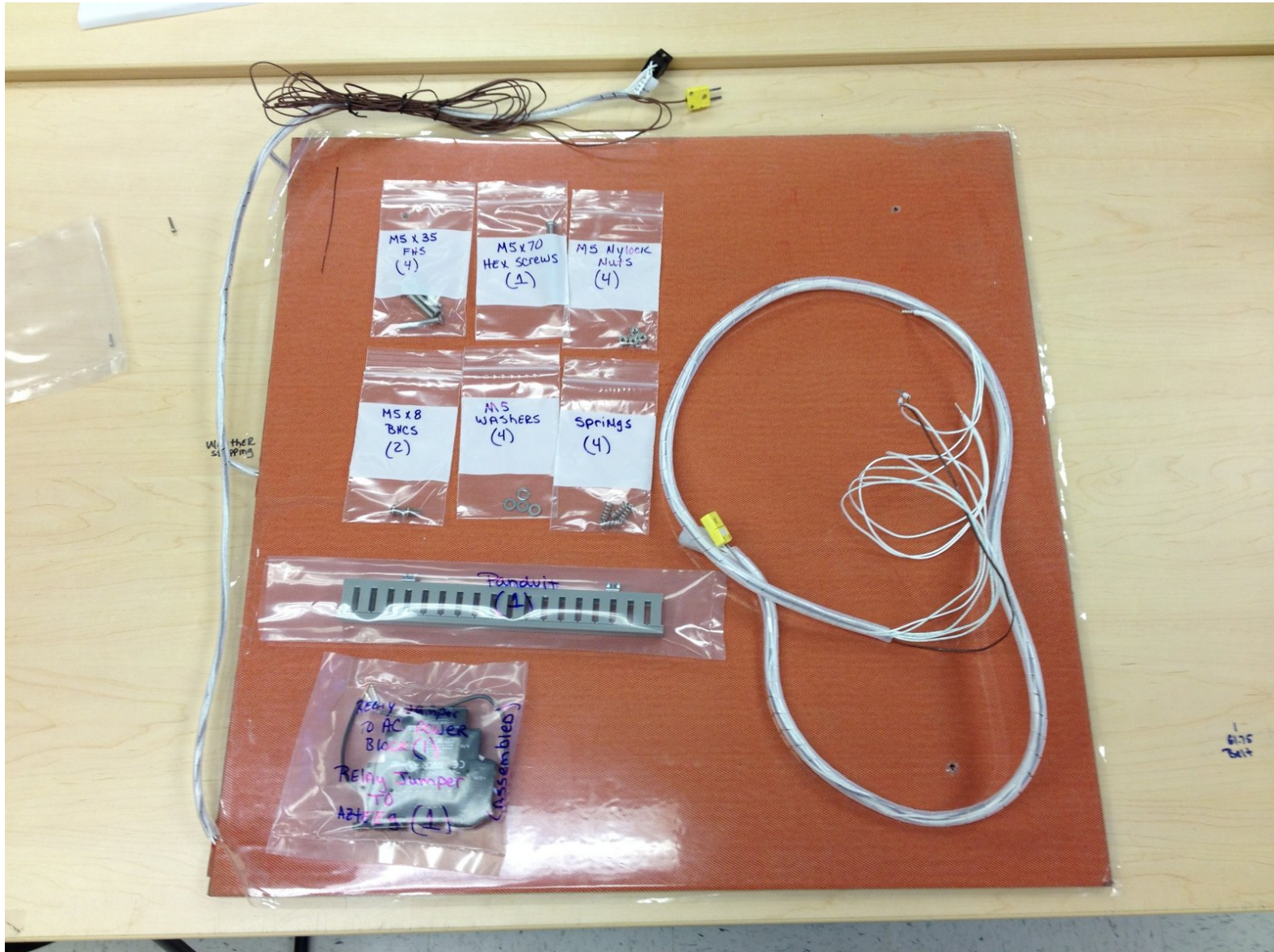


re3D

Installing Your Heated Bed

Use this guide to install your heated bed if you currently have an assembled Gigabot.

