

# Series 900

## Reduced Pressure Principle Backflow Preventers

Sizes: 2½", 6" (65, 150mm)

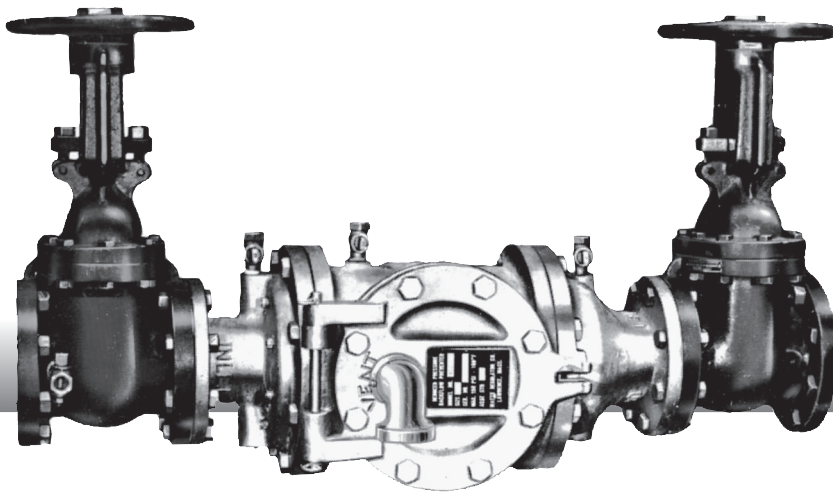
- Service
- Replacement Parts
- Maintenance

For field testing procedure, send for IS-TK-DP and S-FT-TK9A.

For troubleshooting guide, send for S-TSG.

For other repair kits and service parts, send for PL-RP-BPD.

For technical assistance, contact your local Watts representative. See back page.



**Attn. Installer:** After installation please leave this instruction sheet for occupant's information.

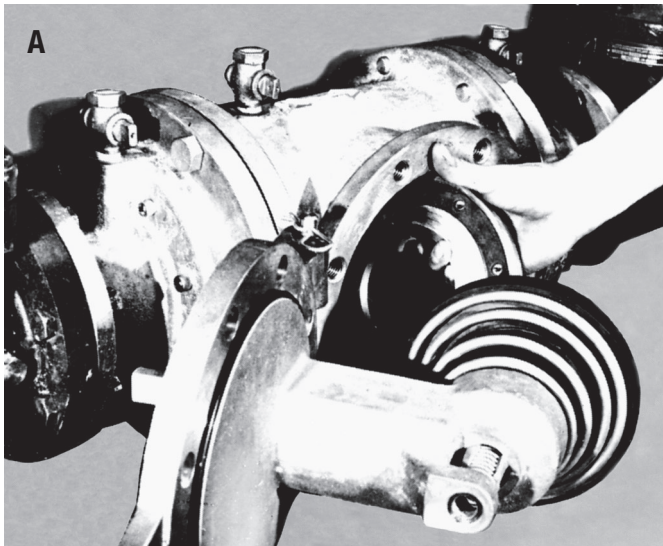
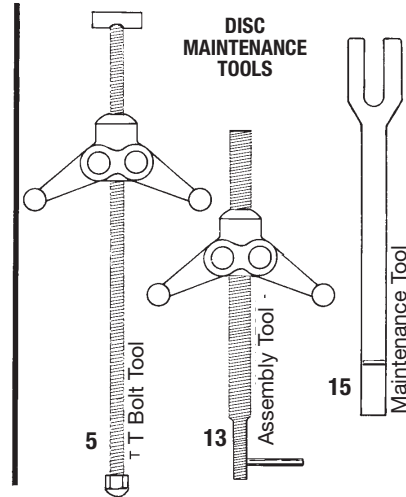
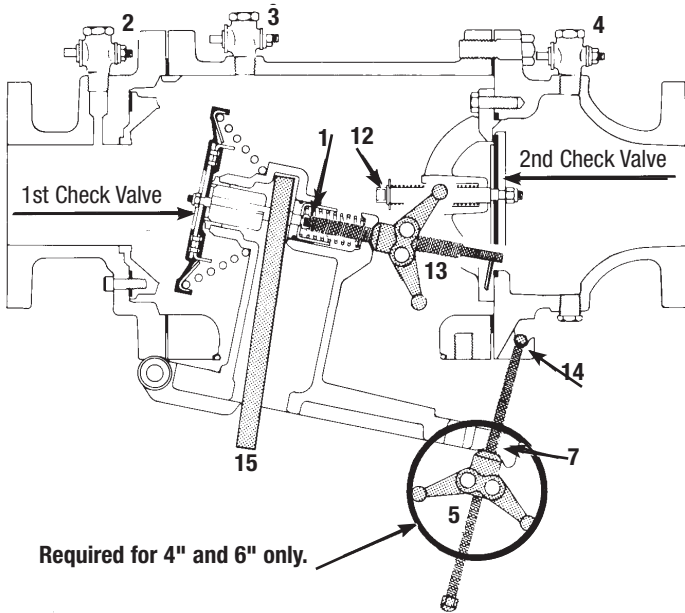
**Important:** Inquire with governing authorities for local installation requirements.

