

PEERLESS PURE FLOW

SUPPLEMENT TO SERIES TC INSTALLATION, OPERATION & MAINTENANCE MANUAL TC-8001

****FOR USE WITH WATER BOILERS ONLY****

NOTICE

These instructions are to supersede those of Section 3. D. 3 for installation of the return yoke on water boilers, which is being replaced by the Peerless Pure Flow device. Refer to these instructions which include the revised figures 3.6 Water Boiler Piping, 3.8 Chilled Water Systems and Figure 3.9 Multiple Water Boiler Piping.

Installer: Read these instructions before assembling the boiler. The Pure Flow support brackets must be installed during section assembly as noted within these instructions. A Back Section with the flanged opening is required to install the Peerless Pure Flow.

Boiler Location:

A minimum distance of 3 feet must be maintained between the Back Section and adjacent construction behind the boiler to allow for the Peerless Pure Flow installation and removal. See figure 1.



Figure 1: Peerless Pure Flow Installation

Support Bracket Location:

1. Refer to Table 1 for the section location of the support brackets. The brackets are to be installed during section assembly.
2. Insert the support bracket through the upper port opening, rotate it sideways and hook one ear over the center of the stay, then the other. See Figure 2
3. Push the bracket towards the back of the section compressing the bracket until the front ears are in the middle of the stay. Twist the bracket sideways hooking one ear then the other. Release the bracket and let it spring into position. See Figure 3.

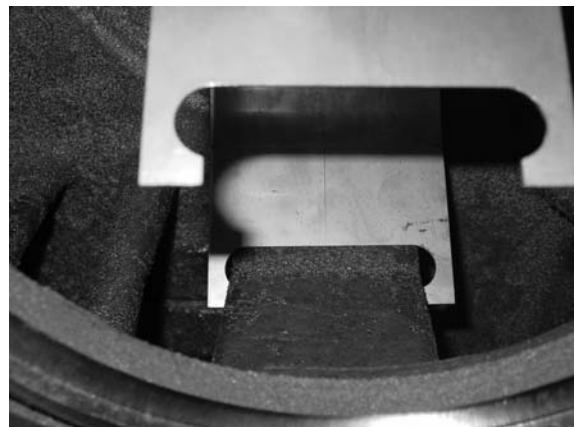


Figure 2: Peerless Pure Flow Support Bracket Installation



Figure 3: Peerless Pure Flow Support Bracket Installation

Table 1: Peerless Pure Flow Support Bracket Locations

Boiler Model	Section Location Numbered From Front to Back																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
TC-04	F	SB	H	B														
TC-05	F	H	SB	H	B													
TC-06	F	SB	H	P	H	B												
TC-07	F	SB	H	P	P	H	B											
TC-08	F	P	H	SB	H	P	H	B										
TC-09	F	P	H	SB	H	P	P	H	B									
TC-10	F	H	P	H	SB	H	P	P	H	B								
TC-11	F	H	P	H	SB	P	P	P	P	H	B							
TC-12	F	H	SB	H	P	P	H	SB	H	P	H	B						
TC-13	F	H	SB	H	P	H	P	P	SB	H	P	H	B					
TC-14	F	H	SB	H	P	H	P	H	SB	H	P	P	H	B				
TC-15	F	H	SB	H	P	H	P	T	H	SB	H	P	P	H	B			
TC-16	F	H	P	H	SB	H	P	H	P	H	SB	H	P	P	H	B		
TC-17	F	H	P	H	SB	H	P	H	P	H	SB	H	P	H	P	H	B	
TC-18	F	H	P	H	SB	H	P	H	P	P	H	SB	H	P	H	P	H	B

F Front Section
 SB Intermediate Section w/ Support Bracket
 H Intermediate Section w/ Heater Opening
 P Intermediate Section, Plain
 B Back Section

Peerless Pure Flow Installation:

1. Install the Rear Flue Collector per instructions in the TC-8001 IO&M manual.
2. Install the eight 3/4 x 3" long mounting studs in the Back Section using a thread sealant on studs. See Figure 4.



Figure 4: Peerless Pure Flow Stud Installation

3. Lay the flange gasket on the machined surface. The gasket will fit just inside the mounting studs.
4. Insert the Pure Flow End Tube into the port opening as shown in Figure 1 and connect the next sections, either an Intermediate Tube or Flanged End Tube depending on boiler size, using brass screws provided. Be sure to guide the tube over the support bracket(s). Refer to Table 2 for quantity and type of tubes required.

See Figure 5 for illustration of the three types of End Tubes that are available.

