

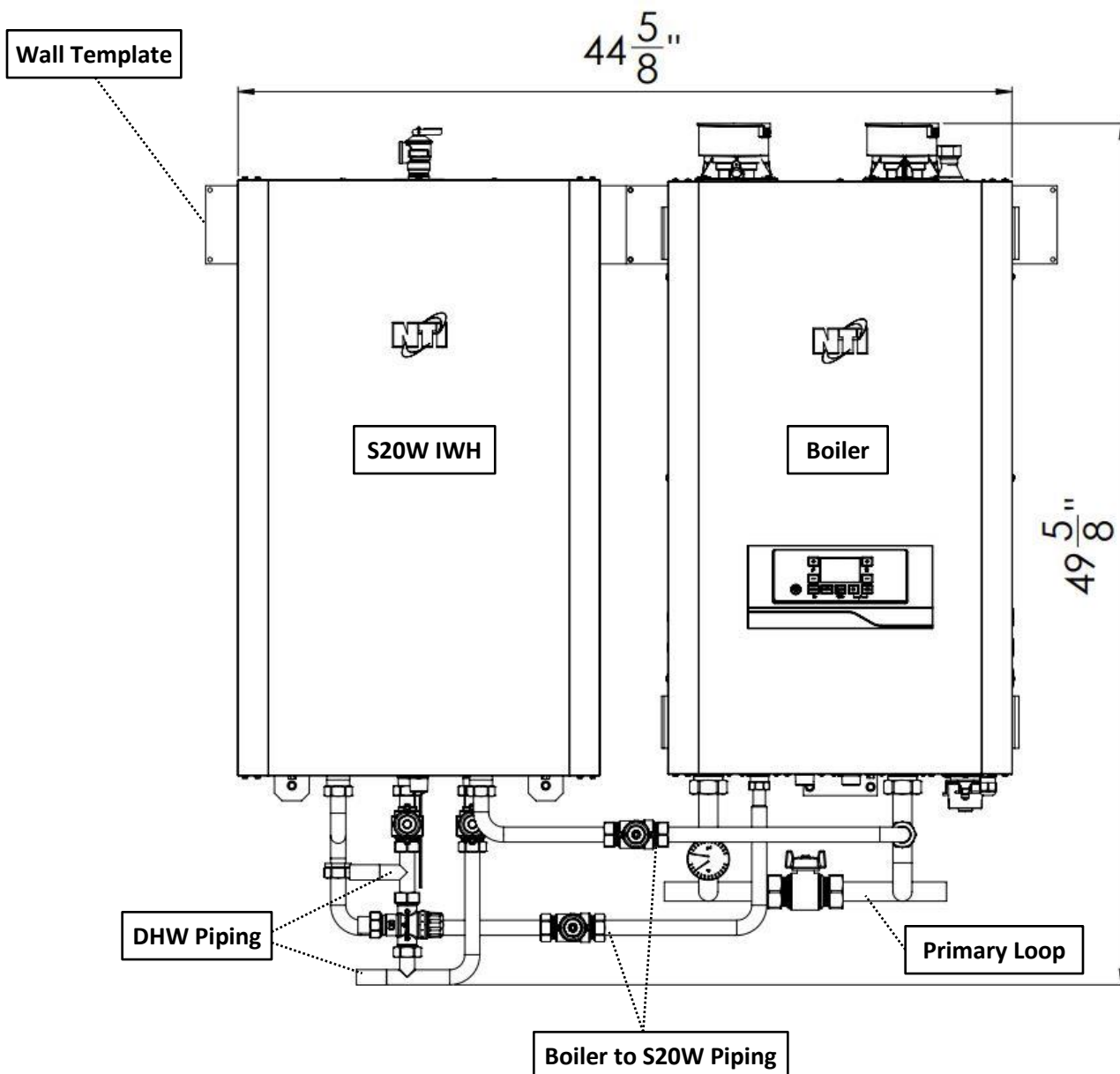
NTI Boilers Inc.  
 Toll Free: 1-800-688-2575  
 Web: www.ntiboilers.com  
 Email: info@ntiboilers.com

