



**BOSCH**

From  
PT-RT/ENG2

Our Reference  
Eli Share

Telephone  
+1(224)232-3006

Mount Prospect  
October 2, 2014

## Report

Issue Dremel 3D20 Extruder Head Clog  
Subject **Dremel 3D20 Extruder Drive Gear Unclog Procedure**  
Description Step-by-step instructions for the Dremel 3D20 Extruder drive gear unclog procedure

## **Extruder Clog Removal Service Instructions**

### **!WARNING! Read all instructions before repairing a jammed extruder**

When servicing the Dremel 3D20-01, only use identical replacement parts available from Dremel.

Repairs on Dremel 3D20-01 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, please call 1-844-4DRML3D (1-844-437-6533) Monday thru Friday, 8AM to 6PM CST. Or, look on our web site at [www.Dremel3D.com](http://www.Dremel3D.com) and follow the link for 'Support'.

#### **UNITED STATES**

Dremel Service Center  
4915 21st Street  
Racine, WI 53406  
Phone: 1-844-4DRML3D

#### **CANADA**

Giles Tool Agency  
47 Granger Ave.  
Scarborough, ON  
M1K 3K9, Canada  
Phone: 1-416-287-3000

West Coast Tool  
4008 Myrtle Street  
Burnaby, B.C. V5C 4G2  
Phone: 1-604-873-5394

#### **Tools Required:**

2.5mm hex allen wrench  
Needle Nose Pliers

## **1 Procedure:**

Step 1: Unload filament from the extruder. Refer to Manual Page 32 for Full Procedure.



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— Step 2: Power off the Dremel 3D Idea Builder



Step 3: Unplug the power cord from the Dremel 3D Idea Builder.



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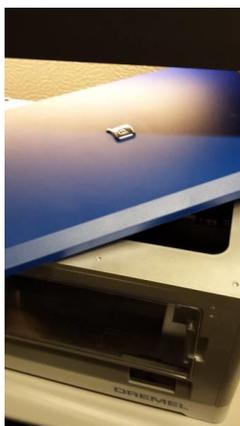
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— Step 4: Remove the top cover.



Step 5: Open the front door

Step 6: Move, by hand, the extruder to the center of the Idea Builder.



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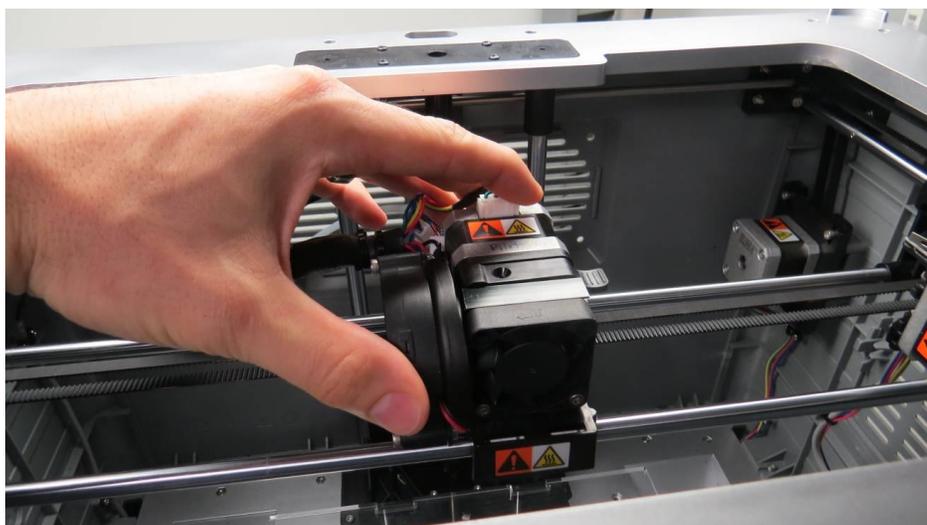
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**CAUTION: Use care when moving the extruder. Excessive force or pressure may damage the guide rails and belt. Do not force the extruder to move. If strong resistance is met when moving the extruder please call the Dremel Service Center.**



Step 7: Using the allen wrench, loosen the two screws on the front fan.



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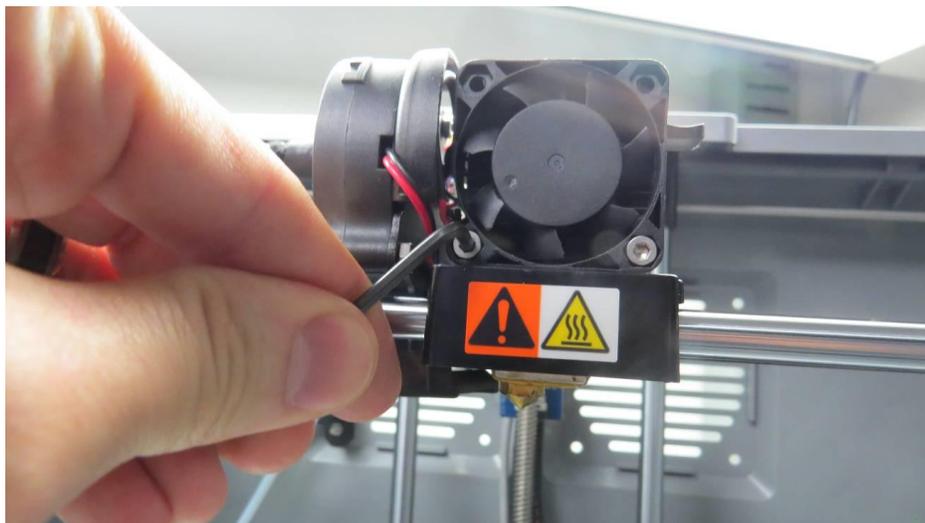
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Step 8: Remove the fan exposing the drive gear.



