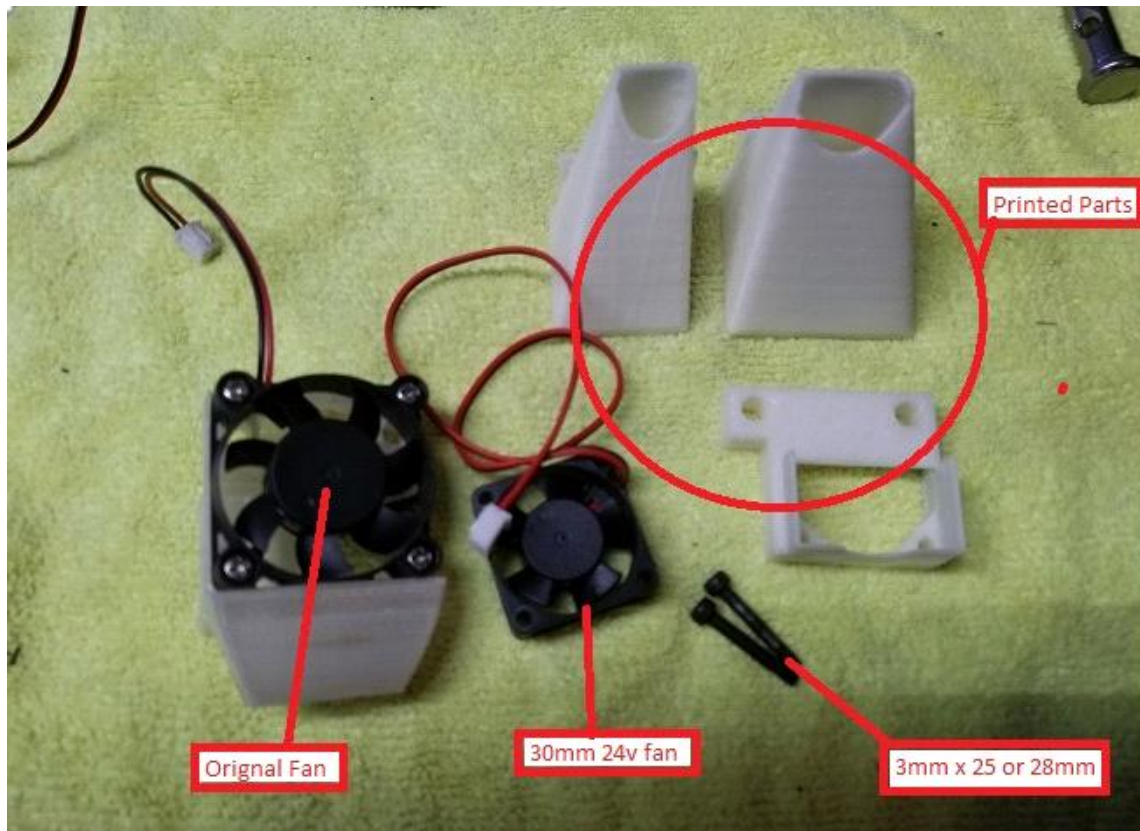


This will walk you thru modifying your current Formbot Trex-2+ print to use DUAL fans, one for the hotend/heatsink and one for the parts cooler(that is controllable)

