

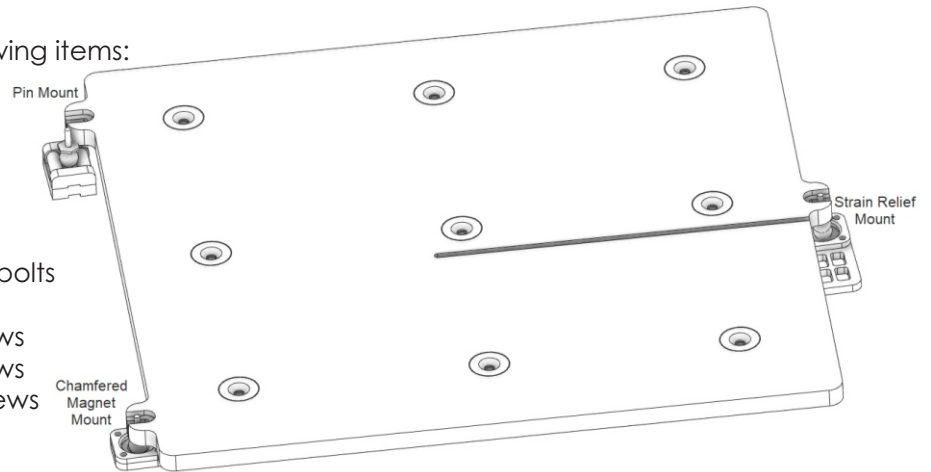


Kinematic Mounting Kit

Thank you for purchasing the Kinematic kit from Mandala Rose Works!

In your kit, you have received the following items:

- 1 fixed magnet base
- 1 strain relief magnet base
- 2 magnet covers
- 1 pin mount base
- 2 pin mount end caps
- 2 hardened steel dowel pins
- 3 - 9.5mm balls with m3x0.5 threaded bolts
- 1 hardware kit containing
 - 8 m3 x 6mm button head screws
 - 2 m3 x 8mm button head screws
 - 3 m3 x 10mm button head screws
 - 3 m3 washers
 - 3 m3 nylock nuts
 - 1 N48SH chamfered magnet (0.75" x 0.125" dia)
 - 2 N48SH flat magnets (0.75" x 0.125" dia)



IMPORTANT NOTE:

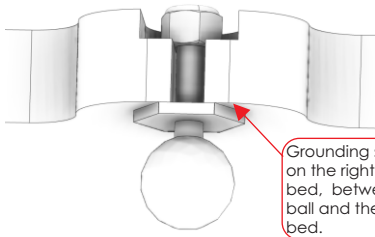
When unpacking, DO NOT LET THE MAGNETS SNAP TOGETHER.

KEEP THEM SEPARATED!

If they snap together suddenly, they WILL shatter.

Installation Steps

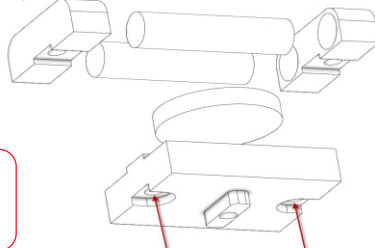
Step 1 - Install Threaded Balls



Grounding strap will go here, on the right hand side of the bed, between the threaded ball and the bottom of the bed.

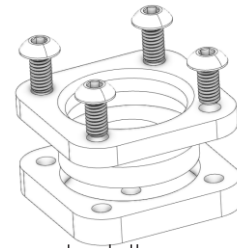
Install m3 threaded balls onto the slots in the bed. Snug them down, but know that you will likely have to move and align them slightly so don't completely tighten them. Align one of the flats of the ball to the edge of the slot to start.

Step 2 - Assemble Pin Mount



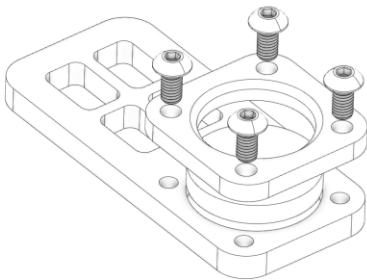
The pin mount gets a "flat" magnet, no holes. Insert the magnet into the base, then set the pins with endcaps onto the base, and secure with 2 m3x8mm screws from the bottom of the pin mount base.

