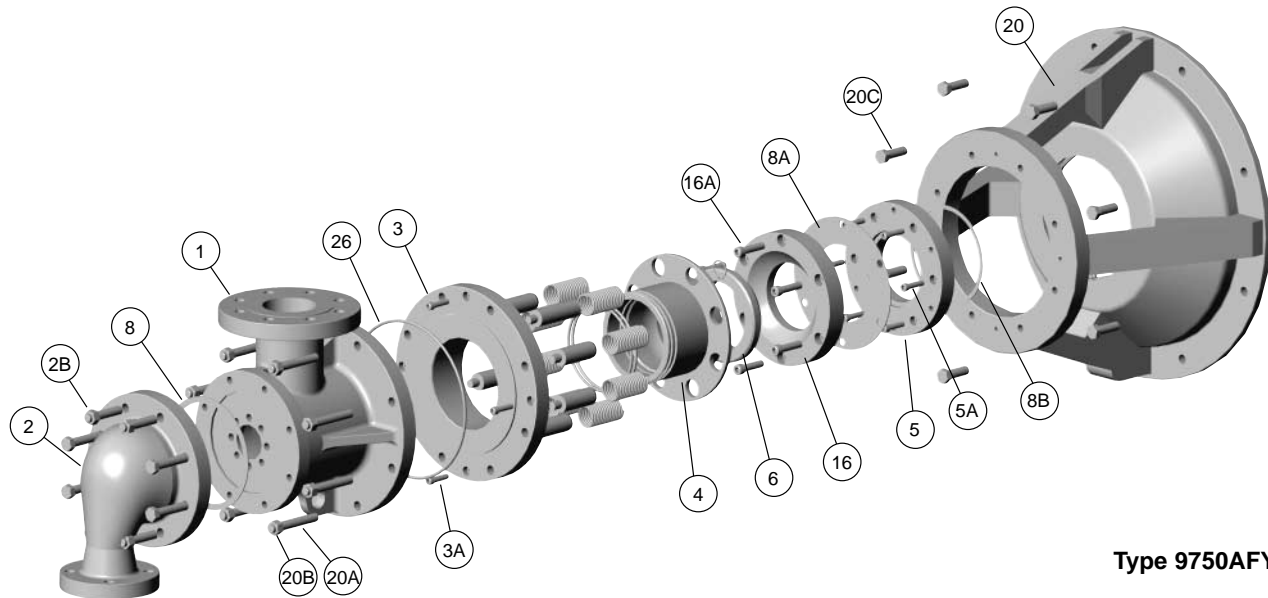


# Installation Instructions for Type 9750 PT Joints with Cantilever Syphon



Type 9750AFYSC-PT

**NOTES:** 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.

The Kadant Johnson Rotary Joint is shipped partially assembled. Disassemble joint, inventory and stage parts prior to installation day.

## STEP 1.

Remove all existing equipment down to a bare journal. Clean all gasket surfaces. Chase and clean all threaded holes. If necessary remove bearing cover. Note: Some installations may not require removing the bearing cover, please consult your factory representative if you have any questions.

## STEP 2.

Various methods are incorporated to support the rotary joint. It depends on the application. Most joints are supported by 1) a ring bracket, 2) a ring bracket and bearing cover supplied as one unit, 3) a ring bracket and bearing cover supplied as individual parts.

**1. With ring bracket only.** Install ring bracket (20) on to existing bearing cover. Secure into position using hex head cap screw (20C).

**2. With ring bracket and bearing cover as one unit.** Make sure the inside bearing area of the cover is clean and free of debris. Apply sealer to the appropriate area of the machine's bearing housing. Slide the bracket/bearing cover unit over the journal and secure into position with the proper size bolts.

**3. With ring bracket and bearing cover supplied as individual parts.** Make sure the bearing cover is clean and free of debris. Apply sealer to the appropriate area of the machine's bearing housing. Slide the bearing cover over the journal and secure into position with the proper size bolts. Install ring bracket (20) on to bearing cover and secure into position using hex head cap screw (20C).

## STEP 3.

Place filler flange (5) and gasket (8B) on to journal. Secure into position using socket head cap screws (5A). Tighten flange screws evenly in a star pattern. In some cases it is necessary to install a second flange also. If required, do so in the above manner.

## STEP 4.

Place wear plate (16) and gasket (8A) on to journal flange. Secure into position using socket head cap screws (16A). Tighten wear plate screws evenly in a star pattern.

## STEP 5.

Place seal ring (6) with its spherical face into the mating surface of the wear plate (16). While holding the seal ring in position, install the end cap/nipple assembly (3, 4) on to the ring bracket (20) and secure into position with four socket head cap screws (3A). As the socket head cap screws are tightened, spring force will be applied to the seal ring and the X dimension will be created. The X dimension is  $7/16'' \pm .150''$ . Make sure seal ring (6) is centered on the nipple (4). Please consult factory if the X dimension is incorrect or if the seal ring is not centered properly.