Table 2: Peerless Pure Flow Component Table

Model Number	Stock Code	Flanged End	3 Hole Int.	2 Hole End	3 Hole End	4 Hole End	Support Bracket
TC-04	76076	1		1			1
TC-05	76077	1			1		1
TC-06	76078	1				1	1
TC-07	76079	1	1	1			1
TC-08	76080	1	1		1		1
TC-09	76081	1	1			1	1
TC-10	76082	1	2	1			1
TC-11	76083	1	2		1		1
TC-12	76084	1	2			1	2
TC-13	76085	1	3	1			2
TC-14	76086	1	3		1		2
TC-15	76087	1	3			1	2
TC-16	76088	1	4	1			2
TC-17	76089	1	4		1		2
TC-18	76090	1	4			1	2



Figure 5: End Tubes

IMPORTANT
 The holes in the connecting tubes must all be aligned in the same direction for the Peerless Pure Flow to function properly.

5. The Flanged End Tube incorporates a tab that must be in the 9 O'Clock position when installed over the mounting studs. See Figure 6.



Figure 6: Peerless Pure Flow Flange Orientation

Boiler Piping:

1. Refer to the TC-8001 Installation , Operation and Maintenance manual Section 3,D for general water piping requirements. See revised Figures 3.6, 3.8 and 3.9 below for piping details.

2. Return piping can be connected to the Rear Section flange with a standard 10" 125# flange with a 8-1/2" bolt hole circle.
3. Place purchased flange gasket against Peerless Pure Flow flange and attached pipe flange using the eight nuts provided with the Peerless Pure Flow Kit. See Figure 7.

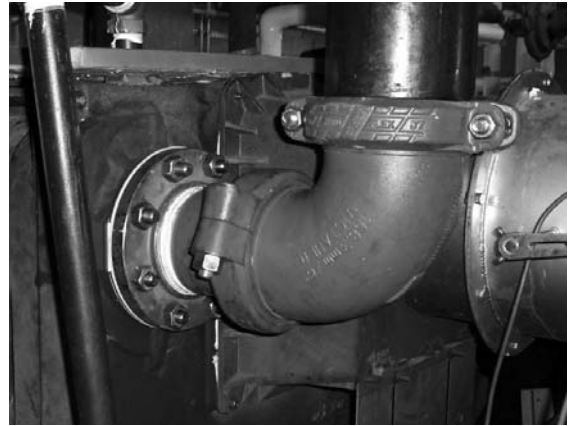


Figure 7: Removable Elbow

⚠ IMPORTANT
 A removable elbow or section of pipe must be used at the flanged connection of the Rear Section to allow for service removal of the Peerless Pure Flow tube.

