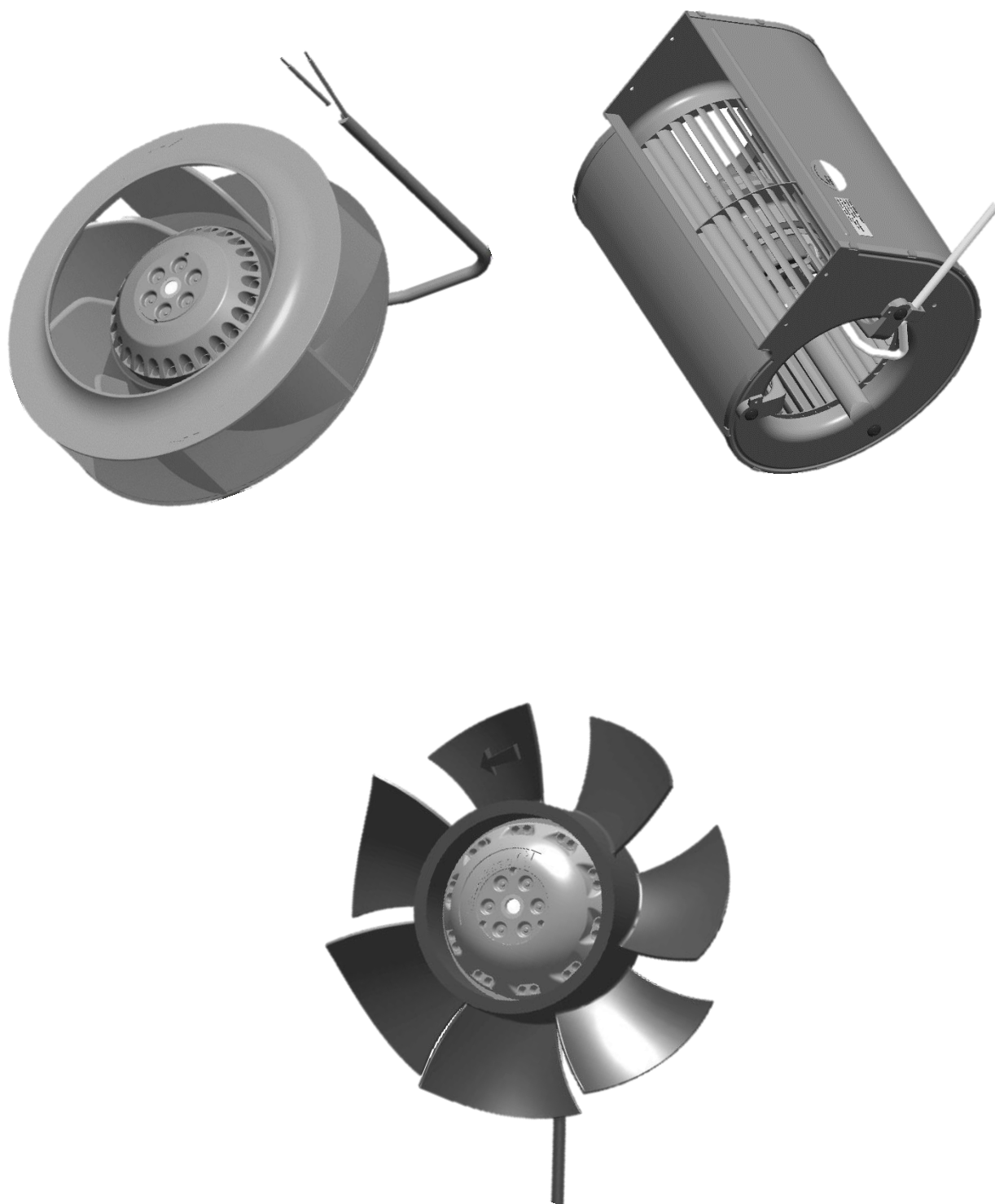


Instruction for disassembly

AC external rotor motors M15-42



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CEBI Micromotors Switzerland s.a.

