

Retrofitting Kit *Filter Cleaning* for Cable Coater ECC 700

Safety Instructions



WARNING: Allow only qualified personnel to perform the following tasks. Observe and follow the safety instructions in this document and all other related documentation.

Use

The retrofitting kit is used to equip a cable coater ECC 700 – hereafter referred to as *unit* or *system* – with improved filter cleaning as well as a fine preliminary filter and muffler.

NOTE: The system has a new part number (P/N or ID) after retrofitting.

Improved Filter Cleaning

Filter cleaning is improved in that, during the cleaning cycle, a nozzle rotates above the filter cartridge, blowing compressed air onto the filter cartridge blades.

Fine Preliminary Filter

The fine filter prevents powder from penetrating the side channel blower.

Components

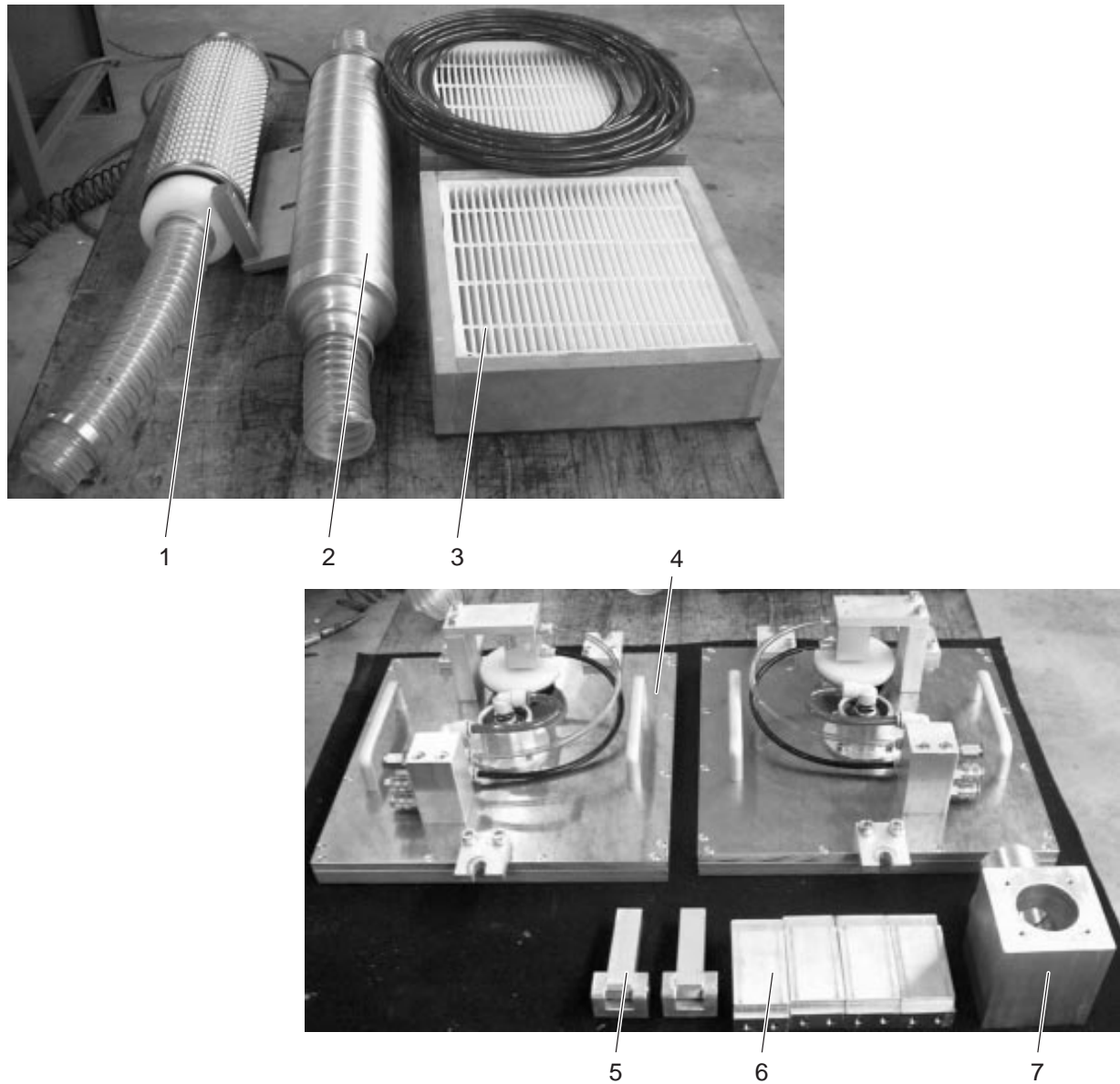


Fig. 1

- 1 Fine filter with holder
- 2 Muffler
- 3 Filter cartridges

- 4 Entire filter cover
- 5 Hinge
- 6 Holder

- 7 Power supply block

Note: Not shown: Mounting material, solenoid valves

Retrofitting



WARNING: Disconnect unit from line voltage and compressed air supply before beginning retrofitting.

Cleaning



WARNING: Since the unit may only be cleaned with compressed air, extreme caution is imperative. Never direct air guns at yourself or others; compressed air can cause serious injury. When injuries occur or are suspected: Immediately consult the first aid office!



WARNING: Emission of material particles into the atmosphere. Keep emissions to a minimum during all maintenance tasks and wear suitable respiratory protection. Ensure effective vacuuming of suspended powder particles.

Clean system by blowing air and vacuuming, taking particular care to clean the filter chamber.

Filter Chamber

1. Remove filter cover and extract filter cartridges. The two vibrators (1) remain in place.
2. Replace the four holders (2) and two hinges (4) with newer, longer ones. Apply jointing compound to the contact surfaces (3).

