

Z-Axis Motor Replacement

SOURCE:

<https://support.zortrax.com/z-axis-motor-replacement/>

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The Z-axis motor is responsible for the platform's movement along the Z axis. Therefore, if the platform does not move at all or it moves with difficulties and makes unusual noises, the Z-Axis motor needs to be replaced. Before replacing the motor, make sure that the screws on the coupler are properly tightened. More details can be found in the [manual](#).

If tightening the screws does not help, follow the steps from this manual to replace the Z-axis motor.

The following manual shows the M200 repair work. For the M300, these procedures are the same.

Unplugging the Power Cable



Turn off the printer and unplug the power cable. Wait a few minutes for all the capacitors to discharge.

Changing the Printer's Position



Grab the printer's housing and change the printer's position so that you can easily access the bottom plate.

Unscrewing the Bottom Plate, part 1



Unscrew the screws that secure the bottom plate on one side of the housing. Use a 2.5mm Allen key.

Turning the Printer



Turn the printer over.

Unscrewing the Bottom Plate, part 2



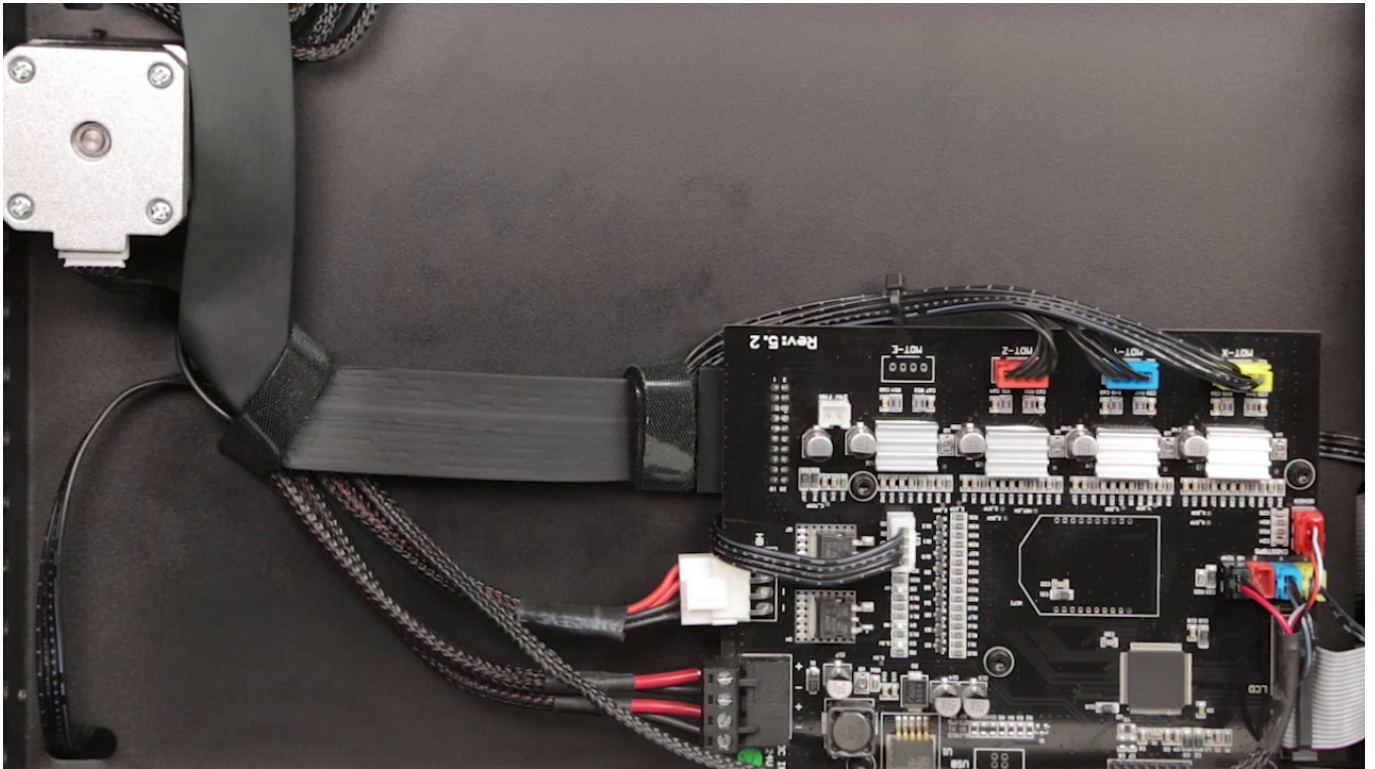
Unscrew the screws that secure the bottom plate on the other side of the housing. Use the same key.

