

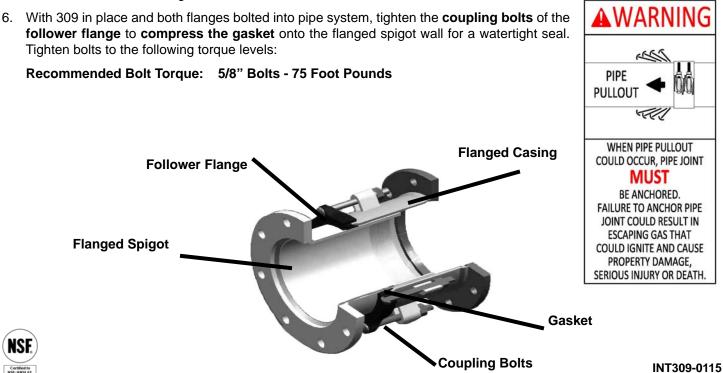
## Model 309 Fabricated Dismantling Joint

#### Read instructions before starting installation\* Review of "Tricks of the Trade" on the reverse will assist with installation. Flange Bolts and Gaskets are not included.

1. Clean and scrape pipe. Remove any scale, pipe wrap, debris or dirt that may interfere with the complete sealing of the gasket. Inspect pipe for integrity, size, outside diameter and surface irregularities. Confirm the proper size and range of coupling. Inspect fitting to ensure all parts are included. Measure gap or take-up area to determine distance required and confirm 309 capability (2" standard adjustment). Inspect the flanged ends for any gouges, grooves, irregularities or imperfections that will interfere with the flange connection.

Fittings furnished with stainless steel hardware; see reverse for fastener management.

- 2. Lubricate the pipe and the fitting gasket with soapy water. Do not use oil base pipe lubricant.
- 3. Loosen **coupling bolts of follower flange** to loosen gasket seal and allow for easy movement of flanged spigot into flanged casing. Do not disassemble fitting.
- 4. Close the dismantling joint by **pushing the flanged spigot into the flanged casing**, reduce laying length enough to install between pipe flange connections. For restrained 309 fitting: loosen restrainer rod back-up nuts to allow for closing of fitting; remove outside nuts to install restrainer rods into pipe system flanges.
- 5. Place fitting between pipe system flanged ends, use appropriate flange gaskets (not included), bolt flanged casing to pipe system flange. Adjust the length of the 309 dismantling joint by pulling (telescoping) the flanged spigot to the correct length to meet up with the opposite pipe system flange. Align bolt holes of flanges by rotating the flanged spigot if necessary. Proceed with bolt up of flanged spigot and pipe system flange connection. For restrained 309 fitting: install restrainer rods to pipe system flanges, tighten back-up nuts to flange; install outside nuts onto restrainer rods and tighten.



\*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.

Tricks of the Trade for Installation

# **JCM** INDUSTRIES

## Model 309 Fabricated Dismantling Joint

### JCM Quality Fitting 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. Standard 5/8" and 3/4" nuts are coated with a special blue or green (antiseize) coating. Additional lubricant may be needed. Uncoated stainless steel hardware is provided without lubrication to prevent a build up of dirt, sand or grit during shipment. 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 overtorquing, 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."

Always clean and lubricate pipe with water or soapy water. This helps overcome friction when installing the gasket. Do not use oil base pipe lubricant; the oil does not disperse, leaves residue and prevents the gasket from sealing/adhering to the pipe wall. Use water solvent lubricant. Alcohol may be added to water in freezing weather.

Difficult to reach or cramped areas on the backside or underside of the pipe can be visually checked by using a mirror.

Couplings perform at optimal effectiveness when centered over joint area.

Use of short shims will assist in keeping the follower centered on the pipe and can be removed as bolts are tightened.

Lubricating coupling bolts will ease installation and assure proper torquing of bolts.

Tightening bolts a star rotation pattern will compress the gasket evenly into the coupling ring and prevent leak or blowout due to misaligned gasket.