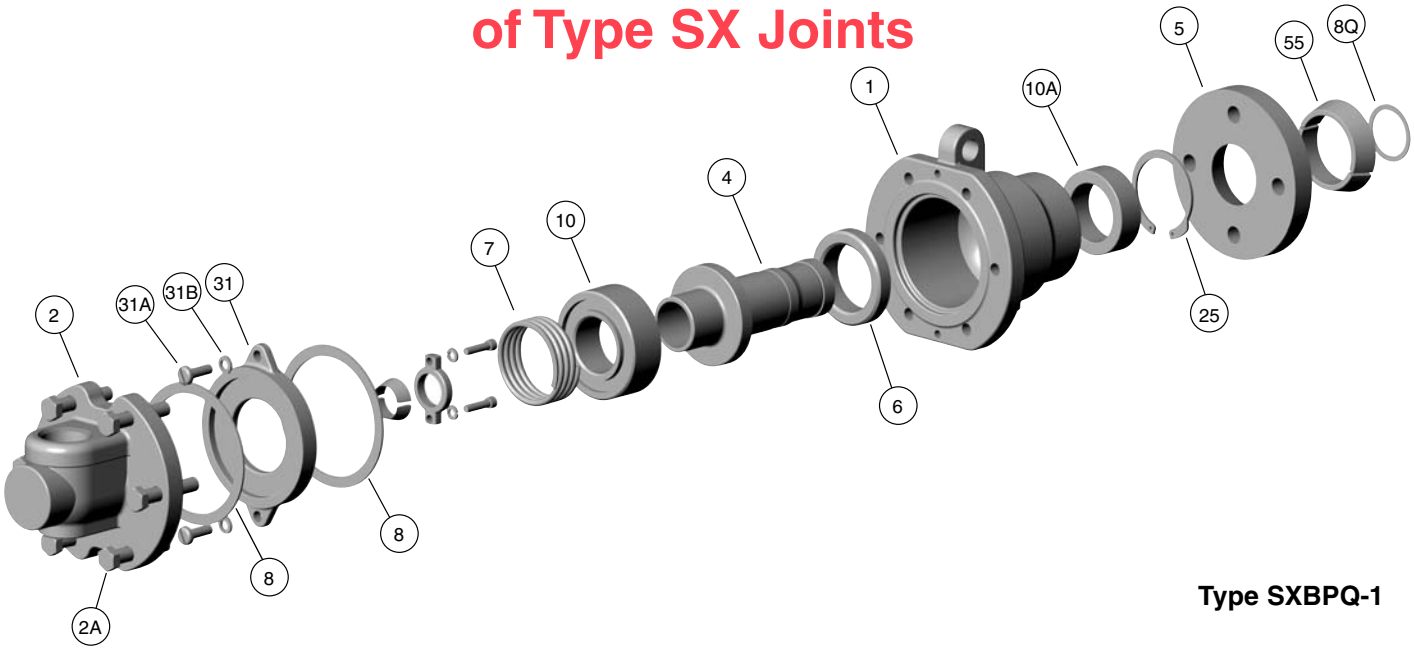
Disassembly and Repair of Type SX Joints



Type SXBPQ-1

Please follow your company's safety procedures whenever working on Kadant Johnson rotary joints and read all of the instructions completely before proceeding.

Please refer to the assembly drawings supplied with your Kadant Johnson rotary joint for part identification. If you have further questions, please contact your Representative or Kadant Johnson.

REPAIR KITS ARE AVAILABLE CONSISTING OF:

Item #	Qty	Description
6	1	Carbon Seal
7	1	Spring
8	*2	Gasket
10	1	Inboard Guide
10A	1	Outboard Guide

* Only 1 gasket required without an assembly plate such as a type SXA Joint.

REMOVAL:

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

STEP 2.
Remove the hex nuts from the studs at Q nipple flange (5).

STEP 3.
The joint is now free to be removed from the machine.

STEP 4.
If equipped with a horizontal pipe, unscrew it at this time and set aside.

STEP 5.
Set the rotary joint upright on a workbench as shown in Figure 1.

STEP 6.
Remove hex head bolts (2A) freeing head (2). Set the head aside. Caution is advised as this item may retain the internal spring force.

STEP 7.
If using an assembly plate (31), remove the two round head cap screws (31A) which hold assembly plate (31) onto the body housing (1). Caution is advised as this item retains the internal spring force. You may have to apply some force to break the gasket loose.

STEP 8.
Remove the internal items – spring (7), inboard guide (10), nipple (4), and carbon seal (6). Discard all items except the nipple (4).

STEP 9.
Turn body (1) over and remove retaining ring (25) and outboard guide (10A) and discard. The joint is now fully disassembled.

STEP 10.
Inspect the nipple's (4) wear surface for wear and scratches. If necessary, replace. Also check the inside of the body (1) for wear.

STEP 11.
Clean all gasket surfaces and parts to be reused.

