GAS-FIRED STEAM BOILERS

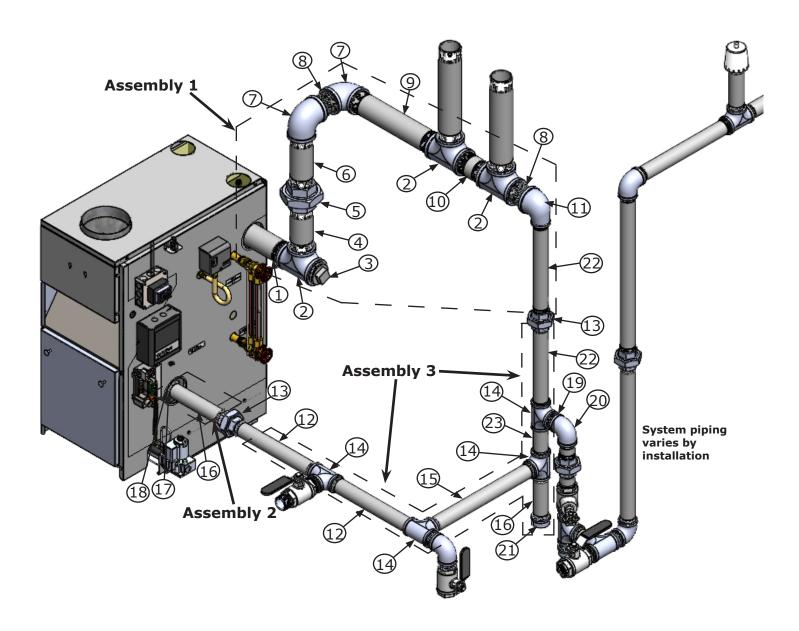
NEAR BOILER PIPING





ONE SUPPLY TAPPING

FOR 3 AND 4 - SECTION BOILERS ONLY



- All installations shall follow National/Local codes and requirements mentioned in boiler installation manual.
- It is recommended to apply Teflon tape and quality pipe dope on all threaded connections.
- Engagement depth for all piping is normally around 19/32" per threaded connection.
- Engagement depth of threaded connection depends on quality and supplier of parts. Installer is responsible for making sure each connection is fully engaged, secure, and leak free.
- General guide only. Check dimensions of specific install location and adjust piping as needed to meet requirements in IOM.
- This guide is not intended to require replacement of existing piping. Existing piping may meet the requirements outlined in the IOM.

ONE SUPPLY TAPPING - LIST OF PARTS

Piping				
Item #	Description	Length	Quantity Required	
1	2 ½" NPT,Nipple	9"	1	
2	2 ½" NPT,Tee Connector	n/a	3	
3	2 ½" NPT,Plug	n/a	1	
4	2 ½" NPT,Nipple	7"	1	
5	2 ½" NPT,Union	n/a	1	
6	2 ½" NPT,Nipple	8"	1	
7	2 ½" NPT,Elbow Connector	n/a	2	
8	2 ½" NPT,Nipple	3"	2	
9	2 ½" NPT,Nipple	14"	1	
10	2 ½" NPT,Nipple	4 ½"	1	
11	2 ½" to 1 ½" NPT,Elbow Reducer	n/a	1	
12	1 ½" NPT,Nipple	14"	3	
13	1 ½" NPT,Union	n/a	2	
14	1 ½" NPT,Tee Connector	n/a	4	
15	1 ½" NPT,Nipple	18"	1	
16	1 ½" NPT,Nipple	7"	2	
17	2"-1 ½" Bushing Reducer	n/a	1	
18	2 ½"-2" Bushing Reducer	n/a	1	
19	1 ½" NPT,Nipple	1 3/4"	1	
20	1 ½" NPT,Elbow Connector	n/a	1	
21	1 ½" NPT,Cap	n/a	1	
22	1 ½" NPT,Nipple	12"	2	
23	1 ½" NPT,Nipple	6 ½"	1	

