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

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

Lubricate all fasteners with anti-seize compound. Tighten all fasteners in a star pattern. Torque specifications are listed on the product assembly drawing and are available from Kadant Johnson.

**NOTE:** Do not use anti-seize or petroleum-based products on o-rings. Only lubricate the o-rings with the silicone lubricant supplied with the Kadant Johnson repair kit. Prior to handling lubricants, consult MSDS information.

Please consult Kadant Johnson if you have any questions.

### REPAIR KITS ARE AVAILABLE CONSISTING OF:

<table>
<thead>
<tr>
<th>Item #</th>
<th>Qty.</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>3A</td>
<td>2</td>
<td>Nilos Ring</td>
</tr>
<tr>
<td>3B</td>
<td>2</td>
<td>Nilos Ring</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>Wave Spring</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>Glyde Ring</td>
</tr>
<tr>
<td>5A</td>
<td>4</td>
<td>O-Ring</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>Set Screw</td>
</tr>
<tr>
<td>7</td>
<td>2</td>
<td>O-Ring</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>Retaining Ring</td>
</tr>
<tr>
<td>_</td>
<td>1</td>
<td>O-Ring Lubricant</td>
</tr>
</tbody>
</table>

### STEP 1.
Allow equipment to cool. Close the inlet and outlet valves and isolate the rotary union from the operating system. Disconnect piping.

### STEP 2.
Remove all covers and drive components between the OTS rotary union and the end of the shaft.

### STEP 3.
Loosen two set screws (6) that are located on the flanged end of the nipple (2). Remove the rotary union from the shaft.

### STEP 4.
Remove retaining ring (8) and push the nipple (2) through the body (1).

### STEP 5.
Remove from the body (1), four glyde rings (5) and four o-rings (5A). Be careful not to damage the grooves they are installed in. Remove nilos ring (3A), bearing (3), and nilos ring (3B).

### STEP 6.
Remove from the nipple (2) wave ring (4) and spacer (3C). Save for reuse. Remove nilos ring (3B), bearing (3), and nilos ring (3A). Be careful not to damage the bearing during removal. Remove two o-rings (7) from the I.D. of the nipple.

### STEP 7.
Clean all parts with acetone solvent and a scrubbing pad. Dry thoroughly. Inspect the nipple (2) for wear. If the nipple tube is worn where the nilos rings run, replace the nipple. Inspect the bore of the body (1) where the nipple (2) turns and the nilos ring grooves. Replace body if there is wear in these areas. Clean and inspect the bearings (3).

### STEP 8.

Nipple (2) Sub-Assembly

Pack bearing (3) and nilos rings (3A and 3B) with Mobilith SHC™ PM 450 lubricant*. Place nilos ring (3A) against the flange on the nipple (2). Press the bearing (3), while pushing on the inner race, onto the nipple. Make sure the bearing’s outer
race turns freely, when this step is completed. Place nilos ring (3B), spacer (3C), and wave spring (4) against the bearing. Using the supplied o-ring lubricant, lubricate and install two o-rings (7) into the grooves in the I.D. of the nipple.

STEP 9.

Body (1) Sub-Assembly

Install four o-rings (5A) into the grooves in the body (1). Install glyde rings (5) into the same grooves over the o-rings.

STEP 10.

Body and Nipple Assembly

Check the body (1) and nipple (2) sub-assemblies for debris and wipe clean if needed. Resting the nipple on its flange, position the body over the nipple and press into position, stopping before the body bottoms out on the nipple.

Pack bearing (3) and nilos rings (3A and 3B) with Mobilith SHC PM 450 lubricant. Place nilos ring (3B), and bearing over nipple (2) and slowly press bearing into position until there is enough room to install nilos ring (3A) and retaining ring (8).

Place nilos ring (3A) against the bearing (3). Install retaining ring (8), making sure it is fully seated all the way around the groove in the nipple.

STEP 11.

The rotary union is ready to use. Please follow the installation instructions for mounting the rotary union. Secure rotary union to the shaft with new set screws (6).

Certified drawings are available on request. Please refer to Kadant Johnson Drawing Number A37640 for torque specifications.

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