Repair Instructions for the 91050 PT™ Rotary Joint

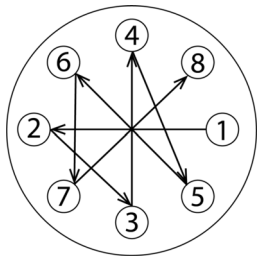
fluidhandling.kadant.com/en/knowledge-center/installation-and-repair-instructions/repair-instructions-for-the-91050-pt-rotary-joint

Effective: May 1, 2022

Introduction

Read all of the instructions before proceeding.

Refer to Kadant Johnson assembly drawing for part identification and to drawing A37640 for torque specifications. For easy identification, parts used in individual steps are often accompanied with their position in the assembly drawing [e.g. gasket (8B)]. Tighten all fasteners in a star pattern. Certified drawings are available upon request. Dimensions are for reference only and subject to change.



Safety

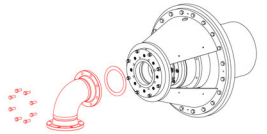
This safety symbol alerts you to risk of death or injury if the instructions are not followed. In all steps, death or injury may result if the machine is not de-energized, depressurized, cooled, and stopped. Death or injury may occur if the product is operated with a fluid type or at a pressure, temperature, or speed that do not meet its specifications. Death or injury may occur if heavy parts and pinch hazards are not handled properly. Follow your company's safety procedures.

Step 1

Disconnect the piping. Remove the head (2).

Note: If the ring bracket (20) is equipped with a shroud or viewing ports, remove and set aside.

⚠ Equipment must be cool and free of pressure.

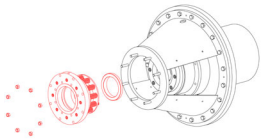


Step 2

Remove the body flange (5), which is attached to the end cap assembly. With assistance, capture the seal ring (6).

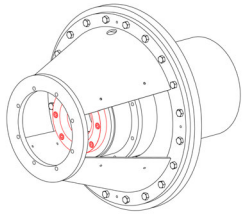
⚠ Spring force present during body flange removal.

⚠ Heavy object. Rigging or hoist is recommended for removal.



Step 3

Inspect the sealing surface of the wear plate. If it is damaged, remove and install a new one using a new gasket.

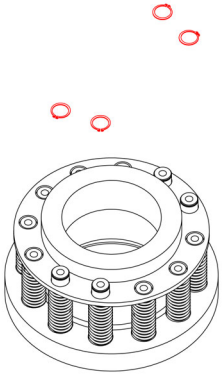


Step 4 - End Cap Assembly Repair

There are two types of repair kits. If using the preassembled end cap assembly kit, proceed to step 7.

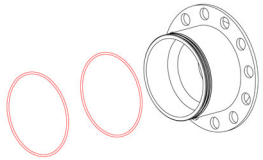
Place the endcap assembly in a press with the seal ring surface facing up. Compress the nipple and remove the four retaining rings. Release the press and separate the nipple from the end cap.

⚠ Spring force present during nipple removal.



Step 5

Remove the O-rings from the nipple and discard. Inspect the grooves and the seal ring sealing surface. Replace if damaged. Lubricate and install new O-rings.



Step 6

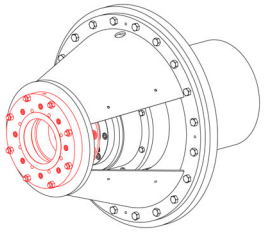
Inspect and clean the end cap (3), body flange (5), torque pins (14), guide pins (14A), and springs (7). Replace any damaged parts. If the end cap or body flange is damaged, they may be separated. Reinstall using a new gasket (8A).

Step 7 - Installation

Clean the mating surfaces of the wear plate, new seal ring, and nipple. With assistance, install the seal ring followed by the body flange with end cap assembly.

Important: After installating the end cap assembly, check that the "X" dimension matches the Kadant Johnson drawing. If it is incorrect, please contact Kadant Johnson.

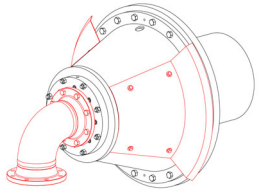
⚠ Heavy object. Rigging or hoist is recommended for installation.



Step 8

Install the head using a new gasket.

Note: Reinstall the viewing port covers or shroud if removed previously.



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 the 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.

Kadant Johnson rotary joints and accessories could be subject to European Pressure Equipment Directive 2014/68/EU (PED). Modifications or changes to rotary joints and/or accessories are only permitted upon approval of Kadant Johnson. Only genuine Kadant parts and original accessories will ensure the safety of these assemblies. The use of other than original parts voids the warranty and will lead to forfeiture of the declaration of conformity and will invalidate any liability for damages cause thereby.