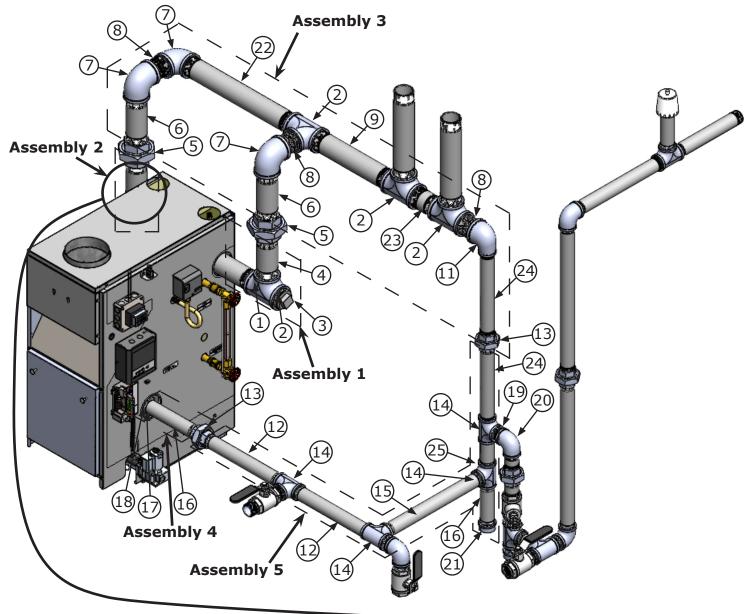
ONE SUPPLY TAPPING - ASSEMBLY PROCEDURE

- Assembly 1
- 1. Secure Pipe 1 to boiler
- 2. Tee 2 to pipe 1
- 3. Plug 3 to tee 2
- 4. Pipe 4 to tee 2
- 5. Union 5 to pipe 4
- 6. Pipe 6 onto other side of union 5
- 7. Elbow 7 to pipe 6
- 8. Pipe 8 to elbow 7
- 9. Elbow 7 to pipe 8
- 10. Pipe 9 to elbow 7
- 11. Tee 2 to pipe 9
- 12. Pipe 10 to tee 2
- 13. Tee 2 to pipe 10
- 14. Pipe 8 to Tee 2
- 15. Reducer 11 to Pipe 8
- 16. Pipe 22 to elbow reducer 11
- 17. Half union 13 to pipe 22
- Assembly 2
- 1. Secure bushing 18 to boiler
- 2. Bushing 17 to bushing 18
- 3. Pipe 16 to bushing 19
- 4. Half of union 13 to pipe 16
- Assembly 3
- 1. Half of union 13 to pipe 22
- 2. Tee 14 to pipe 22
- 3. Pipe 23 to tee 14
- 4. Tee 14 to pipe 23
- 5. Pipe 16 to tee 14
- 6. Cap 21 to pipe 16
- 7. Pipe 15 to tee 14
- 8. Tee 14 to pipe 16
- 9. Pipe 12 to tee 14
- 10. Tee 14 to pipe 12
- 11. Pipe 12 to tee 14
- 12. Half of union 13 to pipe 12

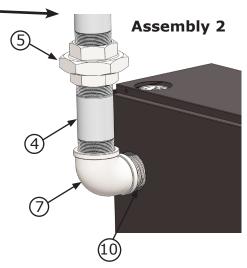
- Attach assembly 3 to both assembly 1 & 2
- Finish near boiler piping
- 1. Pipe 19 to tee 14 from assy 3
- 2. Elbow 20 to system piping

TWO SUPPLY TAPPING

APPLICABLE FOR ALL MODELS. REQUIRED FOR 5 SECTION OR LARGER BOILERS



- All installations shall follow National/Local codes and requirements mentioned in boiler installation manual.
- It is recommended to apply Teflon tape and quality pipe dope on all threaded connections.
- Engagement depth for all piping is normally around 19/32" per threaded connection.
- Engagement depth of threaded connection depends on quality and supplier of parts. Installer is responsible for making sure each connection is fully engaged, secure, and leak free.
- General guide only. Check dimensions of specific install location and adjust piping as needed to meet requirements in IOM.
- This guide is not intended to require replacement of existing piping. Existing piping may meet the requirements outlined in the IOM.