Step 3 - Assemble Fixed Mount



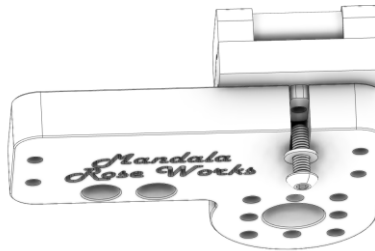
The fixed mount gets the magnet with the "chamfered" hole in it. Insert the magnet into the base, chamfer side up, set the cover over the top, and secure with m3x6mm cap head bolts.

Step 4 - Assemble Strain Relief Mount



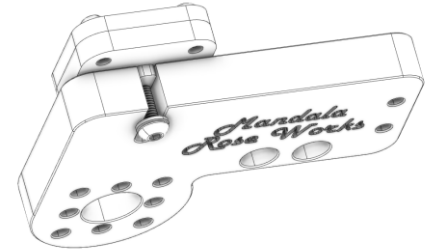
The strain relief mount gets a flat magnet installed in it. Insert the magnet into the base, set the cover over the top, and secure with m3x6mm cap head bolts.

Step 5 - Mount Pin Mount to Left Rear Yoke



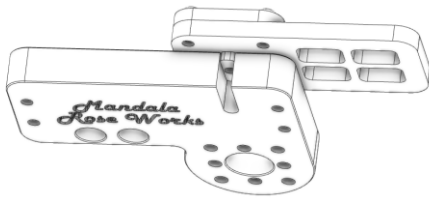
Insert the alignment key on the pin base into the slot on the yoke, and lightly secure it with a m3x10mm button head screw and m3 washer. Do not tighten down yet as you still have final alignment to complete.

Step 6 - Mount Fixed Mount to Left Front Yoke



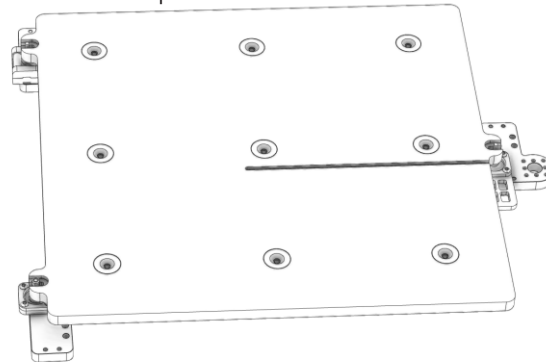
Insert the alignment key on the fixed mount base into the slot on the yoke, and lightly secure it with a m3x10mm button head screw and m3 washer. Do not tighten down yet as you have final alignment to complete.

Step 7 - Mount Strain Relief Mount to Right Yoke



Insert the alignment key on the strain relief mount base into the slot on the yoke, and lightly secure it with a m3x10mm button head screw and m3 washer. Do not tighten down yet as you have final alignment to complete.

Step 8 - Seat the print bed into the kinematic mounts.



Adjust the left 2 mounts until the front left and back left edge of the magbed are equal distance from the left panel of the printer, and the ball on the right side is roughly center of the magnet in the strain relief mount on the right side of the printer. Move the balls in or out in the slot if necessary.

Step 9 - Tighten all nuts and bolts

Now that you have your alignment completed, tighten down all of the nuts that hold the balls onto the bed, as well as the 3 m3x10 bolts that hold the kinematic mounts onto the yokes.

Step 10 - Homing and autoleveling the first time with the kinematic mounts

The kinematic mounts vary in height. With the printer turned off, slowly position the nozzle over each leadscrew and rotate that leadscrew so the nozzle to bed distance is uniform at each leadscrew. (You can use the container your hardware came in as a stop.) Doing a rough level like this can prevent crashes. When the bed looks level to your eye, run your homing, then an autolevel.

STAND BY YOUR POWER SWITCH JUST IN CASE!

Once your autolevel is complete, you are done with the install!

CONGRATULATIONS and enjoy printing on your new kinematically mounted bed.

TIPS:

A) The pin mount is the mount with the least magnetic grab, so always peel your flex plate toward the pin mount. This will keep the pin mount from unseating itself.

B) If doing a short layer height print, drop your print bed 50-100mm before removing the flex plate.