## PLUS Kit S20W to TRX/FTVN Piping Kit

### Overview:

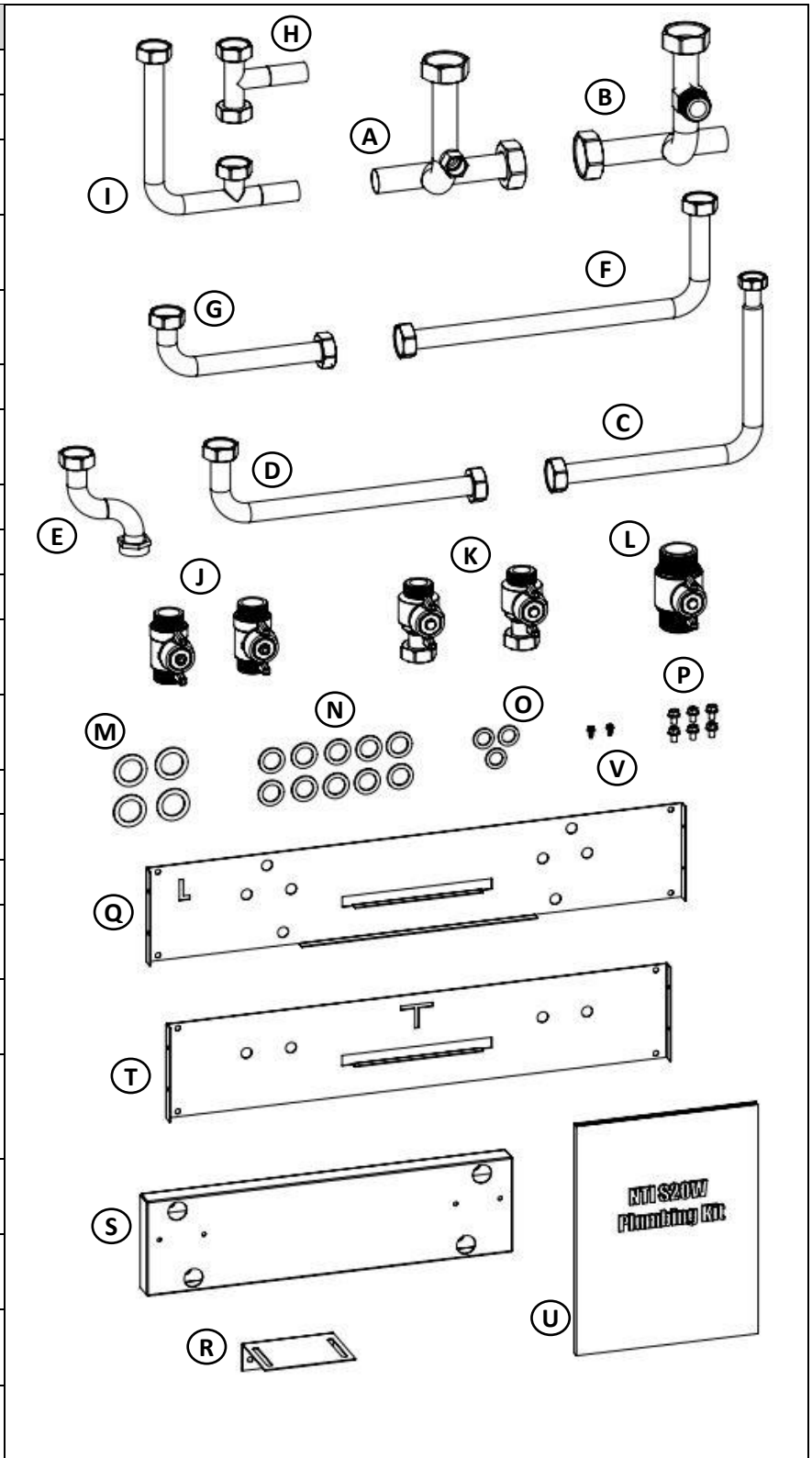
The PLUS Kit is designed to easily connect an NTI S20W Indirect Water Heater (IWH) to an NTI FTVN or TRX150/199 non-combi boiler, without the need for cutting, threading or soldering. The kit is designed to be reversible, meaning that the S20W can be installed to the left or right side of the boiler. The kit includes boiler primary loop piping with isolation valve, boiler to IWH piping with isolation valves, DHW piping with isolation valves for easy installation of mandatory mixing valve included with the S20W, and a wall mounting template to establish proper boiler to IWH spacing.

**Note:** the PLUS Kit can also be used with the boiler and S20W each installed on the optional NTI Floor Stand, P/N 86998



**Kit Contents:**

Item	P/N	Description	Qty
A	87318	Primary Loop Supply Pipe	1
B	87317	Primary Loop Return Pipe	1
C	87323	S20W Coil Supply Pipe, From Boiler	1
D	87324	S20W Coil Supply Pipe, Intermediate	1
E	87325	S20W Coil Supply Pipe, to Coil	1
F	87322	S20W Coil Return Pipe	1
G	87321	S20W Coil Return Pipe, to Low Loss Header	1
H	87319	S20W DHW Pipe	1
I	87320	S20W DHW Pipe	1
J	87316	Isolation Valve, 1" M BSPP	2
K	87314	Isolation Valve, 3/4" F x 1" M BSPP	2
L	87315	Isolation Valve, 1-1/4" M BSPP	1
M	87147	Gasket, 1-1/4"	4
N	85167	Gasket, 1"	10
O	82368	Gasket, 3/4"	3
P	83970	Sheet Metal Screw, 1/4-14, 3/8 Hex-head	6
Q	87509	B-Boiler Installation Template	1
R	87511	Extended Lower Wall Bracket (FTVN085 & FTVN110 models ONLY)	1
S	87512	Spacer Bracket (FTVN085 & FTVN110 models ONLY)	1
T	87510	T-Tank (S20W) Installation Template	1
U	87243	Assembly Instructions (this document)	1
V	85192	Sheet Metal Screw, #8 x 18 x 1/2" long	2

