

PUMP ROTOR

1. Remove upper shell Remove filter end cover screws using 5/16" nut driver
 2. Remove filter end cover and air filters.
 3. Remove pump plate screws using 5/16" nut-driver.
 5. Remove pump plate.
 6. Remove rotor, insert, and blades (see Figure 30 or 31).
 7. **Check for debris in pump. If debris is found, blow out with compressed air.**
 8. Install insert and rotor.
 9. Check gap on rotor. Adjust to 0.076/0.101 mm (0.003"/0.004") if needed (see Figure 32).
- Note:* Rotate rotor one full turn to ensure the gap is 0.076/0.101 mm (0.003"/0.004") at tightest position. Adjust if needed.
10. Install blades, pump plate, air filters, and filter end cover.
 11. Replace fan guard and upper shell (see *Upp*).

12. Adjust pump pressure *Note:*
13. If rotor is still binding, proceed as follows.
14. Perform steps 1 through 6.
15. Place fine grade sandpaper (600 grit) on flat surface. Sand rotor lightly in "figure 8" motion four times (see Figure 33).
16. Reinstall insert and rotor.
17. Perform steps 10 through 12

Figure 33 - Sanding Rotor

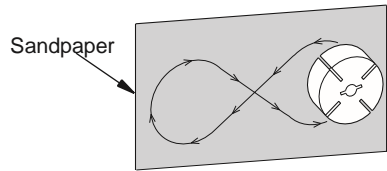
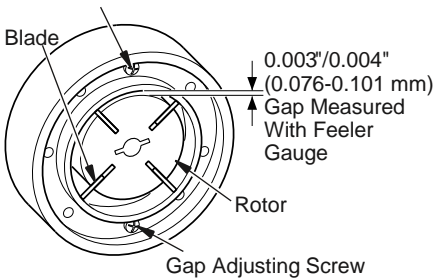
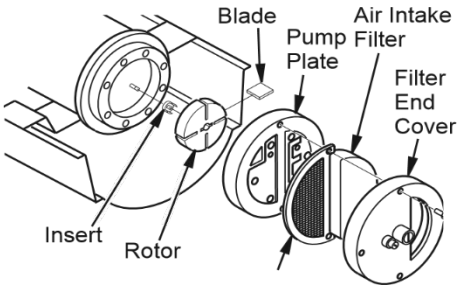


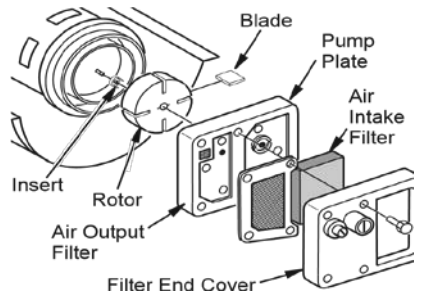
Figure 32 - Gap Adjusting Screw Locations

Gap Adjusting Screw





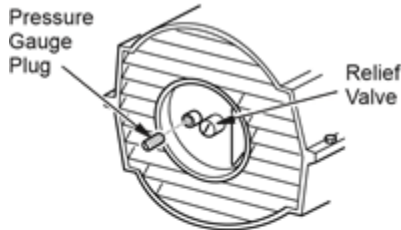
**Figure 30 - Rotor Location,
40/50/55/60/70 Models**



**Figure 31 - Rotor Location,
110/115/155/165/200 Models**

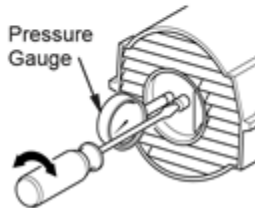
PUMP PRESSURE ADJUSTMENT

1. Remove pressure gauge plug from filter end cover (see Figure 16).
2. Install accessory pressure gauge (part number HA1180).
3. Start heater and allow motor to reach full speed.
4. 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)**

Model	Pump Pressure
40	3.0 PSI
50	3.4 PSI
55	3.4 PSI
60	3.4 PSI
70	4.7 PSI
110	5.1 PSI
115	5.1 PSI
155	5.2 PSI
165	5.6 PSI
200	6.2 PSI



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