Separating the Bottom Plate



Separate the bottom plate from the printer and unplug the bottom fan cable from the motherboard.

Providing Better Access to the Z-Axis Coupler



Unfasten the two extruder cable straps and unplug the cable from the motherboard. Next, unfasten the third strap. Place the extruder cable between the power supply unit and the housing. Finally, grab the cables next to the motherboard and fasten the strap.

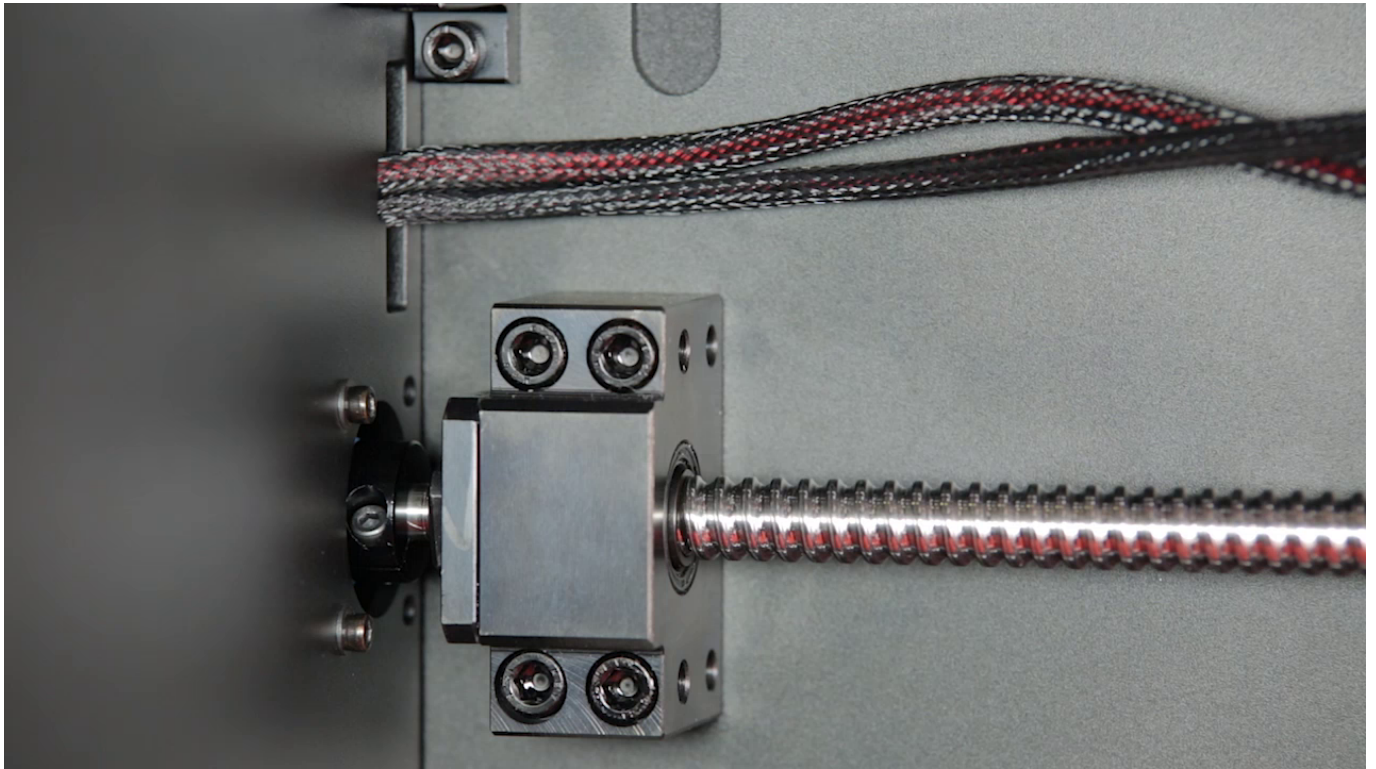
This step is not necessary to follow, however it is recommended so as to avoid the risk of damaging the cables and to get better access to the Z-Axis coupler.

