NWA 3D
PRINTING - SUPPLIES - EDUCATION

NWA 3D LLC
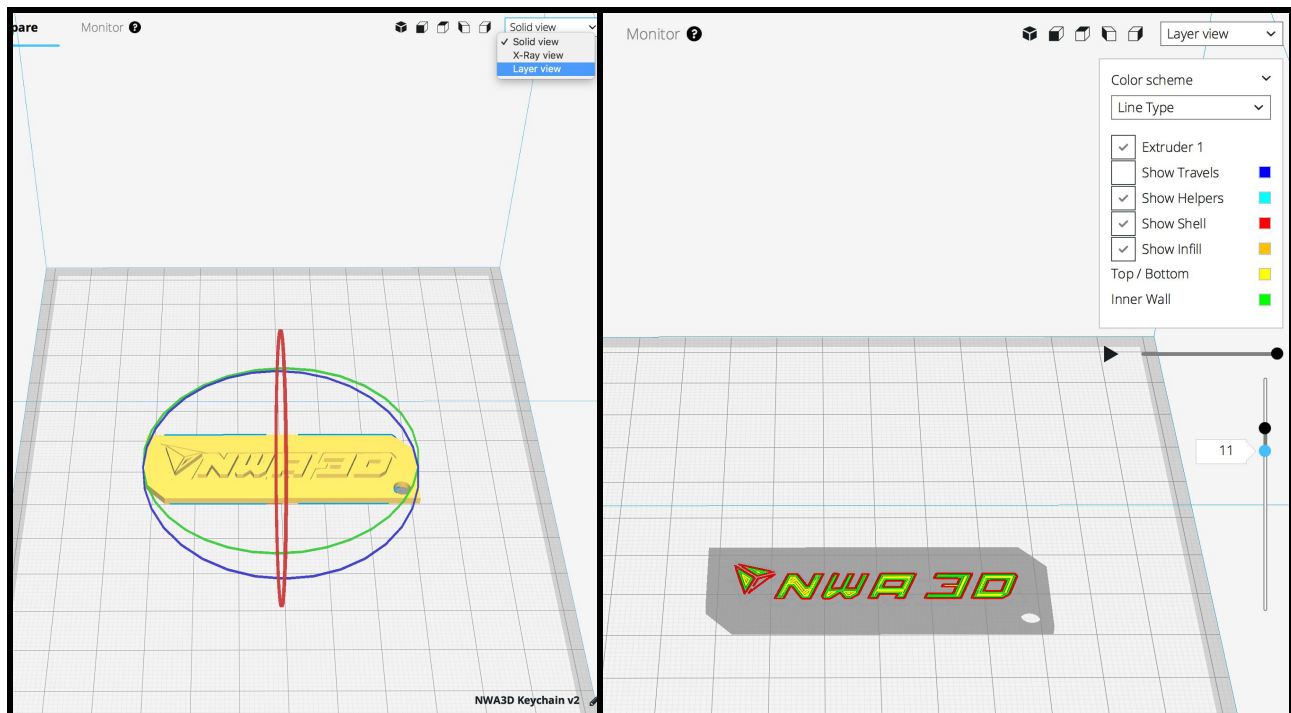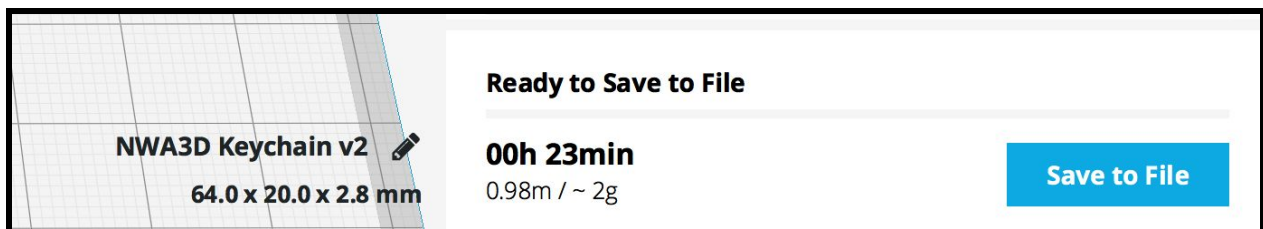3422 