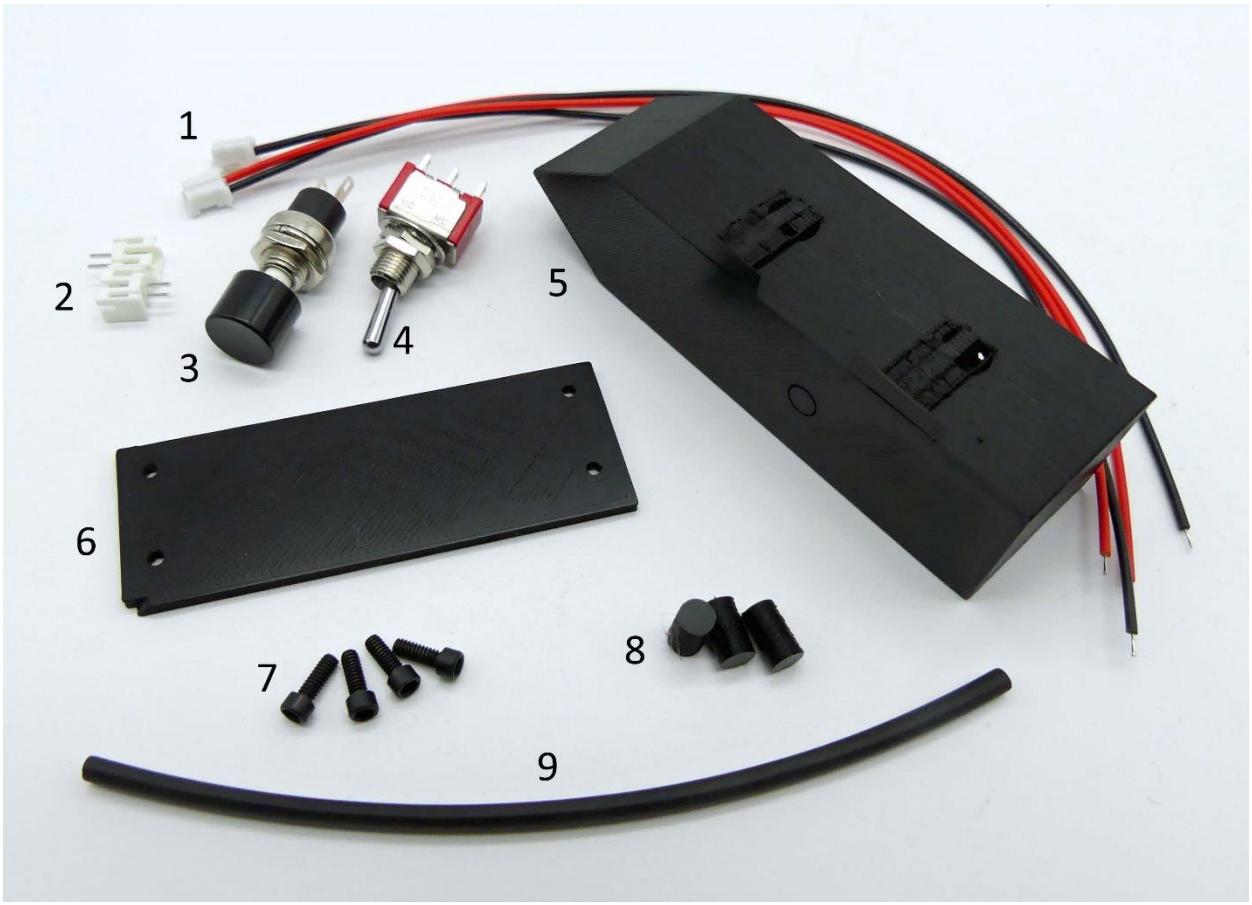
Congratulations on purchasing the Spirit Halloween Life Size trigger box replacement that adds some needed switches than can be just for looks or actually operate the wand and pack lights.

This kit includes the parts needed to replace the existing trigger box on your pack's wand. For just looks, no soldering is required, and you do not have to open up the wand. But if you want the switches to control the wand lights and sounds, then you will need to open up the wand and also do a bit of soldering.

Contents:

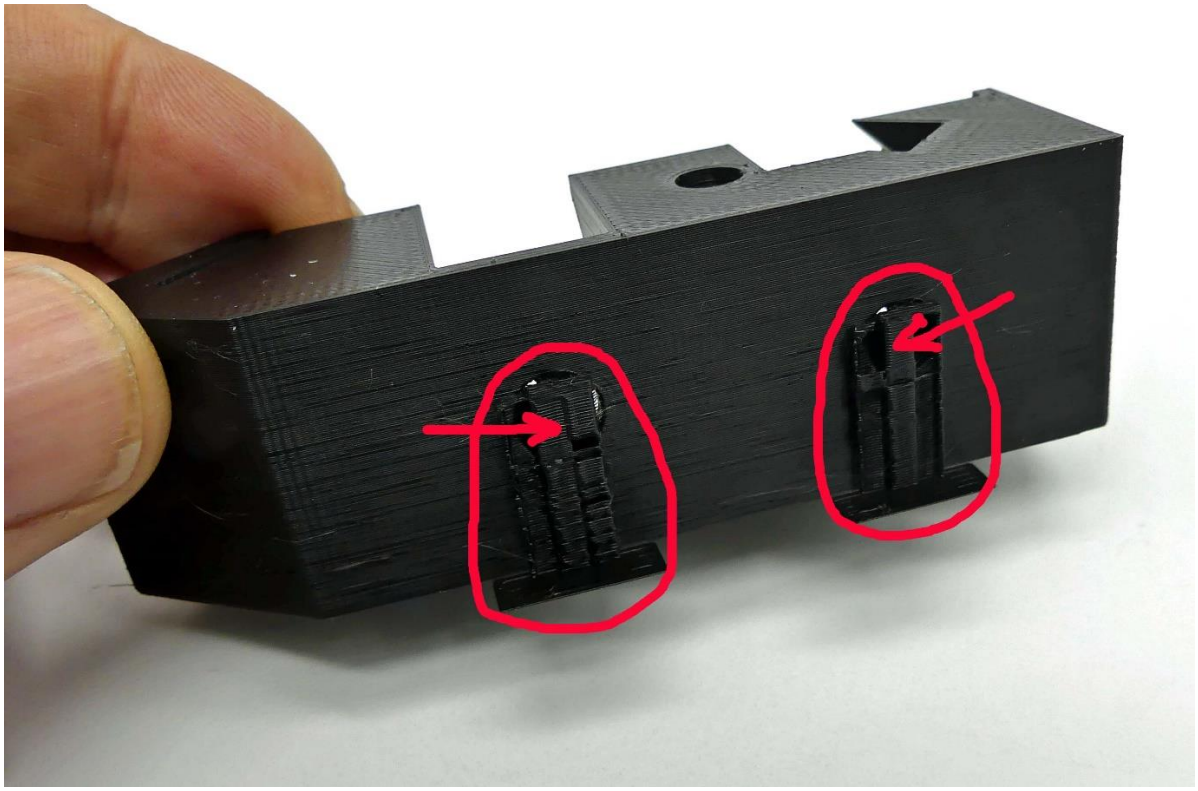


#1 2x connection wires to be added to the switches #3 and #4 (only if the switches will be functional)
#2 2x sockets to be soldering to the existing switches inside the wand (only if the switches will be functional) Sockets with wires attached may be substituted for the non-wired versions shown in the image above.
#3 Pushbutton switch for firing ("Intensify")
#4 Toggle switch to turn on/off the wand ("Activate")
#5 Main trigger box. 3D printed supports can be seen in this part. You will need to remove the supports.
#6 Back cover for the trigger main trigger box #5
#7 4x black screws to attach cover #6 to the main trigger box #5
#8 3x hole plugs. Only one is needed, but it will be trashed if you get into the trigger box later, so there are 2 spares included.
#9 Heat shrink. To be used with wires #1 and/or #2.

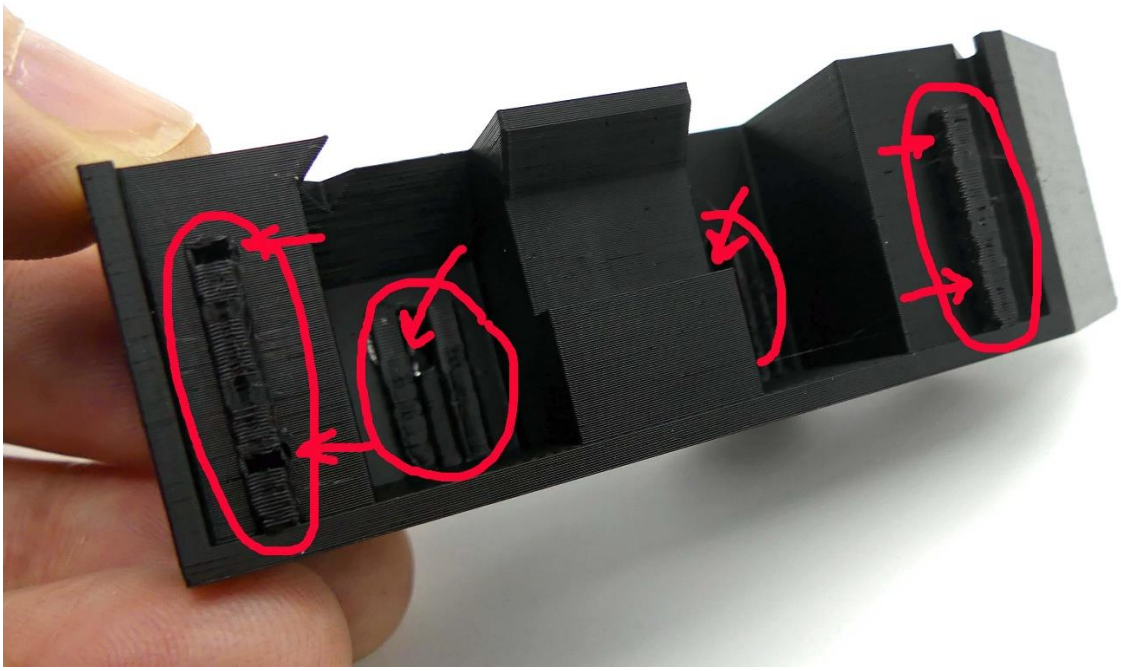
Trigger box prep work

The 3D printing of this part works best if there are supports also printed and lightly attached to the part. You will need to remove all these extra support features.

There are two larger holes with supports on the front and inside for the two switches #3 and #4.

