Stern Pinball
Ghostbusters (GB)

<u>Storage Facility Mod v6</u>

Thank you for your interest & support and I hope you will enjoy this mod for many years to come.

This is a mod that enhances the game for Ghostbusters **Pro** owners and also adds a more realistic feel to **Premium / LE** owners game, and the mod is totally reversible. It is simple to install and uses the same dedicated lock ball lamps / sockets and an added flasher for the Premium / LE version giving your game that more realistic looking Storage Facility as well as now with a realistic panel lighting which is hooked up to GI.

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Tools Required

The following tools are required with only the Metric Allen keys supplied with the mod:

• Screwdriver - Philips
• Small Shifter / Spanner
• 2.5mm Allen key
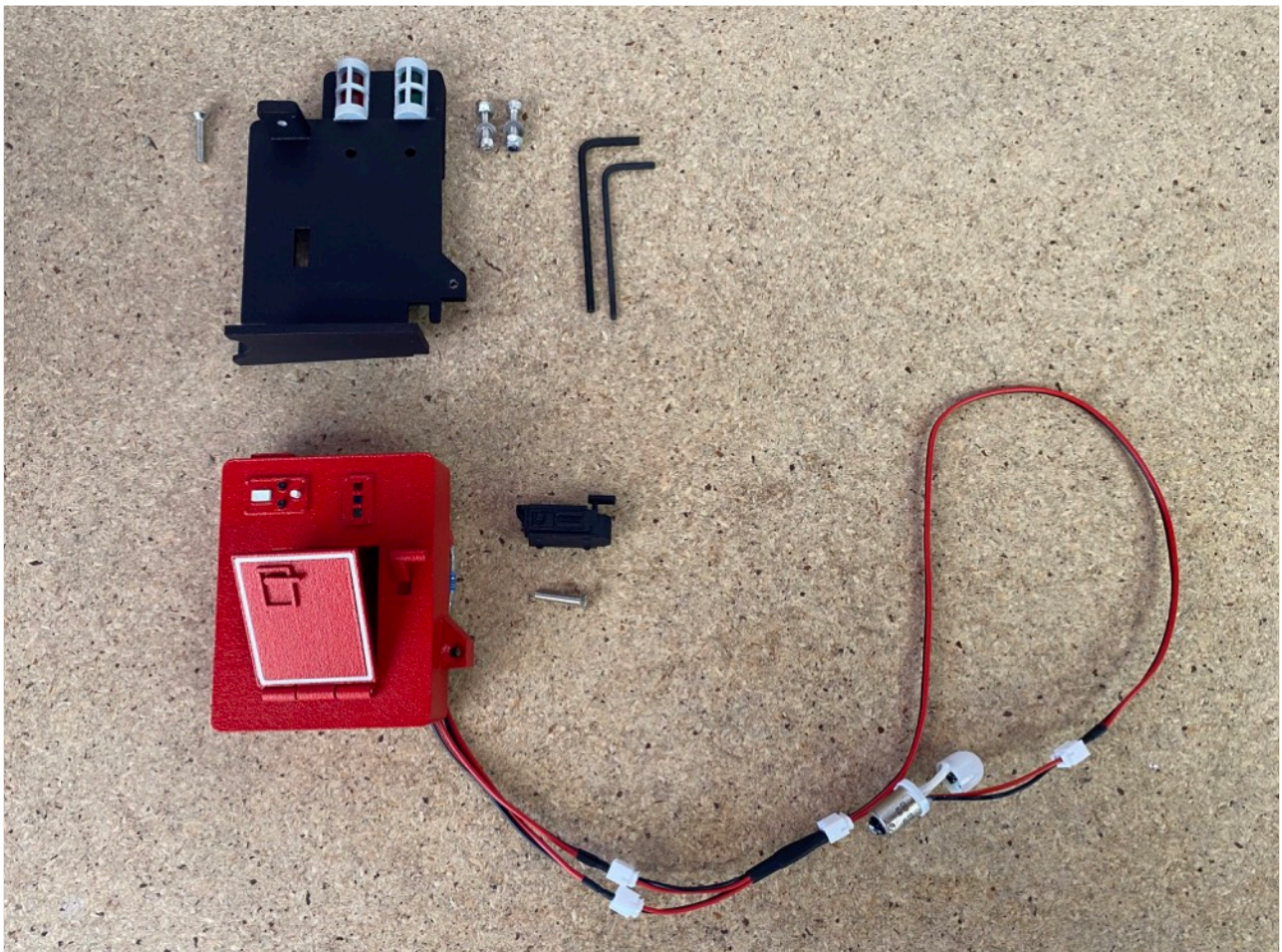• 2mm Allen key

Mod Parts

The kit comprise of the following parts and you do not need to purchase any extra parts.

Pro Kit

For installation of the Pro Kit head to page 5 - 16

1 x backing / mount assembly
1 x cabinet / door assembly
2 x bolts and nuts to secure games pcbs to the backing / mount assembly
1 x wiring kit for the panel lights
1 x ghost trap
1 x 2mm allen key
1 x 2.5mm allen key

Premium / LE Kit

For installation of the Premium / LE Kit head to page 17 -

1 x backing plate assembly (including 3 led pcbs boards already fitted)
1 x cabinet / door assembly
2 x bolts to secure the cabinet to the stainless steel mount
1 x wiring kit for the panel lights
3 x bulb adaptors for the pcbs lighting
1 x ghost trap
1 x 2mm allen key
1 x 2.5mm allen key
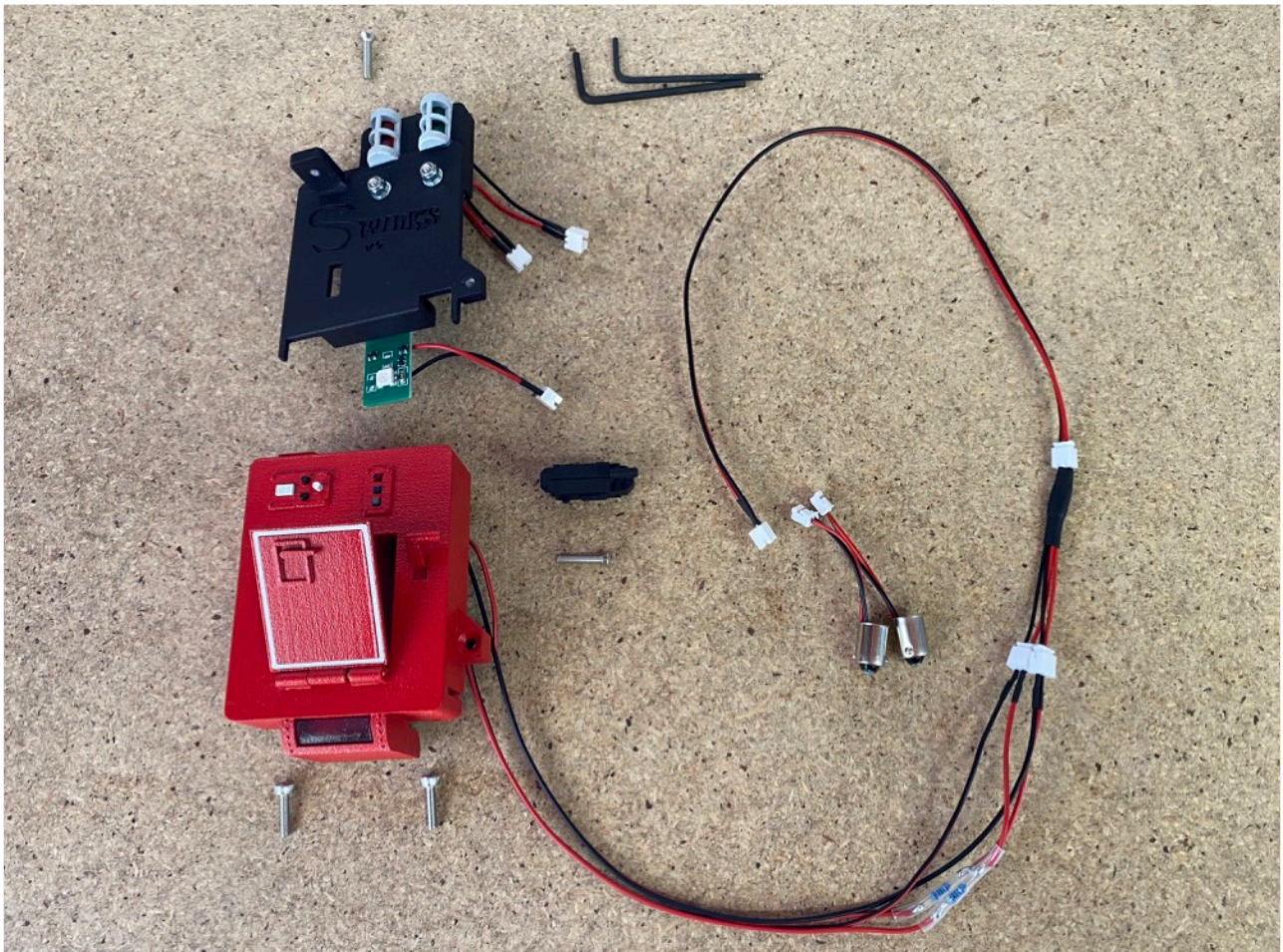
Pro Version Installation
1. Preparing your Mod for Installation

