Extruder drive assembly

This section shows you how to assemble the extruder drive.

To assemble the extruder drive body, you will need the following:

Component	Type	Quantity
NEMA17 motor (not shown)	-	1
Extruder drive block	Extruder drive	1
623 bearing	Extruder drive	1
M3 washer	Extruder drive	1
M3x12mm countersunk socket screw	Extruder drive	3
Extruder small gear (not shown)	Extruder drive	1

NOTE: The ‘retaining tongue‘ that is included in the extruder drive set secures the Bowden cable from the hot end into the extruder drive. You’ll need it later, so hang on to it.

Take the extruder body, and put the 623 bearing in the hole shown. One M3x12mm countersunk screw goes in from the back, and the washer goes on top of the bearing.

Fit the motor on top of this, then attach the other two M3x12mm countersunk screws, to mount the motor solidly.

Push the small gear onto the motor shaft. This should be a tight fit. Ensure the flat part of the bore of the gear is aligned with the flat on the motor shaft before applying too much force. The gear has a small lip at the bottom of the teeth. This side must be against the drive block face.

Now assemble the large gear drive assembly. For this you will need:

Component	**Type**	**Quantity**
Extruder large gear	Extruder drive	1
Hobbed insert	Extruder drive	1
M3 washer	Extruder drive	1
M3 nyloc nut	Extruder drive	1
M3x25mm hex head screw	Extruder drive	1
MR93ZZ bearing	Extruder drive	2

Push the screw through the gear. The hexagon head of the screw should be held tightly by the plastic part. Then slide an M3 washer on to the screw.

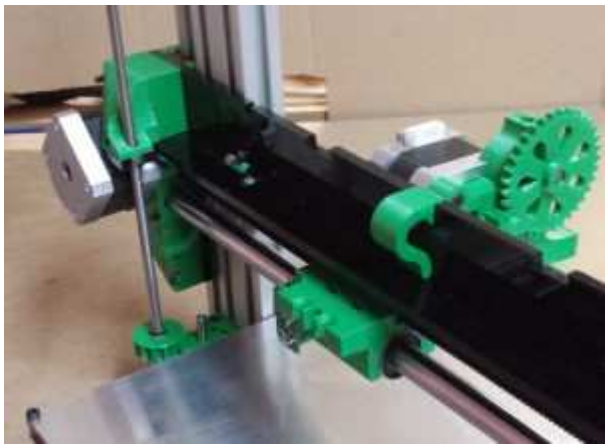
Next slide one of the MR93ZZ bearings on, followed by the hobbed insert. The insert is symmetrical so it doesn't matter which way round it is fitted, but it needs to be screwed tight.

Push the second MR93ZZ bearing into the extruder-drive-block, next to the motor.

Now push the large gear sub-assembly into place …

… and secure it there with the M3 nyloc nut.

The extruder drive assembly can now be mounted on to the machine.



The x-axis-plate is profiled to receive the extruder-drive-block from one side, so push it down with a rotating motion and it will lock into place, using the mass of the motor to keep it there.