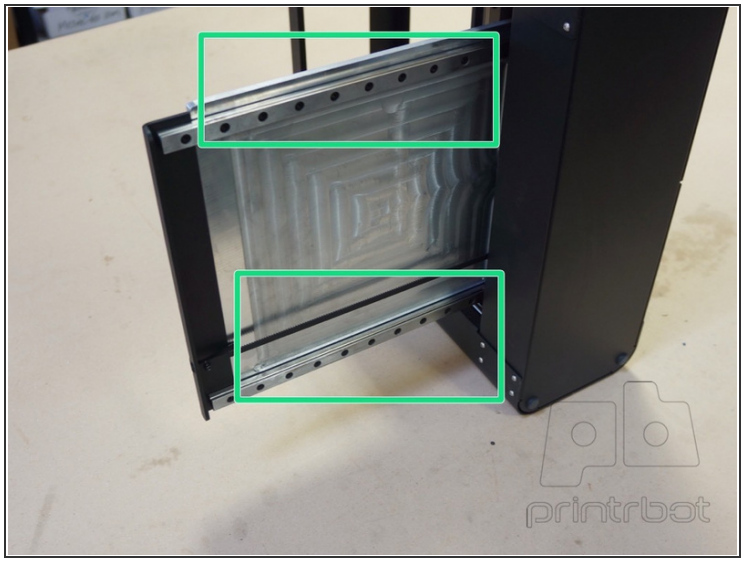
Installing the Heated Bed Upgrade for Metal Plus

Written By: Printrbot Support

Step 1 — Installing the Heated Bed Upgrade for Metal Plus

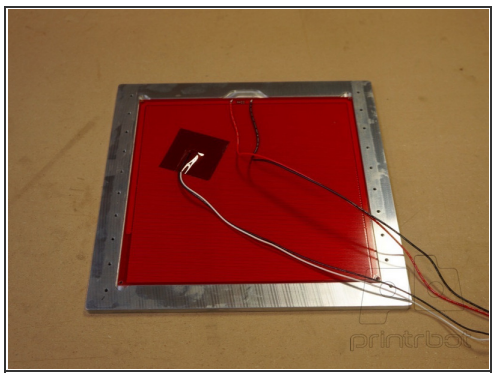
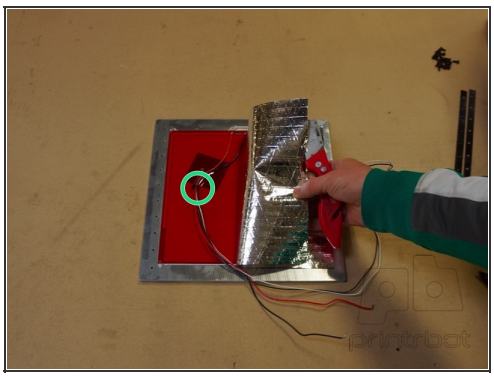
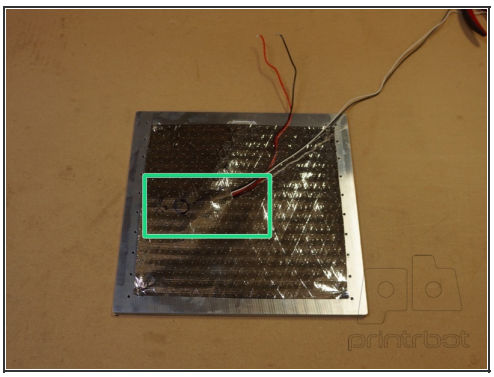
- Check your Heated Bed Upgrade kit against the Bill of Materials.
  - 8" x 8" heat plate
  - 8" x 8" sheet of radiant barrier
  - 10" x 10" Kapton tape square
  - Small Kapton tape square
  - Thermistor with cable
  - Molex power extension
  - Hardware: Zip ties (x8), M3 6mm button head screws (x4)

