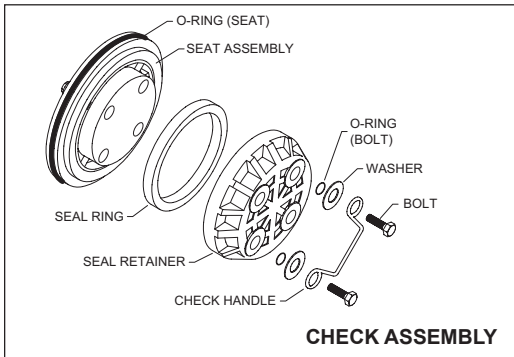


# Maintenance Instructions

4" – 6"



All Model 475ST Reduced Pressure Principle 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 "ZURN WILKINS" parts.

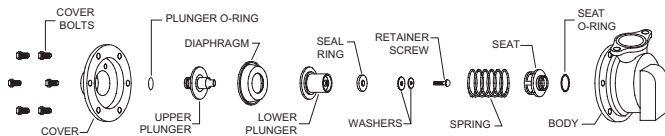
### GENERAL MAINTENANCE

1. Clean all parts thoroughly with water after disassembly.
2. Carefully inspect rubber seal rings and o-rings for damage.
3. Test unit after reassembly for proper operation (refer to "TESTING PROCEDURES").

### SERVICING RELIEF VALVE

1. Remove relief valve cover bolts and cover. Gently pull on diaphragm to remove the cartridge assembly.
2. Inspect seal ring for cuts and embedded debris. Turn over or replace if required.
3. Disassemble cartridge by unscrewing relief valve retainer screw.
4. Inspect diaphragm and o-rings for damage. Replace required parts and apply a light coat of lubricant to plunger o-ring.
5. Carefully reassemble cartridge assembly.
6. Inspect relief valve seat for wear on seating surface. If damaged, replace seat and seat o-ring. Install spring over seat guides.
7. Insert cartridge assembly into relief valve body.
8. Replace relief valve cover and cover bolts.
9. Place the device in service and test per "TESTING PROCEDURES" on page 2.

### RELIEF VALVE ASSEMBLY



Capacity thru Schedule 40 Pipe				
Pipe size	5 ft/sec	7.5 ft/sec	10 ft/sec	15 ft/sec
2 1/2"	75	112	149	224
3"	115	173	230	346
4"	198	298	397	595
6"	450	675	900	1351
8"	780	1169	1559	2339
10"	1229	1843	2458	3687

### SPECIFICATIONS

Maximum working water pressure: 175 PSI  
 Maximum working water temperature: 140°F  
 Hydrostatic test pressure: 350 PSI  
 End connections: Flanged/ANSI16.1 Class 125

### SERVICING CHECK VALVES

1. Close the outlet and then the inlet shut-off valves.
2. Open No. 2, 3 and 4 test cocks to release internal pressure. Leave them open during check removal and reinstallation.
3. Loosen and remove the two nuts, bolts, gasket and grooved coupling from around the access cover.
4. Grasp one of the exposed ends of plastic retainer, push down and then pull toward the #2 check. The retainer should "spiral" out of the groove around the check.
5. Repeat numbers 3 & 4 to remove the #2 check the same way.
6. Always service the checks one at a time to avoid mixing parts. Start by removing the hardware and o-rings from the back of the check assembly (See "Check Assembly" illustration). Separate the seal retainer from the assembly to expose the seal ring.
7. Inspect the seal ring for cuts or embedded debris. If the reverse side of the seal is unused, the seal ring can be inverted and used temporarily until a new seal is obtained. Inspect seat o-ring and replace if cut or damaged in any way.
8. Inspect valve cavity and seating areas. Flush with water to remove any debris.
9. Reassembly: Lubricate the #2 check o-ring, install in the body and close the #4 test cock. Install the #2 check retainer into the body groove by inserting the end with short tab into the notch above the check, sliding your hand around the face of the retainer pushing it into the groove as you go. Retainer should "snap" into place. Lubricate and install the #1 check, close the #2 test cock and install.
10. Lubricate the outside surface of the grooved coupling gasket. Reassemble access covers and grooved couplings, making sure the ends of the couplings touch each other. Close any remaining open test cocks and place valve back in service.

FIGURE 1

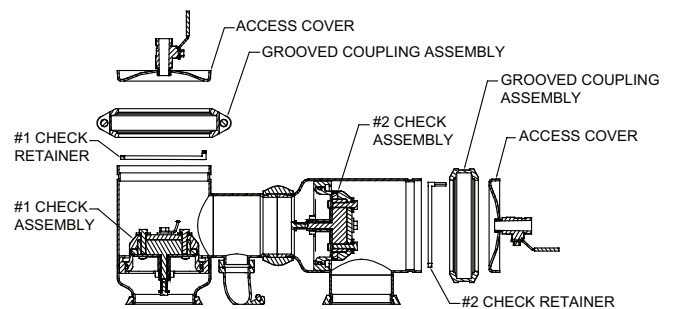


FIGURE 2