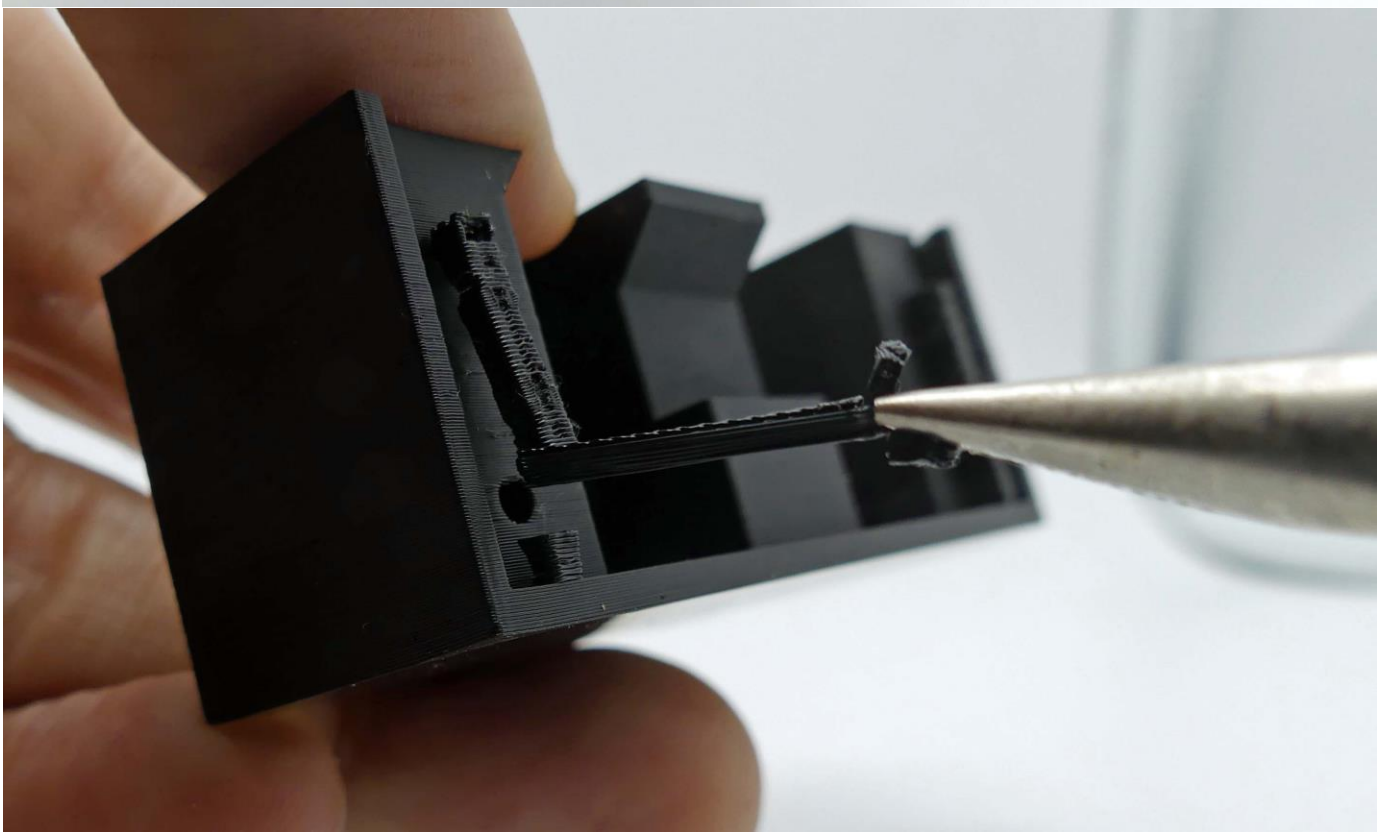


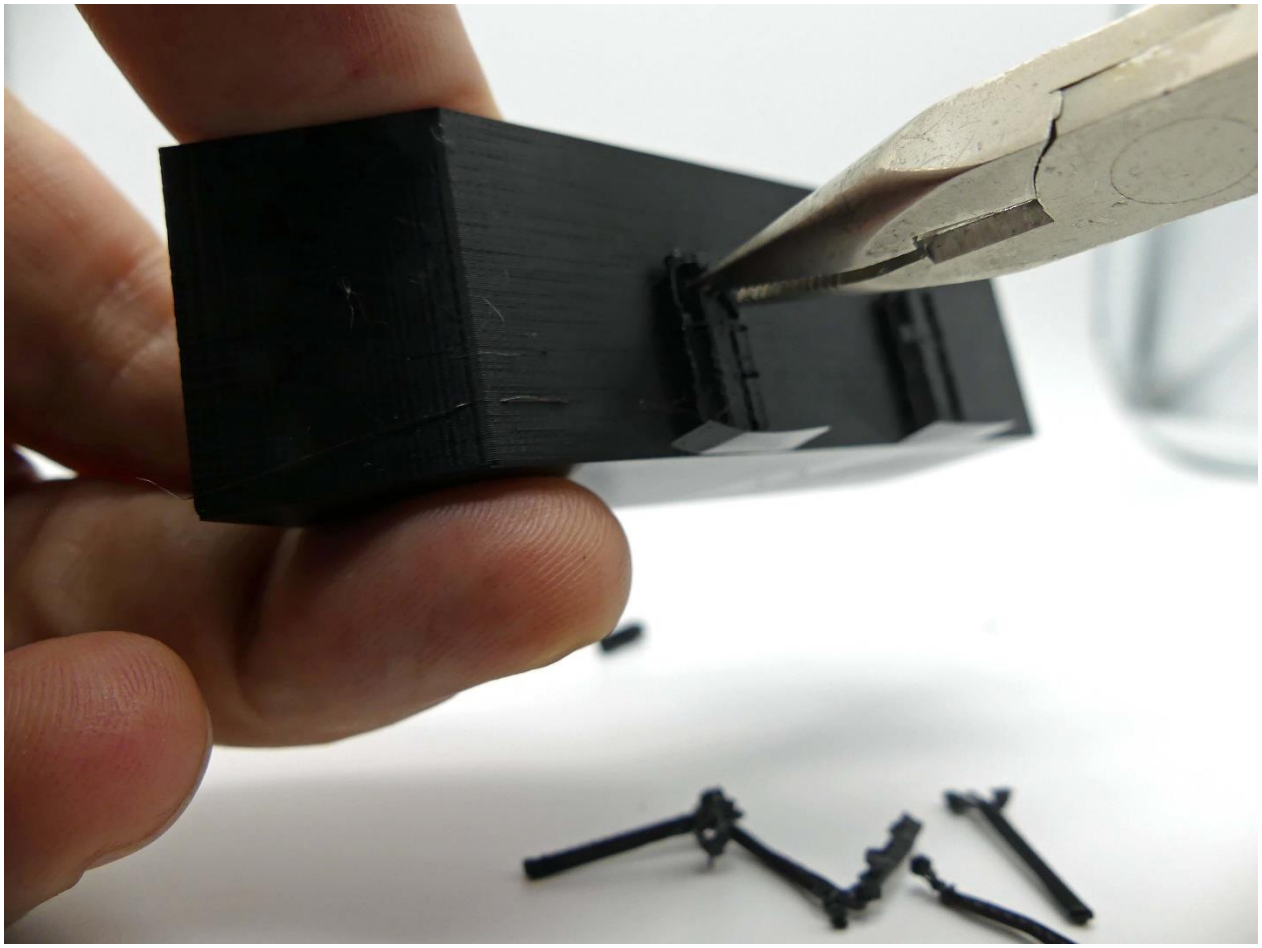
There are also 4 holes with supports on the back side for holes for the back cover #6.



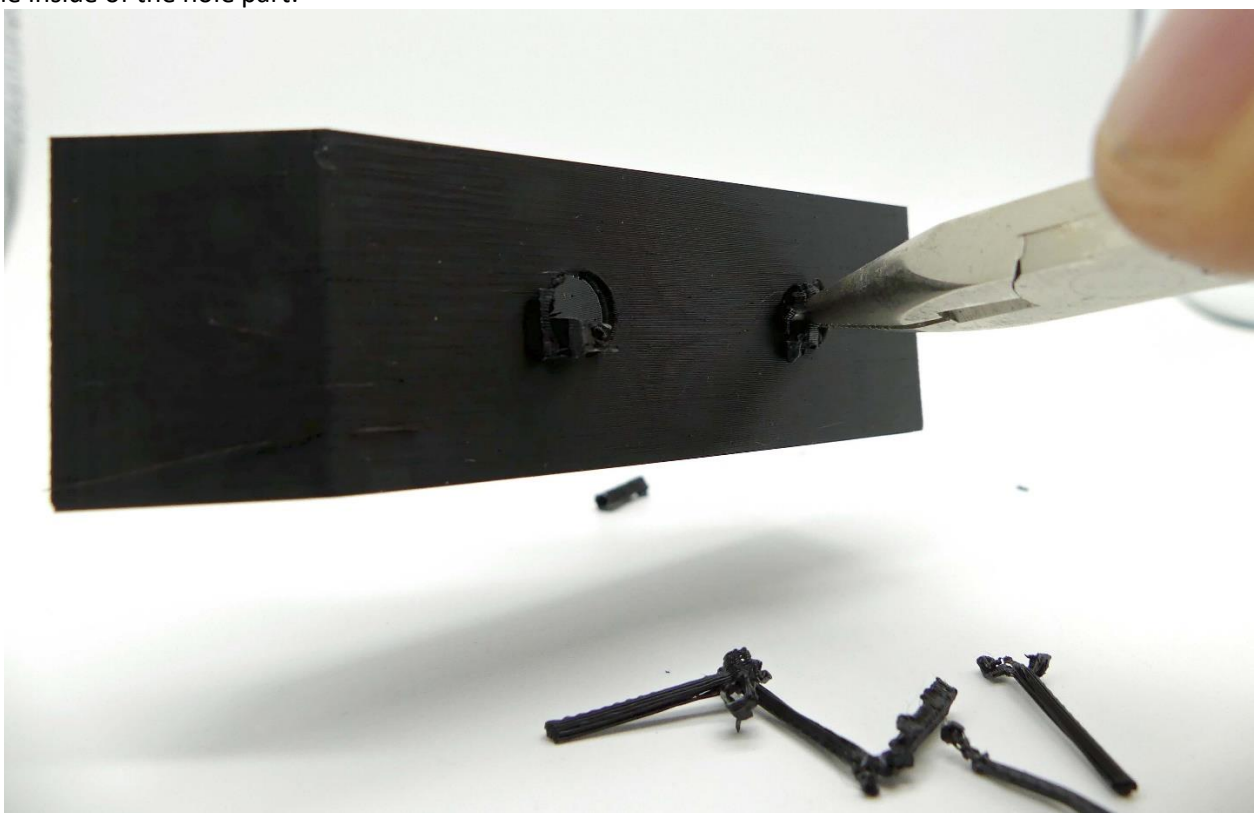
I use needle nose pliers to grab onto the supports and pull them off of the part. Start on the inside and back since if you mark up the surface at all it is hidden. Try and grab the supports in the center of the hole. When you remove the supports from the front for the two holes, be careful not to damage the front surface – unless this is part of you prep work for “distressing” the trigger box!



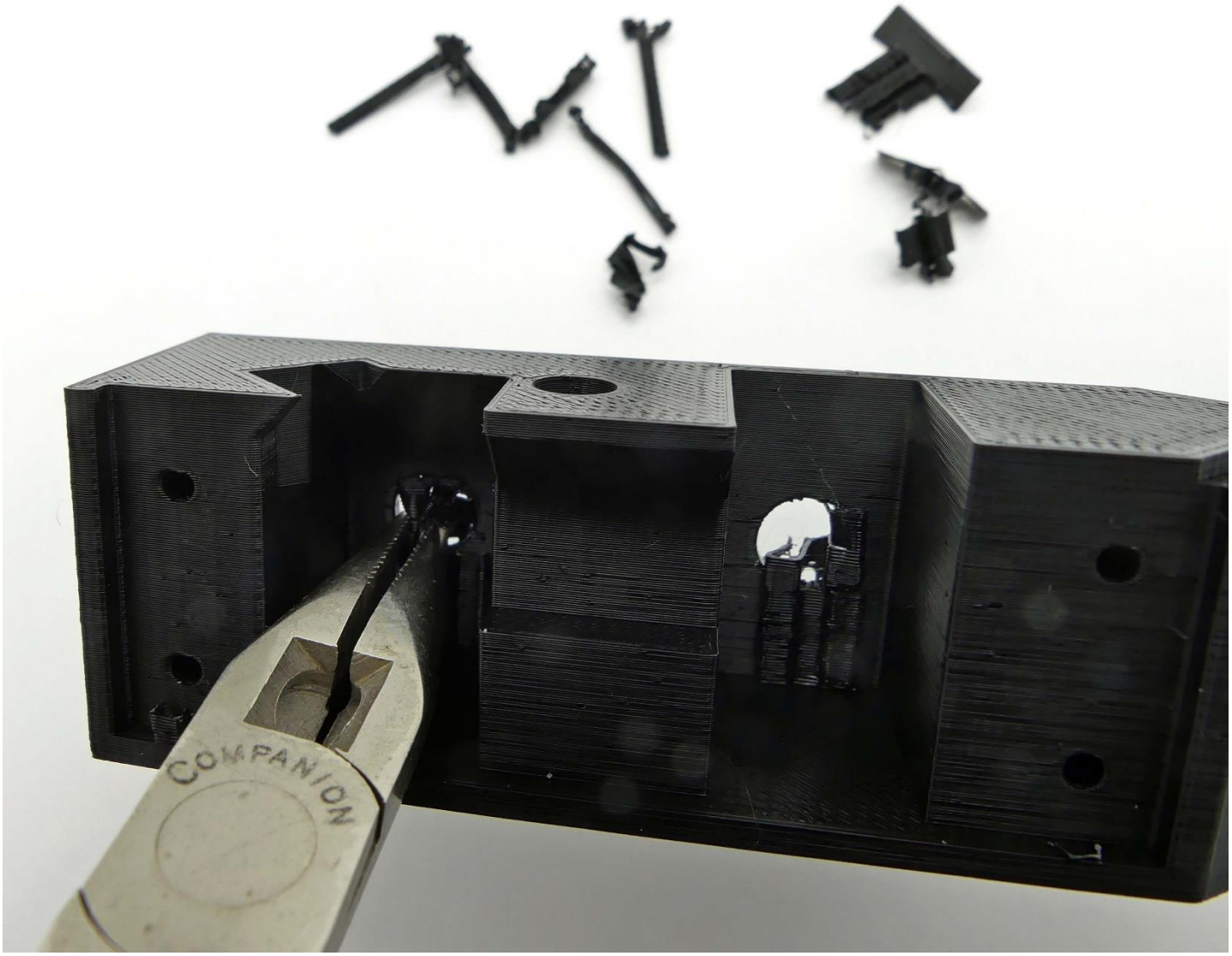




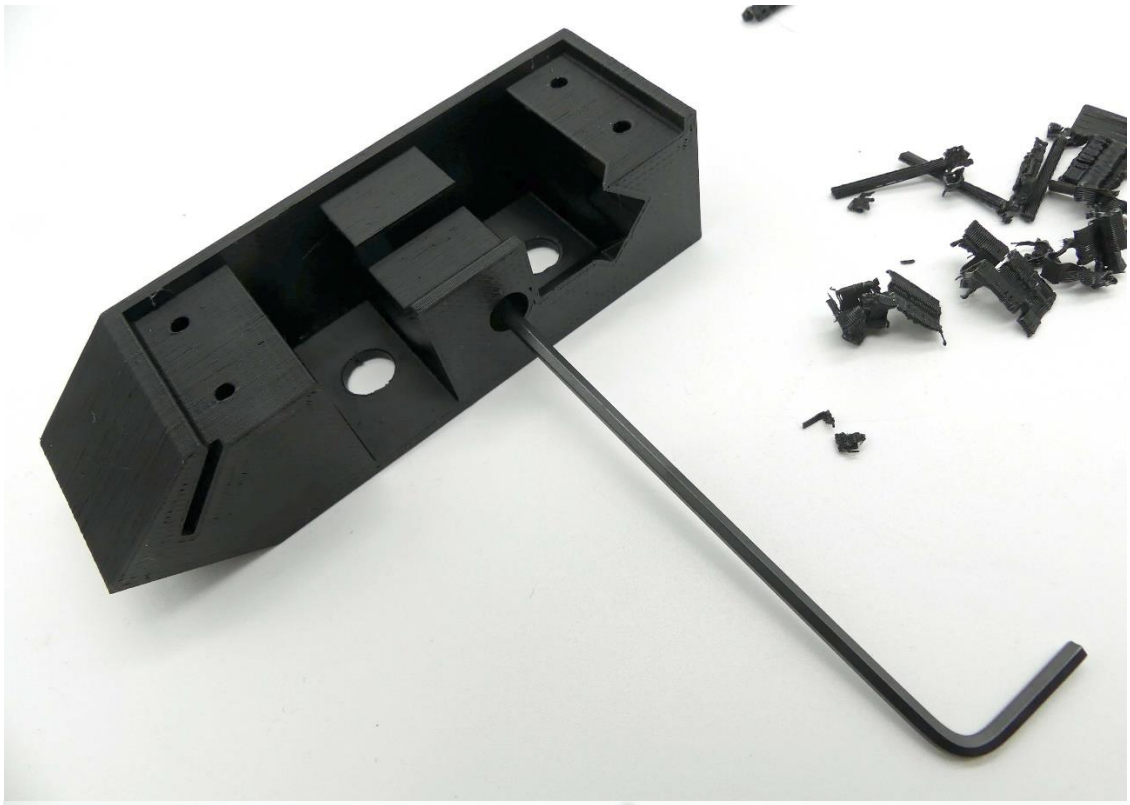
Then the inside of the hole part:

