

DREMEL DIGILAB

Nozzle Replacement

⚠️ WARNING Read the Dremel 3D20 manual and these instructions. Failure to comply with the warnings and instructions may result in fire, equipment damage, property damage, or personal injury.

Always unplug Dremel 3D20 from its power before performing any service procedures. Failure to do so may result in personal injury and equipment damage.

Use only Dremel approved materials and components. Use of object materials, or 3D objects other than Dremel approved object materials and genuine Dremel components may void warranty.

Repairs on the Dremel 3D20 may require the use of special tools (pulling devices and bearing press). Authorized repair centers have trained repair technicians and equipment necessary to perform these repairs.

For the location of the repair center near you, look on our web site at www.Dremel3D.com and follow the link for 'Support'.

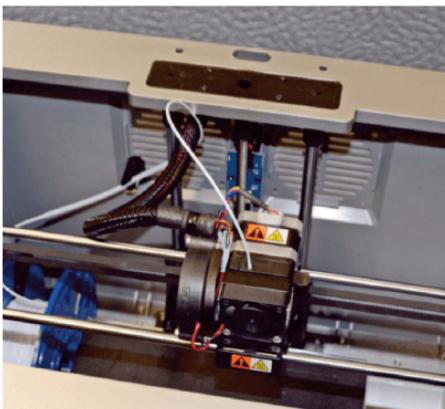
⚠️ WARNING Do not touch the extruder tip or heated build platform during Dremel 3D20 operation or until it has cooled down to at least 60°C (140°F). Contact with the extruder tip or build platform during or after operation before tip and build platform has cooled may result in personal injury.

SERVICE INSTRUCTIONS

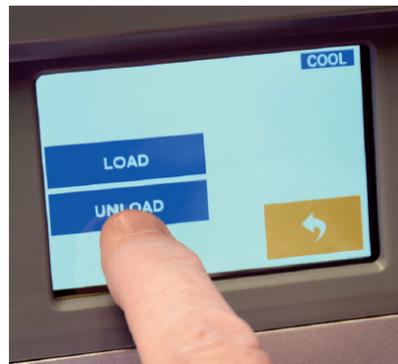
Tools Required:

- 2.5 mm Allen key

Step 1: Remove the top cover



Step 2: Unload filament from the extruder.



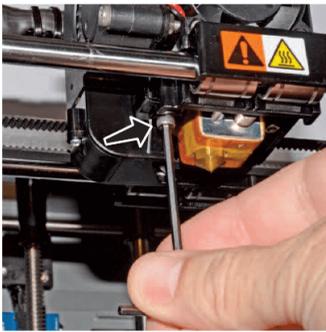
Step 3: Power off then unplug the power cord from the Dremel 3D Idea Builder.



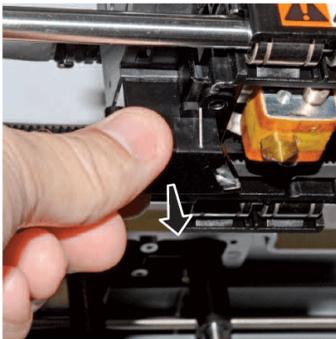
Step 4: Unplug the motor cable from the stepper motor.



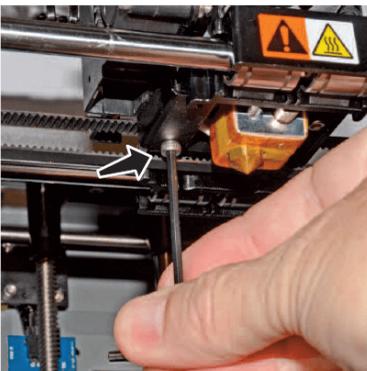
Step 5: Unscrew the fan baffle screw from the left front side of the extruder assembly.



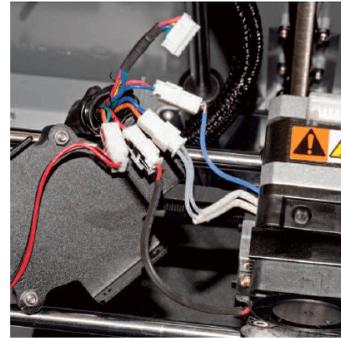
Step 6: Remove the fan baffle from the turbo fan.



