

HYDRA-STOP®

4" - 12" Insta-Valve 250 Patriot Series Valve Body Installation Instructions



Figure 1



Figure 2



Figure 3

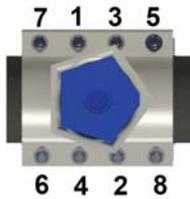


Figure 4
4" - 6" Bolt Tightening Pattern



Figure 5

IMPORTANT: Read installation instructions before installing the IV 250 valve body. Failure to follow installation instructions will void product warranty.

INSTALLATION INSTRUCTION STEPS

1. Inspect the valve body to ensure no damage has occurred during shipment or storage (See Figure 1).
2. Locate valve cartridge and box containing stainless steel mounting hardware. Store in a clean, safe location.
3. Measure pipe outside diameter where the IV 250 is being installed to ensure the correct insertion valve is being used.
4. Thoroughly clean the pipe surface where the valve body 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. Liberally lubricate top and bottom of pipe and mat and throat gaskets with a soap/water solution. Ensure branch gasket is adequately lubricated.
6. Mount the top half of the valve body on the pipe in the position required for permanent installation (See Figure 2). Do not rotate the top half of the valve body after it is positioned on the pipe.
7. Install the bottom half of the valve body 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 valve body are the same front to back and side to side (within 1/8").
8. Using a ratchet or open end wrench, tighten nuts in proper sequence (See Figure 4). Repeat sequence 3 times. Ensure gaps between top half and bottom half of the valve body are the same front to back and side to side (within 1/8") (See Figure 5). Using a torque wrench tighten to recommended torque. Wait 10 minutes to allow the gasket to fully seat and re-tighten bolts to recommended torque.

RECOMMENDED TORQUE:

4" - 8" IV 250

Cl / DI Pipe: 115 ft-lbs.

PVC Pipe: 55 ft-lbs.

AC Pipe: 75 ft-lbs.

10" - 12" IV 250

Cl / DI Pipe: 65 ft-lbs.

PVC Pipe: 55 ft-lbs.

AC Pipe: 60 ft-lbs.

NOTE: 8" valve has 10 total bolts. 10" and 12" valve has 14 total bolts. Please see figure 6 and figure 7 on reverse for bolt torque sequence.

Installation Instructions and Best Practices continued on reverse

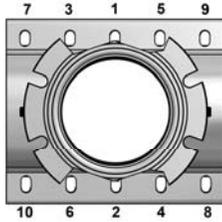


Figure 6
8" Bolt Tightening Pattern

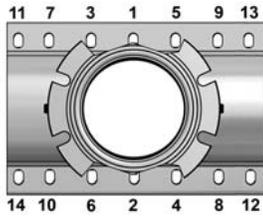


Figure 7
10" and 12" Bolt Tightening Pattern



Figure 8

9. Check inside of valve body outlet to ensure gasket is properly seated. Ensure completion plug set pins are flush with I.D. of the flange (See Figure 8).

10. Fill valve with water. Install test flange. Perform pressure test to ensure a complete seal between the valve 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

10. Remove the test flange.

12. Properly block (support) IV 250 valve body and ensure pipe joints are properly restrained. Proceed with valve insertion operation.

INSTALLATION BEST PRACTICE:

- Keep nuts and bolts clean and free of debris.
- Adequately lubricate pipe and IV 250 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 IV 250 once placed on pipe.
- Tighten nuts equally in no more than 25 ft-lb increments after finger tightening.
- Ensure gaps between top half and bottom half of the IV 250 are the same front to back and side to side (within 1/8").

- Check final torque with a torque wrench to ensure IV 250 has been torqued to installation specifications.
- Do not use a powered wrench to tighten bolts. You will gall the bolts and damage the valve.
- Pressure test a minimum of 1.5 times the system working pressure or a maximum of 1.5 times the rated working pressure of the IV 250.
- After bolts have been tightened to recommended torque wait 10 minutes to allow the gasket to fully seat and re-tighten bolts to recommended torque.
- Block / support the pipe before installing the tapping machine.
- Ensure all pipe joints are restrained prior to proceeding to valve insertion operation.

HYDRA-STOP®

Line Stopping • Line Tapping • Valve Insertion • Training and Support

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Patents Pending

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