Unplugging the Z-Axis Motor Cable



Unplug the Z-Axis motor cable.

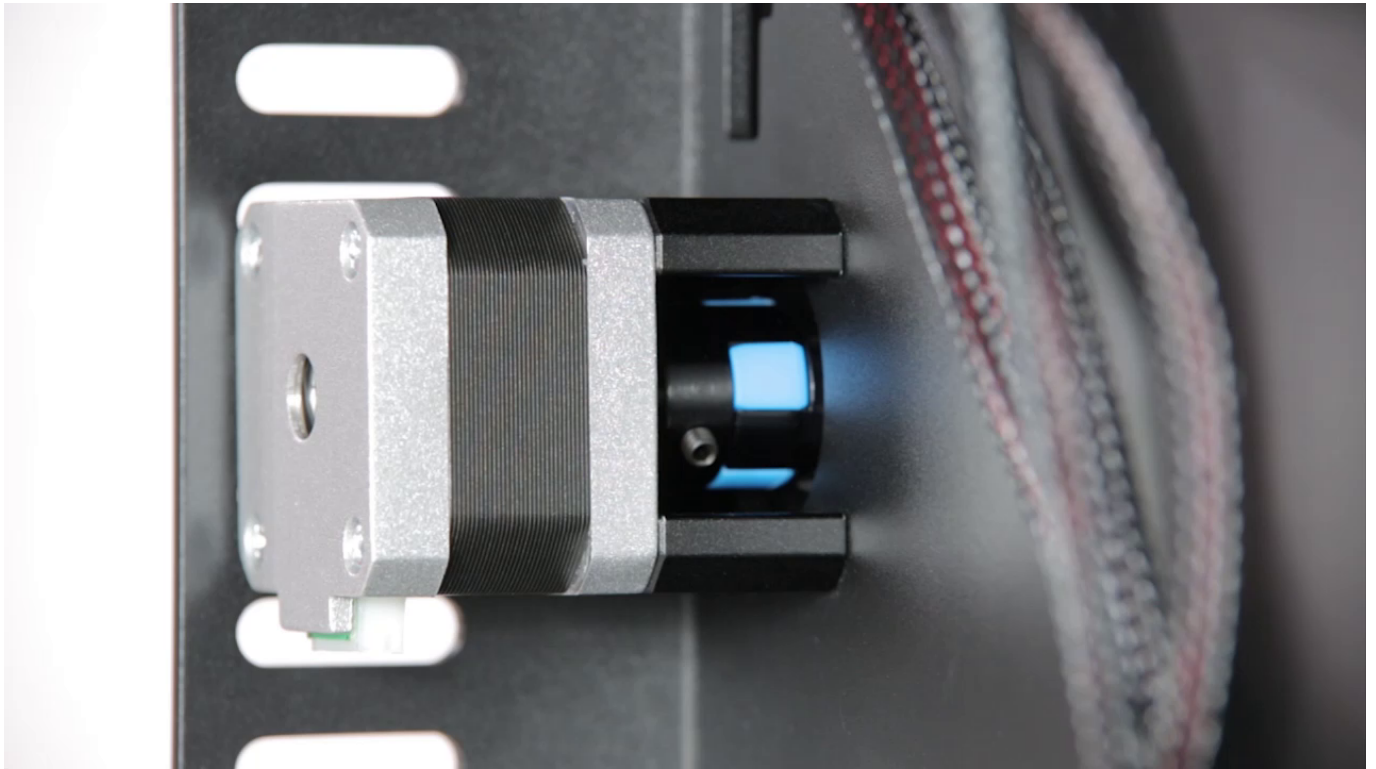
Loosening the Z-Axis Coupler Screws



Loosen the three Z-Axis coupler screws placed on the Z-Axis motor side.

