Model 420 Pressure Vacuum Breaker

Sizes: 1/2", 3/4" & 1"

Maintenance

- Close inlet and outlet shut-off valves before disassembling device.
- 2. Remove canopy screw and canopy.
- 3. Bleed off pressure by opening the No. 2 test cock.
- Unscrew the bonnet from the body by turning counterclockwise. Apply force at the outside edge. Do not use canopy mount to turn bonnet.
- 5. Remove the float assembly, spring retainer, spring and spider. The seat and seat o-ring may now be removed.
- 6. Clean all parts with clean water only.
- 7. After completing inspection, replace necessary parts and reassemble. Repair kits are available from your supplier.
- Retest according to "TESTING PROCEDURES".

MODEL 975 950 Sizes 3/4" - 2"

Maintenance Instructions

All Model 975XL Reduced Pressure Principle and Model 950XL Double Check Valve Backflow Preventers must be inspected and maintained by licensed personnel at least once a year or more frequently as specified by local codes. Replacement of worn or damaged parts must only be made with genuine "WILKINS" parts. The WILKINS Certificate of Limited Warranty provides that failure to do so "...releases WILKINS of any liability that it might otherwise have with respect to that device." Such failure could also result in an improperly functioning device.

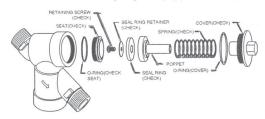
The Model 975XL Reduced Pressure Principle Assemblies should be thoroughly flushed after backflow conditions occur to prevent any type of corrosive deterioration to its components. Failure to do so could result in malfunction of the device.

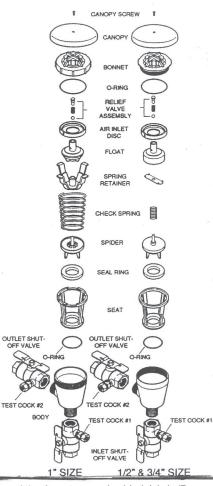
GENERAL MAINTENANCE

- 1. Clean all parts thoroughly with water after disassembly.
- Carefully inspect rubber seal rings, diaphragms and o-rings for damage.
- Test unit after reassembly for proper operation(see "Testing Procedures").

SERVICING CHECK VALVES

- 1. Close inlet and outlet shut-off valves.
- 2. Open No. 2, No. 3 and No. 4 test cocks to release pressure from valve.
- Unscrew check valve covers using appropriate size wrench (CAU-TION: Cover is spring loaded). To avoid injury, hold cover down firmly with one hand while unscrewing.
- 4. Remove check valve cover, spring and poppet assembly.



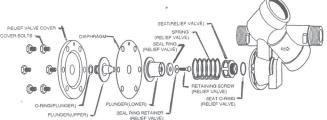


- 5. Inspect the rubber seal ring for cuts or embedded debris. To remove seal ring, remove screw and seal ring retainer. If the reverse side of the seal ring is unused, it is possible to invert the seal ring. This would be considered a temporary solution to fixing a fouled check and should be replaced with a new seal ring as soon as possible.
- 6. Inspect valve cavity and seating area. Remove any debris.
- 7. If installed with removable seat, unscrew seat from body and replace with new seat and lightly grease o-ring.*
- 8. Reverse the above procedures to reinstall check valve assembly. Care should be taken to make sure the heavy spring is installed in the No. 1 check valve (Model 975's series only). For the 3/4"-1" 975XLSE the No. 2 poppet has a cupped seal retainer. For the 1 1/4"-2" 975XLSE the No. 1 seat has a taller seat profile than the No. 2 seat.

SERVICING RELIEF VALVE

- Remove relief valve cover bolts and cover. Gently pull on diaphragm to remove the cartridge assembly.
- Inspect seal ring for cuts and embedded debris. Turn over or replace if required.
- 3. Disassemble cartridge by unscrewing relief valve retaining screw.
- Inspect diaphragm and o-rings for damage. Replace required parts and apply a light coat of grease to plunger o-ring.
- 5. Carefully reassemble cartridge assembly.
- Inspect relief valve seat for wear on seating surface. If damaged, replace seat and seat o-ring.*
- 7. Insert cartridge assembly into relief valve body.
- 8. Replace relief valve cover and cover bolts.
- 9. Place device in service and test per "TESTING PROCEDURES".

