Disassembly and Repair of Type Bearing Cover Inserted (BCI) C-Cast Joints

When ordering a repair kit specify the joint size, style and Part ID located on flange.

ROTARY JOINT REPAIR KIT RK-9200 BCI (3/4")

REPAIR KITS ARE AVAILABLE CONSISTING OF:

<table>
<thead>
<tr>
<th>Item #</th>
<th>Qty</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>2</td>
<td>Thrust Washer</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>Quad Seal*</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>O-Ring</td>
</tr>
<tr>
<td>11</td>
<td>1</td>
<td>Retaining Ring</td>
</tr>
<tr>
<td>13</td>
<td>1</td>
<td>O-Ring</td>
</tr>
<tr>
<td>14</td>
<td>1</td>
<td>O-Ring</td>
</tr>
<tr>
<td>17</td>
<td>2</td>
<td>O-Ring</td>
</tr>
<tr>
<td>18</td>
<td>1</td>
<td>Retaining Ring</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>CSS800-2 Lubricant</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>CSS800-1 Lubricant</td>
</tr>
</tbody>
</table>

*Registered trademark of Minnesota Rubber Co.

NOTE: Follow your company’s safety procedures whenever working on Kadant Johnson products. Read all of the instructions before proceeding with installation or repair.

Please refer to the Kadant Johnson assembly drawing for part identification. Assembly drawings are available on request from Kadant Johnson.

Tighten all fasteners in a star pattern. Torque specifications are listed on the product assembly drawing and are available from Kadant Johnson.

NOTE: The BCI joint must be reassembled using new Quad Seals.

DISASSEMBLY:

STEP 1.
Close the inlet and outlet valves.

STEP 2.
Loosen the three hex head cap screws. This will allow you to remove the head (2) and joint assembly. If retaining ring (18) was not used, the joint body will not come out with the head.

STEP 3.
To remove the head using jacking holes, install hex head bolts (2B) that were removed in Step 2 into threaded holes in head. Turn bolts until head is loose.

STEP 4.
Remove retaining ring (18) and separate the head from the joint. Remove retaining ring (11) and external thrust washer (3). Push nipple (4) through body (1) and remove the second thrust washer from the nipple. For dual flow joints, loosen socket head cap screw (2A) and remove pipe.

STEP 5.
Remove the Quad Seals (5) being careful not to damage the groove they are installed in. Remove the o-rings (13), (14), and (17) from the nipple and body.

Clean all parts with a solvent and scrubbing pad. Dry thoroughly. Inspect the nipple (4) for wear. If nipple tube is worn through the plating where the Quad Seals run, replace the nipple (4).

Inspect the bore of the body (1) where the nipple turns and the Quad Seal grooves. Replace body (1) if there is wear in any of these areas.

Inspect the insert (6) bore where the nipple o-rings (17) seal. Replace if worn or if pin (15) is damaged.

REASSEMBLY:

STEP 6.
Install two new Quad Seals (5), lubricated with CSS800-2, into the body grooves and coat the body I.D. and the very end of the nipple with the same lubricant.

STEP 7.
Using CSS800-2 lubricant, lightly grease one thrust washer (3) and the nipple tube (4) where the Quad Seals are located. Slide
the washer onto the nipple tube (4) until it rests against the nipple's flange.

STEP 8.
Slide the nipple (4) through the body (1) so the body flange is nearest to the nipple flange as shown below.

STEP 9.
Using CSS800-2 lubricant, lightly grease the second thrust washer (3) and slide onto the nipple. Secure with retaining ring (11).

STEP 10.
Wipe off all lubricant from the end of the nipple.

STEP 11.
Wipe o-ring (14) and body (1) face gland dry. Apply three drops of a cyanoacrylates type glue 120° apart in gland, set o-ring (14) in gland. CAUTION: Glue will bond in two seconds.

STEP 12.
Lubricate o-rings (13) with silicon lubricant CSS800-1. Install o-ring in face gland of body (1).

STEP 13.
Place joint assembly in head (2) and install retaining ring (18).

STEP 14.
At the time of installation on the caster, install o-ring (8) into the head flange groove and lubricate with CSS800-1. Install o-rings (17) onto nipple (4) and lubricate with CSS800-1.

STEP 15.
If the insert was removed, install a new lubricated o-ring (16) onto insert (6). Reinstall the insert.

STEP 16.
Lubricate the end of nipple (4) with silicone lubricant CSS800-1.

Please refer to Kadant Johnson Drawing Number A37640 for torque specifications. Glue is available on request from Kadant Johnson.