

Read the instructions in this guide thoroughly before installing the product. The exterior of the product and specifications may be changed without prior notice for quality improvement. Keep this guide in a suitable place nearby the boiler for future reference.

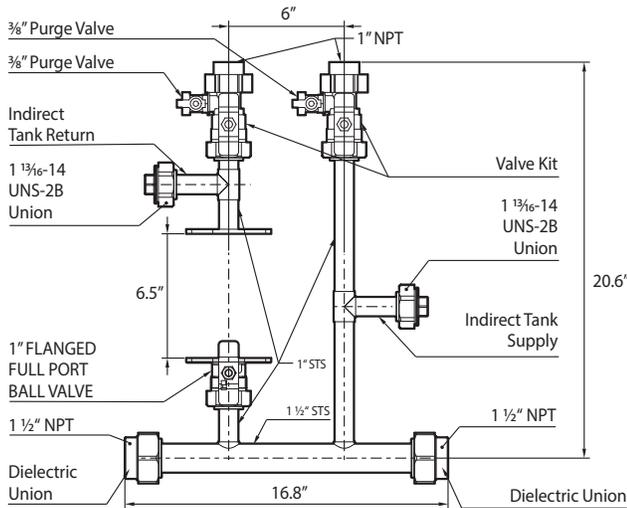
⚠ CAUTION

Follow these installation instructions carefully in order to avoid a safety hazard and/or injury.

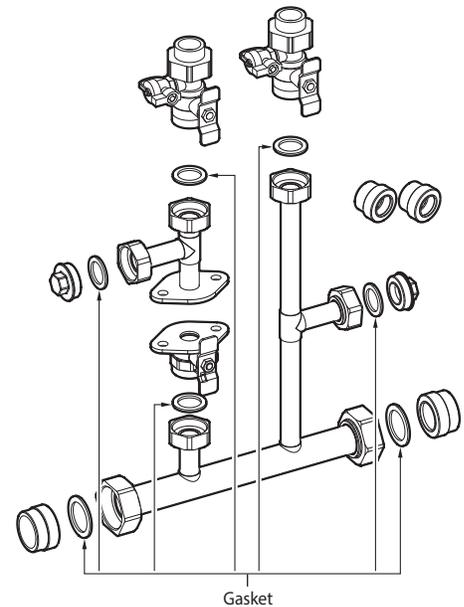
- The NHB-H Series Primary Manifold is approved for use with Navien NHB-H Series Boilers ONLY. The Navien Secondary Manifolds may be used on any heating system with compatible piping.
- This manifold is not to be used with any other manufacturer's products.
- This accessory must be installed and serviced by a qualified installer or service agency.
- For additional information, refer to the NHB-H Series Boiler Installation Manual.

1. Installing the Manifolds

Included Parts and Dimensions



(all dimensions in inches)



NHB-H Series Primary Manifold (#GXXX002396) - *for use with single boiler units only*

Note

Check that a pipe, unions, gaskets, and valves are all included in the Manifold kit box and the Valve kit box. After installing the manifold and valve kits, ensure that the fittings, such as the unions and gaskets, are properly sealed with the pipe.

Preparing for Installation

- Before installing the NHB-H Series Primary Manifold, shut off the water supply to the installation site and make sure that the boiler is properly mounted on the wall according to the NHB-H Series Installation Manual.
- Apply thread sealant to the 1" Heating RETURN and SUPPLY fittings located at the bottom of the boiler unit (See FIGURE 1).

