

13JR Quadlan

thread rolling head for thin-wall tubing

Reference numbers referred to by these instructions can be identified by referring to the appropriate parts drawing

Thread Rolling Head:

13 JR QUADLAN



Changing Rolls

To change rolls, push operating ring 18 rearward to open position.

Insert hex allen wrench into screw 140 in base of holders and back out completely. When all four screws have been removed (one from each holder) turn head upside down and tap on face of holders so that roll shafts 141 start to come out. Remove roll shaft with fingers and rolls are then free to come out of holder 143 slot (See Figure 1). If for any reason the rolls cannot be retrieved the head can be opened to a larger diameter to give more clearance between holders 143.

To install new rolls slide roll 142 into holder slot and push roll shaft 141 into holder making sure that the groove is at bottom and in line with screw hole for 140. Insert screw 140. Repeat for each holder. Be sure rolls are installed in order 1 - 2 - 3 - 4 clockwise when looking into face of roll head. Caution: Roll shafts are carbide and should not be hammered into place because of the danger of shattering.

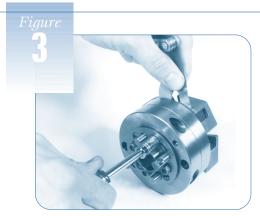
Disassembly

Remove stop screws 21 and lift off the operating ring 18. Remove the connecting pin retaining screws 131 and lift off the shank 41. Remove head opening spring screw 16 and spring 15. Remove the trunnion locking nuts 7 then, remove the roll holders with integral trunnions 143 and the sliding blocks 31. Remove the retaining plate screws 124 followed by the retaining plate 132, shim 6, the connecting pins 116 and the connecting pin springs 119. Now remove the adjusting worm nut 13 and washer 12 and back out and remove the adjusting worm 10. Separate the adjusting ring 9, closing ring 26 and head body 1.

Assembly

Place the closing ring 26 onto the head body 1 followed by the adjusting ring 9. At this point the clearance between the closing ring (which rotates to open and close the head) and adjusting ring can be checked by laying a straight edge across the head body and opposite sides of the adjusting ring surface. Using a feeler gage, check the gap between the straight edge and the head body (See Figure 2) and place shim slightly more than that amount onto the head body. Now replace the





Landis Solutions LLC 360 South Church Street Waynesboro, PA 17268-2610 Toll Free: USA: +1.800.358.3500 Fax: +1.888.718.2922

Canada: +1.888.828.6340 e-mail: info@Landis-Solutions.com

retaining plate 132 and secure with screws 124. The shim is correct if the closing ring can be rotated by hand and a .0015" feeler gage cannot be inserted between the rings. If the gage can be inserted, it will be necessary to reduce the shim. If the closing ring will not rotate and the gage will not fit between the rings the amount of shim must be increased until proper movement is obtained. After determining correct clearance, remove the retaining plate and continue assembly by installing the connecting pin springs 119 and the connecting pins 116. Install the retaining plate 132 and secure with the retaining plate screws 124. Install the adjusting worm 10, the adjusting worm washer 12 and secure with the adjusting worm nut 13. Replace the head opening spring 15 and screw 16. Place the sliding blocks 31 onto the closing pins 30 then replace the roll holders with integral trunnions 143 and secure with trunnion locking nuts 7 allowing .002" to .004" play (clearance) between the holder face and the closing ring surface (See Figure 3). Replace the shank 41 and secure it by installing the connecting pin retaining screws 131. Finally, replace the operating ring 18 and secure with stop screws 21.