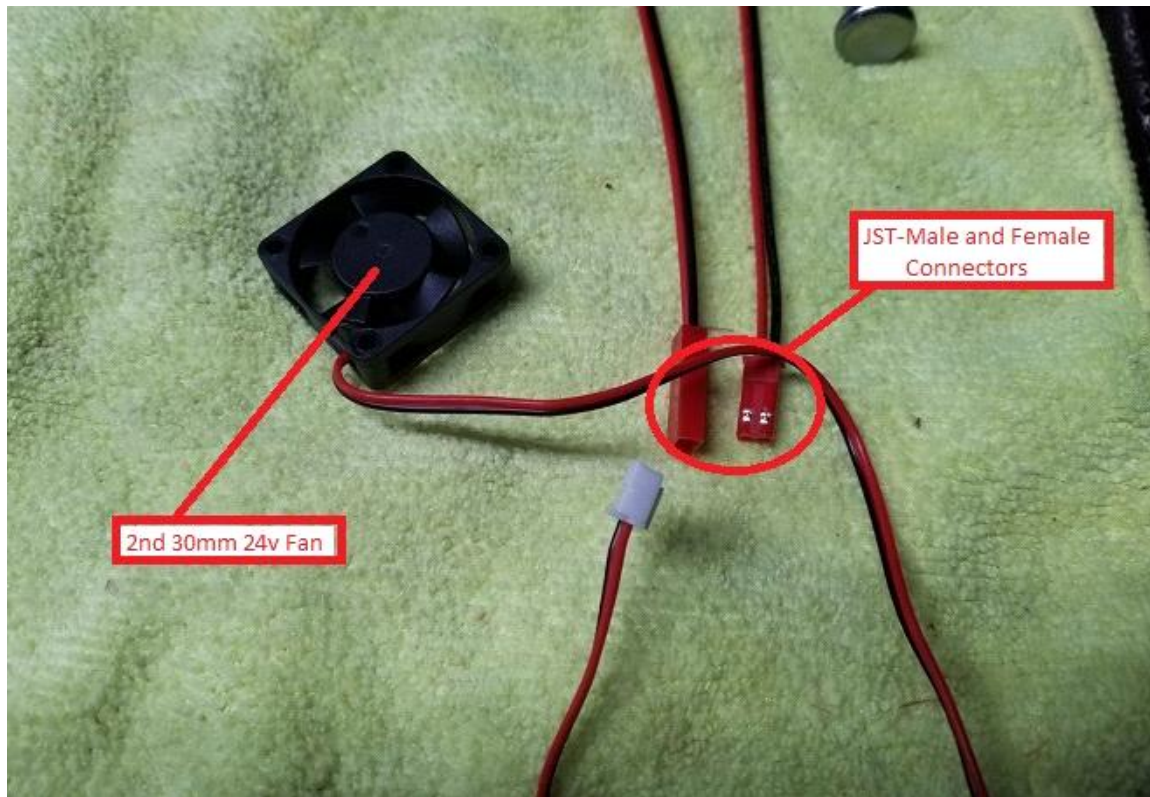
First you will need to print the parts that are in the STL file include in this package.

There are two fan shrouds in this package 1 for the 40mm fan that is currently on the printer and the other is for a 2nd 30mm fan. I chose this because it is a smaller package when assembled and slightly lighter. Its your choice.

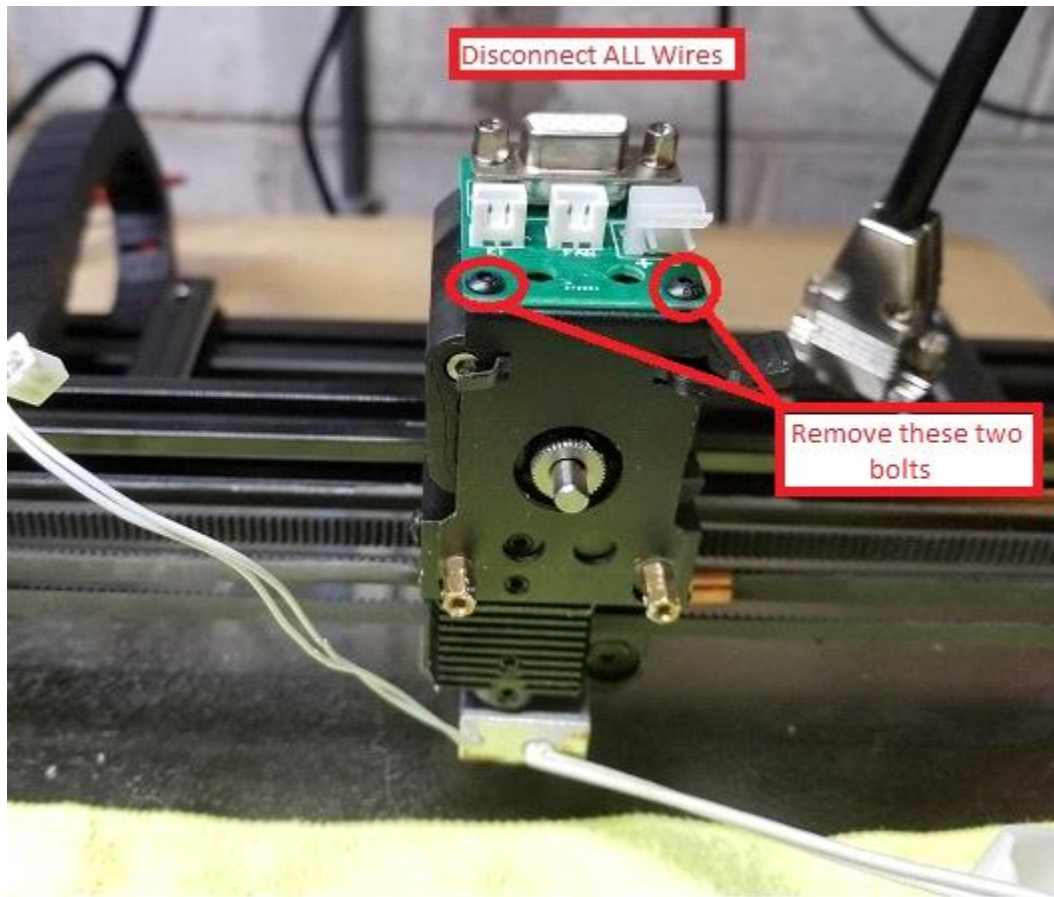
Minimum parts requires for this upgrade.