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1 General notes and security recomendations

This instruction is applied to all Cebi AC external rotor motors. These motors are identified by the designation "M" followed by a number that identify the size of the motor (for example M42). The impeller type (axial or radial with metal or plastic fan) is not relevant for the purpose of disassembly. All the indications about motor model can be found on the top cap.

Attention! – Please observe all indications contained in this instruction; ensure compliance with all safety indications. Use appropriate tools and equipment for your own safety.



To safely work on the motor, line voltage has to be switched off and secured against switching back on. All electrical cables have to be disconnected. A minimum time of 3 minutes has to be respected before start disassembling. Please note that because of the use of capacitors, danger of electrical discharge is present.



2 Tools

In order to get a correct disassembly of the motor, the following tools should be used:

				
Screwdriver 00 size	Plier	Nipper	Philips Screwdriver	Teethy wrench
<u>T1</u>	<u>T2</u>	<u>T3</u>	<u>T4</u>	<u>T5</u>

3 Procedure for disassembly

3.1 Preparation for scroll-equipped motors

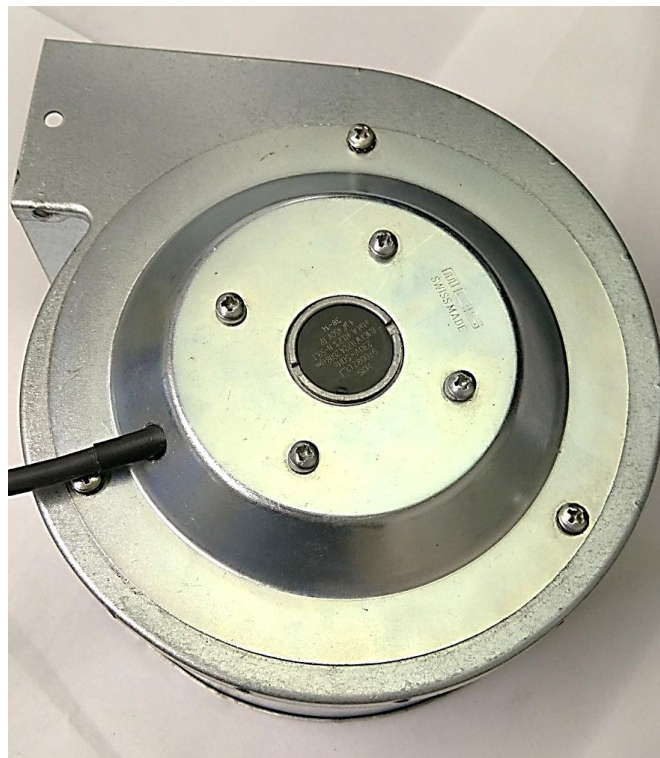
Scroll-equipped motors need an initial step before actually open the motor. The motor has to be carried out from the scroll itself in order to be disassembled. If no scroll is present, please skip this part and start with 3.2.



