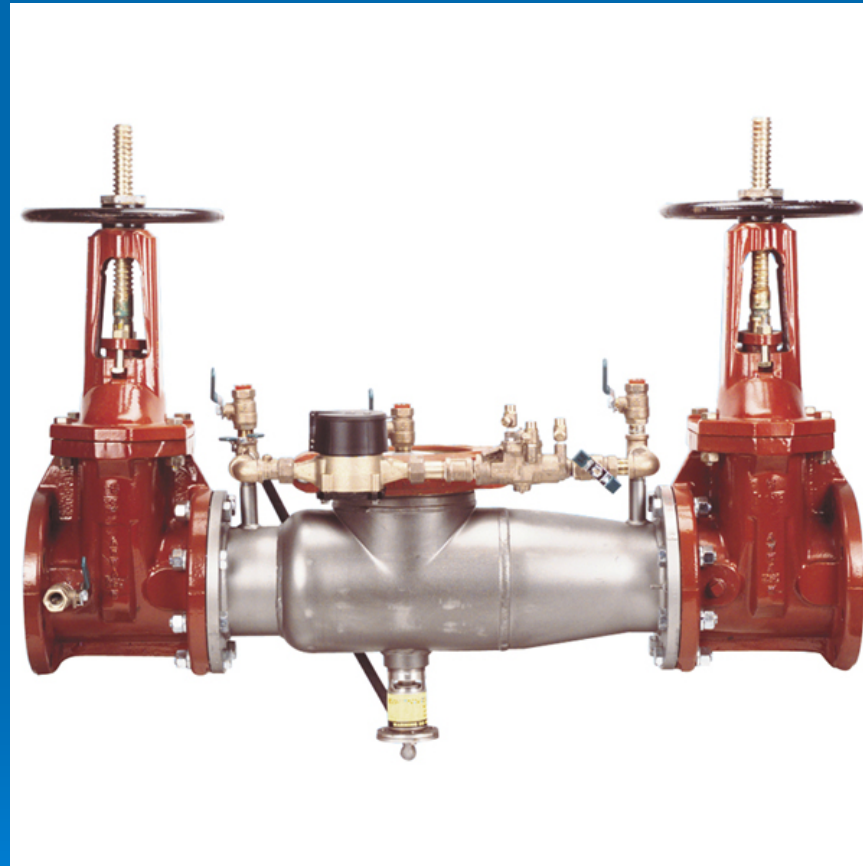


994 RPDA 2 1/2" - 6"



WATTS®

Modification Overview

- Production of the 994RPDA began in 1999 and is current.
- The 994 RPDA currently utilizes the $\frac{3}{4}$ " 009M3 for the bypass assembly.

Modification Overview

- Production for the 5000SS began in 1991 and is current.
- The 5000SS currently utilizes the $\frac{3}{4}$ " 4000BM3 for the bypass assembly.

Single Access Cover Removal

- Cover is secured by a grooved coupling.
- Cover has no spring load.



