



*The Right Connection®*

*Section 9*

**100 Ton Ram Operating Instructions  
for  
Internal Expansion of  
H520 Couplings**

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(refer to the Converting the 100 Ton Ram from Swaging to Internal Expansion section of the instruction manual)

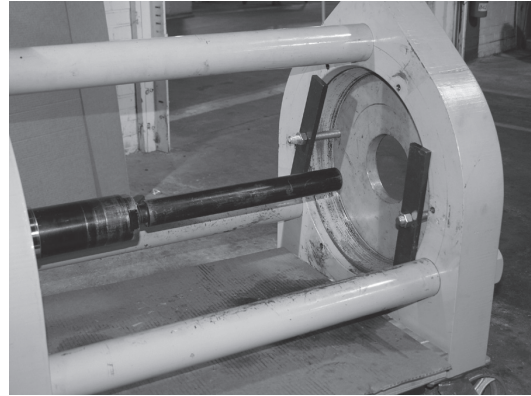
1

Before you begin, move the directional control lever to the "FORWARD" position, depress the button on the remote and fully extend the ram cylinder. Return the directional control lever to the "NEUTRAL" position. Select the proper Pull Rod.

For 1" through 1½" use **25RODSMALL**

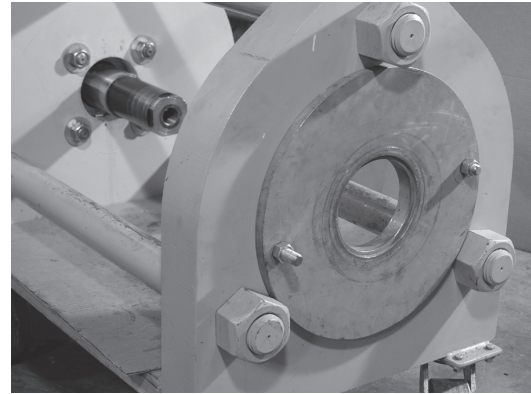
For 2" through 4" use **25RODLARGE**

Screw the short threaded end of the rod or the rod adapter into the IX Master Bar.



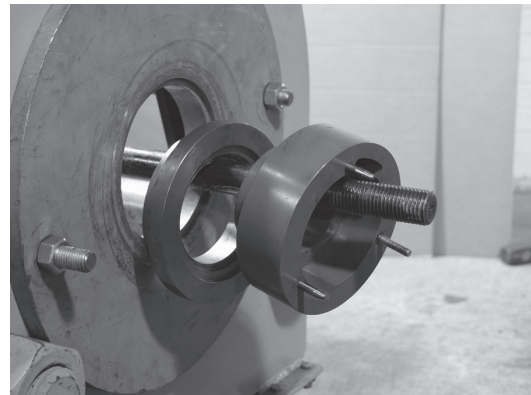
2

Install the Master IX Adapter (**001-0072**) into the Die Bed Plate (**0010-001**). Secure in place using two Adapter Straps (**001-0072A**) and ¾" - 10 UNC x 8" rods.



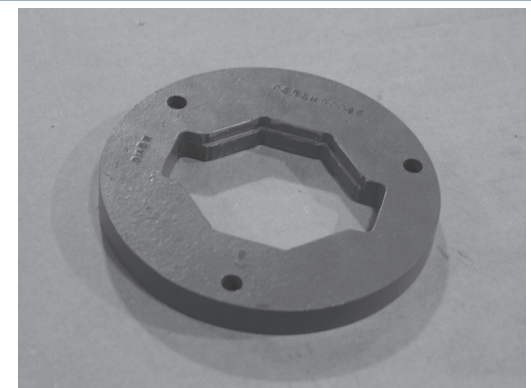
3

Install the **001-067** into the Master IX Adapter opening and secure with Adapter Straps (**25ROSTPA**) and two ½" - 13 UNC Hex Bolts 1⅝" long.

