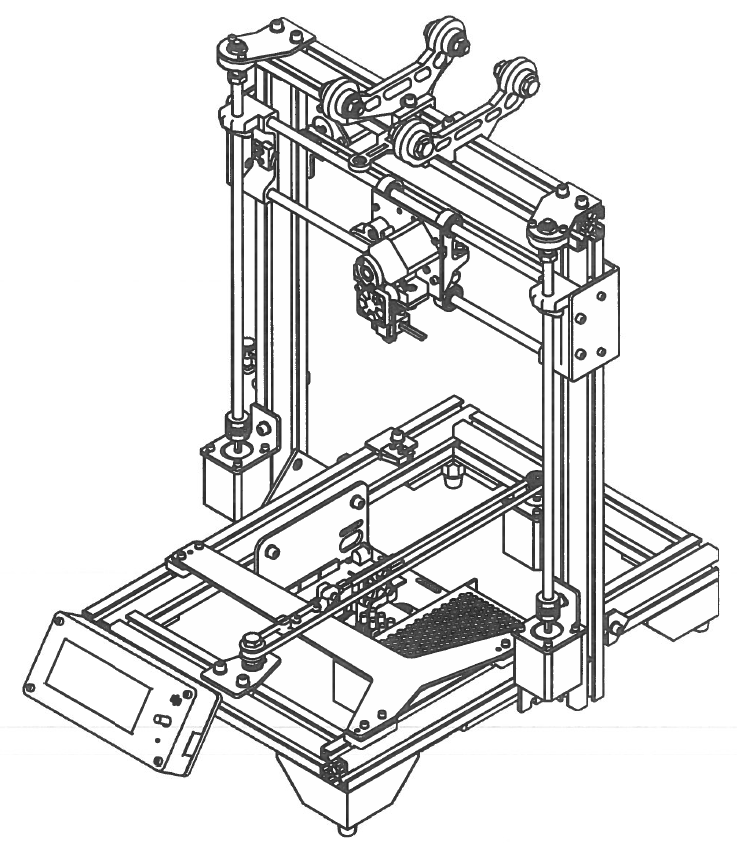
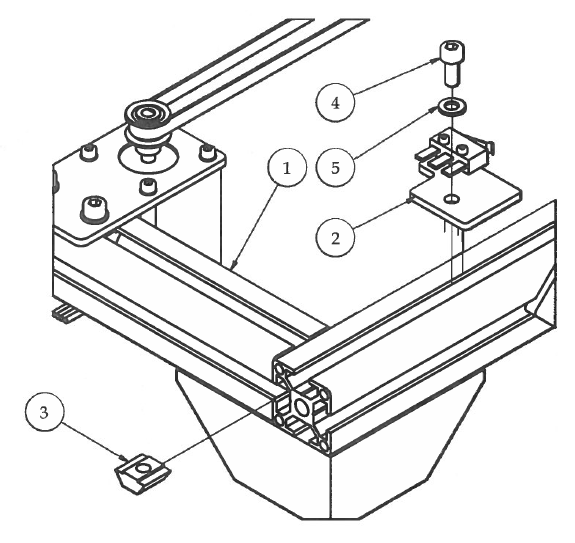
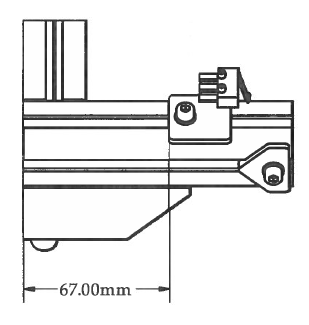
Limit Switches, Electronics Tray, and LCD Screen