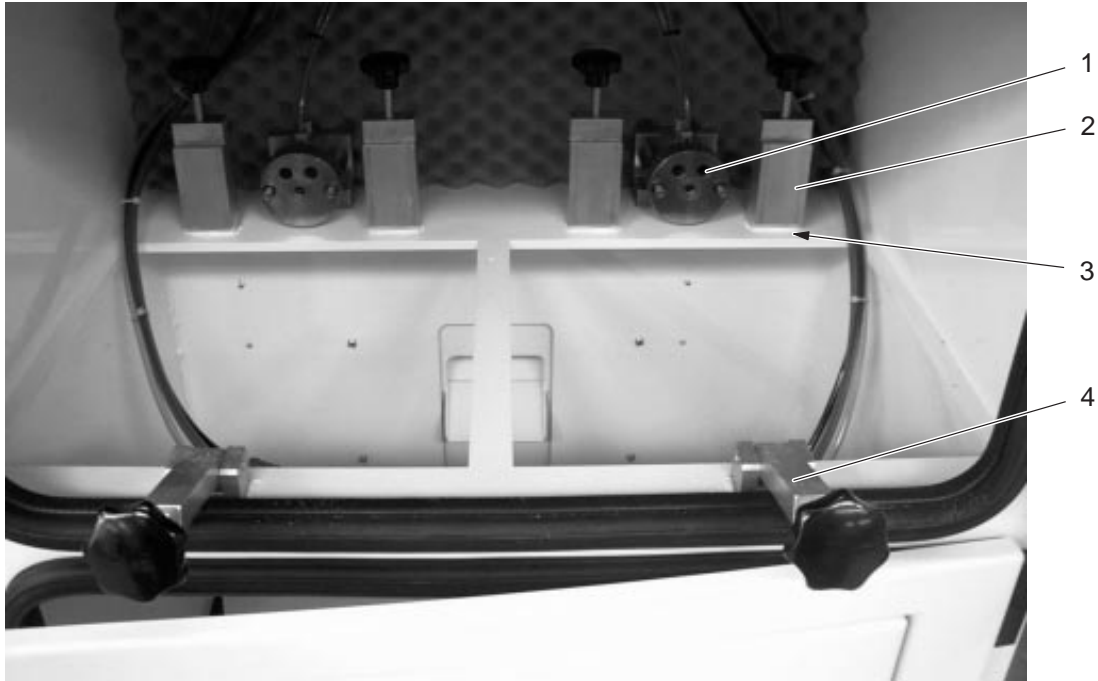


Fig. 2

3. Drill a 15.5 mm hole in the base plate and insert an additional PG fitting.

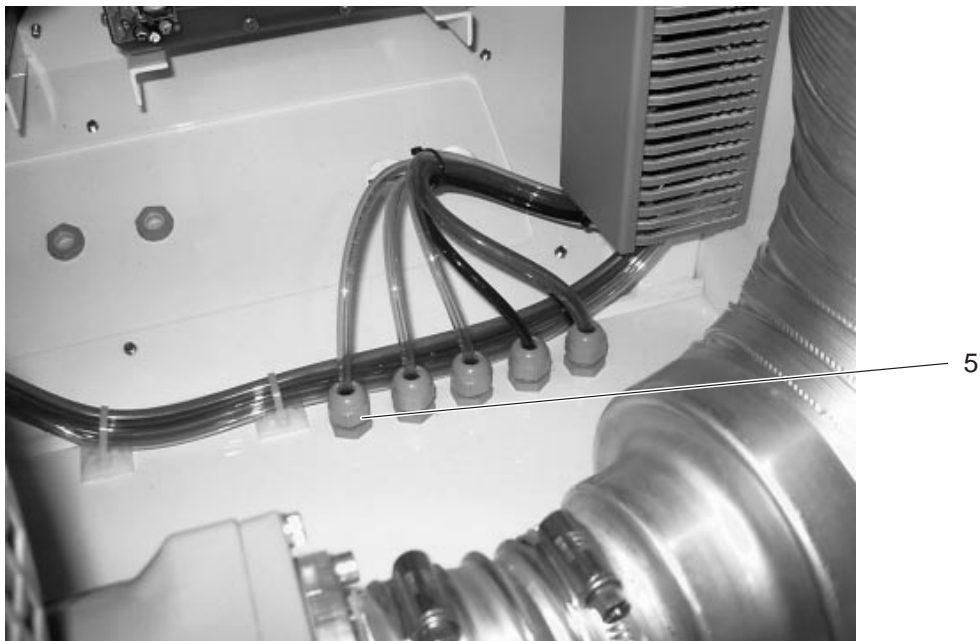


Fig. 3

Valve Island

4. Attach two new solenoid valves (8). To do this, move the valve (6) in that place to the middle valve group and secure with the included screws.
5. Compressed air inlets (10): Connect blue hoses and link to supply line (11). Do this by opening the line between the manifold and the control unit and attaching two Y-pieces.
