



## Installation Instructions

# Series 400 Service Saddles

Models 401, 402, 403, 404, 405, 406, 407, 408

**Read instructions before starting installation\***

**Review of Stainless Steel Fastener Management on the reverse will assist with installation.**

**For purposes other than water, contact JCM Industries for application and product assistance.**

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 service saddle. Inspect fitting to ensure all parts are included.

**For fittings furnished with stainless steel fasteners, see reverse for fastener management.**

2. Lubricate the pipe and the fitting gasket with soapy water. **Do not use oil base pipe lubricant.**
3. Position service saddle on pipe, making sure outlet is aligned with branch line to be connected. Do Not position so that rotation is required. Rotation can result in gasket dislocation.
4. Install strap(s) or bolt(s). Make certain gasket is in proper position and not in the waterway.

Begin to tighten bolts. Alternate from one side of saddle to the other to tighten evenly. JCM recommends the use of a torque wrench to ensure proper torque levels. Improper torque levels can result in leaking assembly or damage to the pipe wall. Tighten bolts to the following torque\* levels:

Bolt Size	Steel & Rigid Pipe	PVC & Polyethylene
1/2"	40 - 50 Ft-lbs.	45 - 50 Ft-lbs.
5/8"	70 - 75 Ft-lbs.	45 - 50 Ft-lbs.

\*Thin wall, small diameter & flexible types of pipe are subject to many variables which affect torque values. JCM Service Saddles visually indicate proper tightening levels when they conform and fit down on the pipe. Use discretion when tightening these saddles on thin wall, small diameter & flexible pipe in order to not crush or severely deform the pipe.

**INT400-0115**

\*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

### Series 400 Service Saddles

Models 403, 404, 405, 406

#### 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.