

gMax 2 PRO Upgrade Kit

v230303

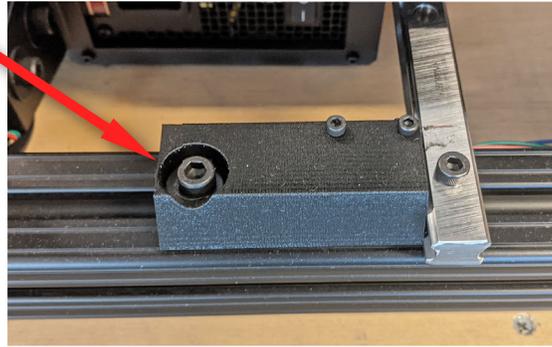
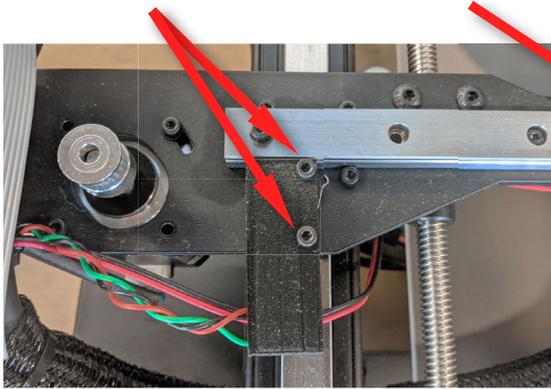


This guide should be used to install the gMax 2 PRO upgrade components

Make sure to inspect the electronics for loose or damaged wires from shipping

Remove Existing Parts

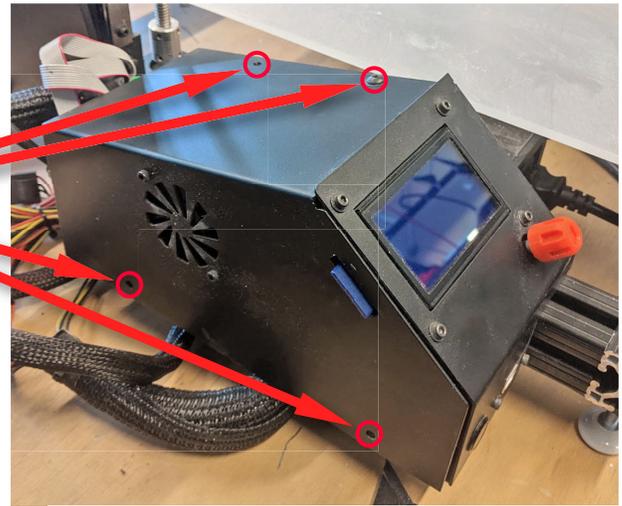
1. Remove X-axis and Y-axis endstops using a hex key. Remove wires to each endstop. You will need to cut the zip-ties to remove the x-axis endstop wire.



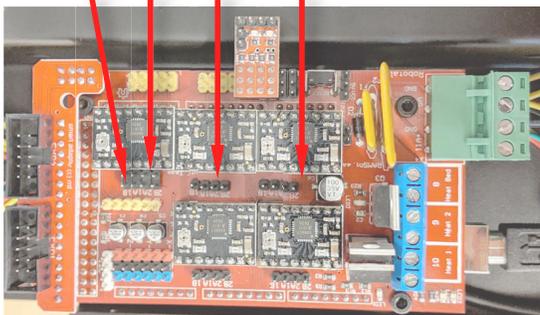
2. Remove (4) bolts on electronics case cover to access inside.

Be careful when removing cover because the case fan is connected to the rear PCB and will need to be unplugged.

