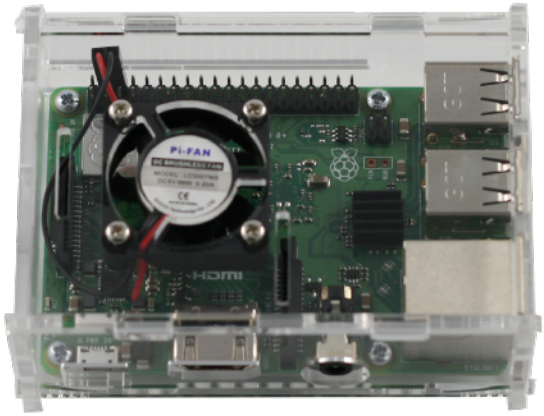
MAKER TRADING POST

MAKING WITH ATTITUDE

**Raspberry Pi Cooling Kit Instructions:**




Thank you for purchasing the coolest accessory we have available for the Raspberry Pi. It is designed to keep your Pi cooler during processor intensive tasks.

Required Accessories:

- Laser-Cut Raspberry Pi Enclosure from Maker Trading Post

Tools required:

- Philips screwdriver
- Hands with fingernails

Tools optional:

- Jackhammer (just kidding)

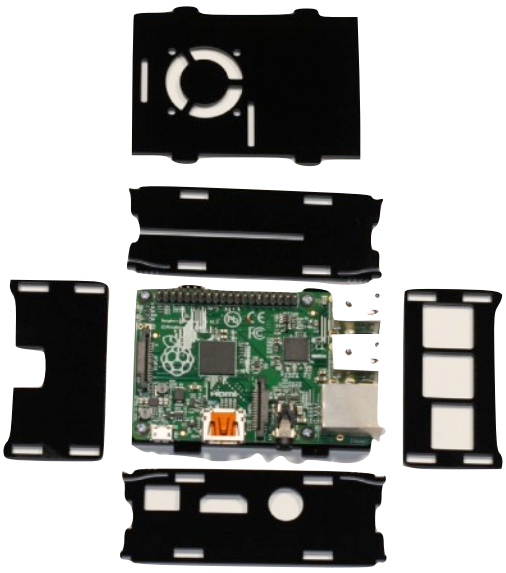
**Step 1: Check the Parts**


Take the parts out of the bag. It should contain the following:

- 1 x Fan
- 4 x Screws
- 4 x Nuts
- 1 x Small Heatsink (for USB controller)
- 1 x Large Heatsink (for the processor)

If you don't have everything in the picture that probably means we messed up. E-mail us at MakerTradingPost@gmail.com and we'll make up some kind of excuse and send you the right stuff.

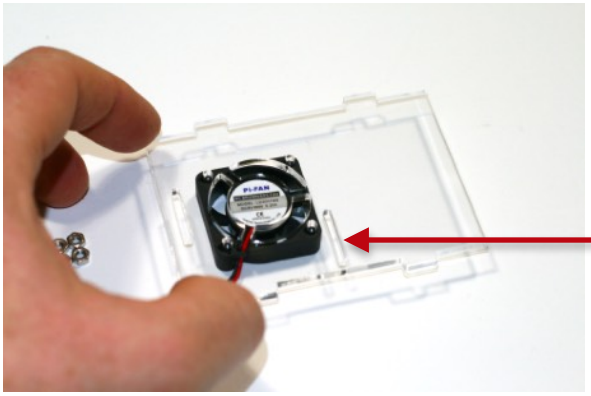
**Step 2: Taking Apart your Laser-Cut Enclosure**



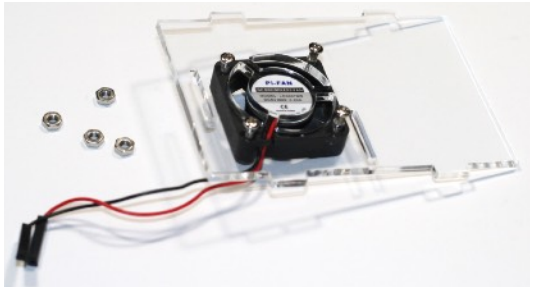
We know, you worked really hard putting together your enclosure and now we're telling you to take it back apart. Just bare with us. Go ahead and take apart your enclosure until it looks like the picture above.

This is best done by holding the enclosure in both hands and pushing gently on the knurled areas on one side of the case. This will release the bottom "claws" and allow the cover to swing up enough that it can be gently removed from the top "claws." Do this for each side. Do not force anything. The "claws" can break if you put too much pressure on them.

