# Series 19MJ08DSS16

Mechanical Joint Gland Restraint

## CONTAINS ALL DOMESTIC HARDWARE

## Installation Instructions

- 1. Identify the pipe. The Series 19MJ00 is designed for restraining C900 PVC and C909 PVCO pipe at ductile iron Mechanical Joint (MJ) fittings with MJ glands (supplied by others). The restraint is a split, serrated ring installed behind the MJ gland. The 19MJ00 utilizes longer t-Bolts than the standard MJ t-Bolt lengths to facilitate the restraint position
- 2. Set aside the split restraint and longer bolts and install the MJ gland per AWWA C600. The bolt torques for 4 inch through 12 is 75-90 ft-lbs. The use of a torque-indicating wrench will facilitate the procedure.
- 3. Using a longer bolt as a gauge, place one half of the restraint onto the pipe so the bolt holes of the restraint and the MJ gland align. Allow enough room on the longer bolts to fully engage the nuts with several threads showing.
- 4. Install the second half of the restraint to align with the first. Tapping each half into place may be necessary. Before installing the side bolts double check the position by using the longer bolts as gauges. Make sure the ID of the restraint is touching the pipe. Side bolts are to be evenly tightened to 120 ft-lbs of torque (70 ft-lbs on 4 inch and 6 inch). A torque indicating wrench will help facilitate this.
- 5. Each of the longer bolts should have two nuts: one to tighten against the MJ gland and one to snug up against the restraint ring with a few threads showing. One at a time, remove a shorter bolt that aligns with the restraint bolt hole and replace with the longer bolt, remembering to "run" one nut up to engage against the MJ gland. This nut should be to the same torque as the original one removed (see step 2 for torque values). Do this for all remaining bolts holes of the restraint.
- 6. Once all bolts are in place and the MJ gland nuts have been retightened to torque, put the remaining nuts on the bolt behind the restraint. Hand tighten the nuts behind the restraint. Do not over tighten the nuts behind the restraint to move the plain-end of the pipe further into the joint.



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### Qty. Description

- 1 1908 Split Restraint Ring
- 4 <sup>3</sup>/<sub>4</sub> in. by 8 in. Stainless Steel Rods w/ T-Nuts

## **Restraints Made in The USA**



For use on water or wastewater pipelines subject to hydrostatic pressure and tested in accordance with either AWWA C600 or ASTM D2774

#### APPROXIMATE SHIPPING WEIGHT: 16 lbs.



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