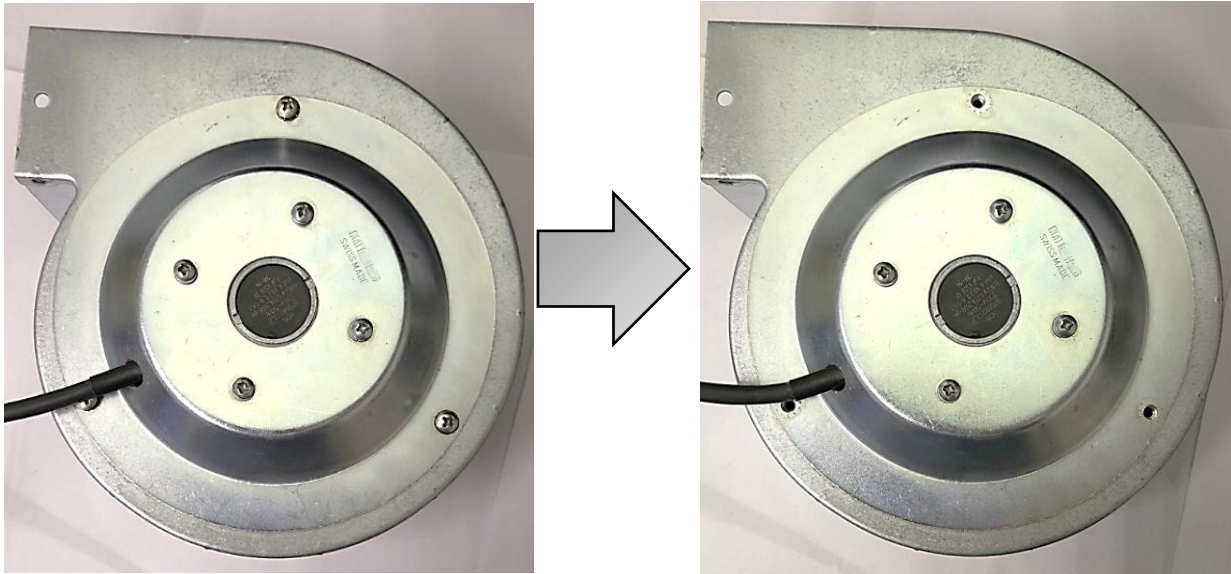
Please be very careful. The sheet-metal design of the scroll can lead to the creation of very sharp edges, which can be harmful. It's good practice to wear appropriate gloves.

3.1.1 Single-inlet scroll equipped motors

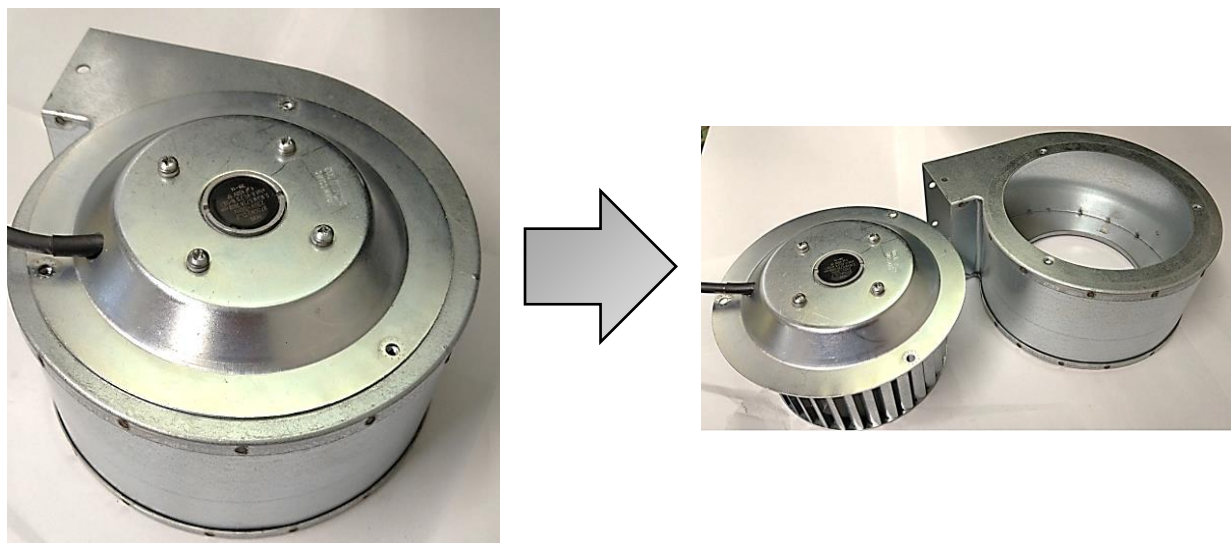
Place the motor in the position where you can see all the screws, as shown.



