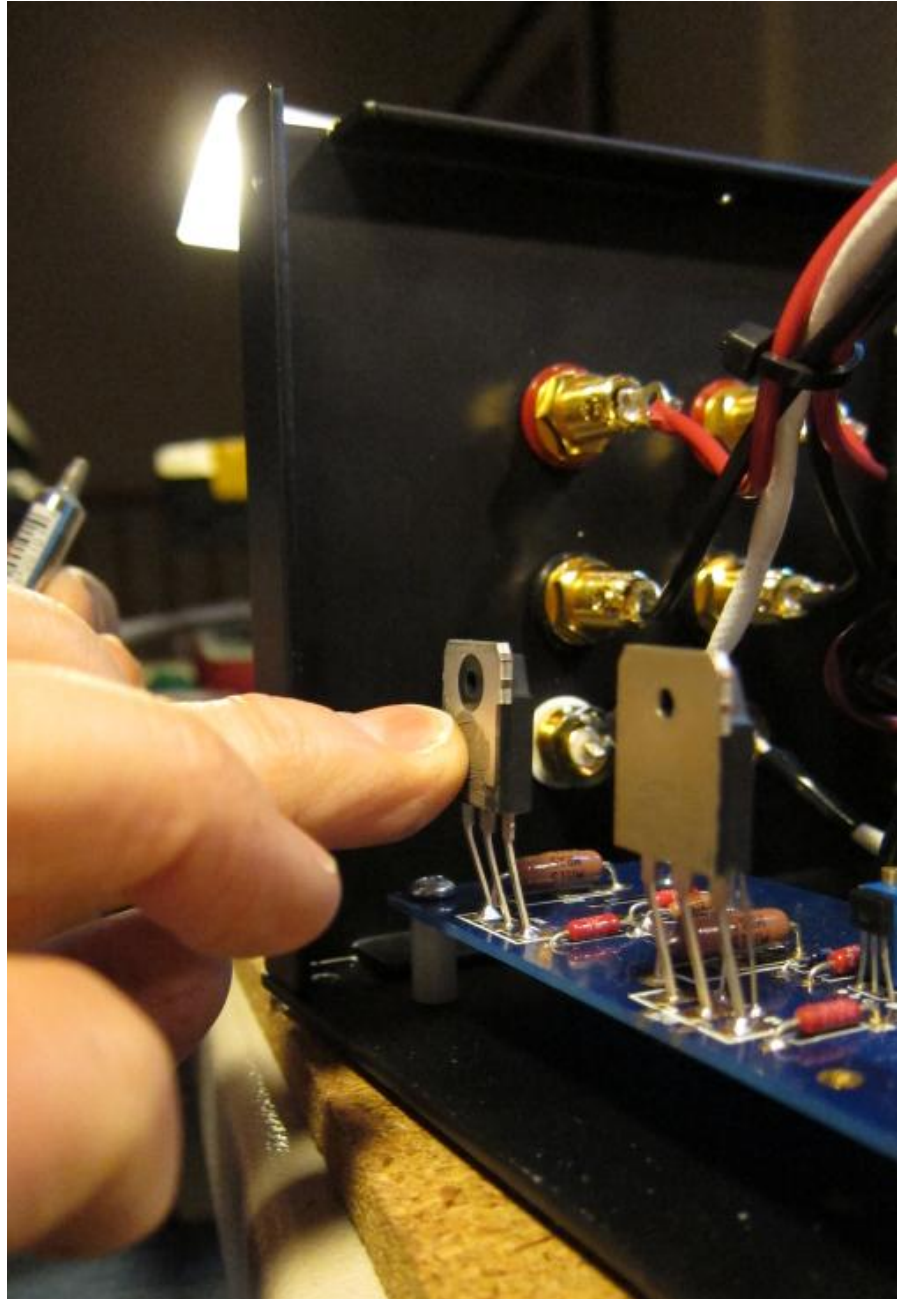


## Attaching heat sinks.

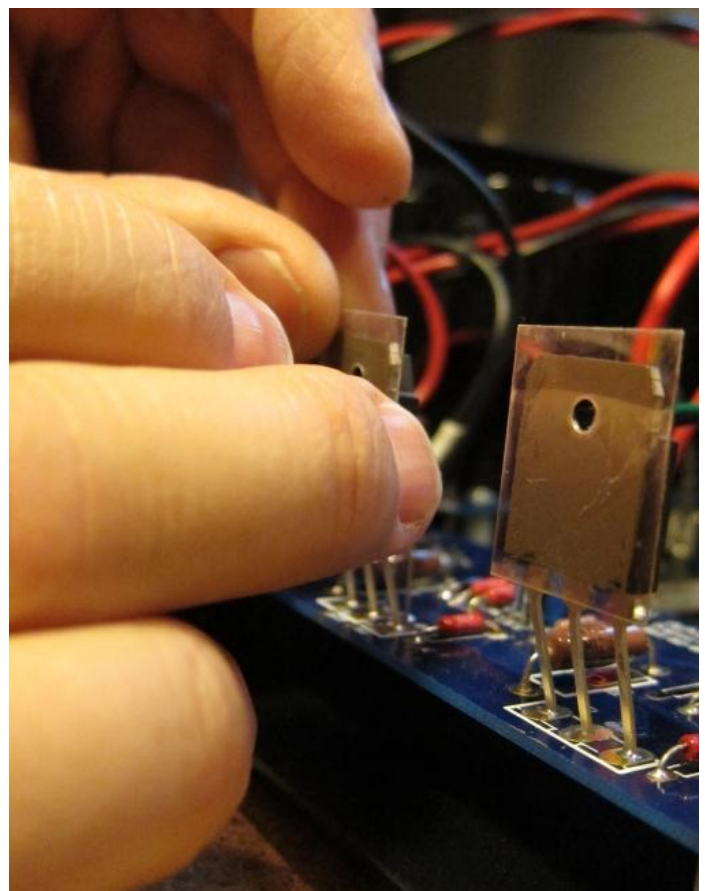
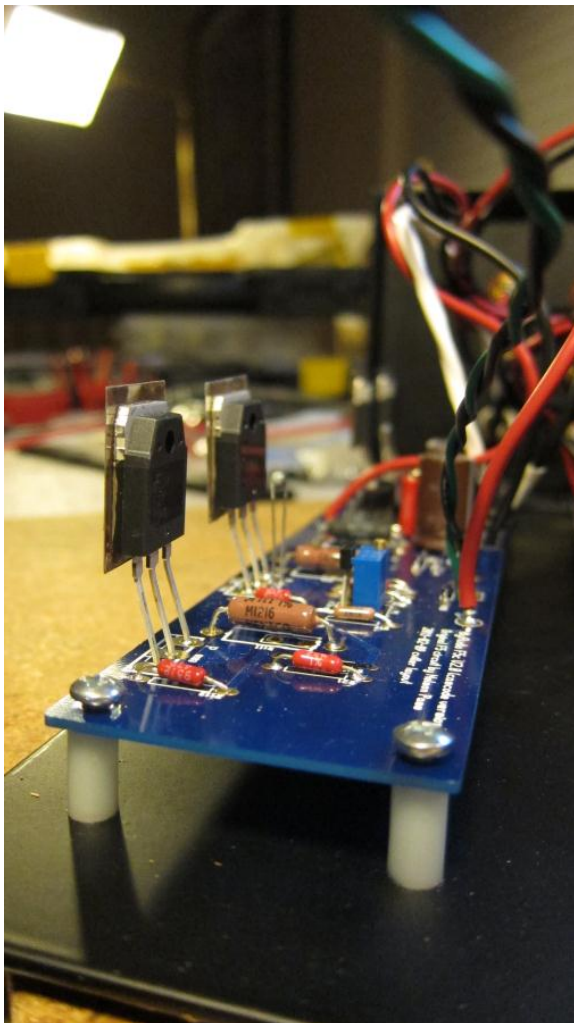