Additional - OPTIONAL Parts:



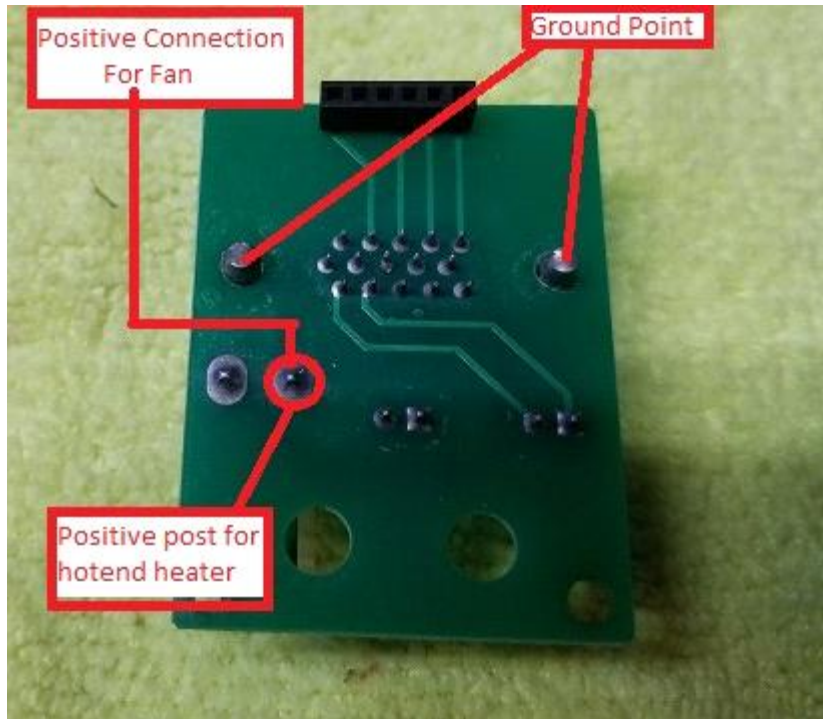
First you will want to disconnect all wires from the PCB and remove the filament if there is any feeding into the extruder at this time. Once done it will look like this



Now remove the two black hex bolts from the pcb and remove the pcb from the extruder

Turn the PCB over and make your solder connections for the fan that will also be on at these locations. Please NOTE: the + location is reversed on the left and right extruder please check this before powering on.

You are connecting the 30mm 24v fan to these points



If you choose to use the JST connectors so you can disconnect the fan, solder one of the connectors to these points, if not you can hardwire the fan to these points instead I chose to use the JST connectors.

