









#### Housing Removal <sup>3</sup>/<sub>4</sub>"-1"

- The plastic housing (vessel) must be removed for service.
- There is no spring load.
- Housing is held in place by a wedge and o-ring sealed on both ends.
- > Remove wedge screws.





## Housing Removal <sup>3</sup>/<sub>4</sub>"-1"

#### Pull wedge straight out.

\*\* Inserting a screw in center hole can help remove stuck wedge.

Slide housing towards inlet and lift upward.





### Check Valve Removal 3/4"-1"

- Check valve modules.
  Modules are located inside the housing.
  Modules are sealed by o-rings.
  Both modules slide
- out of the body inlet.



#### Disassemble Check Module 3/4"-1"

- Modules are spring loaded.
- Holding firmly, twist spring retainer counter clockwise.





#### Check Seat Removal 3/4"-1"

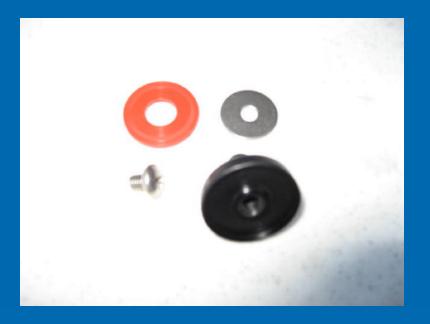
 Check seat is free once the module has been disassembled.
 If the seat is damaged, the entire module must be

replaced.



#### Check Disc Replacement <sup>3</sup>/<sub>4</sub>"-1"

Remove screw, disc retainer, and disc.



#### Check Valve Reassembly Notes 3⁄4"-1"

- > Lubricate o-rings on modules.
- Drop #2 module in body. Then drop #1 module in and turn until #1 spring retainer lines up with #2 seat.
- Push both modules into housing.

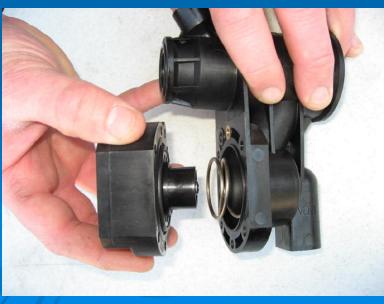




#### RV Cover Removal 3/4"-1"

 RV cover is sealed by the diaphragm.
 There is a slight spring load on cover.
 Hold cover firmly while removing screws.





#### RV Stem Removal 3/4"-1"

Gently pull the RV stem out of the housing.

Spring is free once the stem is removed.





## RV Seat Removal 3/4"-1"

RV seat is o-ring sealed.
 Pull seat straight out of housing.



### Disassemble RV Stem <sup>3</sup>/<sub>4</sub>"-1"

- Remove RV retaining screw.
- Pull plunger and disc holder apart.



### RV Rubber Replacement <sup>3</sup>/<sub>4</sub>"-1"

The RV disc and diaphragm are free once the stem has been disassembled.

Reassemble in reverse order.



#### RV Reassembly Notes 3/4"-1"

- Lubricate plunger oring on stem.
- Insert RV stem into cover.
- Place spring in position over seat.
- Make sure sensing oring is in position.
- Insert cover and stem into housing.





#### Housing Replacement Notes <sup>3</sup>/<sub>4</sub>"-1"

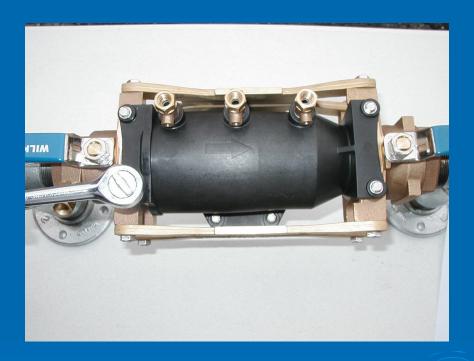
- Lubricate o-rings on inlet and outlet of housing.
- Place housing between struts.
- Slide retaining sleeve downstream against housing.
- Replace wedge and wedge screws.