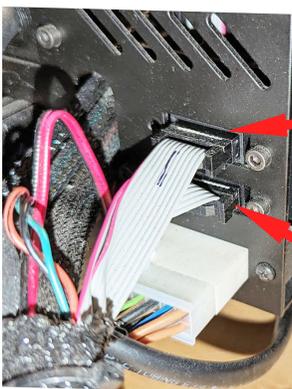
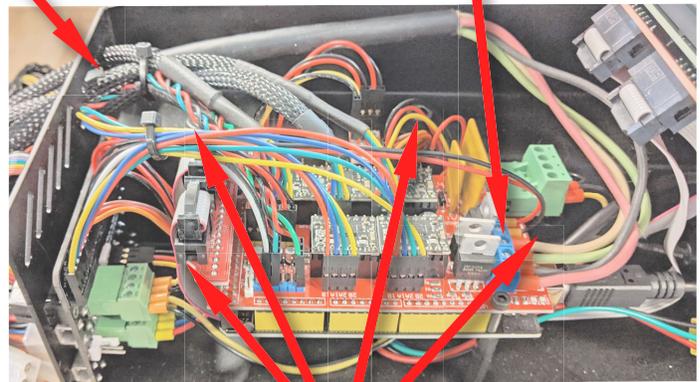
3. Unplug all motor wires, endstop wires and heated bed wires that exit the rear of the case. Label each motor and ribbon cable (See below).



Z Z Y X



Unscrew terminals and remove extruder power wire.



Ribbon #1
(On Top)

Ribbon #2
(On Bottom)

4. Remove (4) bolts holding electronics case to printer frame. (2) bolts are on top and (2) bolts are on the inside below the electronics.

Install New Electronics Case

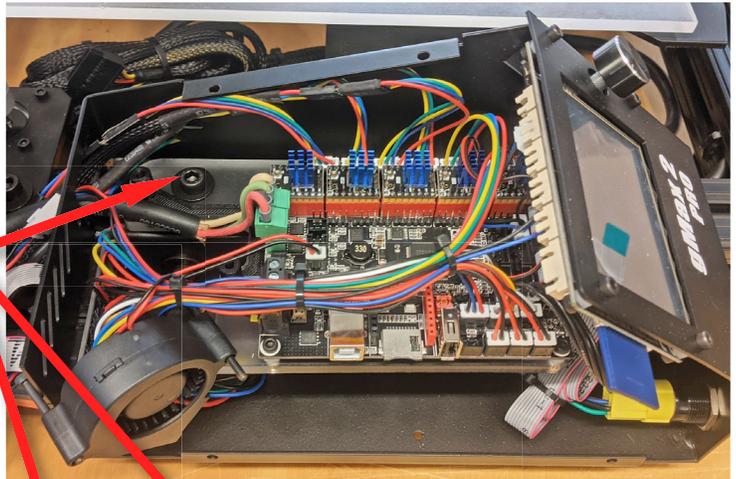
1. Remove cover on new electronics. **Be careful when removing cover because the case fan is connected to the rear PCB.**

2. Remove two M3 screws holding internal blower fan in place so you can access bolt hole below. Leave 3D printed bracket in place.