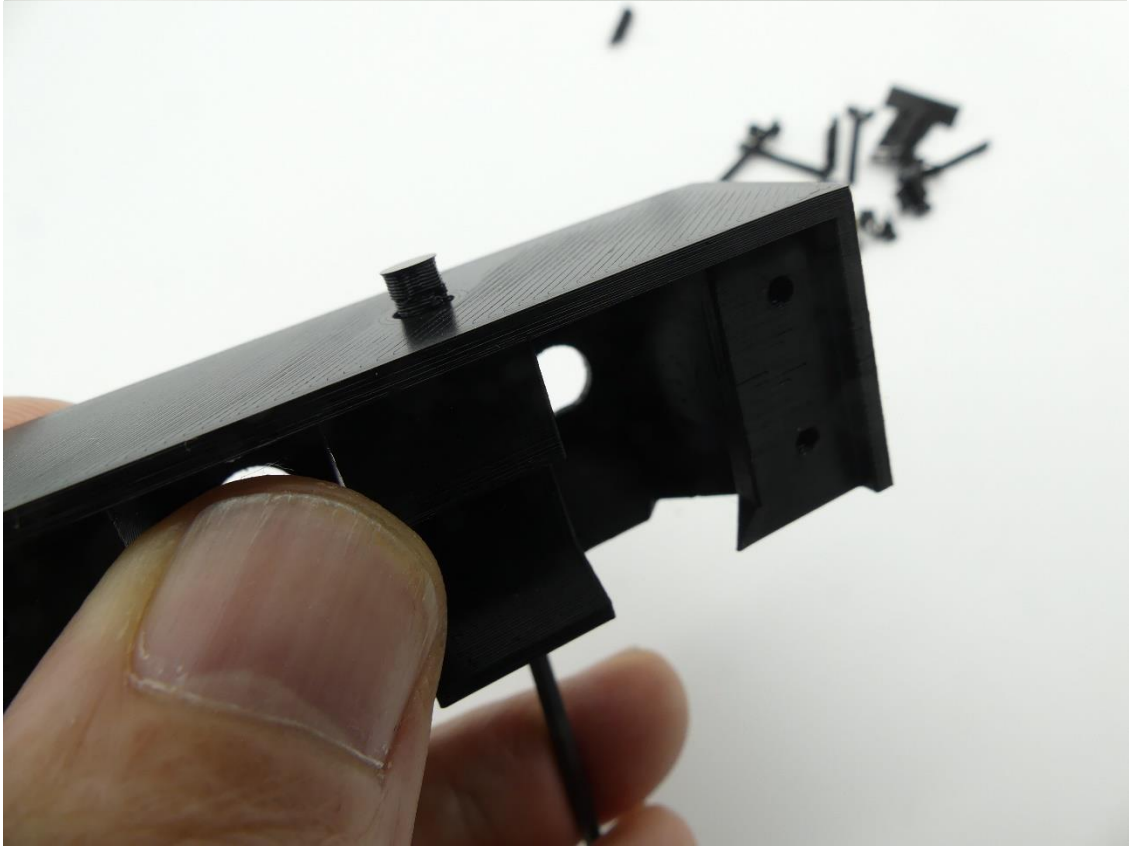


And then the inside of the trigger box, switch hole supports:

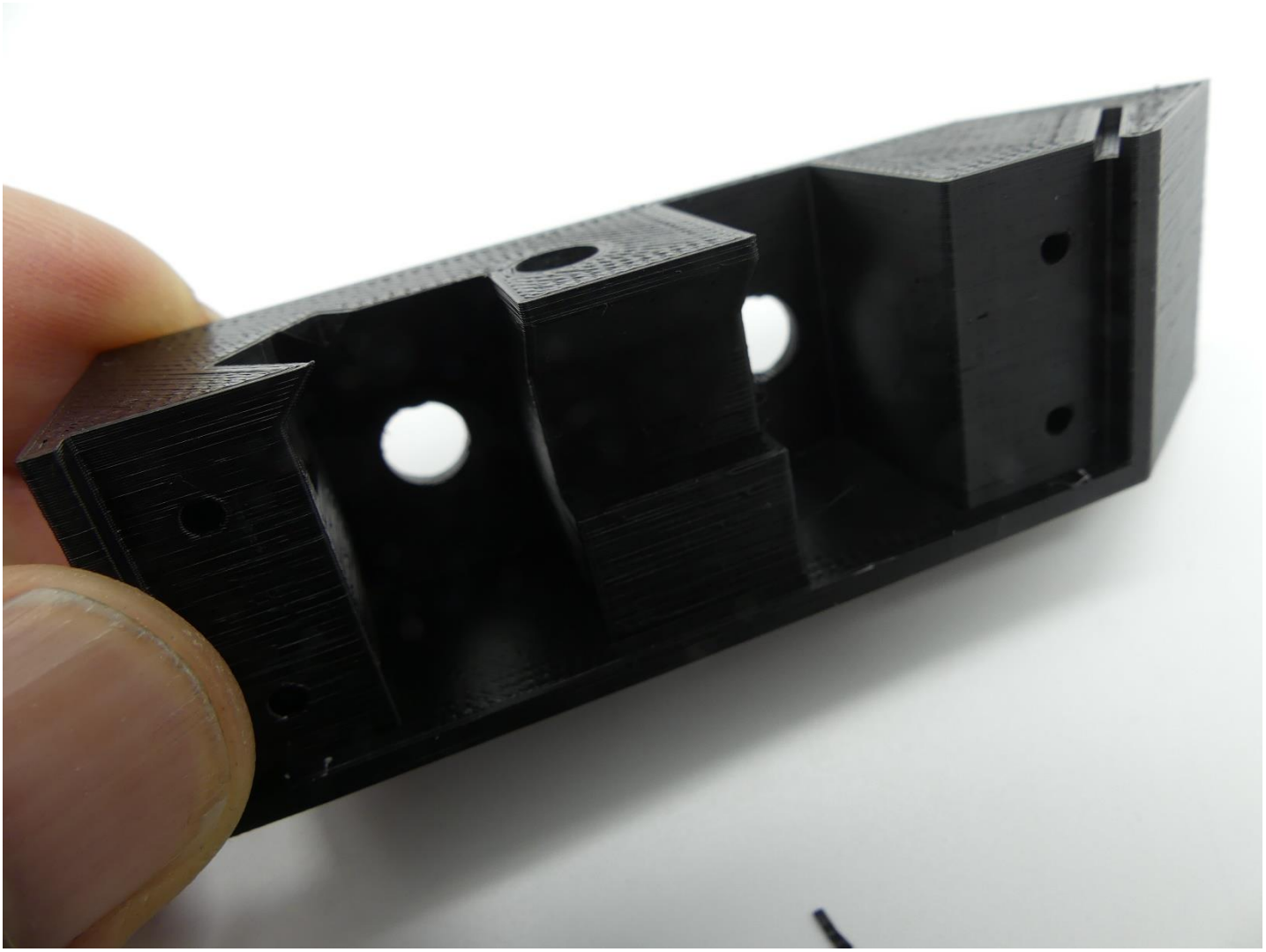


The trigger box is held in by a single screw and the same mounting is used for this trigger box. Since there is support inside that hole to make sure it is round, you need to remove that. The easiest way I found was to use the small hex key (5/64”) that will later be used to attach the screws #9 to the back cover and insert it from the inside of the trigger box and it will push the support structure out from the part:





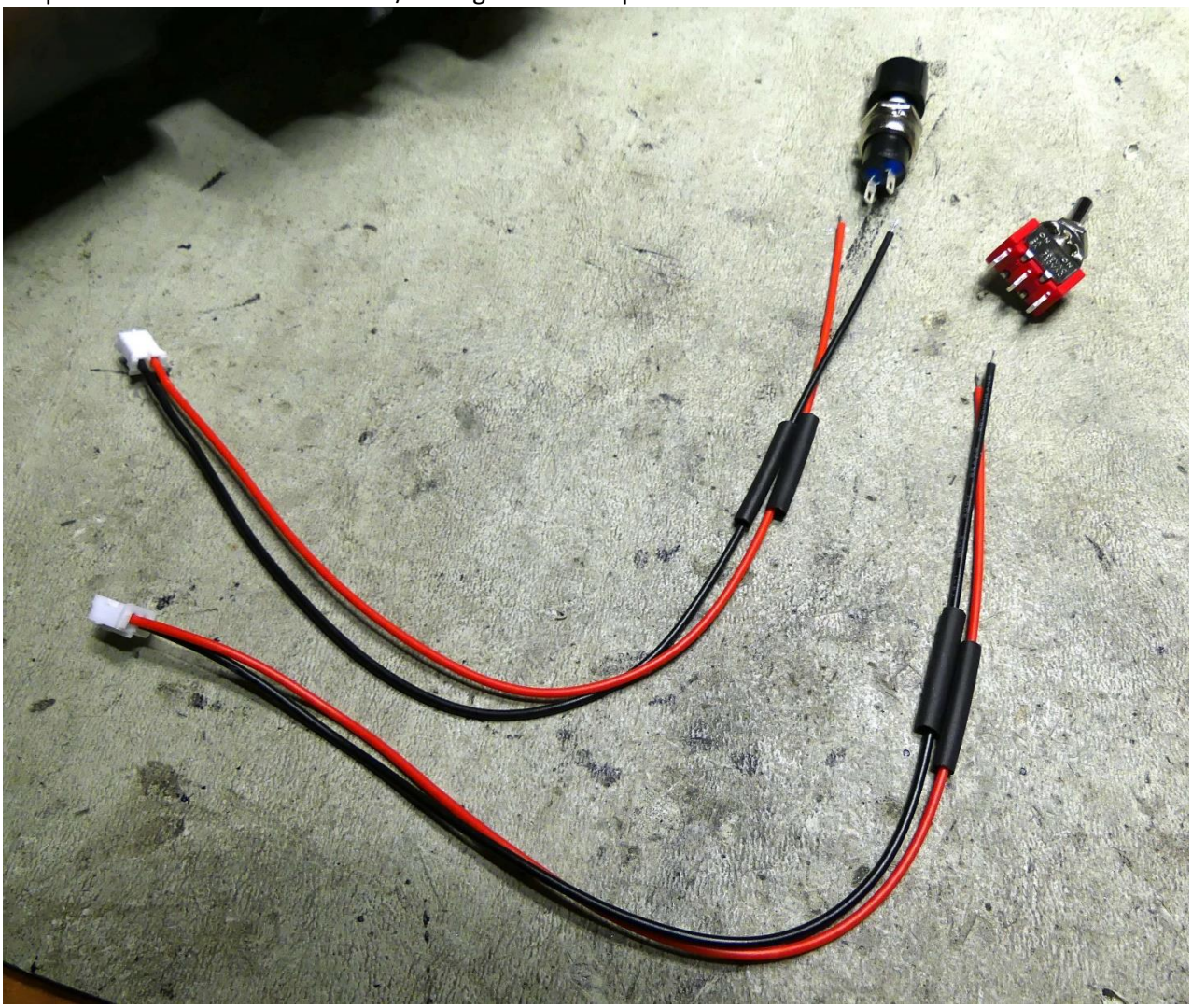
The trigger box has now been cleared of the supports and is ready for adding parts to it.