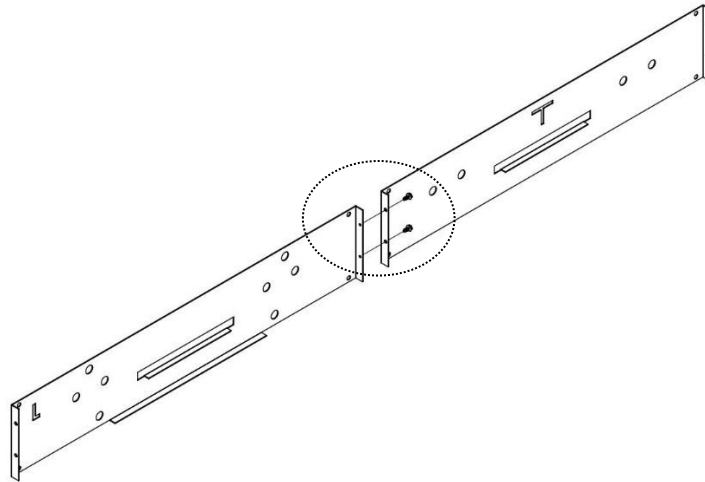


**Assembly Instructions:**

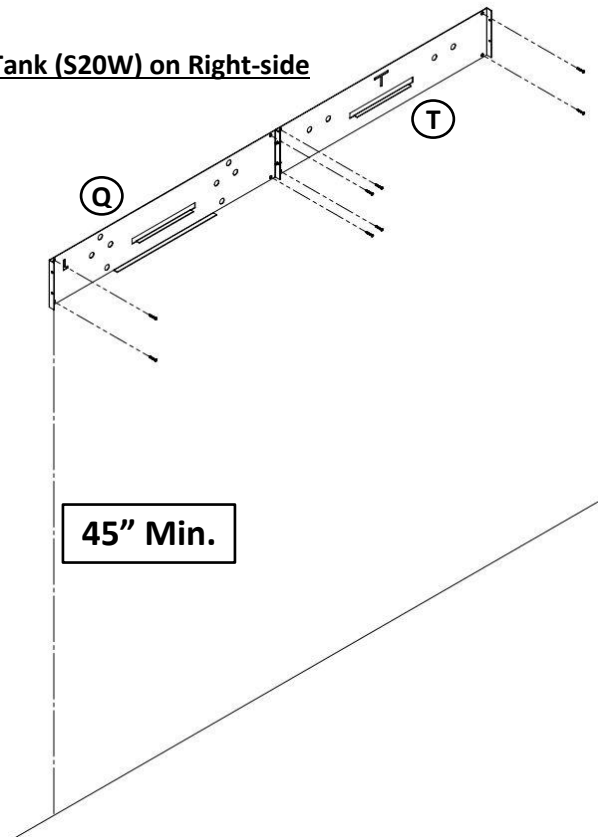
- 1 Fix the Installation Templates (Q) and (T) together with screws (V), then secure to the wall a minimum of 45 in. above the floor using field supplied hardware – ensure templates are level. If installing the S20W on the right-side, place T-Tank template (T) on the right. If installing the S20W on the left-side, install T-Tank template (T) on the left.

**NOTE:** Installing the templates 45" above the floor provides approximately 15.5" clearance from the bottom of the boiler to the floor.

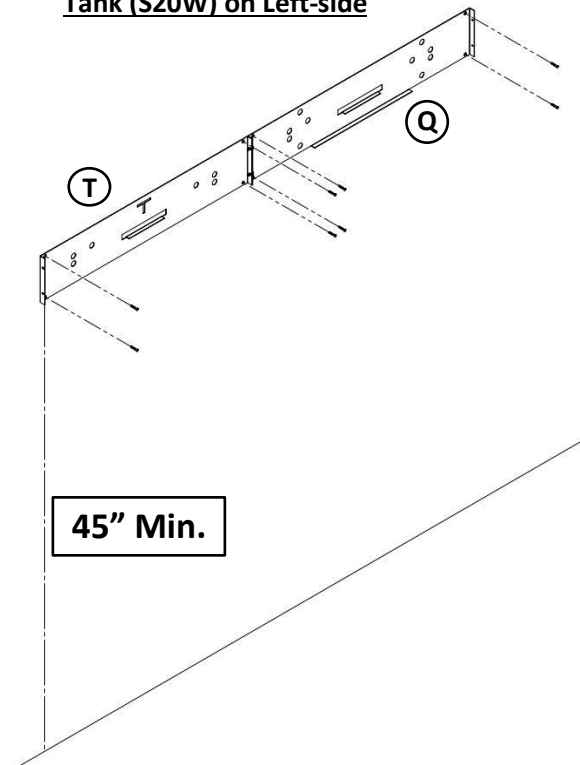
**NOTE:** Templates are only used to locate the upper wall hanging brackets included with the S20W and boiler (see 2), they do not support the weight of either appliance, therefore it is acceptable to use small hardware when fixing the templates to the wall.