**Note:** For Australia and New Zealand, line strainers should be installed between the upstream shutoff valve and the inlet of the backflow preventer.

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.

# Service Replacement Parts and Maintenance

## Series 900

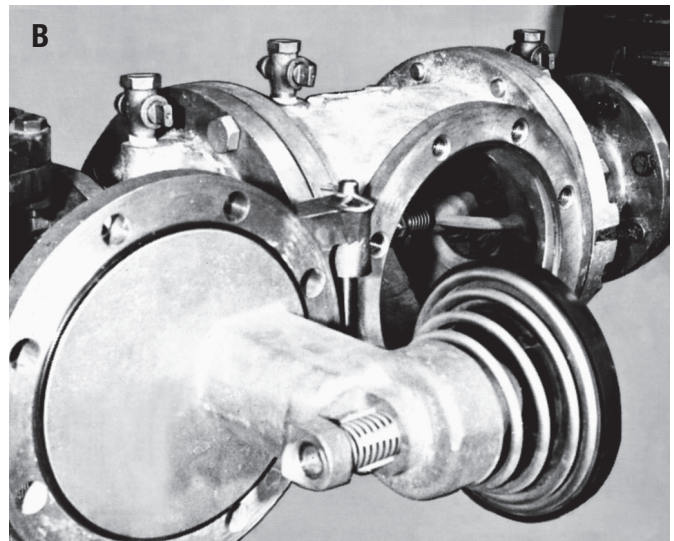


### First Check Valve Quick Cleaning Operation:

- A. Insert maintenance tool (15) into the vent port until the mark on the handle is flush with vent port surface.
- B. Close both inlet and outlet gate valves.
- C. Open three test cocks (2, 3, and 4) located between the gate valves. The test cock which is immediately upstream of the first check valve (2) must be left open when the access door is swung open to equalize pressure. When this test cock is opened, the relief valve will tend to open, but will be captivated in a partially open position by the maintenance tool.
- D. Remove eight hexagonal bolts from the access door.
- E. Swing the door to an open position collecting water spillage in a suitable receptacle.
- F. Inspect 1st check valve seat and discs for damage or deterioration, after wiping with a clean cloth.

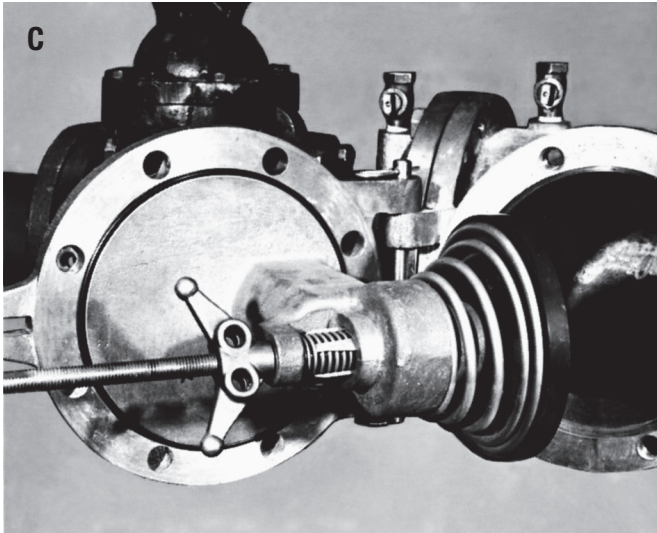
G. If damage or deterioration to either seat is evident, remove the eight socket head screws and remove seat and gasket from valve. See photo (A).

