

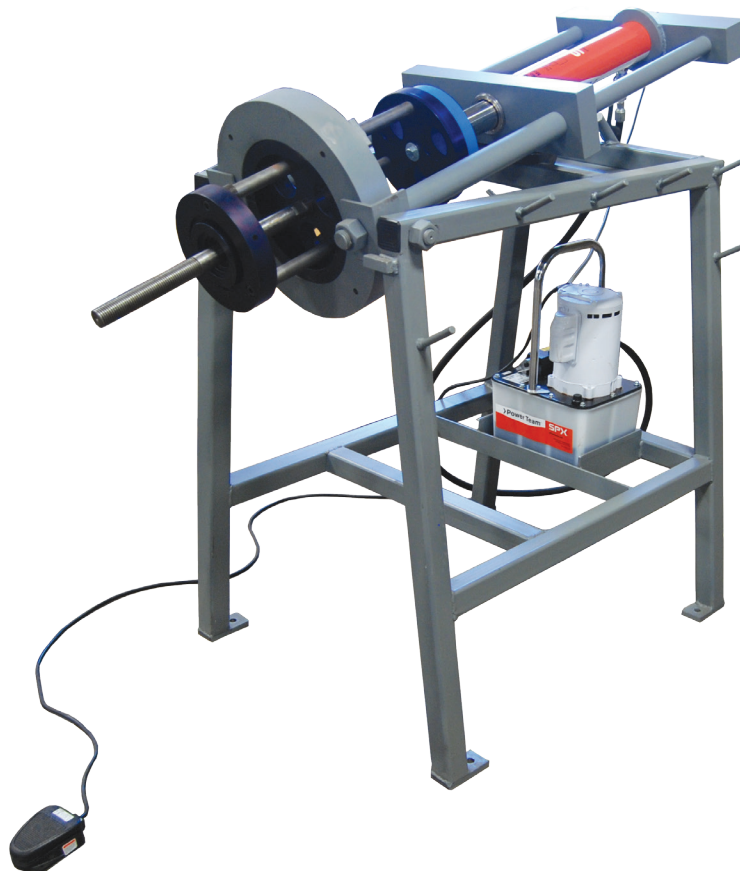


*The Right Connection®*

## 25 Ton Ram Operating Instructions

### *Section 5*

### ***Internal Expansion of Steel & Stainless Steel Stems***



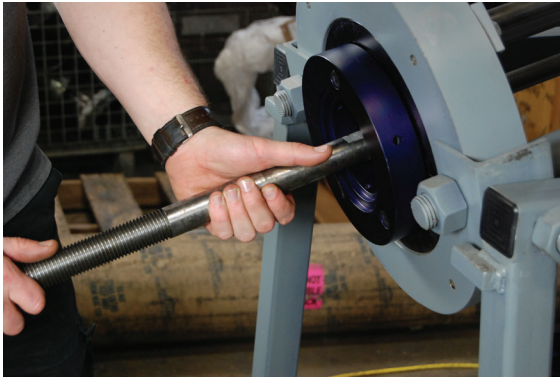
**Dixon**

800 High Street • Chestertown, MD 21620

ph: 877•963•4966 fax: 800•283•4966

***dixonvalve.com***

1



(Refer to Converting Swaging to Expansion section). Before you begin make sure the ram is fully retracted. Select the proper pull rod.

- For 1" thru 1½" use part number **25RODSMALL**
- For 2" thru 4" use part number **25RODLARGE** (note that picture is showing **25RODLARGE**)

Screw the short threaded end of the rod into the face plate of the **25IXATTACH**.

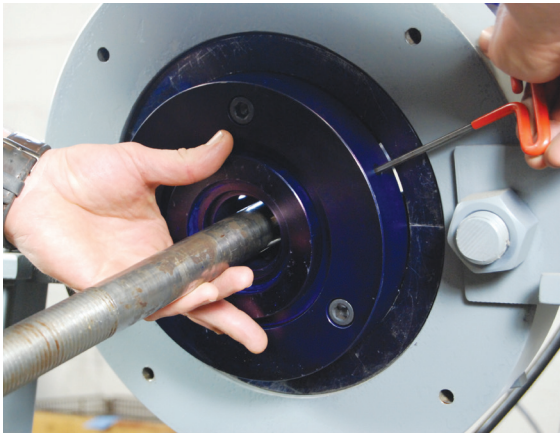
2



Select the corresponding adapter plate(s) for the size and type of fitting you are installing.

The 2" thru 4" adapters have two recesses. The small diameter recess is to be used with stems having NPT\*, Victaulic or a plain end. The larger diameter recess is used for stems with the "Heavy Duty/California Style" end. \* See note on page 4.