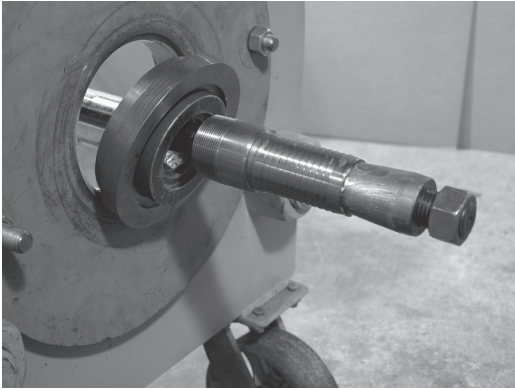


4

Select the corresponding Thrust Plate for the size fitting you are installing. Assuring that the recess is facing outward toward the operator, slide the Thrust Plate over the Pull Rod until it reaches the **25ROSTPA**. Align the holes in the Thrust Plate with the dowel pins on the **25ROSTPA** and slide the Thrust Plate over the pins. Tighten the wing nut to lock in place.



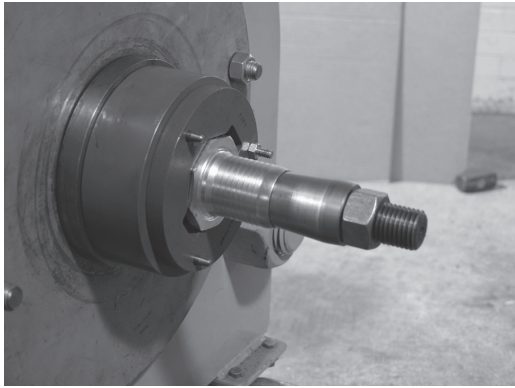
5



Slide the stem over the Pull Rod and into the recess of the Thrust Plate with the connection side of the stem facing the ram. For male stems, insert the hex into the recess of the Thrust Plate. For female stems, insert the first hex into the Thrust Plate so that the second hex will fit into the recess of the Thrust Plate.

**Note:** There is no need to lubricate the plug or stem. The stems are pre-lubricated at the factory.

6



Screw 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. Move the stem slightly to allow for slack and hand tighten the plug or nut until it is snug.

7



Accurately measure the hose O.D. with a diameter tape. Select the correct Holedall™ Petroleum Ferrule from the DPL based upon the Hose O.D. just measured.

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

8

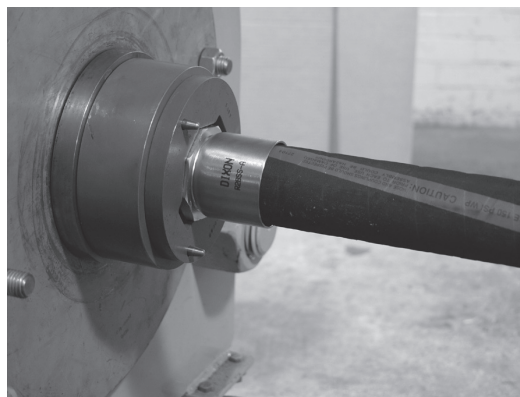


Make sure the hose end is cut square. Slide the ferrule over the hose until the turned over end of the ferrule contacts the end of the hose. Place a mark on the hose at the junction of the ferrule and hose. Move the ferrule away from the hose end  $\frac{1}{8}$ " and place another mark at the junction of the hose and ferrule. This will insure that the proper rubber displacement or pocket is maintained during the expansion process.

9

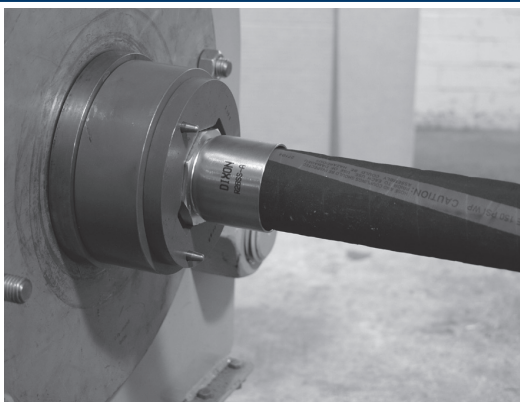
Slide the hose with the ferrule on over the shank until the ferrule contacts the shoulder of the stem. Make sure you align the ferrule with the second mark from step 6. Make sure the pocket has been maintained.

**Important!** If there is an insufficient pocket for the rubber to displace into, damage may occur to the stem, ferrule, and /or hose.



10

While holding the hose and ferrule firmly against the stem shoulder, engage the ram cylinder 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 the 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.