## Housing Removal 11/4"-2"

- The plastic housing (vessel) must be removed for service.
- There is no spring load.
- Housing is bolted and o-ring sealed.
- Remove the four housing bolts.
- Lift the vessel up and out



#### Check Valve Removal 11/4"-2"

- The check valves are held in place by a closure sleeve.
- Gently pry the closure sleeve away from the body.
- Both modules must slide out of the housing.
- Use a short blunt object on a flat surface to push against the #2 check.





#### Check Valve Removal 11/4"-2"

- Make sure all test cocks are open to break any vacuum.
- Push down on the body to slide the modules out.





#### Disassemble Check Module 11/4"-2"

Hold the cage firmly and twist the seat counter-clockwise about ¼ turn.

Check modules are spring loaded.





#### Check Seat Removal 11/4"-2"

- Check seat is free once the module has been disassembled.
- If the seat is damaged, the entire module must be replaced.



#### Check Disc Replacement 11/4"-2"

Remove screw, disc retainer, and disc.



#### Check Valve Reassembly Notes 11/4"-2"

- Lubricate o-rings on check modules.
- #2 check slides into vessel first.
- Insert the #1 check and turn it until the spring retainer lines up with the notches on the #2 seat.
- Push both modules into the vessel.





#### Check Valve Reassembly Notes 11/4"-2"

Lubricate the o-ring on the closure sleeve and insert against the modules.

Place on a flat surface and push down with a "rocking motion" until the sleeve seals with the vessel.





#### RV Disassembly 11/4"-2"

- The RV body must be removed from the vessel.
- The RV body is bolted to the vessel and sealed by an o-ring.
- Remove the 3 bolts on the underside of the RV body.





#### RV Disc Replacement 11/4"-2"

The RV disc is attached to the vessel.

Remove the retaining screw and washer.





### RV Disassembly 11/4"-2"

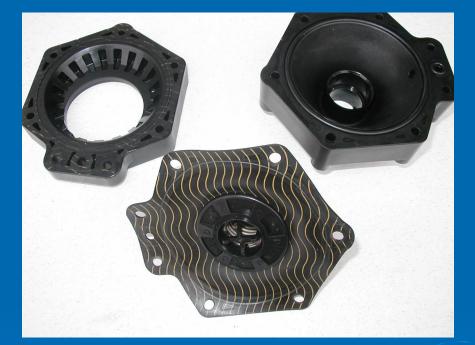
- The RV body is bolted together and sealed by the diaphragm.
- Remove the four bolts.
- Separate the upper and lower RV housing.





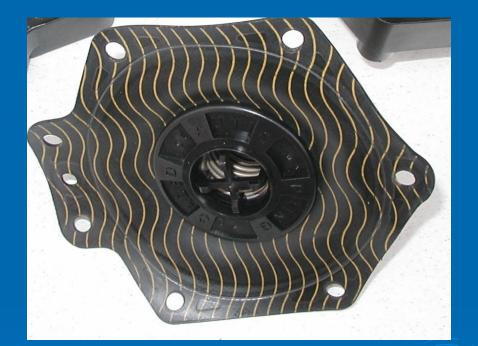
#### RV Disassembly 11/4"-2"

- The RV stem is free once the body is separated.
- \* Note: be careful not to loose the sensing line o-rings on each side of the RV body.



#### RV Seat Removal 11/4"-2"

 The RV seat is part of the stem assembly.
 If the seat is damaged, the stem assembly must be replaced.



### RV Stem Disassembly 11/4"-2"

- The RV spring is located inside the stem assembly.
- \* Note: The stem assembly is spring loaded.
- Hold the diaphragm firmly with one hand and unscrew the lower stem.





## RV Reassembly Notes 11/4"-2"

- Reassemble the stem assembly in reverse order.
- Note: Place seat down on flat surface to help compress RV spring.
- Reassemble RV housing in reverse order.
- Lubricate housing o-ring.
- Install RV housing to vessel.
- Secure 3 housing bolts.





# Housing Replacement Notes 11/4"-2"

- > Lubricate both of the vessel o-rings.
- Rock the vessel from side to side as it slides into position.
- \* Note: Make sure o-rings stay in their groove.
- Vessel must be in position completely before replacing retaining bolts.