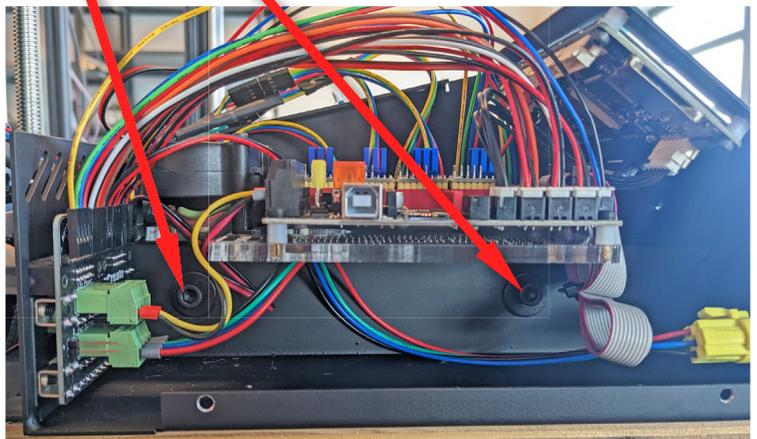


3. Install (3) M6x12mm socket head bolts w/ M6 washers to connect the case to the frame in existing tnuts from old case.

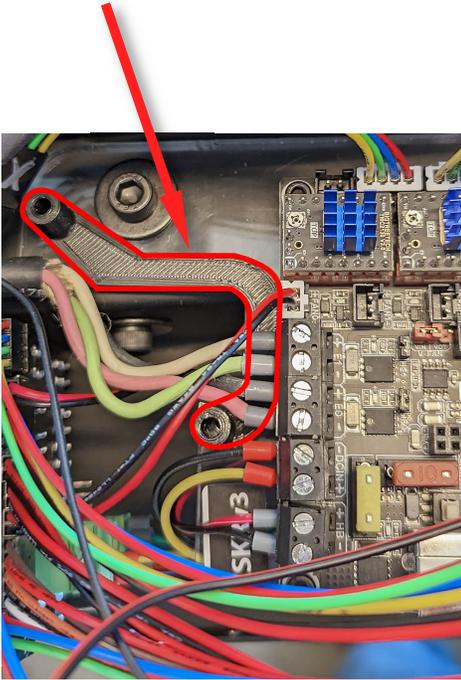
(1) bolt goes on top and (2) bolts go on the inside below the electronics.



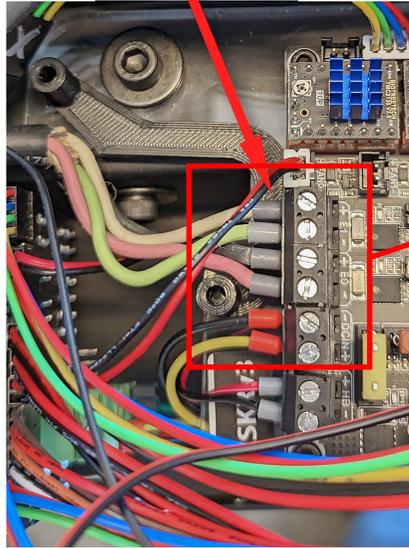
4. Use 3d printed spacer to line up case and power supply bracket if they are in the wrong position.



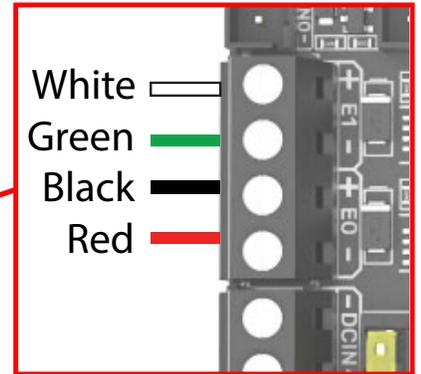
5. Orient 3d printed bracket (from step #2) below blower fan location.



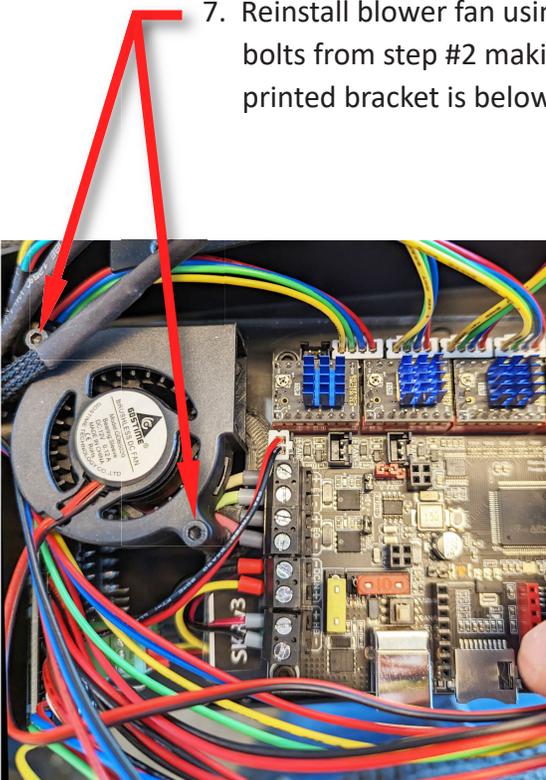
6. Hotend wires should go on top of the bracket. Use a screwdriver to install them in the screw terminals. Hold the screw terminal while tightening to avoid breaking it off.



