

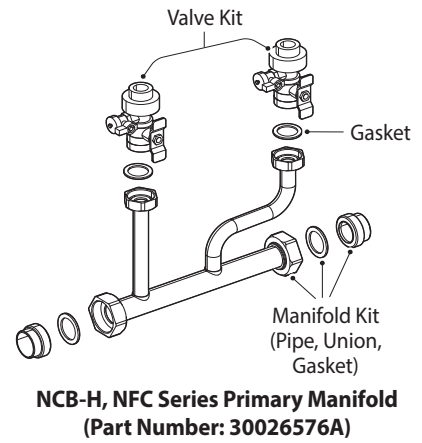
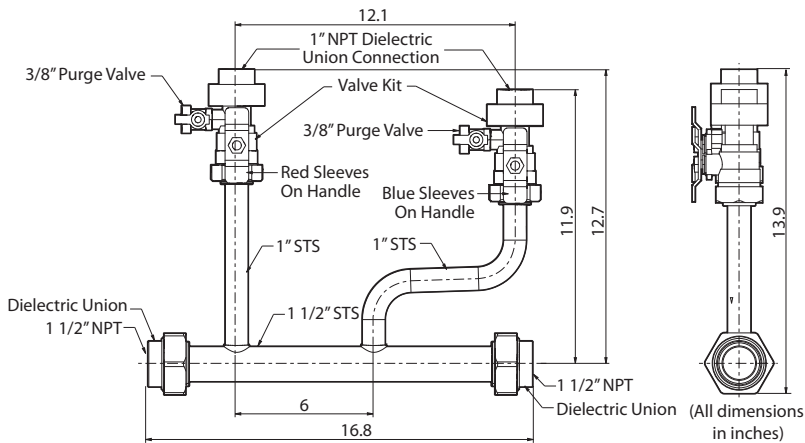
## INTRODUCTION

### CAUTION

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

- The NCB-H, NFC Series Primary Manifold is approved for use with Navien Combi-Boilers ONLY.
- 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.

## INCLUDED PARTS AND DIMENSIONS

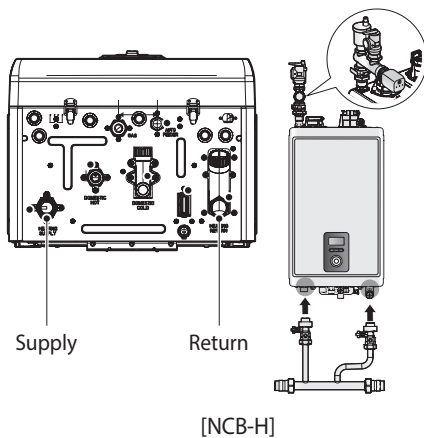


### Note

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.

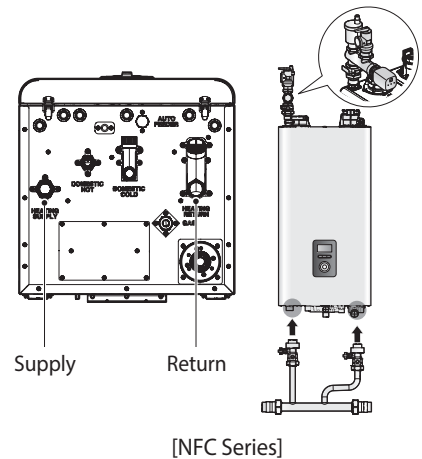
## PREPARE FOR INSTALLATION

- Before installing the NCB-H, NFC 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 Installation Manual.
- Apply thread sealant to the 1" Heating SUPPLY and RETURN fittings located at the bottom of the unit.



### Navien Combi-Boiler Connection Sizes

Description	Diameter
Fuel Gas Inlet	3/4"
Hydronic Auto Feeder	1/2"
Domestic Cold Water Inlet	3/4"
Domestic Hot Water Supply	3/4"
Space Heating Return	1"
Space Heating Supply	1"



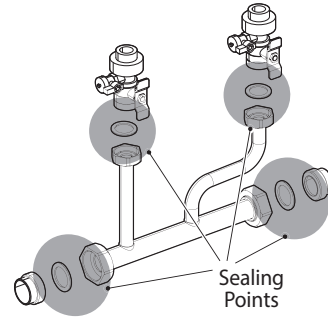
**FIGURE 1. Supply and Return Fittings on the Navien NCB-H, NFC Series Boilers with Connection Sizes**

