

SPECIFIC RETUBE INSTRUCTIONS
30 TO 50 H.P. PARKER INDUSTRIAL HORIZONTAL DRUM STEAM BOILER

BEFORE RETUBING THE BOILER, THOROUGHLY READ THESE SPECIFIC RETUBE INSTRUCTIONS, THE **GENERAL RETUBE INSTRUCTION BULLETIN GRI 101-5**, AND CAREFULLY REVIEW THE SPECIFIC RETUBE INSTRUCTION AND BAFFLE PLACEMENT DRAWING.

I. GENERAL INFORMATION:

1. It is not necessary to remove the cabinet for retubing as the tubes can be replaced through the cabinet doors.
2. The 30 H.P. boiler has 3 tube sections, the 40 H.P. has 4 tube sections and the 50 H.P. boiler has 5 tube sections. All tube sections are identical and can be interchanged.
3. Each section is attached by 2 union connections. Tubes can be removed in sections by removing the door baffles and disconnecting these 2 unions. The tube sections can be pulled through the cabinet door. If a forklift truck or hoist is available, this is ideal for supporting the weight and making it easier to remove the tubes.
4. Before disconnecting the unions to remove the tubes, place adequate bracing such as 2 x 4's under the tubes so they will slip out easier and will not be allowed to drop down causing damage. Pipe rollers can be placed on top of the 2 x 4's making it possible to roll the tube sections through the cabinet door. Be careful not to damage orifices, T-Burners, or the firebox (fireboxes are on power burner boilers only).
5. When installing tube sections in the front of the boiler side with nameplate, always install with the tube header and union on top. When installing tube sections in the back of the boiler, always install with the tube header and union on the bottom. For top and bottom identification, install tubes with baffles located per drawing.
6. Since all tube sections are identical, any individual tube section can be reversed or turned upside down, but it is necessary to re-locate the tube baffles.

II. RETUBE INSTRUCTIONS:

1. Turn off all fuel, water and electricity. Remove the cabinet doors and door baffles.
2. On gas fired models, remove burners under the tube sections which are to be replaced.
3. **Removal of Tubes:** Be sure to place bracing under tubes, see above Item 4, paragraph 1.
When Removed by Individual Sections:
 - (a) It is not necessary to remove the tube braces or individual tube baffles as they will slip out with the tube section as it is removed.
 - (b) Loosen the 2 union connections (1 on each side of cabinet).
 - (c) Be sure that the weight is properly supported as the tube set is very heavy and could cause damage if it should slip down.
 - (d) Pull out the entire section through the cabinet door. If space permits, it is easier to pull the tube sections through the rear cabinet door and they can be slid along the steel tube brace on the rear.
4. If all tube sections are not replaced, the other sections should be inspected and thoroughly cleaned.
5. The water feed piping should be removed and thoroughly cleaned or replaced as necessary. On newer models, there is an internal fitting extending into the drum which should be completely cleaned.
6. The lower tube header should be carefully inspected and thoroughly cleaned or replaced as necessary. On a complete retube job, it should be disconnected, removed from the boiler cabinet, inspected and cleaned.
7. The blowdown piping and inspection nipples from the downcomer leg should be removed. The drum inspection plugs on the head of the drum should be removed. The drum and downcomer leg should be washed out and cleaned thoroughly. All piping and fittings should be cleaned and replaced as necessary.
8. All piping to and including the water level control, should be removed and cleaned or replaced as necessary.
9. The tube sections removed should be replaced following the same procedure as used in removing the old tubes.
10. Make certain that all baffles and tube braces are in the proper position as shown on the drawing. Baffles incorrectly installed may be hazardous.
11. Hydrostatically test the boiler and tighten any loose connections.
12. Be certain that all work is performed in a good workmanship and code manner. Carefully review the General Retube Instruction Bulletin to be certain that all instructions are carefully followed.

NOTE: All pipe fittings should be fitted with teflon tape and/or properly lubricated with steam pipe dope to assure a satisfactory installation. Upper fittings connecting the tube sections to the drum should be thoroughly inspected and cleaned or replaced as necessary.