**Tank (S20W) on Right-side**



**Tank (S20W) on Left-side**



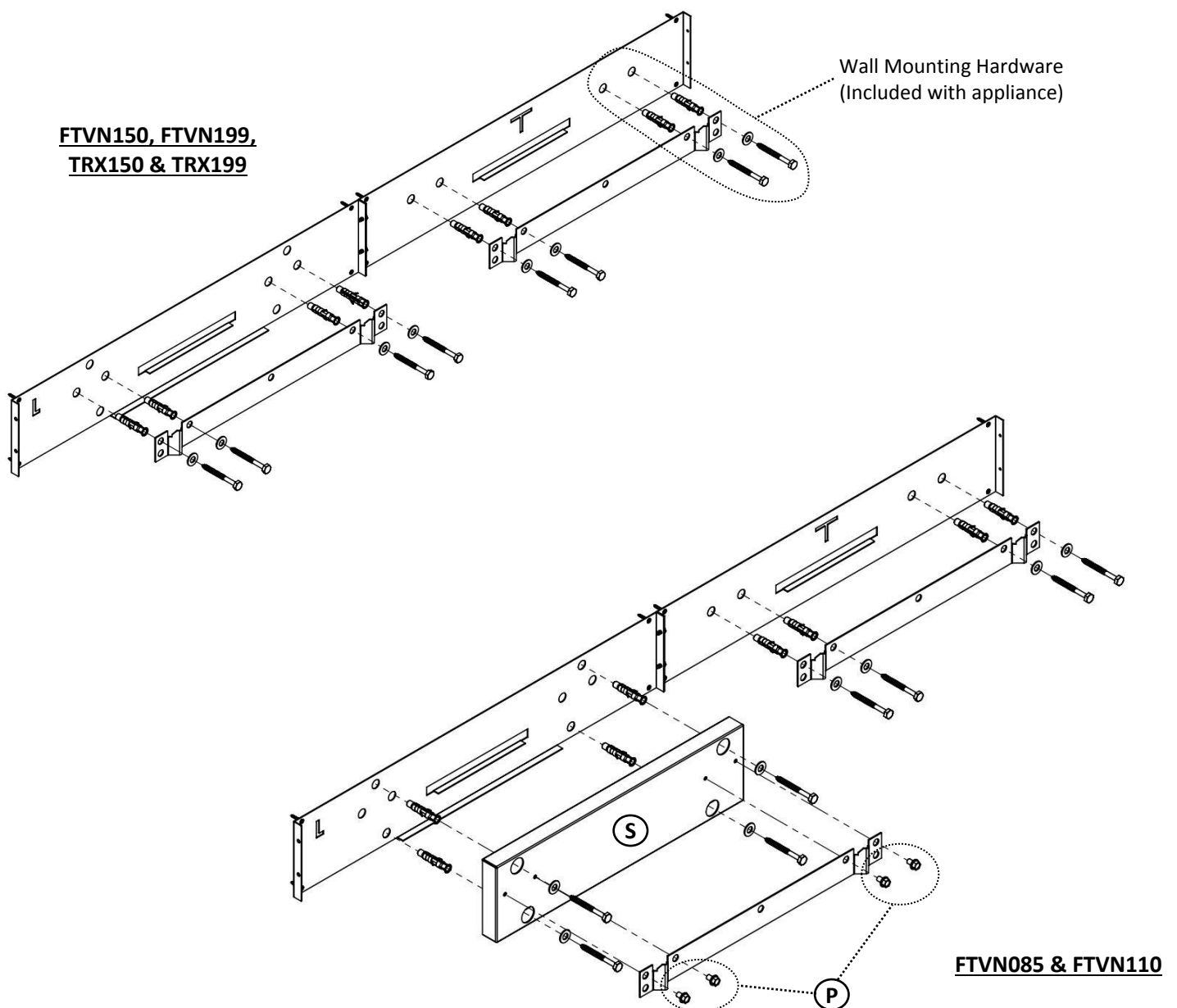
**2** Secure the S20W upper wall mounting bracket to the wall with the wall mounting hardware, using the holes in the T-Tank template (T) to correctly locate the bracket.

**FTVN150, FTVN199, TRX150 & TRX199 models ONLY**– secure the boiler upper wall mounting bracket to the wall with the wall mounting hardware, using the holes in the B-Boiler template (Q) to correctly locate the bracket.

**FTVN085 & FTVN110 models ONLY** – secure Spacer Bracket (S) to the wall with the wall mounting hardware, using the holes in the B-Boiler template (Q) to correctly locate the bracket, then install the boiler upper wall mounting bracket to the Spacer Bracket (S) using the 4 Sheet Metal Screws (P).