Simply remove the 2 screws - 1 at the top left and another on the bottom right and then you will have your mod split into 2 parts.
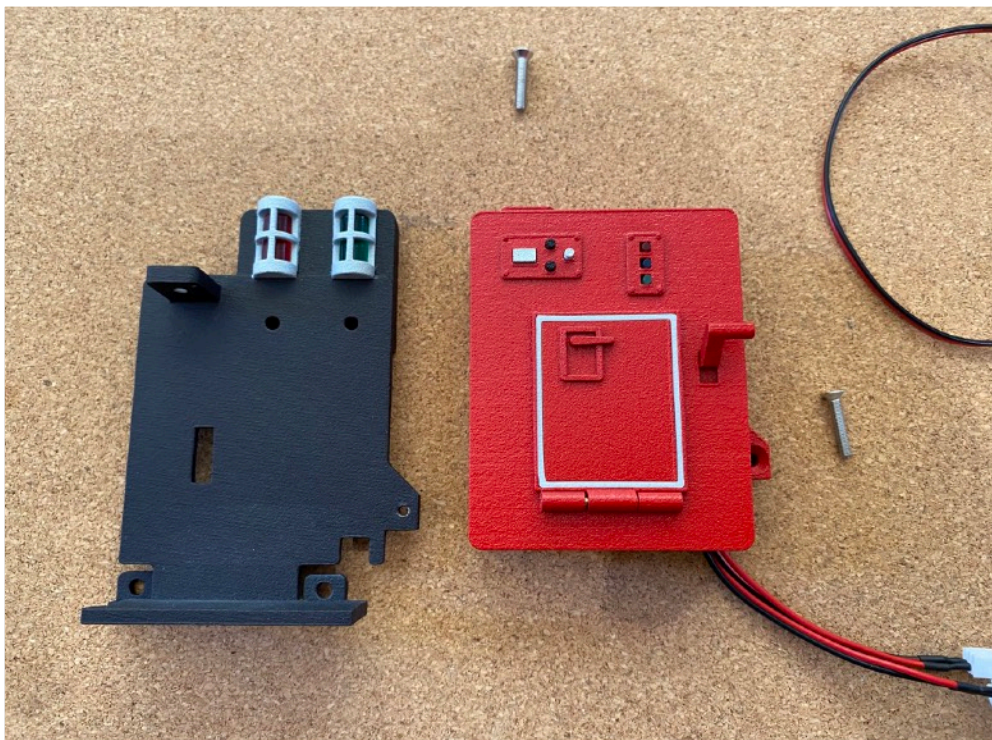
2. Remove Parts from your Game

You need to first power off your game and then remove the Spot Light Post as well as the Storage Facility Plastic which has the LED PCB panels as part of the plastic - these will be re-used in your new mod.
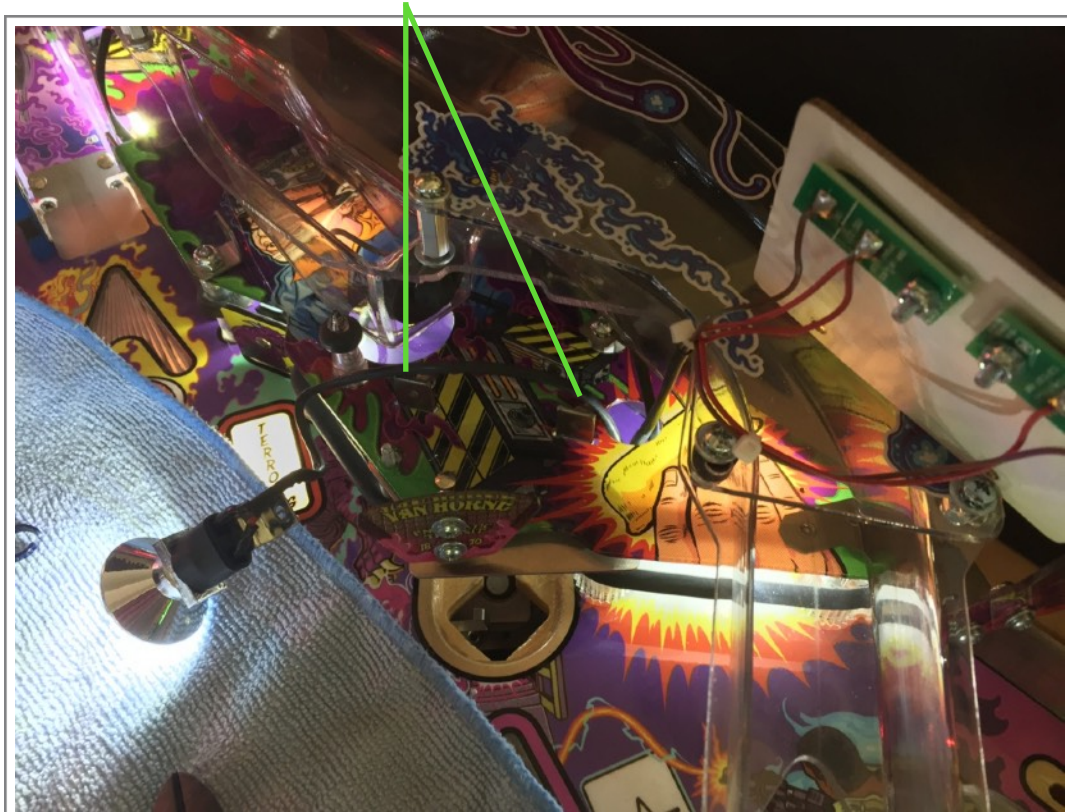

Remove the spotlight from it's post as this gives you better access to the screw for the plastic removal and new mod installation.

Remove the spotlight post from the top of the plastic - ensure not to loose any of the washers.
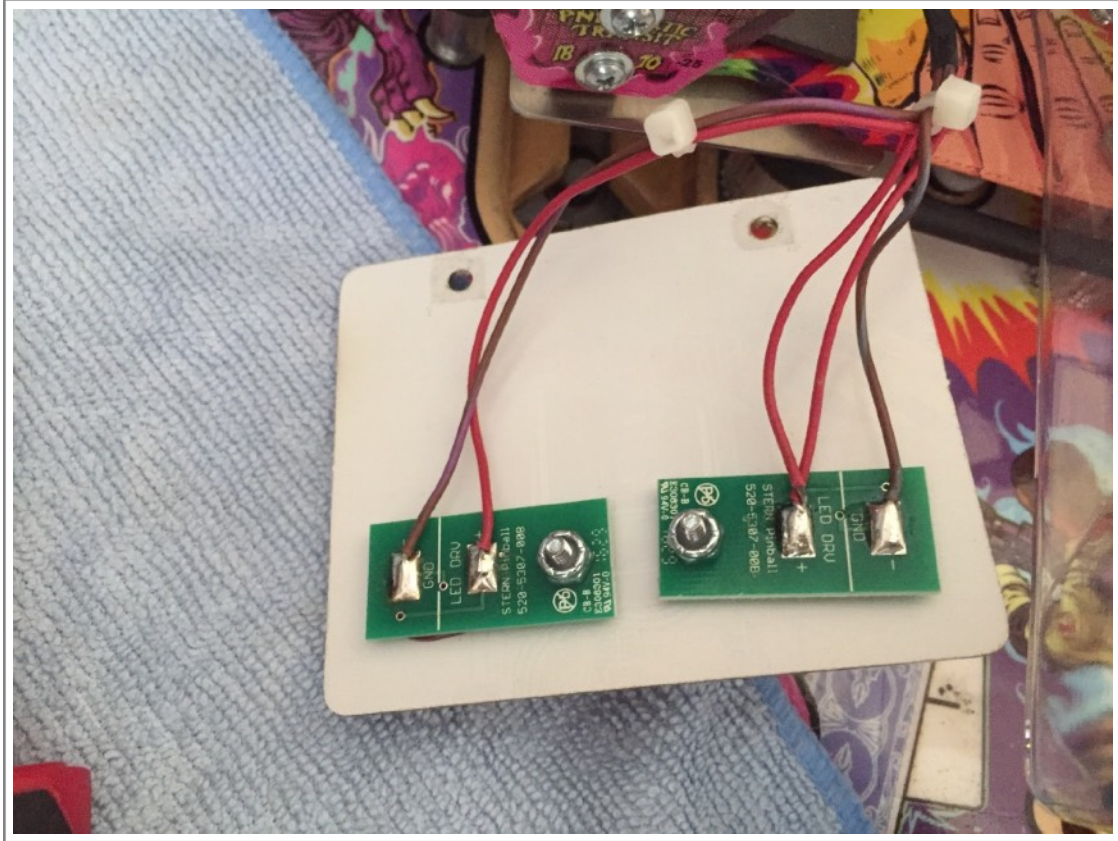

Now remove the Storage Facility Plastic from 2 small 90 degree metal brackets by removing the 2 x screws - do not lose the screws or washer

3. Fitting the Lighting & Bulb Set

First remove the LED PCB boards and green and red caps from the original plastic. Put a little bit of tape on each LED PCB board so you know which is the green and red LED boards.

Note: Ensure to keep the bolts that hold the LED boards in place as well as the plastic incase you want to return the game back to it's original state. That said we do re-purpose the following parts for this mod:
- 2 x LED PCB boards into the mod. Now to install the LED lens and LED Boards into the Containment Mod as per the below Image using the supplied M3 bolts. When looking at the back the **GREEN** LED board is on the left and the **RED** LED board is on the right.