3



Ensuring that the recesses are facing outward towards the operator, slide the adapter plate over the pull rod until it reaches the base of the **25IXATTACH**. Tighten the set screws to secure the adapter.

4a



Lubricate the I.D. of the stem with Crisco® (recommended) or a high viscosity oil or heavy duty grease.

## 4b

Lubricate the O.D. of the small half (tapered end) of the corresponding IX plug with Crisco® (recommended) or a high viscosity oil or heavy duty grease.



## 4c

Slide the stem over the pull rod and into the recess of the adapter plate with the connection side of the stem facing the ram. Screw on (or slide) the IX plug, small end first, onto the pull rod and into the shank of the stem. For 2" and above screw the retaining nut on until it contacts the plug. Note: **25RODLARGE** is shown. Move the stem slightly to allow for slack and hand tighten the plug or nut until it is snug. Lubricate the rest of the O.D. of the plug.

**Hint:** When doing more than 1 hose assembly of the same I.D. size take the time to screw the pull rod further into the face plate of the **25IXATTACH**. This will allow for a shorter cycle time.



## 5

Accurately measure the hose O.D. with a diameter tape. Select the correct IX ferrule from the DPL based upon the hose O.D. just measured.

Note: Always measure both hose ends for accurate ferrule selection.



## 6

Make sure the hose end is cut square. Slide the ferrule over the hose until the turned over end of the ferrule contacts the end of the hose. Place a mark on the hose at the junction of the ferrule and hose. Move the ferrule away from the hose end 1/4" and place another mark at the junction of the hose and ferrule. This will ensure that the proper rubber displacement or pocket is maintained during the expansion process.



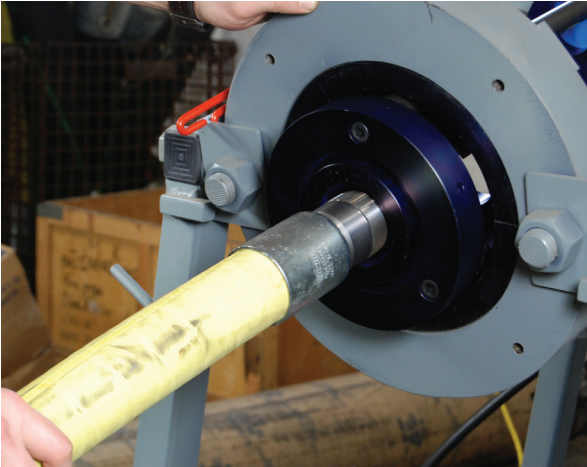


7



Slide the hose with the ferrule on over the shank until the ferrule contacts the shoulder of the stem. Make sure you align the ferrule with the second mark from step 6. Make sure the pocket has been maintained. Important! If there is an insufficient pocket for the rubber to displace into, damage may occur to the stem, ferrule and/or hose.

8



While holding the hose and ferrule firmly against the stem shoulder, engage the Ram by stepping on the foot pedal (or depressing the "ON" button on the remote control.) The internal expansion operation is complete when the hose and stem assembly is pushed completely over the internal expansion plug. Release foot pedal or "ON" switch.

Note: If the gauge reads 10,000 PSI before internal expansion is complete, stop. Contact Dixon® for further assistance. During internal expansion never stand directly in front of the Ram. Visually inspect the coupling and clean excess lubricant from the stem I.D.

Assembly procedure for 2½" threaded male stems:

In order to prevent possible thread collapse on 2½" Male NPT Stems during installation, it is recommended that a female threaded adapter be installed prior to installation. The adapter part # is **M011-384** for the 2½" male stem. Following is the procedure for installation:

1. Lubricate stem I.D. and small end of expansion plug.
2. Thread **M011-384** onto threads of the male stem hand tight ONLY!
3. Slide stem over pull rod thread adapter end first.
4. Seat **M011-384** onto OUTER recess of the adapter.
5. Follow normal IX procedure.
6. When the assembly is removed from the pull rod, remove **M011-384** and clean the stem I.D. of excess lubricant.

If you have any questions, please contact our Engineering Department.

Dixon® sells steel and stainless steel and internal expansion fittings. Verify that the correct plug and adapter plates are being used when installing fittings. Also note that with food grade fittings a different lubricant may be needed. If you need assistance please contact your Dixon® representative or call any Dixon® branch.

Dixon® recommends that all hose assemblies be tested as recommended by the Association for Rubber Products Manufacturer's (ARPM) ARPMINC.com.

# Typical Setup - 25 Ton Ram, Internal Expansion

