

the Repair Guys



Testing two 6 inch Reduced Pressure Principle Assemblies

In our line of work, we field questions from contractors and technicians concerning repairs, installations, and general backflow prevention practices. We'd like to share some questions that we receive as well as our answers. Everyone has different opinions on these subjects and we would like to hear yours. Contact us with questions and ideas via email at: imark@backflowparts.com or mail us at American Backflow Products Co., PO Box 37025, Tallahassee, Florida 32315.

-- Mark Inman and Jason Gregg

Question-

Some of the equipment and valves that I install require specific start-up instructions before being placed into service. My question has to do with the initial installation of a Reduced Pressure Principle Assembly. Are there set guidelines for start-up of a backflow preventer and does the size and type of assembly matter?

Mark-

Yes, in fact, most manufacturers include start-up procedures and basic installation instructions with each backflow assembly. They will be located in either the owner's manual or on an installation and maintenance sheet attached to the assembly or in the shipping box. Of course, this is normally the first thing we throw away when we unpack the box. Basically, start-up procedures are a set of recommended steps that can help prevent damage to the assembly itself and any downstream piping or equip-



ment when the unit is initially placed into service. I know that normally we take these steps for granted but they are quick and easy and can really help save time and trouble during the installation of the assembly. The start-up procedures for backflow assemblies are the same regardless of model, type, or size.

Jason-

Let's make sure that we do not get the start-up procedure confused with the installation, so before we get to the start-up, we need to discuss part of the installation process. The most important point I want to stress about the installation is to flush the piping thoroughly to clear out any dirt, rocks, shavings, PVC cement, Teflon tape, or anything else that can find its way in during an installation. Flushing takes very little time compared to having to open and repair the assembly once the installation is complete. Now that the piping has been flushed and the assembly has been installed, we can get started. Before the water is supplied to the unit, make sure both shut off valves on the assembly are in the closed position. With the shut off valves closed, turn your water supply on and open the #1 test cock. This will help to flush any small debris remaining in the line.

Mark-

You will only need to flush the #1 test cock for a few seconds. Close the test cock #1 and make sure all the rest of the test cocks are in the closed position before proceeding. Next, slowly start to open the inlet shut off valve. Crack the valve open and try to pressurize the assembly very slowly.

This will allow the check valves and relief valve to move into position without being hammered by the initial flow of water into the unit. The relief valve should discharge briefly and then close. Slowly continue to open the inlet shut off valve until it is fully open. After the assembly is pressurized, slightly open each test cock to bleed any trapped air from the unit. At this point, check for discharge from the relief valve. If there is no discharge, move on to the next step. If there is discharge from the relief valve, then you will need to troubleshoot and repair before proceeding.

Jason-

Now that the assembly is fully pressurized, you are ready to pressurize the down stream piping. At this point I would suggest taking a moment to notify the customer and examine any down stream equipment that could be affected once the line is pressurized. (i.e., open or closed valves, booster pumps, flush valves, etc.) Remember an ounce of prevention is worth a pound of cure. The next step will be to slowly open the outlet shut off valve. Crack the valve open and pressurize the system very slowly. This may take some time depending on the size of the system. Once the system has been pressurized, slowly continue to open the outlet shut off valve until it is fully open. The next step would be to recheck any of the down stream equipment that may need to be air bled and for leaks so the customer does not get flooded. Now you can complete the start up procedures by testing the assembly. ▼

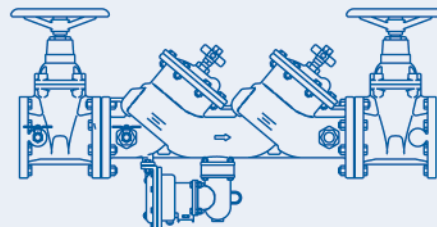


PARTS

(800) 575-9618

24 Hour Fax (850) 575-6508

Visit us at www.backflowparts.com



Backflow Preventer

- **Repair Kits**
- **Accessories**
- **Enclosures**