



DISASSEMBLY & ASSEMBLY SWING CHECK VALVE $\geq 10''$ AND ≥ 900 LBS.

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 nuts (02A) from the retaining plate (118) and remove the retaining plate (118) from the valve body (101).
3. Lower the bonnet (102) into the valve body (101) and remove the segmental ring (117), by tapping a punch tool through the designated disassembly holes provided in the bonnet area of the valve body (101).
4. Remove the gasket ring (114), gasket (003-1) and the bonnet (102) from the valve body (101).
5. Loosen the plug nut (181) approximately 10mm and gently tap the plug bolt (183) into the valve body (101). Now unscrew the plug bolt retainer (182) by loosening the bolting (01W-02W) and remove it together with the plug bolt (183) and the plug bolt gasket (003-2) from the valve body (101).
6. Repeat step 5 for the opposite plug bolt (183) as well.
7. Gently tap the dowel pin (195) from the disc arm (180) in order to separate the hinge pin (190) from the disc arm (180).
8. Now gently tap the hinge pin (190) from the valve body. Ensure the disc (105) is protected from damaging whilst removing the hinge pin (190).
9. Remove the complete disc assembly (105) together with the disc arm (180) from the valve body (101).
10. Remove the collar pin (193) and unscrew the disc nut (189) to remove the disc (105) from the disc arm (180).

INSPECTION PRIOR TO RE-ASSEMBLY

1. Thoroughly clean all parts with solvent and a clean cloth.
2. Examine the following parts signs of damage, i.e. pitting, erosion or scratches:
 - A. SEAT (104) - Sealing surface
 - B. DISC (105) - Sealing surface
 - C. BONNET (102) - Sealing surface
 - D. BEARING BLOCK (185) – Bore surface
 - E. HINGE PIN (190) – Hinge surface
3. Lubricate all threaded parts with high temperature grease, i.e. molykote HCS.
4. Place the disc (105) into the disc arm (180) and secure it with the disc nut (189), washer (188) and collar pin (193).
5. Insert the complete disc assembly (105) into the valve body (101). Install the hinge pin (190) in to the valve body (101) and through the disc arm (180).
6. Gently tap the dowel pin (195) into the disc arm (180) and through the hinge pin (190) in order to secure the hinge pin (190) to the disc arm (180).
7. Insert the bonnet (102) into the valve body (101).
8. Install a **NEW** gasket (003-1) and insert the gasket ring (114) on top of it.
9. Place the segmental ring (117) into the valve body (101). Make sure the segments are located at such place, there is a segment placed in front of each disassembly hole.
10. Insert the bolts (01A) through the retaining plate (118). Place the retaining plate (118) on top of the valve body (101). Screw the bolts (01A) into the bonnet (102) and place the nuts (02A).
11. Tighten the nuts (02A) to force the bonnet (102) into the gasket (003-1).
12. Install both plug bolt(s) (183) in the valve body (101) and insert **NEW** plug gasket(s) (003-2). Now screw the plug bolt retainer(s) (182) in place and screw the plug nut(s) (181) to the plug bolt(s) (183).
13. Pressurise the system and check both the bonnet (102) and the plug bolt(s) (183) for signs of leakage.
14. In case leakage of the bonnet (102) is observed, tighten the nuts (02A). In case leakage of the plug bolt(s) (183) is observed, tighten the plug nuts (181).
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 nuts (02A) / (181) to force the bonnet (102) / plug bolts (183) into the gasket (003-1 & 003-2) for optimum sealing.