Written By: Chris Gerty





TOOLS:

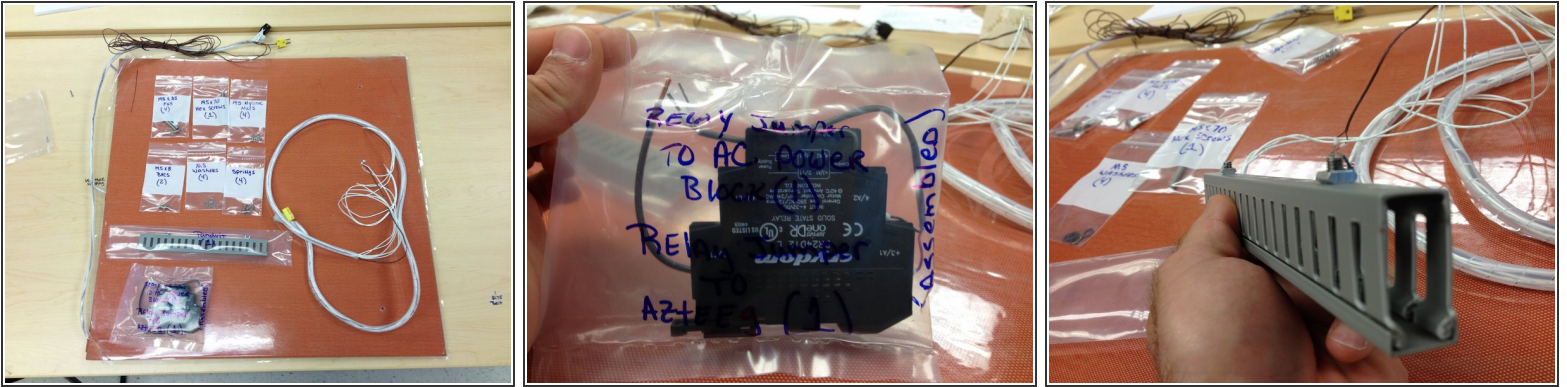
- [Small flat head screwdriver](#) (1)
- [Ball-End Metric Allen Wrench Set](#) (1)
- [8mm combo wrench](#) (1)
- [Large Flathead screwdriver](#) (1)



PARTS:

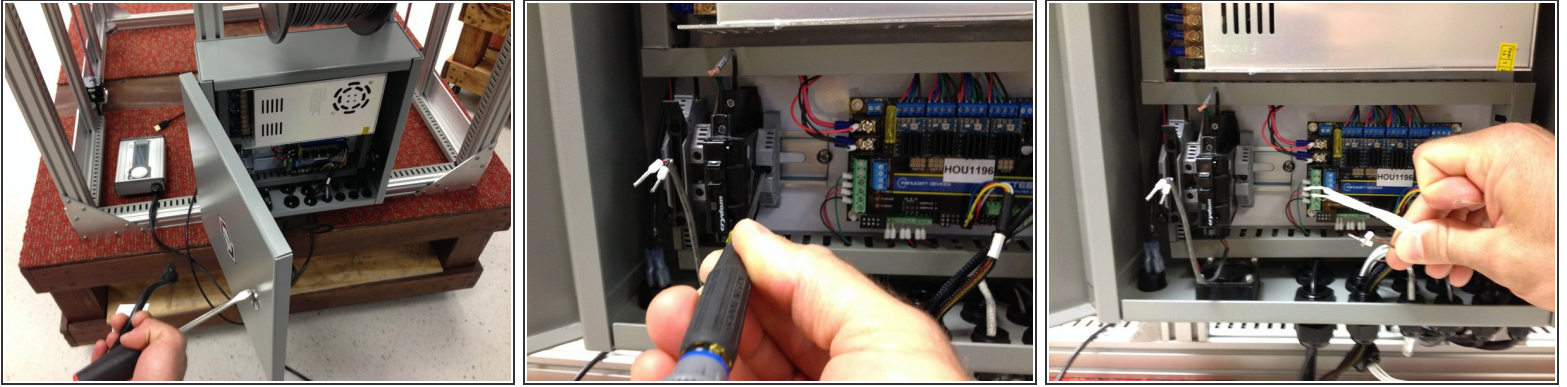
- [Large heated bed with wire bundle and spiral wrap](#) (1)
- [Bag of parts \(screws, washers, springs, nuts\)](#) (1)
- [Panduit with installed screws](#) (1)
- [Solid State Relay with wires installed](#) (1)
- [Heated bed wiring branch for the electrical box](#) (1)

