

### KIT ITEM #

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

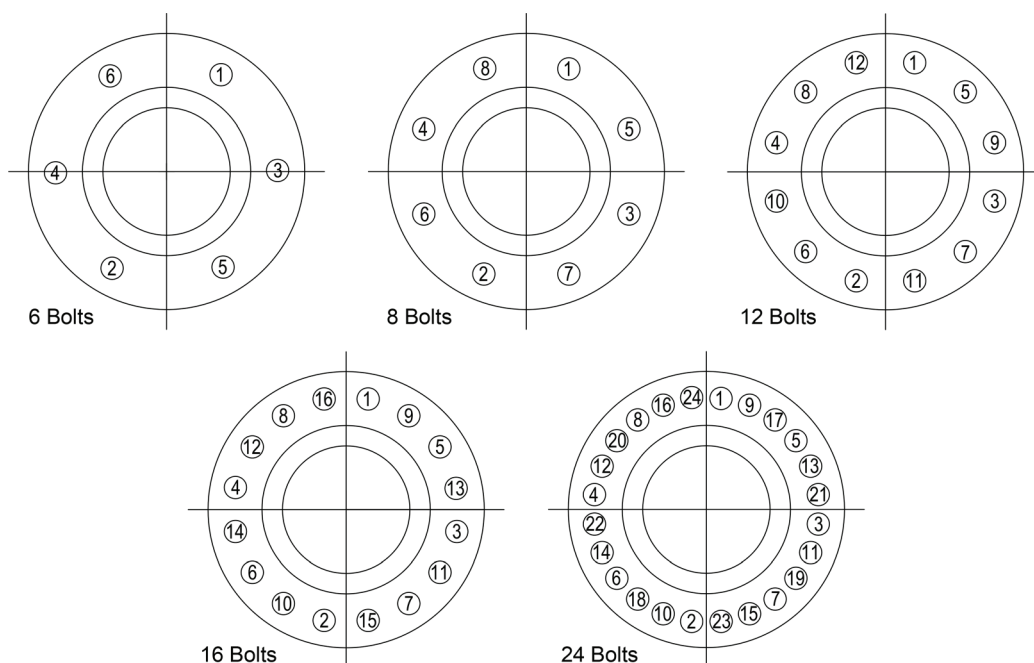
\_\_\_\_\_ FT LBS      \_\_\_\_\_ IN LBS      \_\_\_\_\_ Nm

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 bellows 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.

**FIGURE 1**

**Bolt Tightening Pattern**



1. Disassemble dampener by removing fasteners securing wetted and non-wetted chambers. Remove and discard old bellows, O-rings, gasket and/or PTFE tape. Make sure all components are clean and free of corrosion. Order replacement parts as needed.
2. Place the new PTFE encapsulated O-ring ④ into the sealing groove of the wetted chamber ⑤ centering as much as possible.

**PVDF (Kynar) and Acetal models:** Use 1/8" wide PTFE tape in place of a PTFE encapsulated O-ring ④ on the wetted chamber sealing groove ⑤. The 1/8" PTFE tape has a tacky section on the back side covered by a protective film strip. Remove the protective strip and place the PTFE tape into the wetted chamber sealing groove. Start at one point and carefully install the tape around the bead, keeping the tape centered in the groove. Overlap the ends of the PTFE tape 1/4" to 1/2" and cut off any excess.

3. Place the PTFE bellows ③ into the groove ensuring the O-ring seats in the O-ring groove on the bellows. A short, back and forth, circular twist of the bellows onto the O-ring will help seat it into the bellows O-ring groove. Place the Viton O-ring ② into the O-ring groove on the non-wetted side of the bellows sealing bead. The O-ring may require a slight stretching to fit into the sealing bead groove.

**PVDF (Kynar) and Acetal models:** Place the Viton gasket ② into the groove in the non-wetted chamber ①. Install two bolts in the non-wetted chamber and place the PTFE bellows ③ onto the gasket; the bolts will help to hold the gasket centered.

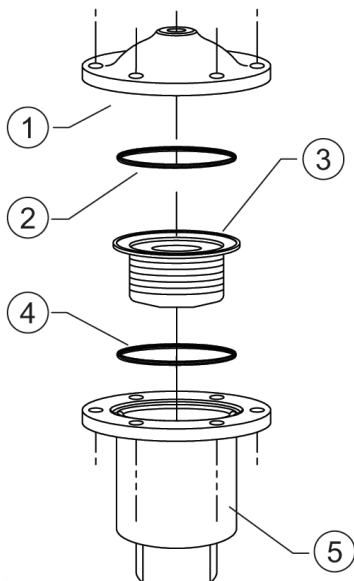
**4 cu in (Flat Top):** PTFE bellows must be pointed **down** into the wetted chamber ⑤ with open end facing **up**.

**10 cu in (Dome Top):** PTFE bellows must be pointed **up** into the non-wetted chamber ① with open end facing **down**.

4. For models with ring band fasteners, reinstall ring bands on wetted and non-wetted chambers with bolt holes aligned.
5. Reassemble dampener by placing the non-wetted chamber ① onto the bellows assembly aligning the bolt holes. A short circular twist of the chamber will help to seat the O-ring. 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.
6. 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.**
7. Due to the nature of PTFE, dampeners should set for 24 hours as the PTFE will *cold flow*. After 24 hours, tighten bolts again to torque specifications on dampener tag.
8. To reinstall dampener, refer to the appropriate Installation and Operation Manual for complete instructions.

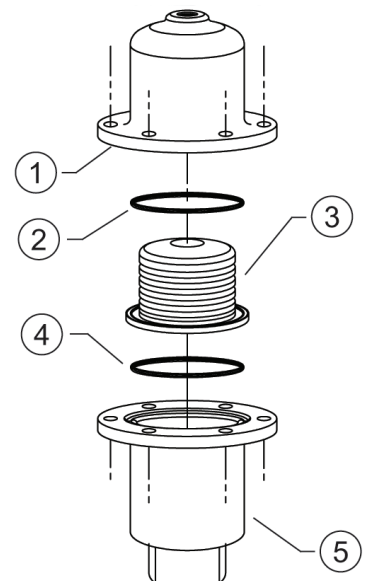
**FIGURE 2**

#### 4 Cubic Inch (Flat Top)



- ① Non-wetted Chamber
- ② Viton O-Ring (Viton Gasket on PVDF and ACETAL models)
- ③ PTFE Bellows
- ④ PTFE Encapsulated Viton O-Ring (PTFE Tape on PVDF and ACETAL models)
- ⑤ Wetted Chamber

#### 10 Cubic Inch (Dome Top)



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