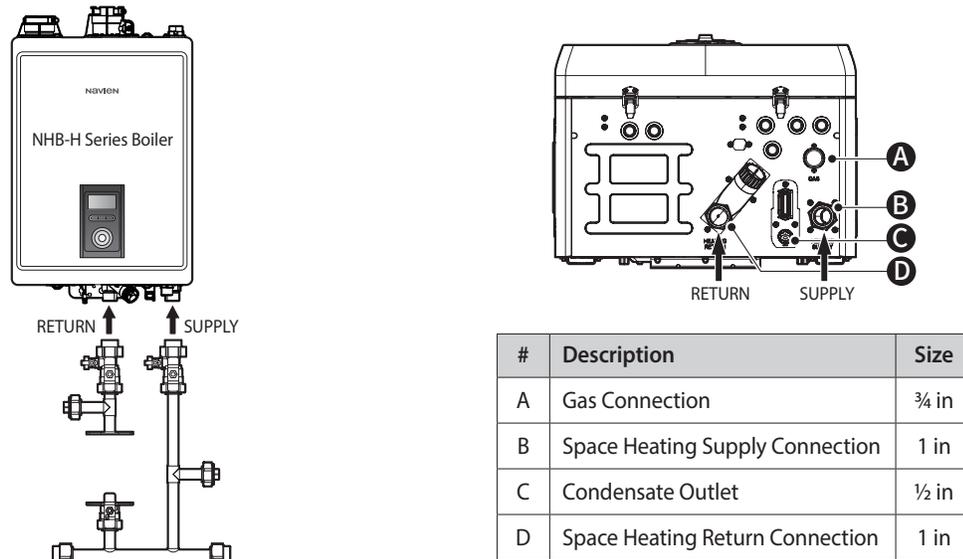
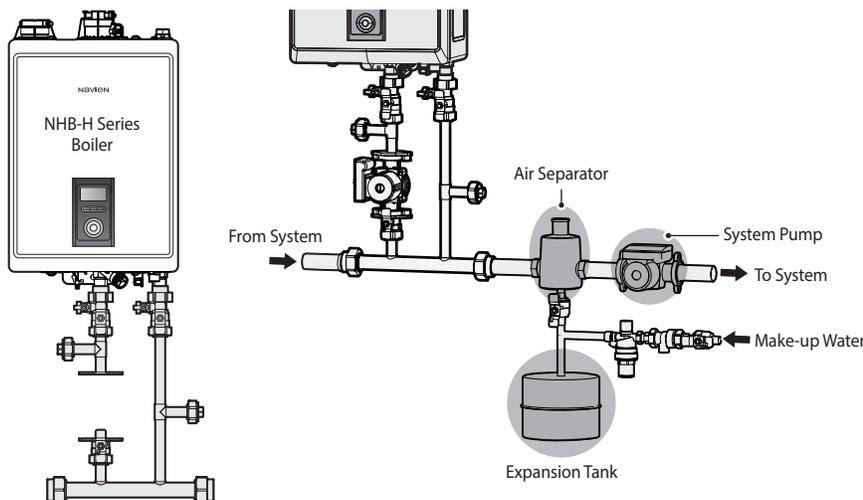


Figure 1. Supply and Return Connections on the NHB-H Series Boiler

Installing the Manifolds on the Boiler

- Identify the SUPPLY (red) and RETURN (blue) pipe connections on the Primary Manifold. Use the provided 1" unions from the manifold to attach the piping to their proper connections on the boiler.
- Note** Make sure that the water connections are tightly sealed to prevent water leaks.
- Install the boiler pump (not included) onto the 1" flange connections available on the Heating Return piping. The length between the flanges is 6-1/2". Check the pump dimensions before installation for compatibility.
 - Install the rest of the piping system to the accessory. Water flow should travel from left to right with the Heating Return entering the manifold from the left side and the Heating Supply exiting from the right. Attach the Heating Supply and Return system piping to the 1-1/2" main hot water pipe on the Primary Manifold and provide sufficient weight support for the plumbing system. This accessory is also compatible with smaller pipe sizes based on BTU demand and flow rate requirements.
 - Install any required accessories such as an air separator, expansion tank, check valve, etc. on the heating supply side as illustrated in FIGURE 2 below.



Note

Primary Manifold is compatible with **single NHB-H Boilers only**. Boiler and System pumps are not included with the manifold. Verify proper pump sizing for best performance. See **Table 1** for recommended pump models.

Figure 2. Primary Manifold Piping Setup with Accessories

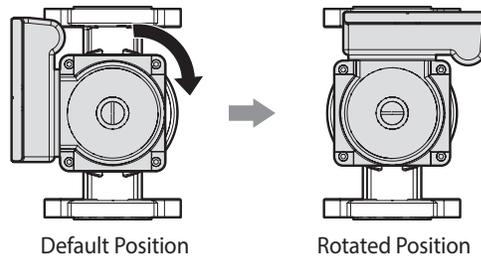
Manufacturer	NHB-055/080/110H	NHB-150H
Grundfos	UPS 15-58	UPS 26-99
Armstrong	Astro 230CI	Astro 280CI
Taco	0015-MSF3-IFC	0013-MSF2-IFC*
Wilo	Star S 21F	Star 30F
Bell & Gossett	NRF-25**	NRF-36

Table 1. Recommended Pump Models with the NHB-H Primary Manifold

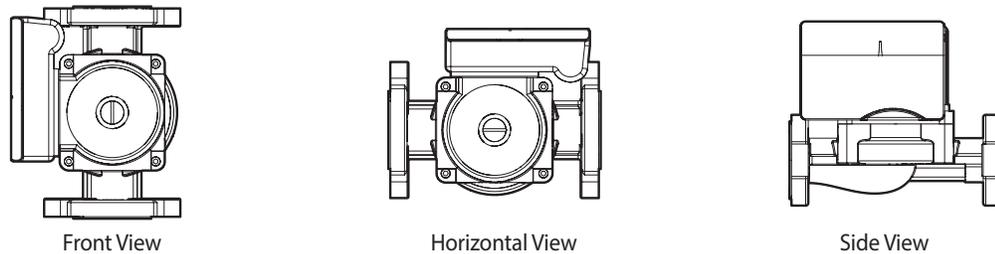
Note

The recommended pump models listed above are suitable for best performance and fit with the NHB-H Series boiler and STS Manifold.

