Replacement of Disc and Packing for CV3S-1000 Series Composition Disc Valves

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

Please refer to the assembly drawings for part identification. If you have further questions, please contact your representative or Kadant Johnson.

While performing the following steps you will want to isolate the valve from the system, i.e. disconnect the air from the cylinder and shut off all services associated with the valve. If convenient, remove the valve from the piping and take it to a vise or work bench.

In order to remove the lower cap it will be necessary to disconnect that portion of the piping.

COMPOSITION DISC REPLACEMENT

DISASSEMBLY

STEP 1. Remove lower cap (2).

STEP 2. Loosen packing nut (4) and upper hex nut (16) located next to coupling (8) and unscrew valve stem (14).

The stem and disc holder assembly can be removed through the opening created by removing the lower cap.

STEP 3. Loosen lower hex nut (16) and unscrew the valve stem from the disc holder. Replace composition disc and secure in place by reversing the preceding step.

STEP 4. To replace the other disc loosen the three legged guide nut and the disc will become accessible. When reassembling the three legged nut stake it to the threads with a center punch.

With the valve stem removed from the valve it is an excellent time to replace the packing.

PACKING REPLACEMENT

STEP 5. Remove packing nut (4) and old packing. New preformed packing rings are available from the factory for ease of replacement. Loosely reinstall the packing nut.

Before reassembling the valve inspect the valve seats for pits or damage. If replacement is necessary:

SEAT REPLACEMENT

STEP 6. Press out old seat (9).

STEP 7. Press in new valve seat using a sealant such as hard setting Permatex.

For best results, it is suggested that the valve be returned to the factory for seat replacement.

REASSEMBLY

STEP 8. Insert the valve stem into the lower opening of the valve body. The new packing will offer resistance and by forcing the stem up through it will shear pieces of packing off. It is best to screw the stem through the packing by turning the stem.

STEP 9. Thread hex nut (16) onto the end of the stem and then thread the stem into coupling (8).

STEP 10. Make sure the air cylinder push rod is fully retracted into the cylinder. Continue threading the stem into the coupling, hold the coupling with a wrench. Ultimately the disc will contact the upper valve seat. When this occurs, continue to turn the valve stem into the coupling five turns. This will pull the cylinder push rod back out of its housing approximately 3/16".

STEP 11. Tighten hex nut (16) against the cylinder coupling (8).

STEP 12. Replace lower cap gasket (6) and reinstall the cap.

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.

KADANT

AN Accent on Innovation

www.kadant.com