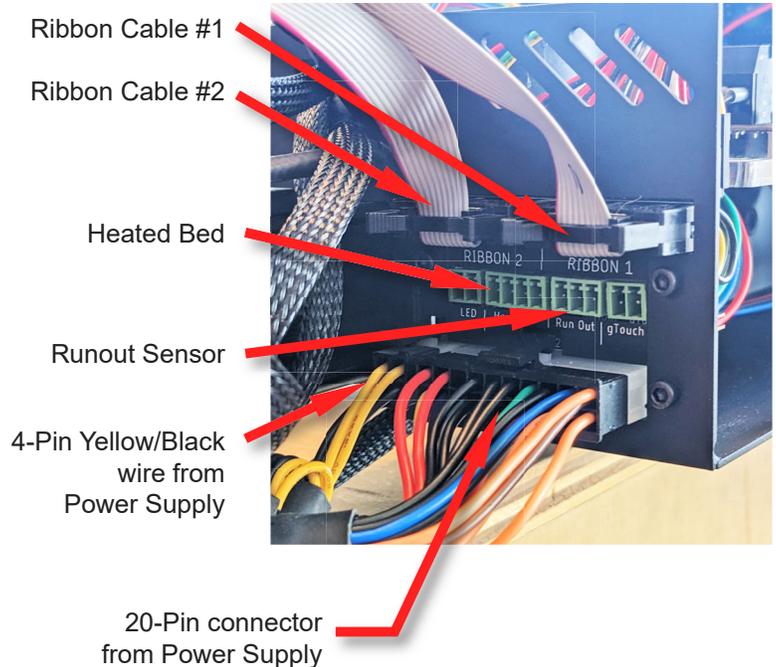
Closeup View



7. Reinstall blower fan using the bolts from step #2 making sure printed bracket is below.



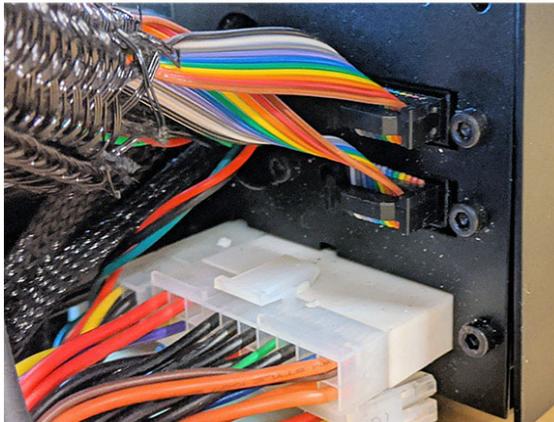
8. Plug in wires to back of electronics case. The pcb has the items labeled.



