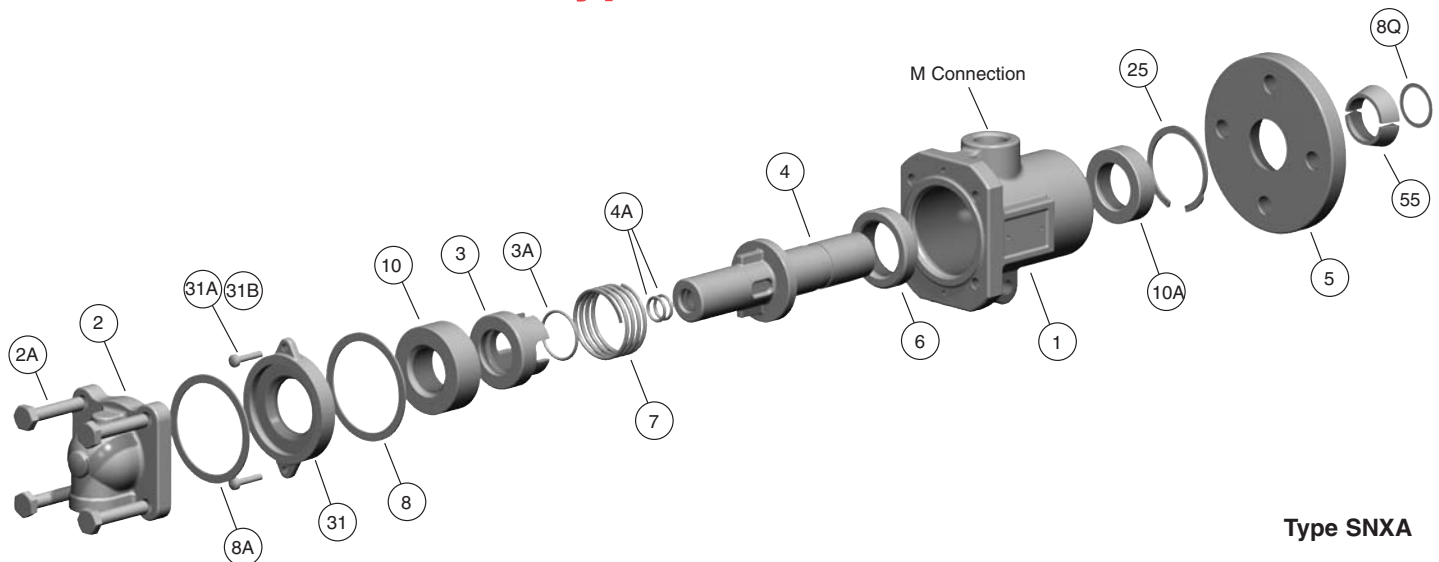


# Disassembly and Repair of Type SNX Joints



**Type SNXA**

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.

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.

## REPAIR KITS ARE AVAILABLE CONSISTING OF:

Item #	Qty	Description
3A	1	O-Ring
4A	*	Packing or O-Rings
6	1	Seal Ring
7	1	Spring
8 and 8A	2	Gasket
8Q	1	Q Gasket
10	1	Inboard Guide
10A	1	Outboard Guide

\* Refer to Kadant Johnson assembly drawing

## REMOVAL:

### STEP 1.

Close the inlet and outlet valves and allow the joint to cool down. Disconnect the piping from the joint, remove the anti-rotation device.

### STEP 2.

Remove the head (2) by removing the hex nuts (2A). Remove and discard gasket (8A). If optional packing gland is used, loosen the locknut and remove the packing gland. See Figure 2.

### STEP 3.

Remove hex nuts allowing quick release nipple flange (5) to slide away from the journal flange, exposing the two tapered split wedges (55). Remove the rotary joint from the machine for rebuilding. Separate the wedges and remove quick release nipple flange. Save the split wedges and quick release nipple flange for reuse. Remove and discard metal gasket (8Q).

For threaded nipple joints, unscrew nipple (4) from journal.

### STEP 4.

Set the rotary joint upright on a workbench as shown in Figure 1.

### STEP 5.

Remove the two round head cap screws and lockwashers (31A and 31B) that hold the assembly plate (31) onto the body (1). Caution is advised as this item retains the internal spring force. You may have to apply some force to break the gasket (8) loose.

### STEP 6.

Remove the internal items: inboard guide (10), spring shoulder (3), spring (7), nipple (4), and seal ring (6). Check the spring shoulder (3) for wear on keyways and the flat sealing surface. Replace spring shoulder if damaged. Remove the o-ring (3A) from the spring shoulder. Discard all items except the nipple and spring shoulder.