6. Compressed air outlets (7): Connect red hoses and guide into the filter chamber through the PG fitting (5, Fig. 3).
7. Guide both power cables of the valve plug (9) through an existing PG fitting of the terminal box.

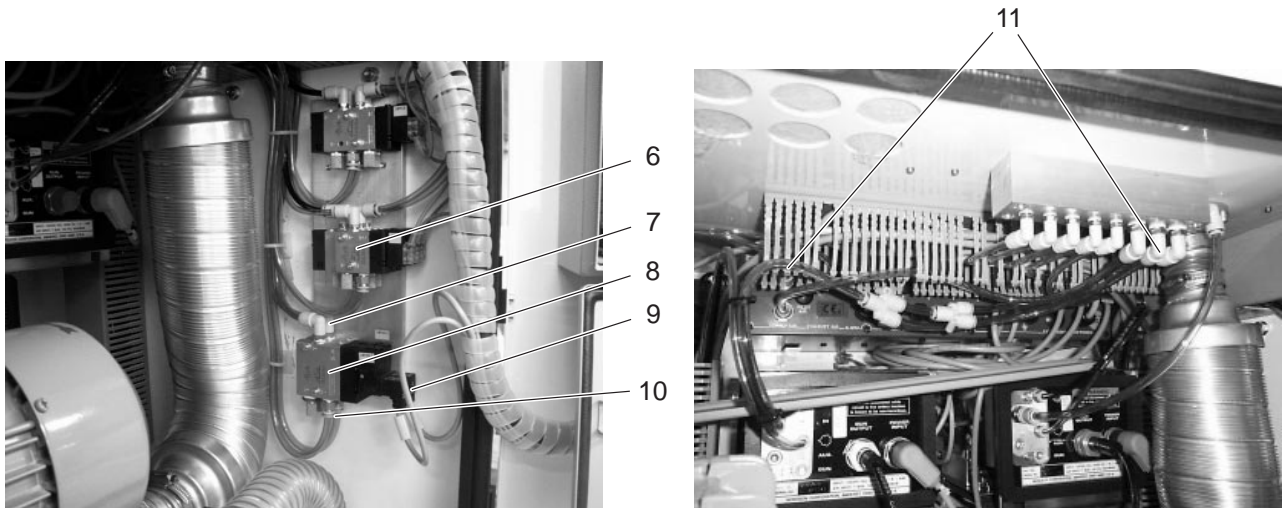


Fig. 4

8. Place one power cable on + and – of terminal 6 and the other on terminal 8.

NOTE: The solenoid valves are assigned to the nozzles for blade cleaning when the system is started up again.

