



## Addendum to [Fab@Home](#) Assembly Instructions

### Part No. LED-1 – UV-Cure LED System

To properly implement these parts, use the following assembly instructions:

- Figure 1 shows the contents of the LED-1 UV Cure System.
- Remove the four #4-40 hex nuts holding the LED-1 assembly together as shown in Figure 2.
- Remove the four 1/2" #4-40 cap screws at the bottom of the Model 1 tool holder as in Figure 3. Do not remove the bottom plate on the tool. The LED-1 will mount below this.
- Align the LED-1 assembly so that the Koba logo is up, the switch faces forward, and the four 7/8" #4-40 cap screws line up with the holes in the bottom of the Model 1 tool holder as in Figure 4.
- Screw the four 7/8" #4-40 cap screws from the LED-1 assembly into the existing #4-40 hex nuts in the Model 1 tool holder as in Figure 5.
- Route the LED-1 power cable behind the tool holder and along the motor and limit switch cable bundle to the Xylotex board as in Figure 6.
- Use the supplied cable ties to secure the LED-1 power cable.
- Connect the female 2-position Molex connector on the LED-1 power cable to the male 2-position Molex connector just below the power connection on the Xylotex board as in Figure 7.
- Figure 8 shows the installation complete and ready to use.

You are now ready to use the UV cure system. To get the most out of your UV cure build experience, it is recommended that a green 18-gauge general purpose precision syringe tip with 1.50" stainless tube be used to dispense Koba P/N UVG-1. A tool configuration file is available for free download from the materials page of the Fab@Home website [http://www.fabathome.org/wiki/index.php?title=Materials:Koba\\_UVG-1#Material\\_Data\\_For\\_Koba\\_UVG-1](http://www.fabathome.org/wiki/index.php?title=Materials:Koba_UVG-1#Material_Data_For_Koba_UVG-1). When you bring up the [Fab@Home](#) software, select the KobaUVG1 tool from the list and start printing with the UV LEDs off. Once the build is complete, cover the syringe tip with electrical tape to prevent curing on the syringe tip, bring the tool over the part, and turn the LEDs on for several minutes. If the surface of the part remains tacky, a few minutes in bright sunlight will eliminate residual oxygen inhibition. Fully cured parts have excellent mechanical characteristics and can be drilled, filed, sanded, etcetera. Figure 9 shows a 40-tooth bicycle chain ring printed using UVG-1.



Figure 1. LED-1 UV Cure System contents.



Figure 2. LED-1 with #4-40 shipping nuts removed.

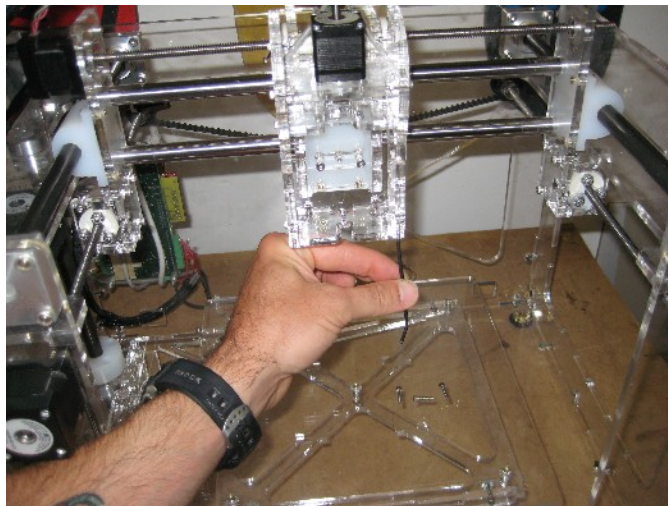


Figure 3. Removing the vertical #4-40 cap screws.

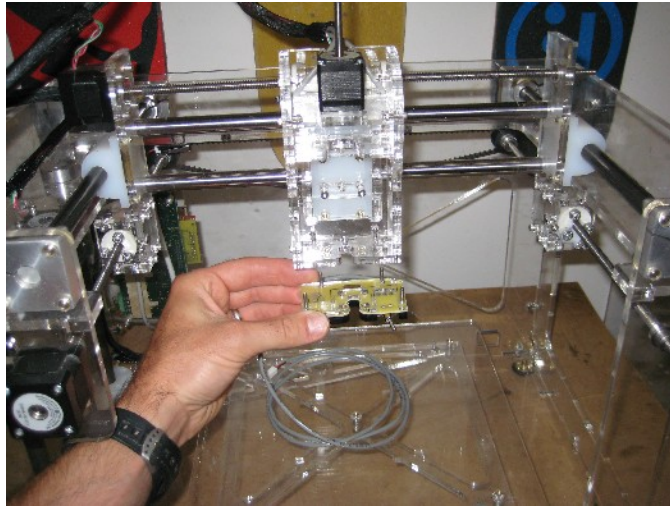


Figure 4. Aligning the LED-1.