Step 2



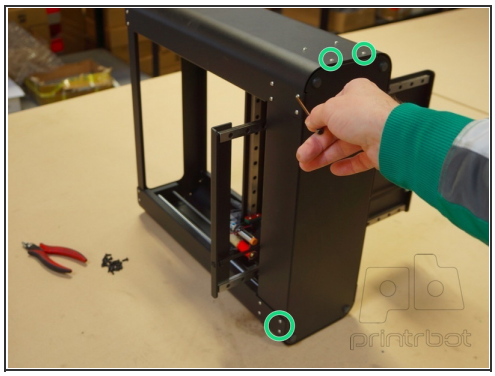
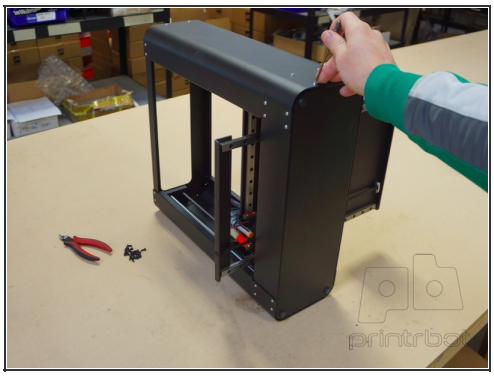
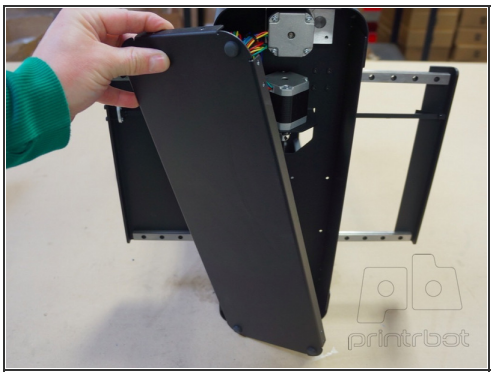
- Gently, lay your Printrbot Metal Plus on it's side and move the carriage to one end, as shown
- Unscrew M3 8mm screws (x26) to remove the aluminum print bed from the rails, as shown.
- **NOTE:** You do not need to remove the black powder coated "wings" from the linear rails. Keeping these attached will save you from having to re-align and re-tighten the Y axis belt.

Step 3

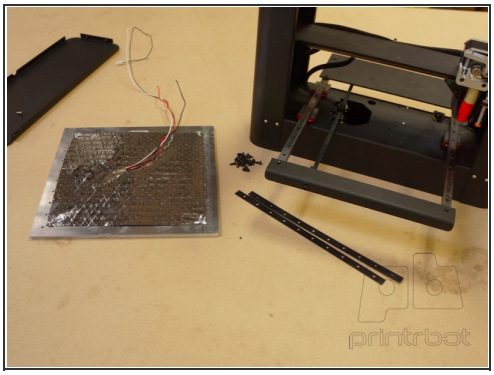
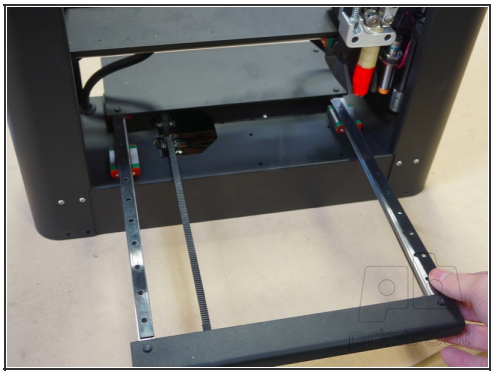
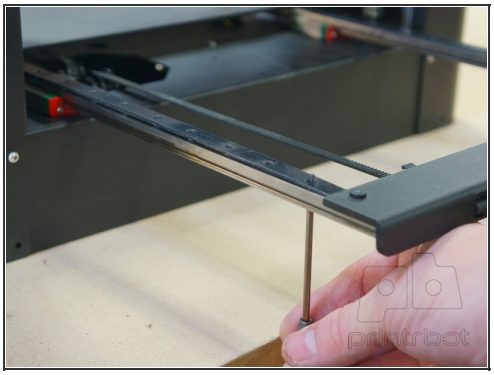
- Place the 8" x 8" heat plate inside the cavity in the bottom of the aluminum print bed. Note that the heat plate is positioned with the black and red wires nearest the wiring cavity in the aluminum print bed.
- Attach the thermistor with cable to the heat plate with the small kapton tape.
- Zip tie the power (red/black) and thermistor (black/white) wires together at the base of the small kapton tape.
- Attach the radiant sheet to the heat plate with the provided button head screws.
- Use a box knife to cut a slit approximately 20mm above and to the right of the thermistor on the heat plate. Feed the wiring through the slit in the radiant barrier.