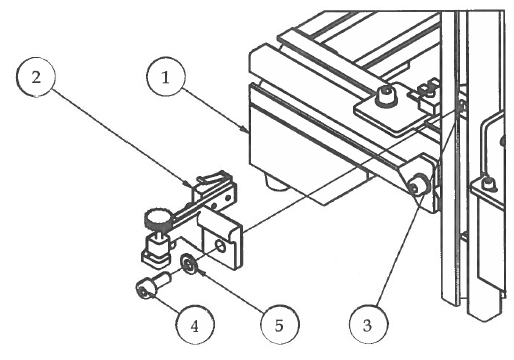


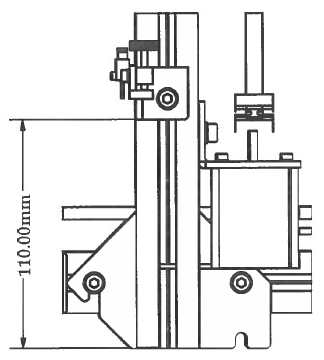
Step 1

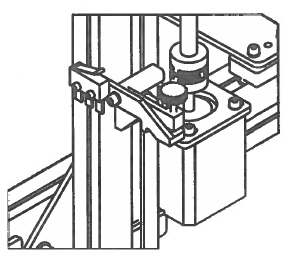


1. Attach the Y Limit Switch sub-assembly using M5 hardware.
2. The Y Limit Switch bracket 67mm from the back of the 3D printer.

|  |  |  |  |
| --- | --- | --- | --- |
| **PARTS LIST** | | | |
| **ITEM** | **QTY** | **PART NUMBER** | **DESCRIPTION** |
| 1 | 1 | X Stage Assembly | Previous sub-assembly |
| 2 | 1 | Y Limit Switch | Previous sub-assembly |
| 3 | 1 | M5 T-Nut | Nuts and bolts |
| 4 | 1 | M5 x 12 | Nuts and bolts |
| 5 | 1 | M5 Washer | Nuts and bolts |
|  |  | M4 Hex Wrench | Tools |

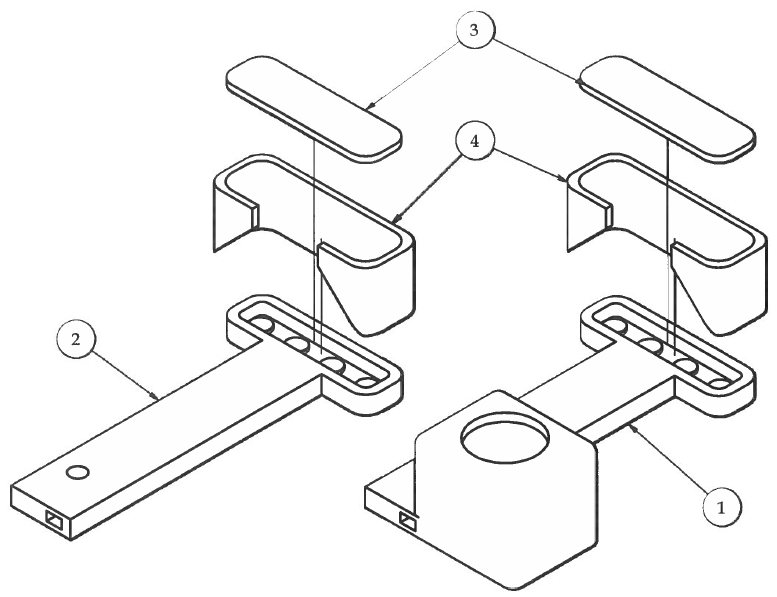
Step 2





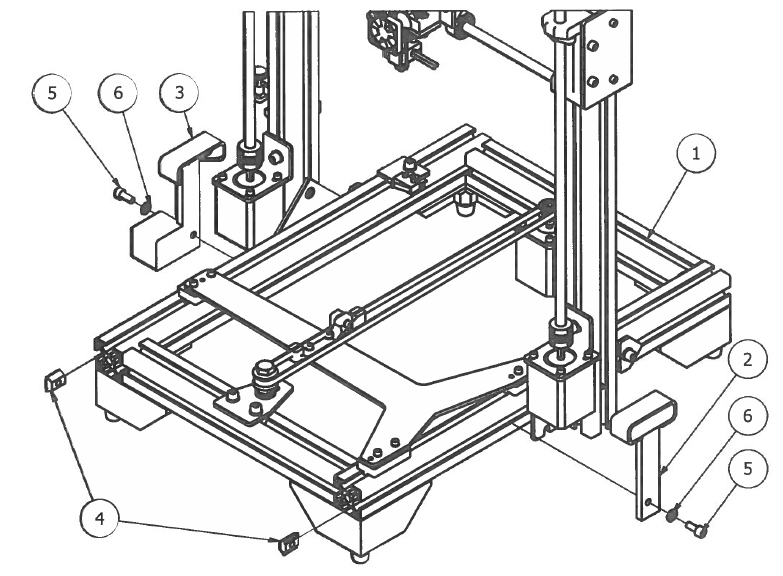
1. Slide M5 T-Nut into the outer slot of the left upright frame.
2. Attach Adjustable Z Limit Switch using M5 hardware measuring 110mm from the bottom of the extrusion. We will calibrate the position of this switch during the final calibration stage of assembly.