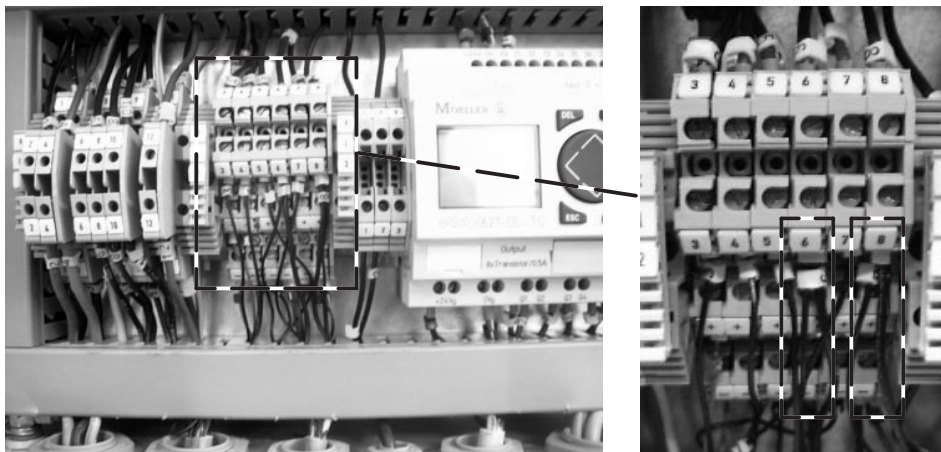


Fig. 5

Muffler

9. Fit (bend) muffler (12) and fasten with clamps.



Fig. 6

Fine Preliminary Filter

10. Unscrew mating flange (13) and drill the four holes M5, 5.5 mm, in the base plate.
11. Fasten power supply block (14) to filter chamber with the mating flange.
12. Attach fine filter with pre-assembled holder (15) under base plate using the included fastening screws of the side channel blower and connect to power supply block.