Step 4

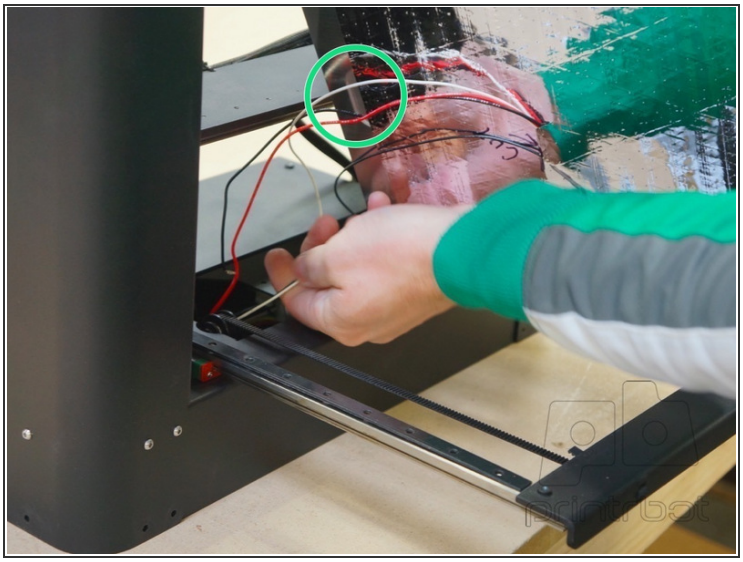
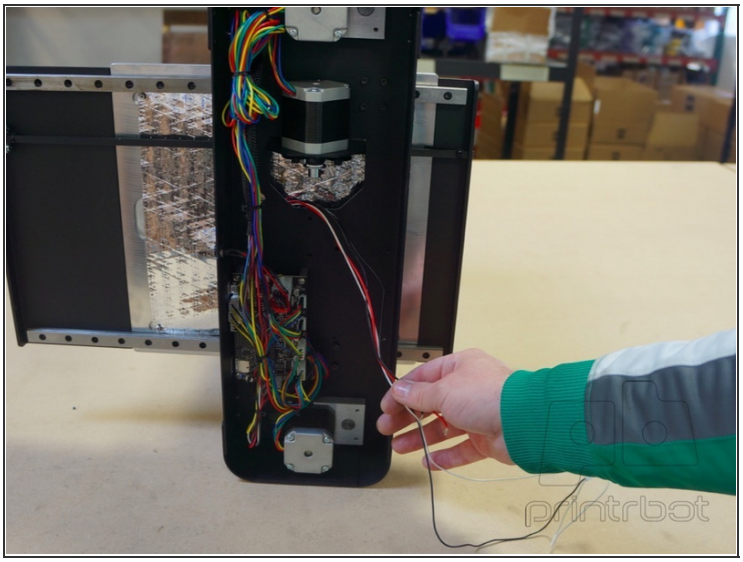
- Unscrew M3 10mm button head screws (x12) to remove the bottom plate from the base of the bot.