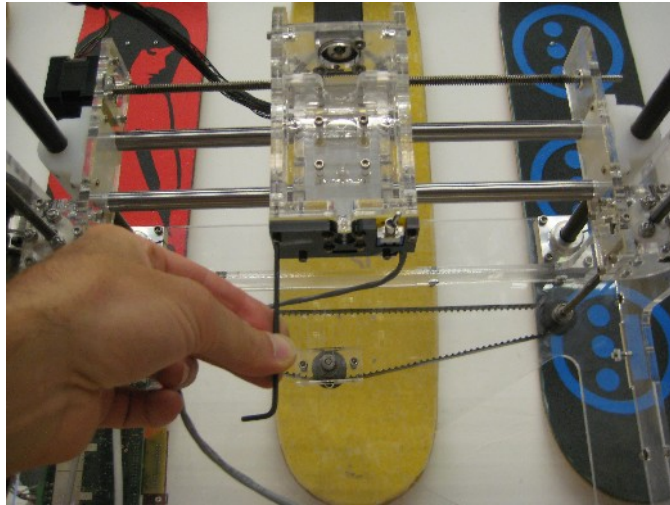


Figure 5. Securing the LED-1.

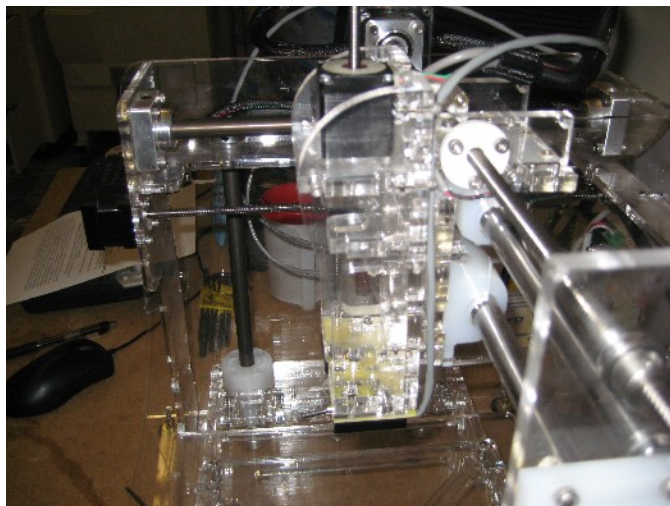


Figure 6. Routing the cable.

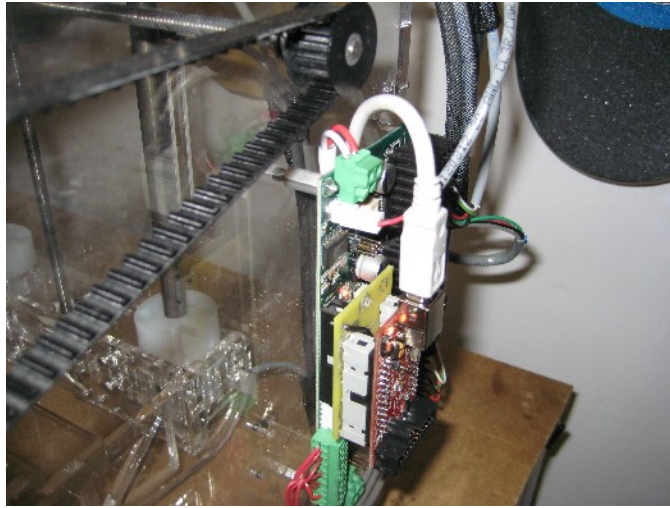


Figure 7. Electrical connection.

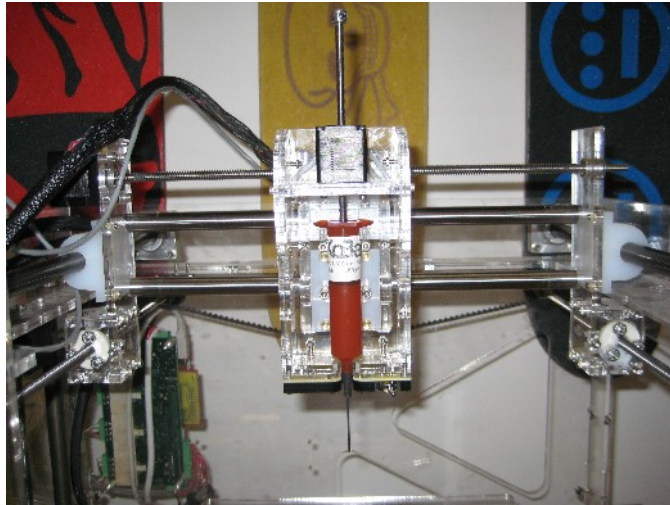


Figure 8. Installation complete.



Figure 9. A UV Cure sprocket.