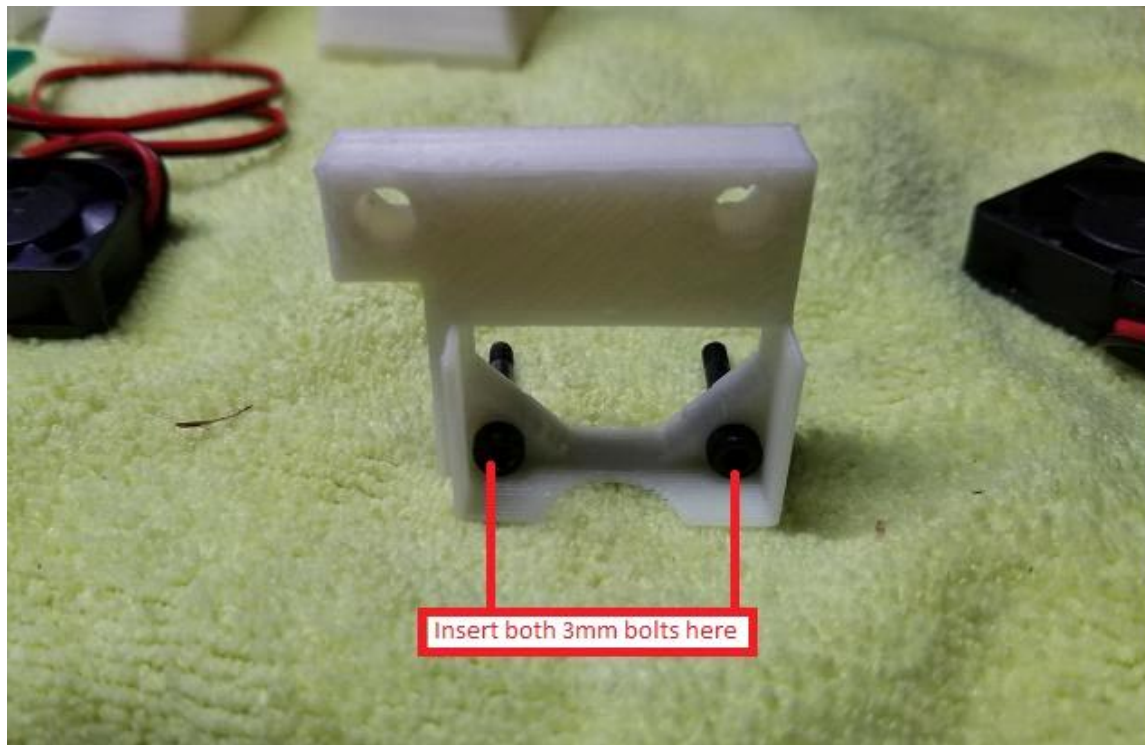
## SAFETY POINT

Once you have done this make sure nothing is sticking up farther than the existing contacts as this can ground out on the stepper motor since there is no cover

Now we will assemble the unit

1st install the 2 3x25mm(or 28mm) bolts as shown





Next slide the 30mm fan onto the bolts, this is the fan that connects to the 2 points shown on the back of the PCB



and now thread the bolts into the part cooler you will be using, either the 30mm or the 40mm fan shroud

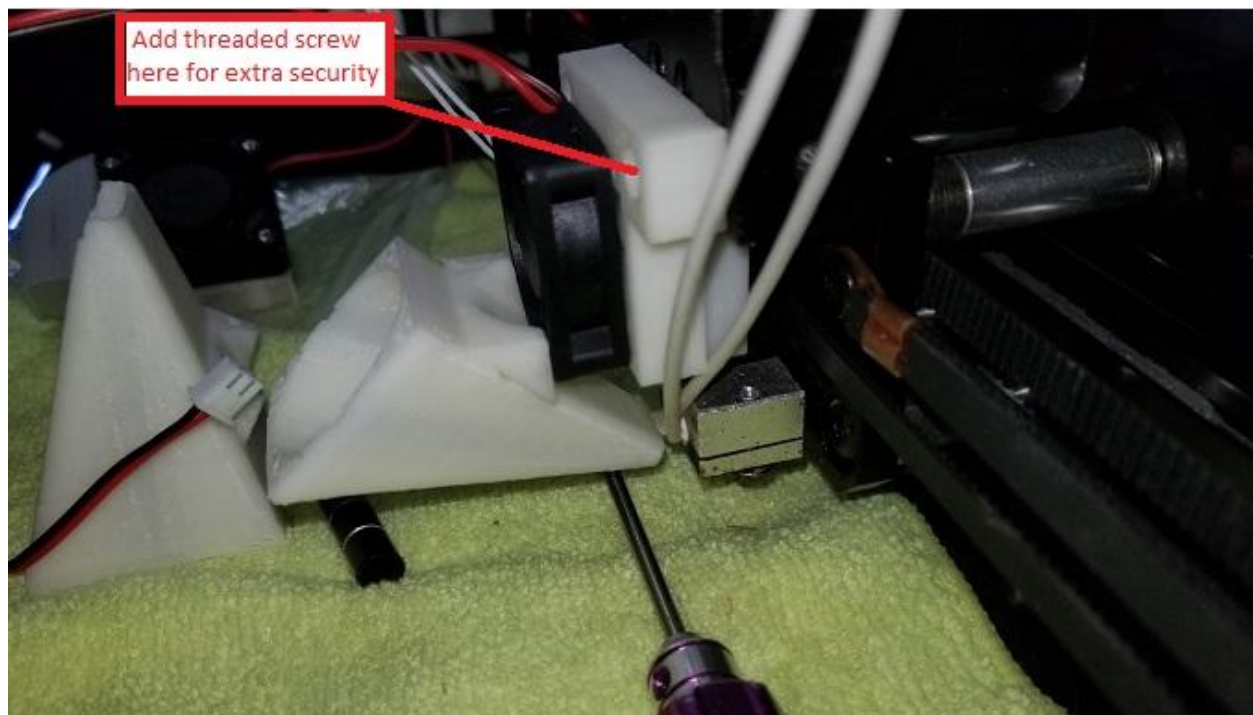


Attach the fan that fits the shroud you chose to use, this is the fan that will PLUG into the fan port on the PCB



You can now reassemble the pcb to the extruder and connect all wires

The design presses on over the gold posts on the extruder and fits between the heatsink cooling fins as shown below. You can use a screw to thread into the open hole of the post if you want to make sure it is really secured



NOTE:

The 40mm parts coolers will not clear the prime buckets that the extruder parks over top of, you can do one of the following to resolve this issue

- 1 - reprint the buckets with the front edge cut down
- 2 - cut the front edge of your existing buckets down 4-5mm (easiest)
- 3 - remove the buckets all together

I hope you enjoy this mod.