

INSTALLATION INSTRUCTIONS
PARKER INDIRECT GAS FIRED WATER HEATERS

Before installing the heater, be certain to carefully read the "General Basic Installation Instructions" for Indirect Gas Fired Water Heaters and the bulletin "Special Inst-210" as these are essential prerequisites to the instructions that follow:

The Parker is an indirect type water heater with an internal heat exchanger mounted in the upper header. The primary water is contained in a closed, sealed unit. Heaters furnished locally are filled at the factory with clean, treated water. Those units shipped without water to prevent freeze-up, have a treatment in the heater but will require filling with water when placed in service. Use soft water when available.

Before filling the heater with water or placing in operation, tighten the bolts on the heat exchanger and all fittings on the heater. After placed in service, it should not be necessary to add water to the heater unless a leak develops or water is lost through the relief valve. If it is necessary to add water more than two times, the cause of the water loss should be immediately investigated and repaired.

Install the heater with sufficient clearance for convenient maintenance and operation. A clearance of the cabinet width plus 10" should be provided in front of the heater to allow for future removal of the heat exchanger. Pipe the exchanger with unions so that it can be disconnected and removed without disturbing the system piping. Dielectric unions are recommended when connecting the exchanger with galvanized piping or other than copper pipe and fittings.

15. HOT WATER OUTLET: Connect to either side of the flanged bonnet as shown on the drawing. It is desirable to leave a tee directly in front of the connection so that a plug or capped nipple can be easily removed for internal inspection of the heat exchanger. A dielectric Union (NF), and 15A. Shutoff valve (NF) should be installed as shown for convenience of shutting off the water supply and removal of the heat exchanger when necessary.

16. WATER INLET AND RETURN: Connect in the same manner to the opposite opening on the flanged bonnet. A dielectric union and 16A. Shutoff valve (NF) should also be installed.

17. LOW WATER CUTOFF: Mounted on heater at the safe shutoff level. For purpose of shutting off the main gas valve on low water experience. This control should be tested when system is drained and cleaned.

17D. DRAIN: The 17A drain valve (NF) should be installed on the lower header of the heater and connected to safe point of discharge in compliance with code. Since the heater is a closed, sealed unit, water should not be regularly drained but only when dirty or necessary as loss of the treated water may be detrimental to the life of the system.

18. RELIEF VALVE: Must be mounted on heater as shown. The outlet of the relief valve should be connected full size downward to a safe point of discharge to prevent injury from scalding. The safety valve should be tested only when required. It may be necessary to add water after testing.

20. PRESSURE GAUGE: For purpose of registering pressure in the heater. Water may be added to the heater by removing the pressure gauge when there is no pressure in the heater.

21B. HIGH LIMIT CONTROL: This is a dual aquastat high limit control with manual reset mounted on the heater header. Serves the purpose to shut off the main gas valve only on excessive high temperatures. Both limits should normally be adjusted to the maximum temperature setting. See "Burner Control System sheet.

