

Bally - 1992
Creature From The Black Lagoon (CFTBL)

Creature "Tail Light Mod"

The Creature "Tail Light Mod" is a mod that is designed in Australia by a CFTBL owner for all the other CFTBL owners around the world that love their game and want to capture that classic 50's / 60's feeling of classic car rear tail light while still functional - synced with 2 playfield features - "Parking Ok" & "Move Your Car". This mod is also a relative simple one to install (no soldering if buying the full kit or parts kit), looks cool and suits the era.



Proudly Designed by



This mod originally came out around 2016 but was expensive due to the bumper being 3D printed metal - in Silver (beautiful but expensive). The design has recently been tweaked a little to allow a now full plastic bumper to be used without any distortion. Swinks Pinball is only making 5 kits available for purchase (not feasible to make these constantly as a bit of work in painting), but with the help of this manual you can also do a kit build yourself or pick up a kit if they are still available.

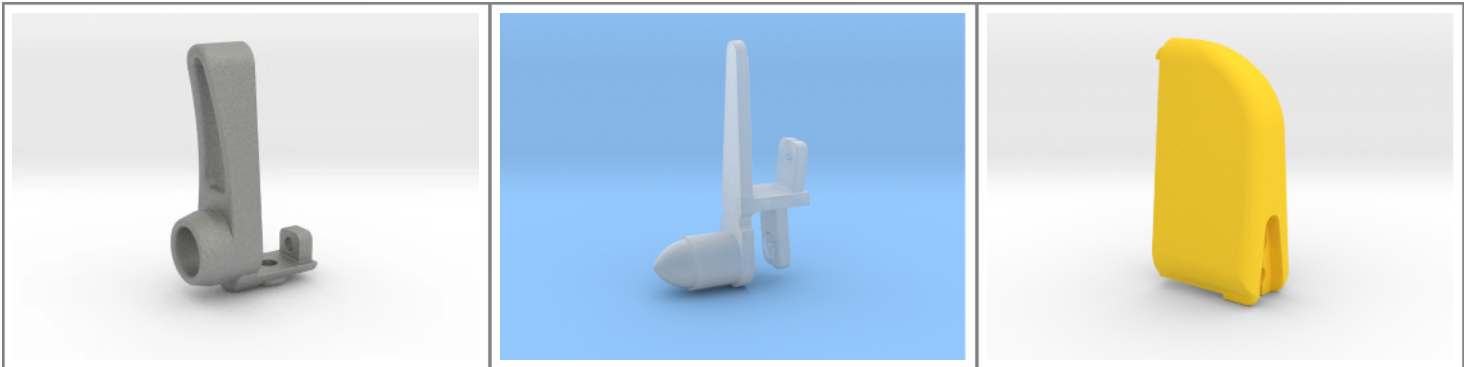
Required Parts

You will need the following parts:

1. Shapeways

<https://www.shapeways.com/marketplace?q=swinkstail&sort=newest>

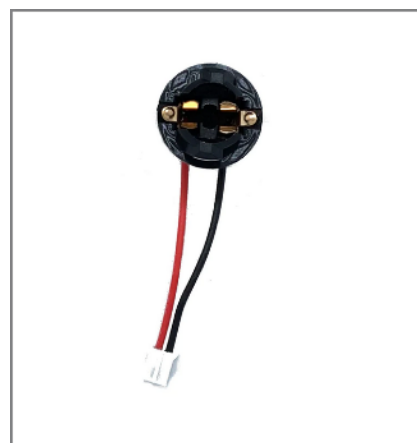
- 1 x Bumper
- 1 x Lens
- 1 x Body Panel in the colour of your choice



2. Comet Pinball

<https://www.cometpinball.com/collections/matrix>

- 2 x Matrix Extension Wires - 36"
- 2 x Matrix Twist Sockets



3. Electronic Store

- 1 x Red 5mm led - (1.7v)
- 1 x White 5mm led - (3.2v)
- 1 x 220R resistor (used with the Red LED)
- 1 x 150R resistor (used with the White LED)
- 180mm of heat tubing - 2.5 mm Black (cut 4 x 25mm, 2 x 40mm)
- 180mm of heat tubing - 5 mm Black (cut 1 x 180mm)
- 60mm of heat tubing - 5m Red (cut 2 x 30mm)

4. Hardware

- 1 x 4mm x 12mm long Stainless Steel button head socket head screw
- 1 x 2.5mm metric allen key.
- 1 x 4 x 0.7mm tap

Note: An alternative for the Hardware is use what you have available to suit the hole which is 3.5mm in diameter which needs to be threaded.

Note 1: Our apologies for some of the different photos showing the stages of installation. I no longer have the game and there the photos are a mix of older and newer stages of progress.

Note 2: Personally we love this mod as it syncs with 2 features on the playfield which for us these inserts are hard to see as they are blocked visually by the curly ramp.