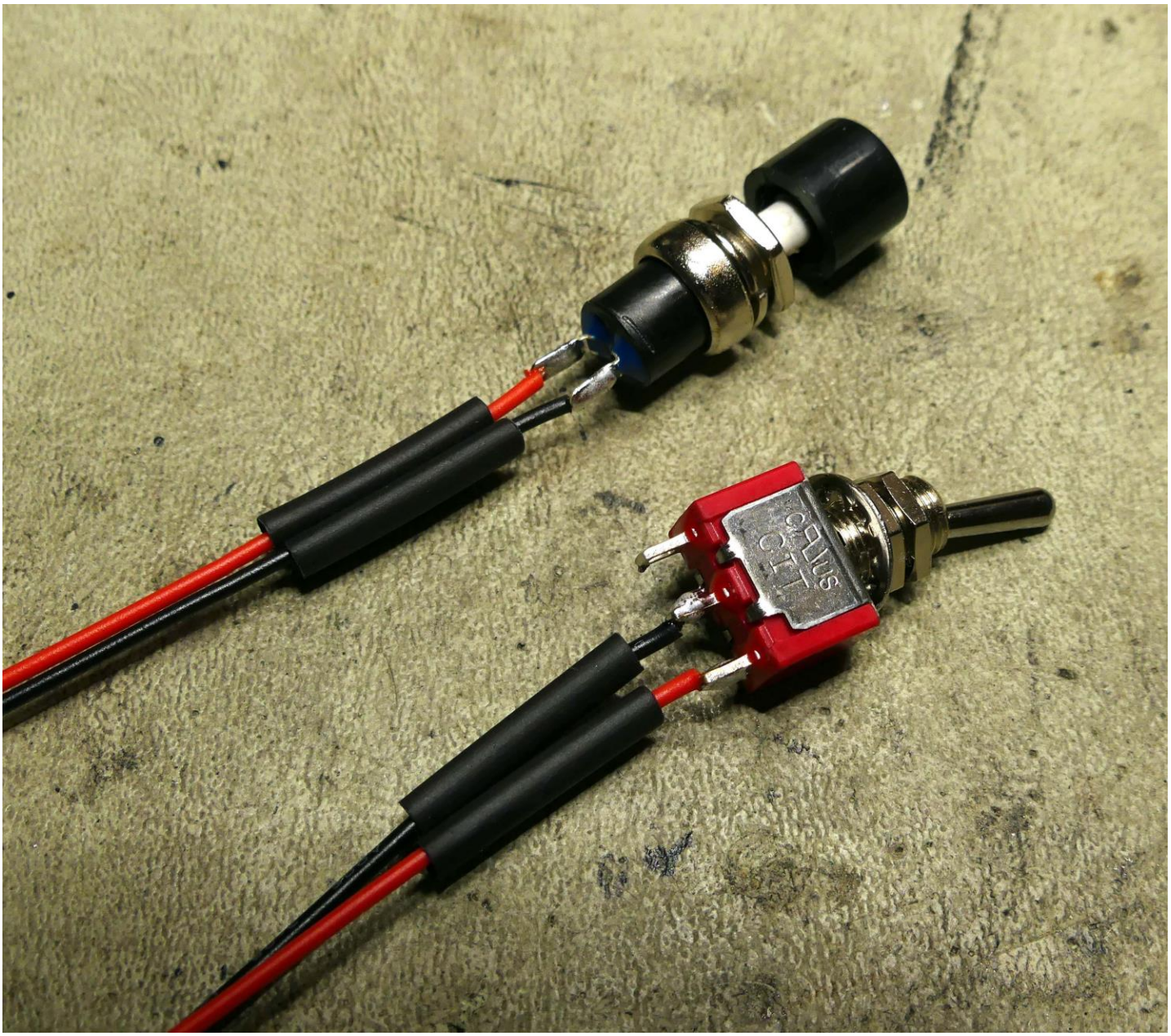
(Optional) Adding wires to the switches:

Attach wires #1 to the switches #3 and #4 and cover the solder joints with heat shrink #9:

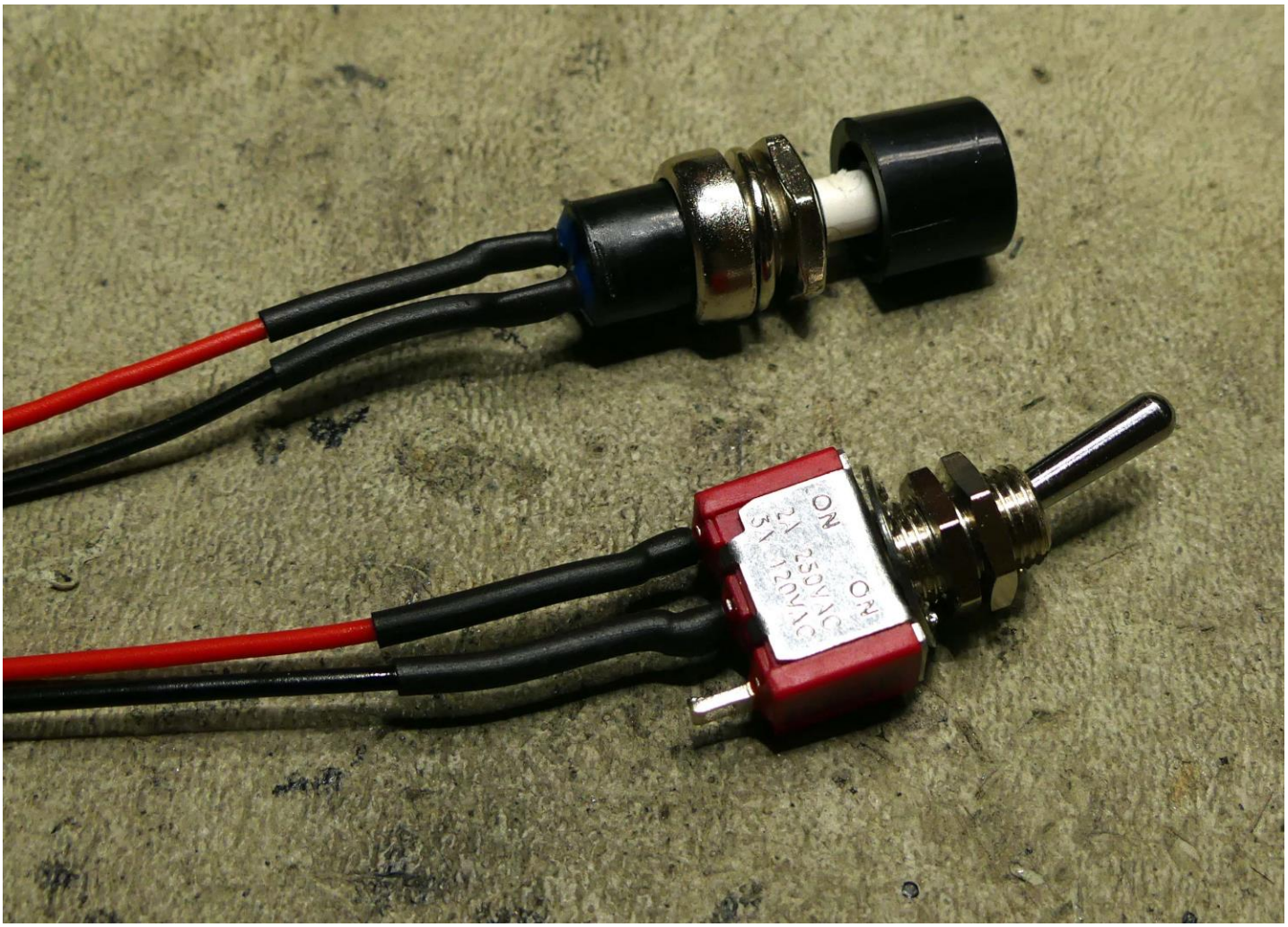
First cut 4 pieces of heat shrink to about 3/4" long each and slip over each of the wires #1.



Then solder the wires to the terminals and then slip the heat shrink up and (eventually) over the solder joint:

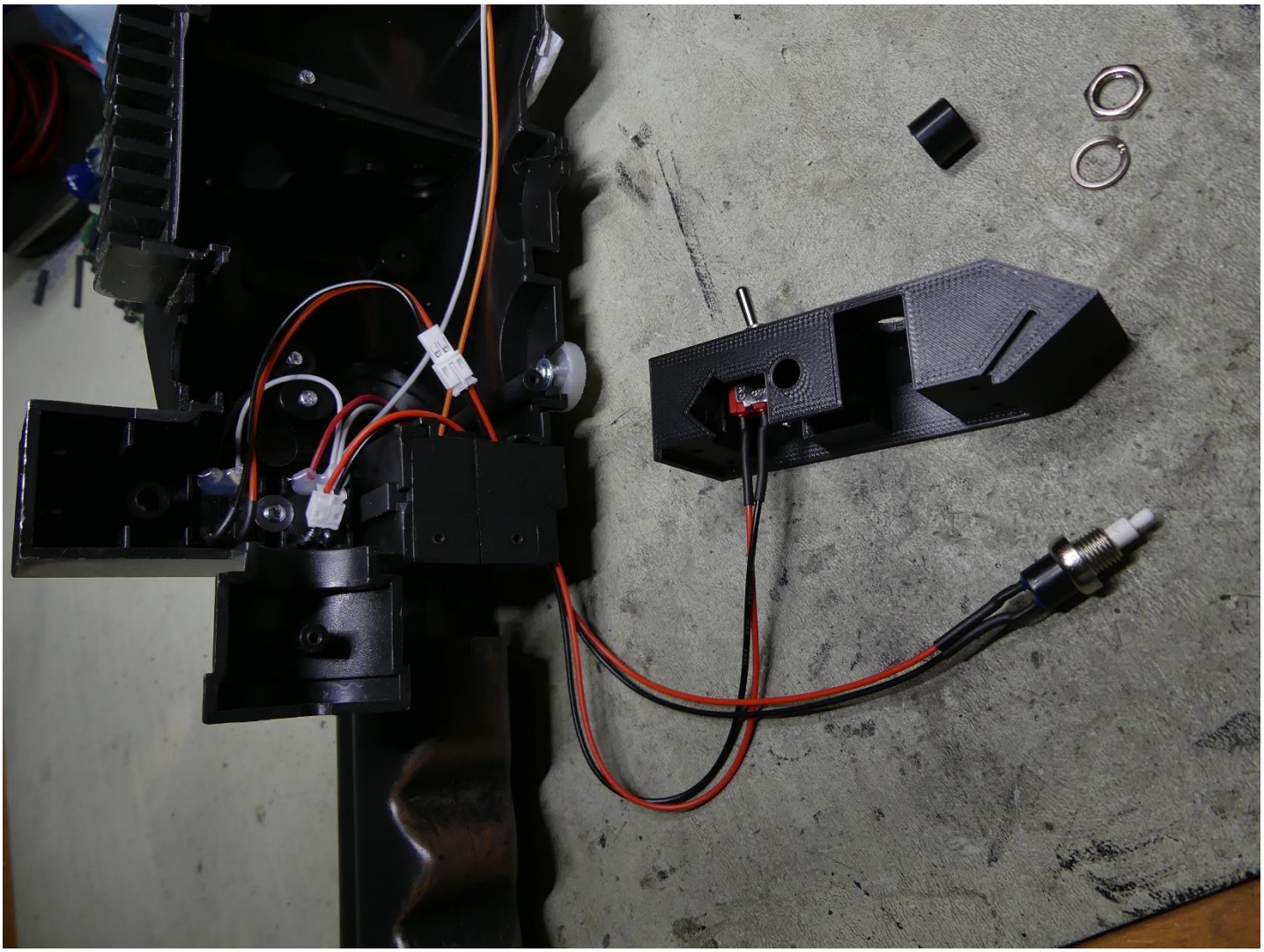


Use a heat gun to shrink the tubing and you have nice looking switches with attached wires:



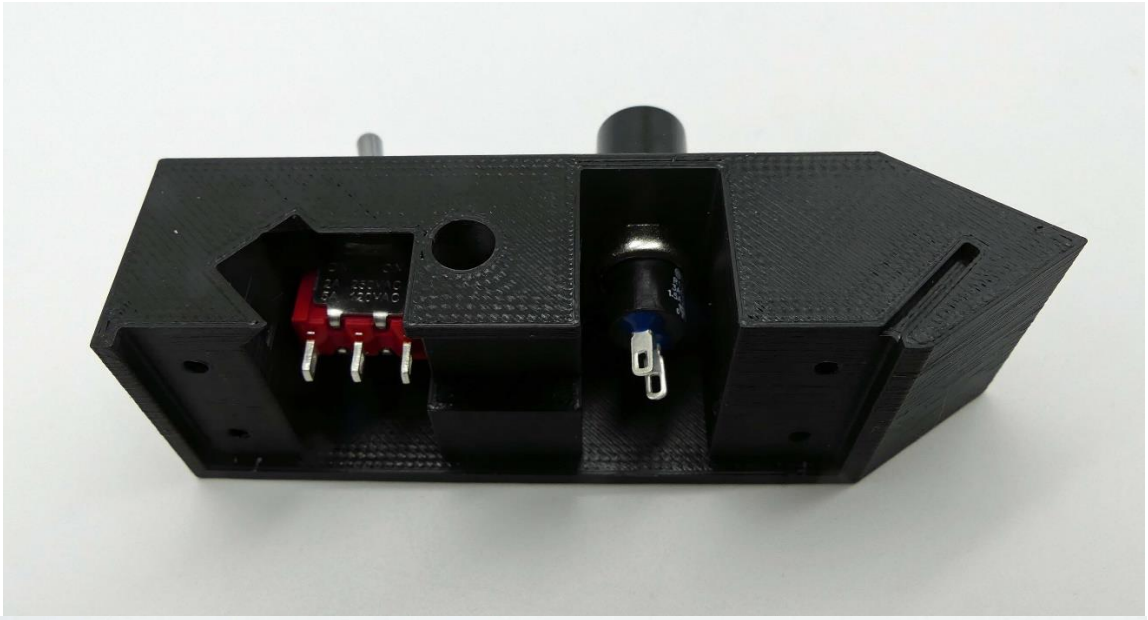
Mount the switches in the trigger box:

You pop off the black pushbutton switch by pulling it straight away from the body. It will make a pop sound. Without the cap, the switch can fit through the hole.



