

## PATCH CLAMP

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 repair clamp. Inspect fitting to ensure all parts are included. For 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.** Loosen nuts of bolts and back nuts to the end of the bolt (complete removal of bolts is not necessary). Release square necked bolts from lug ears and open the clamp.
3. Place clamp on pipe and center gasket pad over damaged area. Engage bolt(s) in slotted receiver lugs and finger tighten to hold in place. Begin bolt tightening.
4. Tighten bolt(s) evenly to the following torque values, ensure torque values with calibrated field torque wrench:

**Nominal sizes 1/2" - 1-1/4" with 3/8" Bolts 25 Foot Pounds**  
**Nominal sizes 1-1/2" - 12" with 7/16" Bolts 35 Foot Pounds**

During bolt tightening sequence, the installer should take care to prevent overtightening bolts causing the pipe to deform or misshapen.

5. Complete installation of fitting, return after approximately 15 minutes and confirm minimum bolt torque levels have been maintained.

Recommended for the following service ratings:

Water Service 150 PSI  
Gas Service 100 PSI



INT110-0124

JCM INDUSTRIES, INC. / P.O. BOX 1220 / NASH, TX 75569-1220

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**Optionally Equipped With 18-8 Stainless Steel Bolts and Nuts  
(Indicated with SS on part number)**

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 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 antiseize 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. Specially coated nuts are supplied 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 pneumatic wrench for installation could cause hardware to seize and is not recommended.

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