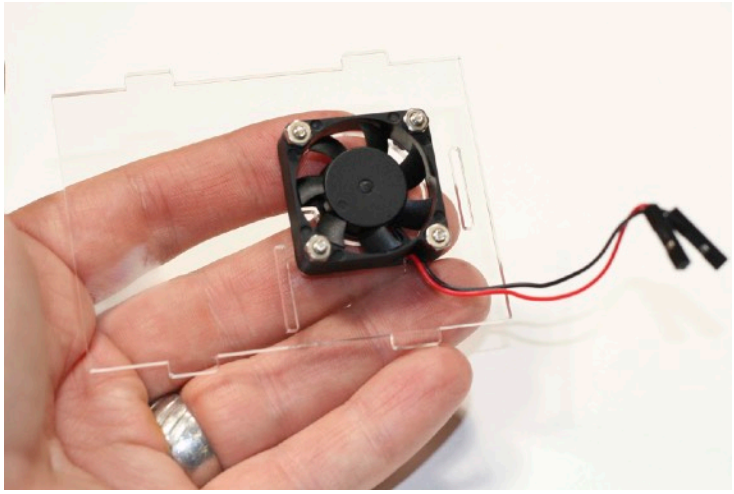
**Step 3: Mounting the Fan**



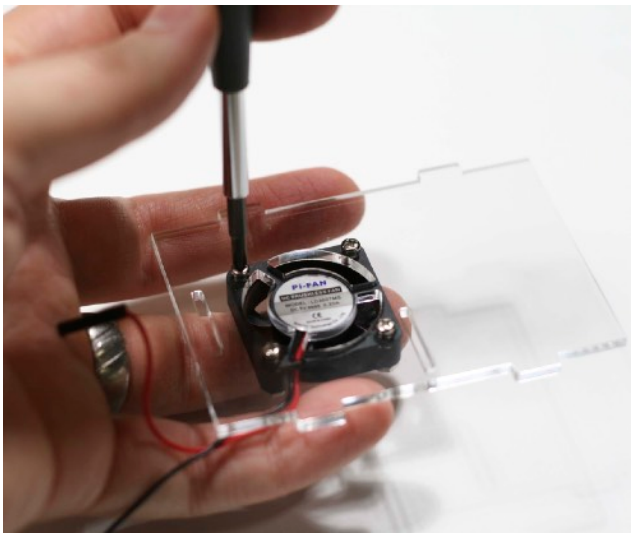
Place the fan onto a flat surface and orient it so you can read the wording on the front. Take the top piece of the enclosure and place it over top of the fan, paying attention to the orientation of the top piece. The camera connector slot should face you and be oriented exactly as it is in the photo.



Drop in the 4 screws from the top so they pass through the acrylic and through the fan. Gently pick up the assembly while supporting the fan and not letting the screw some out, and put it at a slight angle so you can install the nuts on the back side of the assembly.



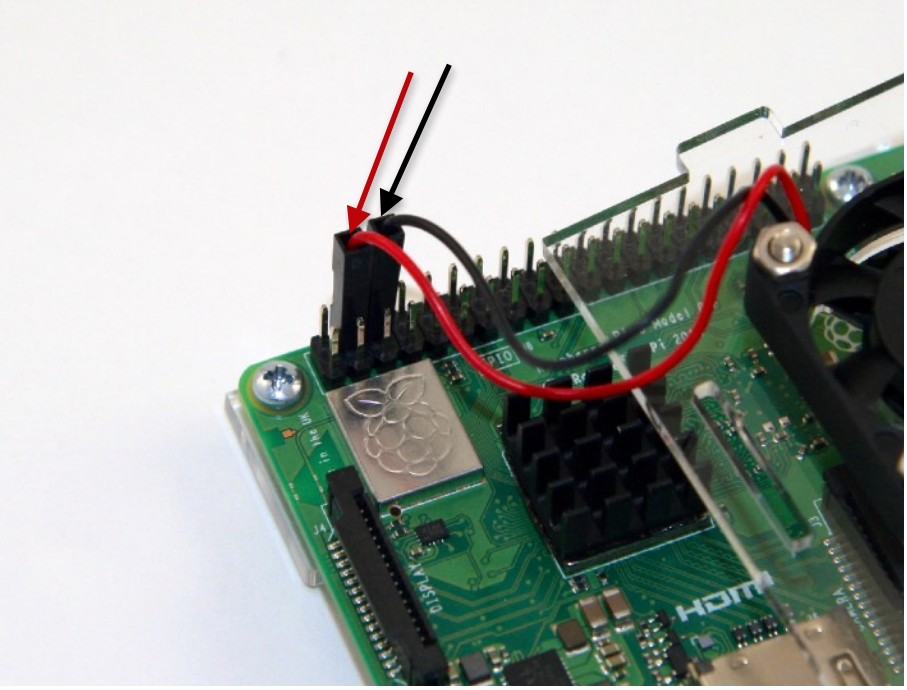
Thread the nuts onto the screws from the back of the assembly. Tighten finger tight.