### STEP 7.

Turn body (1) over and remove retaining ring (25) and outboard guide (10A) and discard. The joint is now fully disassembled.

### STEP 8.

Remove o-rings or packing (4A) from end of nipple (4) and discard them. Inspect the nipple's sealing and guide surfaces for scratches, grooves, or pits. Inspect the keys on the nipple for wear. If there is deterioration in these areas, replace the nipple. Note: Discard and replace any parts that are damaged.

### STEP 9.

Clean all parts and gasket surfaces.

## REASSEMBLY:

### STEP 10.

Lubricate and place a new o-ring (3A) in spring shoulder (3).

### STEP 11.

Place new outboard guide (10A) into body (1) and secure in place with retaining ring (25).

### STEP 12.

Insert a new seal ring (6) into the body (1) convex side down.

### STEP 13.

Place two new lubricated o-rings (4A) in nipple (4) (unless optional packing gland is used). Slide spring (7) and spring shoulder (3) onto nipple, lining up keyways. Slide nipple (4) into body (1).

### STEP 14.

Install inboard carbon guide (10) with its spring groove facing inward over the nipple (4) end and down into the body (1).

### STEP 15.

Using a new gasket (8), set assembly plate (31) over the inboard guide (10) and bolt in place with the two round head cap screws and lockwashers (31A and 31B)).

**NOTE:** Make sure the key slot in the spring shoulder and nipple are aligned by looking through the M connection.

## REINSTALLATION:

### STEP 16..

Place a new metal gasket (8Q) into the recess of the journal.

### STEP 17.

Place 'Q' nipple flange (5) over nipple (4) with the taper facing outward. Place the two tapered split wedges (55) into the recess of nipple and secure into position by sliding the 'Q' nipple flange over the wedges.

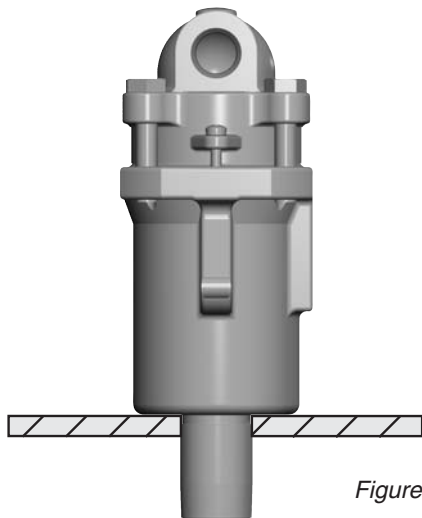


Figure 1

### STEP 18.

Position the joint with quick release flange/nipple assembly (4, 5, and 55) pointed towards the journal flange or roll end. Slide the joint over the horizontal pipe until the pipe passes through the o-rings or packing (4A). Insert the nipple into the journal flange counterbore. Slide the quick release nipple flange (5) over the journal flange studs and secure flange with hex nuts. Tighten hex nuts evenly. The end of the horizontal pipe should extend 3/8" (10 mm) past the end of the nipple or packing gland if used. See Figure 2.

**NOTE:** The 'Q' flange will not fit tightly against the journal flange. There should be 1/8" to 3/16" (3 mm to 5 mm) space between the flanges. Make certain this gap is equal around the circumference of the flange.

### STEP 19.

If packing gland is used, insert new packing rings into the nipple and around the horizontal pipe. Lubrication is not necessary with packing or packing gland. Tighten packing gland to 30 ft-lbs (41 Nm). Tighten locknut. The horizontal pipe should extend 3/8" (10 mm) beyond the packing gland or the end of the nipple. See Figure 2.

### STEP 20.

Install head (2) using a new gasket (8A). Secure head with hex head nuts (2B). To achieve proper gasket loading, lubricate the bolts before installation. Reconnect the piping, turn valves on and joint will be ready for 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.*

## Packing and O-Ring Configurations

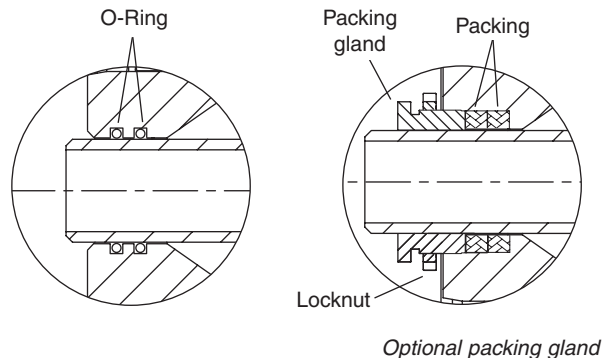


Figure 2

## 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.

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