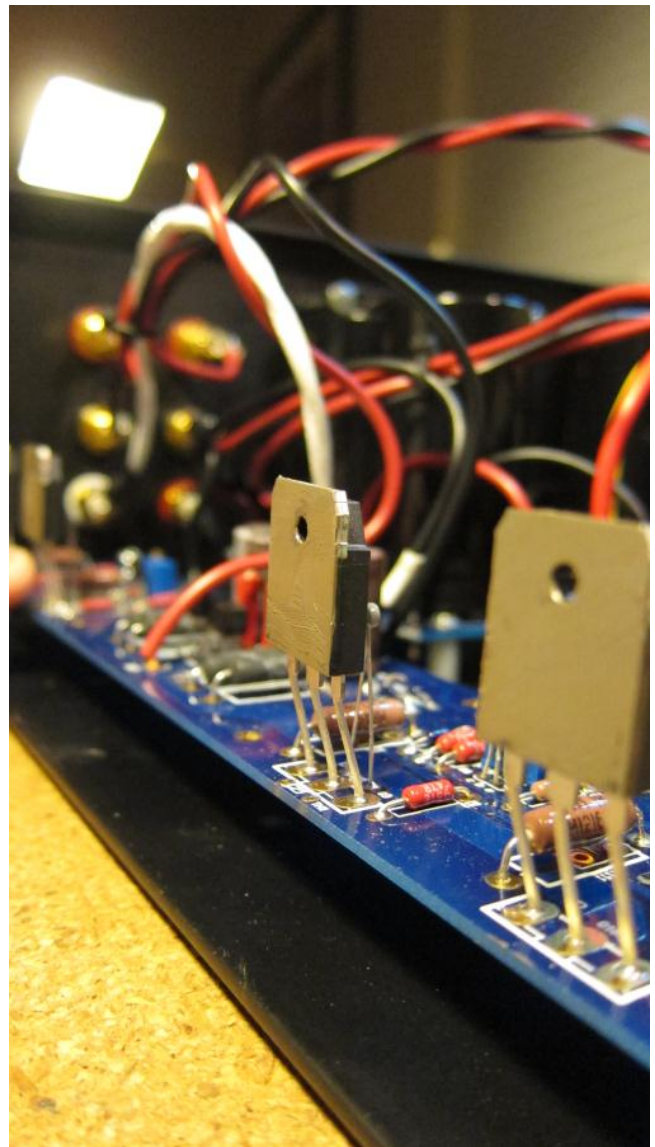
MOSFETs will be attached to the heat sinks using thermal grease along with mica insulators.

