SENTRY™

INSTALLATION INSTRUCTIONS
PTFE Bellows (36 and 85 Cubic Inch Models)

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:

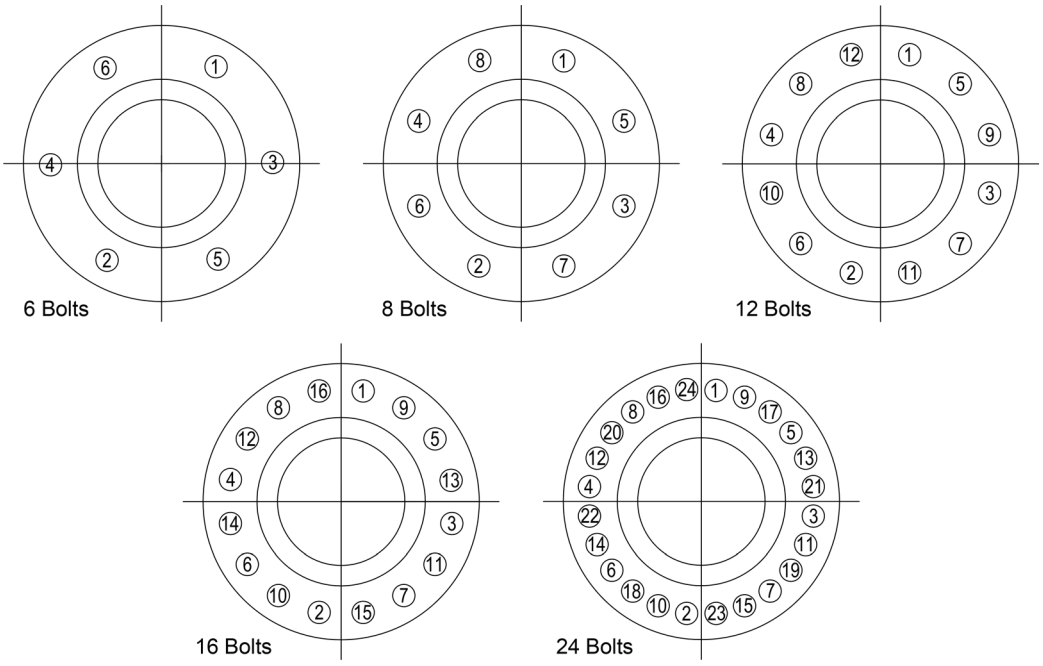
Adjustable and Chargeable models — charge dampener to 80% of the system test pressure prior to test.

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 and O-rings. 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 bellows ③. Make sure the O-ring fits in the groove. While holding the O-ring in place, install the PTFE bellows ③ onto the wetted chamber ⑤ as shown in FIGURE 2. A short, back and forth, circular twist of the bellows onto the O-ring will help seat it into the bellows O-ring groove.

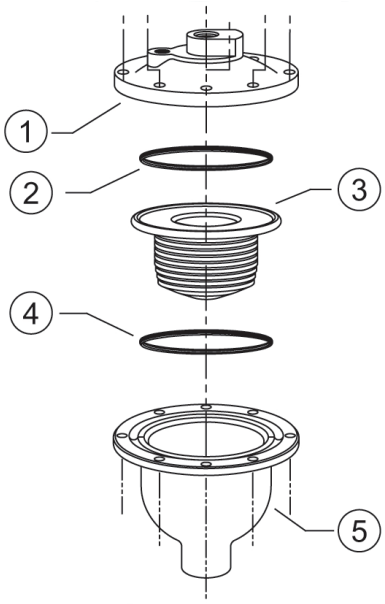
36 cu in (Dome Top): PTFE bellows must be pointed **down** into the wetted chamber ⑤ with open end facing **up**. Place the O-ring ④ in the groove on the closed end of the bellows.

85 cu in (Flat Top): PTFE bellows must be pointed **up** into the non-wetted chamber ① with open end facing **down**. Place the O-ring ④ in the groove on the open end of the bellows.

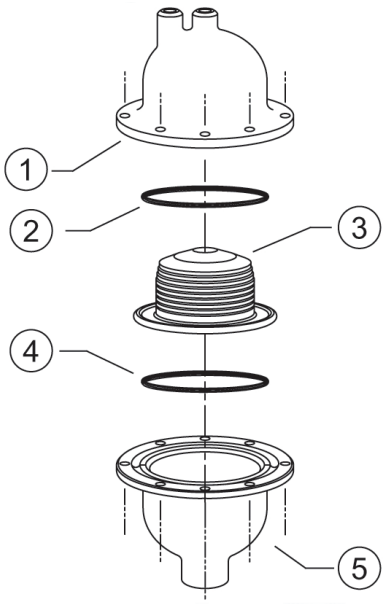
3. Place the Viton O-ring ② into the O-ring groove on the non-wetted side of the bellows sealing bead. The O-ring may require a slight stretching to fit into the sealing bead groove.
4. For models with ring band fasteners, reinstall ring bands on wetted and non-wetted chambers with bolt holes aligned.
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.

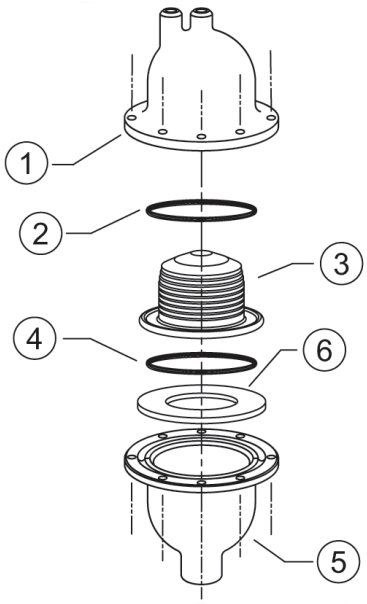
FIGURE 2

36 Cubic Inch (Flat Top)



85 Cubic Inch (Dome Top)





① Non-wetted Chamber
② Viton O-Ring
③ PTFE Bellows
④ PTFE Encapsulated Viton O-Ring
⑤ Wetted Chamber
⑥ High Pressure Plate (High Pressure models only)

M52E11_031

BLACOH™ FLUID CONTROL
601 Columbia Ave, Bldg D, Riverside, CA 92507
800.603.7867 | 951.342.3100 | www.Blacoh.com | Sales@Blacoh.com