|  |  |  |  |
| --- | --- | --- | --- |
| **PARTS LIST** | | | |
| **ITEM** | **QTY** | **PART NUMBER** | **DESCRIPTION** |
| 1 | 1 | Step1 | Previous sub-assembly |
| 2 | 1 | Adjustable Z Limit Switch | Nuts and bolts |
| 3 | 1 | M5 T-Nut | Nuts and bolts |
| 4 | 1 | M5 x 12 | Nuts and bolts |
| 5 | 1 | M5 Washer | Nuts and bolts |
|  |  | M4 Hex Wrench | Tools |

Step 3

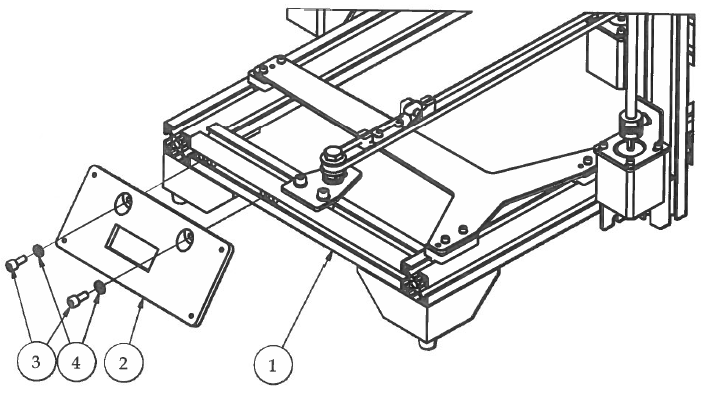
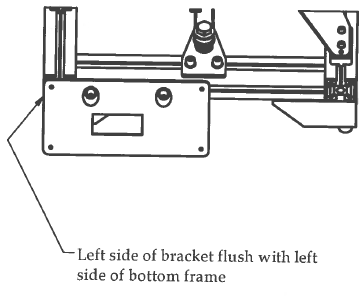
1. Press fit the LED lights into the LED light fixtures and solder them in a series circuit.
2. Solder wires to the LED light series circuits and run the wires through the small tubes inside the light post. (See "Super Bright 3D Printer Lights" on Thingiverse.com for detailed electrical assembly instructions).
3. Carefully attach the ledShade around the LED lights on each of the ledPost sub-assemblies. Leave about 2mm of the back side of the ledShade sticking out.
4. Snap in the ledCover plate on the back of the ledShade to cover the solder joints from the LED lights.

|  |  |  |  |
| --- | --- | --- | --- |
| **PARTS LIST** | | | |
| **ITEM** | **QTY** | **PART NUMBER** | **DESCRIPTION** |
| 1 | 1 | ledPostSwitch | Previous sub-assembly |
| 2 | 1 | ledPost | Previous sub-assembly |
| 3 | 2 | ledCover | 3D printed parts |
| 4 | 2 | ledShade | 3D printed parts |