H. Reverse above procedure for reassembly. Note: Lubricate seat gasket with O-ring grease.



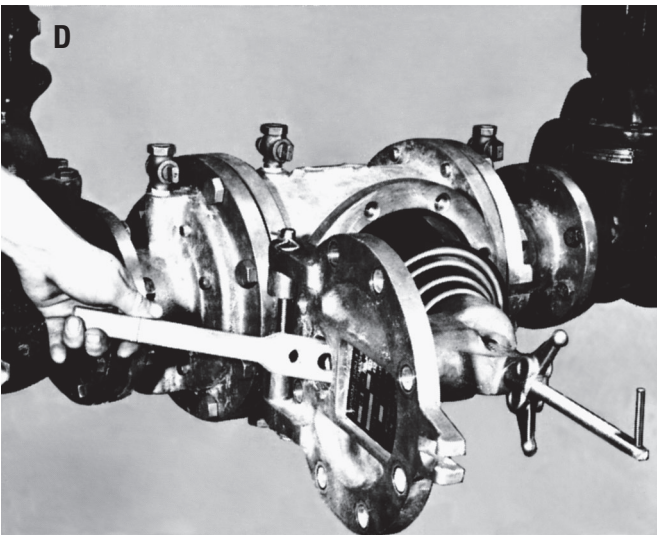
### Removal of First Check Valve Assembly:

- I. Insert assembly tool (13) into the hole in the end of the relief valve casting and screw threaded rod onto the end of the check valve assembly (1) hand tight. Lubricate rod for easier turning.
- J. Tighten the wing nut of the assembly tool only until the maintenance tool (15) can just be removed from the relief valve vent port. (Approximately a half turn.) See photos (C) and (D).



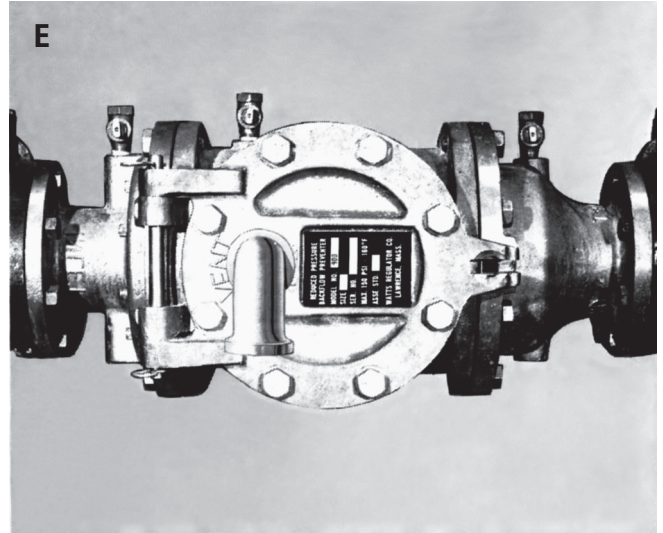
**Caution:** Do not over-tighten the wing nut as this may damage the relief valve disc.

- K. Remove maintenance tool (15). Loosen wing nut while restraining rod from turning, allowing springs to completely decompress. When wing nut spins loosely, threaded rod can be unscrewed from device permitting removal of 1st check valve assembly.
- L. After replacing parts of the check valve assembly, reverse procedure to reassemble parts taking note of the "Caution" regarding over-tightening of the wing nut. Tighten the wing nut only until maintenance tool (15) can just be inserted to the mark on the handle of the tool.
- M. Insert maintenance tool (15), photo (D). Loosen with nut and remove assembly tool (13) from device.

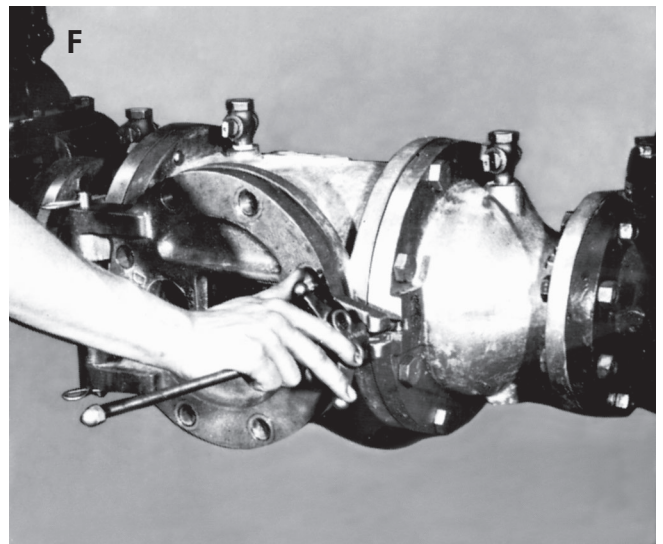


### Dismantling of Second Check Valve:

- N. Depress valve stem of second check valve assembly (12) and hold in an open position. Collect any water spillage.
- O. Reach in through the door and wipe both seat and disc of the second check assembly while depressing (holding). Allow valve to close. **Caution:** Keep fingers clear of closing.
- P. If second check valve is damaged or deteriorated, remove six bolts from the flange of the second check valve module and remove the module.