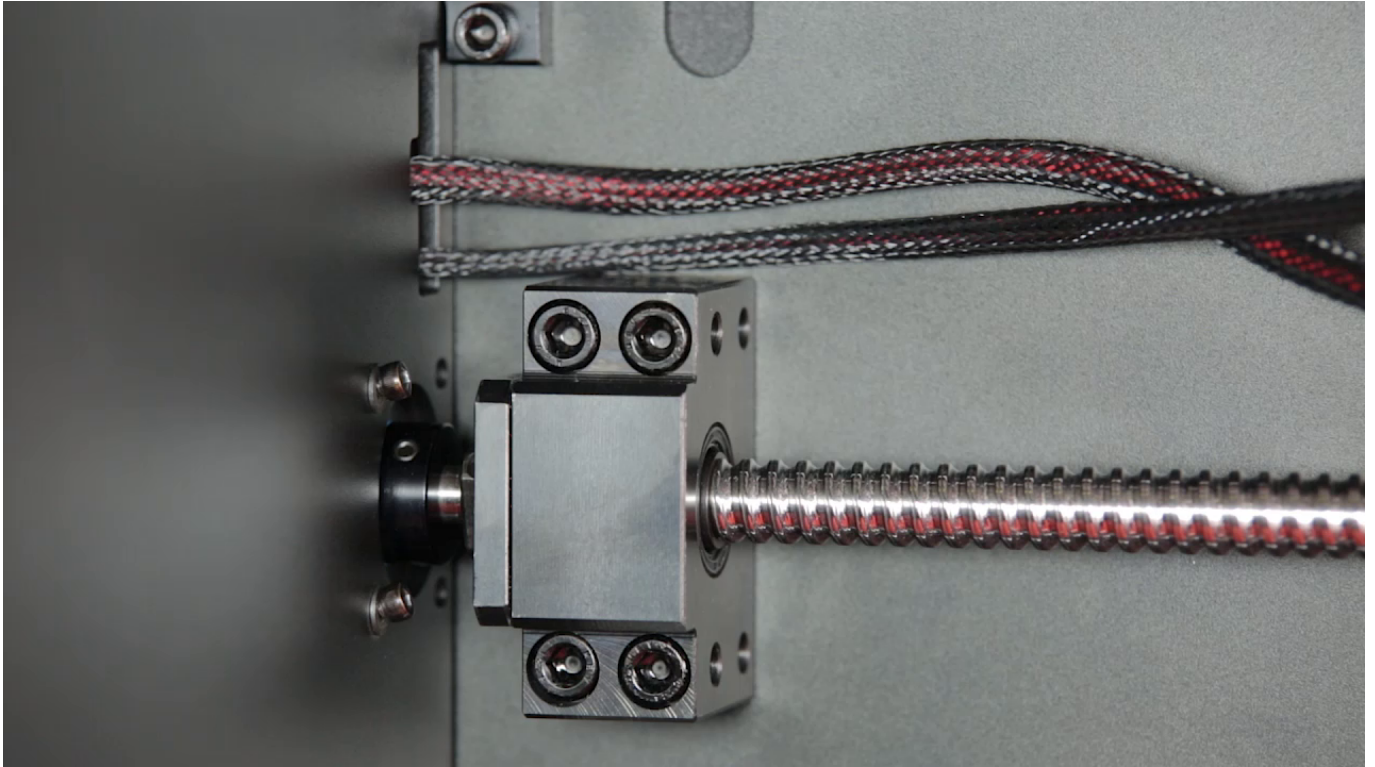
Turn the Z-Axis screw to get access to each screw on the coupler.

