Disassembly & Assembly Large Bore Bolted Bonnet Swing Check 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 and remove the bonnet bolting (06) by loosening the nuts (07).
3. Remove the bonnet (02) using the provided lifting eye (18).
4. Unscrew the plug bolt (14) from the valve body (01) and remove the hinge pin (13) while securing the disc assembly (04) and prevent it from damaging.
5. Remove the disc assembly (03) from the valve body (01).
6. Remove the cotter pin (26) and unscrew the nut (17) to remove the disc (03) from the hinge arm (04).

**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. DISC (03) – Sealing surface
   - C. HINGE PIN (13) – Roundness of the pin
   - D. HINGE ARM (04) – Roundness of the hole
3. Assemble the disc (03) and the hinge arm (04) and secure it with the ring (25), nut (17) and cotter pin (26).
4. Place the disc assembly (03) in the valve body (01) and place it on the seat (05).
5. Align the disc assembly (03) in between the hinge bore located in the valve body (01) and insert the hinge pin (13).
6. Place a new plug gasket (09) in the plug hole and screw the plug bolt (14) in the valve body (01).
7. Tighten the plug bolt (14).
8. Place a new bonnet gasket (08) and place the bonnet (02) on the top flange of the valve body (01).
9. Insert all bonnet bolting (06) and tighten the nuts (07) in a star pattern.
10. Torque the nuts (07) to specification, applicable torque values are given in our IOM.
11. Pressurise the system and inspect the valve visually for signs of leakage after start-up.
12. In case leakage is observed, tighten the nuts (07) and / or the plug bolt (14) until the leaking stops.
13. 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 nuts (07) and plug bolt (14) to provide optimum sealing.