LN™ Rotary Joint Conversion For Use with ISSS™ Syphon

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: 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.

REMOVAL:

STEP 1.
Release residual pressure in the system. Close the inlet and outlet valve. Allow the rotary joint to cool sufficiently and then disconnect the inlet and outlet piping from the rotary joint.

STEP 2.
Loosen and remove head bolts (2A). Remove head (2). Remove gasket (8) and clean gasket surfaces.

STEP 3.
Loosen lock nut (30) and remove packing gland (10). Discard lock nut and packing gland.

STEP 4.
Remove lock nuts from support rods and set aside for reuse.

STEP 5.
Loosen and remove Q flange retaining nuts (5A). Remove the rotary joint. Remove split wedges (55) and the Q flange (5). Sit the Q flange and split wedges aside for reuse. If the rotary joint is threaded to the roll, loosen the nipple at the journal flange to remove the rotary joint.

STEP 6.
Place the rotary joint into a hole in a work surface with the nipple (4) passing through the hole first so the rotary joint will rest on the wear plate (16).

STEP 7.
During this step prepare to contain the spring force that is present within the rotary joint. Remove the assembly plate (31) by removing two screws (31A). Inspect assembly plate. Replace if worn.

STEP 8.
Remove the following: seal ring (6), thrust collar (3), spring (7), nipple (4), and second seal ring (6). Discard the thrust collar.

STEP 9.
Inspect the following for scoring or excessive wear and replace as required: seal ring (6, two each), spring (7), nipple (4), and wear plate (16). To replace the wear plate, remove wear plate bolts (16A) and separate wear plate from body (1). Clean gasket surfaces and install a new wear plate gasket (8R). Place a new wear plate on body and secure into position with wear plate bolts.

STEP 10. (See Figure 1)
Position parts into the rotary joint body in following order: seal ring (6) with the flat face against the wear plate (16), nipple (4) against the spherical face of the seal ring, and then the spring (7). Install a new thrust collar (3) and seal ring (6) with the spherical face against the thrust collar (3).
STEP 11.
Place a new gasket (8) between the body (1) and the assembly plate (31). Place a new gasket (8) between the wedge plate (40) and the assembly plate. Compress the spring (7) using the wedge plate and assembly plate, making sure the keyways in the thrust collar (3) line-up with the keys on the nipple (4). Secure wedge plate/assembly plate to the body using socket head cap screws (31A). Tighten cap screws evenly to 10 ft-lbs (14 Nm).

STEP 12.
Place a new copper gasket (8Q) into recess in the journal flange. Position the rotary joint assembly back onto the support rods. Secure to the roll using the Q flange (5) and split wedges (55) or thread the nipple (4) back into the roll and tighten. Tighten the Q flange evenly using a star pattern, while making sure the gap between it and the journal flange is even. The gap should be approximately 1/8˝ (3 mm) around the circumference of the flange. The Q flange should not tighten against the journal flange surface. Check rotary joint alignment by making sure the nipple is centered in the wear plate (16) and the body (1) housing.

STEP 13.
Set up the rotary joint by pulling it away from the roll. Make sure the rotary joint is square and level to the machine. Install spacer collars (if required) and lock nuts on each rod. Run the nuts down the support rod until there is a gap (X Dimension) between the face of the nut and the lug on rotary joint. See Figure 2 for the correct “X” dimension. Run a second nut down the support rod locking it with the first one while maintaining the “X” dimension.

STEP 14.
Refer to ISSS Stationary Syphon installation instructions to complete this step.

STEP 15.
Place gasket (8) onto head (2) and secure into position using head bolts (2A). Tighten head bolts using a star pattern and the proper torque.

STEP 16.
Attach flex hoses and the rotary joint is ready to be put back into 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.

<table>
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<tr>
<th>Rotary Joint Size</th>
<th>X Dimension</th>
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<td>8˝</td>
<td>13/16˝</td>
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Figure 1
When completed, the rotary joint is converted to a type LJ™ rotary joint without the packing and packing gland.

Figure 2

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.