

### Tools and Materials Needed

1. Model 408 1.66" x 2ft. SS Double Valve Pump (#106082)
2. 1.66" x 2 ft. 408 to 407 Conversion Kit (#106534) Includes:
  - 407 1.66" Replacements Part Kit (#106898)
  - 407 2 ft. Replacement Bladder (#106364)
  - 407 2 ft. Bladder Sleeve (#106185)
  - 407 2 ft. Riser (#106376)
  - 4 x #V115 O-rings (#100457)
  - 407 1.66" Top Retainer (#106131)
  - 407 1.66" Bottom Retainer (#106130)
  - 407 1.66" Bottom Platen (#106140)

**Note:** These instructions assume that the Model 408 Double Valve Pump has been completely decontaminated and is fully assembled before beginning the conversion.

### Disassembling the Double Valve Pump

1. With each hand, hold the Top and Bottom Platens and rotate each counter clockwise, opposite to each other.
2. Once loosened, unscrew the Top Platen from the Pump Body. Unscrew and remove the Pump Body from the Bottom Platen.
3. Remove the Riser and then the 3/8" Check Ball from the Valve Body.
4. Remove the Valve Body and then the 3/8" OD Check Ball from the Bottom Platen.

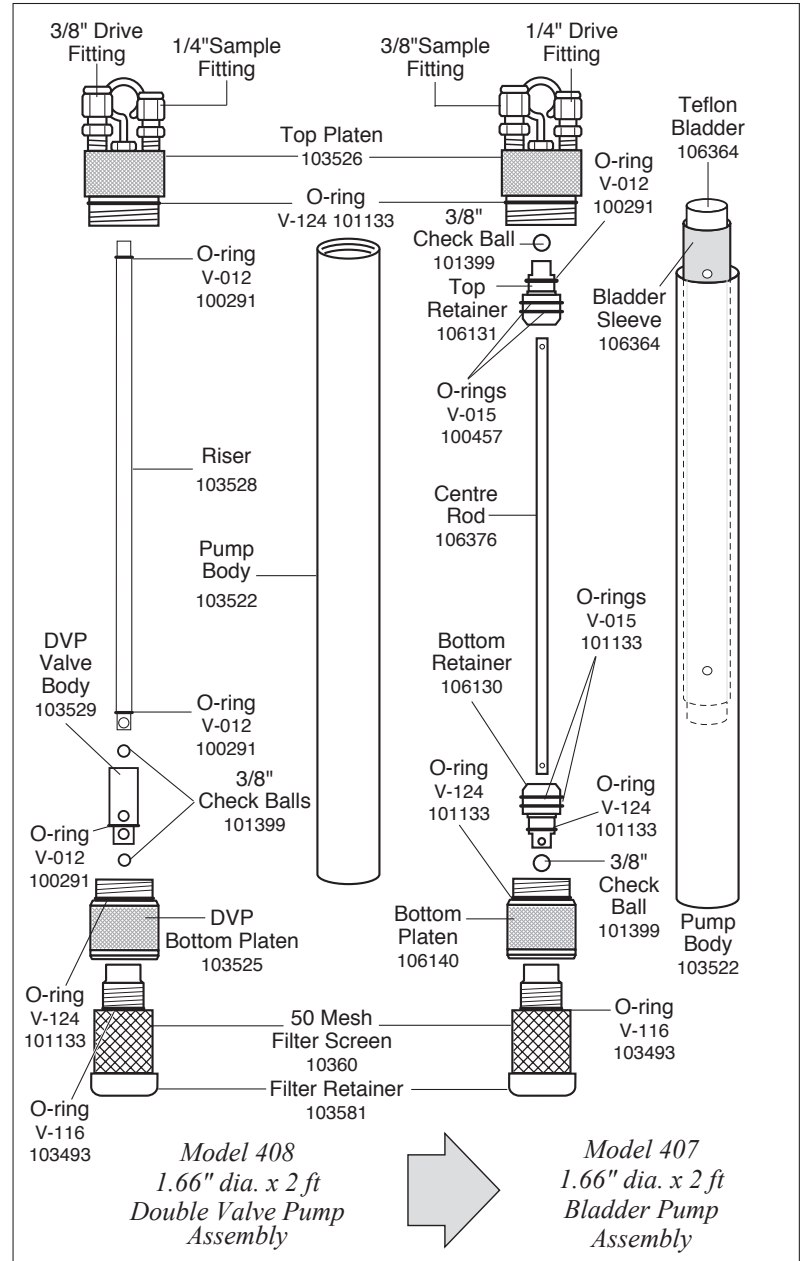
**Note:** Be careful not to lose either of the Check Balls, as they will be required for assembling the Bladder Pump.

5. Unscrew the Filter Retainer with Filter Screen from the Bottom Platen and remove.
6. Check all O-rings for wear or damage. Use the O-rings from the Conversion Kit, to replace as necessary.

### Assembling the Bladder Pump

**Note:** If the Bladder Cartridge (Bladder, Bladder Sleeve, and Top and Bottom Retainers) comes already assembled, skip to Step 6.

1. Manually slide the new Bladder into the Bladder Sleeve. It should extend about 1/4" (6 mm) beyond the Bladder Sleeve at both ends. Using your finger, slightly flare both ends of the Bladder.
2. Hold both ends of the Bladder to minimize slip within the Sleeve. Liberally lubricate a Retainer with water, and insert it first at a 45° angle and rotate gently back and forth until the Bladder has been pushed about 1/4" (6 mm) past the second O-ring on the Retainer.
3. Insert the Centre Rod into the Sleeve until it rests in the Retainer.



*Stainless Steel Double Valve Pump Conversion to a Bladder Pump*

4. Lubricate the second Retainer with water, align it onto the Centre Rod and working gently to avoid twisting or crumpling of the Bladder, push the Retainer into the Bladder until it is about 1/4" (6 mm) past the second O-ring.
5. Trim off any excess bladder material if necessary.
6. Drop the 3/8" OD Check Ball into the newly provided Bottom Platen. Fit the Bottom Retainer of the assembly firmly into the Bottom Platen.
7. Slip the Pump Body over the assembly and screw it onto the Bottom Platen.
8. Drop a 3/8" OD Check Ball into the Top Retainer and screw the Top Platen into the Pump Body.
9. To ensure the Check Balls are positioned correctly, shake the Pump to ensure the Check Balls rattle. If not, repeat steps 6 to 7.
10. Thread the Filter Retainer with the Filter Screen into the Bottom Platen.

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