**NOTE:** Wall mounting hardware is included with the boiler and S20W; consult the wall mounting instructions provided with those appliances before attempting installation.

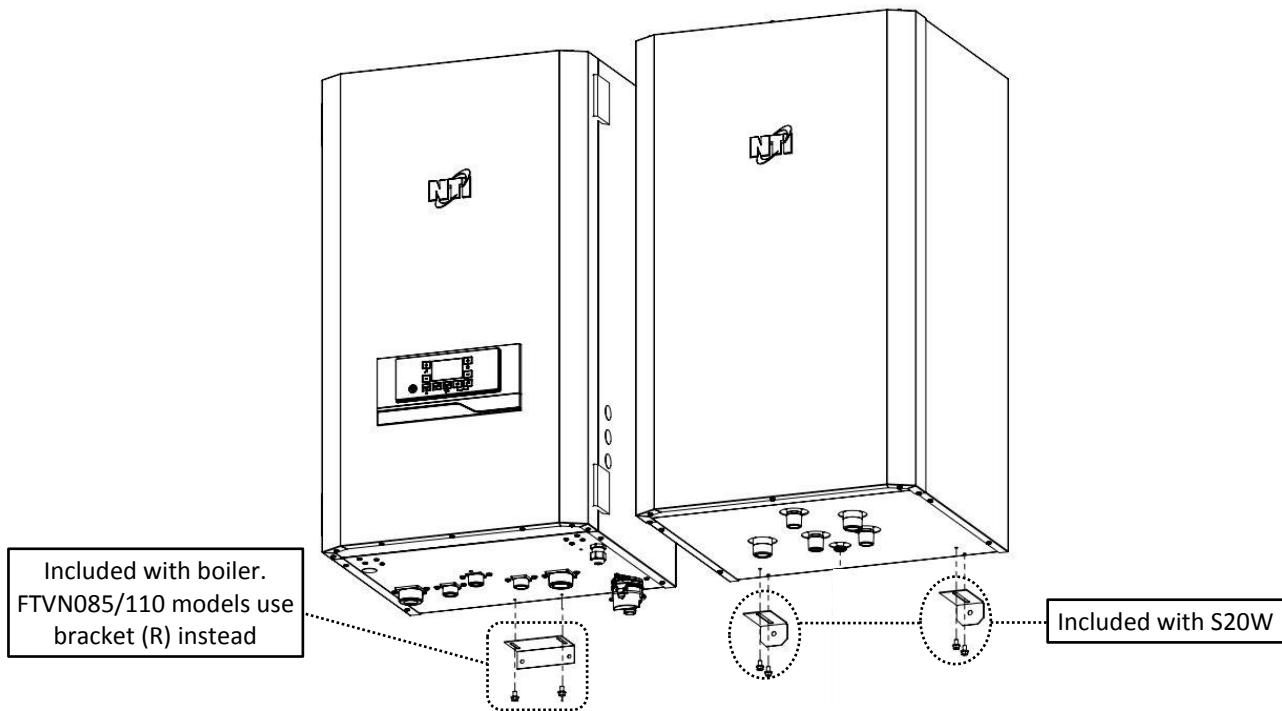
**NOTE:** Example below is with boiler installed on the left side of the S20W.



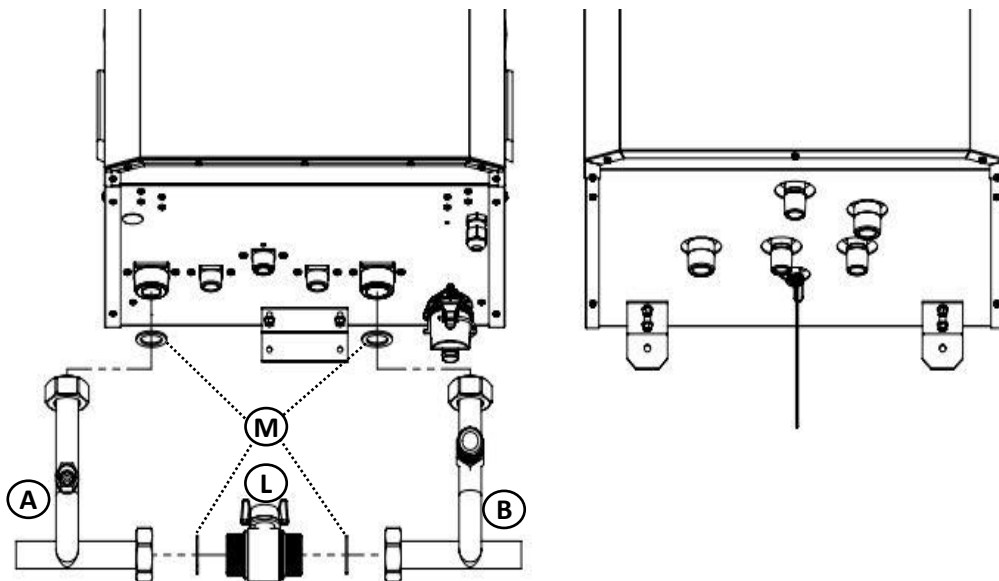
**3** Hang the tank and boiler onto the upper wall mounting brackets, then attach their respective lower wall mounting brackets to the bottom, ensuring both are plumb and level. **DO NOT** secure the lower wall mounting brackets to the wall at this time as the appliances may need to be manipulated during the installation of the piping.