Step 5

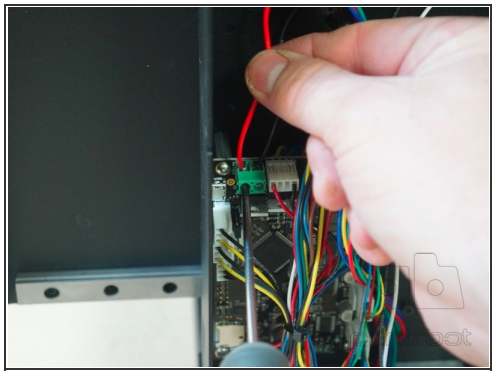
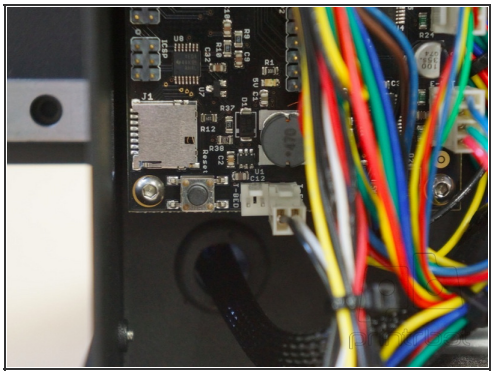
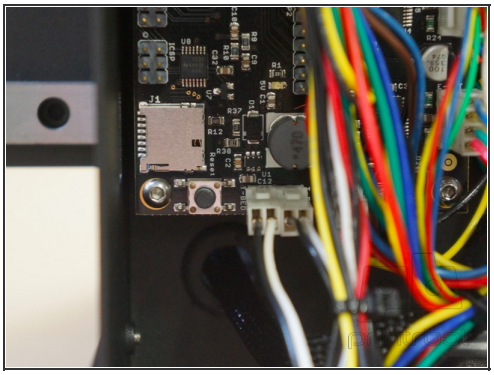
- Lay the two plastic insulators on the linear rails, making sure that the holes for the screws align with the holes on the insulators.

Step 6

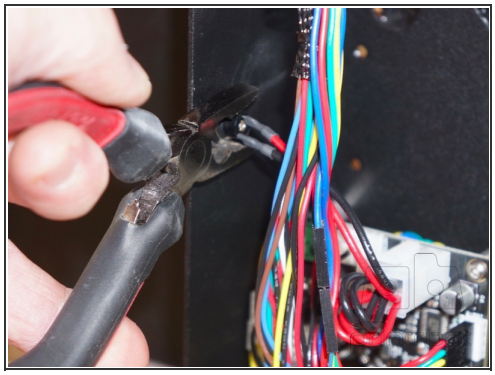
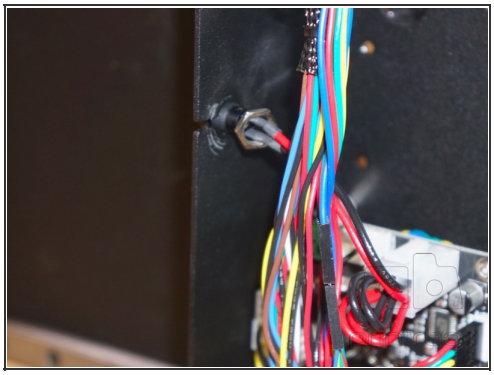
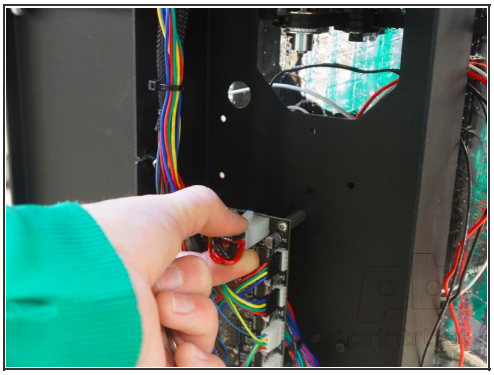
- Feed the wires from the heated bed through the opening in the base plate, and screw the bed back onto the rails.
- Align the heated bed with the linear rails. Note that the wiring cavity in the aluminum print bed is positioned to the back of the bot.
- Use existing M3 8mm screws (x26) to attach the aluminum print bed to the linear rails.

