

## INSTALLATION

1. Omni Waste Oil Burners are to be installed on manufactures approved appliances. Check with factory for application approval. Warranty is voided if burner is used in a non-approved application.
2. Wire 115Vac power into main electrical box located on top of burner. Use dedicated 15amp protection circuit with 12 gauge wire. Connect Oil Pump with 12 gauge wire.
3. Depending on application, wire low voltage thermostat into "T" terminals on the Oil Primary (figure 1) or jump "T" terminals for continuous operation.
4. USE ONLY 3/8" nominal ID copper tubing with flare fittings only on the oil suction from the tank to the oil pump and oil pump to burner. **DO NOT use ferrule fittings or teflon tape on any pipe fittings.** Keep suction line approximately 6" from bottom of oil tank to prevent suction of sludge. Use only an inside oil storage tank. **Do Not** draw from an outside tank, especially not an underground tank directly to burner. A separate transfer pump from an outside tank with proper filtration to the inside supply tank is acceptable.
5. The fuel pump included with burner is to be mounted at tank level or below.

## STARTUP

1. **IMPORTANT-** Prior to starting the unit, pre-fill the filter and fuel line with oil to assist priming procedure. Oil pump motor turns at low RPM's and would take significant time to complete priming process if not pre-filled. Make sure the oil supply line fittings are air tight. Vacuum leaks are notoriously hard to find. Pressurizing the line with oil in it can help to locate leaks.
2. During the initial power up process the burner is locked out from energizing until the oil has been properly pre-heated to operating thermo setpoint, approx 3 to 5 minute duration. Once the oil has been pre-heated, power is then applied to burner componenets and oil pump.
3. Making sure the thermostat is turned off, apply power to the burner. Switch burner main power switch to ON position. After allowing the oil pre-heater time to establish temperature setpoint, approximately 5 minutes. Jump the "T" terminals on the Oil Primary (figure 1). Once the burner is running, temporarily jump the "F" terminals on the Oil Primary. This will allow the burner to run during the pump priming process.
4. Priming the oil pump: Open bleeder valve one turn until all air is expelled (figure 4). This may need to be done twice to insure all air is removed. **IMPORTANT:** When fully purged and flame is established remove temporarily jumpers on "F" terminals of the Oil Primary to allow safety features of the unit to operate properly.
5. Adjust air supply of integrated air compressor to 12-13 P.S.I. This is factory preset, however, due to freight handling settings may be compromised.
6. Combustion air band (figure1) should be open approximately 1/2" or until flame is clear yellow, not orange. Opening the air band too far may cause delayed in starting or even prevent the flame from starting.

## MAINTENANCE

1. **Weekly** Drain water from storage tank.
2. **Monthly** Clean pump screen on oil pump assembly of sludge and remove any water. Access to screen is by removing pump cover. Clean flame cone of deposits. Clean air compressor filter/muffler.
3. **Yearly** Inspect and adjust electrodes per (figure 6). **CAUTION: turn off main electrical power before checking or adjusting electrode settings.** Inspect and check alignment

of nozzle in relation to flame cone/burner tube (figure 6). Tip of nozzle must be  $\frac{1}{4}$ " forward of inside radius of flame cone. If nozzle is behind inside radius of flame cone, coking will occur and flame cone can clog. To adjust, loosen Pre-Heater block securing nut and set screw, push fore or aft as needed then retighten securing nut and set screw.

