

Repair Instructions for the 2000 ELSX™ Rotary Joint

 fluidhandling.kadant.com/en/knowledge-center/installation-and-repair-instructions/els-elsx-rotary-joints/repair-instructions-for-the-2000-elsx-rotary-joint

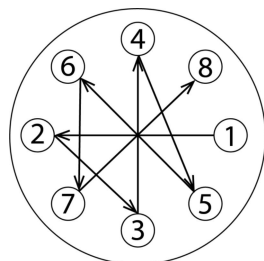
Effective: March 1, 2022



Introduction

Read all of the instructions before proceeding.

Refer to Kadant Johnson assembly drawing for part identification and to drawing A37640 for torque specifications. For easy identification, parts used in individual steps are often accompanied with their position in the assembly drawing [e.g. gasket (8B)]. Tighten all fasteners in a star pattern. Certified drawings are available upon request. Dimensions are for reference only and subject to change.



Safety



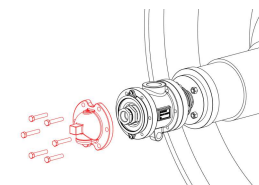
This safety symbol alerts you to risk of death or injury if the instructions are not followed. In all steps, death or injury may result if the machine is not de-energized, depressurized, cooled, and stopped. Death or injury may occur if the product is operated with a fluid type or at a pressure, temperature, or speed that do not meet its specifications. Death or injury may occur if heavy parts and pinch hazards are not handled properly. Follow your company's safety procedures.

Step 1

Disconnect the piping and anti-rotation device.
Remove the head (2).

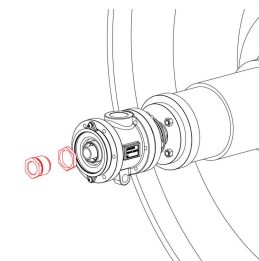


Equipment must be cool and free of pressure.



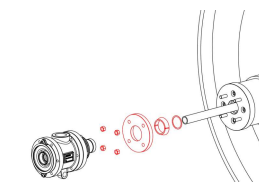
Step 2

Loosen the packing gland locknut (30) and remove the packing gland (10N) from the rotary joint.



Step 3

Loosen and remove the nipple flange (5) and slide the rotary joint away from the journal. Remove the metal gasket (8Q) from the journal flange and discard. Remove the split wedges and nipple flange and save for reuse.

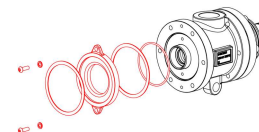


Step 4 - SERVICING THE ROTARY JOINT

Remove the assembly plate by loosening the two cap screws (32A).



Spring force present during assembly plate removal.



Step 5

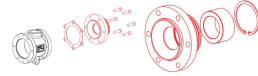
Remove the front guide and assembly consisting of the nipple, spring shoulder, spring, and seal ring.



Note: The spring shoulder may be stuck on the nipple. Separate the two parts for inspection.

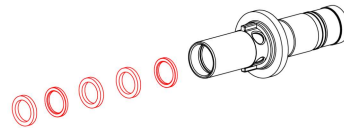
Step 6

Separate the wear plate from the body. Remove the back guide (10B) by removing the retaining ring.



Step 7

Remove the packing (35) and packing rings (11) from the end of the nipple. Discard the packing and set aside the rings for later use.

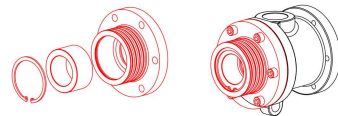


Step 8

Discard the seal ring, gaskets, guides, and O-rings. Inspect and clean all gasket, O-ring, and sealing surfaces. Replace any damaged parts.

Step 9

Install a new back guide (10B) into the wear plate and secure with the retaining ring (18). Using a new gasket, install the wear plate on the body.



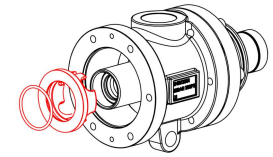
Step 10

Turn the rotary joint upright and install a new seal ring, with the convex side toward the wear plate. Install the nipple into the body followed by the spring.



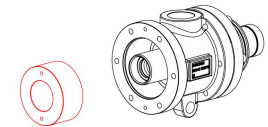
Step 11

Install a new O-ring (26) into the spring shoulder. Install over the nipple by aligning the keys with the spring shoulder keyways.



Step 12

Install the front guide (10A) over the nipple with the two pin holes facing outward.



Step 13

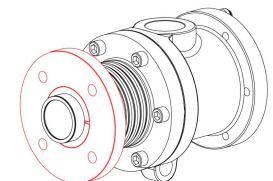
Install a new O-ring (25) into the assembly plate. Using a new gasket, install the assembly plate onto the body while lining up the pins with the corresponding holes on the guide.

 Spring force present during assembly plate installation.



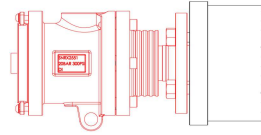
Step 14 - REINSTALLATION

Slide the nipple flange over the rotary joint nipple with the taper facing out. Place the split wedges into the recess of the nipple. Slide the nipple flange over the wedges.



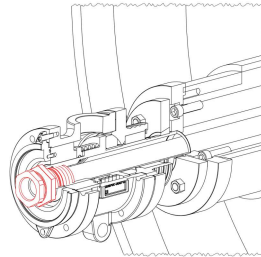
Step 15

Place metal gasket (8Q) into the journal flange. Lift the rotary joint up, slide over the horizontal pipe and into the journal flange. Secure to studs with nuts. An even gap of 1/8" to 3/16" (3 to 5 mm) should remain in between the journal flange and nipple flange.



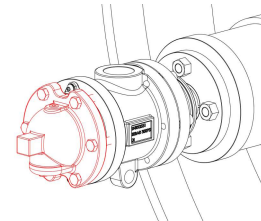
Step 16

Reinstall the packing, packing rings, packing gland, and locknut. Apply approximately 30 ft-lbs (41 Nm) of torque to the gland and tighten the locknut.



Step 17

Using a new gasket, install the head. Reattach piping and anti-rotation device.



R-2000ELSX-1

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 the 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.

Kadant Johnson rotary joints and accessories could be subject to European Pressure Equipment Directive 2014/68/EU (PED). Modifications or changes to rotary joints and/or accessories are only permitted upon approval of Kadant Johnson. Only genuine Kadant parts and original accessories will ensure the safety of these assemblies. The use of other than original parts voids the warranty and will lead to forfeiture of the declaration of conformity and will invalidate any liability for damages caused thereby.