In the photo to the right, thermal grease is being applied to the back of the MOSFETs before applying the mica insulator. A very, very thin layer of grease is used. We used Arctic Silver.



And here are a couple MOSFETs covered with a thin layer of thermal grease.

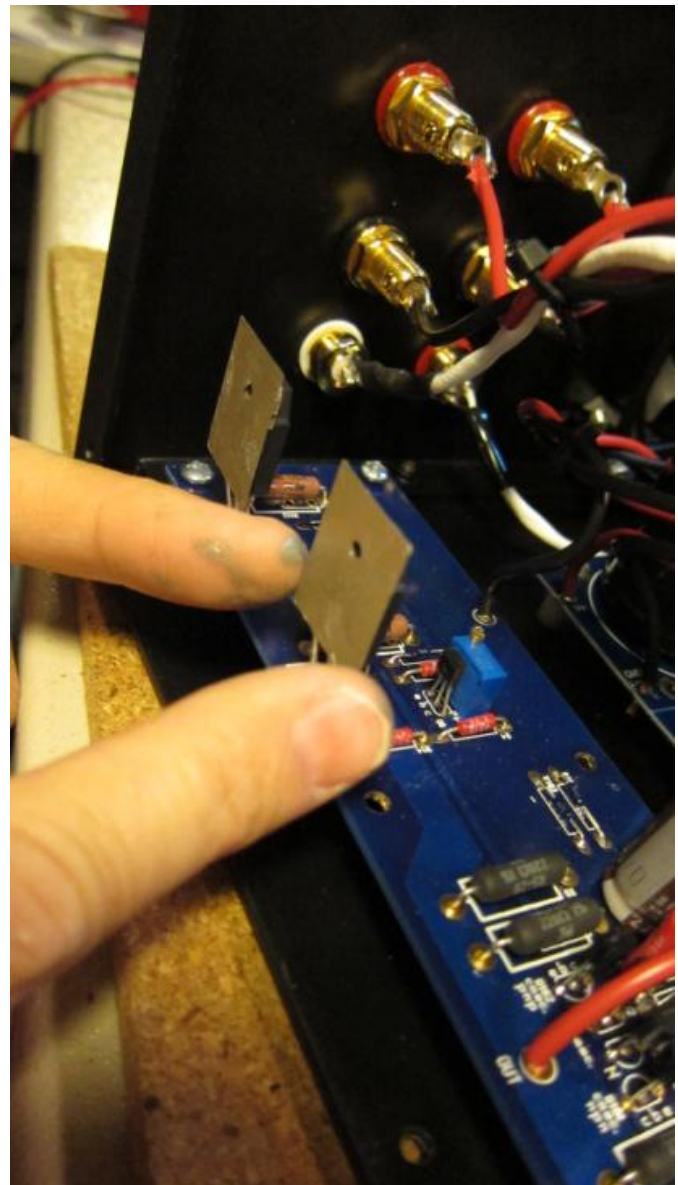
Before applying grease to mica insulators, we loosely placed mica insulators over a greased MOSFETs and took some photos so you could see that the insulators extend well beyond the metal backs of the MOSFETs, below. Next step is to grease up the surfaces of the mica that will contact the heat sinks.



