# SERVICE PROCEDURES

WARNING: To avoid risk of burn and electrical shock, never attempt to service heater while it is plugged in, operating, or hot.

## **UPPER SHELL REMOVAL**

- Remove screws along each side of heater using 5/16" nut-driver. These screws attach upper and lower shells together. See Figure 10 or 11.
- 2. Lift upper shell off.
- 3. Remove fan guard.

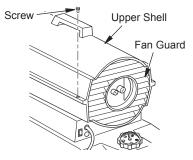


Figure 10 - Upper Shell Removal, 40/50/55/60/70 Models Only

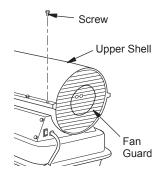


Figure 11 - Upper Shell Removal, 110/115/155/165/200 Models Only

### **FAN**

*IMPORTANT:* Remove fan from motor shaft before removing motor from heater. The weight of the motor resting on the fan could damage the fan pitch (see Figure 12).

- 1. Remove upper shell (see Figure 10 or 11).
- 2. Use 1/8" allen wrench to loosen setscrew which holds fan to motor shaft.
- 3. Slip fan off motor shaft.

- Clean fan using a soft cloth moistened with kerosene or solvent.
- 5. Dry fan thoroughly.
- 6. Replace fan on motor shaft. Place fan hub flush with end of motor shaft (see Figure 13).
- 7. Place setscrew on flat of shaft. Tighten setscrew firmly (40-50 inch-pounds/4.5-5.6 n-m).
- 8. Replace fan guard and upper shell.

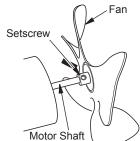


Figure 12 - Fan, Motor Shaft, and Setscrew Location

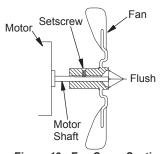


Figure 13 - Fan Cross Section
AIR OUTPUT, AIR INTAKE AND LINT
FILTERS

- 1. Remove upper shell (see Figure 10 or 11).
- 2. Remove filter end cover screws using 5/16" nutdriver (see Figure 14 or Figure 15, page 10).
- 3. Remove filter end cover.
- Replace air output and lint filters.
- 5. Wash or replace air intake filter (see *Preventative Maintenance Schedule*, page 7).

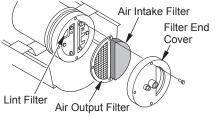


Figure 14 - Air Output, Air Intake, and Lint Filters, 40/50/55/60/70 Models Only

## SERVICE PROCEDURES

#### Continued

- 6. Replace filter end cover.
- 7. Replace fan guard and upper shell. *IMPORTANT*: Do not oil filters.

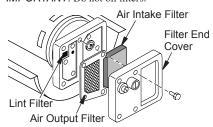


Figure 15 - Air Output, Air Intake, and Lint Filters, 110/115/155/165/200 Models Only

### PUMP PRESSURE ADJUSTMENT

- 1. Remove pressure gauge plug from filter end cover (see Figure 16).
- 2. Install accessory pressure gauge (part number HA1180).
- 3. Start heater (see *Operation*, page 5). Allow motor to reach full speed.
- Adjust pressure. Turn relief valve to right to increase pressure. Turn relief valve to left to decrease pressure. See specifications correct pressure for each model (see Figure 17).
- 5. Remove pressure gauge. Replace pressure gauge plug in filter end cover.

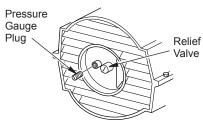


Figure 16 - Pressure Gauge Plug Removal (40/55/60/70 Models Shown)

ump		
essure 0 PSI 4 PSI 4 PSI 4 PSI 7 PSI 1 PSI 1 PSI 2 PSI	Pressure Gauge	
	Pump essure 0 PSI 4 PSI 4 PSI 4 PSI 7 PSI 1 PSI 1 PSI 2 PSI 6 PSI 2 PSI	essure 0 PSI 4 PSI 4 PSI 7 PSI 1 PSI 1 PSI 1 PSI 2 PSI 6 PSI

Figure 17 - Adjusting Pump Pressure (40/50/55/60/70 Models Shown)

#### **FUEL FILTER**

- Remove side cover screws using 5/16" nutdriver.
- 2. Remove side cover.
- 3. Pull upper fuel line off fuel filter neck (see Figure 18 or 19).
- Carefully pry bushing, fuel filter, and lower fuel line (110/115/155/165/200 Models only) out of fuel tank (see Figure 19).
- Wash fuel filter with clean fuel and replace in tank
- 6. Attach upper fuel line to fuel filter neck.
- 7. Replace side cover.

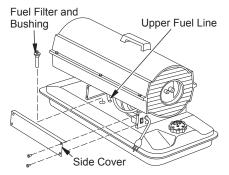


Figure 18 - Fuel Filter Removal, 40/50/55/60/70 Models

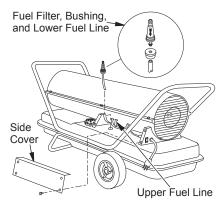


Figure 19 - Fuel Filter Removal, 110/115/155/165/200 Models