There is a little cable restraint bracket on the lower left side of the mod - so slide the wires into this.
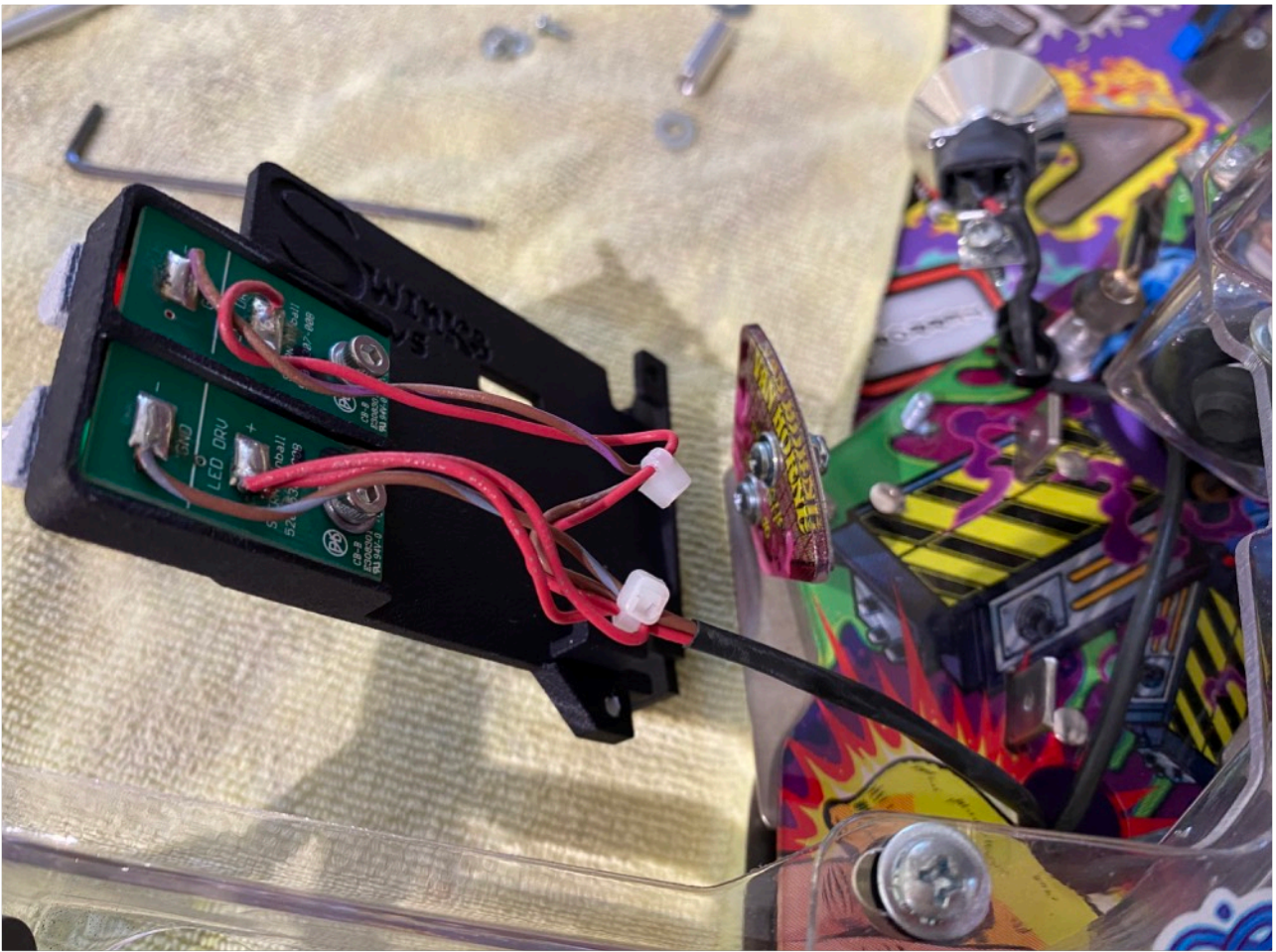
At this point lift your playfield up to it's playful pegs or playfield service brackets to aid you feeding the cable in the next few steps to the underside of the playfield.

4. Installing the Storage Facility Backing / Base Mount to the Game

Now that the feature lighting is feed through the plastic hole, the Storage Facility can be located to the 2 existing 90 degree angle brackets and secure with the original screws.
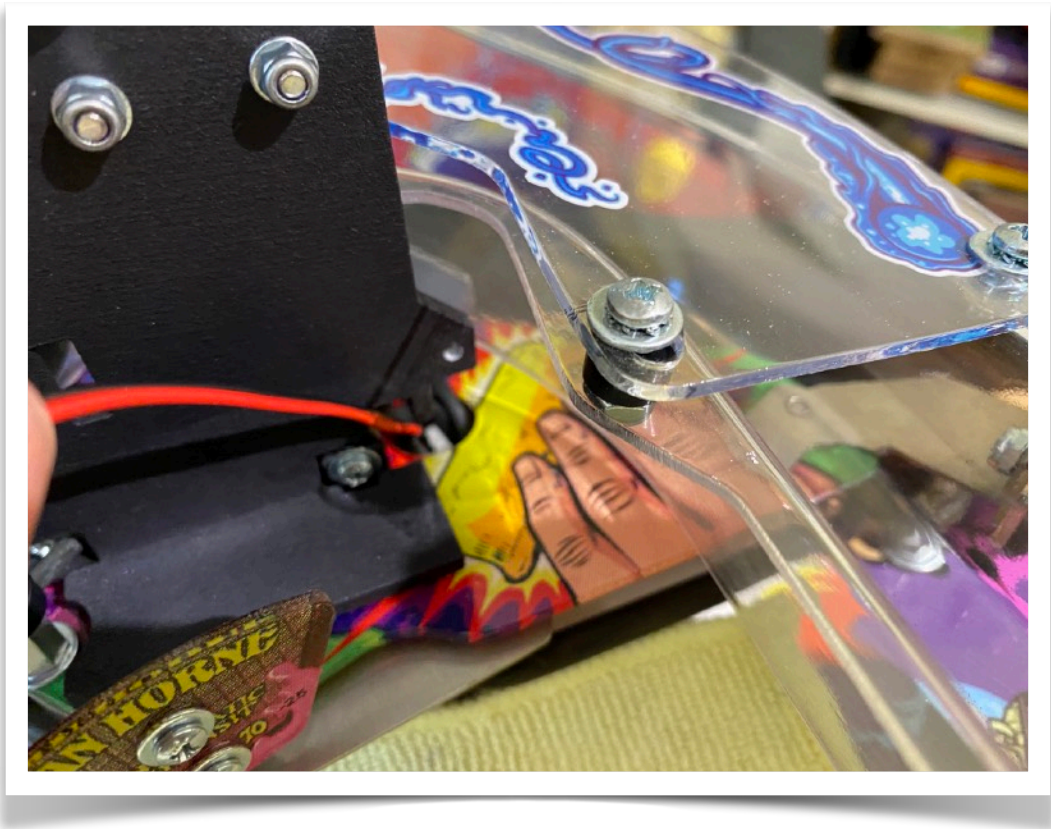

Now re-install the spotlight back into place.

5. Installing the Storage Facility to the Backing / Base Mount

Now time to install the Storage Facility Cabinet and you will first need to feed the cable coming from the control panel and then feed through the hole in the plastic near the Twinkie.

Now bring the cabinet up to the mount and feed around the spot light and then over the top anchor mount and push against the backing plate - make sure to tuck cables within the cabinet and push against the backing plate and re-insert the top screw and lower right hand screw. There is a slot for the cables to pass through out the back of the cabinet.

6. Adjusting the Storage Facility Door to your Liking

There is a screw on the left hand side just above the spotlight. Wind this out approx 5mm (no more) and then the door can swing open in which on the right side of the door is a bracket with 3 holes.
- Hole closest to the door = door closed
- Middle hole = door open 15 degrees
- Back hole = door open 30 degrees (and the door just misses the sign in front of the mod)

Select your preferred hole and then wind the bolt back in making sure it is lined up with a hole in the doors bracket.

The ghost trap can slide out but will not fall out - UNLESS you lift your playfield up with the door is in the 30 degree setting - so remove the ghost trap if your door is at 30 degrees open.

The photo below shows 30 degrees open.
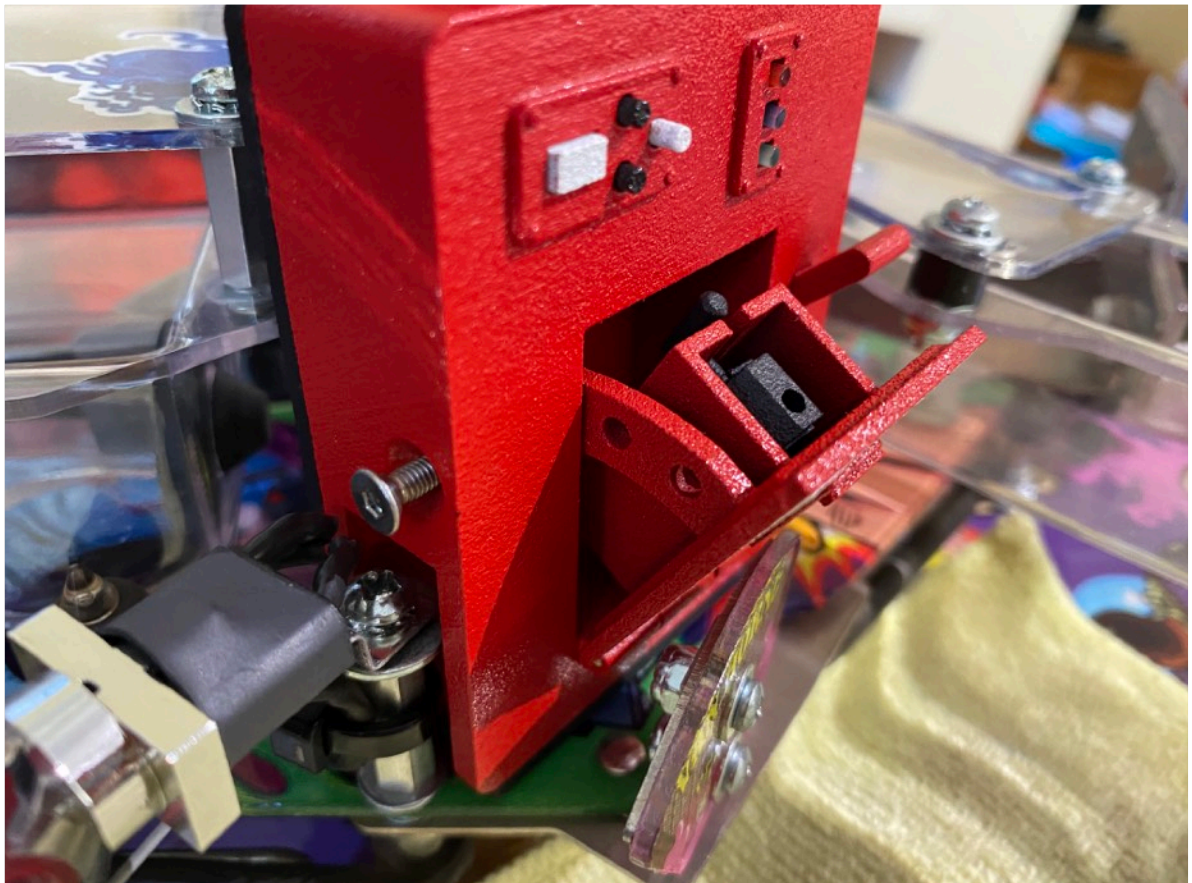
7. Connecting the Lighting Cable.