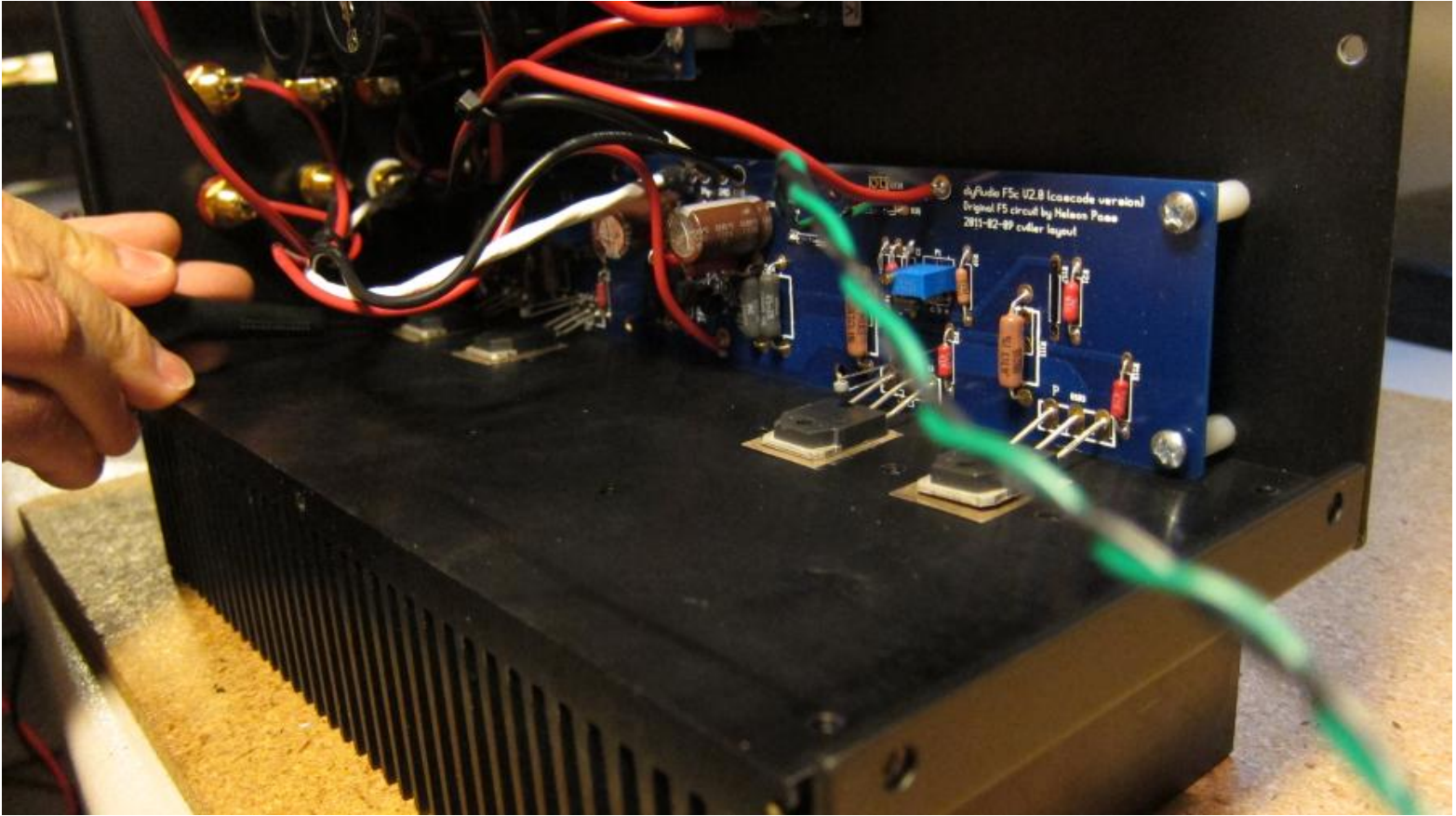
Spreading thermal grease on a mica insulator. Again, think thin. The grease looks much thicker in this photo than it was.



