



REMOVING THE UPPER FINISHING MOTOR



WARNING!

The operations described in this technical data sheet and those contained in the relative video tutorials which can be captured via QR CODE must only be performed by qualified technicians and only after having read the safety information contained in sections 2 and 6 of the Use and maintenance manual.

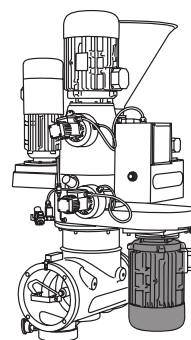
When in doubt, do not interpret! Instead directly contact the Colombini Srl technical assistance service at +39 011 8211407 service@colombini.srl

Motor characteristics:

Weight: Kg. 60 / 55

Power: kW 11 / 7,5

Spare part number: E1.0158 / E1.0151



To remove/reinstall the upper fine grinding motor the following are required:

- a) Phillips screwdriver
- b) wrench - 8 mm
- c) wrench - 13 mm
- d) wrench - 17 mm
- e) Allen wrench - 5 mm
- f) 4 and 6 mm Allen wrenches

REMOVING THE MOTOR



WARNING!

Removal of the motor is a dangerous operation. Make certain that the operator wears suitable protective gloves and crush-resistant footwear.

- From the operator panel, move away the lower fine grinding discs to a value of 0.600 mm.
- Remove the machine power supply by turning the main switch to 0.



- Remove the cover for the upper fine grinding motor belt. Using a 8 mm wrench, unscrew and remove the three bolts.
- Using a 4 mm Allen wrench, unscrew and remove the three screws securing the gear wheel guard disc. Remove the guard disc.
- Using a 6 mm Allen wrench, loosen the four screws securing the motor support to the timing belt frame.



- The position of the motor support vs. the timing belt frame is fixed by the locking position of a worm screw located under the frame. Using a 13 mm wrench, loosen the worm screw locking bolt and loosen the two securing nuts that prevent the screw from moving longitudinally in its seat.

- Push the motor block towards the body of the machine, loosening the timing belt — tensioned on the gear wheel inside the frame — just enough so that it acquires some play.



WARNING!

The motor weighs approximately 60 kg. Be careful when handling it.

- Using a 5 mm Allen wrench, loosen the six Allen screws on the gear wheel and remove the gear wheel from its seat.
- Make certain that the transmission timing belt on the upper fine grinding discs is free to move in its seat.



- Using a 5 mm Allen wrench, loosen the four Allen screws and remove the cover from the motor electrical box.



WARNING!

Save/photograph the position and colour of the three power supply cables for subsequent reassembly.

- Using a 7 mm socket screwdriver, unscrew and remove the three nuts, with their washers, and withdraw the three power supply cables.
- Unscrew the upper screw and remove it with its washer and then withdraw the yellow-green earth cable.
- Disconnect the fan power supply connector using a Phillips screwdriver.
- Using a Phillips screwdriver, unscrew the four screws securing the lower motor cooling fan.
- Remove the cooling fan assembly.



WARNING!

Secure the fan assembly with a suitable support or with the aid of another person so that it cannot fall and be damaged.

- Completely unscrew the previously loosened bolt and nut securing the worm screw located under the transmission belt block.
- Using a 5 mm Allen wrench, unscrew the two screws securing the worm screw support flange. Remove the two screws and the two related washers.
- Unscrew the nut still present on the worm screw, manually accompanying the flange that intercepts the screw until both nut and flange are completely removed from the screw.
- Free the worm screw from all constraints.



WARNING!

The motor is heavy. To remove it, make certain that it is supported by a lifting device compliant with current safety regulations.

- Move the motor so that the upper part can pass through the central hole.
- Using a forklift, position the blades under the motor so that it is properly supported when the screws securing it to the grinder are loosened.



- Unscrew the four screws holding the motor support suspended from the transmission belt frame. Use a 6 mm Allen wrench.



WARNING!

The motor is heavy and must be unscrewed carefully. During the operation, make certain that the motor rests firmly on the forklift blade which must bear the full weight of the motor.

- Unscrew the four Allen screws and remove them completely.
- Once freed from all constraints, the motor rests solely on the forklift blades.
- Save/photograph the correct position of the motor for subsequent reassembly.
- Lower the forklift blade so that the upper part of the motor is lowered, passing through the circular passage in the transmission belt support frame, so it can be moved freely.
- Remove the upper fine grinding motor in compliance with the safety standards.

REINSTALLING THE MOTOR

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- Correctly position the motor under the transmission belt support frame, making certain that the motor shaft is coaxial to the circular passageway and the motor support flanges are correctly positioned in relation to the machine. Make reference to the position saved during removal.



WARNING!

Be careful when inserting the motor.

Observe the safety standards for handling: the motor is heavy.

The motor shaft must enter the transmission frame. WARNING!.



WARNING!

If a new motor is to be installed, we recommend greasing the end of the shaft.

- Using the forklift, lift the motor, making sure that the shaft passes through the hole.
- Tighten the four bolts and washers securing the motor support to the transmission frame. Use a 6 mm Allen wrench.
- Without tightening the four bolts, make certain that the motor is supported and the forklift truck can be removed.
- Remove the forklift truck.
- Insert the worm screw locking flange that adjusts the position of the motor so that the nut present is located between the two sides of the component. Adjusting the nut as needed, position the flange so that the position lines up with the transmission frame securing holes.
- Using a 5 mm Allen wrench, tighten the two bolts with washers to secure the flange.
- Make the electrical connections on the motor and reinstall the cover on the electrical box.
- Secure the lower motor body, making certain that the openings and threaded holes line up. Tighten with four Phillips screws.
- Hook up the fan power supply connector and secure it with its screw.
- Position the gear wheel in its housing inside the transmission frame, making certain that it is correctly positioned above the motor shaft and that the screw through-holes and threaded holes on the motor line up.



WARNING!

Make certain that the timing belt does not get pinched under the gear wheel but is, instead, arranged correctly around it.

- Using a 5 mm Allen wrench, tighten the six gear wheel securing screws.
- Adjust the belt so that the belt teeth and gear wheel cogs are aligned correctly.

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- Tighten the worm screw stud nut so that the entire motor block shifts in its seat, correctly tensioning the transmission timing belt.



WARNING!

While tensioning the belt, move the gear wheel to ensure that the transmission shows no slippage and that, on the contrary, the tension is not so high as to compromise correct transmission of the movement.

- Insert the gear wheel guard disc and secure it with its three screws.
- Reinstall the cover grille and secure it with its three screws.

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- Replace the second nut and securing bolt on the worm screw. Tighten the securing bolt using a 13 mm wrench.
- Fully tighten the four Allen screws supporting the motor to the transmission frame.

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