Lift the playfield into it's vertical position and you will notice the cable coming from the large top right hand hole.
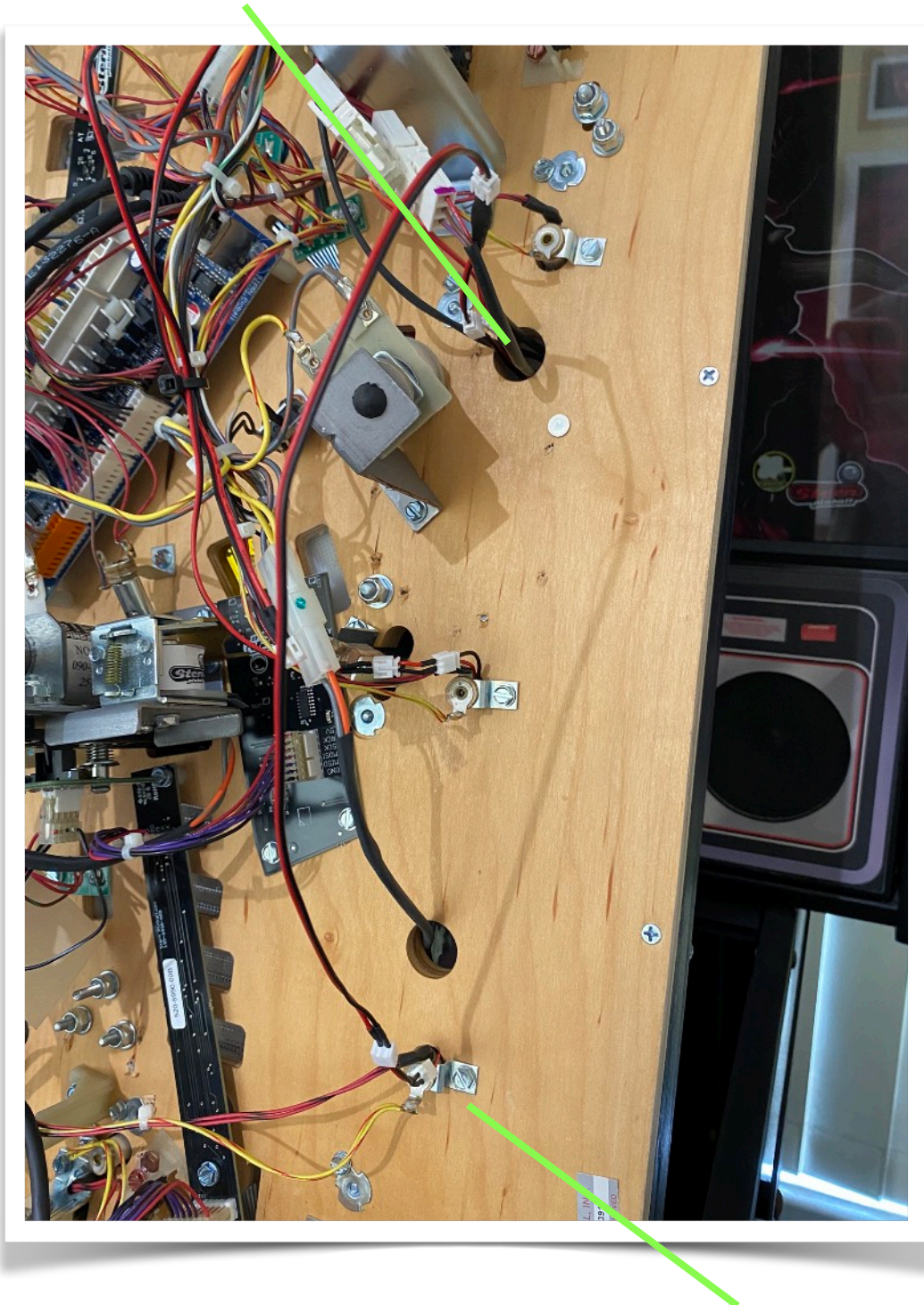
I then feed the cable to the lower right GI socket which is higher up the playfield.

Now remove the existing light socket and remove the bulb and then replace with the issued light bulb adaptor with the short wire tail. We then connect the cable to this tail. You will notice on the cable a short 25mm / 1 inch cable - this is the polarity swap wire. If your mod lights do not work - remove this wire and test again and everything should work. Once done - lower your playfield into it's play position - ensuring no cables get pinched or get snagged while lowering your playfield.
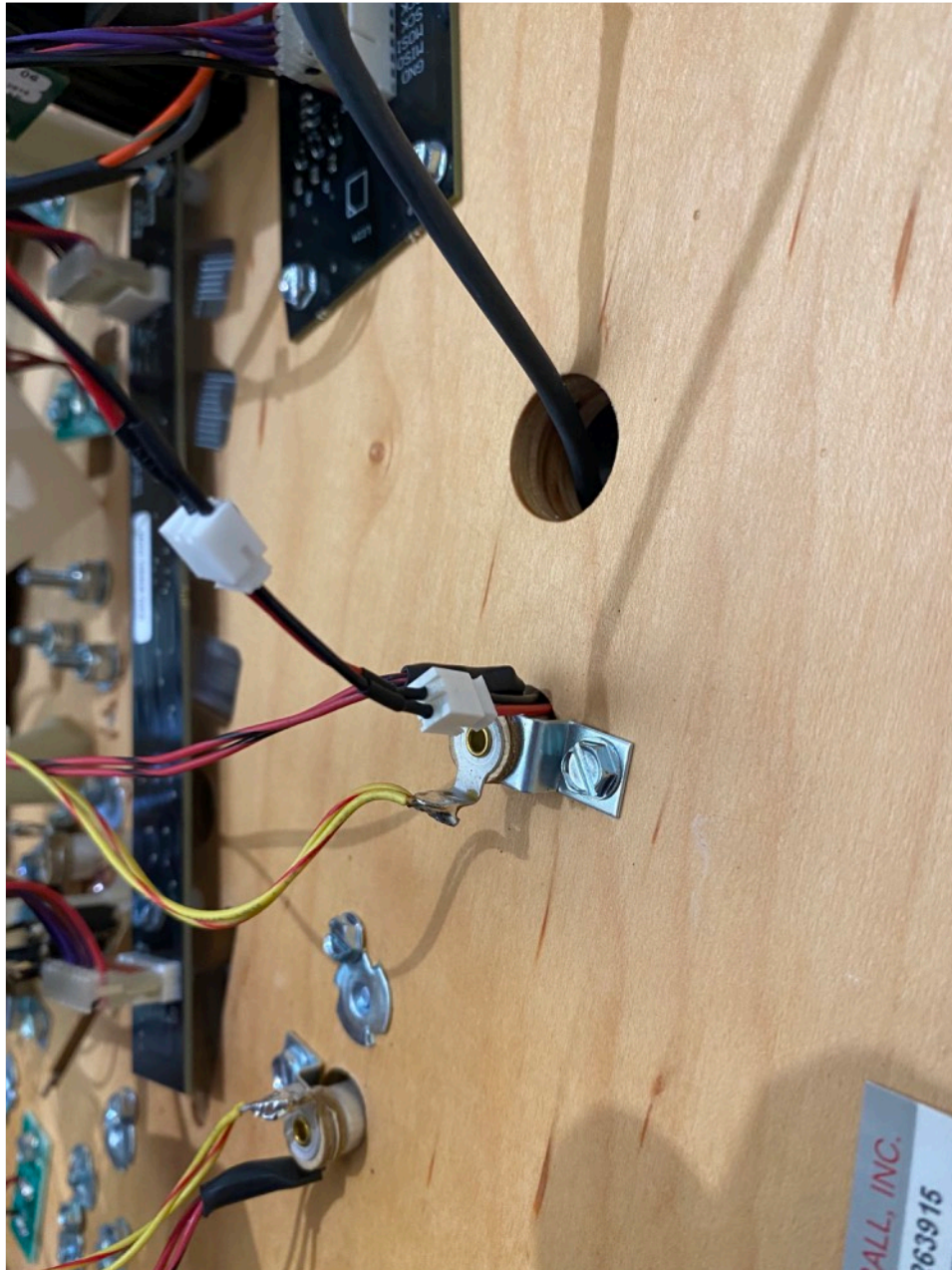
8. Power your Game Up

Now you are ready to power up your game:

The 3 x panel lights are connected to GI so they will always be on and just add some lighting and atmosphere to the mod and game.