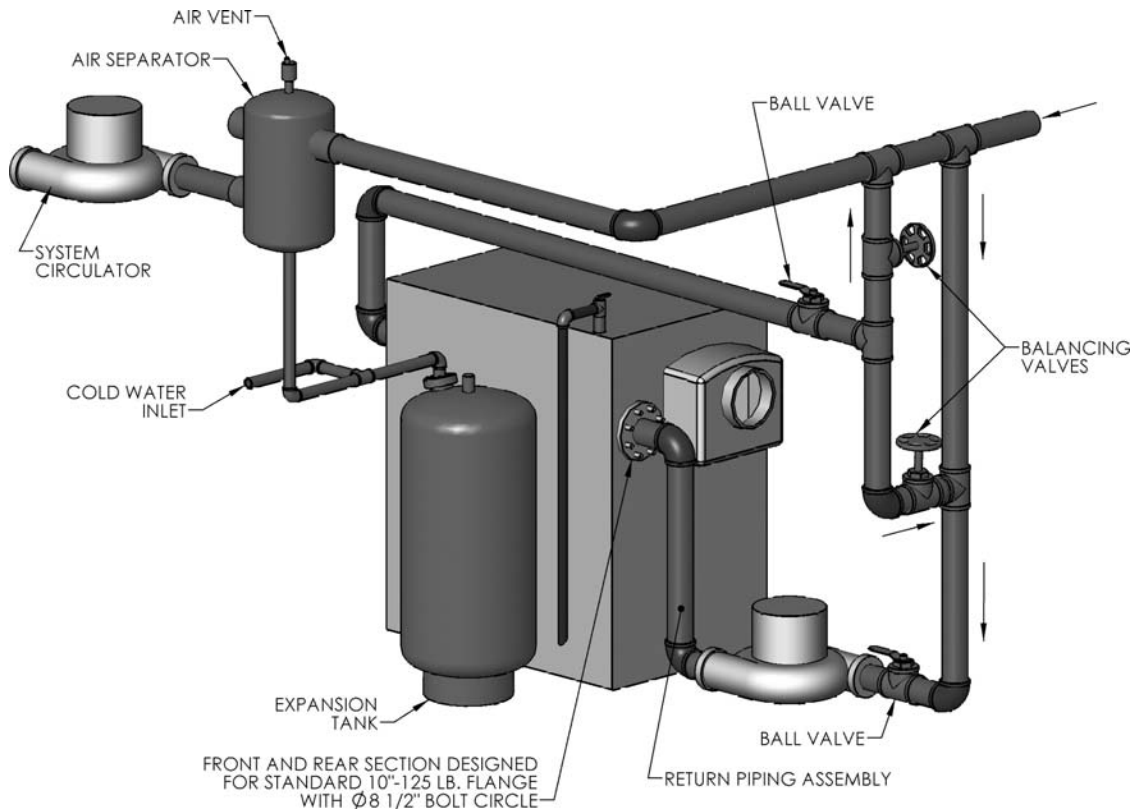


Figure 3.6: Water Boiler Piping

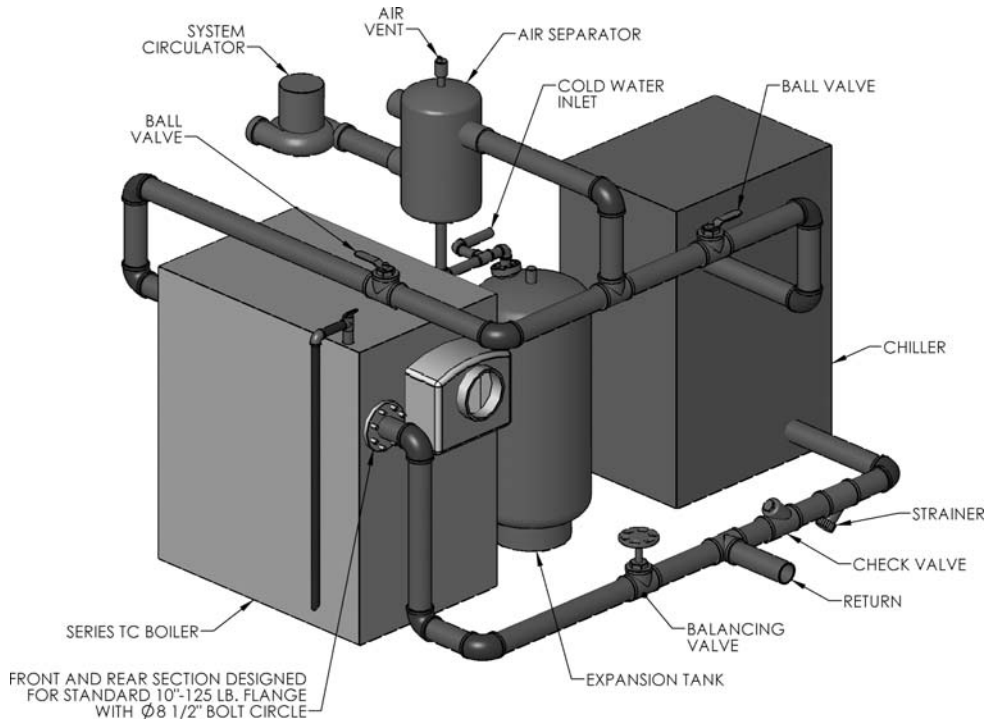


Figure 3.8: Chilled Water Systems

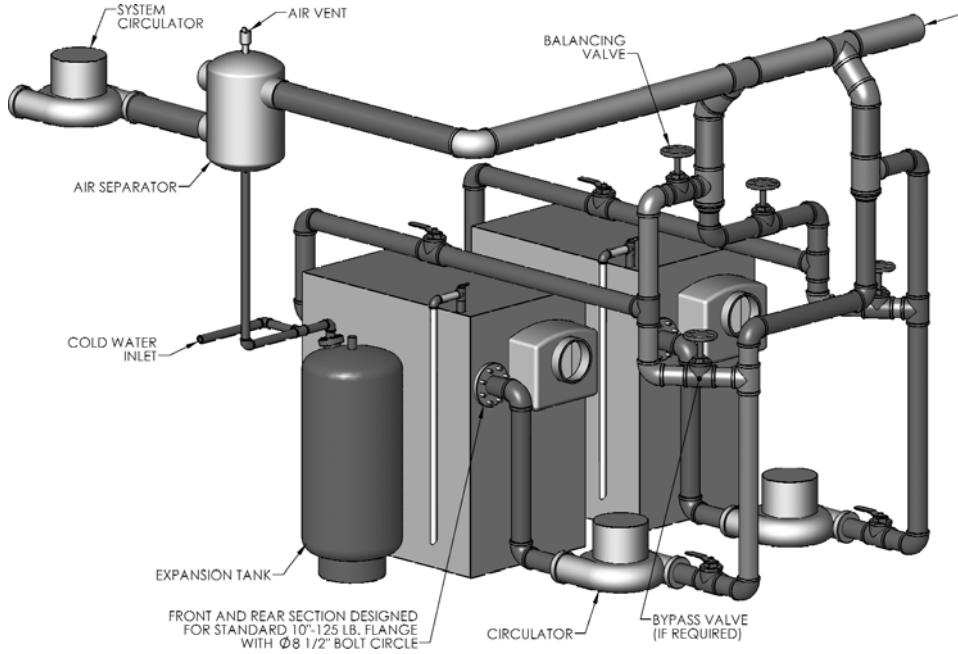


Figure 3.9: Multiple Water Boiler Piping



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