

WH MODEL PARKER INDIRECT WATER HEATERS
WATER FILL, TREATMENT & CLEANING INSTRUCTIONS

I. WATER FILL:

The Indirect Heater is normally shipped dry for reduced shipping weight and to prevent freeze up in cold climates. It is necessary to fill with water before starting the Heater.

1. Clean only with Potable Water. Use Soft Water if available. Fill the Heater to the proper level. The proper amount of Water Control Treatment has already been added at the factory before shipment.
 - A. On Systems using the Expansion Tank, fill to the top of the upper header or to the top of the fill opening elbow.
 - B. On older swimming pool applications without the expansion tank, fill to the top of the fill ELL on backside of Heater (See Drawing).
2. With the fill opening plug removed, start up the Heater and allow it to operate for several minutes. This allows water to circulate through the primary side and eliminate Air Pockets. Turn off heater, refill to proper level and plug fill opening.
3. Start-up Heater and operate in normal manner. Check the System to be certain that there are no leaks and all fittings and connections are securely tight. Be certain the Water Level is proper. After several days of service, check for leaks in the fittings and re-tighten the Heat Exchanger Bolts.

II. WATER TREATMENT:

1. For Portable Water Service, use only Treatment comparable to EMS 323 Water Control, USDA Grade G1. For General Service, use EMS 323 or Treatment comparable to EMS 632 Boiler Water Control, USDA Grade G6. The following quantities of Treatment are recommended and have already been added to new Heaters at the Factory.

| HEATER MODEL OR SIZE | LIQUID CONTROL TREATMENT | OR | DRY CONTROL TREATMENT |
|----------------------|---|----|-----------------------|
| WH-300 TO WH-730 | 1/4 QUART (1 CUP OR 8 OZ OR ½ PINT) | | 3 OZ (.19#) |
| WH-970 TO WH-1410 | 1/2 QUART (2 CUPS OR 16 OZ OR 1 PINT) | | 6 OZ (.38#) |
| WH-1900 TO WH-2270 | 3/4 QUART (3 CUPS OR 24 OZ OR 1½ PINTS) | | 9 OZ (.56#) |
| WH-2650 TO WH-3000 | 1 QUART (4 CUPS OR 32 OZ OR 2 PINTS) | | 12 OZ (.75#) |

WARNING

MIX THOROUGHLY IN WARM WATER BEFORE ADDING TO HEATER. WHEN THIS HEATER IS USED FOR POTABLE WATER SERVICE, NEVER ADD ANTI-FREEZE, GLYCOL, HEAT TRANSFER FLUID, OR ANY SUBSTANCE OTHER THAN POTABLE WATER TO THE PRIMARY SIDE. THE ONLY TREATMENTS THAT ARE TO BE USED ARE USDA APPROVED GRADE G1 GENERAL POTABLE WATER TREATMENT COMPOUNDS. REFILL ONLY WITH POTABLE WATER.

2. It should not be necessary to add Make-up Water to the Heater, but if such is required more than two times, immediately determine the cause of the leak and repair it. If it is necessary to add Make-up Water to the System on repeat occasions, every third or fourth time, add approximately 10% of the above amount of Control Treatment.

III. CLEANING & FLUSHING:

The Parker Indirect Heater is not recommended to be regularly flushed or cleaned unless the Boiler Water becomes dirty or discolored, or if it has been necessary to add water make-up on repeat occasions. It is considered good practice to completely drain and flush the System within the first six (6) months of service and any time the water becomes discolored or dirty. The following instructions should be followed in the flushing and refilling of the system.

1. Install a Drain Valve on the Lower Header or, if not available, remove
2. If the water is dirty, remove the Heat Exchanger from the boiler. Remove the cap from the other lower header.
3. Remove and clean the Expansion tank.
4. Take a hose and thoroughly wash the external Heat Exchanger. Wash inside of the Upper Header and down through the Tubes until the System is thoroughly clean.
5. If it is not possible to clean the Tubes thoroughly or if there is considerable rust or scale deposits, consult the Manufacturer for the recommended Cleaning Procedures.
6. If it is not practical to remove the Heat Exchanger, connect the hose to one of the connections off of the Upper Header such as the Expansion Tank Opening, Relief Valve Opening or Pressure Gauge Opening. Allow the water to run through the System and drain until all the water is thoroughly clean.
7. If the Heat Exchanger is removed, the Gaskets should be replaced and all surfaces carefully cleaned so that the Gasket Surfaces will properly seal against leaks.
8. Before refilling the Boiler, the Low Water Cut-off Probe and Temperature Control Bulbs should be inspected and cleaned or replaced as necessary. The Low Water Cut-off should be tested for safe operation when refilling the Boiler.