For the toggle switch, I like leaving one nut on the body of the switch before I mount it. This leaves a bit less of the threaded portion of the switch sticking up on the front of the trigger box. For both switches, push through the holes and then put the lock washer on and then the nut to hold the pushbutton in place.

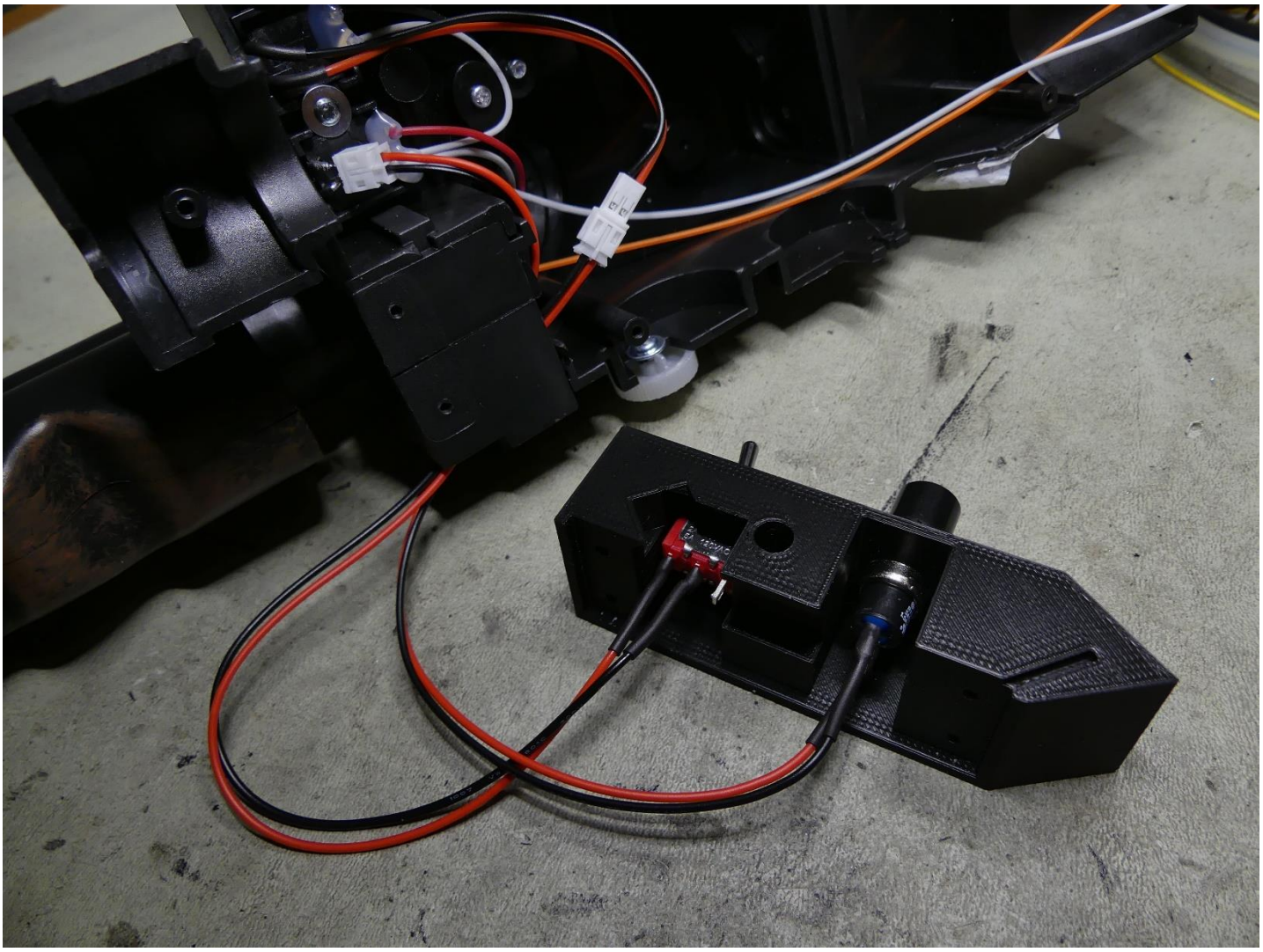
When tightening the nut, take care not to scratch or gouge the trigger box surface. I used the needle nose pliers, but an appropriate wrench or socket driver could be used and may be less likely to scratch the trigger box surface.





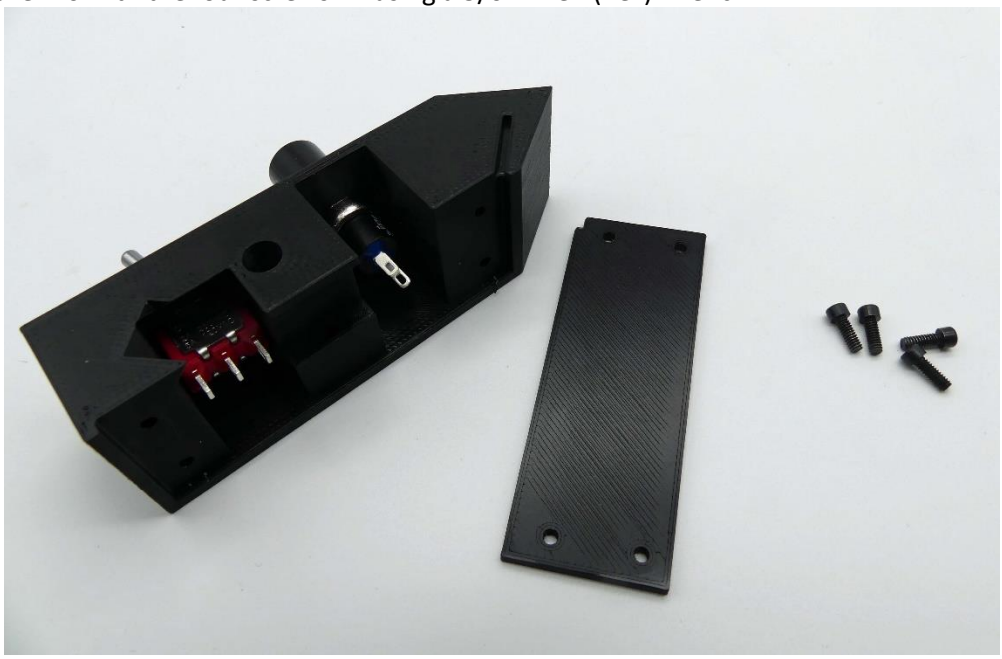
The “INTENSIFY” and “ACTIVATE” stickers were removed from the original trigger box and placed on this new trigger box in the appropriate locations. I used a razor blade to lift the edges so as not to damage the sticker. One sticker had a corner that would not stick so I added some glue (rub on glue stick) to the back side it it held much better.

If there are wires on the toggle switch, orient the part so that the wires connect on the leads that are on the bottom edge of the trigger box:

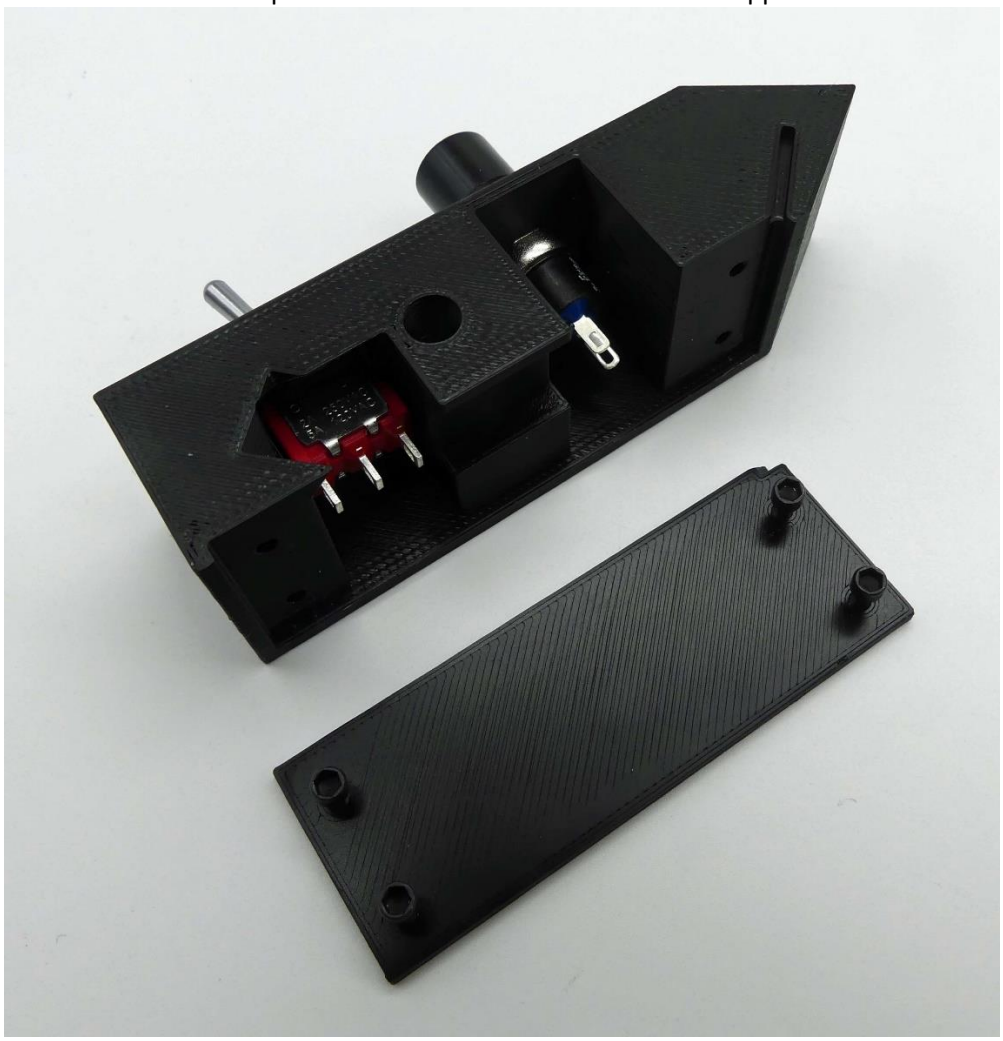


Attach the back cover

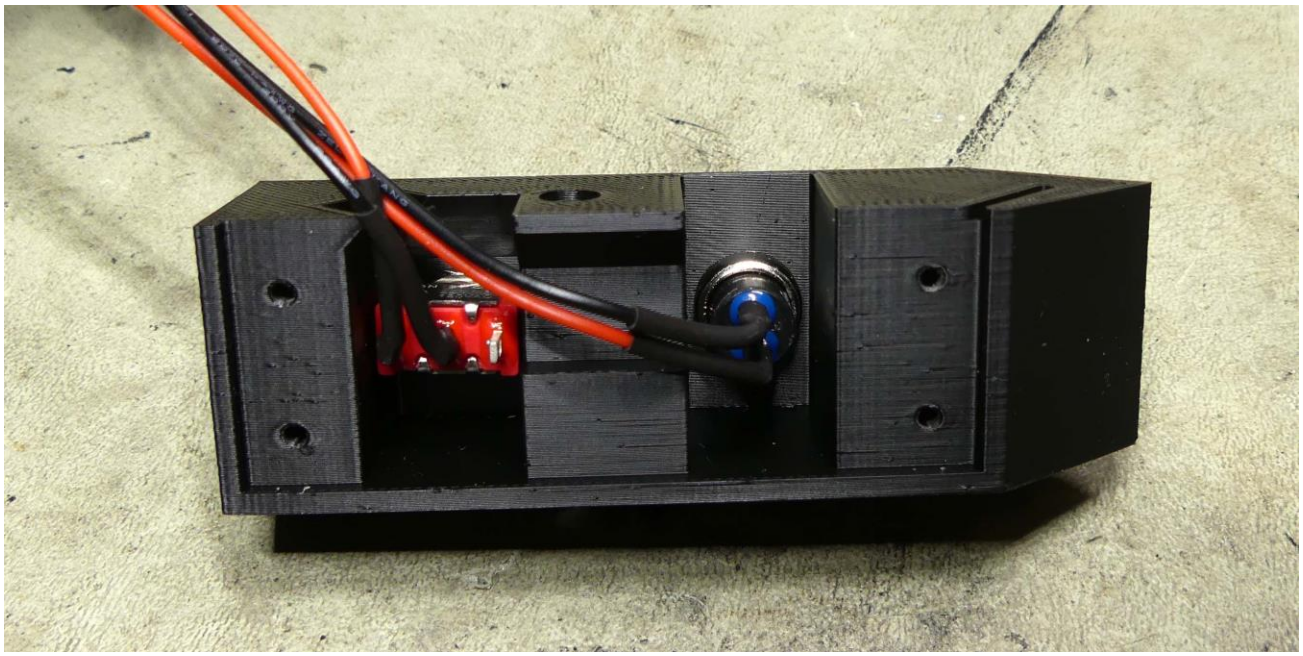
Attach the back cover #6 with the four screws #7 using a 5/64 Allen (hex) wrench.



