Disassembly and Repair of Type PT™ Joints – 6000 Series

REPAIR KITS ARE AVAILABLE CONSISTING OF:

<table>
<thead>
<tr>
<th>Item #</th>
<th>Qty</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>1</td>
<td>Carbon Seal Ring</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>Gasket</td>
</tr>
<tr>
<td>25</td>
<td>2</td>
<td>O-Ring</td>
</tr>
<tr>
<td>--</td>
<td>1</td>
<td>O-Ring Lube</td>
</tr>
</tbody>
</table>

NOTE: Please follow your company’s safety procedures whenever working on Kadant Johnson rotary joints and read all of the instructions completely before proceeding.

Please refer to the assembly drawings supplied with your Kadant Johnson rotary joint for part identification. If you have any questions, please contact your Representative or Kadant Johnson.

REMOVAL AND DISASSEMBLY:

STEP 1. Close the inlet and outlet valves and allow the joint to cool down.

STEP 2. Remove head bolts (2A) and set head casting (2) aside.

STEP 3. Loosen the mounting bolts that hold the joint to the support bracket. (At this time, be prepared to support the weight of the joint). As the joint is loosened, the carbon seal ring (6) will be free to fall out of the cavity in the wear plate (16).

SERVICING THE JOINT:

STEP 4. Separate the end cap as an assembly (32, 25, 18, 7 & 4) from the body (1) by removing the hex head cap screws (3A).

STEP 5. Inspect the wearing surfaces of the nipple (4) and wear plate (16) for scratches and wear. Replace if necessary. (These two hardware items are not part of the repair kit – but they can be ordered separately.)

STEP 6. Remove the nipple (4) from the end cap (32) by placing the assembly in a small press with the nipple wear surface facing up. Support the end cap (32) so the nipple (4) can be pushed through it to compress the springs (7). Place a wooden block on the nipple wear surface to protect it. Push downward on the nipple and remove the retainer rings (18), then release the press. This allows the nipple to be removed from the end cap, exposing the o-rings (25). Remove the o-rings from the end cap and discard.

STEP 7. Using a solvent and mild abrasive, clean the o-ring grooves and their adjacent sealing surfaces. If the sealing surfaces are steam cut or pitted, replace the damaged parts.
STEP 8.
Install two new o-rings (25) and apply silicone lube to the sealing surface for ease of installation.

STEP 9.
Examine the springs (7) on the end cap. If the springs have taken a slight set and are no more than a 1/4" shorter in length than a new spring, they may be reused.

STEP 10.
Remove old gaskets (8 & 8R), and clean all gasket material from mating surfaces on body (1), head (2) and end cap (32).

REASSEMBLY AND REINSTALLATION:

STEP 11.
Place the end cap (32) into the press, positioned so the nipple (4) can be pushed through it to compress the springs. Install the springs (7) over the spring guide pins (19). Position the nipple into the end cap while aligning the guide pins with the holes in the nipple’s flange. Protect the flat sealing surface of the nipple with a piece of wood and push the nipple into the end cap, compressing the springs and install the retainer ring (18) on the guide pins. Release the press and the nipple flange should move and rest against the retainer ring.

STEP 12.
Place the end cap, as an assembly (32, 25, 18, 7 & 4), back onto the body (1) using a new gasket (8R). Secure into place using hex head cap screws (3A).

STEP 13.
With new carbon seal ring (6) positioned in the recess of the wear plate (16), loosely reattach the joint to the support bracket, using cap screws. Slide the joint inward, until “set-up” dimension (X) is achieved. The dimension varies with joint size. See assembly drawing for dimension. Make sure the seal ring is centered on the nipple then tighten the cap screws to securely bolt the joint to the bracket.

NOTE: As the carbon seal ring wears, the space between the retainer ring and the nipple will decrease to zero. When this occurs, the joint will start to leak – however, the metal wearing surfaces will not be in contact with each other.

STEP 14.
Reattach the head (2) to joint body (1) using new gasket (8). Hook up piping and turn valves on. The Kadant Johnson joint is now ready to be placed back in service.

Dimensions are for reference only and subject to change. Certified drawings are available on request. Please refer to Kadant Johnson Drawing Number A37640 for torque specifications.

The Kadant Johnson Warranty

Kadant Johnson products are built to a high standard of quality. Performance is what you desire: that is what we provide. Kadant Johnson products are warranted against defects in materials and workmanship for a period of one year after date of shipment. It is expressly understood and agreed that the limit of Kadant Johnson’s liability shall, at Kadant Johnson’s sole option, be the repair or resupply of a like quantity of non-defective product.