

Service guide

Non-return valve

VCM 10 / VCM 13

Disassembling and Assembling



The Service guide covers the instruction for disassembling and assembling the VCM 10 and VCM 13 Non-return valve.

IMPORTANT:

It is essential that the VCM 10 and VCM 13 are serviced in conditions of absolute cleanliness.

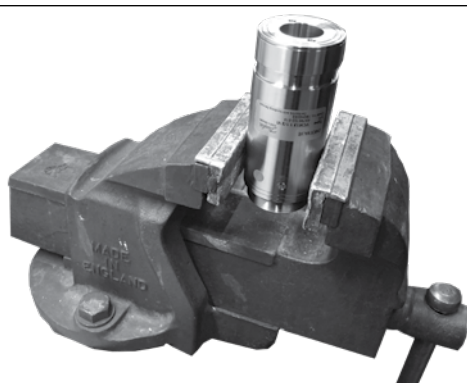
WARNING:

Do not use silicone when assembling the VCM 10 and VCM 13. Do not reuse disassembled O-rings; they might be damaged. Always use new O-rings.

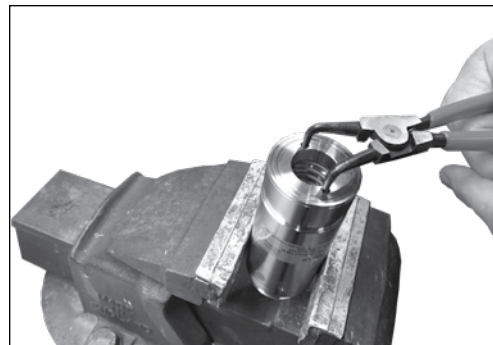
For a better understanding of the VCM 10 and VCM 13, please see the sectional view.

Tools needed:

- Snap ring pliers
- Screwdriver

Disassembling

1. Mount the VCM10 / VCM 13 into a vice with aluminum trays.



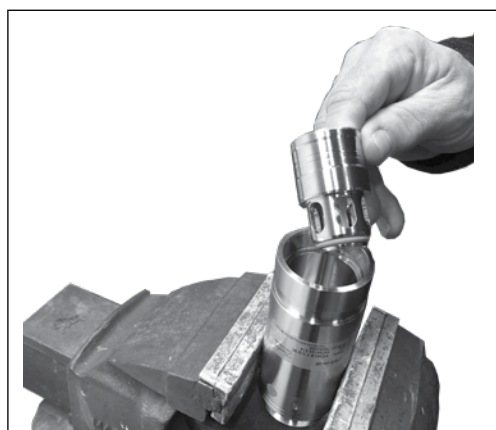
2. Turn the nut CCW with snap ring pliers.



3. Remove the nut.



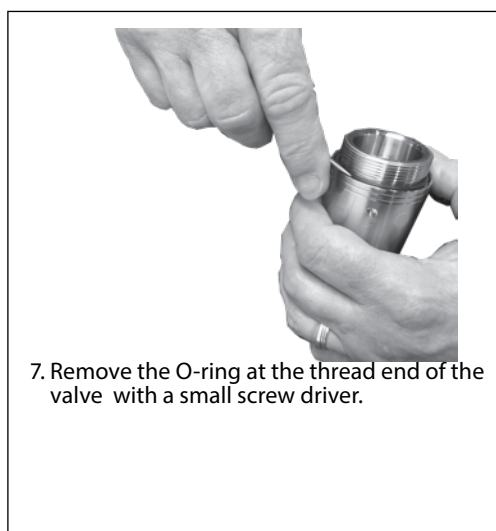
4. Remove the spring.



5. Remove the valve cone.



6. Remove the O-ring at the cone with a small screw driver.



7. Remove the O-ring at the thread end of the valve with a small screw driver.

Assembling

1. Lubrication:

- To prevent seizing-up, lubricate threads with PTFE lubrication type.
- O-ring inside VCM 10 / VCM 13 may be lubricated only with clean filtered water.
- O-rings at the thread end must be lubricated.
- It is important to lubricate ALL parts to be assembled with clean filtered water.



2. Mount the lubricated O-ring at the thread end of the valve.



3. Mount the water lubricated O-ring on the cone. Ensure the O-ring is pushed fully into the O-ring groove.



4. Mount the cone.



5. Mount the spring onto the cone.



6. Lubricate the threads of the nut.



7. Screw in the nut.



8. Tighten the nut with a snap ring pliers.

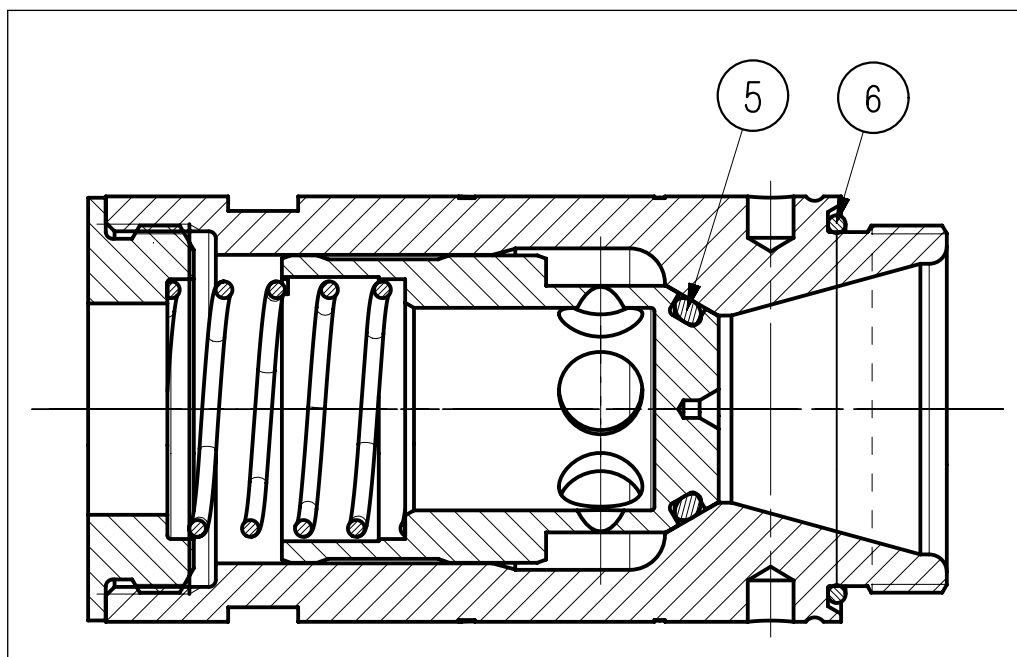


9. Lubricate the threads at the valve end.

Testing valve function:

Verify free movement of valve cone.

Spare part list and sectional drawing



Spare part list

Pos.	Qty.	Designation	Material	Seal set 180H4003
5	1	O-ring 19.20 x 3.00	NBR	x
6	1	O-ring 40.00 x 2.00	NBR	x

Service interval

4 years for inspection and exchanging O-rings as needed.

Danfoss A/S
High Pressure Pumps
Nordborgvej 81
DK-6430 Nordborg
Denmark

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without consequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.