Step 7

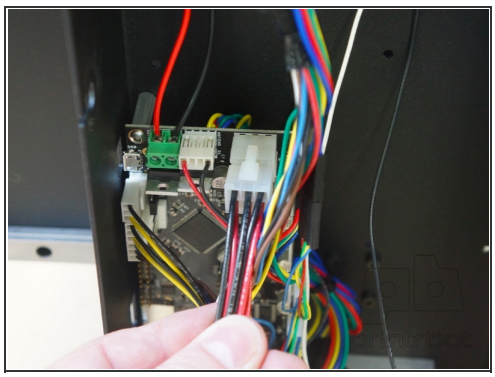
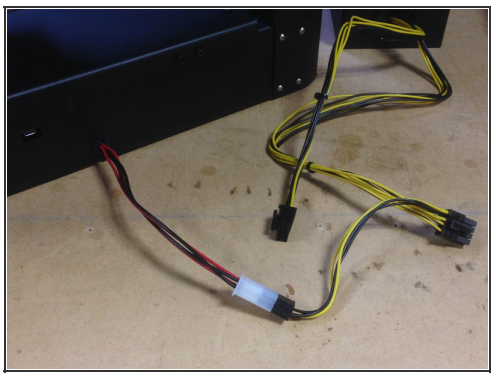
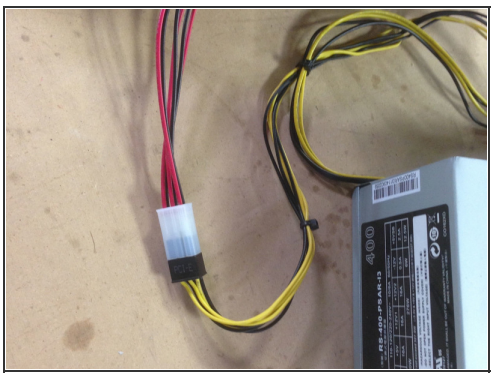
- Insert the power wires from the heat plate (red/black) into the green screw terminal block on the Printrboard. Tighten the screws on the terminal with a phillips head screwdriver to secure the wiring.
- **NOTE:** Place the black wire in the terminal closest to the middle of the bot (right side). The red wire will go to the outside (left).
- Attach the female end of the thermistor with cable to the two pin male connector labeled "T-BED" as shown

Step 8

- Remove the existing 6 pin power dongle by loosening the nut on the inside of the base plate.
- Unplug the dongle from the 6 pin port on the Printrboard.

Step 9

- Attach the molex power extension to the Printrboard and route it through the hole where the original dongle was previously.
- Find the proper connector on your ATX power supply (not provided) and plug the other end of your power extension to the power supply.

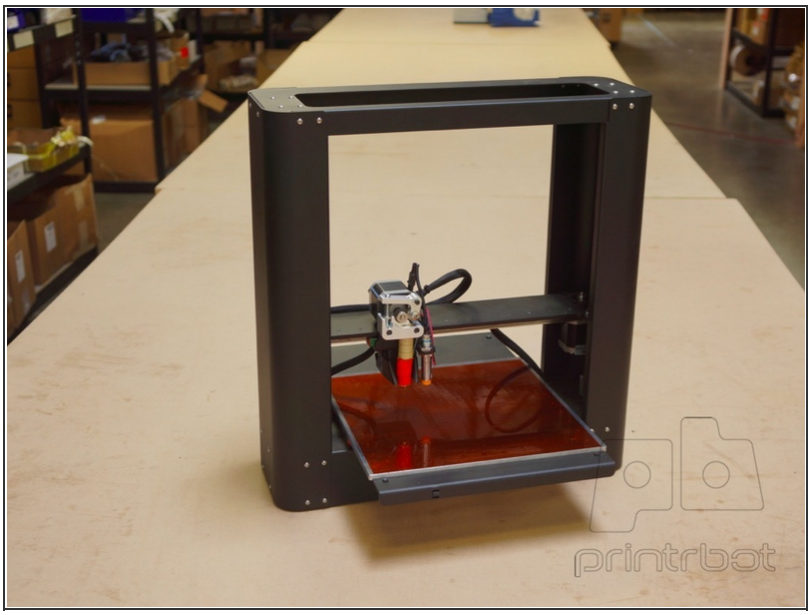
⚠ **CAUTION: DO NOT FORCE** plugs or connectors that do not match. This will damage your components. Only connect 6 pin to 6 pin and 4 pin to 4 pin.

TIP: Check your ATX power supply to make sure that the correct voltage has been selected. 115V for US 230V for EU. Click here for more info.

Step 10

- Finally, install the 10" x 10" Kapton tape.
- Clean the aluminum print bed with acetone and a paper towel.
- Remove the adhesive backing from the tape. Carefully align the kapton square with the print bed and begin applying. You can use the same acetone/paper towel to wipe and apply the kapton tape.

Step 11



- Congratulations! Enjoy your recently upgraded Metal Plus.
- **NEXT STEPS:** Click here for tips on printing with ABS and other materials.

This document was last generated on 2016-03-09 12:20:23 PM.