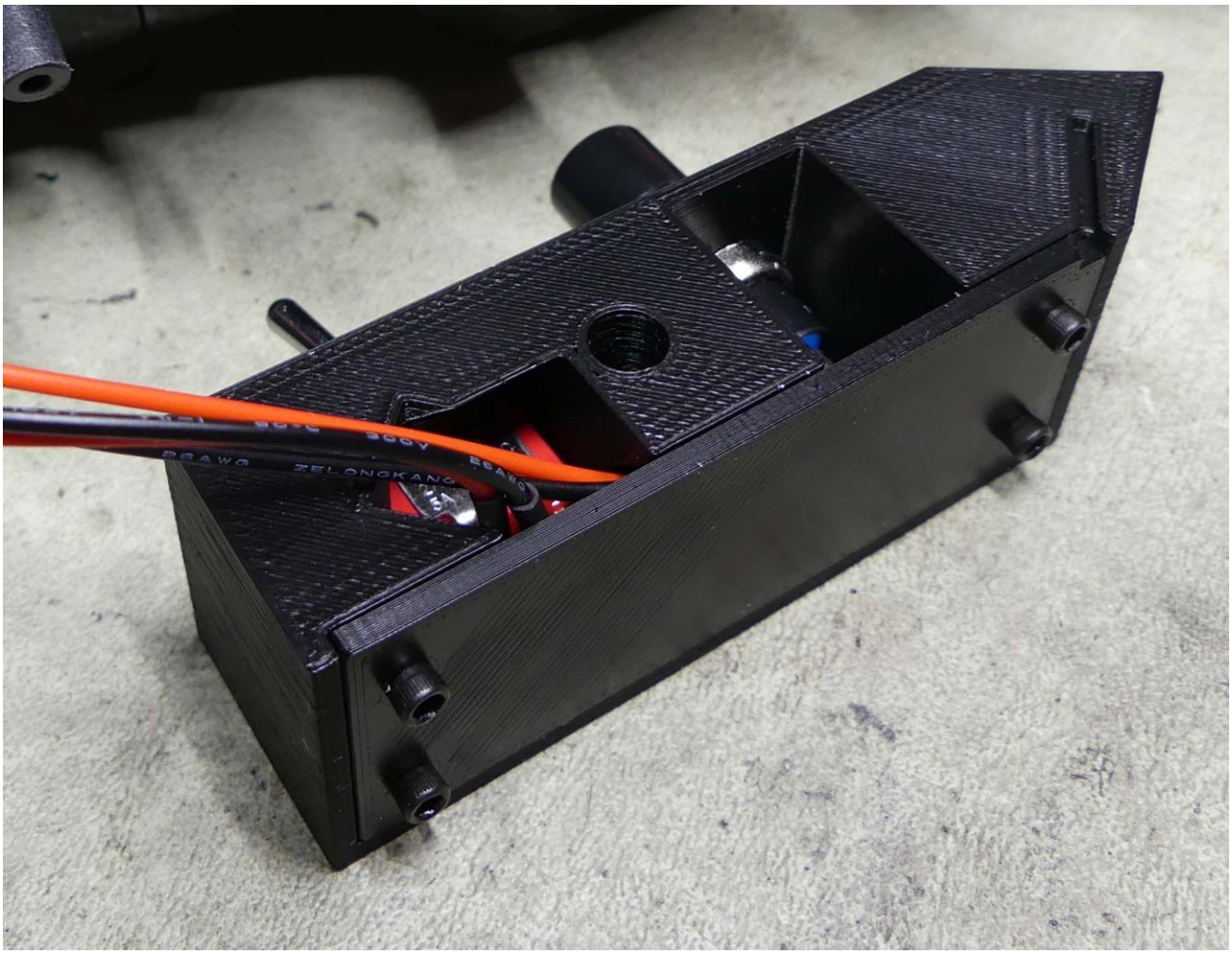
Start each screw in the side of the cover positions such that the notch is on the upper left-hand side of the cover:



Dress the wires (if attached) through the spaces provided so they will not get pinched when the cover is attached:

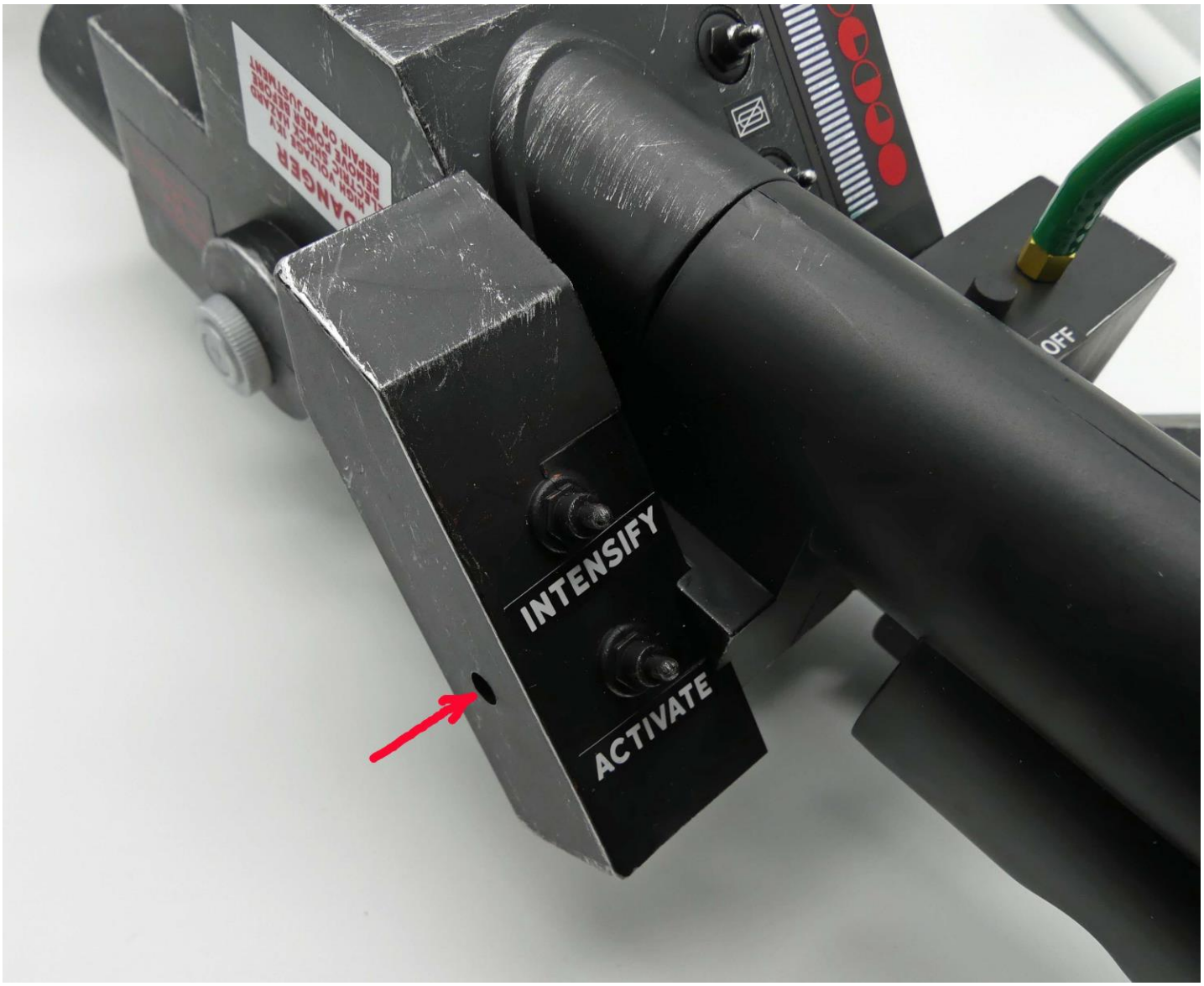


Then screw on the back cover with the 5/64” Allen key:



Remove the trigger box.

This is a simple step and involves unscrewing the single screw that holds the trigger box in place. Keep the screw since we will be needing that to hold the new trigger box in place!



(Optional) Open up the wand and attach the connectors #2:

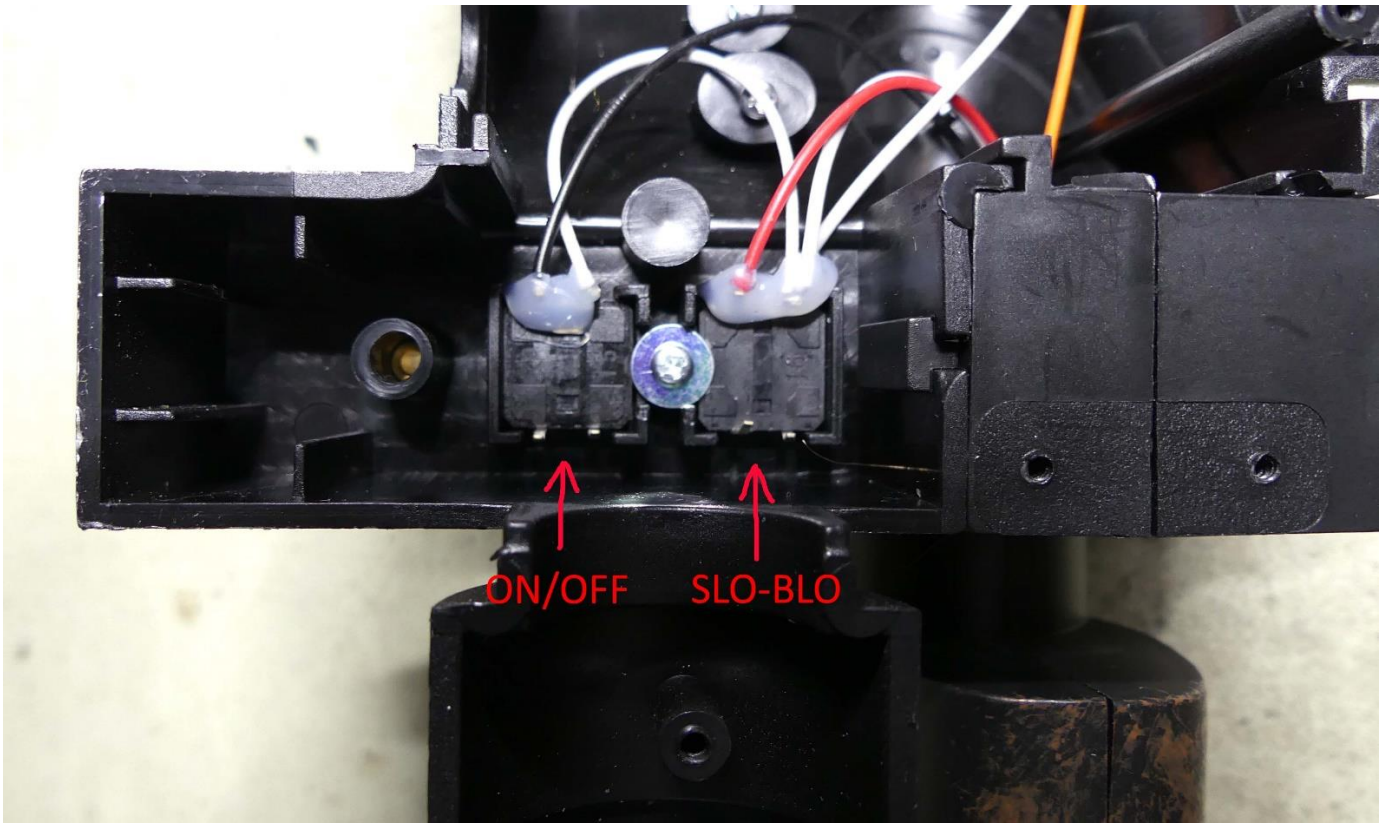
If there are wires attached, you will need to open up the wand, attach the connectors #2 and then thread the wires ends from the trigger box into the hole under where the trigger box attaches.