Unscrewing the Z-Axis Motor



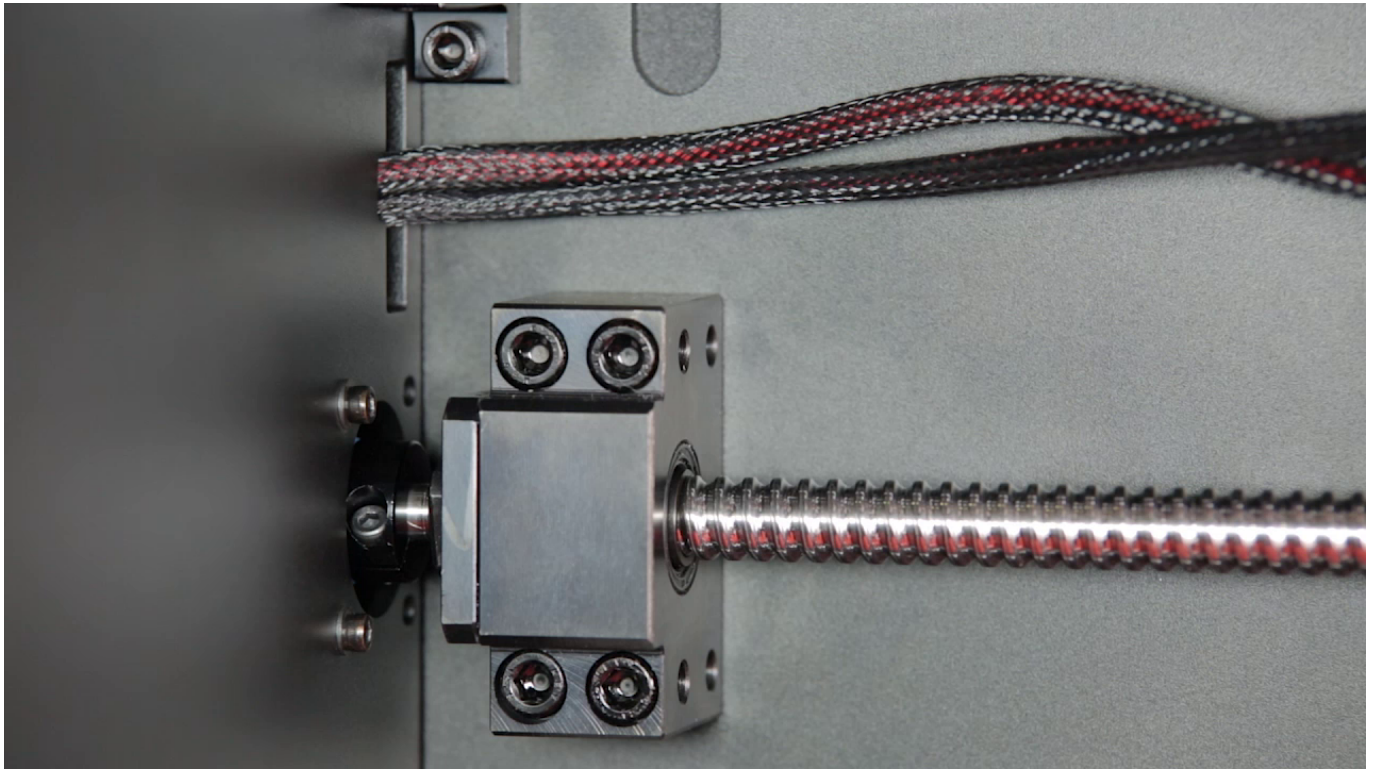
Unscrew the two screws that secure the Z-Axis motor. Remove the motor with its distance piece.

Z-Axis Motor Assembly



Hold the Z-Axis motor screws and put the motor with the distance piece on them. Next, tighten the screws.

Tightening the Z-Axis Coupler Screws



Tighten the three Z-Axis coupler screws placed on the Z-Axis motor side.