TWO SUPPLY TAPPING - LIST OF PARTS

Item #	Description	Length	Quantity Required
1	2 ½" NPT,Nipple	9"	1
2	2 ½" NPT,Tee Connector	n/a	3
3	2 ½" NPT,Plug	n/a	1
4	2 ½" NPT,Nipple	7"	2
5	2 ½" NPT,Union	n/a	2
6	2 ½" NPT,Nipple	8"	2
7	2 ½" NPT,Elbow Connector	n/a	4
8	2 ½" NPT,Nipple	3"	3
9	2 ½" NPT,Nipple	14"	1
10	2 ½" NPT,Nipple	2 ½"	1
11	2 ½" to 1 ½" NPT,Elbow Reducer	n/a	1
12	1 ½" NPT,Nipple	14"	3
13	1 ½" NPT,Union	n/a	1
14	1 ½" NPT,Tee Connector	n/a	4
15	1 ½" NPT,Nipple	18"	1
16	1 ½" NPT,Nipple	7"	2
17	2"-1 ½" Bushing Reducer	n/a	1
18	2 ½"-2" Bushing Reducer	n/a	1
19	1 ½" NPT,Nipple	1 ¾"	1
20	1 ½" NPT,Elbow Connector	n/a	1
21	1 ½" NPT,Cap	n/a	1
22	2 ½" NPT,Nipple	3 Sec - 16" 4 Sec - 19" 5 Sec - 22 1/2" 6 Sec - 26" 7 Sec - 29" 8 Sec - 32" 9 Sec - 35 1/2"	1
23	2 ½" NPT,Nipple	4 ½"	1
24	1 ½" NPT, Nipple	12"	2
25	1 ½" NPT,Nipple	6 ½"	1

TWO SUPPLY TAPPING - ASSEMBLY PROCEDURE

- Assembly 1
- 1. Secure Pipe 1 to boiler
- 2. Tee 2 to pipe 1
- 3. Plug 3 to tee 2
- 4. Pipe 4 to tee 2
- 5. Half of Union 5 to pipe 4
- Assembly 2
- 1. Secure pipe 10 to boiler
- 2. Elbow 7 to pipe 10
- 3. Pipe 4 to elbow 7
- 4. Half of Union 5 to pipe 4
- Assembly 3
- 1. Half of union 5 to pipe 6
- 2. Elbow 7 to pipe 6
- 3. Pipe 8 to elbow 7
- 4. Tee 2 to pipe 8
- 5. Pipe 22 to tee 2
- 6. Elbow 7 to pipe 22
- 7. Pipe 8 to elbow 7
- 8. Elbow 7 to pipe 8
- 9. Pipe 6 to elbow 7
- 10. Half of union 5 to pipe 6
- 11. Pipe 9 to tee 2
- 12. Tee 2 to pipe 9
- 13. Pipe 23 to Tee 2
- 14. Tee 2 to pipe 23
- 15. Pipe 8 to tee 2
- 16. Elbow reducer 11 to pipe 8
- 17. Pipe 24 to elbow reducer 11
- 18. Half of union 13 to pipe 24.
- Attach assembly 3 to both assembly 1 & 2
- Assembly 4
- 1. Secure reducer 18 to boiler
- 2. Reducer 17 to reducer 18
- 3. Pipe 16 to reducer 17
- 4. Half union 13 to pipe 16

- Assembly 5
- 1. Half of union 13 to pipe 24
- 2. Tee 14 to pipe 24
- 3. Pipe 25 to tee 14
- 4. Tee 14 to pipe 25
- 5. Pipe 16 to tee 14
- 6. Cap 21 to pipe 16
- 7. Pipe 15 to tee 14
- 8. Tee 14 to pipe 15
- 9. Pipe 12 to tee 14
- 10. Tee 14 to pipe 12
- 11. Pipe 12 to tee 14
- 12. Half of union 13 to pipe 12
- Attach assembly 5 to both assembly 3 & 4
- Finish near boiler piping
- 1. Pipe 19 to tee 14 from assy 5
- 2. Elbow 20 to pipe 19
- 3. Elbow 20 to system piping