Note 3: If you purchased a painted and pre-assembled kit you can skip straight to page 12 but the pages in between are a good reference if ever you need to perform some maintenance / repairs.

Step 1 - Prepping Your Shapeways Parts

- The Body Panel could do with a clear coat to shine it up but is not required - as the one in the photo on the front page is a raw printed part as is the standard finish for this part from Shapeways. Though it could get marked by dirty fingers - take care.
- Note: Light will glow through light colour body panels.
- The Lens does not require any work so it is ready for parts to be fitted.
- The Bumper will need the rear hole tapped to either 4mm or to a similar sized imperial thread though you may need the hole prepped for the correct size.
- Then to achieve a semi chrome to high chrome finish to the bumper you need to paint the part with a jet black and then again with a chrome paint preferable in the same brand.

Update photo

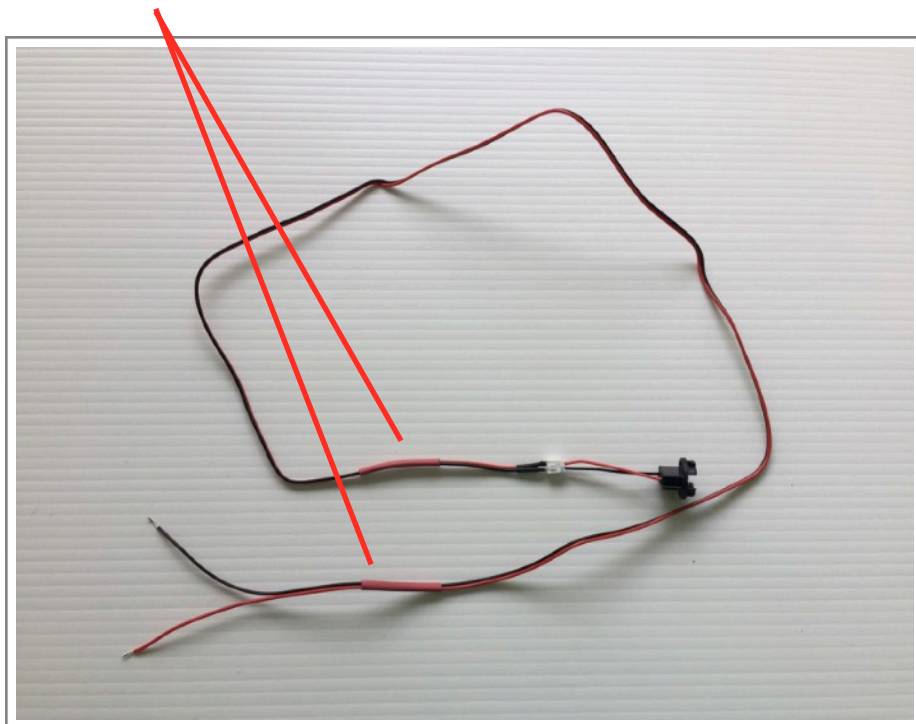


Step 2 - Making the Lighting / Wiring Harness

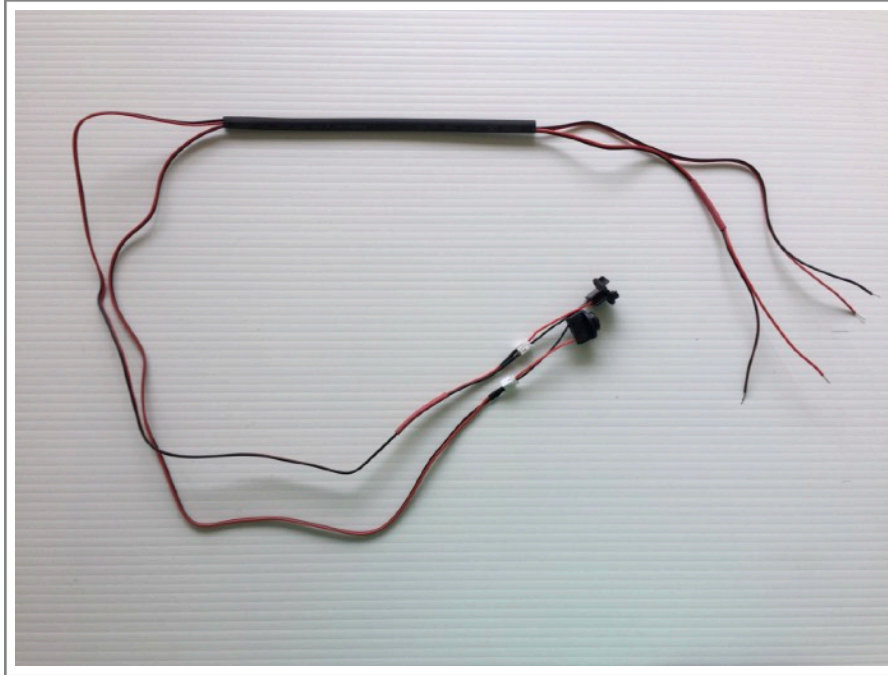
- Fit the 36" wires to the twist socket wires.
- Cut the plug off the non used side of the 36" wire.