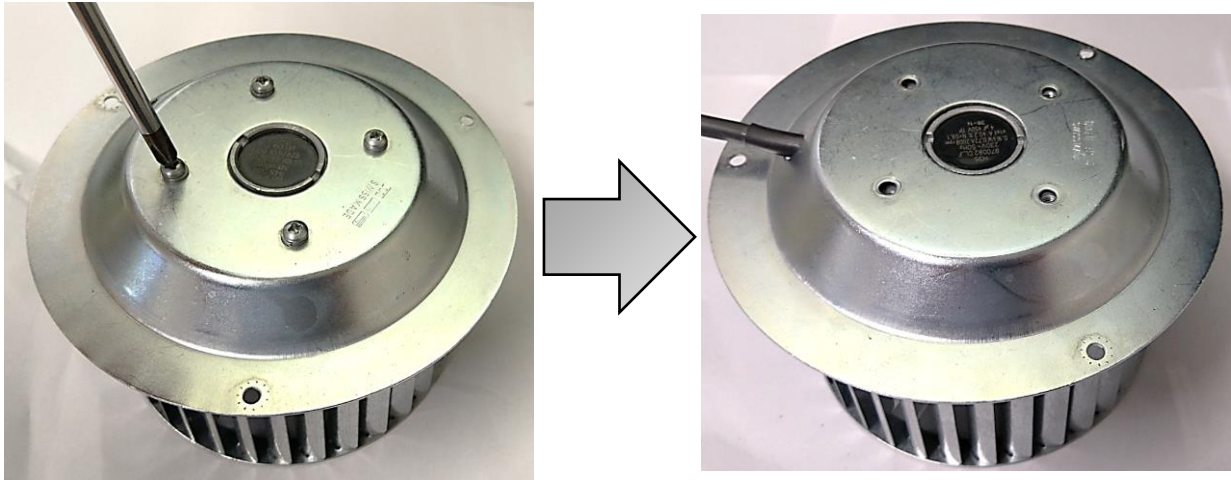
Using the Philips screwdriver [T4], start with removing and disposing the three self-tapping screws closing the top of the scroll.



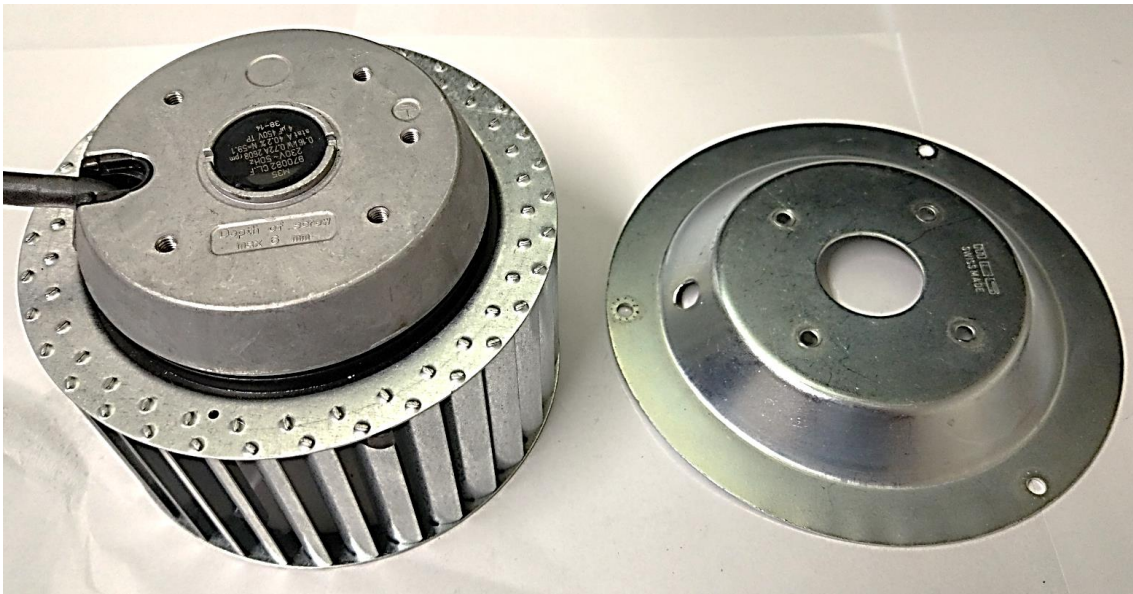
Separate the motor and its fixing plate from the rest of the scroll.



