







Modification Overview

> Production of the $2\frac{1}{2}$ - 3" sizes began in 1998.

The lead free version (XL) was introduced in 2011.

Single Access Cover Removal

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





- Check valve module.
- Checks are secured by retainers and oring sealed.
- #1 check must be removed before #2 can be removed





Plastic Retainer –

There is one retainer securing the #1 check module.

Pinch together the exposed ends, push down, and then pull downstream.





Wire Retainer –

There are two separate spring loaded plate retainers that secure the #2 check module.

Pinch the sides of the spring together and rotate the plates out of the body groove, one at a time.





Once the retainer is removed the check module can be pulled straight out of the body.



Check Disc Replacement

 Remove the nut, washer, o-ring on back of module.
** Do not remove any hardware from the

- spring side of module.
- Separate the disc retainer from the module.





Check Seat Removal

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



Check Valve Reassembly Notes

- Lubricate check module o-ring.
- Install the check module into the body and close the test cock to hold check in place.



Check Valve Reassembly Notes

Plastic Retainer -

Install the plastic retainer by inserting one end into the body groove and then sliding your hand around the face of the retainer pushing it into the groove as you go.

The retainer will snap into place when it is fully seated.





Check Valve Reassembly Notes

Wire Retainers -

- Retainers are positioned at 12:00 and 6:00.
- Install each retainer into the body groove one plate at a time.
- Squeeze the spring ends together to clear the stops on the face of the seat.





RV Cover Removal

Cover is sealed by the diaphragm. Remove sensing line. Cover has a slight spring load. Hold cover firmly as the bolts are removed.





RV Stem Removal

- Gently pull on diaphragm to remove the RV stem.
- The spring should fall out when the stem is removed.



RV Seat Removal

- The seat is pushed into the body and oring sealed.
- Simply pull the seat straight out of the body.





RV Stem Disassembly

Remove the retaining bolt and pull apart.





RV Rubber Replacement

- The diaphragm and seat disc are free once the RV stem has been disassembled.
- The bead and cup of the diaphragm should face toward the bolt end of the stem.
- Reassemble stem in reverse order.



RV Reassembly Notes

- Form the diaphragm to lay flat against the RV cover.
- The bead on the diaphragm will line up with the groove on the RV body.
- Replace and lubricate the plunger o-ring.