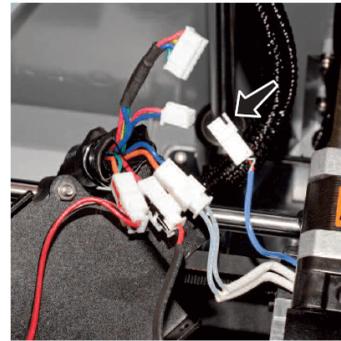
Step 7: Unscrew the turbo fan mounting bracket screw from the left back side of the extruder assembly.



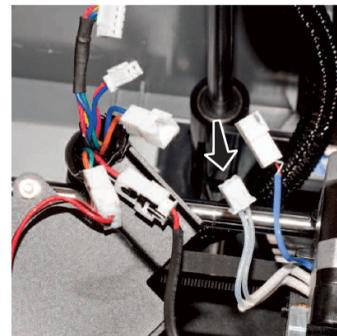
Step 8: Move the turbo fan bracket and turbo fan away from the extruder assembly. This will expose the wire connections.



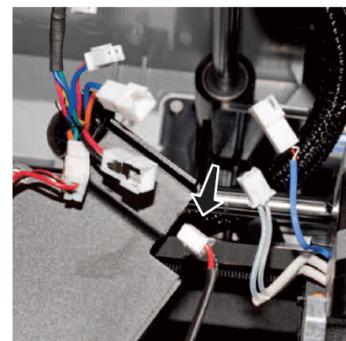
Step 9: Disconnect the thermocouple wire connector. (Red and blue to red and white wires).



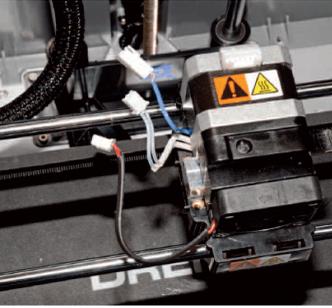
Step 10: Disconnect the heat cartridge wire connector. (Orange and blue wire to 2 white wires).



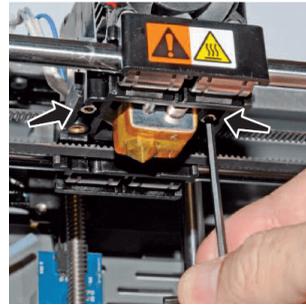
Step 11: Disconnect the fan wire connector. This connector is marked with black ink. (Red and black to red and black wires).



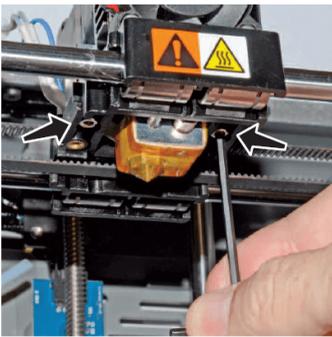
Step 12: All wires should be disconnected. Move the turbo fan and bracket out of the way.



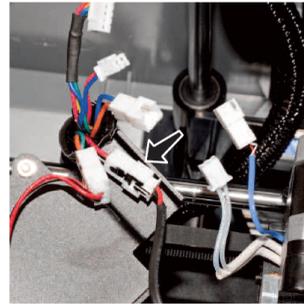
Step 16: Insert and tighten both screws, left and right, to secure extruder assembly to the extruder carriage.



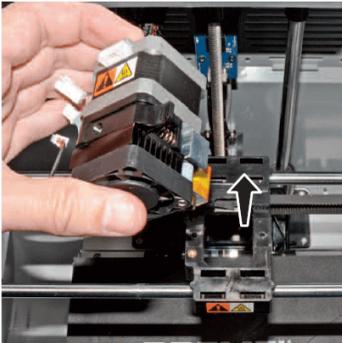
Step 13: Unscrew the extruder mounting screws from underneath the extruder assembly. There are 2 screws, one located on the right side and one located on the left side.



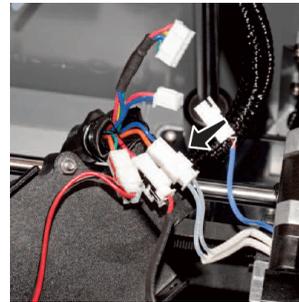
Step 17: Reconnect the fan wire connector. This connector is marked with black ink. (Red and black to red and black wires).