To open up the wand, you need to remove 8 Philips head screws:

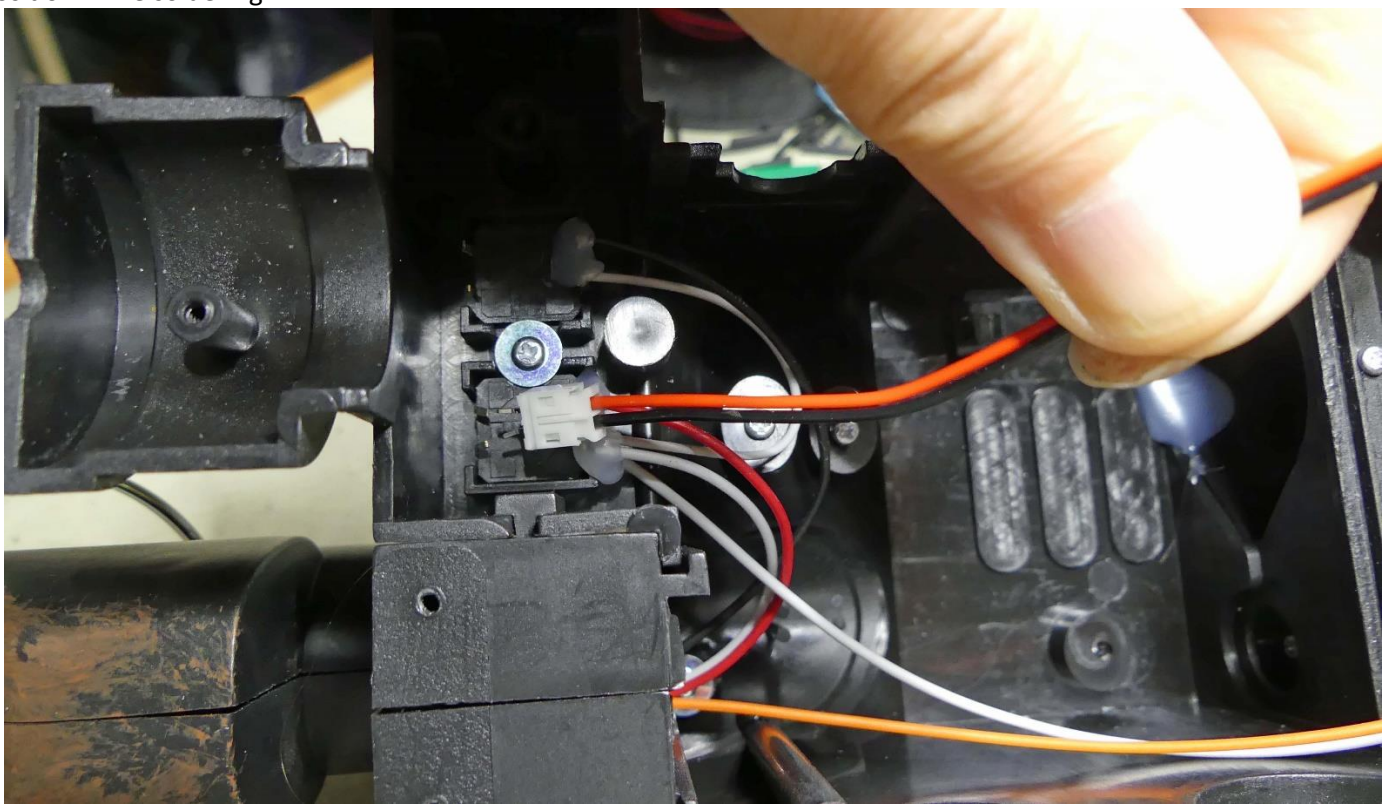


There is a label that goes across the two main wand plastic pieces, and it will tear if you just pull these pieces apart. I tried to peel the sticker off first but that did not work well for me at all! I suggest you take a razor blade or Xacto knife and cut through the sticker along the seam so that the two pieces can separate nicely with minimal impact to the sticker.

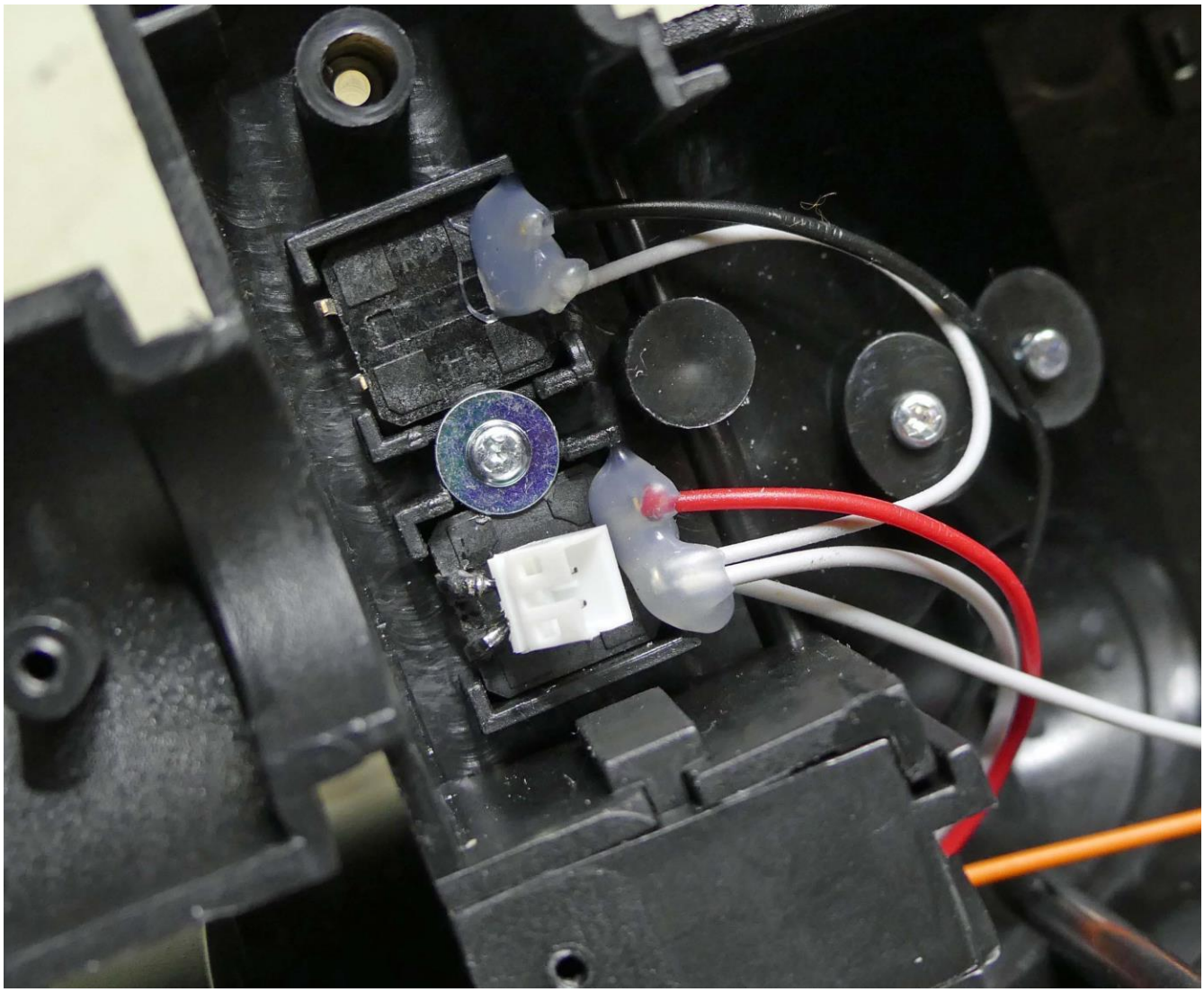
Locate the two pushbuttons that are used to power the wand ON/OFF and fire (“SLO-BLO”):



Each switch has 4 connections and only two of them are used. To share the function, we can solder the connectors #2 to the two remaining connections on each switch. Both styles of connector #2 are shown even though your kit will contain two of just one of these styles. For the no-wire socket, I first attached the wire to it just so it was easier to position while soldering:



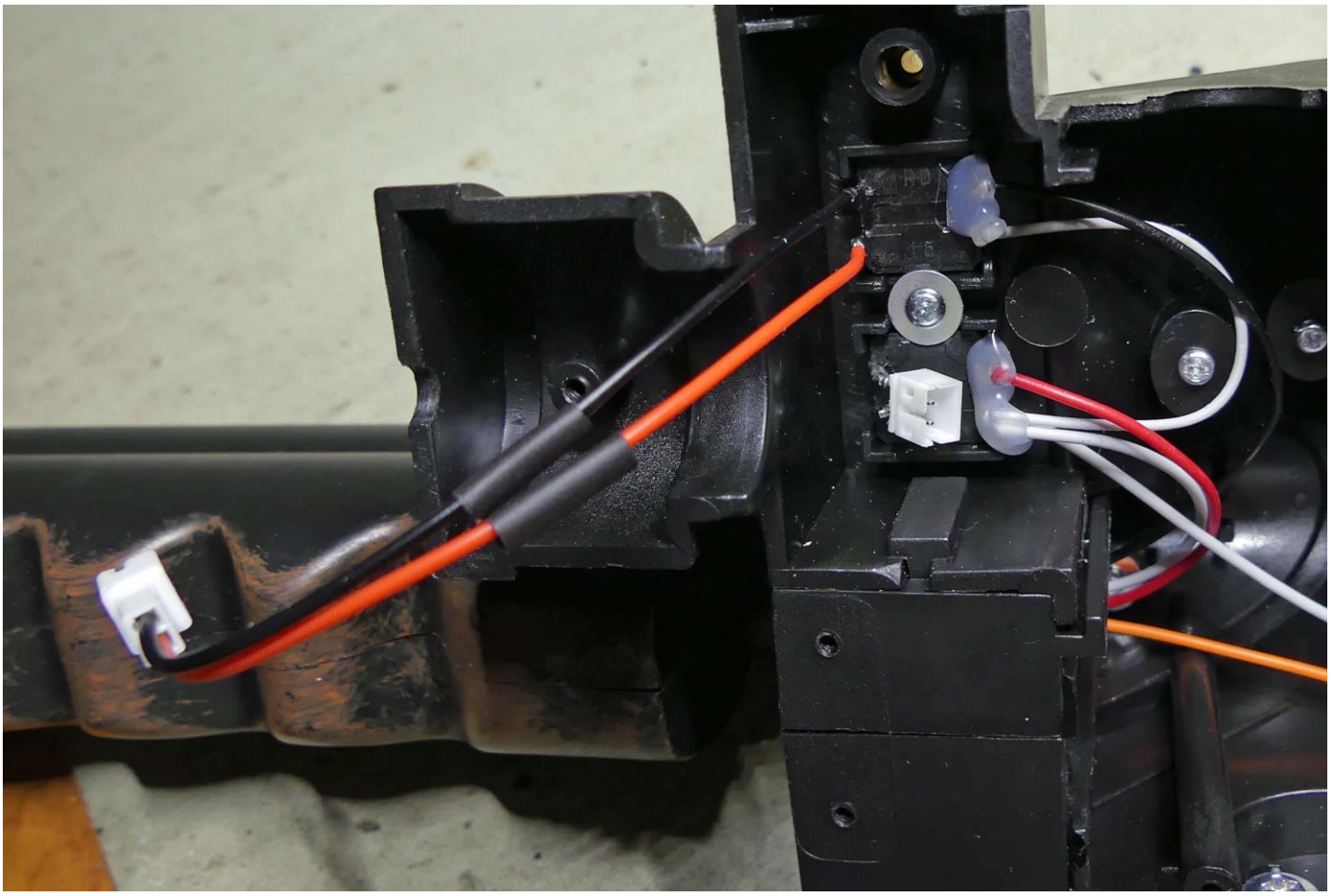
Hear it is soldered in place:



If you have the sockets with wires attached, first cut two 1/2" sections of the heat shrink tubing and slip them over the wire ends:



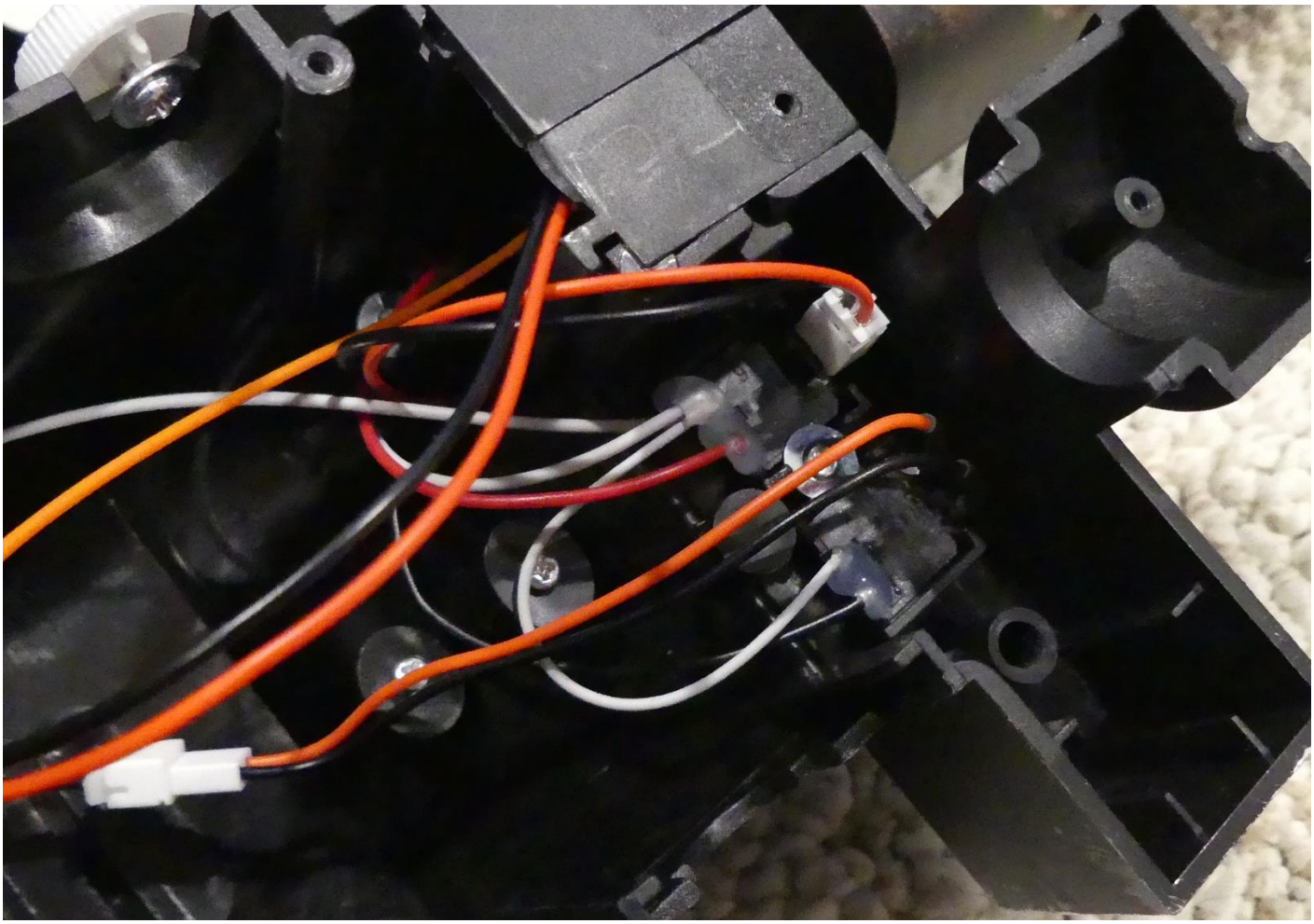
Then solder the wires to the switch terminals:



The orientation does not matter, so these can be wired either way (red on top, black on bottom or the opposite).

