



Installation Instructions Asbestos Cement Pipe Restrainers

Model 630 Fitting Restrainer Model 631 Joint Restrainer Installation Instructions

Read instructions before starting installation.*

Review of “Tricks of the Trade” on the reverse will assist with installation.

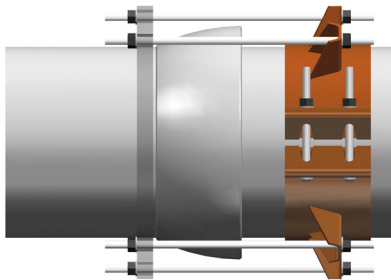
1. Clean and scrape pipe. Remove any scale, pipe wrap, debris or dirt that may interfere. Inspect pipe for integrity, size, outside diameter and surface irregularities. Confirm the proper size and range of restrainer. Inspect fitting to ensure all parts are included. Clean pipe for distance of 2 feet from center of joint.
2. **For 630, Assemble Mechanical Joint Fitting on pipe.** Position top half of restrainer on pipe the appropriate distance from the fitting/coupling to engage the restraining bolts/all-thread rods. Make certain the hollow side of the restrainer ears face toward the fitting/coupling. Align the restrainer ears (or anchor loops) with fitting bolt pattern.
3. Position the bottom half of the restrainer and install clamping bolts.
4. Tighten clamping bolts evenly. Alternate from one side of restrainer to the other. Tighten bolts to the following torque levels:

4” Nominal Pipe Size	75 ft.lbs. of torque
6” - 16” Nominal Pipe Sizes	100 ft. lbs. of torque

Field Installation Note: The torque values listed are manufacturer’s suggested levels. It is necessary for field technicians to assess the pipe’s condition and integrity to determine if pipe will accommodate these torque levels. Should the assessment find pipe fragile, brittle or weakened, adjust torque levels accordingly.

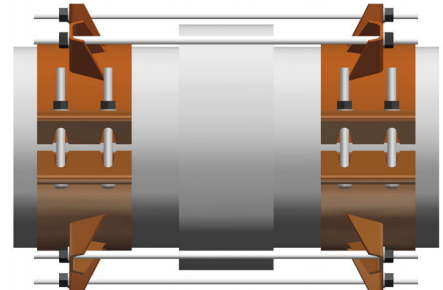
5. **For 631 Joint Restrainer**, assemble other half of restrainer unit on the opposite side of the coupling with same procedures 1 - 4.
6. Insert restrainer bolts/all-thread rod to fitting/over coupling. Place a washer and nut on end(s) of each bolt or rod and hand tighten. Then tighten each nut one full turn.
7. If applicable, install second nut on restrainer bolts or rods to lock nut in place.

JCM 630 Fitting Restrainer



JCM 631 Joint Restrainer

**Restrains
A/C Couplings
Bolted Couplings
Adapters**



*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. Proper anchorage, restraint, harnessing, thrust blocks or other devices must be provided to prevent pipe movement (lateral, angular, axial) or pipe pullout from the bolt-on fitting. 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.

For application review or questions contact JCM Industries at 1-800-527-8482, 903-832-2581



Stainless Steel Fastener Management and Tips and Tricks Of The Trade For a Successful Installation

JCM Quality Fittings Equipped With 18-8 Stainless Steel Bolts and Nuts

When not properly handled it is the nature of stainless steel fasteners to gall and freeze (seize up). This is due to the inherent properties of the stainless material. Galling and freezing is often triggered by the presence of metal chips, burrs and grains of sand on the threads of the bolts and nuts. Extra care has been taken by JCM prior to assembly and packing of this fitting to assure a trouble-free installation.

1. The nuts and bolts are made from material of different hardness so that they have different strengths.
2. Nuts are coated with a special anti-seize coating. Additional lubricant may be needed. **A Molybdenum-Base lubricant is recommended.**
3. Each nut is assembled by hand to be sure that it went on the bolt freely.
4. The bolts and nuts are handled carefully to avoid damage to the threads.
5. The bolts and nuts are made to exacting specifications to assure that the correct material is used and that the thread form is correct.

Stainless hardware is especially susceptible to galling. JCM supplies specially coated nuts to eliminate the galling caused by over-torquing, but **the bolt threads must be kept clean, free from nicks and not pitched or thrown into the tool bucket during the installation process.** Use of the **JCM 901 Master Wrench or JCM 905 Torque Wrench with Deep Socket is highly recommended.** Use of pneumatic wrench for installation could cause hardware to seize and is not recommended.

Tricks of the Trade

Years of field experience, special applications and product testing have revealed many subtleties regarding application and installation of bolted fittings. For maximum performance under adverse conditions take advantage of the JCM "Tricks of the Trade."

Lubricate the pipe with soap-water or water. Soapy water will enable the sleeve to slide on the pipe and will dissipate with water.

Tighten the bolts in the sequence provided in the instructions. Fittings are engineered to load in a certain fashion. Instructions provide the "sequence" of tightening bolts. Ensure the gap between sleeve halves is equal on both sides

Confirm bolt torques with a torque wrench. Proper bolt torque is critical to the success of the installation. A torque wrench should be used to ensure recommended levels are achieved. Most field problems are directly related to lack of proper torque levels.