REASSEMBLY:

STEP 12.
Place new outboard guide (10A) into body (1) and secure in place with retaining ring (25).

STEP 13.
Insert a new carbon seal (6) into the body (1) convex side down followed by nipple (4).

STEP 14.
Install carbon guide (10) with its spring groove facing outward over the nipple end and down into the body (1).

STEP 15.
Place spring (7) into the machine groove in the end of the carbon guide.

STEP 16.
Using a new gasket, set assembly plate (31) over the spring and bolt in place with the two round head cap screws.

STEP 17.
Using the second gasket (8), bolt head (2) to the body with fasteners (2A). To achieve proper gasket loading, lubricate the bolts before installation.

STEP 18.
Thread the syphon pipe into the head.

STEP 19.
For quick release style connections to your journal; place a new copper gasket (8Q) into the journal flange. Slide the quick release nipple flange (5) over the rotary joint nipple with its taper facing outward. Place the two split taper wedges (55) into recess of the nipple and then slide the quick release flange over them. Lift the joint up and slide the nipple (4) into the journal flange recess and secure to the studs with nuts provided, tightening evenly. Note that the quick release nipple flange (5) will not seat tightly against the face of the journal flange. When tight, there should be 1/8˝ to 3/16˝ (3 to 5 mm) space between the two flanges. If the rotary joint has a threaded nipple connection for attachment to your roll, simply thread it into the journal.

STEP 20.
Connect piping to joint using Kadant Johnson flexible metal hose. The hose(s) should be long enough so there is no binding or tension tending to move the joint off the journal centerline of the roll. The joint must be free to move outward to compensate for carbon seal ring wear.

NOTE: Connect the hose as close to the joint as possible. Minimize the use of fittings and pipe, as this increased weight can affect the performance of the joint. Provide suitable support for the pipe and fitting beyond the hose.

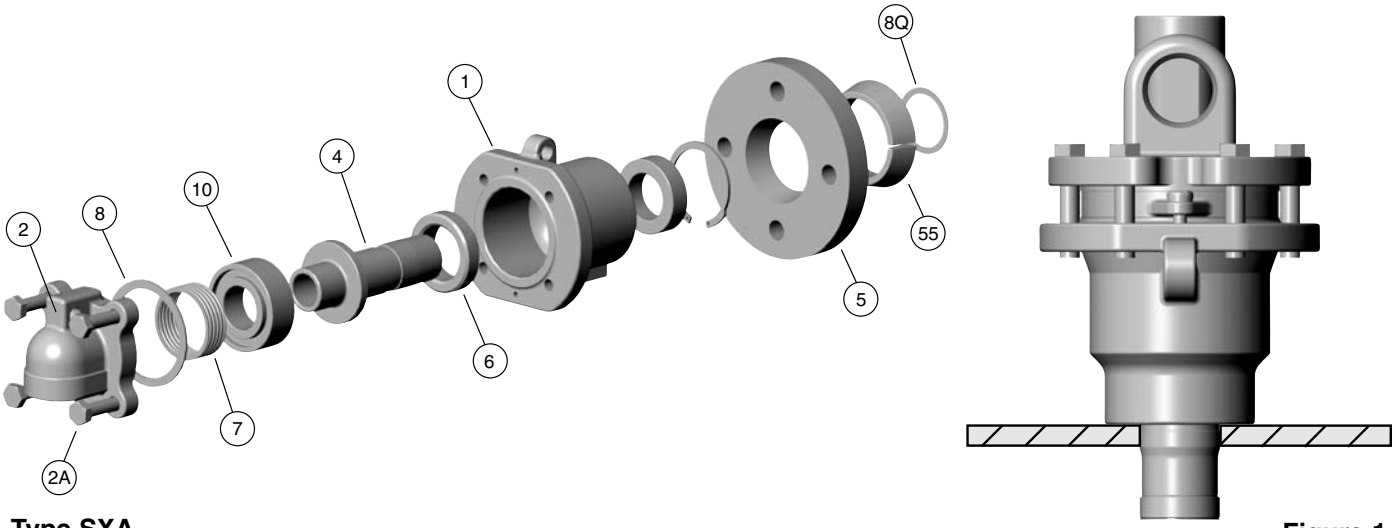
STEP 21.
Install stop rods in the anti-rotation rod holes using Schedule 80 pipe. It is recommended that no more than two joints be joined with one rod. Secure the rod in the rod hole of one joint using cotter pins and let the rod float in the rod hole of the second joint. This will absorb the torque generated by the joint, and prevent premature hose failure by reducing stresses.

STEP 22.
Reattach the piping and open the valves. The Kadant Johnson joint is now ready to be placed back in service.

NOTE: Never apply oil or grease to Kadant Johnson joints. The saturated steam, condensate, or liquid passing through it is the only lubrication required for the carbon-graphite parts.

Minimize running Kadant Johnson joints dry. Excessive seal wear may occur.

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.



Type SXA

Figure 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 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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