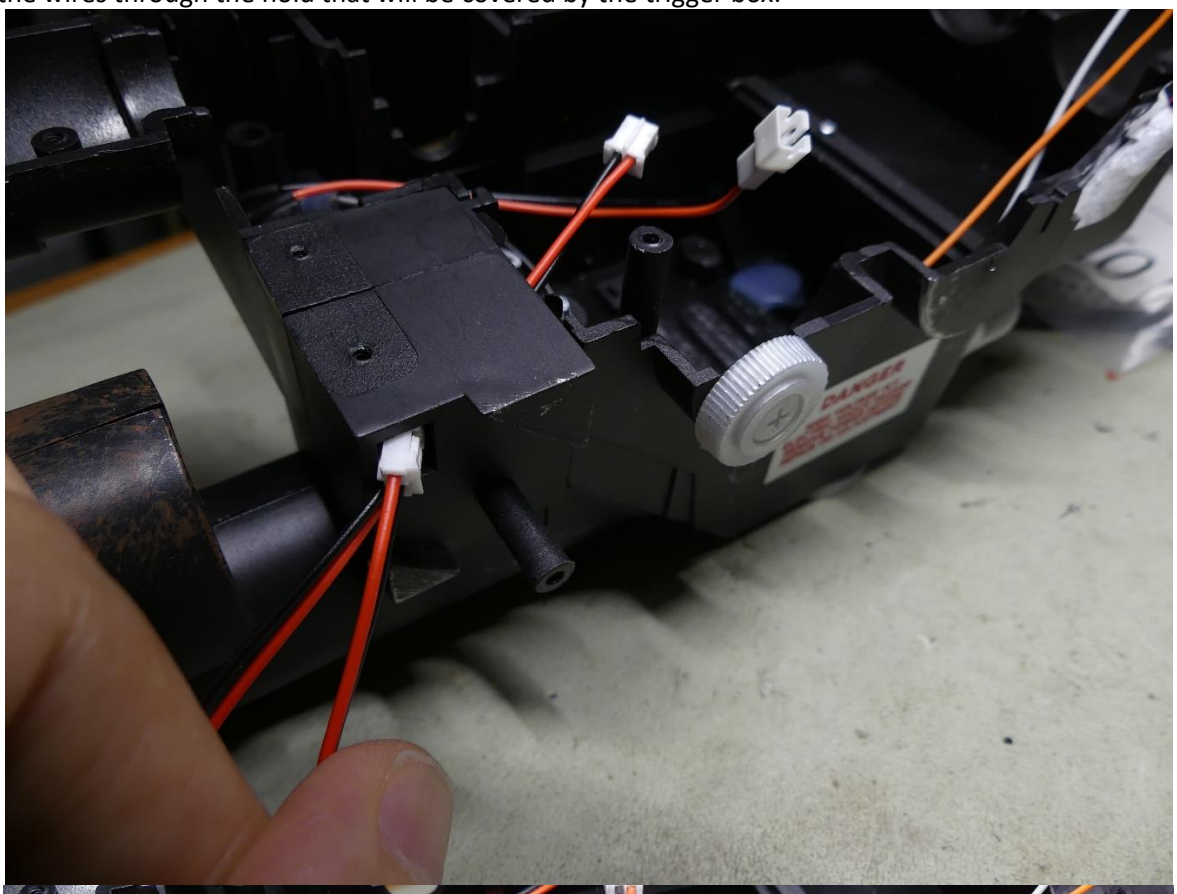
Slide the heat shrink down and use a heat gun to protect the solder joint. Take care not to get the plastic near the wires too hot as you do not want to melt anything!

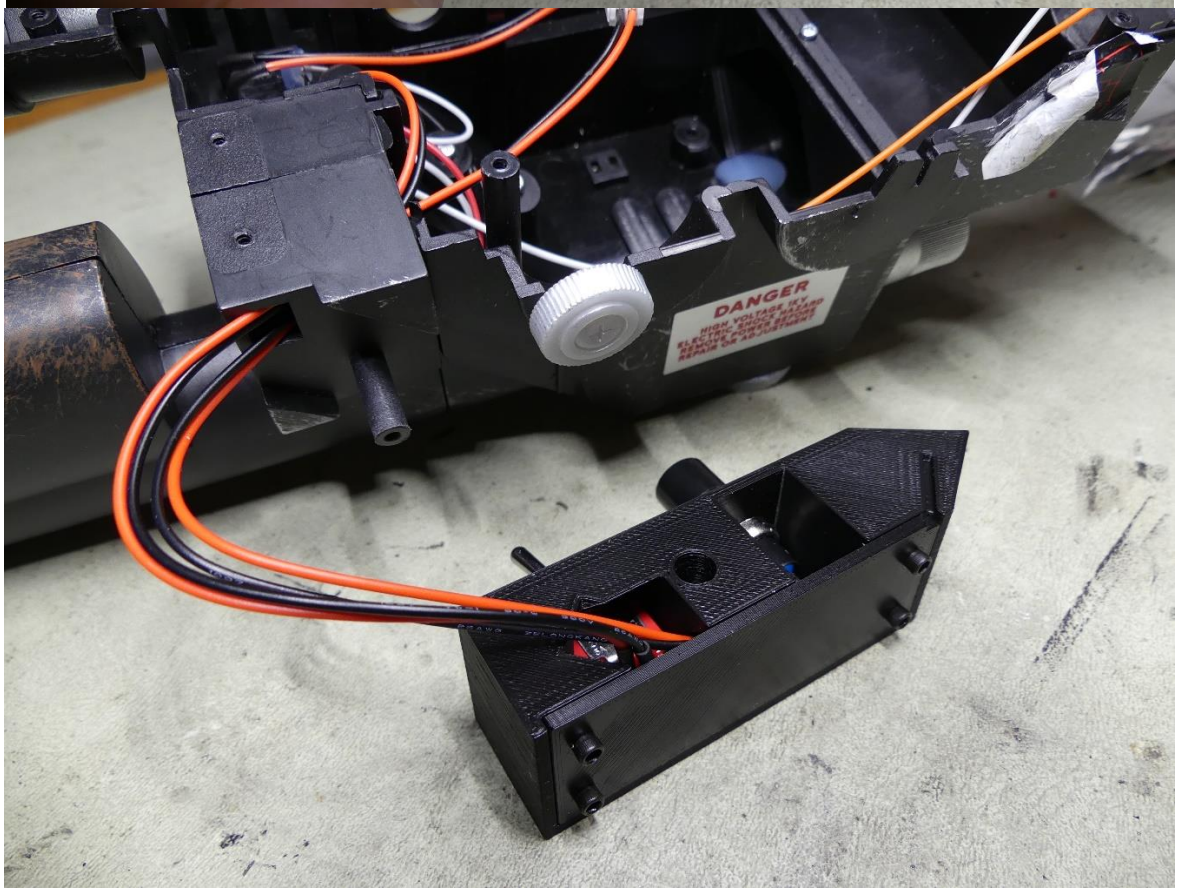
When I went to put the wand back together, I found that there are tow posts that come down and press against the switches, so you cannot have the wire or socket cover the center of the switch. Here is what it looked like after I dressed the parts so that they would not get squished when putting the two haves together:



Just make sure the center of each of the switches is clear of wires and connectors before putting the wand back together.

Next feed the wires through the hold that will be covered by the trigger box:



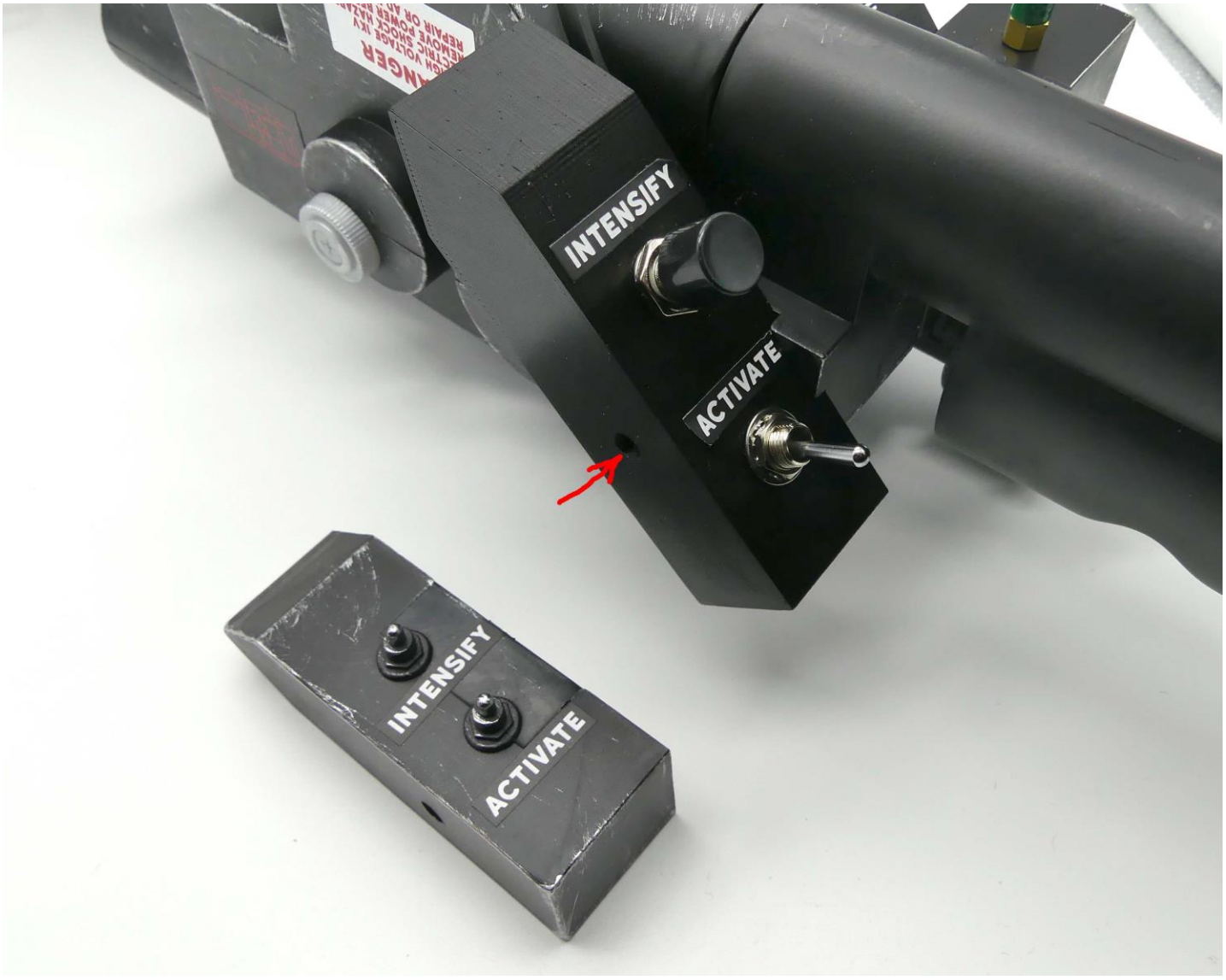


Plug the cable from the Pushbutton switch (INTENSIFY) into the socket attached to the SLO-BLO switch.
Plug the cable from the toggle switch (ACTIVATE) into the socket attached to the ON/OFF switch.

Attaching the trigger box:

After the old trigger box is removed, the new trigger box is easy to attach.

Just line up the trigger box (and make sure the cables are pushed into the hole if they are available) and screw in the one screw that holds the trigger box in place:



Lastly take one of the plugs #8 and make sure the flat shiny end is on the outside and the rougher end is placed in the screw hole and push it in until it is flat with the rest of the side surface. This plug will cover the screw. To remove the plug, use a tiny drill bit and drill into it part way, stop the dril and then pull. This should remove the plug as it will still be attached to the drill bit.

INTENSIFY
ACTIVATE
INTENSIFY
ACTIVATE

You should test that the switches work before putting the wand back together in case there is some need to resolder something.

If you took the wand apart, then just press the two halves back together while making sure no wires are going to be pinched between the two pieces. Once back together, screw back in the 8 screws that you removed to take the wand apart.

Congratulations, you now have the new trigger box installed!