N. College Avenue, Suite 5
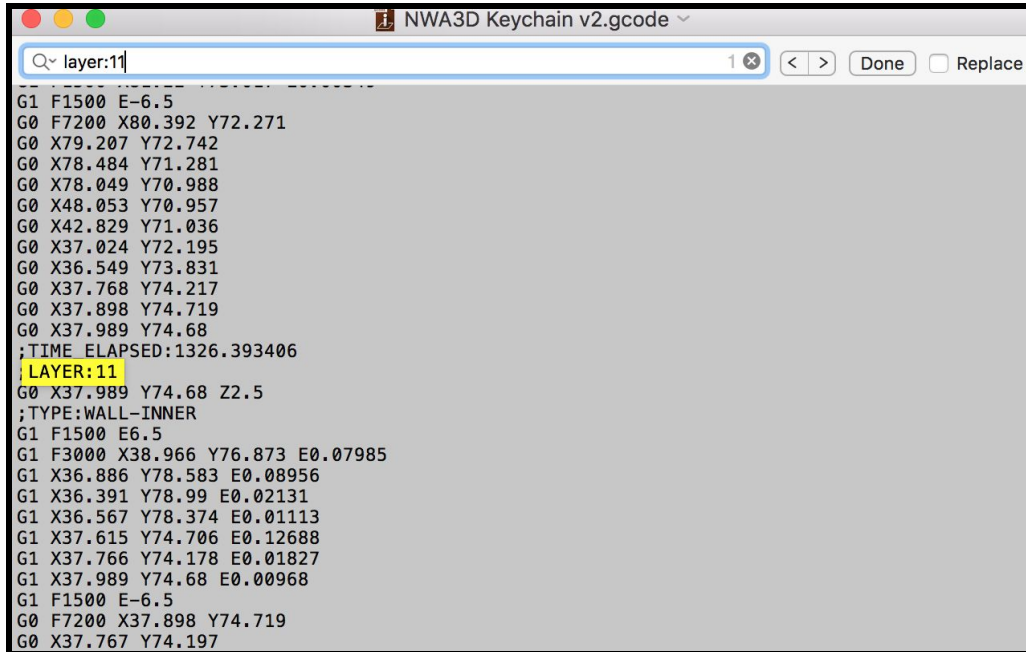Fayetteville, AR 72703
479-439-0300