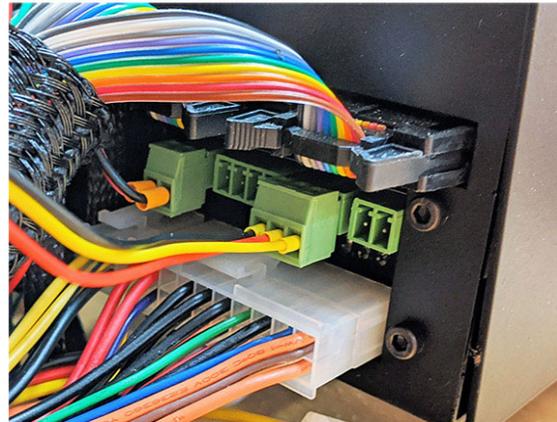
v1 Electronics PCB Only

Back of Electronics Case

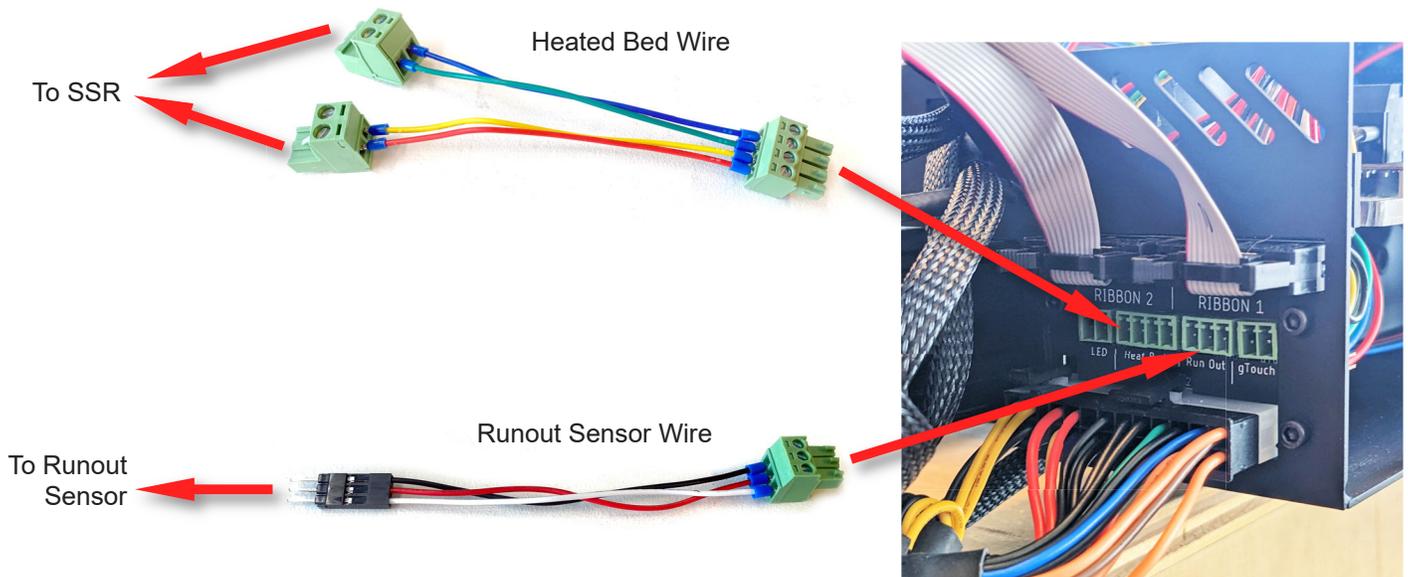
v1 Electronics PCB



v2/v3 Electronics PCB

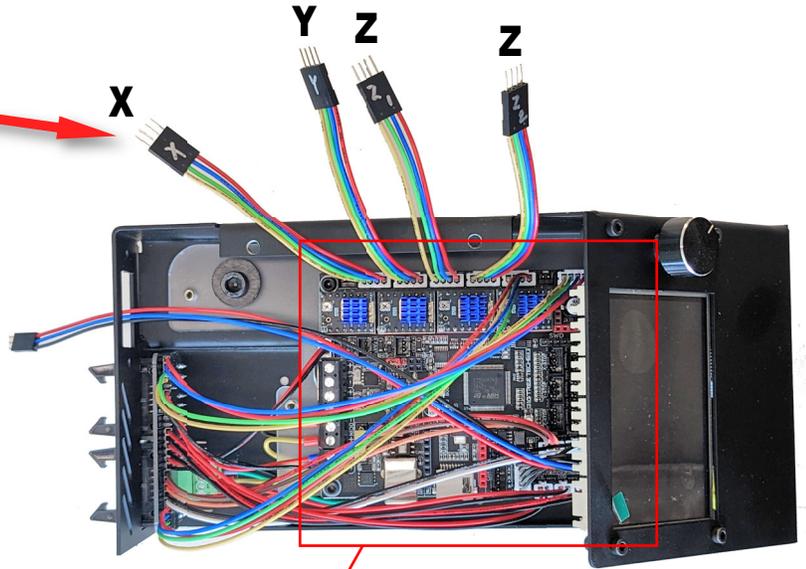
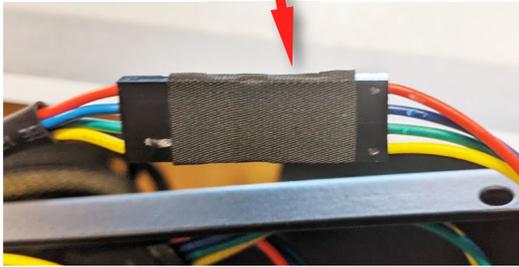


Printers that have printed circuit board (PCB) v1 with non locking ribbon cable plugs will need additional patch cables, selected at checkout, to plug in the heated bed and runout sensor wires.

