

MAKERBOT REPLICATOR 2: TECHNICAL SUPPORT ARTICLE REPLACING THE EXTRUDER CABLE BUNDLE

Version 1.1

WHAT ARE ALL THESE CABLES

The main extruder cable bundle ends at the motherboard as a single plug with eight cables attached. At the top end it is split into:

- 4 wire cable connector that connects to the extruder stepper motor
- 2 wire (red and black) cable connector that connects to the front fan
- 2 wire (white and black) cable connector that connects to the heater cartridge

WHY WOULD I NEED TO REPLACE IT?

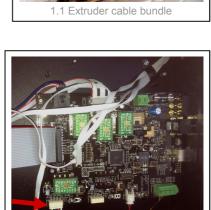
Sometimes one of these cables can get a minor to complete break that with consequently effect the stepper motors performance OR the front fan OR the heater cartridge (which heats up the heater block)

This sheet does not serve to diagnose this problem, just to help you repair it. If you are trying to ascertain if there is a fault in any of these cables see **Technical Support Article:** Has my Extruder Cable Failed

TEST THE CABLE FIRST

Before going to the trouble of fitting the new cable, which is a little fiddly, test it.

- 1. Turn your machine on its side (hold and gently lower gantry as you turn machine)
- 2. Unscrew the protective plate at the base of the machine
- 3. Unclip the Extruder cable bundle (see Fig 1.2) and clip in new one
- 4. Leave all wires in the protective tube and just lift new cables up to extruder.
- 5. Tip machine back upright (watch to make sure you do not pinch new cable).
- 6. Disconnect the old cables at the extruder (see Fig 1.3), and connect new ones



 Motherboard, Arrow points to extruder cable connector

CHECK THE NEW CABLE

Turn on the machine and test the cables

• Does the machine heat up? (Run filament load to test both the stepper motor and heater cartridge cables)

 Does the front fan turn on? (it should have run during the above test.

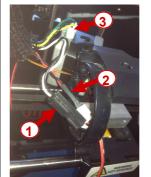
If yes then you will need to fit the cable properly.

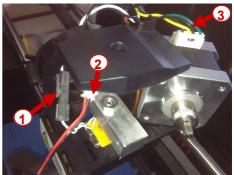
How Do I Fit It?

You will need to cut the small zip ties that hold the extruder cable bundle to the back of the machine.

Then very carefully unthread the old cable all the way down to the motherboard (you must un thread downwards as they are often twisted around the thermo cable which is delicate—be gentle.

Then thread the new cable back inside the cable protective sleave and re connect as per steps 1 to 6 above.





1.3 Extruder cables at extruder.

Stepper motor has been moved so you can see it more clearly.

1. Heater Cartridge cables 2. Front Fan Cables 3. Stepper Motor Cables

Test again. Then screw motherboard protective plate back on.

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