Step 1 — Installing Your Heated Bed



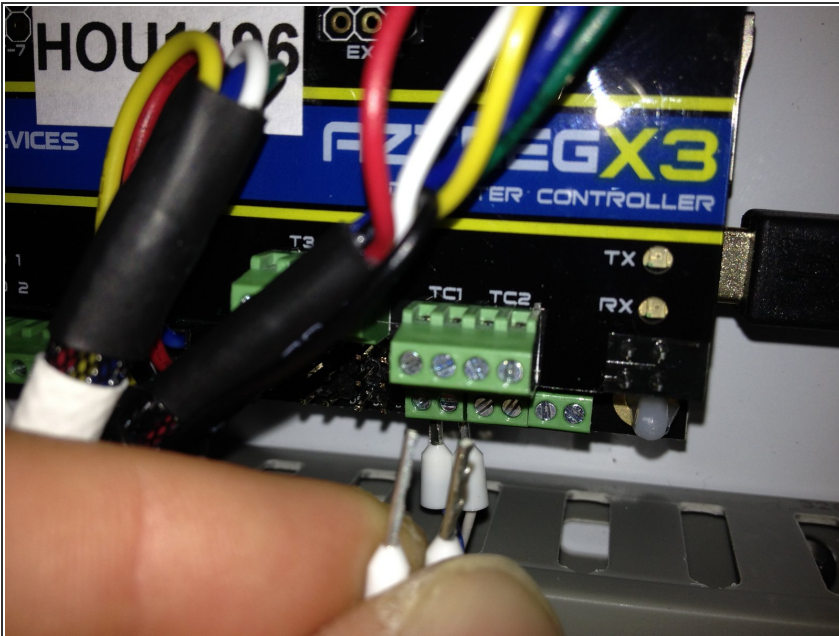
- Included with your heated bed are all of the parts necessary to connect into the electrical box, and install your bed to your existing metal plate.
- ⚠ During this procedure you will be exposing connection which during normal operation will see "mains" voltage (120/220VAC).**
- When working on any part of this procedure, ensure that the main power is disconnected from any power source, and USB cable is unplugged.
 - If you are not comfortable working with high voltage connections, consult a certified electrician to perform this procedure for you.

Step 2



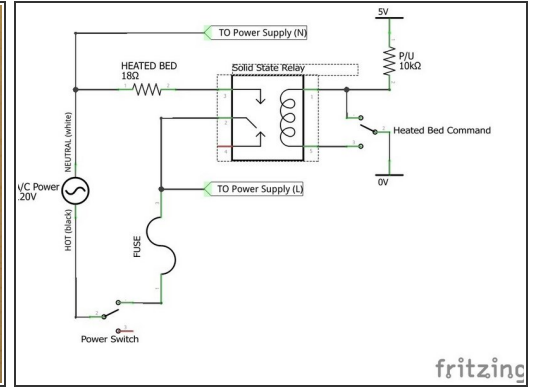
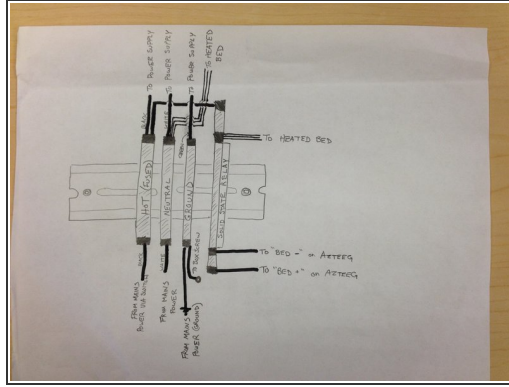
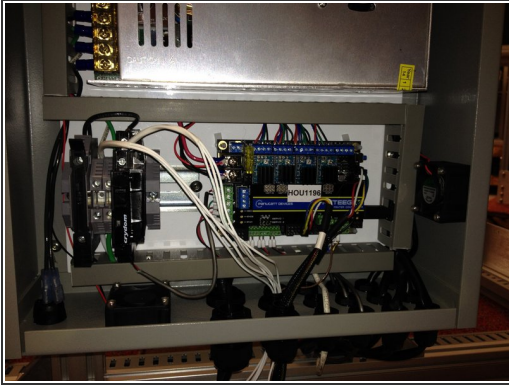
- Open the electrical box using a large flathead screwdriver.
- Install the solid state relay in between the end cap and the rightmost connection on the rail, as shown.
 - Use a small screwdriver to move the relay's connector clip down onto the rail, once it is in place.
- Using the provided wiring, feed the two shrink-wrapped ends, and the brown wire, through the bottom of the electrical box, after removing an appropriate plastic grommet.