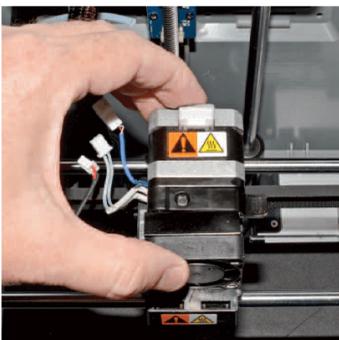
Step 14: Remove the extruder assembly.



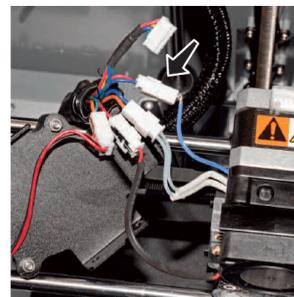
Step 18: Reconnect the heat cartridge wire connector. (Orange and blue wire to 2 white wires).



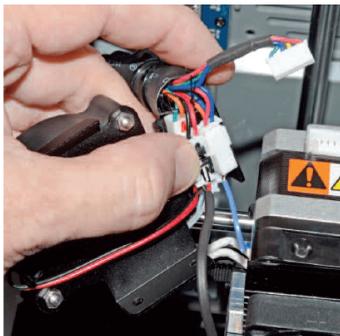
Step 15: Replace the new extruder assembly onto the extruder carriage.



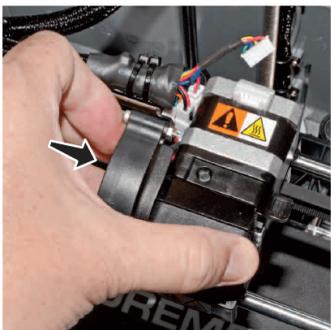
Step 19: Reconnect the thermocouple wire connector. (Red and blue to red and white wires).



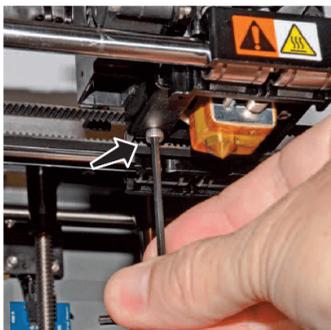
Step 20: With all wires connected, neatly place the connectors into the open area of the turbo fan bracket. Make sure wires lay flat underneath the stepper motor.



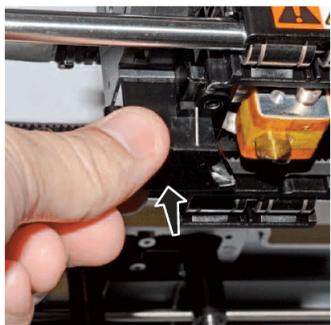
Step 21: Move the turbo fan bracket next to the extruder capturing the wire connectors between the bracket and the extruder assembly.



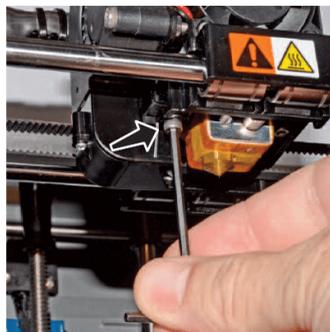
Step 22: Insert and tighten the back left screw for mounting the turbo fan bracket.



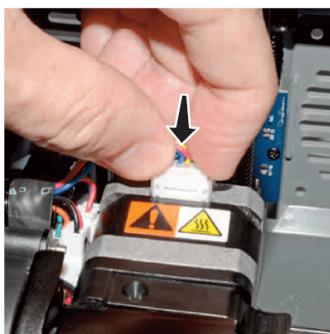
Step 23: Insert the fan baffle into the turbo fan.



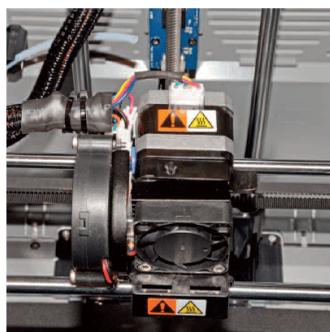
Step 24: Insert and tighten the fan baffle screw on the front left side of the extruder assembly.



Step 25: Reconnect the motor cable.



Step 26: Reassembly complete.



Step 27: Plug in and turn on the Idea Builder.