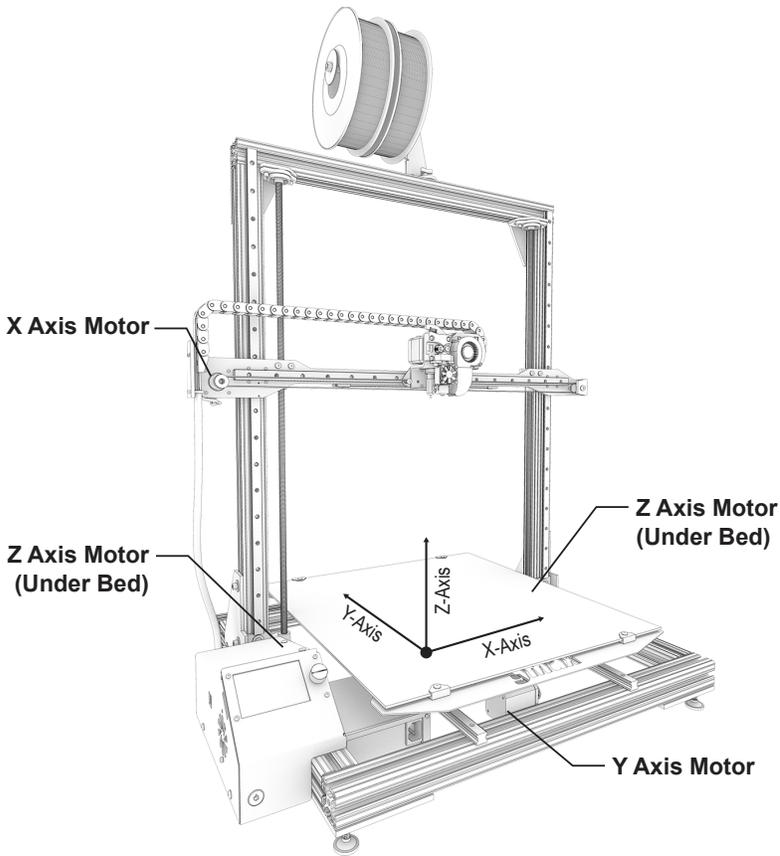
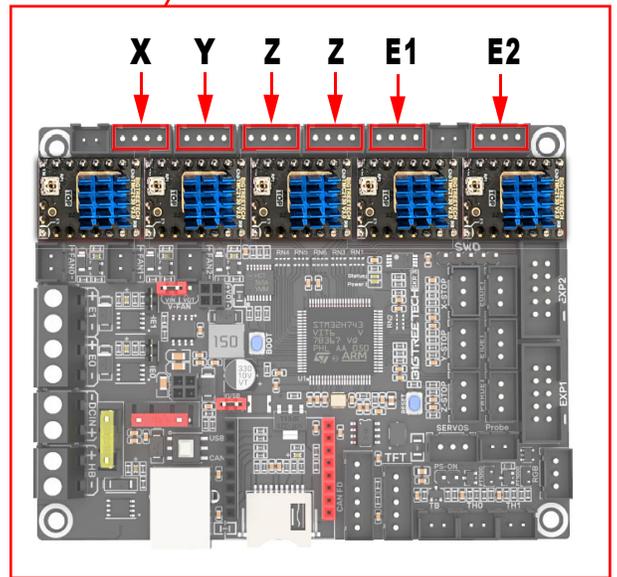


9. Connect motor wires from printer to appropriate wires in the electronics case.

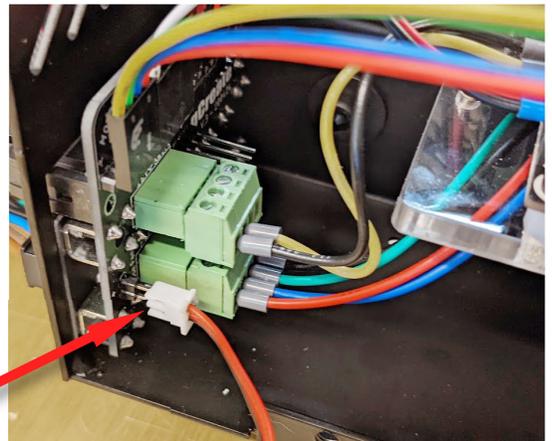
Match up each axis and make sure the colors line up. Once complete use supplied tape to wrap around connections.



