ELSNTM Rotary Joint Conversion For Use with ISSSTM 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).

STEP 4. Remove anti-rotation device.

STEP 5. Loosen and remove Q flange retaining nuts (5A) and slide Q flange (5) away from journal. If the rotary joint is threaded to the roll, loosen the nipple at the journal flange.

STEP 6. Slide rotary joint off the roll. Remove split wedges (55) from the recess in the nipple (4). Remove the Q flange (5). Set the Q flange and split wedges aside reuse.

STEP 7. 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 8. 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).

STEP 9. Remove the following: O-ring (31C), internal guide (6A), spring shoulder (3), spring shoulder O-ring (3A), spring (7), nipple (4), and seal ring (6).

NOTE: Discard the nipple (4), packing (35), packing gland (10), and O-rings (3A and 31C). These items are not used with an ISSS Syphon.

STEP 10. Inspect the following for scoring or excessive wear and replace as required; seal ring (6), external guide (6B), 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 wear plate on body and secure into position with wear plate bolts (16A). Install a new external guide (6B). Install retaining ring (16B), securing the external guide. If a woodruff key is present, please discard it. The woodruff key is no longer used.

STEP 11. (See Figure 1)
Place parts back into the rotary joint body in the following order: seal ring (6) with the flat face positioned against the
wear plate (16), new nipple (4), spring (7), spring shoulder (3), and internal guide (6A) with the pin holes facing out.

STEP 12.
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) with the wedge plate and assembly plate, making sure the pins in the assembly plate are aligned with the pin holes in the internal guide (6A). Make sure the keyway in the spring shoulder (3) is aligned with the key on the nipple (4). Once in position, secure wedge plate/assembly plate using socket head cap screws (31A). Tighten cap screws evenly to 10 ft-lbs (14 Nm).

STEP 13.
Place a new copper gasket (8Q) into the journal flange and install the rotary joint assembly. Secure into position 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.

STEP 14.
Install anti-rotation device.

STEP 15.
Refer to ISSS Stationary Syphon installation instructions to complete this step.

STEP 16.
Place gasket (8) onto head (2) and secure into position using head bolts (2A).

STEP 17.
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.

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.