The 2 x beacon lights will flash in attract mode and operate as normal when a ball is locked for multi ball.

Enjoy.

# Premium / LE Version Installation
1. Remove Parts from your Game

This is a little bit of a challenge to fully document as I had a friend that was probably 500km away from me who removed their plastic and toy from their game and mailed to me to then document. You will need to remove the plastic to remove posts from the stainless steel bracket later in the dismantle so you will just need to locate the screws that hold the plastic down to remove this plastic and associated parts. First lift your playfield up on to it's service brackets / pegs so it is sitting partially out of the cabinet for easier access.

2. Preparing your Mod for Installation

Simply remove the 2 screws - 1 at the top left and another on the bottom right and then you will have your mod split into 2 parts.
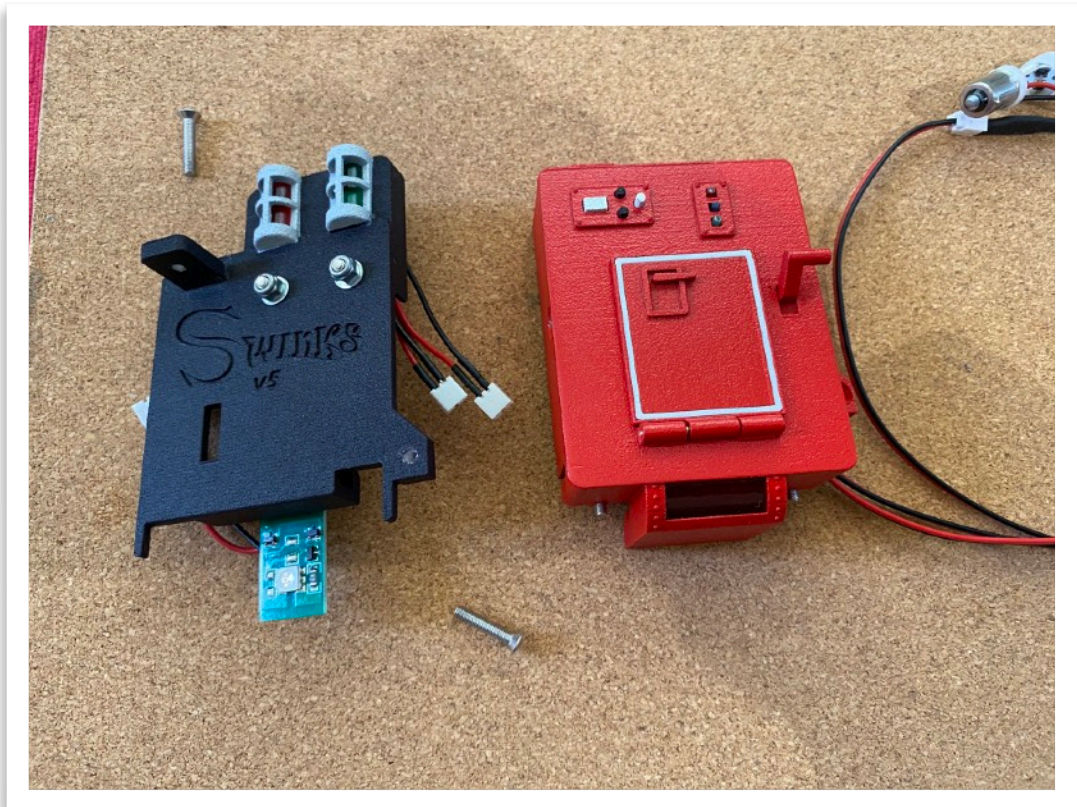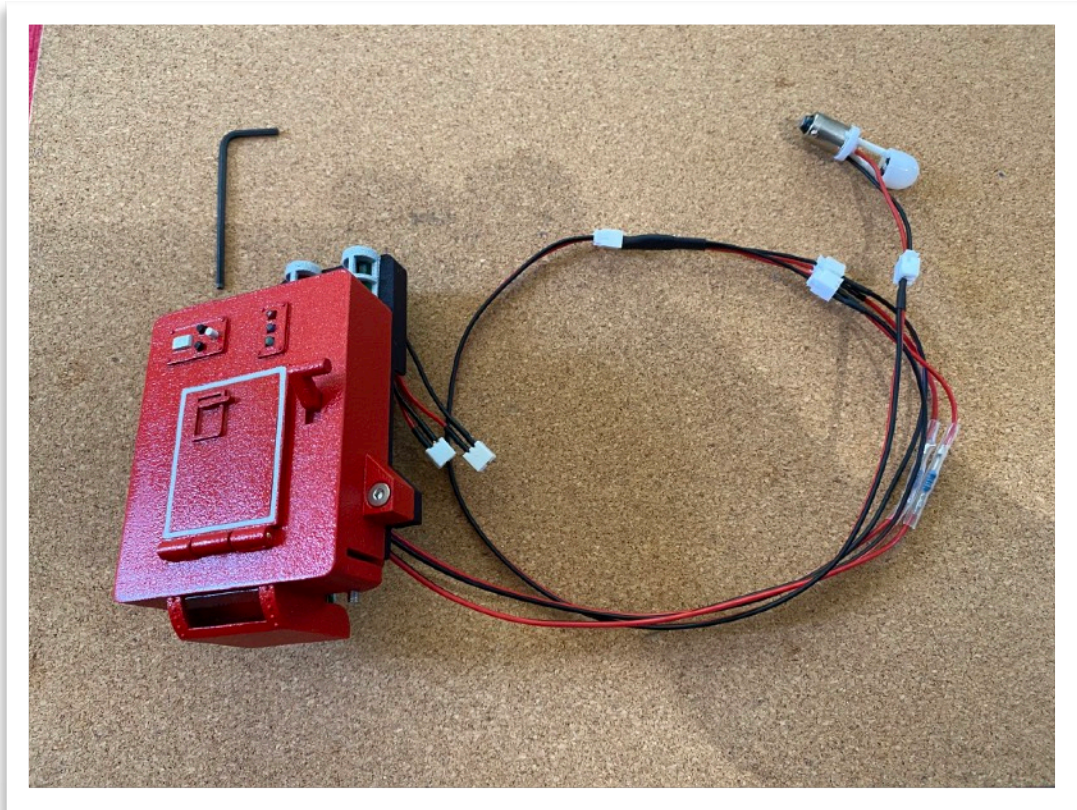
3. Remove Toy & Lighting from the Bracket

Remove the 2 screws which are low in the toy on both sides and then also remove the 2 bulbs in the front and then the toy can lift off and it will now expose 2 posts with bulb sockets as well as larger socket as per the bottom photo (bag all parts so if you ever want to return the game to original you can).

Now remove the 2 x posts as well as the large flasher socket. Though when turning the plastic over take care to not break the plastic. I secured the plastic to a piece of cardboard with some painters tape to strengthen and support the plastic.
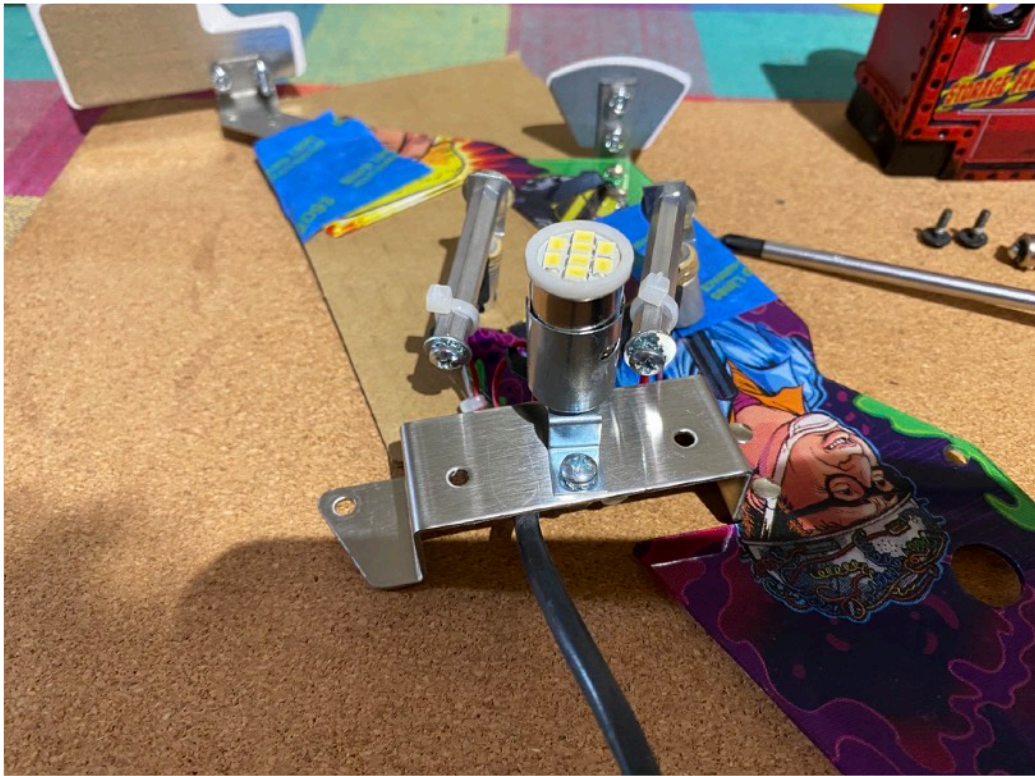
This is what you are left with, so give it a clean ready for the mod.