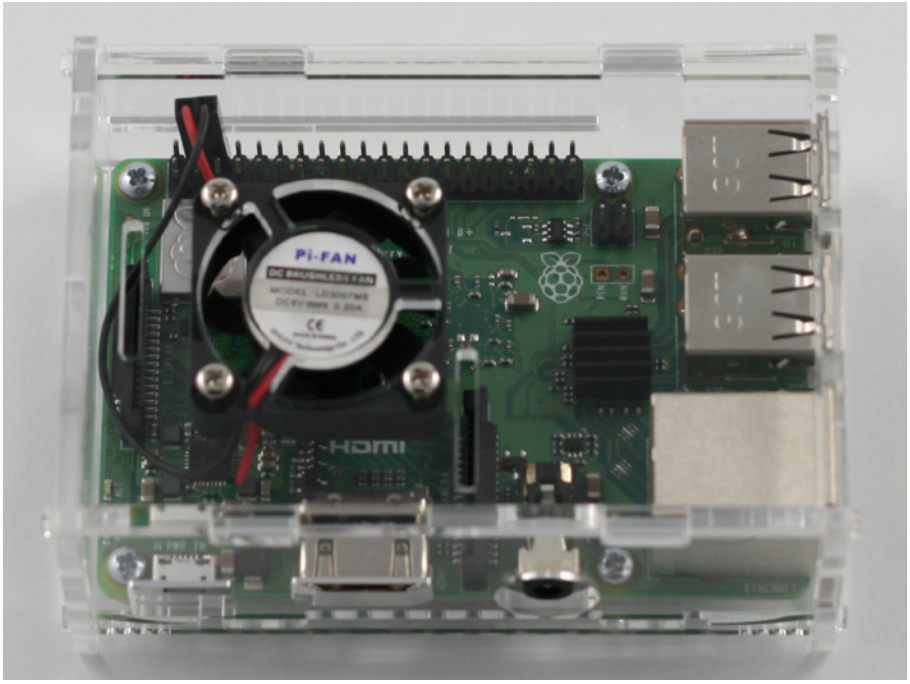
Use a Philips screwdriver to tighten the 4 screws. It helps to put a little pressure on each corresponding nut so that it doesn't turn while you tighten the screw. I'm not doing it in this picture because I'm holding the screwdriver and everything else with one hand while taking the picture with the other. I'm talented like that.

Put the top / fan assembly down for a few minutes while you install the heat sinks. The larger of the two heat sinks if for the processor. Grab it. Remove the paper backing from the adhesive and stick it to the center of the processor (the large, black or silver chip on the top of the Pi. Use firm pressure to seat it to the processor.


The smaller heat sink is for the USB controller (the next largest black chip on the top of the Pi) Remove the paper and stick it to the chip the same way you did the processor. Apply firm pressure to seat it. Your Pi should now look just like the picture. If it doesn't you messed up and should reread the instructions



It's time to plug the fan into the Pi's GPIO for power. Pick up the fan / top assembly and connect the fan wires to the pins shown in the picture. Pay attention to the black and red wires. The red wire plugs into the 2nd pin on the top row from the left. The black wire plugs into the 3rd pin on the top row from the left. Pay close attention to the wires; if they are plugged in reverse the fan will not work. If they are plugged into the wrong pins the fan won't work.



Finally, it's time to put the enclosure back together again. Do this the same way you took it apart but backwards. Make sure the wires do not get pinched in the case and are not touching the fan blade. Be sure you don't put too much pressure on the plastic "claws" when closing up the case.

Insert your microSD card and power the Pi up normally. The fan should blow upward, drawing heat away from the processor and sucking hot air out of the case. It should be relatively quiet. If it is loud check for debris and make sure your wires aren't touching the fan blades.

You Pi should now stay as cool as a cucumber. Enjoy!