Follow your company's safety procedures whenever working on Kadant Johnson products. Read all of the instructions before proceeding with the installation or repair.

Please refer to the Kadant Johnson assembly drawings 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.

**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.

**STEP 1.**
Remove all existing equipment down to the bare journal.

**STEP 2.**
Clean the journal gasket surfaces on the inside and outside of the journal.

**STEP 3.**
Assemble the internal spider (3) by inserting two syphon support bushings (3A) into the end of the spider. Install a third syphon support bushing into the bushing retaining ring (3B) and mount bushing retaining ring to the end of the internal spider. Secure into position using head cap screws (3C). Tighten screws evenly to 20 ft-lbs (27 Nm) using a star pattern. See Figure 1.

**STEP 4.**
If an insulating sleeve (98) is being installed, install it first. Inside the dryer, mount the internal spider (3) to the dryer head using a new gasket (7). Secure internal spider into position with bolts (3D).
STEP 5.
Outside the dryer, install the journal flange (13) using a new gasket (11). Secure journal flange into position with bolts (12) provided.

STEP 6.
Mount the rotary joint assembly according to the instructions accompanying it.

STEP 7.
Inside the dryer, carefully slide the horizontal pipe (99) through the guides in the internal spider (3). Continue to slide the horizontal pipe through the journal and into the rotary joint until it passes through the O-rings (41) in the wedge plate (40). See Figure 2.

STEP 8.
Lubricate O-ring (10A) with silicone O-ring lube and place it into O-ring groove in the face of the vertical condensate pipe flange (10B). Position the vertical condensate pipe flange against the horizontal pipe flange (10) and secure with bolts (10C). Tighten bolts to 20 ft-lbs (27 Nm). See Figure 1.

STEP 9.
Rotate the syphon assembly inside the dryer and make sure it clears all obstructions. Position the syphon pick-up fitting (1) at the bottom of the dryer.

STEP 10.
Set the gap between the bushing retaining ring (3B) and horizontal pipe flange (10) to a minimum of 0.590˝ (15 mm). See Figure 1.

STEP 11.
Secure syphon assembly into position by installing the split wedges (42), and pressure plate (43) into the wedge plate (40). Secure pressure plate with screws (45) and lockwashers (44) and tighten evenly to 8 ft-lbs (11 Nm). Tap pressure plate with a soft-faced hammer to seat split wedges. Then tighten screws evenly to 16 ft-lbs (22 Nm).

STEP 12.
Make sure pick-up fitting (1) faces into the rotation of the dryer. Set the pick-up fitting clearance, between the bottom of the fitting and the dryer shell, to 0.25˝ (6 mm). Secure pick-up fitting by tightening clamping bolts and nuts (1A) to 50 ft-lbs (68 Nm).

STEP 13.
Complete the rotary joint installation following the rotary joint installation procedures.

The syphon installation is now complete and can be put 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.