Now you will have a game cable with 3 sockets attached to posts, so now remove the sockets from the posts and bag the posts and screws. Note: put some tape on sockets or write on the socket a **R** (**Red**) and **G** (**Green**) so when reassembling you get the sockets on the right side (but if you get it wrong it will be easy to swap cables).
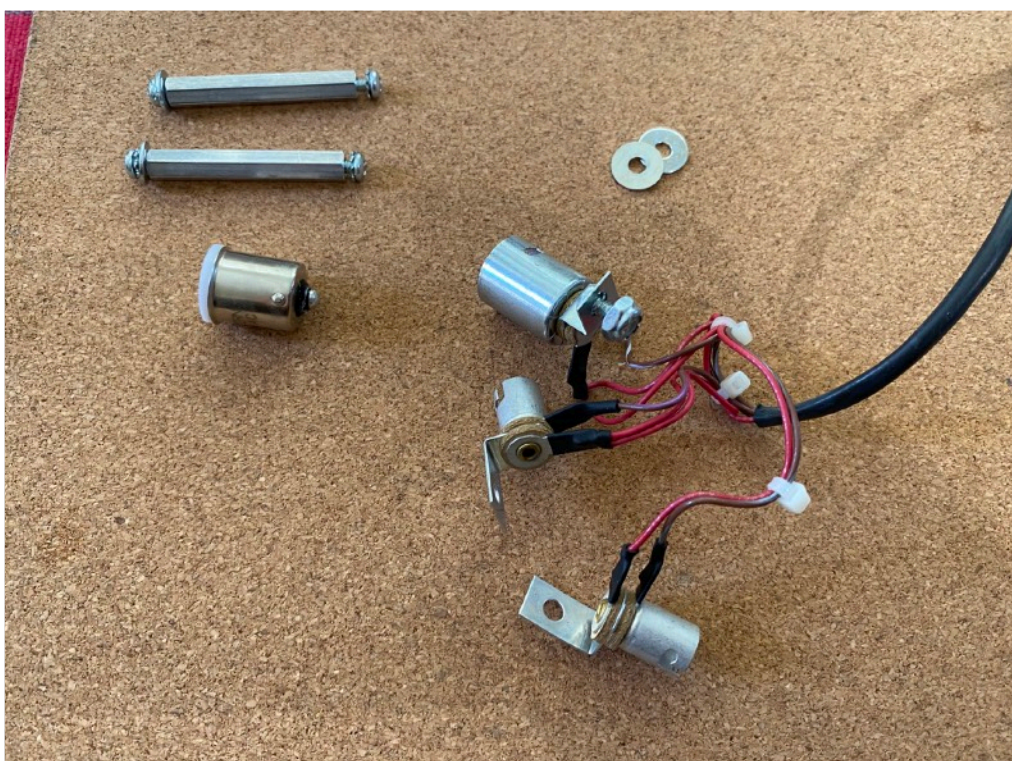
# 4. Install the Sockets to the Mod Backing Plate

Remove the screws that are fastened to the plate and then re-install the sockets as shown below with the Green Socket on the left (when looking at the back) and Red on the other side and lastly the flasher in the centre - though since I do not have a Premium / LE I recommend turning the flasher socket to face down - opposite to this picture.
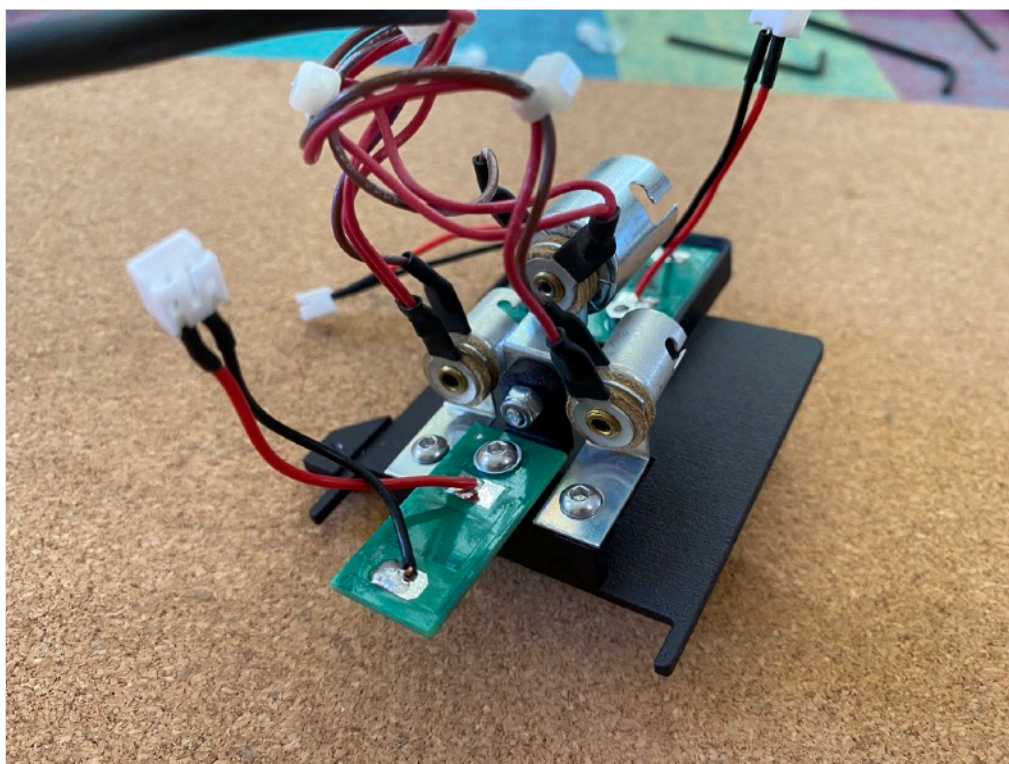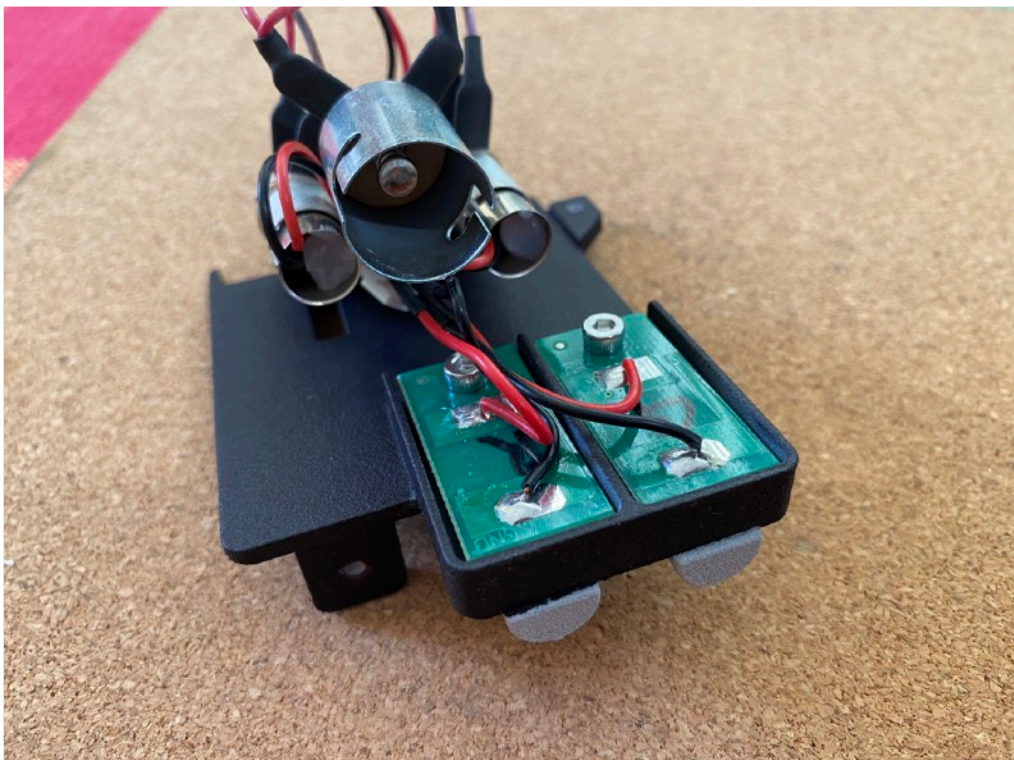

