DISASSEMBLY & ASSEMBLY PARALLEL SLIDE GATE VALVE

≥ 4” AND ≥ 900 LBS.
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1. Caution, before any attempt is made to disassemble, verify that the valve is sufficiently cooled down, depressurised, isolated from system pressure and secured against accidental pressurisation.

2. For gearbox / motor operated valves remove the gearbox / actuator (019), by unscrewing the bolts from the lower side of the adapter plate (127) and rotating the gearbox / actuator (019) clockwise to unscrew it from the stem (109).

3. Unscrew bolts (01C) from the yoke flange (126).

4. Loosen the bolts (01J-02J) from the guiding plate (119) and remove it. Unscrew the yoke bars (125) out of the valve body (101). Unscrew gland bolting/nuts (01B-02B) and remove them. Remove the gland flange (123) and packing follower (122).

5. Unscrew the bolts (01A-02A) and (01D-02D from the retaining plate (118) and remove it from the body (101), while securing the stem (109) in place in order to prevent it from damaging.

6. After the retaining plate (118) has been removed, lower the stem (109) and bonnet (102) down into the body (101). Now remove the retainer (117) by tapping a punch tool through the designated holes provided in the bonnet area of the valve body (101).

7. Remove the gasket ring (114) and the gasket (003), together with the bonnet (102) and stem (109), by pulling the stem (109) out of the valve body (101).

8. Dis-assemble the “disc assembly” by removing the disc holder (113) from the stem (109). Afterwards remove the disc guide (142) and slide both discs (105) from the disc holder (113). It is important to mark the disc position (upstream / downstream).

INSPECTION PRIOR TO RE-ASSEMBLY

1. Thoroughly clean all parts with solvent and a clean cloth.

2. Examine the following parts for signs of damage, i.e. pitting, erosion or scratches:
   A. SEATS (104) - Sealing surface
   B. STEM (109) - Packing area
   C. DISCS (105) - Sealing surface
   D. BONNET (102) – Sealing surface

3. Lubricate all threaded parts with high temperature grease, i.e. molykote HCS.

4. Install the first disc (105) into the disc holder (113), install the disc pin(s) (140) and springs (141) and place them into the corresponding socket located in the first disc (105). Afterwards place the second disc (105), now install the disc guide (142) to finalise the complete disc assembly.

5. Slide the complete disc assembly (113) onto the stem (109).

6. Place the bonnet (102) over the stem (109) and lower it into the valve body (101). Install a new gasket (003) into the valve body (101), with the gasket ring (114) on top of it.

7. Insert the retainer (117) in the designated groove. Pull the stem (109) towards the top of the valve and install the retainer ring (118) by placing it on top of the bonnet (102). Install the bolts (01D-02D) and (01A-02A) onto the body (101) and tighten them.

8. Place packing ring (121) and packing (004) over the stem (109) into the bonnet (102). Place the packing follower (122) over the stem (109). Place the gland flange (123) over the stem (109) and install the gland bolts (01B-02B). Evenly tighten the nuts (02B) preventing contact between the stem (109) & packing follower (122).

9. Screw the yoke bars (125) into the valve body (101). Place the yoke flange (119) on the designated area located at the stem (109). Secure the guiding plate (119) with the bolts (01J-02J).

10. Place the yoke flange (126) on top of the yoke bars (125) and secure them with the hexagon socket bolts (01C).

11. Install the adapter plate (127) and finally install the gearbox / actuator (019) by rotating it counter clockwise.

12. In case of actuator operated valves, make sure to reset the limit switches.

13. Pressurise the system and check the packing (004) and bonnet gasket (003) for signs of leakage.

14. In case leakage is observed through the packing (004), tighten the nuts (02B) of the gland bolts (01B) carefully until the leaking stops. In case leakage through the bonnet (102) is observed, tighten the bolts (01A-02A) located on top of the retaining plate (118).

15. The valve is now ready for use.

IN CASE SEVERE DAMAGE IS OBSERVED, USE REPLACEMENT PARTS INSTEAD!

Important:
After starting up the system, once the valve has reached its working temperature and pressure, it is recommended to tighten the bolts (01A-02A) into the retaining ring (118) to force the bonnet (102) into the gasket (003) for optimum sealing.

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