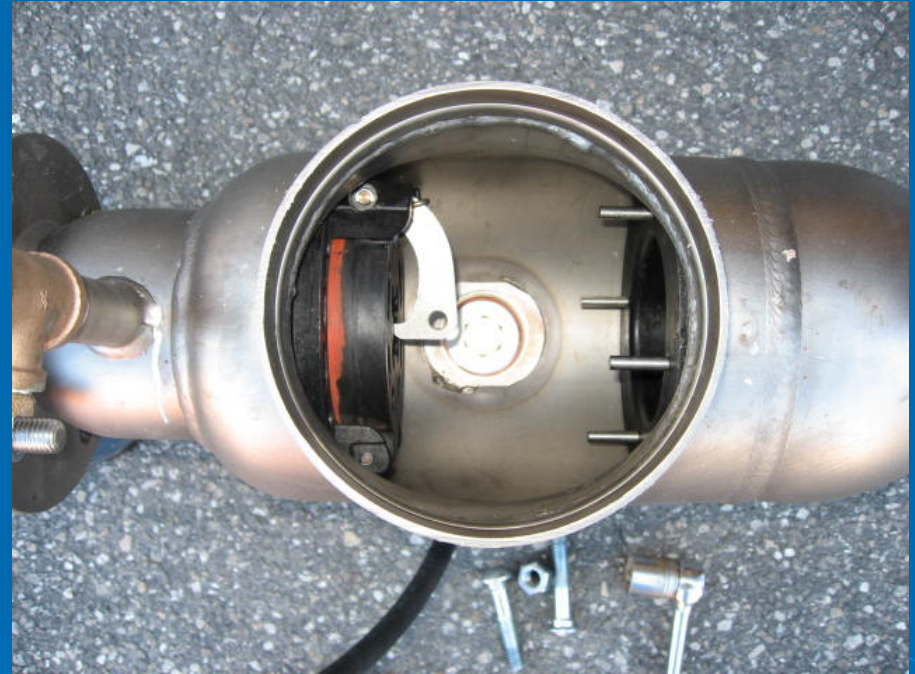
Check Valve Removal

- Check valve modules called “Cam Checks”.
- Checks are o-ring sealed and threaded into body.
- #1 Check must be removed before #2 can be removed.



Check Valve Removal

- Cam checks unscrew counterclockwise by hand “if possible”.
- *Do not use cam arm as a handle to unscrew.



Check Valve Removal

- If too tight, place a drift punch or solid rod (long screwdriver) in one of the holes on the outer edge of the check module.
- Tap with hammer in correct direction (counterclockwise) to loosen.



Check Valve Removal Notes

- There are “special tools” available to help remove check modules.



Check Seat Removal

- Check seats are part of each module and can not be removed.
- If the seat is damaged, the complete check module will need to be replaced.



Check Disc Inspection (First Check)

- 2 1/2" - 4" first check and all 6" sizes.
- Locate the stud on the outlet flange of the assembly.
- Place the cam arm hole on the stud and open the check valve so that the cam arm rests between the roller and clapper.



Check Disc Inspection (Second Check)

- 2 1/2 - 4" second checks only.
- Lift the cam arm and hold in open position.
- *Raise the clapper so that the end of the cam arm rests between the roller and clapper.



Check Valve Reassembly Notes

- Lubricate check o-ring.
- Reassemble check modules in reverse order.
- Lubricate outside edge of groove coupler gasket.

Relief Valve Removal

- RV assembly is threaded onto body and o-ring sealed.
- Disconnect RV Hose.
- Unscrew complete RV assembly from the main body.

**Do not place wrench on RV housing.

- Place wrench on flange and cover only.



Relief Valve Removal

- Remove cover bolts.
- Remove piston and sleeve by sliding them out through the flange side of the RV housing.



RV Seat Removal

- The RV seat is a machined part of the RV housing.
- To replace the seat, you must replace the housing.



Relief Valve Disassembly

- Remove sleeve from piston assembly.
- The piston assembly is spring loaded.
- Hold the piston firmly in one hand and unscrew the hex head bolt.



RV Disc Replacement

- Replace the RV disc in the disc holder.
- Replace the o-rings on the hex head bolt.



RV Diaphragm Replacement

- Reassemble the disc holder and spring to the diaphragm / piston assembly.
- Slide sleeve over diaphragm.
- Position the bead of the diaphragm over the edge of the sleeve.



RV Diaphragm Replacement

- While holding the sleeve in one hand, place the bolt end of the assembly on a flat surface.
- Using the other hand, cup the palm slightly over the diaphragm to form an air trap.



RV Diaphragm Replacement

- Rapidly slap the diaphragm down over the piston assembly and inside the sleeve.
**If the diaphragm is wrinkled, then it is not in the correct position.
- Repeat this step if necessary.



Relief Valve Reassembly Notes

- Slide the piston assembly and sleeve into the housing in reverse order.