Using the Philips screwdriver [T4], remove and dispose the four screws fixing the motor to the plate.



Separate the motor from the plate.



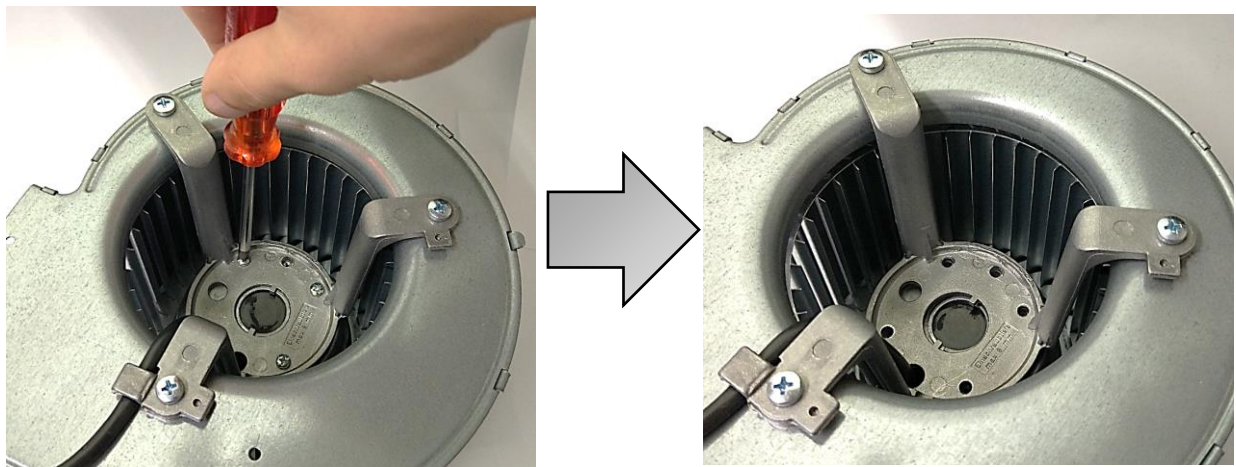
► From this point, please refer to 3.2.

3.1.2 Double-inlet equipped motors

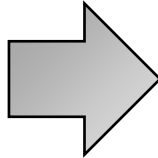
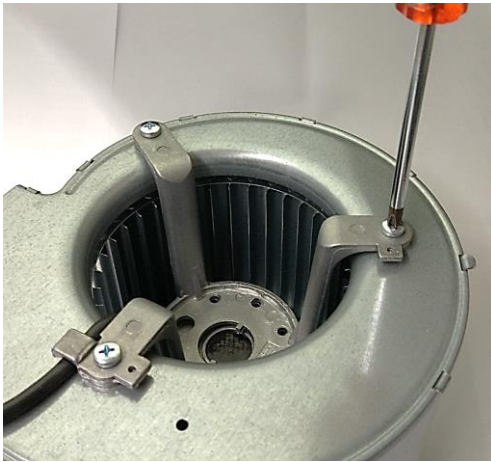
Place the scroll in the position where you can see all the screws, as shown in the next picture.