- Q. After disassembly and cleaning, reassemble the check valve module in the position shown in photo (B).
- R. Inspect access door O-ring seal to be sure it is in its proper position and close the door. Reassemble with eight hexagonal bolts.
- S. Close all petcocks and open gate valves.
- T. Remove maintenance tool (15) after restoring water pressure, photo (E).

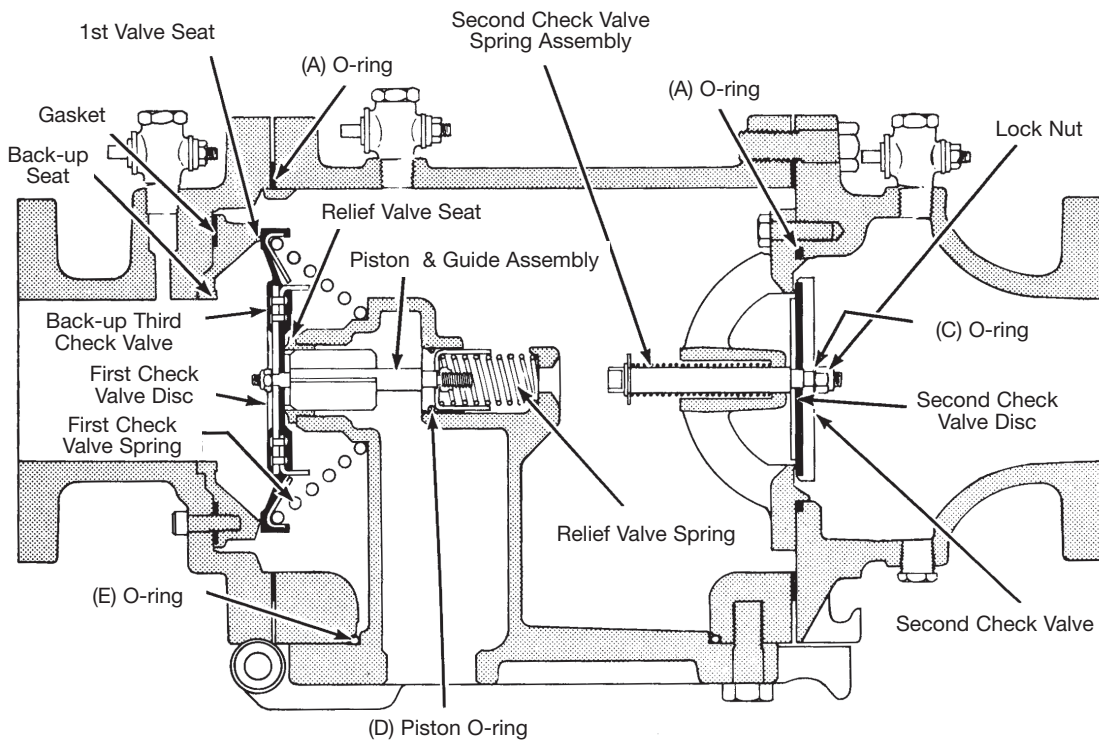


### Opening of access door when maintenance tool cannot be fully inserted into vent port because relief valve is open:

- U. Insert T bolt (5) into cavity of outlet casting (14) and through the ear of relief valve casting.(7).
- V. Tighten wing nut hand tight.
- W. Remove eight hexagonal hatch bolts. *There is now a spring load transmitted to the T bolt assembly (5) from the first check spring.*
- X. Slowly back off the wing nut allowing the door to open to the point where the first check and relief valve springs have decompressed enough so the door can be freely opened and the T bolt assembly (5) can be removed.

# Replacement Parts

## Series 900



**Note:** Before re-assembly, grease Relief Valve Seat orifice, Piston Bore and Piston O-ring. Use silicone base grease.

### Service Parts Kit consists of:

First Check Valve Disc  
 Second Check Valve Disc  
 Set of O-rings (B, C, D, E)  
 Silicone Grease

### For Prices:

Refer to Separate Replacement Parts Price Sheet, PL-RP/BPD.

#### CALIFORNIA PROPOSITION 65 WARNING

**WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. (California law requires this warning to be given to customers in the State of California.)

For more information: [www.watts.com/prop65](http://www.watts.com/prop65)

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Water Safety & Flow Control Products



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