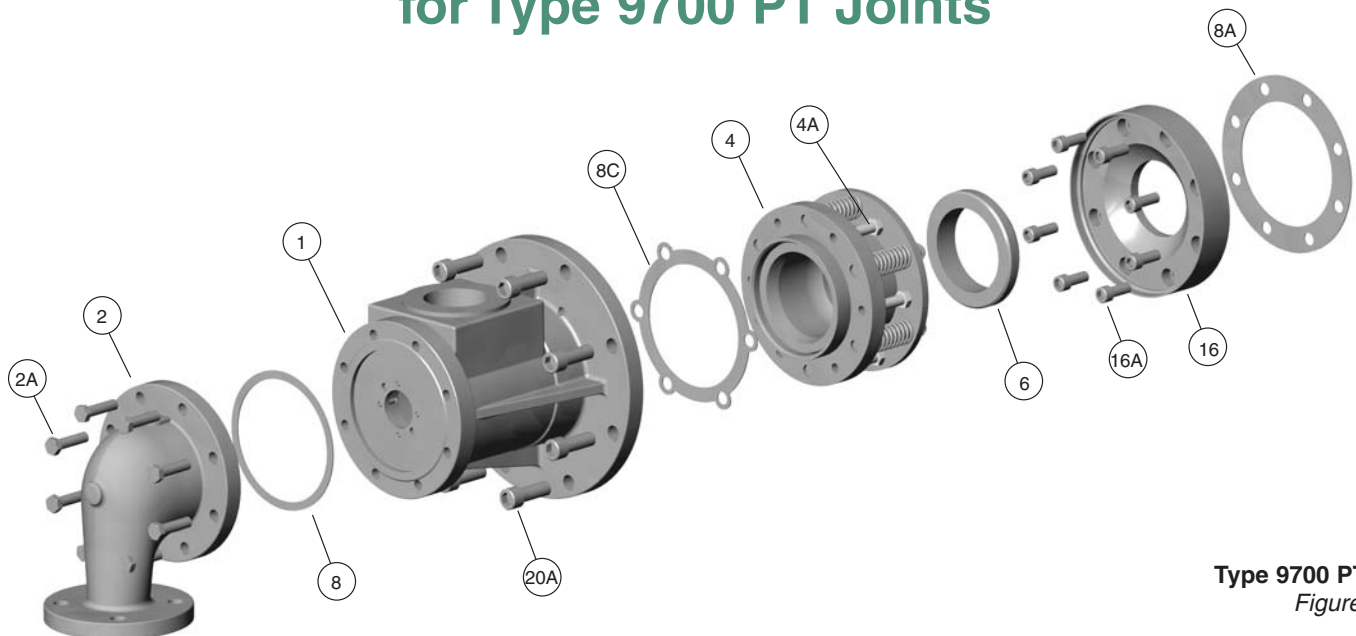


Installation Instructions for Type 9700 PT Joints



Type 9700 PTF
Figure 1

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. If you have questions, please contact your representative or Kadant Johnson.

The 9700 PT Joint is shipped partially assembled. Disassemble joint, inventory, and stage parts prior to installation.

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. (See Figure 2)

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

STEP 3. (See Figure 1)

Place wear plate (16) and gasket (8A) onto journal flange. Secure into position using socket head cap screws (16A). Tighten wear plate screws evenly in a star pattern, using the proper torque.

STEP 4.

Attach the piston assembly (4) to the body (1), using gasket (8C) and bolts (4A). Tighten bolts evenly in a star pattern, using the proper torque. Once complete, this makes up the body assembly.

STEP 5. (See Figure 2)

Two methods are used to support the rotary joint: 1) a ring bracket and 2) a ring bracket and bearing cover supplied as individual parts.

- 1. With ring bracket only.** Install ring bracket (20). Secure into position using hex head bolts (20C).

- 2. With ring bracket and bearing cover supplied as individual parts.** Cover the bearing to protect it from debris while cleaning the machine's bearing housing and apply sealer to housing. Make sure the bearing cover is clean and free of debris. Slide the bearing cover over the journal and secure into position with the proper size bolts. Install ring bracket (20) onto bearing cover and secure into position using bolts (20C). Tighten bolts to the proper torque.

STEP 6.

Clean the spherical face of the wear plate (16), the flat face of the nipple (4), and the mating surfaces of the seal ring (6). These sealing surfaces must be free of debris, oil, or other contaminants.

STEP 7. (See Figure 2)

There are two options for installing the cantilever support tube (H). In both options, the support tube must be installed so that the block welded on the end of the support tube will be in the 6 o'clock position while the vertical indexing slot milled into the opposite end will be in the 12 o'clock position. The large hollow bolt (J) must be removed and the threads lubricated with never seize.

Option 1. If there is enough clearance between the dryer hood and the journal, install the cantilever support tube (H) with body assembly (1) first. Apply never seize to the tapered portion on the cantilever support tube. From the piston side install the support tube (H) into the body with tapered end towards the piston. Align the pins (10) in the body with the support tube indexing slots and push into position, making sure the block on the opposite end of the support tube is at the 6 o'clock position. Install the hollow bolt (J), while positioning two bent tabs of the lockwasher (I) into the holes of the body (1), and tighten the hollow bolt by hand. Place the seal ring (6) over the block end of the support tube (H) and slide it down the support tube until the flat surface contacts the flat surface of the nipple (4). Insert the support tube (H) through the journal bore. Place the support tube/joint assembly onto the ring bracket and secure into position with eight bolts (20A). Tighten bolts using a star pattern, using the proper torque.

