

## Installation Instructions

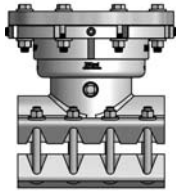


Figure 1

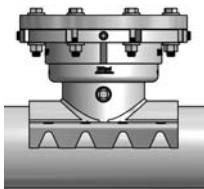


Figure 2

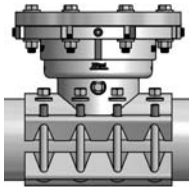


Figure 3

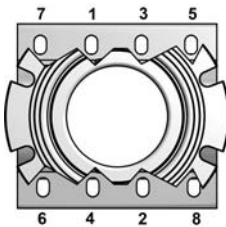


Figure 4

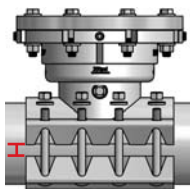


Figure 5



**IMPORTANT:** Read installation instructions COMPLETELY before installing the Insta-Valve 250 Patriot valve body. Failure to follow installation instructions will void product warranty. Follow local safety regulations and use personal protection equipment (PPE) as required by national, state and local regulations.

### INSTALLATION INSTRUCTION STEPS

1. **Confirm bore of temporary gate valve is 8.5 inches.** If the bore of your temporary gate valves is smaller than 8.5 inches immediately call Hydra-Stop technical support (708-389-5111).

2. Inspect the line stop fitting to ensure no damage has occurred during shipment or storage (See Figure 1). Locate and remove completion plug and box containing stainless steel mounting hardware. Store in a clean, safe location.

3. Measure pipe outside diameter where the line stop fitting is being installed to ensure the correct line stop fitting is being used.

4. Thoroughly clean the pipe surface where the line stop fitting will be installed and inspect for flaws, i.e., gouges, protrusions, excessive corrosion, etc. Irregular surfaces should be avoided to assure maximum gasket sealing.

5. Lubricate top and bottom of pipe and mat and branch gaskets with a soap/water solution. Ensure branch gasket is adequately lubricated. Do not use grease or pipe lubricant.

6. Mount the top half of the line stop fitting on the pipe in the position required for permanent installation (See Figure 2). Use a level to ensure the flange is level. Do not rotate the top half of the line stop fitting after it is positioned on the pipe.

7. Install the bottom half of the line stop fitting over the tapered ends of the mat gasket ensuring they are flat and smooth against the pipe surface. Visually inspect gasket to ensure tapered ends are not folded or rolled under themselves. Install stainless steel bolts, washers and nuts (See Figure 3). Finger tighten, ensuring gaps between top half and bottom half of the line stop fitting are the same front to back and side to side (within 1/8"). **NOTE:** It is acceptable to invert the middle two bolts on each side of the 4" line stop fitting to utilize a socket wrench for installation.

8. Using a torque wrench, tighten nuts in proper pattern. Tightening patterns are shown in Figure 5 and Figure 6. **Repeat tightening pattern in no more than 25 ft. lb. increments until recommended torque is reached.**

9. Wait 10 minutes to allow the gasket to fully seat then re-tighten bolts to recommended torque three additional times following the tightening pattern.

**NOTE:** 8" fitting has 10 total bolts. Please see figure 6 for bolt torque sequence.

Recommended Torque:

CI / DI Pipe: 115 ft-lbs. PVC Pipe: 55 ft-lbs. AC Pipe: 75 ft-lbs.

**Installation Instructions and Best Practices continued on back**

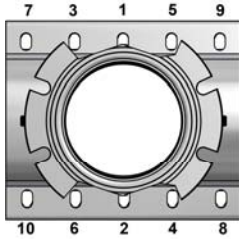


Figure 6



Figure 7

10. Check inside of fitting body outlet to ensure gasket is properly seated. Ensure completion plug set pins are flush with I.D. of the flange (See Figure 6).

11. Fill fitting body with water. Install test flange. Perform pressure test to ensure a complete seal between the fitting body and pipe (do not use a compressible medium such as air).

Minimum Test Pressure: 1.5 times the system working pressure

Maximum Test Pressure: 375 psi

12. Remove the test flange.

13. Following the tightening pattern, re-torque carriage bolts to recommended torque before continuing.

14. Properly block (support) HSF 250 Patriot fitting body and ensure pipe joints are properly restrained. Proceed with line stopping operation.

For Questions, please call 800.538.7867

## **HYDRA-STOP FITTINGS - INSTALLATION BEST PRACTICES**

- Keep nuts and bolts clean and free of debris.
- Adequately lubricate pipe and HSF 250 Patriot gaskets with soap/water solution paying special attention to AC pipe. Ensure branch gasket is adequately lubricated. Do not use grease or pipe lubricant.
- Avoid rotating top half of HSF 250 fitting once placed on pipe.
- Do not use a powered wrench to tighten nuts. You will gall the bolts and damage the fitting.
- Block / support the pipe before installing the tapping machine.
- Ensure all pipe joints are restrained prior to proceeding to valve insertion operation.
- Label fitting body with a paint pen or permanent marker with the tightening pattern as a visual reminder of the tightening pattern.



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Call Hydra-Stop for Technical Support at 800.538.7867 and visit us on the web at [www.hydra-stop.com](http://www.hydra-stop.com)

Specifications subject to change without notice.