

KIT ITEM #

IMPORTANT! After maintenance or reassembly, use new fasteners and torque fasteners as follows:

_____ FT LBS _____ IN LBS _____ Nm

Torque specifications are based on the replacement kit ordered. Check torque specifications to dampener tag. Consult factory if specifications do not match dampener tag or tag is missing.

 Read and observe all safety warnings and instructions in the Installation and Operation Manual before dampener installation, operation or repair.

 **WARNING!** Remove all pressure from dampener AND pumping system before disassembly, removal or maintenance.

⚠ CAUTION! Replace nut and bolt fasteners at each reassembly with fasteners of equal grade/strength value. **DO NOT** reuse old nuts and bolts. Fasteners may lose strength when re-torqued. Warranty voided for failure to replace both nuts and bolts when reassembling.

△ To avoid possible damage to bladder from a system pressure test:

Adjustable and Chargeable models — charge dampener to 80% of the system test pressure prior to test.

Automatic model — prior to test, dampener must be equipped with a constant source of compressed air with pressure equal to or greater than system test pressure.

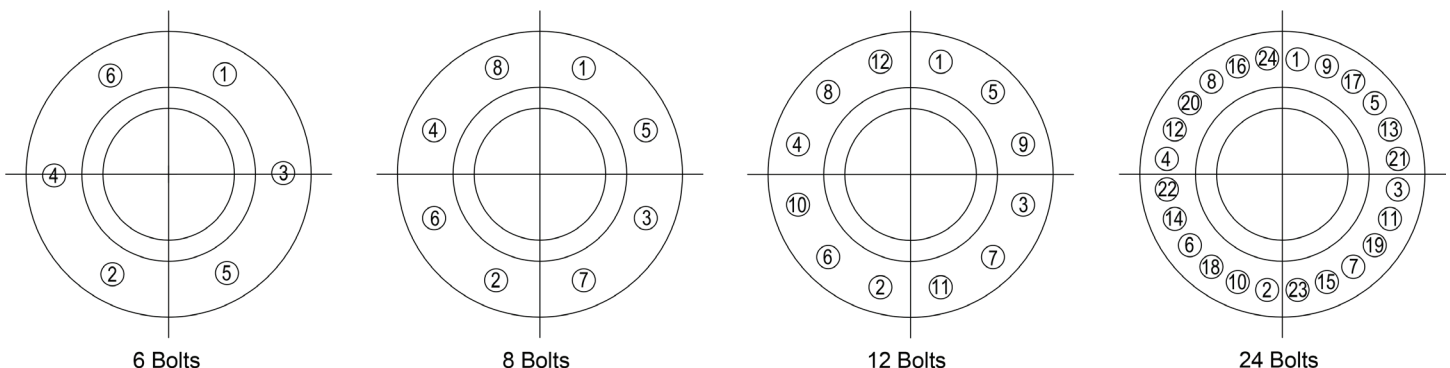
Inlet Stabilizer model — maximum pressure test 30 psi (2.0 bar), charge to 20 psi (1.3 bar) for system pressure test.

BLADDER Replacement

1. Disassemble dampener by removing fasteners securing wetted and non-wetted chambers. Make sure all components are clean and free of corrosion. Order replacement parts as needed.
2. Remove and discard the old elastomeric bladder. Install the new elastomeric bladder into the wetted chamber (bottom) of the dampener with the bottom of the bladder in the down position so that it fits within the wetted chamber with the open end facing up.
3. Reassemble dampener by securing the non-wetted chamber (top) to the wetted chamber (bottom). For models with ring band fasteners, reinstall ring bands on wetted and non-wetted chambers with bolt holes aligned. Secure dampener assembly with new bolts, nuts and washers. The gap between the non-wetted and wetted chambers must remain even all around the unit.
4. Tighten bolts in a criss-cross pattern as shown in FIGURE 1, and torque to specifications on dampener tag. **DO NOT reuse old nuts and bolts. New nuts and bolts must be of equal grade/strength value.**
5. To reinstall dampener, refer to the appropriate Installation and Operation Manual for complete instructions.

Bolt Tightening Pattern

FIGURE 1



HIGH PRESSURE Bladders

High pressure elastomeric bladders are equipped with a reusable stainless steel anti-extrusion button (see FIGURE 2). Installation instructions differ depending on whether the bladder is equipped with a 3-piece button or a 1-piece button.

3-Piece Anti-Extrusion Button

1. The 3-piece anti-extrusion button is comprised of two disks with a screw holding them in place. To remove the 3-piece button from a failed bladder, remove the screw ②.
2. High pressure bladders that use the 3-piece button have a hole in the center to accommodate the screw. To install the button in a replacement bladder, place the screw ② into the disk ③ that is flat on both sides and thread the screw from the inside of the bladder through the hole in the bladder ①. Take the disk ④ that is tapered on one side and attach it securely to the screw ②. Use blue thread locker to prevent thread backout.
3. Insert the bladder ① into the wetted chamber (bottom) of the dampener and reassemble according to instructions above.
4. **VITON Bladders:** For high pressure VITON bladders equipped with the 3-piece anti-extrusion button, charge dampener after reassembly to an initial pressure of 100 psi (6.9 bar). Dampener must remain at that pressure for a minimum of 3 hours to precondition the bladder before reinstalling.

1-Piece Anti-Extrusion Button

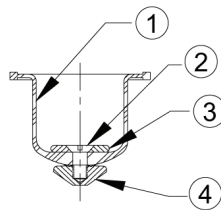
1. High pressure bladders that use the 1-piece button ① have an indentation in the center to accommodate the button ②. To remove the 1-piece button from a failed bladder, place a medium size screwdriver in a vise with the handle up to use as a post. Position the bladder over the handle and push down on the edges at the top of the bladder. The post will push up on the center and eject the button. In some cases, it is also possible to deflect the bladder with your hands by pushing on the inside to pop the button out.
2. To install the button in a replacement bladder, again place a medium size screwdriver in a vise with the handle up to use as a post. Position the bladder over the handle and push down on the edges at the top of the bladder. The post will push up on the center and cause the indentation in the center of the bladder to expand allowing the button to be reinstalled in the bladder.
3. Insert the bladder ① into the wetted chamber (bottom) of the dampener and reassemble according to instructions above.
4. **VITON Bladders:** High pressure VITON bladders with the 1-piece anti-extrusion button **do not** require conditioning before reinstallation.

High Pressure Bladders

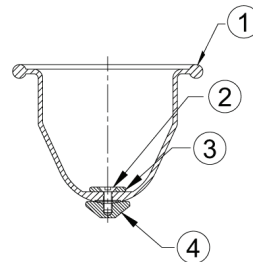
FIGURE 2

3-Piece Anti-Extrusion Button

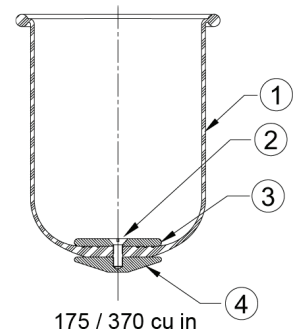
- ① Elastomeric Bladder
- ② Screw
- ③ Disk, Flat
- ④ Disk, Tapered



4 / 10 cu in



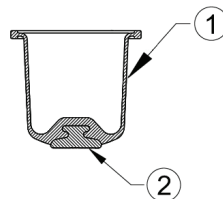
36 / 85 cu in



175 / 370 cu in

1-Piece Anti-Extrusion Button

- ① Elastomeric Bladder
- ② Anti-Extrusion Button



4 / 10 cu in

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