Step 4

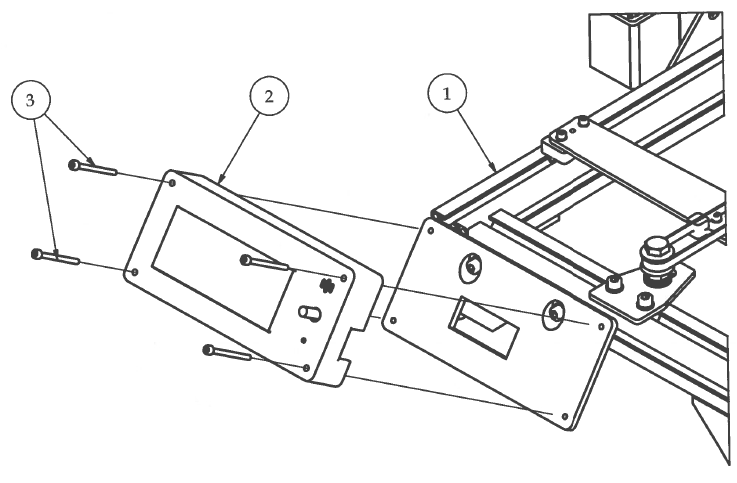
1. Attach both LED light fixtures to the bottom frame by sliding the LED light fixtures up against the Z motor brackets and attach using I-Nuts and M5 hardware.

|  |  |  |  |
| --- | --- | --- | --- |
| **PARTS LIST** | | | |
| **ITEM** | **QTY** | **PART NUMBER** | **DESCRIPTION** |
| 1 | 1 | Step1 | Previous sub-assembly |
| 2 | 1 | LEDpostAssy | Previous sub-assembly |
| 3 | 1 | LEDpostSwitchAssy | Previous sub-assembly |
| 4 | 2 | M5 T-Nut | Nuts and bolts |
| 5 | 2 | M5 x 12 | Nuts and bolts |
| 6 | 2 | M5 Washer | Nuts and bolts |
|  |  | M4 Hex Wrench | Tools |

Step 3

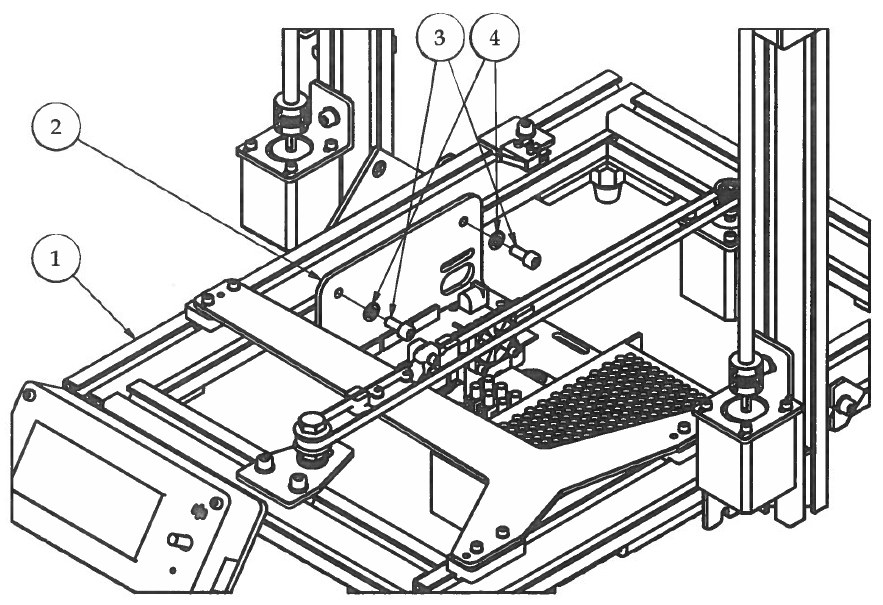
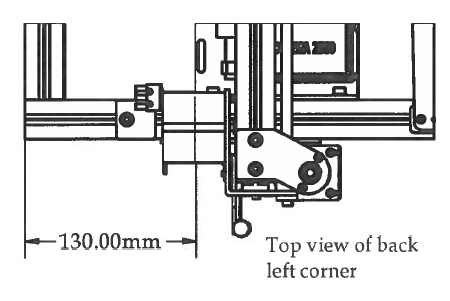
1. Attach the LCDpanelBoxBack to the font of the bottom frame using the existing T-Nuts and M5 hardware.
2. Make sure the left-outside of the bracket is flush with the left side of the bottom frame. This allows sufficient space when folding the crossbar down for shipping and/or transportation.