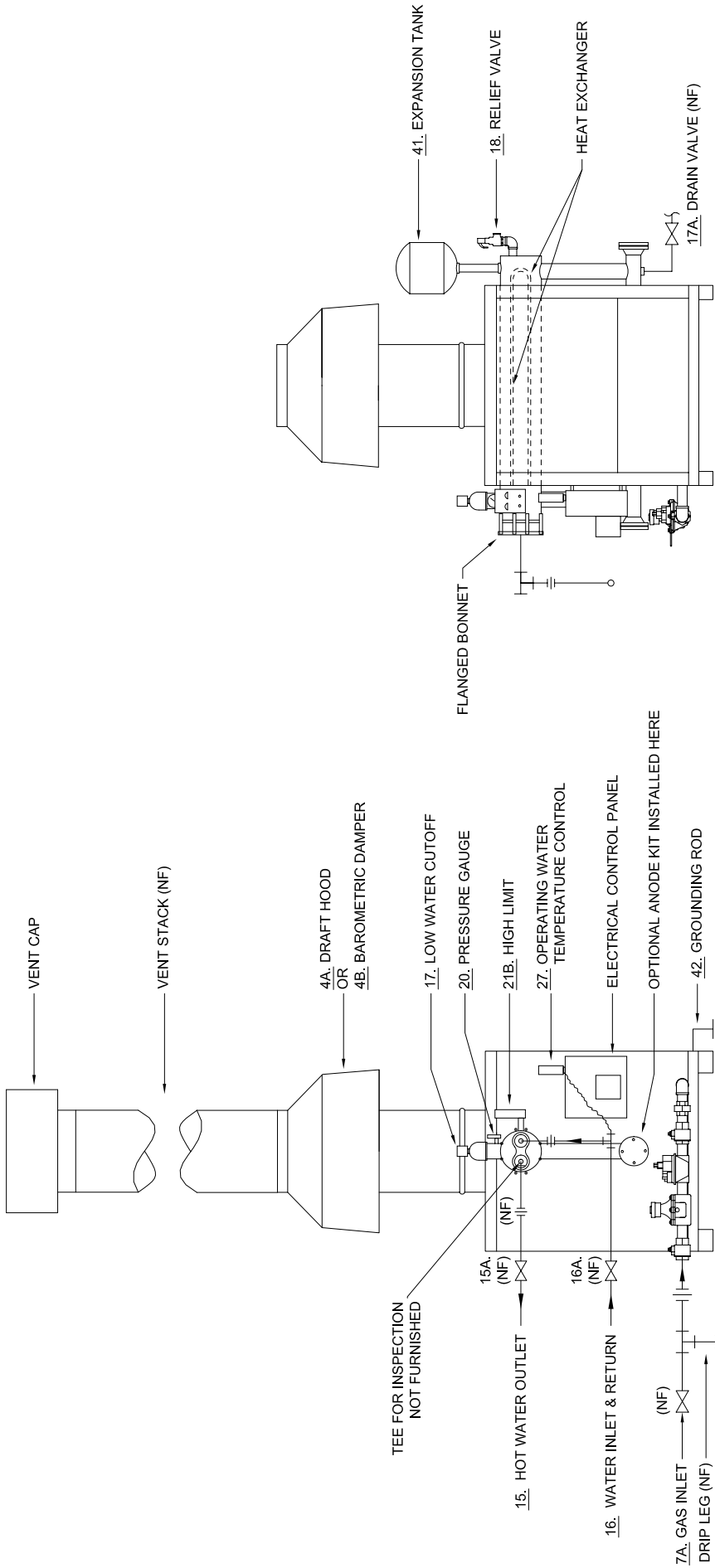
27. OPERATING WATER TEMPERATURE CONTROL: Located in the electrical control panel box. The sensing bulb must be field mounted in the well furnished and installed on the inlet circulating line to the Heater 16 as shown. Set for the desired temperature of the water supply.

41. EXPANSION TANK: Furnished standard with all Parker indirect fired heaters, used to heat water above 110° F. On heaters which are crated, it may be necessary to field mount expansion tank as shown on drawing when expansion tank is crated separately.

42. PROPER GROUNDING of the boiler is necessary if there is a possibility of electrolysis (a form of corrosion) and to help maintain normal tube life. Periodic internal inspections are necessary to determine if the thin protective coating has developed in the tubes. Proper grounding of the boiler requires driving a copper rod of 6' or more into the ground. Readings in excess of 35MV to ground require grounding to prevent the onset of a corrosion problem. Additional anode kit for lower header may also be required.

NOTE: Do not connect city water makeup direct to primary side of the heater unless required by local code. If such is necessary, install a shutoff valve and keep closed so the low water cutoff will function as a warning for loss of water in the heater. The probe type low water cutoff is used to eliminate flushing as necessary on a float type control. Be certain the water in the heater is at proper level too at least top of the pressure gauge opening before attempting to operate heater.

PARKER INDIRECT GAS FIRED WATER HEATERS INSTALLATION DRAWING



PARKER INDIRECT WATER HEATER - FRONT VIEW

SIDE VIEW

IMPORTANT INSTRUCTIONS:

1. HOT WATER INLET 16 AND OUTLET 15 MAY BE REVERSED ON HEAT EXCHANGER FOR PIPING CONVENIENCE.
2. SHUTOFF VALVES 15A AND 16A (NF) ARE RECOMMENDED AS SHOWN SO THE PUMP OR THE EXCHANGER CAN BE SERVICED WITHOUT DRAINING THE SYSTEM.
3. ALLOW CABINET WIDTH PLUS 10" IN FRONT OF HEAT EXCHANGER AND INSTALL UNION CONNECTIONS IN CIRCULATING LINES FOR EASY REMOVAL OF EXCHANGER.
4. MAKE CERTAIN THAT THE WATER IN HEATER IS AT PROPER LEVEL TO AT LEAST THE TOP OF PRESSURE GAUGE OPENING BEFORE ATTEMPTING TO OPERATE.

- X— SHUTOFF VALVE
- |— TEE
- |— UNION
- (NF) NOT FURNISHED

INST210.DWG

USED ON	WH-300 TO WH-3000 INDIRECT HEATER	PART NAME	INSTALLATION DRAWING
FOR	PARKER INDIRECT GAS FIRED WATER HEATERS		
DR.	RPC	DATE	0C3
CH.	PARKER BOILER CO. 5930 BANDINI BLVD. LOS ANGELES, CALIF. 90040		
APPROVED	SCALE NO SCALE SUPERCEDES NO. 9D DWG. NO. 210 INST 1		