Turn the Flasher Bulb socket down like this. Ignore the following images of the socket pointing upwards.
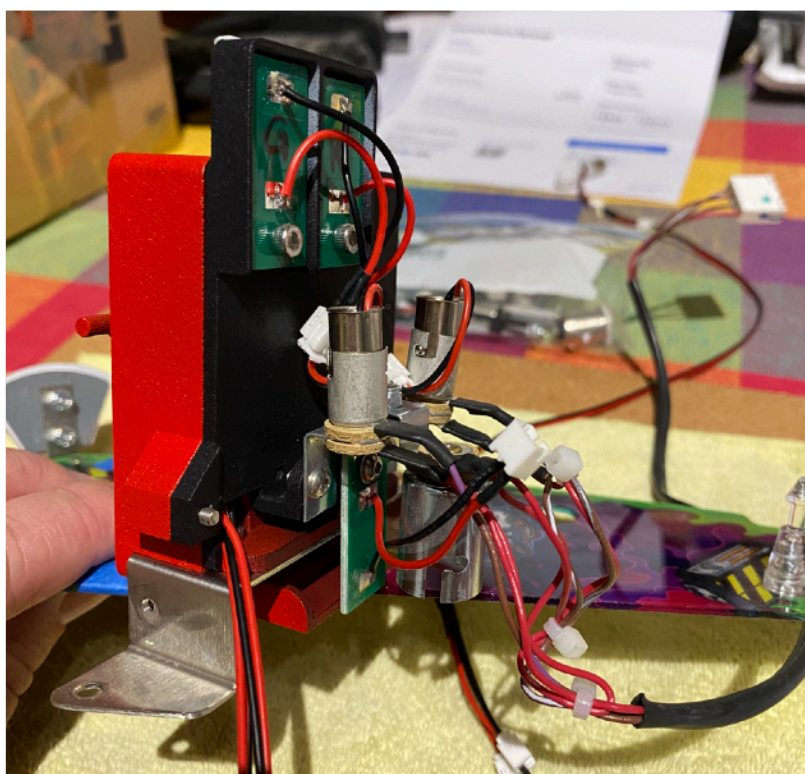
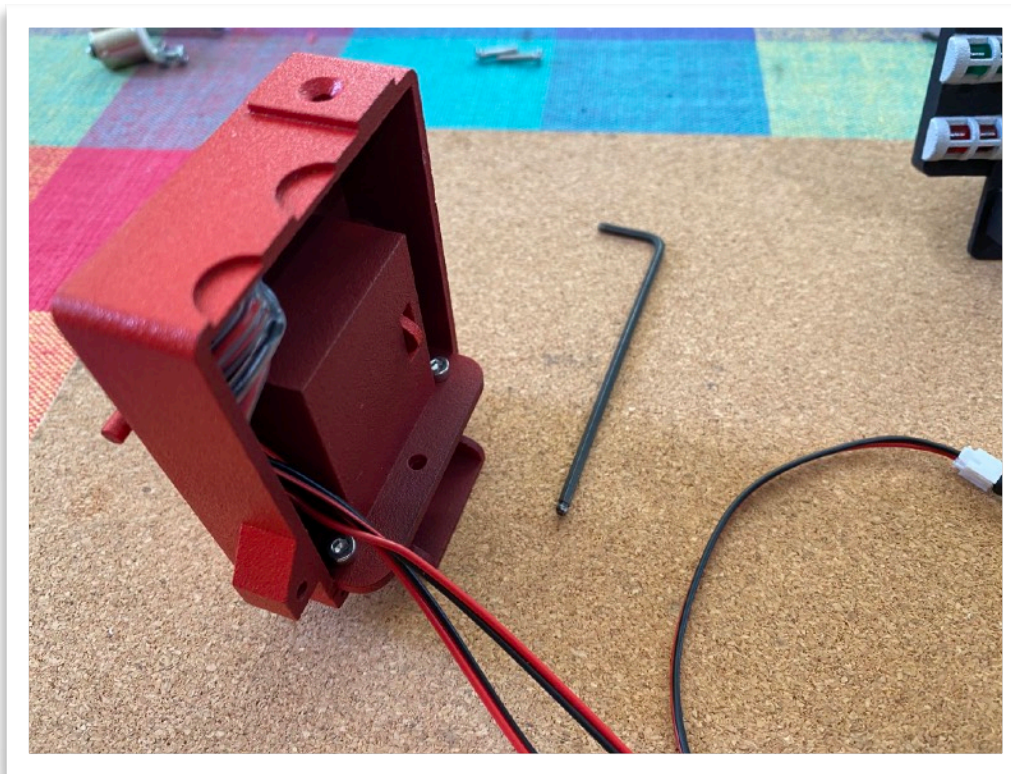Now locate the 2 smaller socket adaptors.
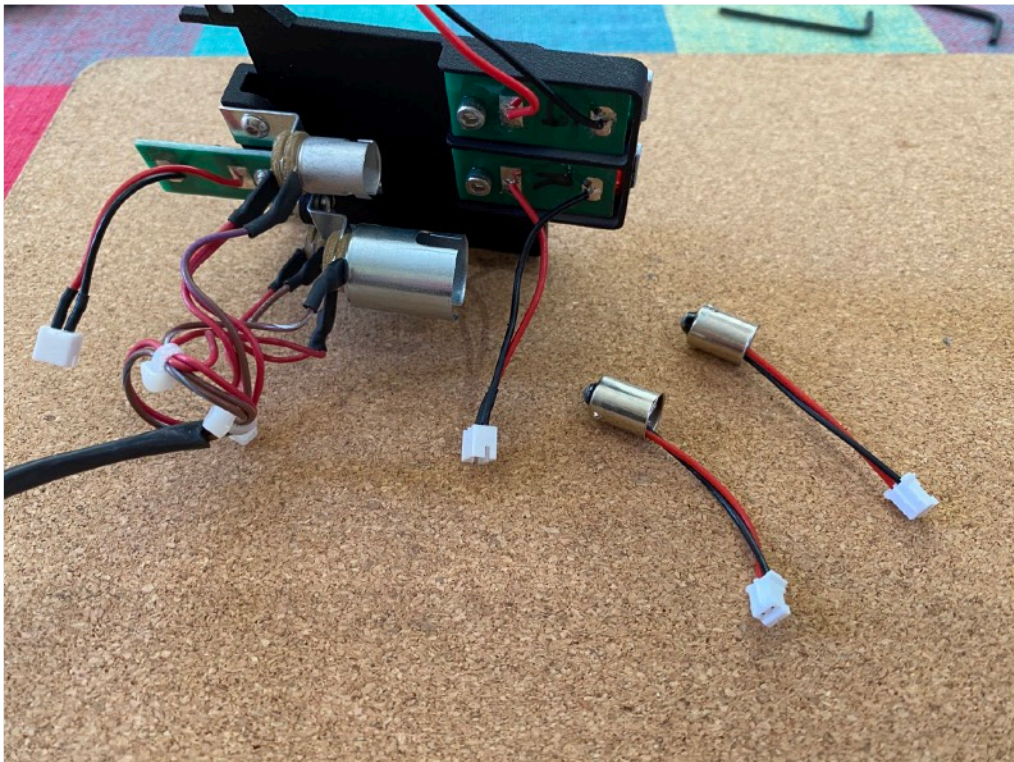
Lastly connect the PCB LED boards to the socket adaptors including the flasher PCB LEDs which is the bottom PCB LED to the larger socket - then tuck the cables in behind the larger socket.
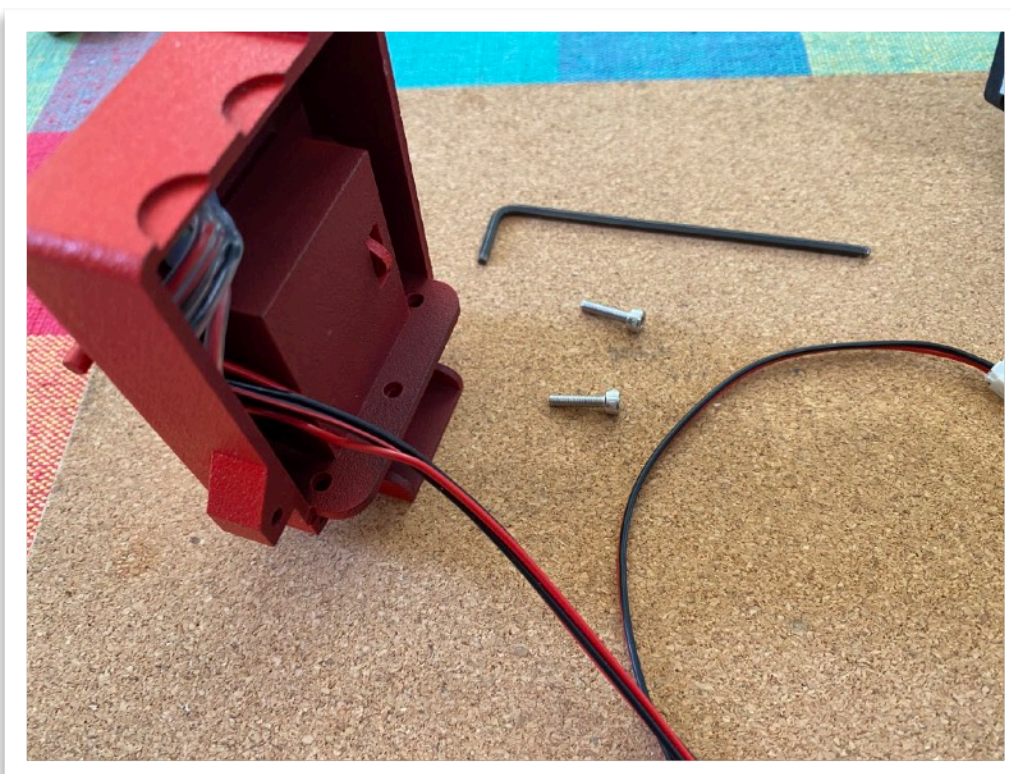
5. Installing the Cabinet to the Stainless Bracket