For Reference

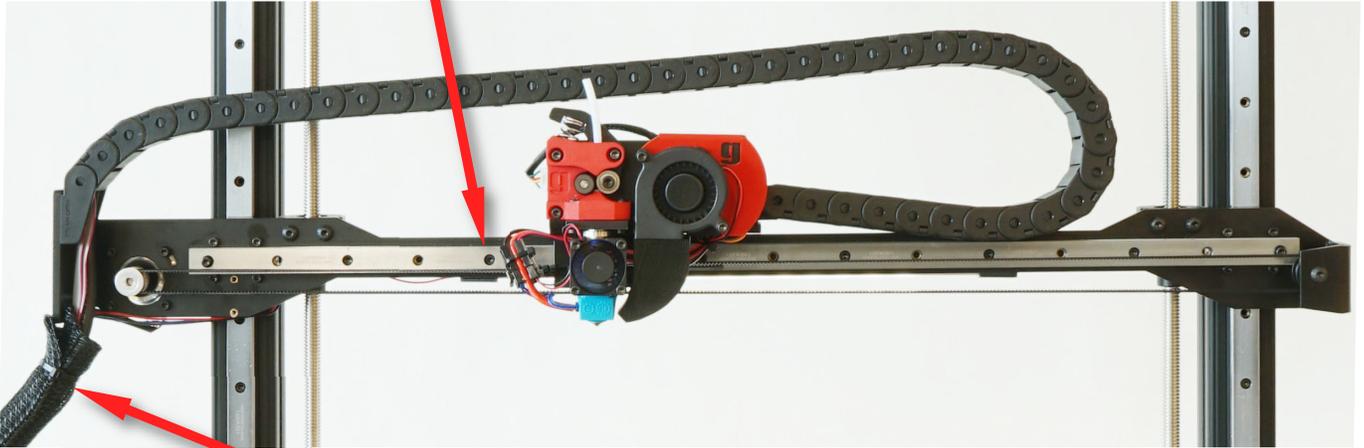


10. Plug in case fan to rear PCB with the red wire on the top and reinstall electronics case cover with bolts from before.



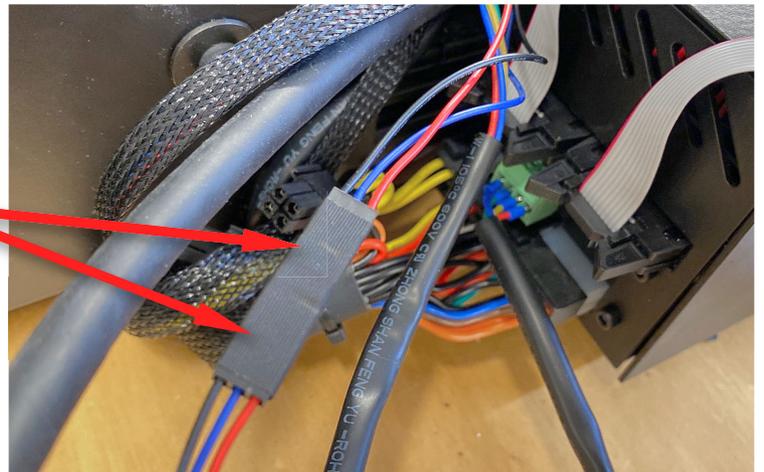
Install New LED Light Bar

1. Loosen bolt on x-axis rail to remove 3d printed bracket on rear. Remove old LED light bar and wire.



2. Install new LED light bar using the existing bolts and route new LED wire through flexible covering over x-axis wire bundle. Use supplied zip-ties to re-secure flexible covering.

3. Connect LED light wire to wire coming out of electronics case. Make sure to match up the colors correctly and use supplied tape to wrap around connectors.



Install New Firmware

1. Every electronics case was tested with dual chimera firmware to ensure both extruder drivers work correctly. If you are using either a dual 2in1 or single extruder, the correct firmware must be installed.

We have included the firmware on the sd card that shipped with the electronics in a sub folder. Installation instructions can be found in that folder. **EVERY NEW ELECTRONICS UPGRADE KIT HAS AN SKR v3 MAINBOARD.**