Step 3



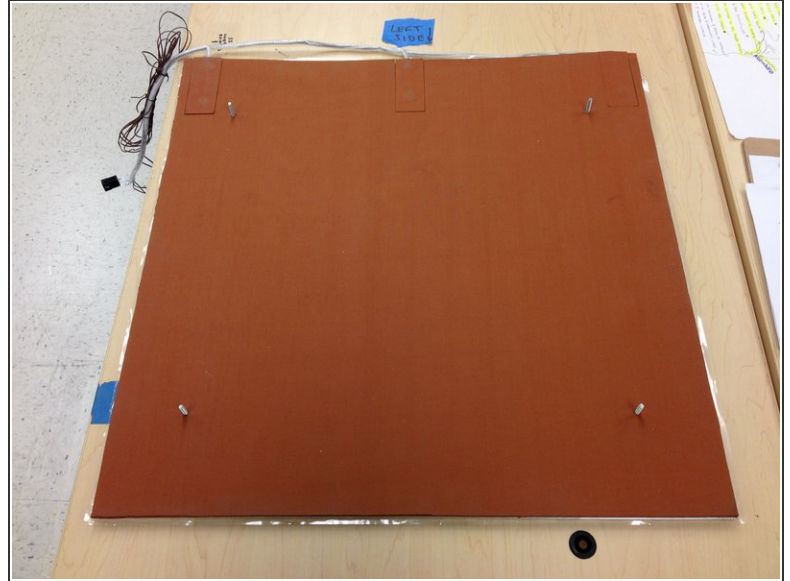
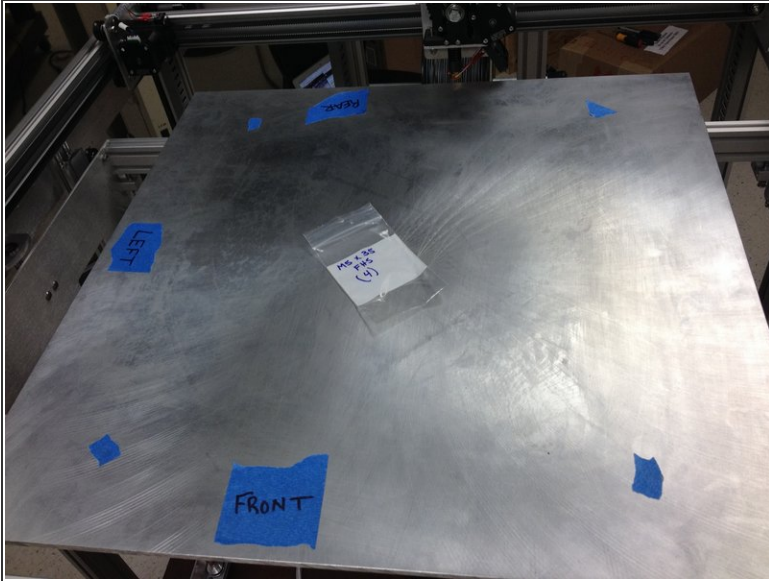
- From the brown wire, connect the red and yellow wire ends to the left and right screw terminal (respectively) TC1 on the Azteeg.

