Assembly and disassembly instructions for MeiStream 40…150

Tools required:

Size 3 Allen key with ball end
Size 4 Allen key with ball end
Size 10 Allen key

Auxiliary materials:

Non-toxic grease
Exploded view: MeiStream 40…150
Disassembly of MeiStream DN 40…150

01. Unlock the aluminium seal from screw (24)
02. Remove the screws (23) and (24) from the meter body (25)
03. Remove the measuring insert from the meter body
04. Unlatch the lid (1) from the hinge of the sliding ring (2)
05. If there is one, remove the wire seal from the sliding ring (2)
06. Remove the sealing plug (3) from the sliding ring (2) by quarrying it out
   The sealing plug is damaged when removed and has to be replaced when assembled again
07. Open the cover plate of the OD (4) on the left side and remove it. Hold the head ring (6) and
   move the sliding ring (2) all the way to the right. Remove the sliding ring by pulling it towards
   the top.
08. Carefully push the six clips of the head ring (6) towards the outside by about 1mm by using a
    screwdriver while simultaneously pulling the head ring towards the top
09. Remove the register (7) and the centre ring (8) from of the head ring (6) by pushing them
    towards the bottom
10. Unlock and remove the 4 screws (18) from the measuring chamber
11. Remove the measuring chamber from the cover flange by pulling it towards the bottom (9)
12. Remove the adjusting bolt (13) by pushing it from the top towards the bottom of the cover
    flange (9)
13. Remove the adjusting bolt (13) from the adjusting bulkhead (15)
14. Carefully remove the O-ring (14) from the adjusting bolt (13)
   The edges of the hub must not be damaged in order to prevent a leakage.
   Attention! The O-ring must not be reused in order to prevent a leakage.
15. Remove the magnet coupling (11) from the bearing pin of the cage (19)
16. Remove the lip-seal (22) from the cage (19) (does not apply to DN 125)
17. Turn the nose cone (16) anti-clockwise against the cage (19) in order to unlatch it.
   A detent at the upper part has to be overcome. Afterwards, the nose cone can be removed
   from the cage by pulling it towards the front
18. Remove the turbine (17) from the cage (19)
19. Remove the gear (12) from the transmission shaft (21)
20. Remove the protection tube from the cage by pushing it from the bottom and take it off from
    the top
21. Remove the transmission shaft
Assembly of MeiStream DN 40…150

01. Insert the transmission shaft (21) with its long ending into the left hole of the cage (19) and insert the short ending of it into the bearing

02. Slide the protection tube (20) from the top over the transmission shaft (21) into the cage (19). The hub of the protection tube has to latch into the slot of the cage.

03. Fit the gear (12) to the transmission shaft (21) making sure it seats properly

04. Take the turbine (17) at the worm gear and fit it into the nose cone (16)

05. Insert the nose cone (16) with the turbine (17) into the cage (19) so that the plate of the nose cone lies at the upper collar of the cage. Turn clockwise to lock
   Note: The shaft of the turbine has to fit into the bearing of the cage. When locking there should be a click when the nose cone latches in

06. Fit the magnetic coupling (11) to the bearing pin of the cage (19)

07. Fit the lip-seal (12) to the cage and insert the ends of the seal into the slot on the cage to secure it

08. Lightly lubricate the O-ring (14) and insert into the slot of the adjusting screw (13)

09. Screw the adjusting bolt (13) into the thread of the adjusting bulkhead (15)

10. Push the adjusting bolt from the bottom into the hole of the cover flange (9)

11. Fit the cage which has already been assembled to the cover flange
   Note: the adjusting bulkhead has to fit into the slot of the cage

12. Fix the cage (19) to the cover flange (9) by using the 4 screws (18)
   Note: a torque of about 3 Nm

13. Lightly lubricate the O-ring (10) and fit into the slot of the cover flange (9)

14. Insert the measuring insert which has already been assembled into the meter body (25)
   Note: the arrows on the cover flange and on the meter body have to point into the same direction

15. Screw in the screws (23) and (24) and tighten them

16. Fit a aluminium seal to screw (24)

17. In order to adjust the meter in the testing station, put the register (7) upon the cover flange and adjust it by turning the adjusting screw
   Note: the adjusting is to be done at high flow rates (Qmax / Q4)

18. Insert the register (7) with the glass side first into the head ring (6)
   Note: the anti-twist device in the glass has to fit into the slot of the head ring

19. Insert the centre ring (8) with its inscription “1234” pointing towards the bottom into the head ring (6)
   Note: the 3 hubs on the outside of the centre ring have to fit into the slots on the inside of the head ring

20. Latch all clips

21. Fit the sliding ring (2) from the top over the head device and turn clockwise all the way

22. Fit the cover plate (4) into the Opto window on the right side of the sliding ring and latch it in on the left side

23. Fit the sealing plug (3) into the hole of the sliding ring (2) below the hinge of the lid and push it all the way in

24. Latch the lid (1) into the hinge of the sliding ring (2)