**FTVN085 & FTVN110 models ONLY** – use the Extended Lower Wall Bracket (R) instead of the lower wall mounting bracket provided with the boiler (hardware is included with the boiler).

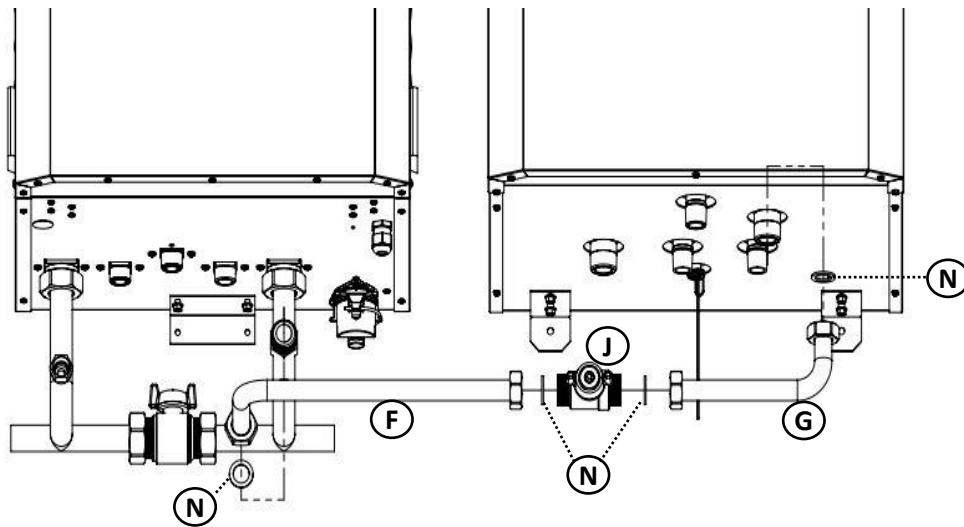
**NOTE:** lower wall mounting bracket hardware is included with the tank and boiler.



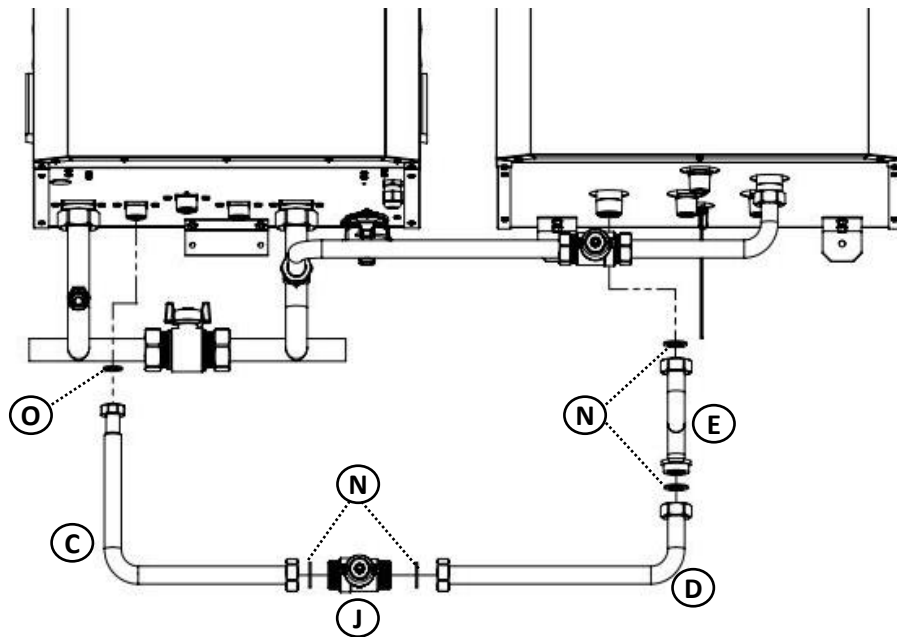
**4** Primary Loop Assembly – loosely install pipes (A) and (B), together with isolation valve (L), onto the boiler. Use 1-1/4" gaskets (M) at each connection.