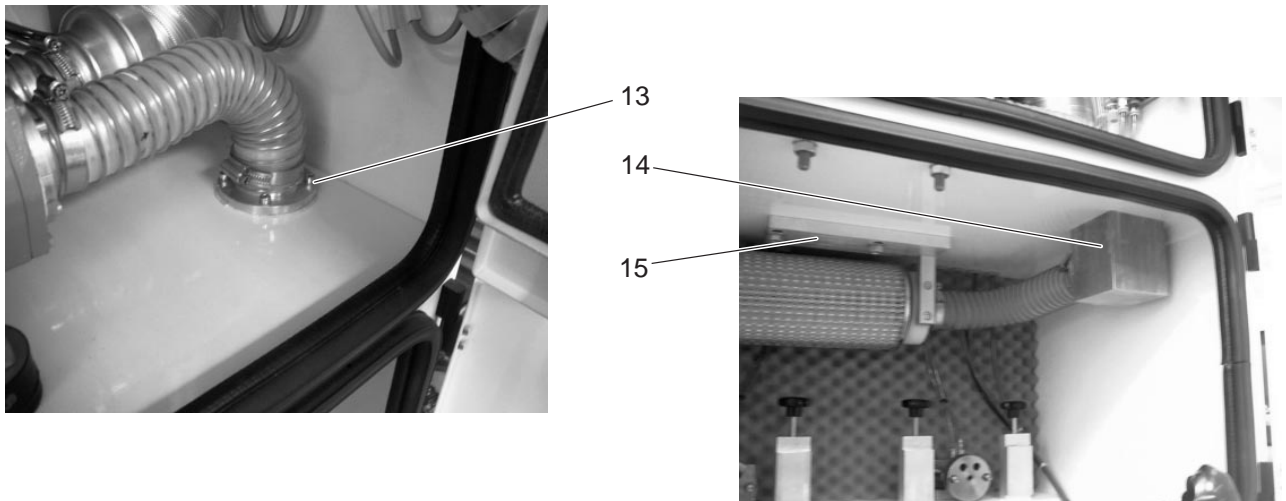


Fig. 7

Inserting Filter Cartridges and Filter Cover

13. Insert new filter cartridges, put filter cover in place and fasten.
14. Connect pneumatic hoses:

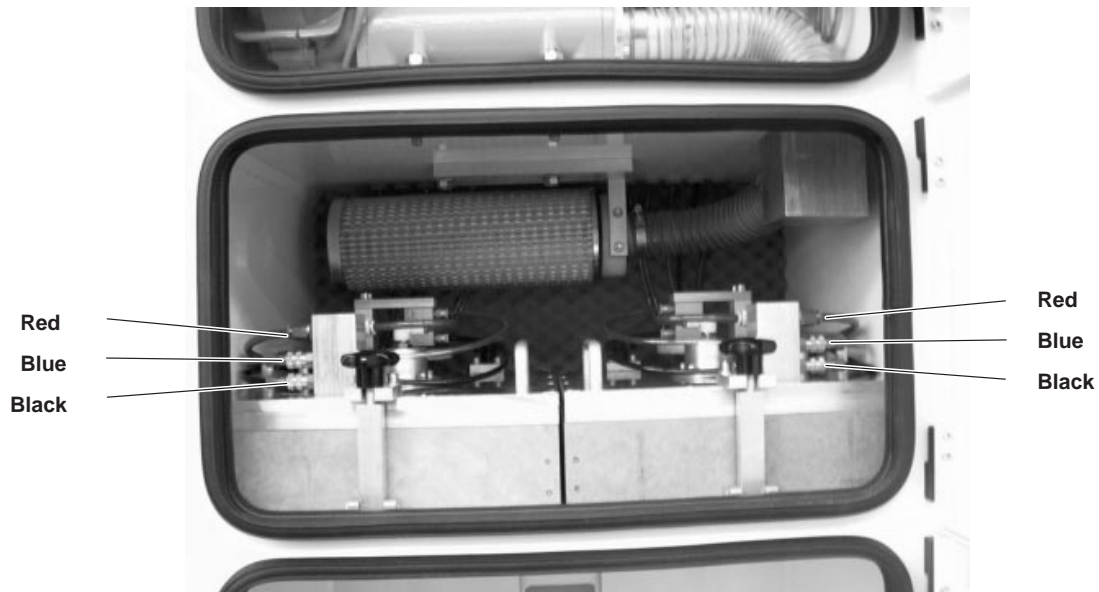


Fig. 8

Sealing Leaks in Material Container

15. Carefully clean powder residue from around edge seals (wipe off). Do this by prying the seals away slightly with a screwdriver or similar tool.
16. Apply sufficient jointing compound under the seals, to the linings in the corners and to the seals.



Fig. 9

Starting Up System Again

Checking Assignment of Solenoid Valves

The compressed air for the rotating nozzles is switched via the solenoid valves, connected in random order in steps 6., 8. and 14.. Check when starting up again whether the nozzle of the filter cover closed for cleaning is rotating. If not, simply exchange the red hoses (7, Fig. 4) of the solenoid valves.

PLC Parameters

For improved filter cleaning, Nordson recommends setting the following parameters, which deviate from the factory setting. Depending on the operating conditions, the values may need to be optimized. Also refer to manual, section *Setting PLC Parameters*.

Code name	Parameter
T3 6 s	Lead time nozzle
T5 T7 12 s	Operating time filter 1 / filter 2 NOTE: Set the same operating time for both filters.
T6 T8 25 s	Pause time filter 1 / filter 2 NOTE: Set the same pause time for both filters.

Additional Maintenance



WARNING: Before doing any maintenance work, switch the system off completely (Refer to *Operation, Daily Switch OFF*) and secure such that it can not be unintentionally switched on.

Also refer to manual, section *Maintenance*, General Information.

Cleaning Fine Preliminary Filter

System part	Activity	Interval
Fine preliminary filter	Disassemble and knock out	When replacing filter cartridges When the vacuum in the coating chamber decreases noticeably (powder escapes through cable inlets)