

12 Install steam boiler controls

Install controls:

1. Install controls where shown in Table 11 and Figure 28.

⚠ WARNING

Failure to properly install, pipe and wire boiler controls can result in severe damage to boiler, building and personnel; and is not covered by boiler warranty.

- Install steam pressure operating and high limit controls and pressure gauge. See Figure 28, this page, and Figure 29, page 30.
Pressure limit control settings:
 - Low** – set according to design requirements.
 - High** – set at least 2 psi higher than low limit, 15 psi maximum.
- Relief valve must be installed with spindle in vertical position. Use fittings provided with boiler. Do not make any other connection in that piping.

⚠ WARNING

Pipe relief valve discharge through vertical piping to atmosphere. Use rigid material suitable for 375°F, threaded one end only. Install drain pan elbow to drain condensate. Pipe near floor close to floor drain to eliminate potential of severe burns. Do not pipe to any area where freezing could occur. Do not plug, valve or place any obstruction in discharge line.

- Install water level controls and gauge glass as shown in Figure 30 and Table 12, page 30.
 - Fittings for controls to be furnished by others.
 - If water level control is not shown in Table 12, page 30, locate casting mark on control and install per manufacturer's instructions.

NOTICE

Do not use water level controls with quick hook-up fittings. Nuisance shutdowns will occur.

Table 11 Steam control tappings (see Figure 28)

Tapping	Size (NPT)	Steam boilers, with water level controls:	
		Float-type primary Probe-type secondary	Float-type primary Float-type secondary
A	1½" Note 1	Skim tapping (Pipe skim piping to side of boiler.)	
B	3"	Steam relief valve	
C1	1"	Primary water level control	
C2	1"	Primary water level control	
D1	1"	Not used	Secondary level control
D2	1"	Not used	Secondary level control
E1	1"	Gauge glass	
E2	1"	Gauge glass	
F1	1"	Try cock tapping	
F2	1"	Try cock tapping	
G	1"	Control tree: Limit control, operating control, and pressure gauge	
H	1½"	Boiler drain	
K	1"	Not used	
P	1"	Secondary level control	Not used
Notes:		1. 1½" plug provided with boiler. 2. By special request only.	

Figure 28 Steam control locations