* For proper fit to the manifold, the Taco #0013 MSF2-IFC must be positioned with the junction box at the TOP of the pump as shown below:



Detailed Views of Pump



** The RETURN service valve handle may interfere with some pump models when installed in the vertical position. The valve handle may be removed from the manifold if necessary.

- An additional accessory, an indirect tank, can be installed in the additional ports below (see FIGURE 3). Stub outs are provided for the direct connection of an indirect water heater. Refer to the NHB-H Installation and Operation Manual for accessory piping and wiring requirements.

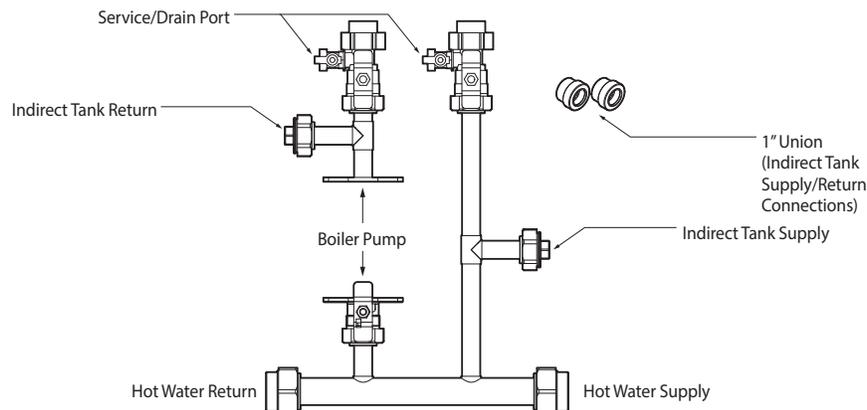


Figure 3. Available Ports on the NHB-H Series Primary Manifold

- Once all steps are completed, it is recommended to flush, purge, and fill the system in order to remove excess pipe debris. Check for any leaks from the piping before initial operation of the heating system.

2. Installing the PRV-Air Vent Adapter

Using this adapter, you can easily install the pressure relief valve, air vent and external LWCO.

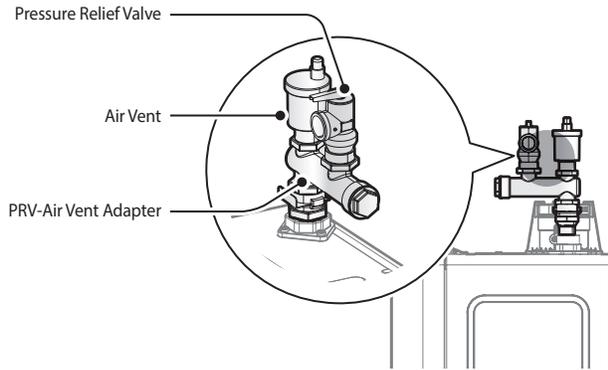
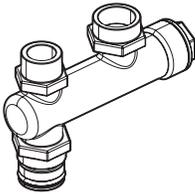


Figure 1. Adapter and Components Assembly

Included Items

		
PRV-Air vent Adapter	Socket (Thread to clip)	Clip

Installing the PRV-Air Vent Adapter on the Boiler

Follow the guidelines below when installing a PRV-Air vent adapter.

1. Connect the socket to boiler PRV Connection.
2. Insert PRV-Air vent adapter into the socket.
3. Install the provided clip to secure the adapter to the fitting.

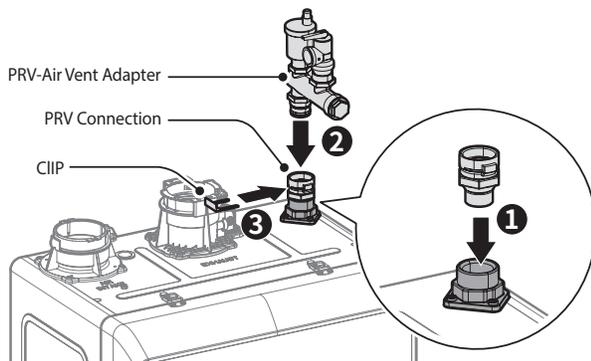


Figure 2. Adapter Assembly

Installing the LWCO on the PRV-Air Vent Adapter

Install a separate LWCO device if required by local codes.

The following figure illustrates an example of typical external LWCO installation.

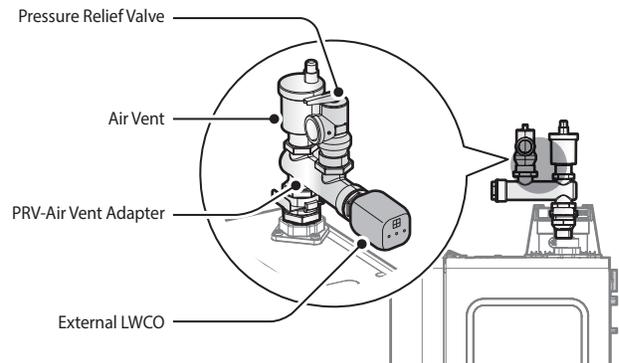


Figure 3. Adapter and Components Assembly (with LWCO)