

Maintenance Instruction for double-acting pneumatic cylinder type EC

This maintenance instruction is an instruction for maintenance on the double-acting pneumatic cylinders type EC. The instruction shall be available for the persons responsible for service and maintenance on Stafsjö's knife gate valves and EC pneumatic cylinders.

The following procedures are described:

- A – Disassembling instructions**
- B – Spare parts kits**
- C – Assembling instructions**
- D – Operational tests**



Each knife gate valve and EC pneumatic cylinder is identified with a label containing the article number and serial number. When corresponding with Stafsjö Valves AB or your local representative, please have these numbers available.

Stafsjö Valves AB does not accept any responsibility for the product if installation, service and maintenance on the EC pneumatic cylinders are not performed according to this instruction or according to Stafsjö's installation and service instruction. Nor does Stafsjö Valves AB accept any responsibility for the product if any significant change has been done to the product.

For more detailed information on the technical data of the Stafsjö knife gate valves, actuators or accessories, please see data sheets on www.stafsjo.com, or contact Stafsjö Valves AB or your local representative.

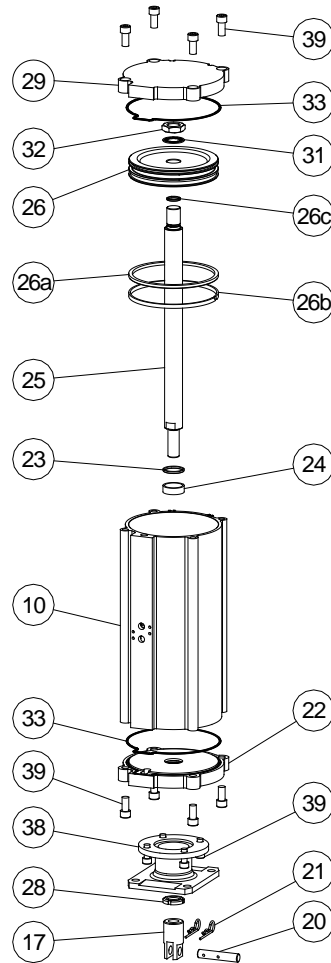


Further information on installation, service, assembling/disassembling the EC actuator to/from Stafsjö's knife gate valves is described in Stafsjö's installation and service instruction, which is available on www.stafsjo.com.

A. Disassembling instructions

1. Disassemble the EC double-acting pneumatic cylinder from the knife gate valve.

To disassemble the EC double-acting pneumatic cylinder from the knife gate, follow instructions in Stafsjö's Service and Installations instruction, available on www.stafsjo.com



Picture 1: EC 160.

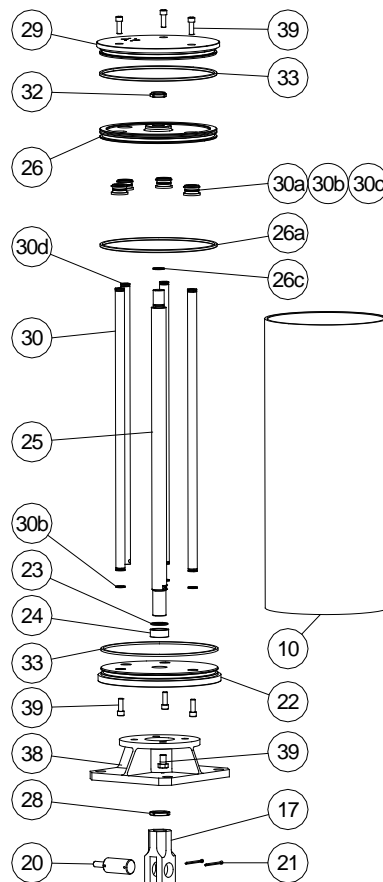
Same principle applies for EC 100, EC 125, EC 200 and EC 250.

2. Disassembling the double-acting pneumatic cylinder itself.

A. EC 100, EC 125, EC 160, EC 200 and EC 250 itself.

See picture 1 for identification position numbers.

1. Remove the Solenoid valve or any pneumatic connection.
2. Remove the lower cover's screws (39).
3. Remove the lower cover (22) from the cylinder barrel (10).
4. Slip out the piston (26) mounted on the piston rod (25).
5. Remove the top cover screws (39).
6. Remove the top cover (29).



Picture 2: EC 320.

B. Disassembling of the EC 320 itself.

See picture 2 for identification of position numbers.

1. Remove the Solenoid valve or any pneumatic connection.
2. Remove the lower cover screws (39).
3. Remove the lower cover (22).
4. Slip out the piston (26) mounted on the piston rod (25).
5. Remove the top cover screws (39).
6. Remove the three guide bars (30).
7. Remove the air supply bar (30d).
8. Remove the top cover (29).

B. Spare parts kits

4. Exchange old components to new ones.

Following spare parts is available as ready-to-use kits for the EC series. If other parts are worn out than those in the spare parts kits, please contact Stafsjö or your local representative for advice and further information.

Spare part kits for EC 100, EC 160, EC 200 and EC 250

Pos.	Type	Quantity
26b	Piston bearing	1 pcs.
26c	Piston rod o-ring	1 pcs.
23	Lower cover internal o-ring	1 pcs.
26a	Piston o-ring	1 pcs.
33	Covers o-ring	2 pcs.

For EC 200 and EC 250 optional Namur plate o-rings can be supplied on request.

Spare part kits for EC 320

Pos.	Type	Quantity
26c	Piston rod o-ring	1 pcs.
23	Lower cover internal o-ring	1 pcs.
26a	Piston o-ring	1 pcs.
33	Covers o-ring	2 pcs.
30a	Guide bar bush	4 pcs.
30b	Guide bar o-ring	8 pcs.
30b	Bush external/internal o-ring	4 pcs.



Stafsjö does not accept any responsibility for the product if the cylinder has been modified or if wear parts not approved by Stafsjö are used on the cylinder.

C. Assembling instructions

5. Assembling of the EC actuator

A. EC 100, EC 125, EC 160, EC 200 and EC 250 itself. See picture 1 for identification position numbers.

1. Assemble the top cover (29) to the cylinder barrel (10). Make shore that the covers o-rings (33) are placed into the cover's groove.
2. Tighten the top cover's screws (39).
3. Slip in the piston (26) mounted on the piston rod (25).
4. Assemble the lower cover (22). Make shore that the covers o-rings (33) are placed into the cover's groove.
5. Tighten the lower cover screws (39).
6. Assemble the Solenoid valve or any pneumatic connection.

B. Assembling of the EC 320 itself. See picture 1 for identification position numbers.

1. Assemble the top cover (29) to the cylinder barrel (10). Make shore that the covers o-rings (33) are placed into the cover's groove.
2. Assemble the air supply bar (30d).
3. Assemble the three guide bars (30)
4. Assemble the top cover screws (39).
5. Slip in the piston (26) mounted on the piston rod (25).
6. Assemble the lower cover (22). Make shore that the covers o-rings (33) are placed into the cover's groove.
7. Assemble the lower cover screws (39)
8. Assemble the Solenoid valve or any pneumatic connection.

D. Operational tests



Observe and act according to Stafsjö's installation and service instruction for the EC pneumatic cylinders before any operational tests starts.

6. Operate the EC pneumatic cylinder from its end positions and carefully study it for any leakage.
7. Re-install the EC pneumatic cylinder on the knife gate valve.



Observe and act according to Stafsjö's installation and service instruction for the EC pneumatic cylinders and knife gate valves before any assembling starts on the pneumatic cylinder valve unit.