Rotor Kit	FA1000	FA1000	FA1000	FA1000
17-4	Blade	288-3100-60	288-3100-60	288-3100-60	288-3100-60
17-5	End Pump Cover	288-3100-10	288-3100-10	288-3100-10	288-3100-10
17-6	Filter Kit	FA1005	FA1005	FA1005	FA1005
17-7	Lint Filter	See 17-6	See 17-6	See 17-6	See 17-6
17-8	Output Filter	See 17-6	See 17-6	See 17-6	See 17-6
17-9	End Filter Cover	288-3100-40	288-3100-40	288-3100-40	288-3100-40
17-10	Plug/Pump Adj. Kit	FA1006	FA1006	FA1006	FA1006
17-11	Ball	See 17-10	See 17-10	See 17-10	See 17-10
17-12	Spring	See 17-10	See 17-10	See 17-10	See 17-10
17-13	Adj. Screw	See 17-10	See 17-10	See 17-10	See 17-10
18	Fan Assembly	283-1000-72	283-1000-72	283-1000-71	283-1000-70
19	Ignitor	158-9100-001	158-9100-001	158-9100-007	158-9100-009

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#### **14. PARTS LIST**

KEY NO.	DESCRIPTION	PART NO.			
		DFA45	DFA65	DFA120	DFA170T
20	Side Cover R	280-5102-90	280-5102-90	280-5103-01	280-5103-10
21	Side Cover L	280-5102-91	280-5102-91	280-5103-02	280-5103-11
22	Fan Guard	285-3107-40	285-3107-40	285-3107-41	285-3107-41
23	Main P.C.B. Assembly	160-9200-080	160-9200-080	160-9200-071	160-9200-026
23-1	Fuse	FA1015	FA1015	FA1016	FA1017
24	Clip Nut	285-4105-00	285-4105-00	285-4105-00	285-4105-00
25	Upper Shell	285-5103-10	285-5103-10	285-5104-10	285-5104-30
26	Handle	285-3106-80	285-3106-80	285-3107-61	285-3107-60
27	Wheel Assembly	-----	-----	287-6000-01	287-6000-00

#### **ACCESSORIES**

Air Pressure Gauge      FA1010 (all models)  
Thermostat                FA1012 (all models)

**FOR TECHNICAL ASSISTANCE SEE YOUR LOCAL RETAILER OR  
CONTACT US AT:**

Phone: 814-643-1775      Tech.: 814-643-2299

Fax: 814-643-3443

Email: techsvc@yourheater.com

or visit our website at [www.yourheater.com](http://www.yourheater.com)

## **LIMITED WARRANTY:**

This limited warranty is extended to the original retail purchaser of this DuraHeat Heater and warrants against any defect in materials and workmanship for a period of one (1) year from the date of retail sale. World Marketing of America, Inc., at its option, will either provide replacement parts or replace or repair the unit, within one (1) year of retail purchase. (Shipping costs, labor costs, etc. are the responsibility of the purchaser.)

----- **DO NOT RETURN TO RETAILER UNTIL CONTACTING WORLD MARKETING AT 1-800-776-9425,** -----  
**FAX: 814-643-3443, EMAIL: TECHSVC@YOURHEATER.COM OR MAIL: P.O. BOX 192, MILLCREEK PA 17060**

### **DUTIES OF THE OWNER:**

This heating appliance must be operated in accordance with the written instructions furnished with this heater. This warranty shall not excuse the owner from properly maintaining this heater in accordance with the written instructions furnished with this heater. A bill of sale, canceled check or payment record must be kept to verify purchase date and establish warranty period. Original carton should be kept in case of warranty return of unit.

### **WHAT IS NOT COVERED:**

1. Damage resulting from use of improper fuel.
2. Damage caused by misuse or use contrary to the owners manual and safety guidelines.
3. Damaged caused by lack of normal maintenance.
4. Air filters, fuel filters, fuses.
5. Use of non-standard parts or accessories.
6. Damage caused in transit.

This warranty does not imply or assume any responsibility for consequential damages that may result from the use, misuse, lack of routine maintenance of this heating appliance. A cleaning fee and the cost of parts may be charged for appliance failures resulting from lack of maintenance. This warranty does not cover claims which do not involve defective workmanship or materials. **Freight charges on warranty parts or heaters to and from the factory shall be the responsibility of the owner.** FAILURE TO PERFORM GENERAL MAINTENANCE (INCLUDING CLEANING) WILL VOID THIS WARRANTY.

THIS LIMITED WARRANTY IS GIVEN TO THE PURCHASER IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE. THE REMEDY PROVIDED IN THIS WARRANTY IS EXCLUSIVE AND IS GRANTED IN LIEU OF ALL OTHER REMEDIES. IN NO EVENT WILL WORLD MARKETING OF AMERICA BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Some states do not allow the exclusion or limitation of incidental or consequential damages so the above limitation or exclusion may not apply to you.

### **CLAIMS HANDLED AS FOLLOWS:**

1. Contact our Consumer Warranty Dept. noting the heater model, the problem, copy of the sales receipt or date of purchase. The Warranty Dept. can be reached at 1-800-776-9425, Fax at 814-643-3443 or email at techsvc@yourheater.com.
2. A representative will contact you. **DO NOT RETURN THE HEATER TO RETAILER** unless instructed by our Representative. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

----- **DO NOT RETURN THE HEATER TO THE RETAILER WITHOUT PRIOR INSTRUCTION FROM OUR REPRESENTATIVE.** -----

TO REGISTER THE WARRANTY ON YOUR NEW KEROSENE HEATER, PLEASE FILL OUT THIS CARD  
COMPLETELY AND MAIL WITHIN 14 DAYS FROM DATE OF PURCHASE.

NAME: \_\_\_\_\_ PHONE: (     ) \_\_\_\_\_  
ADDRESS: \_\_\_\_\_  
CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_  
MODEL: \_\_\_\_\_ SERIAL #: \_\_\_\_\_ DATE PURCHASED: \_\_\_\_\_  
DEALER PURCHASED FROM: \_\_\_\_\_ TYPE OF STORE: \_\_\_\_\_  
CITY & STATE WHERE PURCHASED: \_\_\_\_\_ PRICE PAID: \_\_\_\_\_

**Please Take a Minute To Give Us Your Answers To The Following Questions.**  
**All Responses Are Used Solely For Market Research And Are Held In Strict Confidence.**

Do you own any other portable heaters?      Yes      No  
If you do: How many? \_\_\_\_\_ What Brands? \_\_\_\_\_ Satisfied? \_\_\_\_\_  
Please indicate your age group:      Under 25,      25-34,      35-44,      45-54,      55-64,      65 or older  
How do you intend to use your new heater? \_\_\_\_\_  
Where did you hear about this heater? \_\_\_\_\_  
What made you select this heater?      Price,      Store Display,      Salesperson,      Recommendation,      Radio ad,  
   Newspaper Ad,      Other (Please Specify) \_\_\_\_\_  
What is your occupation? \_\_\_\_\_  
Part No. DHF-WTY      Would you recommend this heater to a friend? \_\_\_\_\_

**THANK YOU FOR COMPLETING THIS FORM!**