Placing greased mica on the greased MOSFET. The greased surface of the mica is facing out so it will come in contact with the heat sink.



After greasing all four MOSFETs on one amp board, we attached that side's heat sink and placed the amp on its side so we could carefully adjust the micas' positions and then clamp down the MOSFETs.

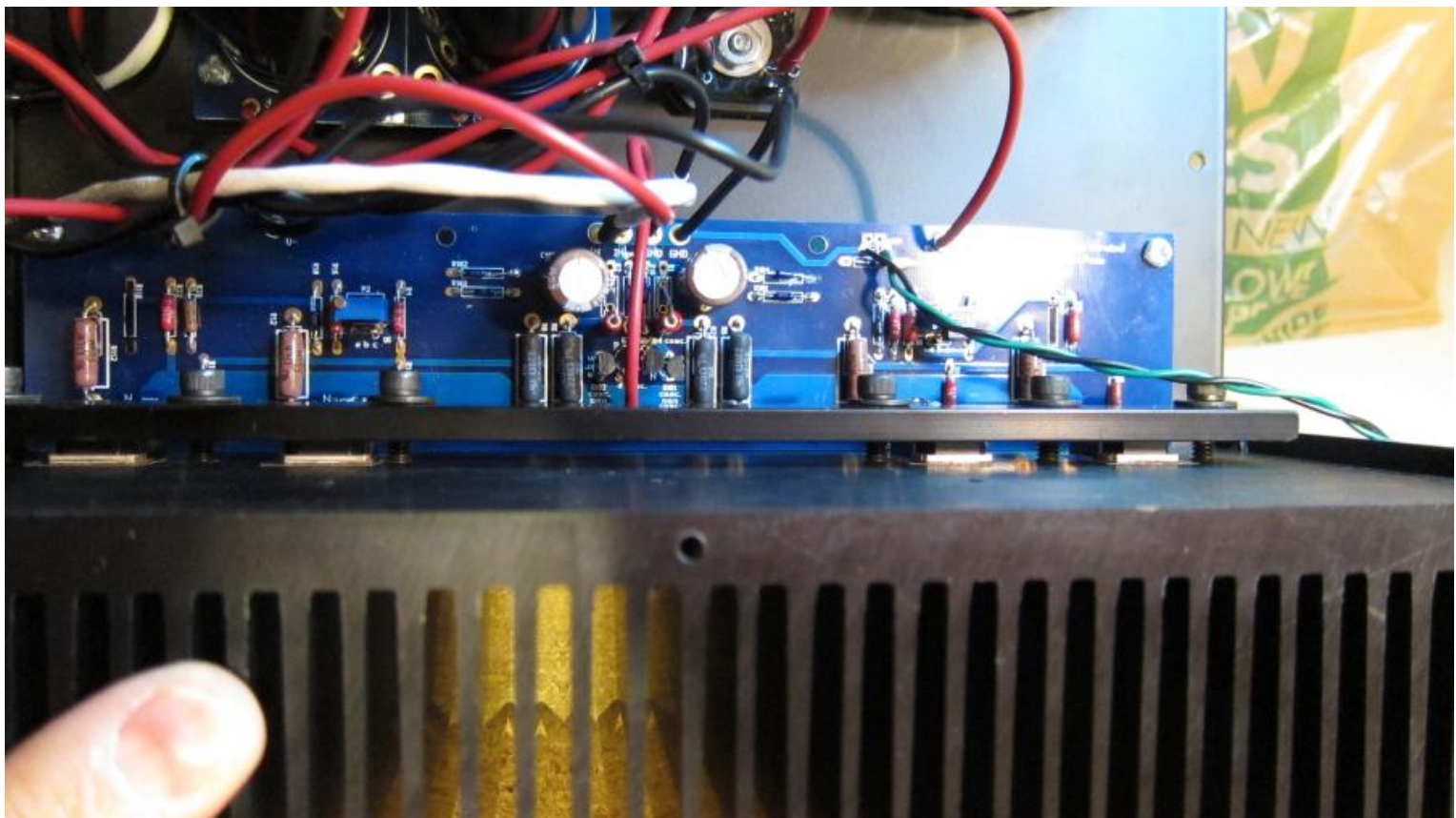
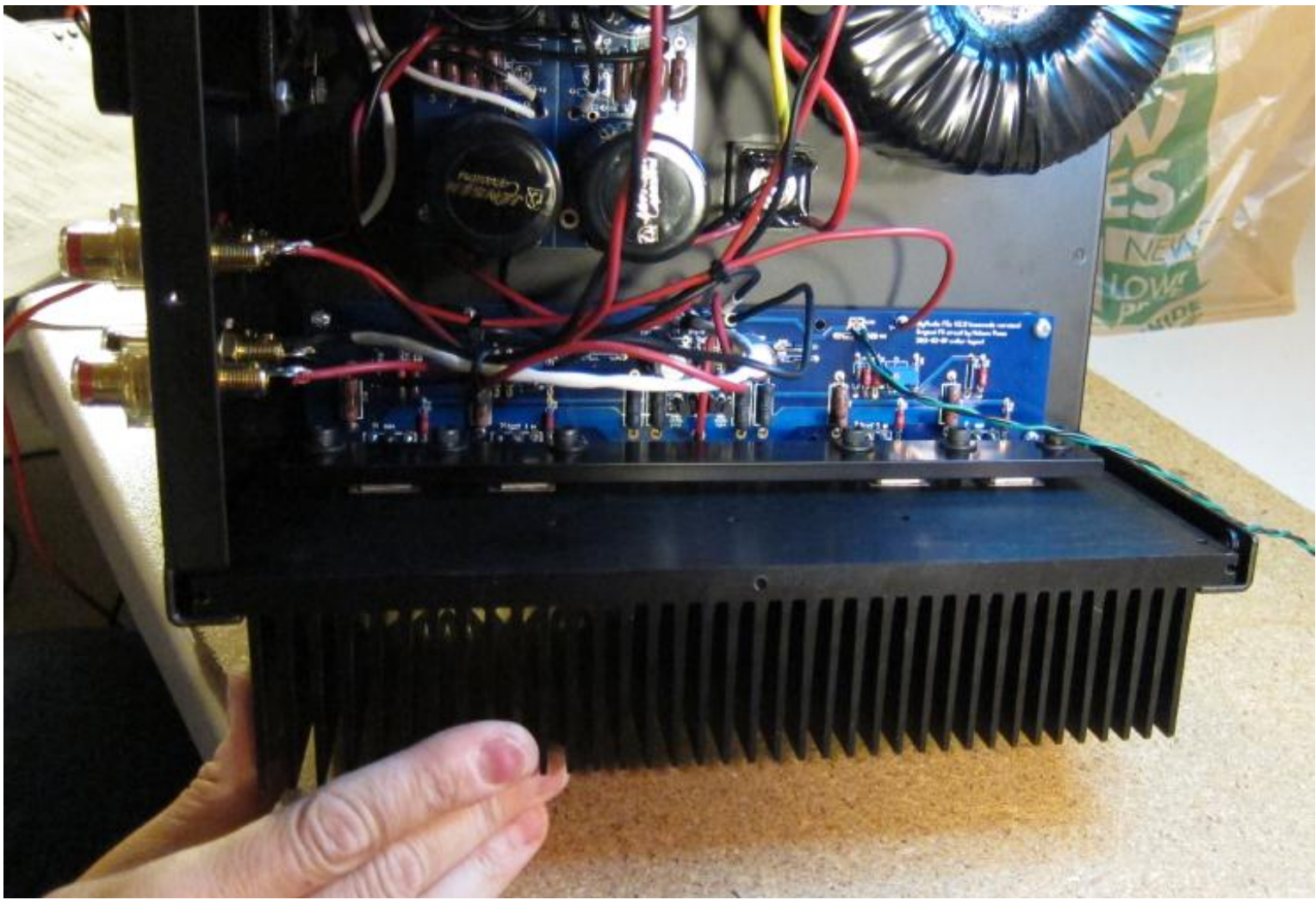