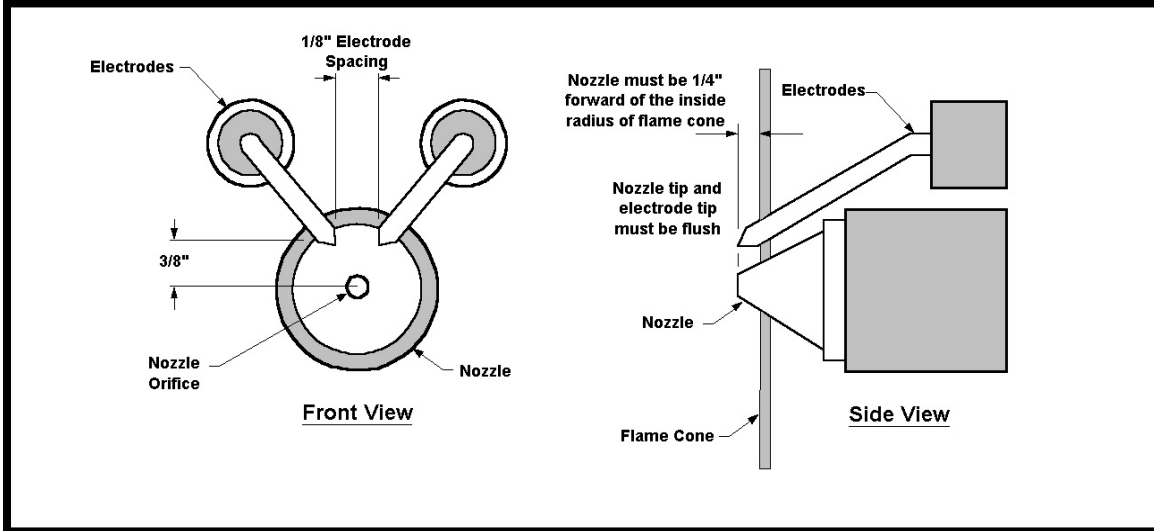


Figure 6 –Electrode Adjustment Diagram

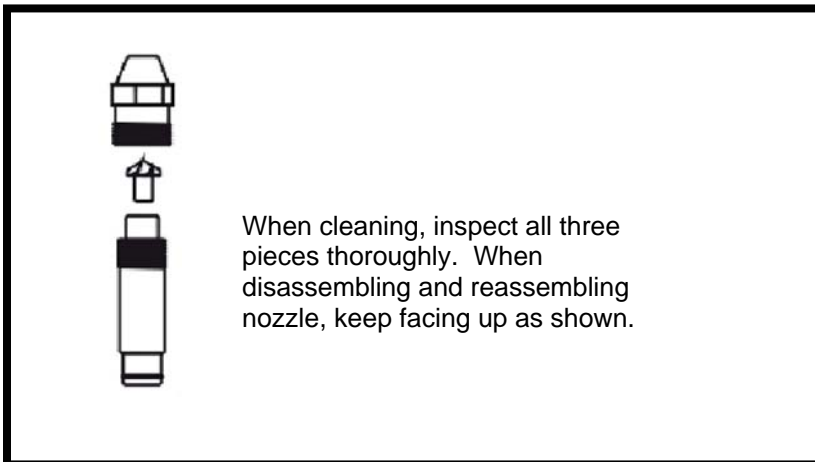


Figure 7 –Nozzle Assembly Detail

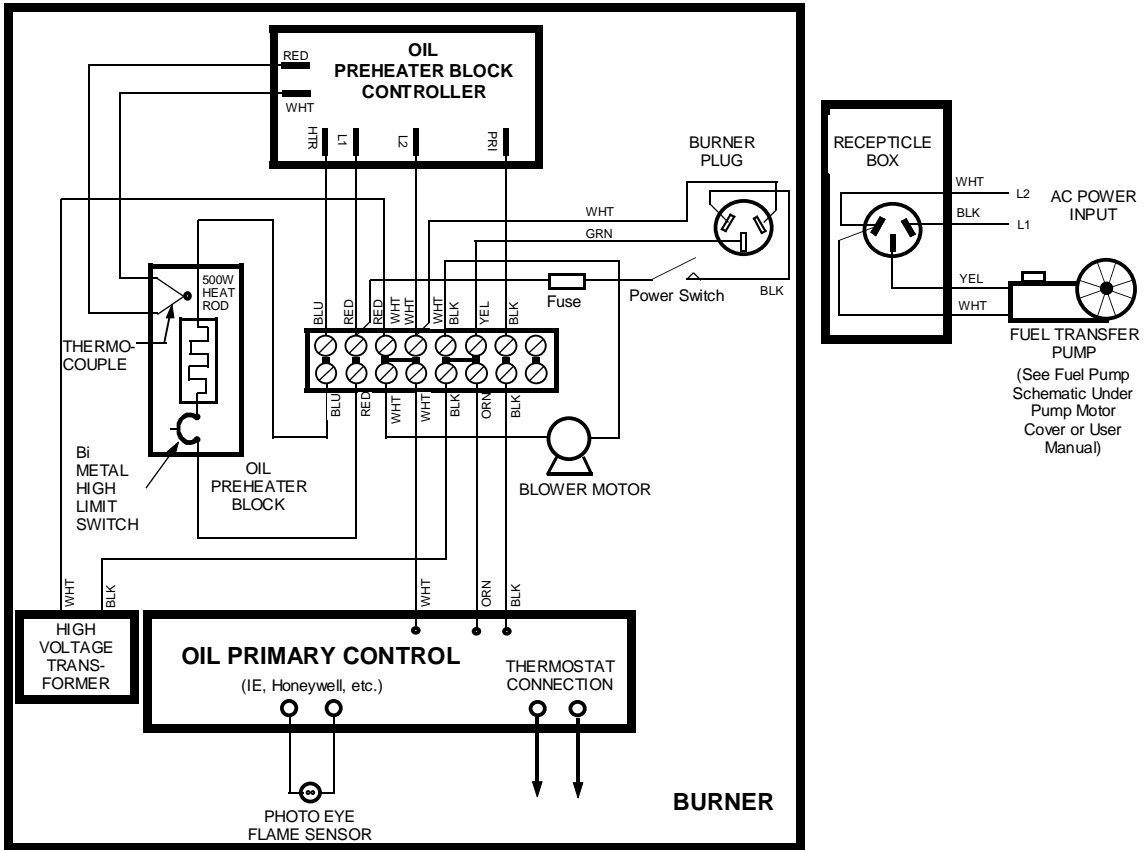


Figure 8 –Burner Wiring Diagram