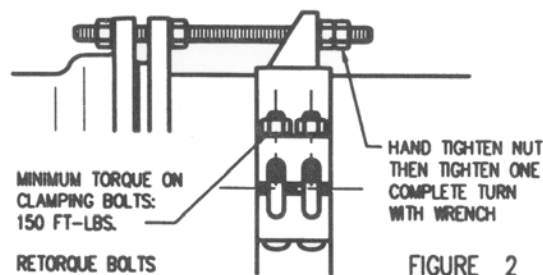
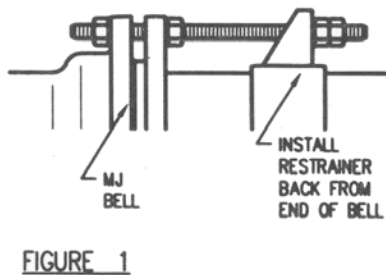


### Model 610 Fabricated Fitting Restrainer PVC & HDPE Pipe

Clean and scrape pipe. Remove any scale, pipe wrap, debris or dirt that may interfere. Inspect pipe for integrity, size, outside diameter and surface irregularities. Confirm the proper size and range of restrainer. Inspect fitting to ensure all parts are included.

1. Clean pipe for distance of 2 feet from center of joint.
2. Assemble Mechanical Joint Fitting on pipe.
3. Loosely assemble one set of restrainer rings on Spigot end of pipe. (Make certain the hollow side of the restrainer ears face toward the M.J. Fitting, or center of the joint.) See Figure 1 below. Position the restrainer approximately four (4) inches from the mechanical joint gland.

**Note 1:** For installation of restrainers prior to joint make-up, clamping bolts should be loosely tightened to maintain placement of restrainer during joint make-up. Over tightening of clamping bolts prior to joint make-up may result in ovalation of the pipe. After Bell/Spigot joint make-up is complete, tighten clamping bolts to recommended torque levels.



4. Remove appropriate number of T-Bolts from M.J. fitting to correspond with number and location of restrainer ears. Restraining stud can be located on top and bottom, or on sides, whichever is called for in plans. (Top and Bottom is easiest for tightening of clamps.)
5. Position nut on the long studs so that when inserted through the gland and fitting it can be tightened against the gland. Insert and ALIGN center restraining stud on each side. Place nut on fitting end of stud and WASHER and NUT on restrainer end of stud.
6. Tighten clamping bolts to minimum of 150 ft/lbs. Wait a few minutes and re-torque bolts again. (This should leave a gap of 1/2 inch between the restrainer ends.)
7. Insert balance of restrainer studs making certain that a washer is on the restrainer end, against the ear.
8. Hand tighten all restrainer end nuts, then tighten each nut one full turn.
9. Install second nut on restrainer end of stud to lock in place. (T610-0797)

Note: It is recommended that restrainers not be placed closer than four (4) feet on same length of pipe.

\*Ensure fitting is suitable for application (confirm size, materials, pressure ratings, line content, meets local governing & association standards, etc.). Pipeline operation forces, including pressure fluctuations, thermal expansion/contraction, movement/shifting, etc. will influence the success of the application. Inspection of the pipe integrity is the responsibility of the end user. JCM recommends the use of calibrated torque wrench. Failure to follow installation instructions will result in voided product warranty.