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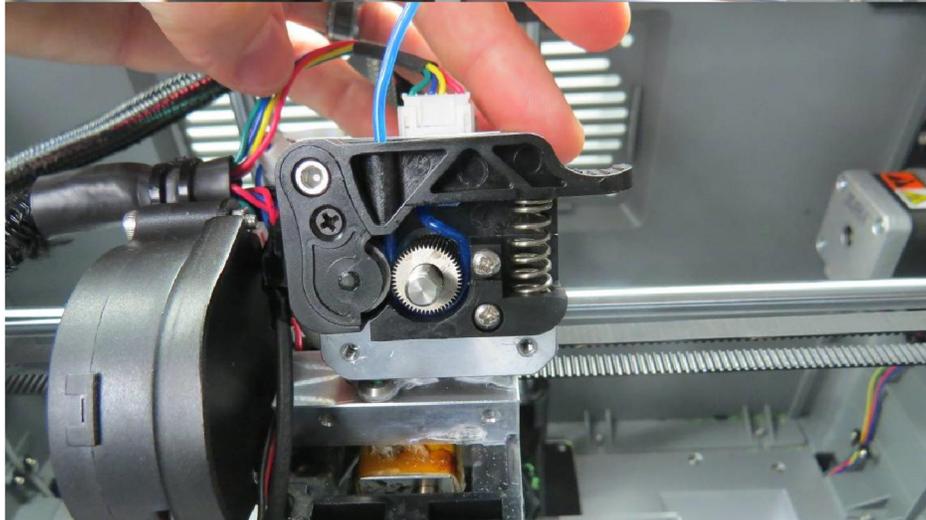
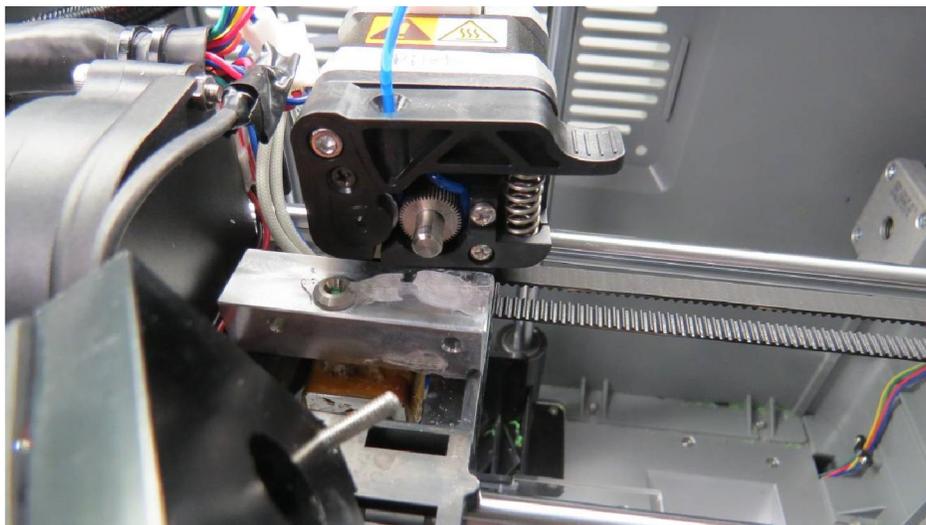
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Step 9: Remove the clogged filament with a needle nose pliers.

**Note: Make sure to remove all remnants of the clogged filament and discard appropriately. Any remaining filament may cause the printer to not work properly.**

**[S THERE A NEED TO DEPRESS THE FILAMENT LEVER TO OPEN UP THE SPACE BETWEEN THE GEAR AND THE ROLLER? There should be additional narrative, if it may be helpful to prevent part damage.]**

**Commented [s1]:** In my experience, I have not needed to depress this lever to remove a clog. Typically, I pull the clog out from the gear and then I am able to slip the filament back out the top hole.