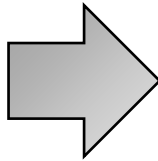
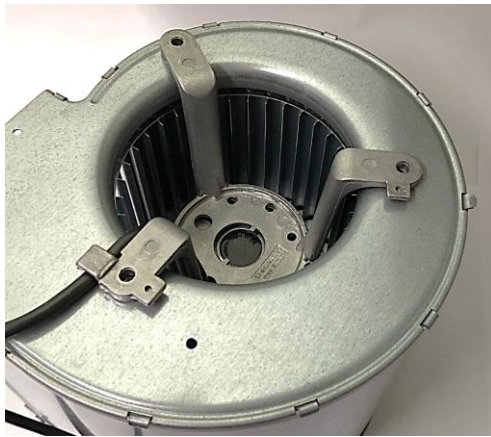
Using the Philips screwdriver [T4], start with removing the four screws linking the motor with the aluminium support. Please note that from this point the motor is free to move.



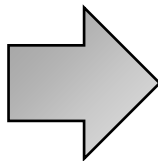
Using the Philips screwdriver [T4], remove the three screws linking the aluminium support with the scroll.



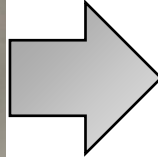
Remove the aluminium support.



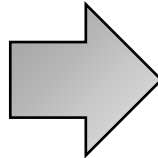
Using the teathy wrench [T5], carefully block one of the metal strips and begin to bend it back to straight shape.



Repeat the process fore very metal strips.



Carefully and slowly extract the top plate from its position. *For this operation it is recommended to use gloves.*



Extract the motor from the scroll.

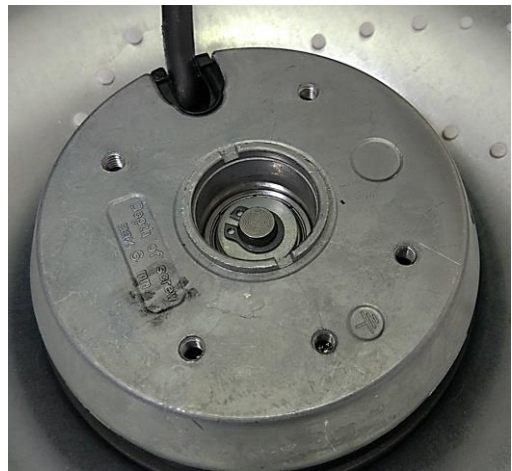
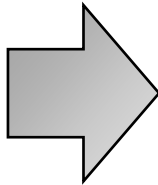
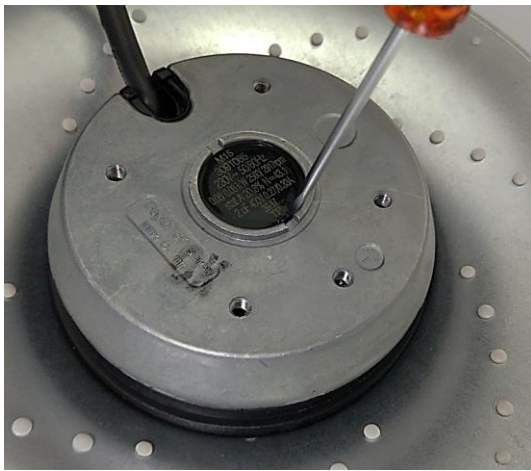


► From this point, please refer to 3.2.

3.2 Opening the motor

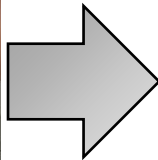
3.2.1 M15-35 Motors

Remove the top cap using the screwdriver [T1]. Place the tool between the cap and the aluminium carrier and lift the cap.