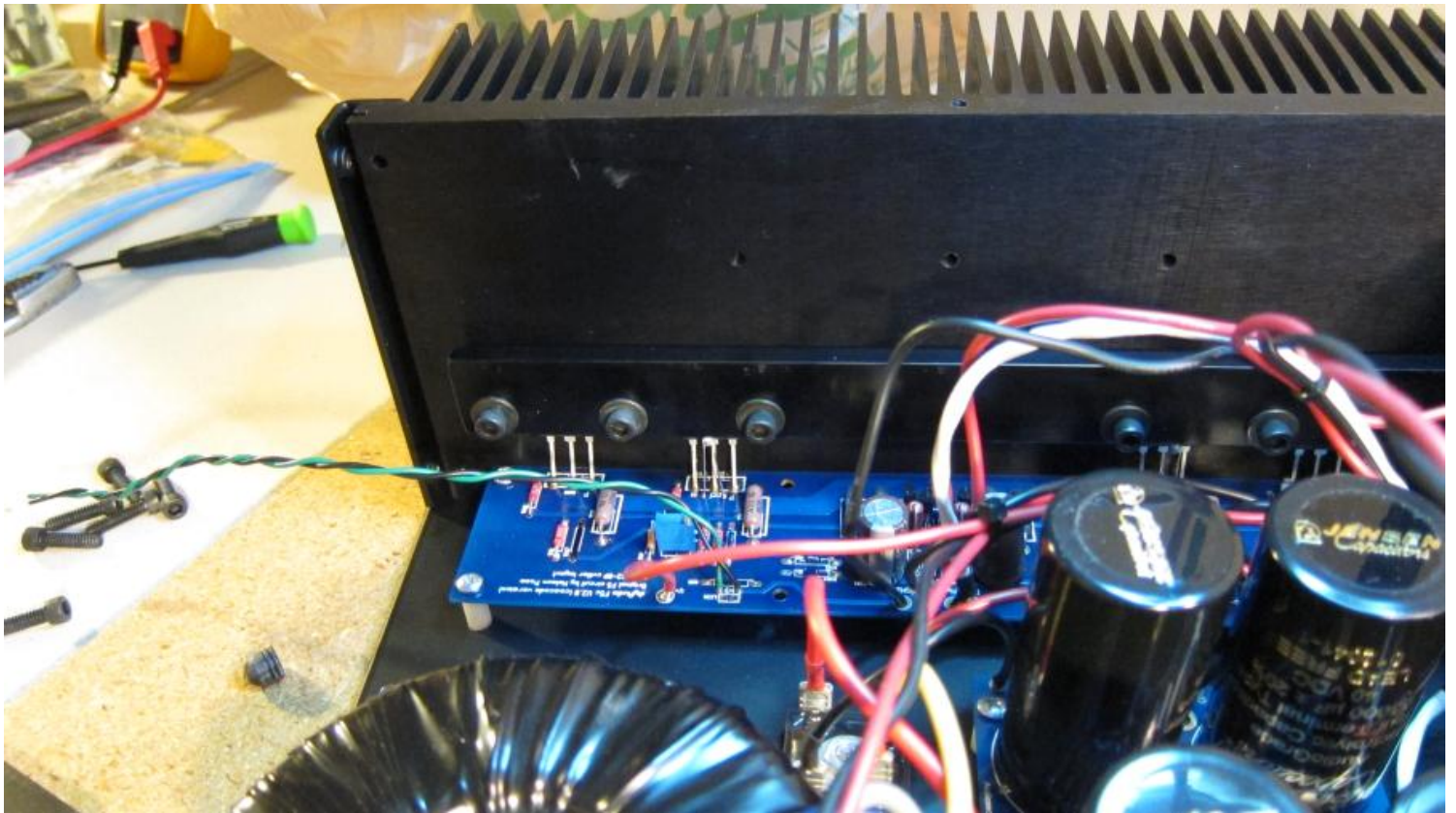
Above, we are carefully making small adjustments to slide the mica a bit to be in good position before clamping down MOSFETs. Those green and black twisted wires to be connected to the LEDs on the front panel keep appearing and getting in the way when photographing.

Next, the clamp (aluminum bar) was carefully placed in position, and washers and 10-24 bolts held the clamp into place over the MOSFETs.

We didn't use a torque wrench, but carefully tightened the bolts equally until they were firm, but not super tight.

One can crack the case of MOSFET, and we wanted to be sure not to do that. A couple photos of the clamp in place on the next page. In the second photo, below you can see the MOSFETs below the clamp, held tightly to the heat sink.

