INSTALLATION INSTRUCTIONS PARKER DIRECT GAS FIRED HOT WATER BOILERS

Before installing the boiler, be certain to carefully read the "General Basic Installation Instructions" on Direct Fired Hot Water Boilers, as these are essential prerequisites to the instructions that follow.

The Parker Direct Fired Hot Water Boiler is recommended for use on all forms of closed system building or process heating applications.

- 15. Hot Water Outlet: This connection is the upper header of the boiler as shown on the drawing and must be on the same side of the boiler as the temperature controls and temperature pressure gauge. This connection can be reduced in size to meet the requirements of the particular circulating lines but should not be reduced too small to impair circulation and should never be smaller than the circulating pump. Boilers T-760 and smaller are furnished with screwed connections; Models T-970 and larger are furnished with flanged connections. Lines should be run as straight as possible.
- <u>16.</u> Return Water Inlet: This connection is located in the lower header of the boiler on the opposite side from the outlet as shown on the drawing. All lines should be adequately sized, never less than the circulator and run as straight as possible.
- 17. Low Water Cutoff: A low water cutoff is furnished for the purpose of shutting off the main gas valve on low water experience. An approved probe type low water cutoff is recommended on all boilers as regular flushing is not required and it can conveniently be mounted in the boiler outlet header. If float type low water cutoff is furnished, it should be installed with a drain valve and regularly flushed. When an additional low water cutoff or a combination feeder is used, it should be installed in the field at the safe system water level and wired to terminals provided on the boiler.
- <u>17D.</u> <u>Drain</u>: The 17A drain valve (NF), should be installed on the lower header of the boiler. It should be connected full size to an approved drain receptacle for flushing the boiler, when necessary.
- 18. Relief Valve: Must be mounted on the top header of the boiler. The relief valve outlet must be piped full size, preferably downward to a safe point of discharge in compliance with local code. The piping should be properly supported so there will be no strain on the relief valve to cause possible damage or breakage.
- <u>20.</u> <u>Temperature Pressure Gauge:</u> For purpose of registering temperature and pressure at the boiler. It may be desirable to install another temperature gauge in the system at the point of required temperature control.
- <u>21.</u> <u>High Limit & Operating Control</u>: Mounted on the boiler and wired for the purpose of shutting off the main gas valve when the boiler water reaches the desired temperature. The operating control should be set for the desired circulating boiler water temperature and the high limit control should be set adequately above that temperature. See Burner control system sheet.
- <u>23.</u> <u>Circulating Pump</u>: Required on all installations with not less than 2 feet of straight pipe into the suction side of the pump. Preferred operation is for the pump to run continuously during boiler operation but it may be cycled with the load if the system is so designed. Pump and motor should be lubricated before using. Be sure to install pump with oil cups upward. See "Operating Instructions" for more complete information.

NOTE: Expansion tank (NF) and air control fittings (NF) required in system for proper operation and elimination of air and noise in circulating lines. Refer to detailed system drawings and instructions for more complete installation instructions.

- 7A. GAS INLET 15. HOT WATER OUTLET (MUST BE ON UPPER HEADER WITH CONTROLS.) 2011NST.DWG SHUTOFF VALVE (NF) NOT FURNISHED ELECTRICAL CONTROL PANEL 17. LOW WATER CUTOFF 21. HIGH LIMIT & OPERATING CONTROL 17A. DRAIN VALVE (NF) L DRIP LEG (NF) SUPERSEDES NO. 12/75 * * NOINO →|+ DWG. NO. 201 INST 1 18. RELIEF VALVE 岜 INSTALLATION DRAWING SCALE NO SCALE \exists ¥ LOS ANGELES, CALIF. 90040 PARKER BOILER CO. 5930 BANDINI BLVD. PARKER DIRECT GAS FIRED HOT WATER BOILERS PARKER DIRECT GAS FIRED HOT WATER BOILERS MODELS T-1460 TO T-6800 FRONT VIEW USED ON T-300 TO T-6800 HOT WATER BOILERS **INSTALLATION DRAWING** 90 16. RETURN WATER INLET COWER HEADER OPPOSITE SIDE FROM OUTLET) 4B. SINGLE BAROMETRIC DAMPER TWO BAROMETRIC DAMPERS (MODEL T-6800) 4A. SINGLE DRAFT HOOD (MODELS T-2160 & SMALLER) (MODELS T-5700 & SMALLER) TWO DRAFT HOODS (MODELS T-2600 TO T-6800) RPC APPROVED FOR DR. Ä 16. RETURN WATER INLET (LOWER HEADER OPPOSITE SIDE FROM OUTLET) 4A. DRAFT HOOD OR 4B. BAROMETRIC DAMPER 21. HIGH LIMIT & OPERATING CONTROL NOTE: CIRCULATING PUMP REQUIRED ON ALL INSTALLATIONS. LOW WATER CUTOFF FURNISHED STANDARD ON BOILER OUTLET HEADER. WHEN ADDITIONAL LOW WATER CUTOFF OR COMBINATION FEEDER USED, SHOULD BE INSTALLED IN FIELD AT SAFE SYSTEM WATER LEVEL. REFER TO DETAILED SYSTEM DRAWING FOR OTHER PIPING INFORMATION. VENT STACK (NF) ELECTRICAL CONTROL PANEL VENT CAP (NF) 18. RELIEF VALVE NOTE: MODELS T-970 & LARGER FURNISHED WITH FLANGED CONNECTIONS. ALL SMALLER SIZES FURNISHED WITH SCREWED CONNECTIONS. 17D. DRAIN MODELS T-300 TO T-1140 FRONT VIEW 17 LOW WATER 15. HOT WATER OUTLET —— (MUST BE ON UPPER HEADER WITH CONTROLS.) 20. TEMPERATURE PRESSURE GAUGE Ę 17A. DRAIN VALVE (NF) 7A. GAS INLET -DRIP LEG (NF) -