1.0 Scope

This procedure details the requirements for proper assembly of the Steel Mains Compact Dismantling joint.

2.0 References

2.1 Steel Mains Compact Dismantling Joint Data Sheet
2.2 Steel Mains Tender drawing – series 196
2.3 https://www.youtube.com/watch?v=y4leUBrFBrw

Note: these references are required for the recommended and maximum installed length for the dismantling joint. If in doubt contact Steel Mains for conformation of these lengths.

3.0 Assembly Procedure

3.1 Make sure that the bolt holes in the valve and the adjacent flange are aligned in the correct orientation. So that the tie bolts can be inserted.
3.2 Ensure that the distance between the flange face and the valve face are within the effective range of the dismantling joint.

3.3 Place the gasket onto the face of the pipe flange and align it to the holes in the flange. Use suitable ties through the holes in the flange and the gasket at 12 o’clock, 3 o’clock and 9 o’clock positions to hold it in position.
3.4 Place the aluminium spacer tubes between the flange and the valve at the 4 o'clock position and feed the tie bolts through the flange hole and the tube and then through the hole in the valve flange.

3.5 Install a washer and nut on either end of the tie bolt and tighten firmly with a spanner.
3.6 Repeat this procedure at the 8 o’clock position. When both of these lower spacers and bolts have been installed, they will act as a support for the dismantling joint.
3.7 Lower the dismantling joint down between the valve and the flange until the two bolts and spacer tubes support it.

3.8 Insert bolts at the 2 o’clock and 10 o’clock position and fit nuts and washers. The temporary ties used to hold the gasket in place can now be removed.

3.9 The ties holding the DJ together for transport can also be cut and removed.
3.10 Progressively turn the compression bolts in an anticlockwise direction to expand the DJ towards the mating flange. Continue until solid contact is made between the pipe flange and the valve. Use a star pattern when the contact becomes firm. Torque on the compression bolts should be at least 50 Nm and no gap should be evident between the DJ and the valve body and the two abutting flanges of the DJ itself. This ensures that all the rubber sealing components are sufficiently compressed and there is some compression of the pipe flange gasket.
3.11 Install all the remaining tie bolts.

3.12 Commence tightening procedures for compressed fibre gasket joints on the nuts on the pipe flange end.

3.13 Test the joint for leaks and tighten flange bolts as required.