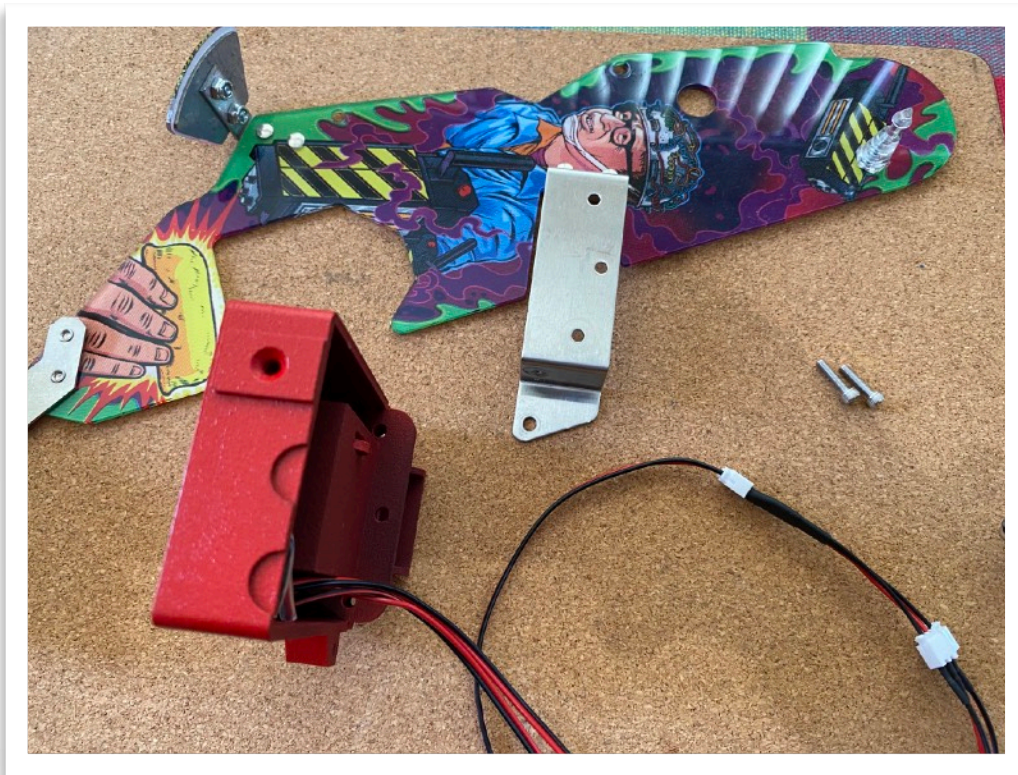Remove the 2 x screws at the bottom / back of the cabinet.

It should look like this.

Then locate to your stainless bracket that is riveted to your games plastic and align your cabinet.


Then slide the cabinet over the stainless steel bracket and locate over the holes and insert both bolts but get both bolts started and then secure. Securing and locking one bolt down may make securing the 2nd bolt difficult.

6. Installing the Backing Panel to the Cabinet

Take your assembled backing panel and locate into the cabinet - take note to locate the cables in place and out through the bottom left hand side where it is designed for cables to pass through. Then secure the 2 parts together with your 2 screws.
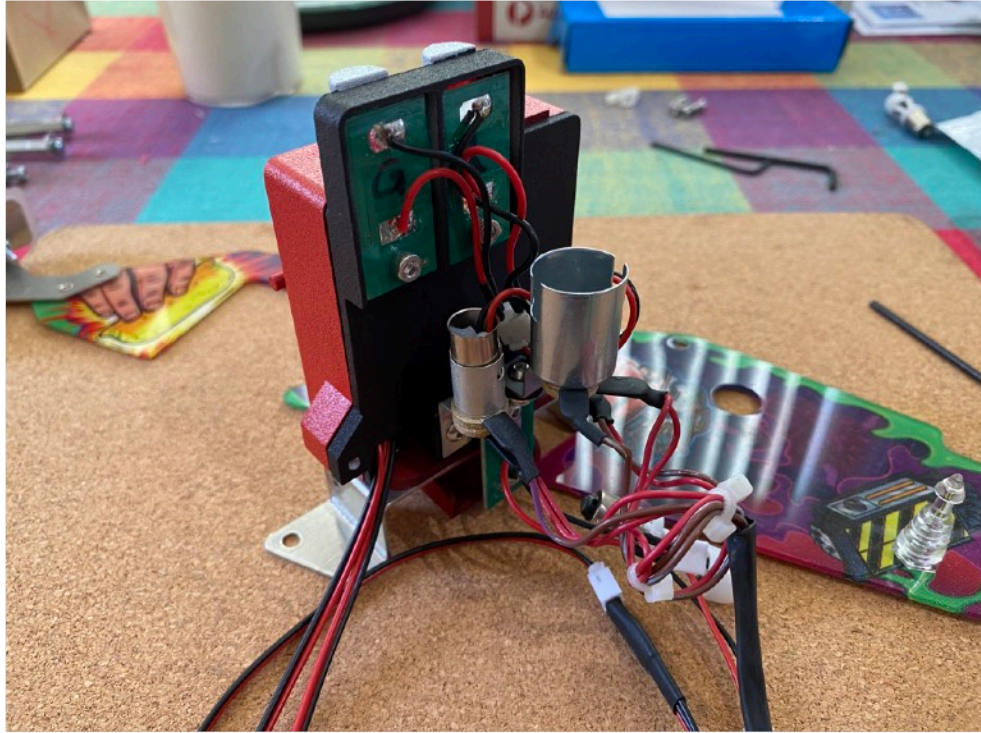
Then install the PCB lead from the back cover into the second adaptor lead of the Flasher Socket. Next feed the back cover around the sockets and back of the mod and line up with the hole on either side of the Stainless Steel bracket using the original black screws to secure.
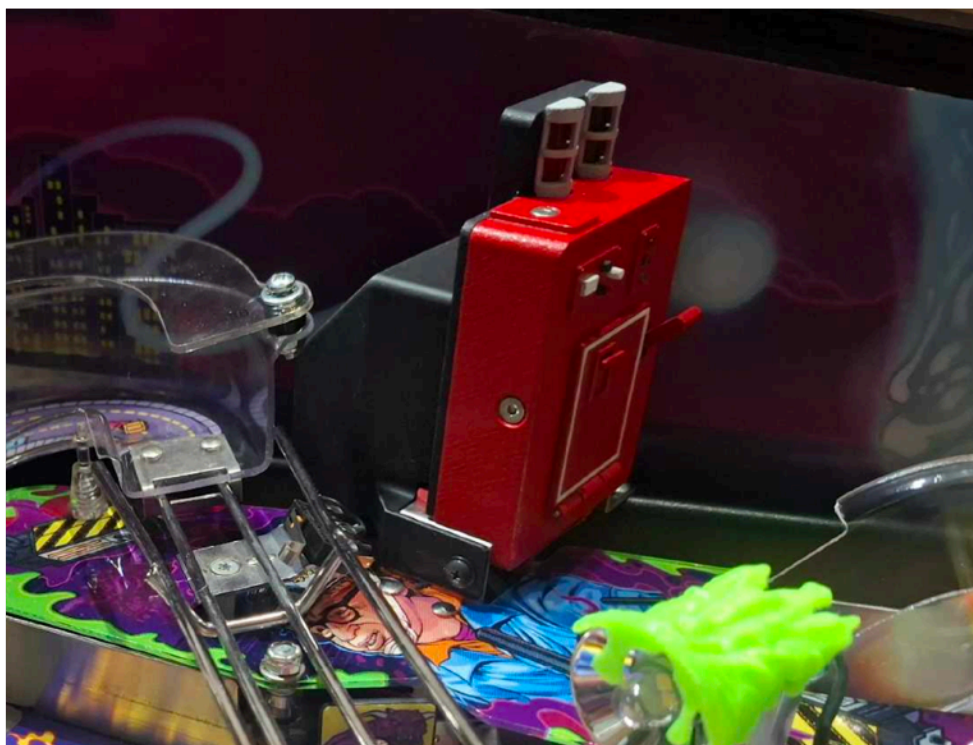
Then feed the cables through the playfield and secure your plastic the same as when you removed it - now with the mod back into the playfield. There is a cable coming from the ramp switch that you will need to feed through a recess in the back cover.

Then secure your plastic and mod into the game.

7. Connecting the Lighting Cable

Refer to Page 14 as this step is the similar for both versions but the Premium / LE will have different holes to pass cables through. Though my friend did connect to a socket under the plastic and did not feed the cable under the playfield - so this is up to you. Now lower the playfield back into it's play position.

8. Adjusting the Storage Facility Door to your Liking

Refer to Page 13 as this step is the same for both versions

9. Power your Game Up

Now you are ready to power up your game:

The 3 x panel lights are connected to GI so they will always be on and just add some lighting and atmosphere to the mod and game.

The 2 x beacon lights will flash in attract mode and operate as normal when a ball is locked for multi ball.

The 1 x flasher lights up the bottom ghost chute when the flashers activate in the game.

My apologies for the following photo as the mod and plastic is just resting on the playfield in my Pro and hooked up to test tools to show the lighting effects of the Premium / LE Version of the mod.

Enjoy

RETURN POLICY:
Please contact us as we will be proactive to try and quickly resolve any problems from abroad reducing the need to send your purchased parts. Approval from Swinks Pinball must be received before any items can be returned for repair or replacement. All mod parts etc. must be included when the product is returned. We will repair or replace/exchange components based on our analysis of the problem. Swinks Pinball reserves the right to deny any return to us or exchange. Refunds are not given. Freight will be covered by Swinks Pinball on the return trip back to you **only** and we will not cover the postage to us.

PRODUCT DISCLAIMER:
Please remember that this is a "MOD." We took great effort in designing and testing our system in order to produce a high quality product, but it is not a factory original nor an approved part for your pinball machine. There is the risk of unwanted side effects with any modification to a factory game and there are many factors that can cause undesirable side effects after installation of such a modification. As such, we cannot assume responsibility for game malfunction, damage to the game or surroundings, unwanted electrical emissions, personal injury, or other adverse effects caused by the installation of our MOD.

PRODUCT QUALITY DISCLAIMER:
All parts are made to the highest quality possible. All the parts are professionally 3D printed by Zelta3D using SLS nylon / MJF nylon & Resin processes with some minor print lines, slight surface finish variances or clouding (on the resin parts) which is part of the process. You may notice some of these variances when handling but once the mod is installed they will not be clearly visible from the players perspective and will give your machine that cool Ghostbuster storage facility equipment look.