Step 4



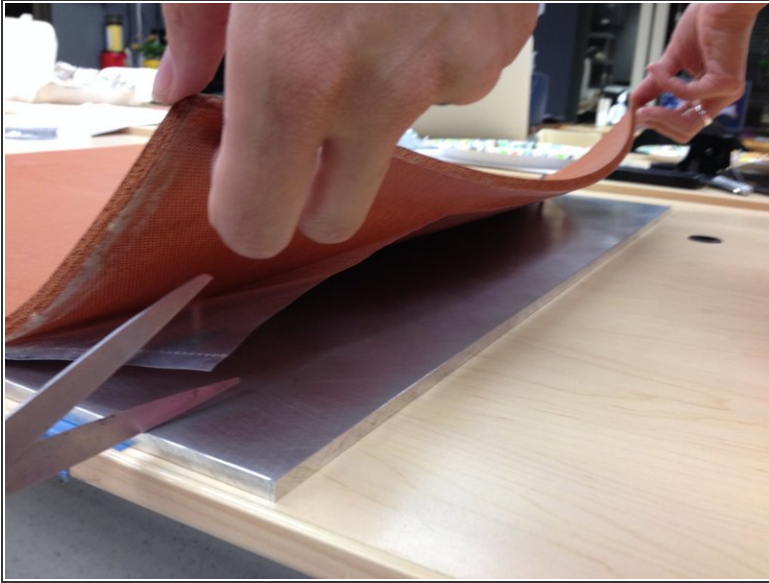
- Connect high voltage wiring per diagram.
- ❗ The heated bed legs are not polarized, so you can connect either set of three crimped contacts to either designated location.
- Route the white wires inside the conduit which is already present in the electrical box.
 - This will provide some additional strain relief for the mains connection should the wire be pulled on from the outside of the electrical box.

Step 5



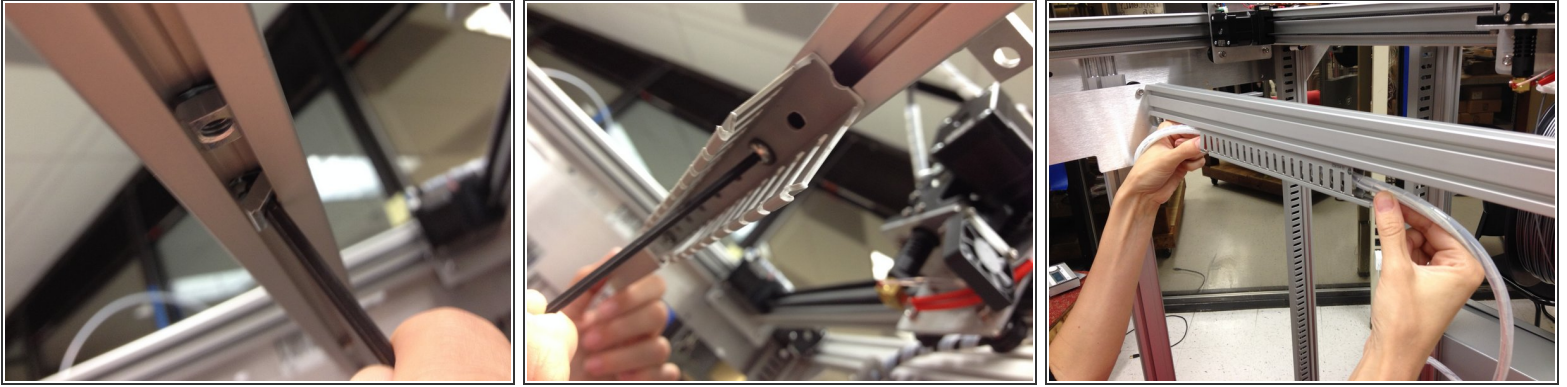
- Mark the bed (REAR, FRONT, LEFT)
- Obtain the M5x35mm screws from the bed attachment hardware bag.
 - Disconnect the four screws from the top of the bed plate, replace them with the M5x35mm screws, and secure with a small amount of tape.
- Remove the bed and lay upside-down on a clean surface, taking careful note of which side is the LEFT SIDE of the bed. This is the side that the wires will protrude from.
- Using brake parts cleaner or other non-residue cleaner, wipe down the bed of any dust, oil, or dirt.
- **With the protective plastic still installed** on the bed, position the heated bed pad onto the metal bed, over the protruding screws.

