

The following information is an addendum to Smith Meter Bulletin MN03018: Pipeline Strainers Installation/Operation Manual. This reference material is regarding operation and maintenance of Swing Bolt Closures from the Huber Corporation, their Bulletin Figure 510, dated May 5, 1986.

HUBER FIG. 510 "SWING-BOLT CLOSURES

OPERATION AND MAINTENANCE

CLOSING THE CAP:

1. Each time before closing, remove the O-ring and clean and lubricate the O-ring, the O-ring groove in the sub, and the O-ring sealing face of the cap.
2. Lubricate the bolt hinge pins, bolt threads, and the hinge with a weather resistant lubricant.
3. The mating surfaces of the cap and sub are machined to normally provide self-alignment; however, the following steps in tightening are recommended to avoid the possibility of cocking the cap.
 - a. For initial centering, use 4 bolts approximately 90° apart. Make certain the cap is centered, and tighten these sufficiently to hold the cap.
 - b. Engage the remaining bolts and begin at the top by tightening every other bolt and alternating each time with a bolt 180° opposite until all bolts are initially tightened. Do not overtighten any bolt at one time. Use repeated tightening passes following the above procedure until the cap is securely in place and perfectly centered.
 - c. Make final tightening pass to bring cap O-ring sealing face in firm, metal to metal contact with sub face.
4. The closure should now withstand the design pressure without leakage. Should there be any problem, check the following in the order listed:
 - a. Cap is centered in the sub with metal to metal contact all around.
 - b. Bolts are tightened sufficiently for initial bolt prestress.
 - c. Foreign material or a defective O-ring interfering with O-ring seal.

OPENING THE CAP:

1. Bleed all pressure from the line or vessel.
2. Loosen bolts.

CAUTION: In loosening bolts, do not let bolts swing from cap lugs until ALL bolts are loose and cap is separated from sub sufficiently to insure that no pressure is in the line.