|  |  |  |  |
| --- | --- | --- | --- |
| **PARTS LIST** | | | |
| **ITEM** | **QTY** | **PART NUMBER** | **DESCRIPTION** |
| 1 | 1 | Step2 | Previous sub-assembly |
| 2 | 1 | LCDpanelBoxBack | 3D printed parts |
| 3 | 2 | M5 x 12 | Nuts and bolts |
| 4 | 2 | M5 Washer | Nuts and bolts |
|  |  | M4 Hex Wrench | Tools |

Step 4

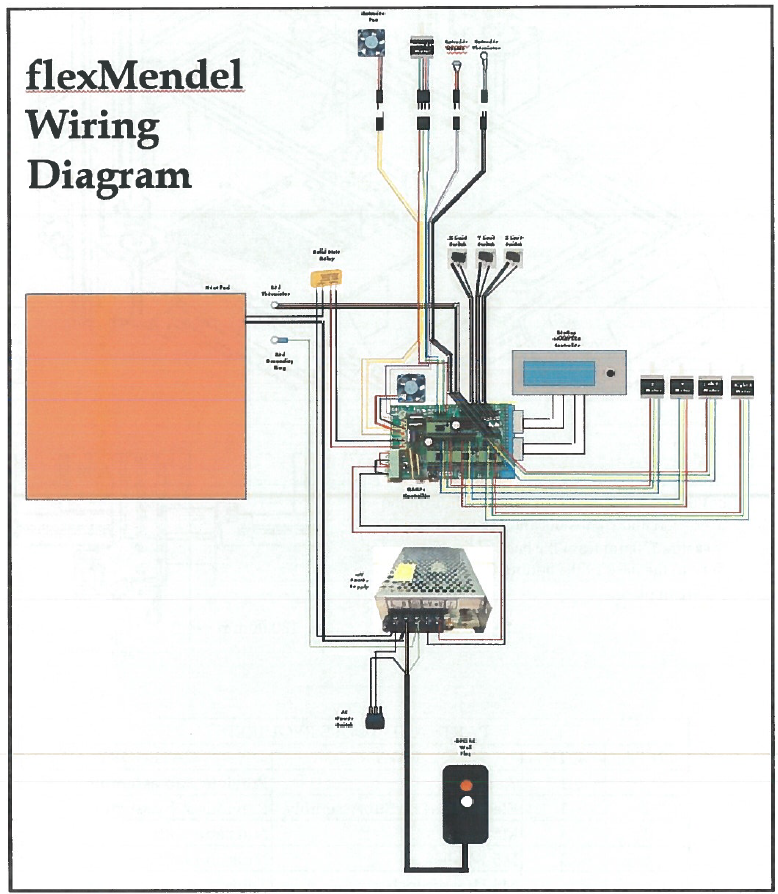
1. Attach the LCDscreenPanelBoxFront using M3 hardware. The M3 x 40 bolts will self-tap into the LCD Back Panel.
2. Make sure that the AC Power Switch is oriented in the correct position and that all of the wires to the LCD screen and AC power switch are placed through the rectangular window on the LCDscreenPanelBoxBack bracket before securing in place.