## MANIFOLD INSTALLATION

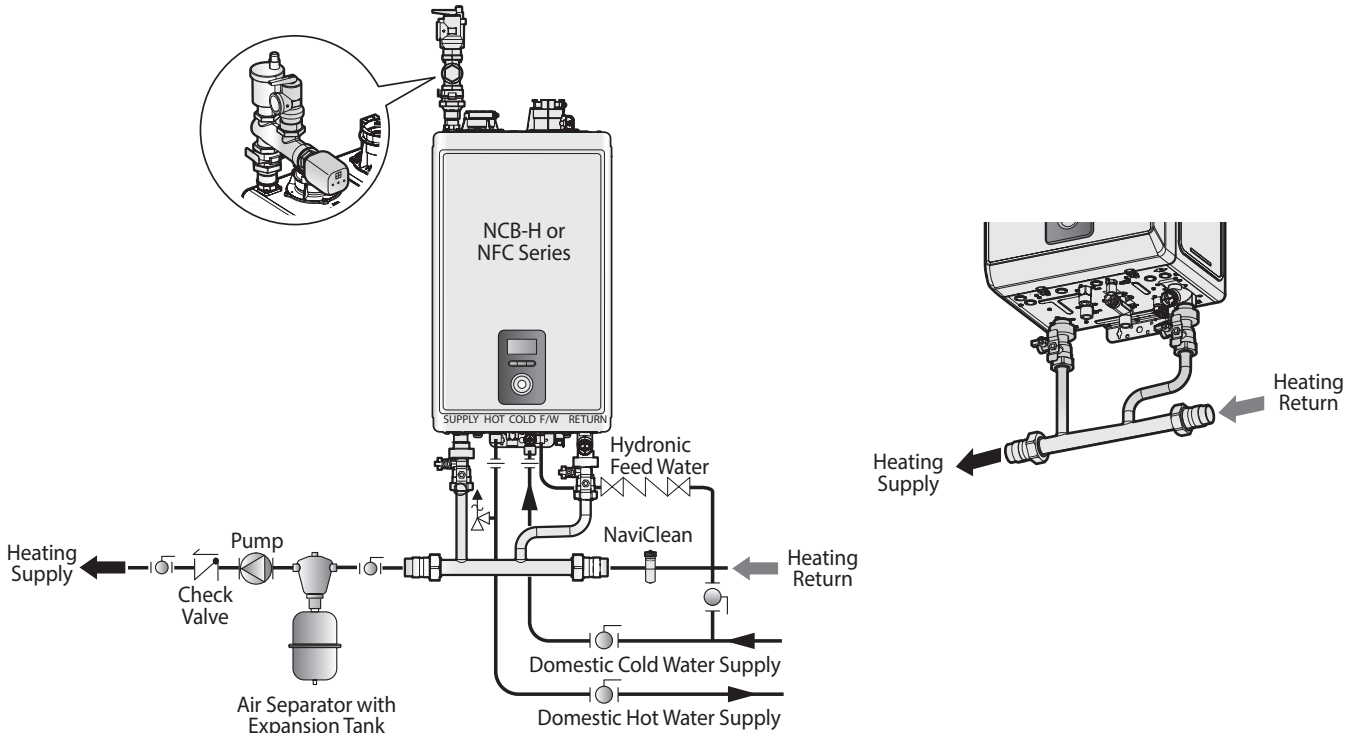
- Identify the SUPPLY (red) and RETURN (blue) pipe connections on the manifold. Use the provided 1" unions from the manifold to attach the piping to their proper connections on the boiler.

**Note** Make sure that the water connections are tightly sealed to prevent water leaks.

- Install the rest of the piping system to the accessory. Water flow should travel from right to left with the Heating Return entering the manifold from the right side and the Heating Supply exiting from the left. Attach the Heating Supply and Return piping to the 1-1/4" main pipe ends on the 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.

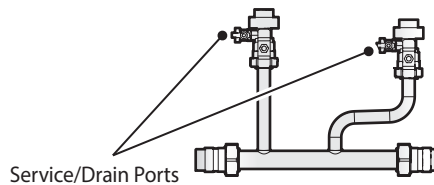


- Install any required accessories such as an air separator, expansion tank, check valve, etc. on the heating supply side as illustrated in FIGURE 2 below.



**FIGURE 2. Manifold Piping Setup with Accessories**

- Service and Drain ports are available on the service valves (see FIGURE 3).



**FIGURE 3. Available Ports on the NCB-H, NFC Series Primary Manifold**

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