

MAKERBOT REPLICATOR 2: TECHNICAL SUPPORT ARTICLE CHECKING, REPAIRING AND REPLACING ENDSTOPS

Version 1.1

WHAT DO ENDSTOPS DO?

The endstops tell the machine when the extruder has moved all the way to the right, top or back positions.

WHERE ARE THEY LOCATED

There are three endstops inside the printing space of the machine.

- The X Axis (left and right movement) endstop (Fig 1.1) is at the top of the machine on the right hand side of the extruder gantry. This endstop DOES NOT have a lever.
- The Y Axis (forward and backwards) endstop (Fig 1.2) is in the back left corner of the machine
- The Z Axis (up and down) endstop (Fig 1.3) it at the top of the Z Axis rod at the back of the machine



If your machine fails to stop when moving in any of the axis directions and then bangs into the endstop, or the Y stepper motor, then the endstop is not doing its job. It could be:

- 1. Bumped so that it is not in the correct location to be activated
- 2. Faulty or damaged

HOW DO I KNOW IF THE ENDSTOP IS WORKING?

When the machine, press the endstop leaver or button and a red light will light up on the circuit board attached to the endstop. (Fig 1.4 and 1.5)

If it does not light up, check the connector cable has not come out.

If it still does not work you may need a new endstop....contact tech support.

DO YOU NEED TO JUST ADJUST THE ENDSTOP?

If you know the endstop works because the light comes on but the machine does not stop moving you may need to just adjust its position

X Axis: When you slide the extruder all the way to the right does the stepper motor tap the endstop? Sometimes the endstop is tipped up slightly and just needs to be pushed back down. Sometimes the screw is a little loose and the board has pivoted back so that the extruder stepper motor no longer compresses the endstop button.

Y Axis: As with the X Axis end stop, slide the extruder gantry all the way back—Does the plastic mounting for the gantry bearings tap the endstop? Sometimes the screw is a little loose and the board pivotes back so that the endstop leaver no longer compresses at the correct point. You may need to pivot it forward slightly and tighten the screw.

Z Axis: When bed comes all the way to the top, the z axis endstop is compressed. This endstop is protected behind the Z axis rod and very rarely gets knocked or has any problems, but the same rules apply here as above

How to I fit a new Endstop

Once we send you your replacement, (WITH THE MACHINE TURNED OFF) just unclip the cable connector, unscrew the faulty board. Screw in the new one and connect the cables. Turn on the machine and press the leaver/button. Does the light turn on? Great, now check

the position is correct (see notes under Do You Need To Just Adust The Endstop) and you are good to go!



1.1 X Axis Endstop (from above looking down)





1.3 Z Axis Endstop





BilbyCNC hopes you found this helpful. Please visit support.bilbycnc.com.au if you need further assistance