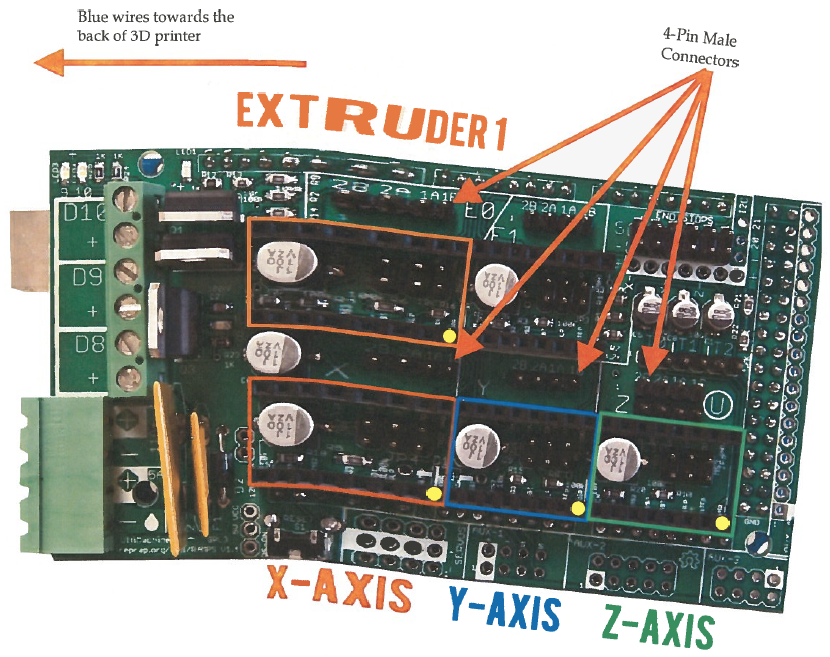
|  |  |  |  |
| --- | --- | --- | --- |
| **PARTS LIST** | | | |
| **ITEM** | **QTY** | **PART NUMBER** | **DESCRIPTION** |
| 1 | 1 | Step3 | Previous sub-assebmly |
| 2 | 1 | LCDscreenSubAssembly | Previous sub-assebmly |
| 3 | 4 | M3 x 40 | Nuts and bolts |
|  |  | M2.5 Hex Wrench | Tools |

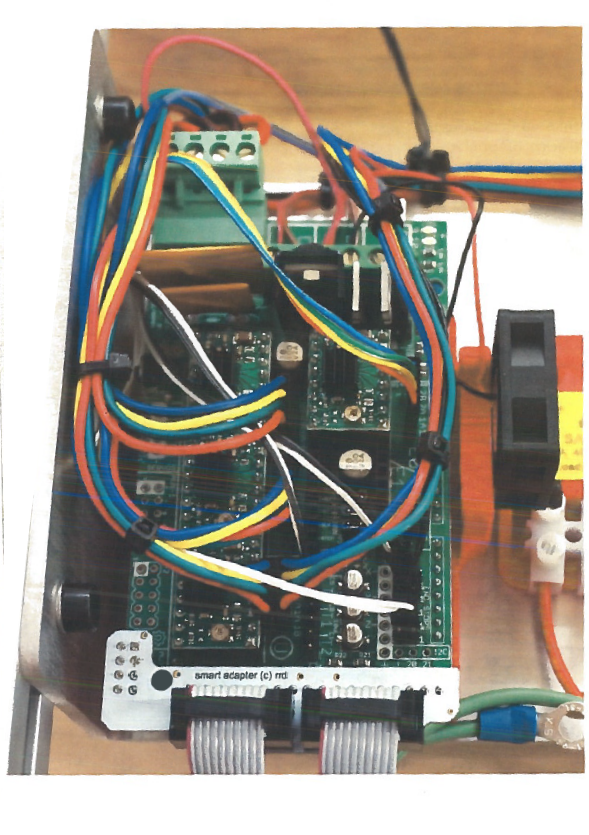
Step 5

1. Attach the Electronics Tray sub-assembly to the bottom frame using the existing T-Nuts on the inside left and right slots and MS hardware.
2. Measure 130mm from the back of the Electronics Tray to the back of the bottom frame.
3. Secure in place.

|  |  |  |  |
| --- | --- | --- | --- |
| **PARTS LIST** | | | |
| **ITEM** | **QTY** | **PART NUMBER** | **DESCRIPTION** |
| 1 | 1 | Step4 | Previous sub-assembly |
| 2 | 1 | ElectronicsTraySubAssembly | Previous sub-assembly |
| 3 | 4 | M5 x 12 | Nuts and bolts |
| 4 | 4 | M5 Washer | Nuts and bolts |
|  |  | M4 Hex Wrench | Tools |

Electrical Assembly

1. Plug X, Y, LZ, RZ and Extruder Motor wires into the 4-pin male connectors next to the appropriate stepper drivers. All motor wire plugs should have the BLUE WIRE TO THE BACK of the printer.



1. Limit Switches are plugged into X-, Y-, and Z-
2. D8 Terminal is for both fans, RAMPs and Extruder Fans. Make sure that the RED wires get plugged into the POSITIVE (+) port.