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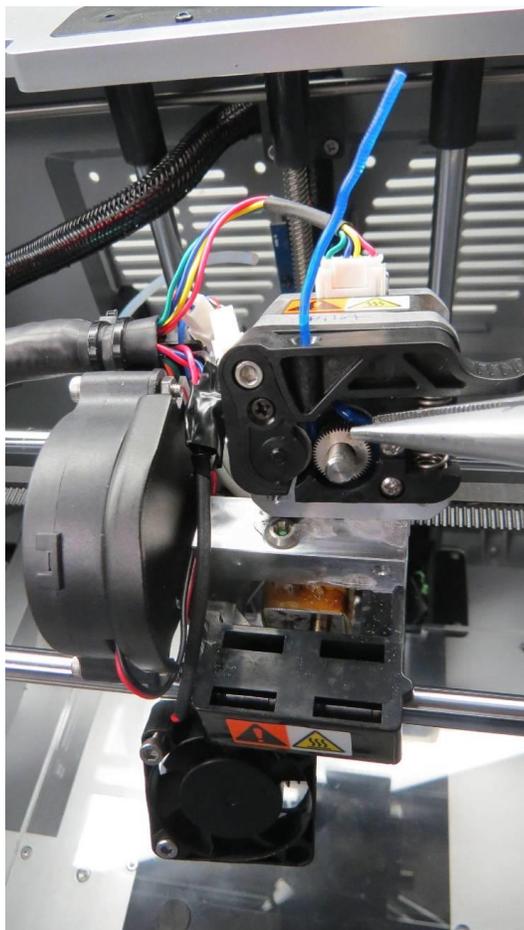
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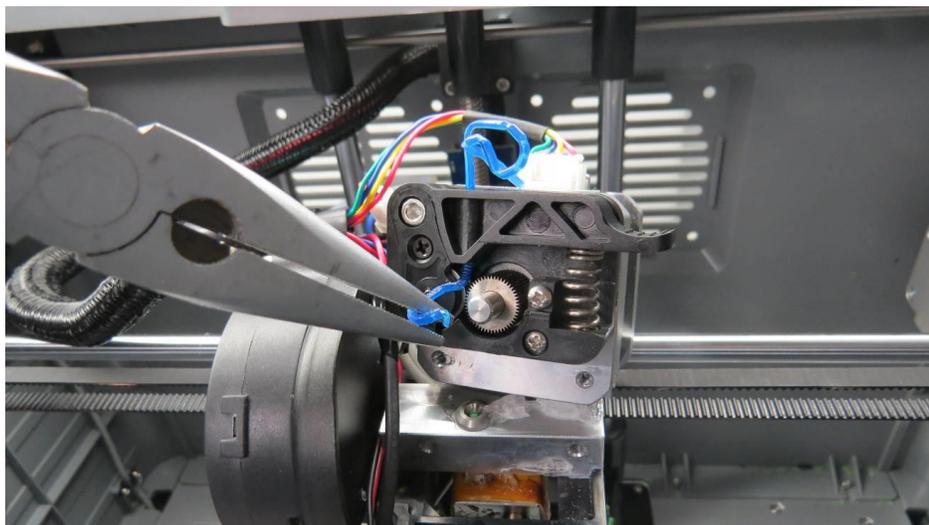
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Step 10: Replace the stepper motor and fan.



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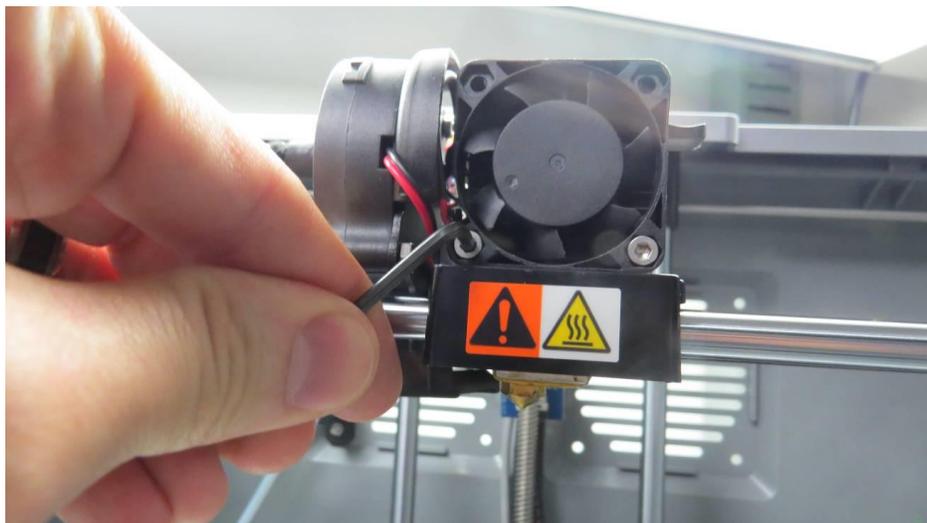
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Step 11: Tighten the 2 fan screws in place.

Note: Screws should be hand tightened. Do not over tighten or you may damage the extruder fan.

CAUTION: Do not lean on or apply excessive force to the extruder head assembly. Doing this may bend or damage the guide rails.

## 2 Test and Verify:

Step 1: Make sure to plug in the Idea Builder.

Step 2: Turn the Idea Builder back on.

Step 3: Load filament following the instructions on page 25 of the User manual.



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**Congratulations! You are  
now ready to build.**

**Build On.**

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