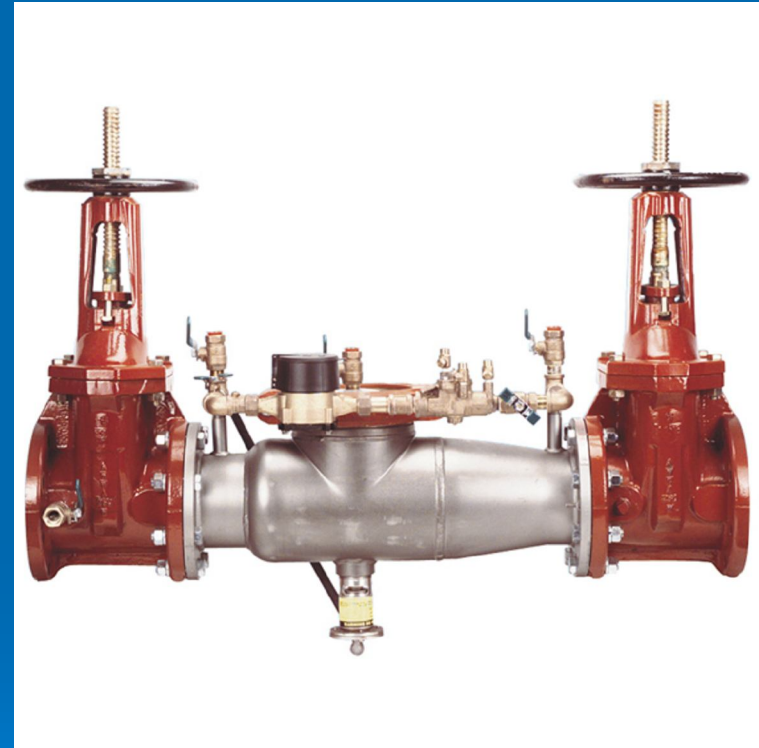


# 4000SS / 5000SS 994 / 994RPDA 2 1/2" - 10"



# 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.
- 2 1/2”-6” Cam Checks are threaded into body.
- #1 Check must be removed before #2 can be removed.
- 8-10” Checks are simply bolted into body.



# Check Valve Removal

- 2 1/2-6" cam checks  
unscrew  
counterclockwise by  
hand "if possible".  
\*Do not use cam arm  
as a handle to  
unscrew.



# Check Valve Removal

- 2 1/2-6" Cam Checks.
- 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*

- 2 1/2-6" Cam Checks.
- 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 2 1/2" - 6"

- 2 1/2"-4" first check and 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 2 1/2"-6"

- 2 1/2 -4" second check.
- 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.



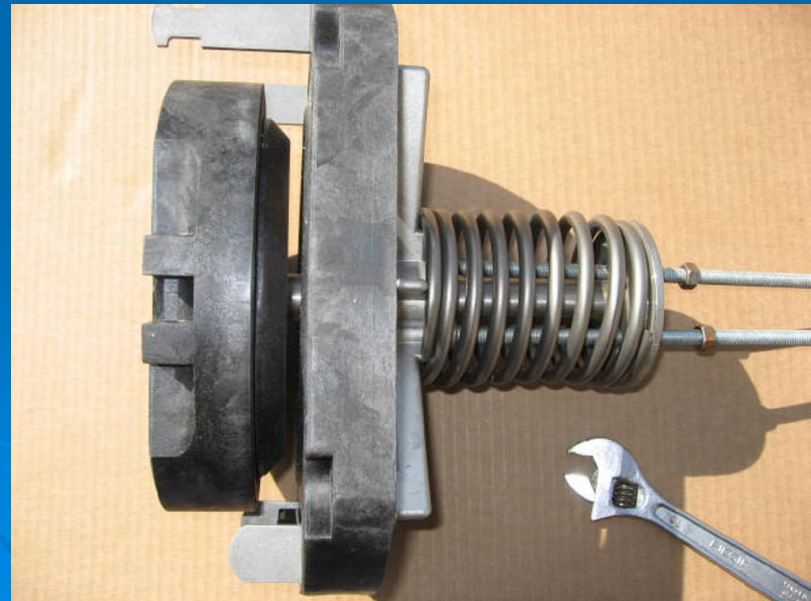
# Check Disc Inspection 8"-10"

- 8-10" first check.
- Place two 3/8" X 14" all thread rod through the two holes of the spring retaining plate.
- Screw the rods into the disc holder about 1/2".
- Secure both rods with 3/8" nuts.



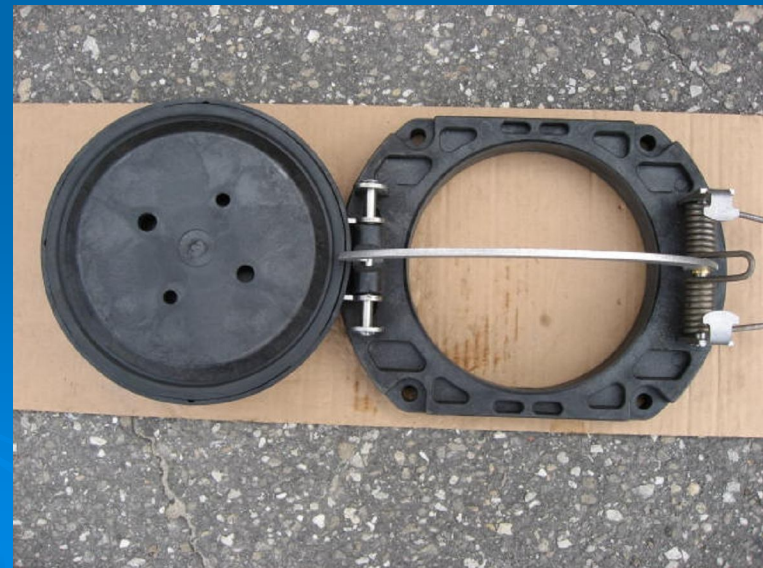
# Check Disc Inspection 8"-10"

- 8-10" first check.
- Tighten both nuts evenly to compress spring.
- Compress the spring until the clapper has moved about 1" from seat and inspect.
- To remove rod, loosen nuts evenly – be careful not to unscrew rod.




# Check Disc Inspection 8"-10"

- 8-10" second check
- Using a 3/8" nut driver or a piece of small diameter pipe, place on the end of the torsion spring and move away from and around the retaining bracket.
- This will free the cam arm 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.