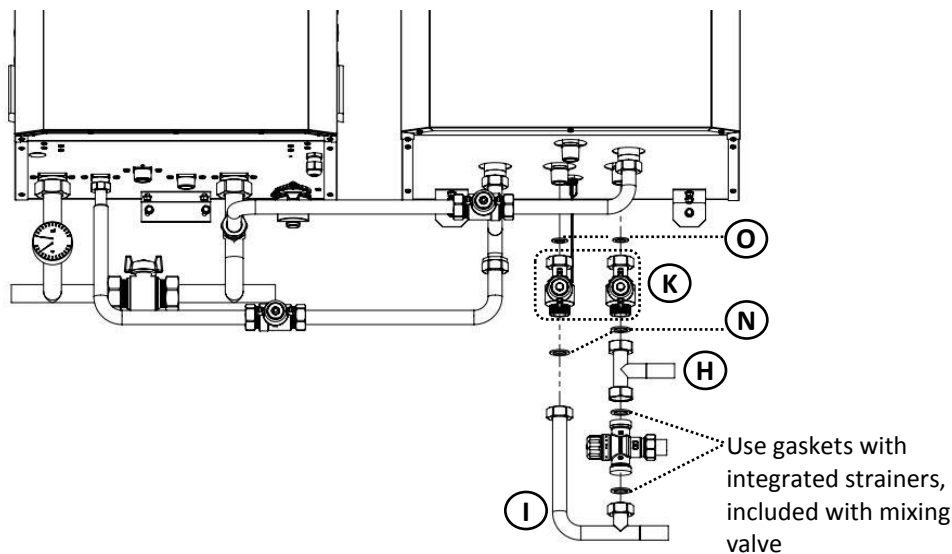
**5** S20W to Boiler Return Piping Assembly – loosely install pipes (F) and (G), together with isolation valve (J), onto the boiler and tank. Use 1" gaskets (N) at each connection.



**6** Boiler DHW Supply to S20W Piping Assembly – loosely install pipes (C), (D) and (E), together with isolation valve (J), onto the boiler and tank. Use a 3/4" gasket (O) at the boiler DHW supply connection and use 1" gaskets (N) at the other connections.



**7** DHW Piping Assembly – loosely install pipes (H) and (I), together with isolation valves (K) and S20W mixing valve, onto the tank. Use the ¾” gaskets (O) when connecting the valves to the tank and use 1” gaskets (N) when connecting the pipes to the valves.



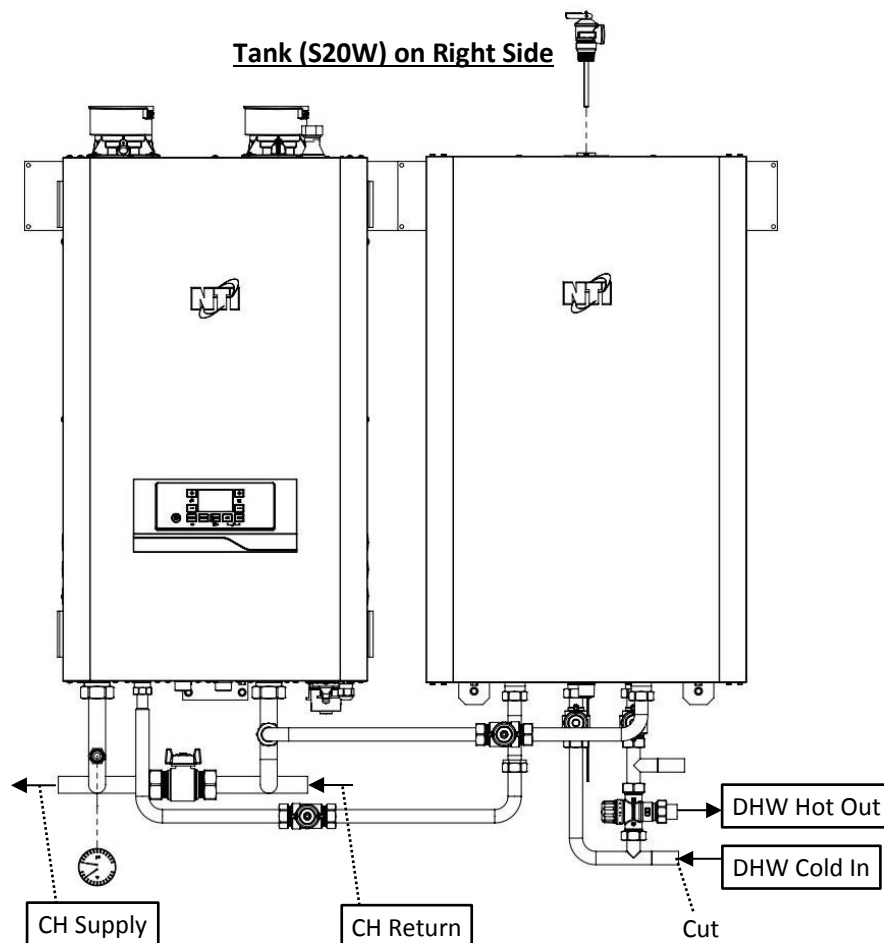
**8** Complete Installation – tighten each swivel-nut connection and then re-establish plumb and level of the boiler and tank before anchoring the lower mounting brackets to the wall using field supplied hardware.