Option 2. While holding the seal ring (6) in the spherical face of the wear plate (16), install the joint assembly onto the ring bracket (20)

and secure into position with eight socket head cap screws (20A). Tighten in a star pattern, using the proper torque. Apply never seize to the tapered portion on the cantilever support tube (H). From inside the dryer, insert the cantilever support tube, with the tapered end going into the journal first. Align the pins (10) in the body with the support tube indexing slots and push into position, making sure the block on the end of the support tube is at the 6 o'clock position. Install the hollow bolt (J), while positioning two bent tabs of the lockwasher (I) into the holes of the body (1), and tighten the hollow bolt by hand.

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 29 (+2/-4) mm. 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.

Tighten the hollow bolt (J) to 200 Nm. Bend two lockwasher (I) tabs over the bolt flats in a manner that will prevent the hollow bolt from loosening.

STEP 8. From inside the dryer

Lubricate the o-ring (K) with silicone o-ring lubricant. Slide pick-up fitting (A) onto the vertical syphon pipe (F). Slide the pick-up fitting, support bracket, and vertical pipe, (A, E, F) assembly into the support tube until the end of the vertical pipe slides through the o-ring (K) and the support bracket fits over the end of the support tube. Secure the vertical syphon pipe to the support bracket using clamps (D) and nuts provided.

STEP 9.

Final Bracket and Pick-up Foot Adjustment

Make sure the support bracket (E) is vertical and the syphon pick-up fitting (A) is at the bottom of the dryer. Locate the pick-up fitting opening opposite of the dryer rotation direction. Adjust and tighten the clamps (G) so that the dimension Y is about 68 mm, or if the dryer has groove in the shell, center the pick-up foot in the dryer groove. Set the pick-up fitting clearance by placing a gauge in the center of the pick-up fitting (consult factory for clearance specification). Secure into final position by tightening bolt/nut (B & C). If the desired pick-up fitting clearance can not be obtained, please consult the factory.

STEP 10.

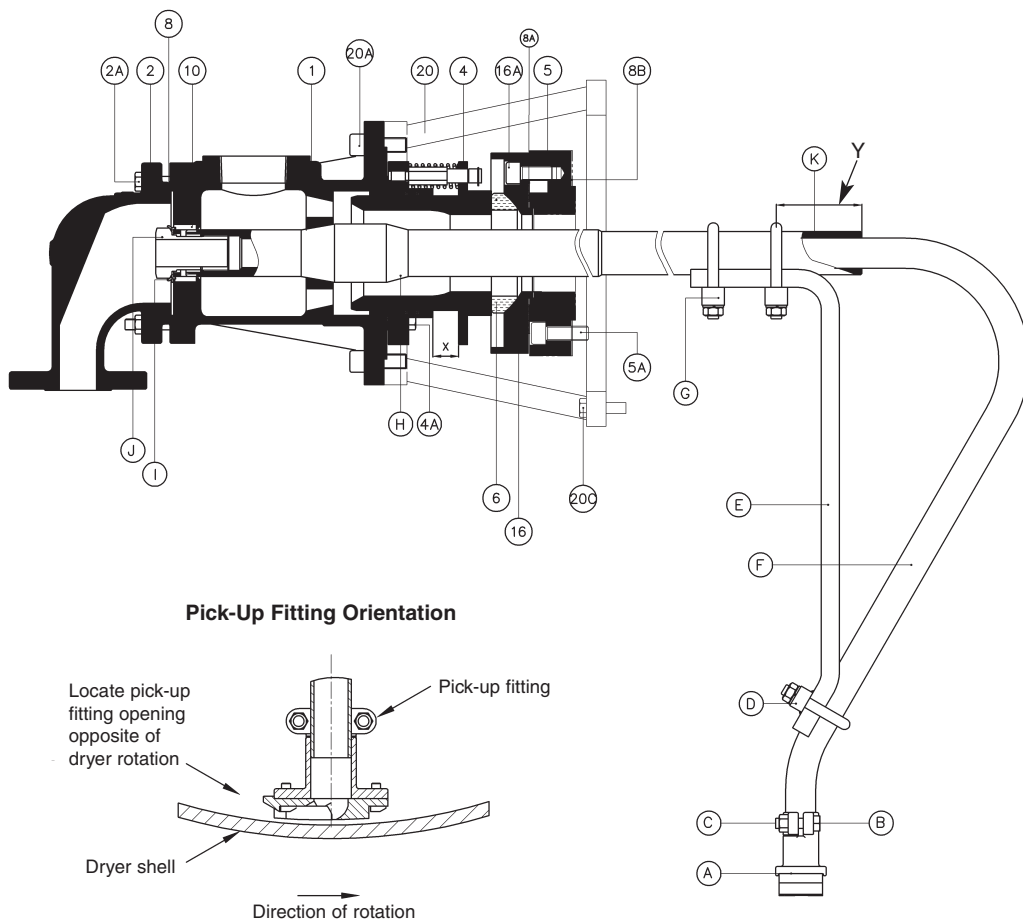
Check all counter weights and make sure they clear the syphon assembly as the dryer rotates. If necessary, the support bracket and pipe assembly can be adjusted by loosening support bracket clamp bolts and repositioning the bracket. But be sure that the dimension 'Y' is located from 46 to 146 mm for OD 1500 mm dryer and from 36 to 136 mm for OD 1800 mm dryer.

Check the cantilever support tube for clearance through the journal. The cantilever support tube must have at least 3/16" (5 mm) clearance between its O.D. and the journal I.D.

STEP 11.

Place gasket (8) onto head (2). Install head onto body (1) and secure into position with head bolts (2A). Tighten in a star pattern, using the proper torque. The Kadant Johnson rotary joint is now ready to accept piping.

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 9700 PTF / CSS
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.