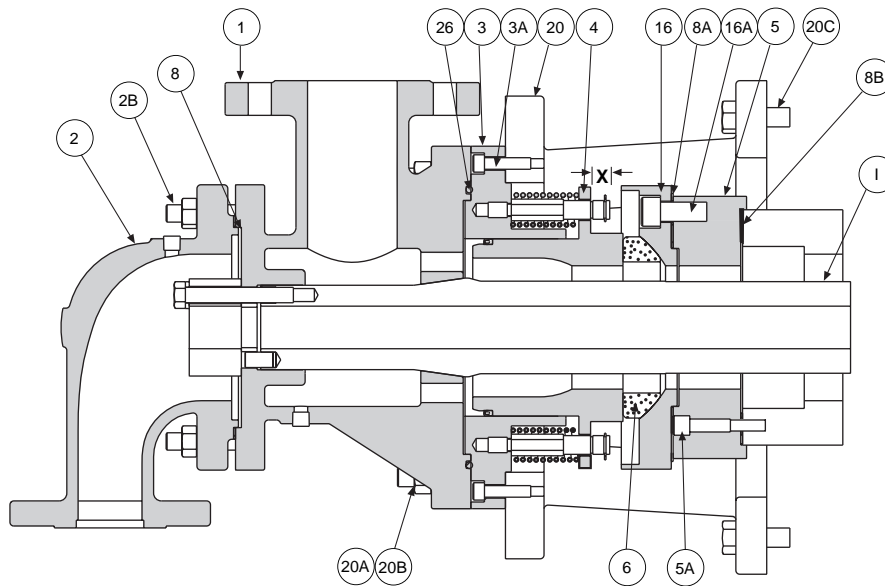
## STEP 6.

There are two options for installing the cantilever support tube (1).

Before you begin and if required, install the drive lock pin into the hole predrilled in the tapered end of the cantilever support tube, opposite the pin that is factory installed.

### Apply Never Seize to the tapered portion of the support tube.

Option 1: If there is enough clearance between the dryer hood and the journal, you can install cantilever support tube by inserting it through the partially assembled joint and down the journal bore. Leave the tapered end of the tube protruding out of the end cap approximately 7". Lubricate the o-ring (26) and place it into the o-ring groove on the joint body. Make sure the drive lock pin on the end of the cantilever support tube inside the dryer is at the 12 o'clock position.



From outside the dryer the pin location can be confirmed by putting the syphon code numbers stamped in the cantilever support tube at the 12 o'clock position. Place the body over the cantilever support tube and install the filler flange (J), lockwasher (K) and hex head cap screws (L). Lift the body and cantilever support tube into position over the studs (20A) on the ring bracket (20) and secure into position with nuts (20B). At this time the hex head cap screws (L) **must** be tightened evenly to 105 ft/lbs using a torque wrench. Place gasket (8) onto the head (2) and secure it to joint body using the hex nuts (2B).

Option 2: Lubricate the o-ring (26) and place it into the o-ring groove on the joint body. Position the body over the studs (20A) on the ring bracket (20) and secure into position with nuts (20B). From inside the dryer, insert the cantilever support tube (I), with the tapered end going in first, into the journal. With the drive lock pin in the 12 o'clock position, align the holes in the body (1) with the holes in the support tube. Install filler flange (J), lockwashers (K) and hex head cap screws (L). At this time the hex head cap screws (L) **must** be tightened evenly to 105 ft/lbs using a torque wrench. Place gasket (8) onto the head (2) and secure the head to the joint body using the hex nuts (2B).

**STEP 7.**

After either option for the cantilever support tube installation is complete, the rest of the syphon installation may be finished.

Inside the dryer, position the support bracket (E) over the end of the cantilever support tube, remove the pipe clamps (D) and set aside. Sealing the threads with pipe sealer, install the elbow (G) onto the vertical pipe (F). Slide the pickup fitting (A) onto the vertical pipe. Lubricate the o-ring (N) on the elbow/vertical pipe assembly and insert the elbow into the end of the support tube. Install the pipe clamps and secure with the lock nuts provided.

**STEP 8**

**FINAL BRACKET AND PICKUP FOOT ADJUSTMENT.**

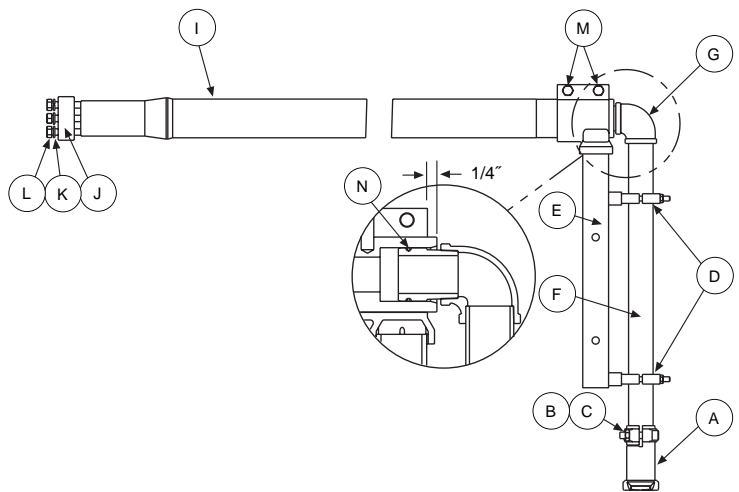
Make sure the support bracket (E) is vertical and the syphon pickup fitting is at the bottom of the dryer. The pick-up fitting **must** be pointed into the rotation of the dryer. Adjust the circular portion of the support bracket so that it

is 1/4" back from the end of the support tube. Tighten support bracket clamp bolts (M). Set the pick up fitting clearance by placing a gauge in the center of the pickup fitting (consult factory for clearance specification). Tighten the small set screw in the side of the pick-up fitting and double check the clearance. Secure into final position by tightening bolt/nut (B & C). If the desired pickup fitting clearance can not be obtained, the vertical pipe (F) can be cut off allowing for more adjustment.

**STEP 9**

Check all counter weights and make sure they will clear the syphon assembly as the dryer rotates. If necessary, the support bracket can be move away from the dryer head up to 1/4" by loosening the bolts and repositioning the bracket. Check the cantilever support tube for clearance through the journal. The cantilever support tube must have at least 3/16" clearance between its O.D. and the journal I.D.

9750-PT Syphon Assembly



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 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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