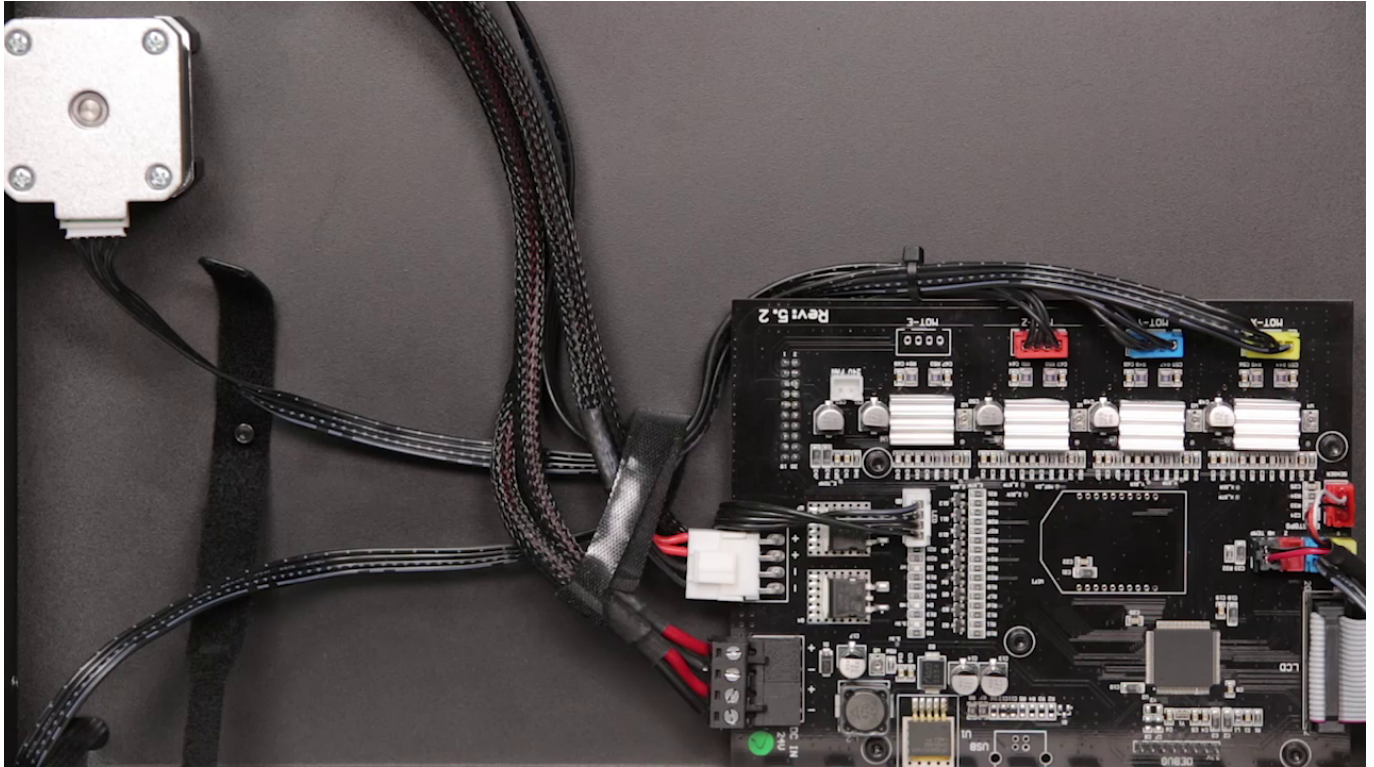
Turn the Z-Axis screw to get access to each Z-Axis coupler screw.

Plugging the Z-Axis Motor Cable



Plug the Z-Axis motor cable in.

Rearranging the Cables



Unfasten the strap next to the motherboard. Secure the extruder cable with the first strap and plug it in. Fasten the remaining straps.

Bottom Plate Installation



Plug the bottom fan cable into the motherboard and install the bottom plate.

Securing the Bottom Plate, part 1



Secure the bottom plate on one side of the housing. Use a 2.5mm Allen key.

Turning the Printer



Turn the printer over.

Securing the Bottom Plate, part 2



Secure the bottom plate on the other side of the housing. Use the same key.

Changing the Printer's Position



Grab the printer's housing and set the printer upright.

Plugging the Power Cable



Plug the power cable in.