*For seat removal assistance, consult factory.



Model 950 & 975

Double Check Valve Assembly
Reduced Pressure Principle Assembly





Maintenance Instructions

All Model 975 Reduced Pressure Principle and Model 950 Double Check Valve Backflow Preventers must be inspected and maintained by licensed personnel at least once a year or more frequently as specified by local codes. Replacement of worn or damaged parts must only be made with genuine "WILKINS" parts.

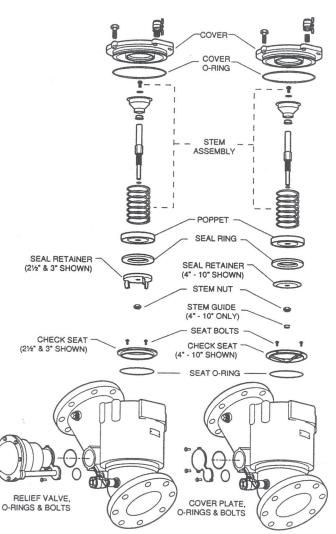
Backflow prevention assemblies should be thoroughly flushed after backflow conditions occur to prevent any type of corrosive deterioration to its components. Failure to do so could result in malfunction of the device.

GENERAL MAINTENANCE

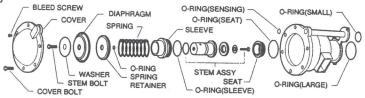
- 1. Clean all parts thoroughly with water after disassembly.
- Carefully inspect rubber seal rings, diaphragms and o-rings for damage.
- Test unit after reassembly for proper operation according to "TESTING PROCEDURES" on page 2.

SERVICING CHECK VALVES

- 1. Close inlet and outlet shut-off valves.
- Open No. 2, No. 3 and No. 4 test cocks to release pressure from valve.

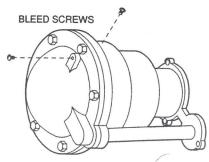


- Unbolt the check valve covers using appropriate size wrench. NOTE: Poppets are self contained. The covers should lift no more than 1/2" before tension is relieved.
- 4. Remove check cover and poppet assembly.
- 5. Inspect the rubber seal ring for cuts or embedded debris. To remove seal ring, remove nut and seal ring retainer. If the reverse side of the seal ring is unused, it is possible to invert the seal ring. This would be considered a temporary solution to fixing a fouled check and should be replaced with a new seal ring as soon as possible.
- 6. Inspect valve cavity and seating area. Remove any debris.
- Reverse the above procedures to reinstall check valve assembly. NOTE: Care should be taken to make sure the heavy spring is installed in the No. 1 check valve (Model 950DA, 975 & 975DA only).



SERVICING RELIEF VALVE

- Remove relief valve cover bolts and cover. Gently pull on diaphragm to remove the cartridge assembly.
- Inspect seal ring for cuts and embedded debris. Turn over or replace if required.
- 3. Disassemble stem cartridge by unscrewing diaphragm bolt. CAUTION: This assembly is spring loaded.
- Inspect diaphragm and o-rings for damage. Replace required parts and apply a light coat of grease to o-rings.
- 5. Carefully reassemble cartridge assembly.
- Inspect stainless steel seat for wear on seating surface. If damaged, replace seat and seat o-ring.
- Insert cartridge assembly into relief valve body. Make sure that stem guide is fully seated into body and that diaphragm is assembled as shown below.
- 8. Replace cover o-ring, cover and cover bolts.
- Place relief valve back in service and test according to "TESTING PROCEDURES" on page 2.



AIR BLEED FROM RELIEF VALVE

To bleed air from relief valve, first locate the two stainless steel bleed screws located on the top of cover and side of body. Using a slotted head screwdriver, turn the screws counterclockwise about 1/4 to 1/2 turn. When a steady stream of water is noted, turn the screws clockwise to their original position.