Metal Motor Mount Installation Instructions

Position the extruder near the center of x travel.

Snip and remove the three cable ties securing the plastic extruder motor mount cover and the one cable tie securing the hot end and fan wires (on the side of the filament drive.

Remove the cover. Disconnect all connectors.

Remove the fan assembly form the filament drive using a 2.5 mm wrench to loosen the M3 bolt in the bottom left corner of the 40 mm fan (the smaller fan).



Remove the filament drive from the extruder motor using a 2.5 mm wrench to loosen the screws to the top left and bottom right of the drive gear.

Disconnect the harness from the motor.

Loosen the two m4 bolts that run horizontally using a 3 mm wrench. These bolts clamp the motor mount in place. Once the bolts are loose enough remove the motor.

Remove the extruder motor mount by unscrewing the four m3 bolts using a 2.5 mm wrench.



Place washers on two m3 x 10 bolts and secure the black metal motor mount plate to the carriage through the rear two holes using a 2.5 mm wrench.

Place the metal motor mount as shown. Place washers on two m3 x 12 bolts. Applying gentle backwards force on the motor mount, secure the mount by running the m3 x 12's through the plate to the carriage and tighten using a 2.5 mm wrench.

Noting the location of the connector, remove the three m3 bolts that have been removed from the corners in the picture to the right using a 2.5 mm wrench.

Place the motor in the motor mount and secure with three m3 x 12 bolts using a 2.5 mm wrench. Ensure that the connector is facing the right as shown.



Attach the junction box cover to the junction box through the top right corner with 1 black m3 x 10 button head using a 1.5 mm wrench. Rotate the cover 90° so that it is out of the way for subsequent steps.

Place the junction box on the side of the extruder and secure to the metal motor mount with two m4 x 16 bolts using a 3 mm wrench.

Re-install the filament drive with the m3 x 12 bolts that were securing it previously through the holes to the top left and bottom right of the drive gear using a 2.5 mm wrench.



Re-install the fan assembly with the m3 x 45 through the bottom left corner of the 40 mm fan (smaller fan) using a 2.5 mm wrench.

At this point, you can decide to either modify your current harness, or use it as-is. The new junction box will have the harness wires run all the way through it. You may want to adjust the wiring harness so that less length of wire comes out the front of the junction box. To modify the harness, connect all connectors and snip the cable ties that secure the harness cables inside of the black braided wire loom. Now you can freely pull the wires through the harness. If you choose to modify the harness, ensure that there is still enough slack in the harness running to the junction box, so that at all points of X travel the harness is not being bent, stretched or pinched. The 50 mm fan connects to fan 0 and the 40 mm fan connects to fan 1.

Once everything is connected, rotate the junction box cover 90° and secure it with a black m3 x 10 button head using a 1.5 mm wrench. Then use a cable tie to secure the hot end wires to the side of the filament drive.