Step 6



- Cut a small amount (1-2 inches) of the protective plastic away from the RIGHT edge of the heated bed.
- Carefully affix the small strip of exposed adhesive to the metal bed, ensuring alignment with the corners, and screws still through the pre-drilled holes.
- Remove the two screws closest to the affixed end.
- Ensuring the affixed part of the bed stays stable, and lift up the remaining part of the heated pad, removing the plastic sheeting.
- Carefully lay the bed back down, guiding the M5 screws through the pre-drilled holes.

Step 7



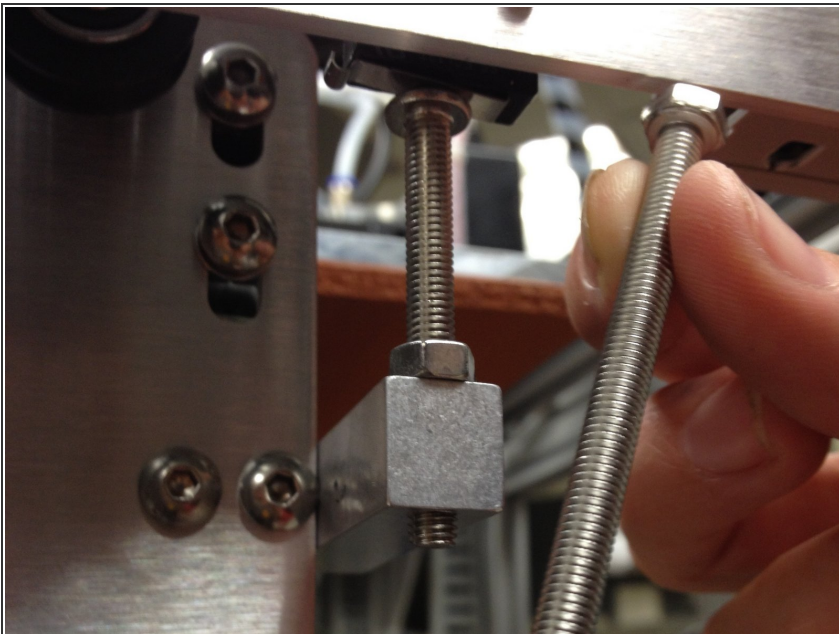
- Place the bed back onto the bed rails
- Insert two magic T-nuts (T-nuts that can be inserted after the rail is installed) into the bottom of the rear bed rail.
- Connect the panduit as shown.
- Route the wiring bundle from the electrical box from the center of the rear panduit, up to the section of panduit connected to the rear bed rail.

Step 8



- Install the bed with the electrical wires protruding from the left side of the bed.
- Obtain the remainder of the bed attachment hardware from the bag.
 - Install the spring, washer, and nylock nut onto each of the four bolts. Compress the spring to about 50% of its travel.
- Route the cabling from the bed to the panduit on the rear bed rail and connect the two connectors.
- Tuck the excess cabling inside the panduit to minimize tangling.

Step 9



- Replace the Z limit switch bolt M5 x 45mm BHCS with the longer one that is provided M5 x 70mm, to account for the greater thickness of your new heated bed.
- Upgrade the firmware of your Gigabot at <https://re3d.zendesk.com/hc/en-us/article...>

Have questions? Need help? Email support@re3d.org