Installation Instructions for the 2000 LJ Rotary Joints

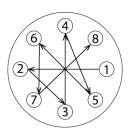
KA fluidhandling.kadant.com/en/knowledge-center/installationand-repair-instructions/install-lj-rotary-joint

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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 fastener in a star pattern. Certified drawing are available upon request. Dimensions are for reference only and subject to change.



Safety



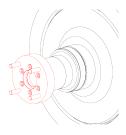
This safety symbol alerts you to risk of death or injury if the instructions are not followed. In all steps, death or injury may result if the machine is not de-energized, depressurized, cooled, and stopped. Death or injury may occur if the product is operated with a fluid type or at a pressure, temperature, 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

Remove the existing equipment. If installing a new journal flange, install with a new gasket.



Equipment must be cool and free of pressure.



Step 2

Thread the horizontal pipe (99) into the head. Verify that the cap screws (2A) are tightened properly on the head (2).

Important: Check that the horizontal pipe is straight and true to prevent excess wear and breakage.



Step 3

Slide the nipple flange (5) over the rotary joint nipple (4) with the taper facing out. Place the split wedges (55) into the recess of the nipple. Slide the nipple flange over the wedges.

Note: If the rotary joint has a threaded nipple connection, thread it into the journal flange and tighten.



Step 4

Place a metal gasket (8Q) into the journal flange. Lift the rotary joint up and slide the nipple into the journal flange while engaging the support rods with the holes in the body lugs. Secure the nipple flange (5) to the studs with hex nuts. An even gap of 1/8" to 3/16" (3 to 5 mm) should remain in between the journal flange and nipple flange.

Important: The clearance between the wear plate/body and nipple should be even around the entire nipple. Refer to the table depending on the size rotary joint used in your application.



Rotary Joint Clearance Relation Chart LJ-Rotary Joints		
Rotary Joint Size	A (Inboard Nipple Wear Plate)	Guage Size
3/4" - 2200	1/16" (1.5 mm)	1/32" (0.80 mm)
1" - 2300	3/32" (2.0 mm)	1/16" (1.5 mm)

Rotary Joint Clearance Relation Chart LJ-Rotary Joints		
1-1/4" - 2400	1/16 (1.5 mm)	1/32" (0.80 mm)
1-1/2" - 2500	3/16" (5.0 mm)	1/8" (3.0 mm)
2" - 2550	1/8 " (3.0 mm)	3/32" (2.0 mm)
2-1/2" - 2660	1/8 " (3.0 mm)	3/32" (2.0 mm)
3" - 2700	1/8 " (3.0 mm)	3/32" (2.0 mm)
3 1/2" - 2750	1/8 " (3.0 mm)	3/32" (2.0 mm)
4" - 2800	1/4" (6.0 mm)	3/16" (5.0 mm)
5" - 950	1/2" (12.0 mm)	3/8" (10.0 mm)
6" - 1000	1/4" (6.0 mm)	3/16" (5.0 mm)
7 1/2" - 1075	1/8" (3.0 mm)	3/32" (2.0 mm)
8" - 1100	1/4" (6.0 mm)	3/16" (5.0 mm)

Step 5

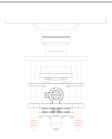
The LJ rotary joint uses hex nuts installed on the support rods as seal wear indicators. Install a hex nut on each rod. There will be a space between the hex nut and lug on the body (1). Refer to the rotary joint drawing for the correct spacing. Install lock washer and a second hex nut to each rod and tighten in place.

Important: Do not lock the rotary joint in place on the supports.

Note: When rod support stands are used, install the rods after the rotary joint is secured to the roll.

Note: In some applications a retaining plate is used on the support rods. There should be a space in between the head and retaining plate to allow for seal wear.

Note: As the seal ring wears the rotary joint will move away from the roll. When the rotary joint reaches the hex nuts the seal ring is worn.



Step 6

Connect piping to rotary joint using Kadant Johnson flexible metal hose.

Important: Refer to Flexible Hose Installation.

Recommended MINIMUM HOSE LENGTH		
Hose Size	Minimum Length	
1/4"	8" (200 mm)	
3/8"	10" (250 mm)	
1/2"	10" (250 mm)	

Recommended MINIMUM HOSE LENGTH		
3/4"	12" (300 mm)	
1"	15" (380 mm)	
1-1/4"	18" (450 mm)	
1-1/2"	18" (450 mm)	
2"	21" (530 mm)	
2-1/2"	22" (560 mm)	
3"	24" (610 mm)	

IS-2000-LJ-Rotary-Joints

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