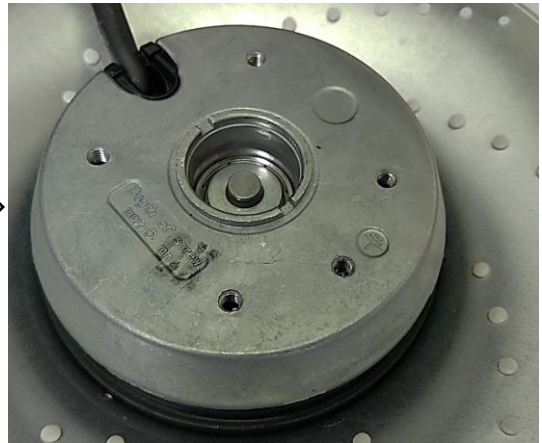
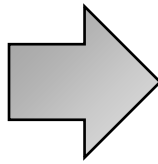
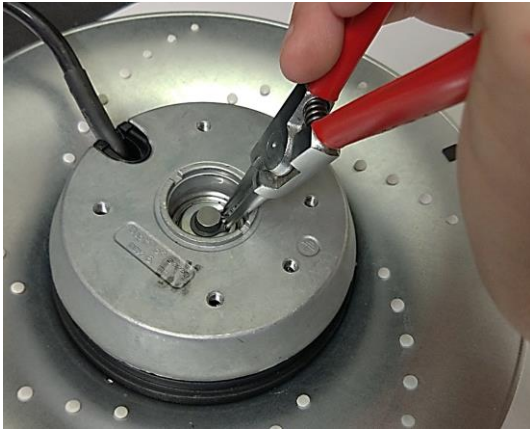
3.2.2 M42 Motors

Remove the top cap using the pliers [T2]. Pull until the cap comes out from its position.

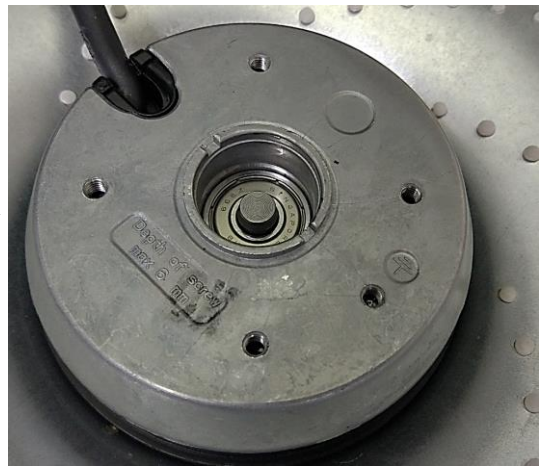
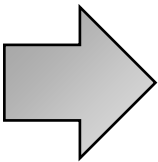
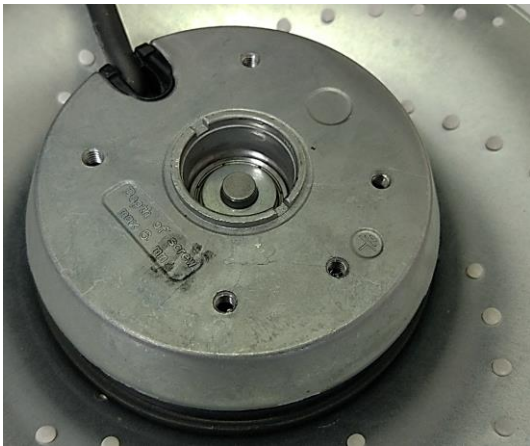


3.3 Disassemble the motor

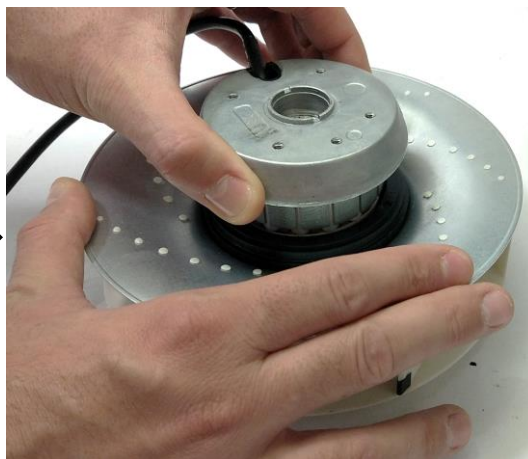
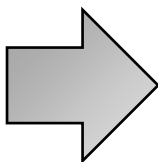
Remove the inner seeger from its position using the nipper [T3]. Please do not reuse the seeger removed.



Remove and dispose all the washers.



Disassemble rotor and stator by pulling apart the two components.



Remove and dispose the washers.