How to program .Gcode to print in multiple colors

1. Open your model in any version of Cura and slice it.

2. Go to the "Layer view" and use the slider to find the layer where you want the filament to change color.

3. Save the .Gcode on your desktop and open it with a text edit program (such as Notepad or TextEdit).
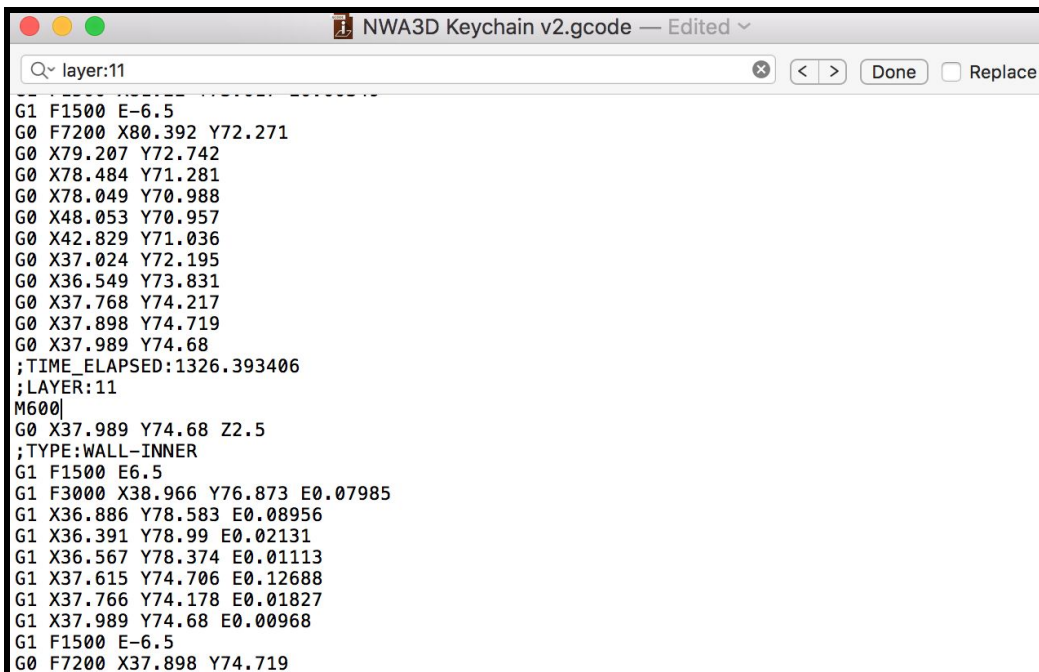
4. Use the "Search" (command+f/ control+f) feature to search for the layer number where you want the file to change color. Type "layer:" and then the number of the layer from Cura in the window (no spaces).

```
● ● ●                           NWA3D Keychain v2.gcode ∨
Q∨ layer:11                                              1 ⊗    < >   Done      Replace
G1 F1500 E-6.5
G0 F7200 X80.392 Y72.271
G0 X79.207 Y72.742
G0 X78.484 Y71.281
G0 X78.049 Y70.988
G0 X48.053 Y70.957
G0 X42.829 Y71.036
G0 X37.024 Y72.195
G0 X36.549 Y73.831
G0 X37.768 Y74.217
G0 X37.898 Y74.719
G0 X37.989 Y74.68
;TIME_ELAPSED:1326.393406
;LAYER:11
G0 X37.989 Y74.68 Z2.5
;TYPE:WALL-INNER
G1 F1500 E6.5
G1 F3000 X38.966 Y76.873 E0.07985
G1 X36.886 Y78.583 E0.08956
G1 X36.391 Y78.99 E0.02131
G1 X36.567 Y78.374 E0.01113
G1 X37.615 Y74.706 E0.12688
G1 X37.766 Y74.178 E0.01827
G1 X37.989 Y74.68 E0.00968
G1 F1500 E-6.5
G0 F7200 X37.898 Y74.719
G0 X37.767 Y74.197
```

5. Once you find the layer, enter a new line below the layer title, type in "M600," and save the file.

```
● ● ●                    NWA3D Keychain v2.gcode — Edited ∨
Q∨ layer:11                                                ⊗    < >   Done      Replace
G1 F1500 E-6.5
G0 F7200 X80.392 Y72.271
G0 X79.207 Y72.742
G0 X78.484 Y71.281
G0 X78.049 Y70.988
G0 X48.053 Y70.957
G0 X42.829 Y71.036
G0 X37.024 Y72.195
G0 X36.549 Y73.831
G0 X37.768 Y74.217
G0 X37.898 Y74.719
G0 X37.989 Y74.68
;TIME_ELAPSED:1326.393406
;LAYER:11
M600
G0 X37.989 Y74.68 Z2.5
;TYPE:WALL-INNER
G1 F1500 E6.5
G1 F3000 X38.966 Y76.873 E0.07985
G1 X36.886 Y78.583 E0.08956
G1 X36.391 Y78.99 E0.02131
G1 X36.567 Y78.374 E0.01113
G1 X37.615 Y74.706 E0.12688
G1 X37.766 Y74.178 E0.01827
G1 X37.989 Y74.68 E0.00968
G1 F1500 E-6.5
G0 F7200 X37.898 Y74.719
```

6. Move the file to an SD card and start your print!

7. When the printer gets to the M600 line of code it will automatically pause and an alarm will sound. Remove and load your new filament color until you see the new color extruding out of the nozzle. Press the button to resume the print, you did it! *Because the nozzle stays hot, make sure you're around when it changes color. If it is left heated and unattended too long, the filament will bake into the nozzle and cause a clog.*