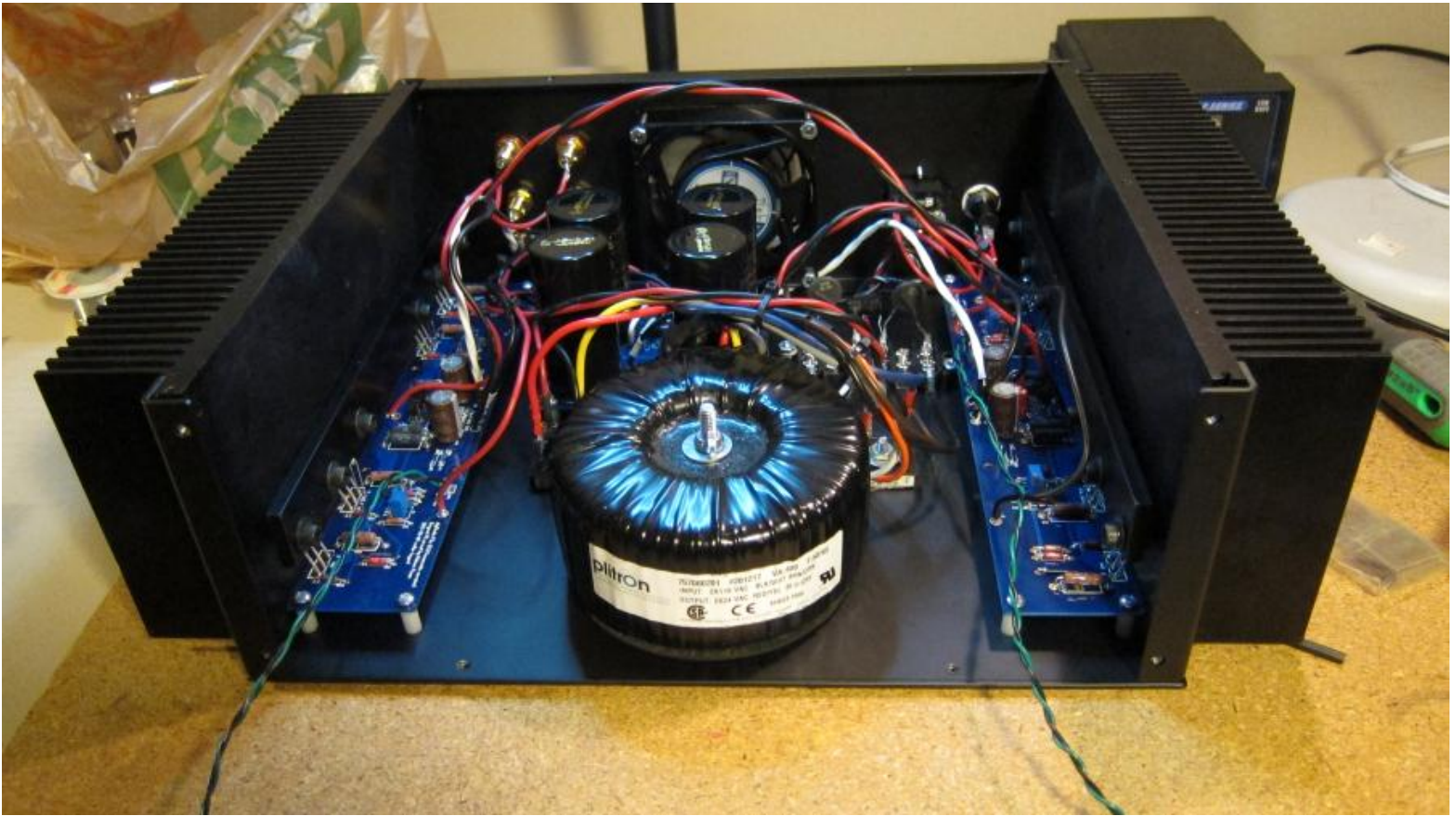




In the photo above, the amp has been placed right side up to see how the clamping system works. The bolts to the left on the table are for the clamp on the other side of the amp. And the next thing we did was perform the identical procedure on the other side and got both heat sinks attached and both sets of MOSFETs clamped down. The way the amp boards were made, the MOSFETs are not spread equally on the heat sink. Two towards the front and two towards the back. This will limit heat dissipation to some extent. It may have been wiser to have spread the MOSFETs equally on the sinks and run wires from them to the boards. The photos, below, shows both heat sinks and both clamps in place, and the fan has been installed in the back panel.



A similar photo, below.



Continued in part 11.