**Boiler Piping** – install the boiler Tridicator and pressure relief valve, then complete the remaining boiler piping before pressurizing to check for leaks.

**DHW Piping** – Cut the end off of the appropriate pipe stub to connect the cold water supply line. Connect the hot water outlet line to the discharge of the mixing valve. Complete the remaining DHW piping, including installing the tank T&P valve, before pressurizing to check for leaks.

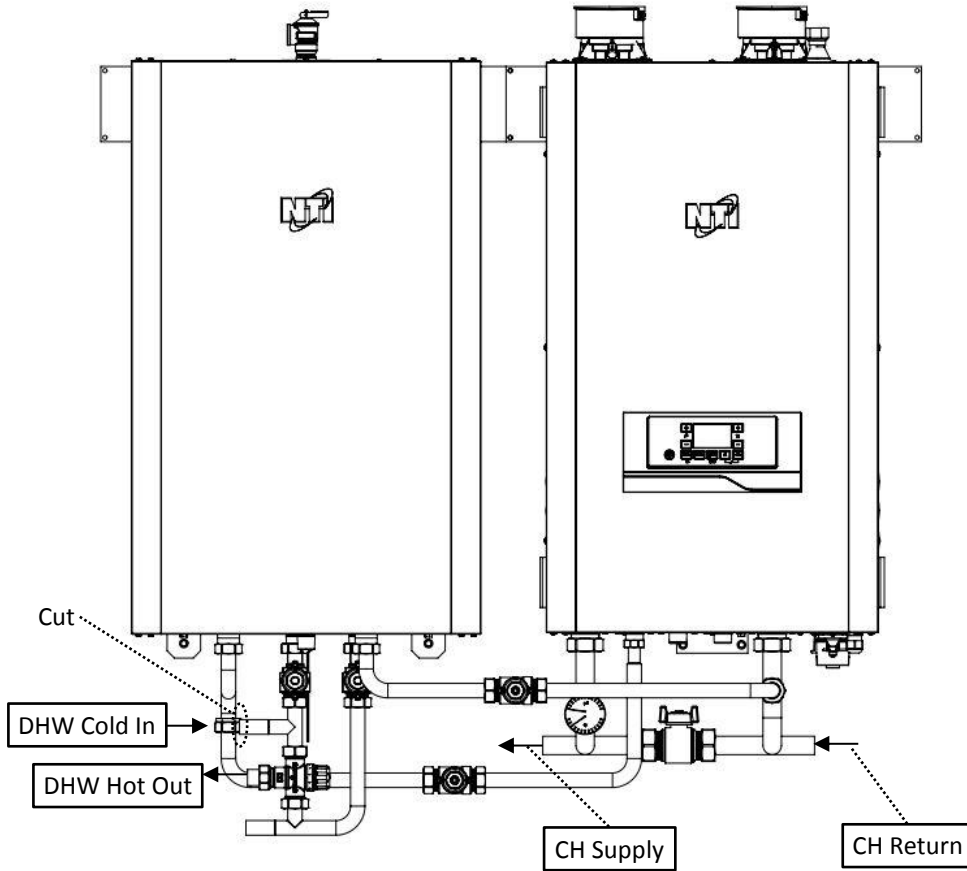
**NOTE:** the DHW cold water supply connection to the S20W tank is located to the left of the DHW hot water outlet connection; only cut the pipe stub of the pipe that connects to cold water supply connection – see examples below.

**NOTE:** it is mandatory to install a mixing valve on the DHW outlet of the S20W



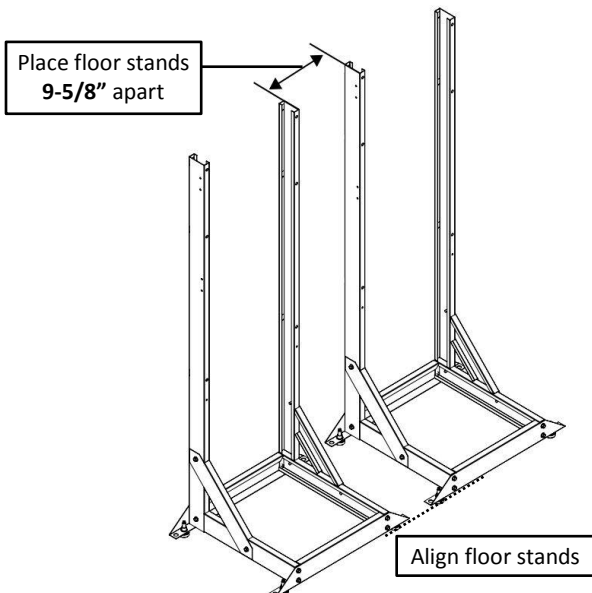
----- See next page for example with tank installed on left-side -----

**Tank (S20W) on Left-side**



**When Using Optional NTI Floor Stand, p/n 86998**

**FTVN150, FTVN199, TRX150 & TRX199**



**FTVN085 & FTVN110**

