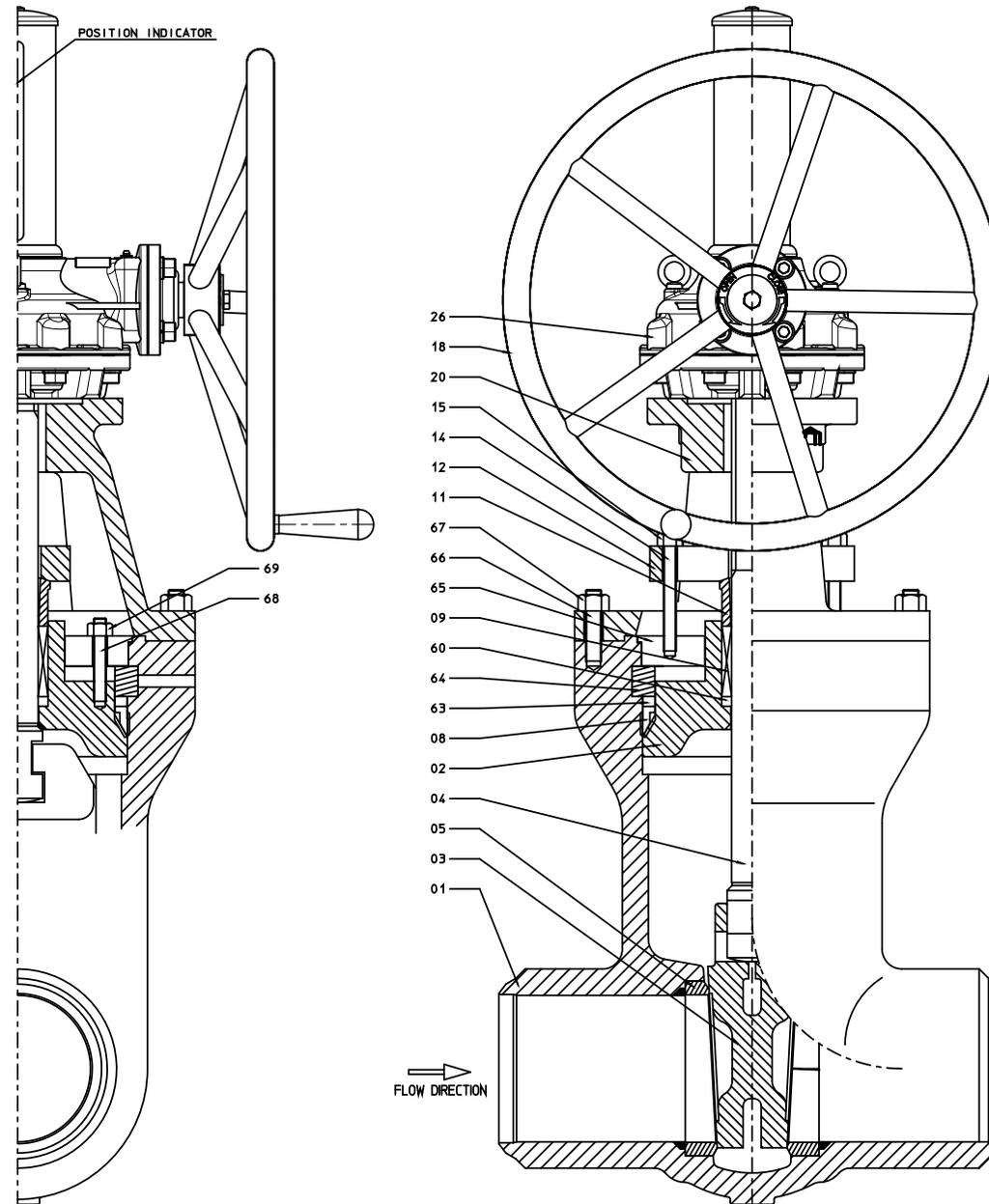


DISASSEMBLY & ASSEMBLY LARGE BORE  
PRESSURE SEALED BONNET GATE VALVE



**DISASSEMBLY & ASSEMBLY LARGE BORE PRESSURE SEALED BONNET GATE VALVE**

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. Unscrew the gland bolting (14) by removing the nuts (15).
3. In case the valve is equipped with a gearbox or actuator (26), remove it from the valve by loosening the bolting from below the top flange (20) and rotate the gearbox clockwise to remove it from the stem (04).
4. Remove the bolting (68/69) and unscrew the nuts (67), now remove the yoke (20), gland flange (12) and the retaining plate (65) from the valve body (01).
5. Lower the bonnet (02) into the valve body (01) and remove the segmental ring (64), by tapping a punch tool through the designated disassembly holes provided in the bonnet area of the valve body (01).
6. Remove the bonnet (02) gasket ring (63) and gasket (08), together with the stem (04) and wedge (03), by pulling the stem (04) out of the valve body (01) using a rope or sling to hoist these parts. The use of chains is prohibited.
7. Disconnect the wedge (03) from the stem (04) by sliding it off the T-lock construction.
8. Remove the gland (11) from the bonnet (02) and slide the stem (04) down out of the stuffing box whilst preventing the (integral) backseat (02) from damaging.
9. Remove the packing (09) and packing ring (60) from the stuffing box.

6. Place the segmental ring (64) in the designated groove provided in the valve body (01). Make sure that there is no split between two segments placed in front of a disassembly hole.
7. Install the retaining ring (65) and insert bonnet bolting (68) and tighten the nuts (69) in a star pattern, torque the nuts (69) to specification, applicable torque values are given in our IOM.
8. Install the packing ring (60) followed by a replacement packing (09) and the gland (11) on top of it.
9. Place the yoke (20) together with the gland flange (12) over the stem (04) and on top of the valve body (01) and tighten the nuts (67).
10. Now tighten the gland bolting (14-15).
11. In case the valve is equipped with a gearbox or actuator (26), rotate it counter clockwise on the stem (04) and install the bolting through the yoke flange (20).
12. Pressurise the system and inspect the valve visually for signs of leakage after start-up.
13. In case leakage is observed, tighten the bonnet nuts (69) and / or the gland nuts (15) until the leaking stops.
14. The valve is now ready for use.

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. SEAT (05) – Sealing surface
- B. WEDGE (03) – Sealing surface
- C. STEM (04) – Packing and backseat area
- D. BONNET (02) – Sealing and backseat surface



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

3. Insert the stem (04) from the bottom through the bonnet (02) whilst preventing the (integral) backseat from damaging.
4. Connect the wedge (03) to the T-lock located on the stem (04).
5. Insert the bonnet (02) together with the stem (04) and wedge (03) inside the valve body (01) and install a replacement gasket (08) over the bonnet (02) followed by the gasket ring (63).



**Important:**

**After starting up the system, once the valve has reached its working temperature and pressure, it is recommended to tighten the bonnet nuts (69) to provide optimum sealing.**