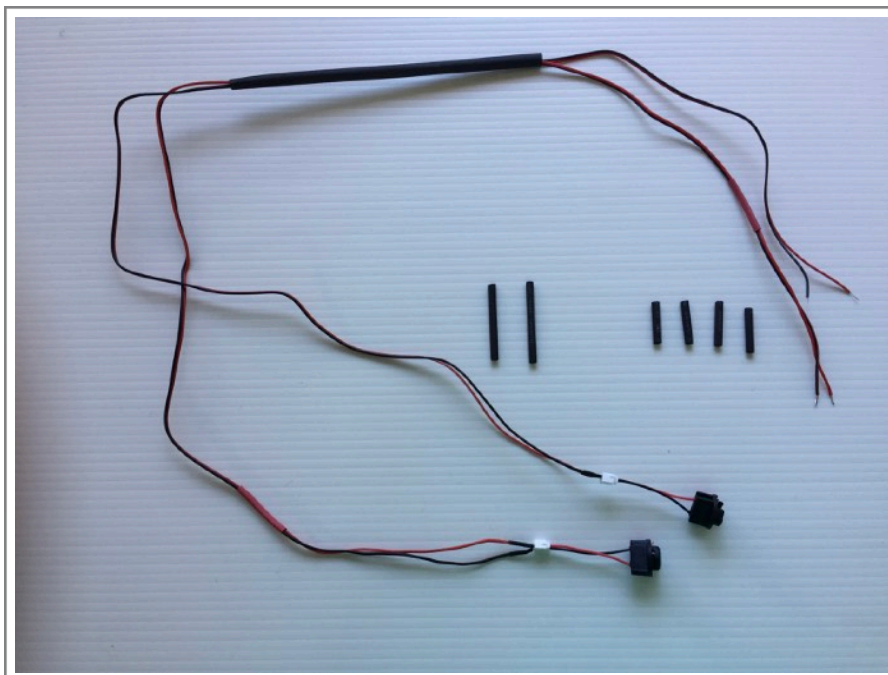
- Cut 2 pieces of 5mm red heat shrink about 30mm long and feed a piece to each end of one cable only and shrink to the cable about 130mm from each end (twist matrix plug end) and about 50mm on the LED end. This will be the Red LED cable.



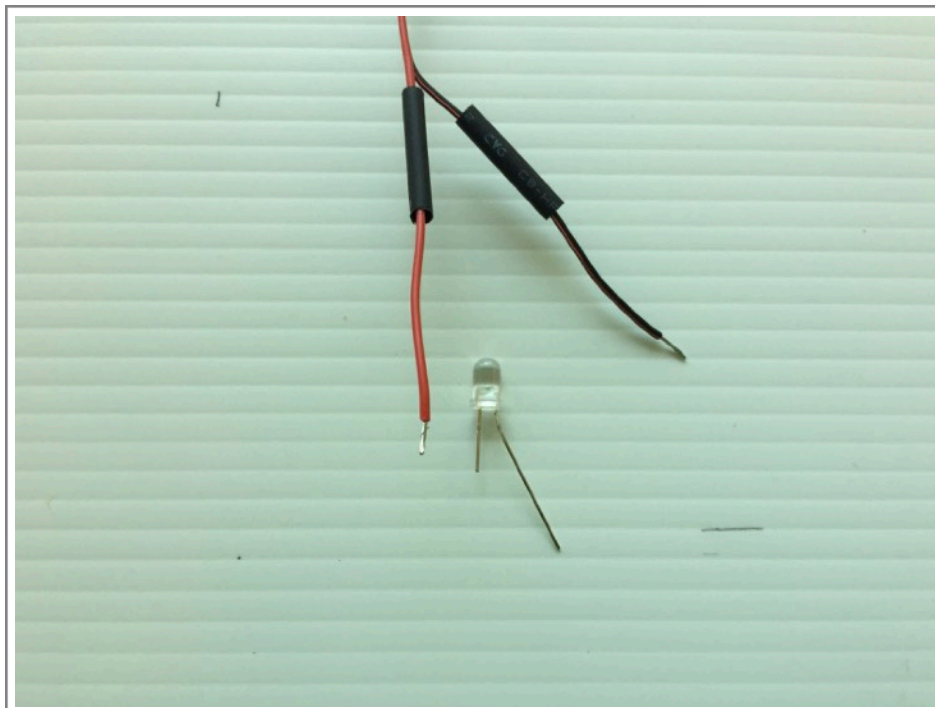
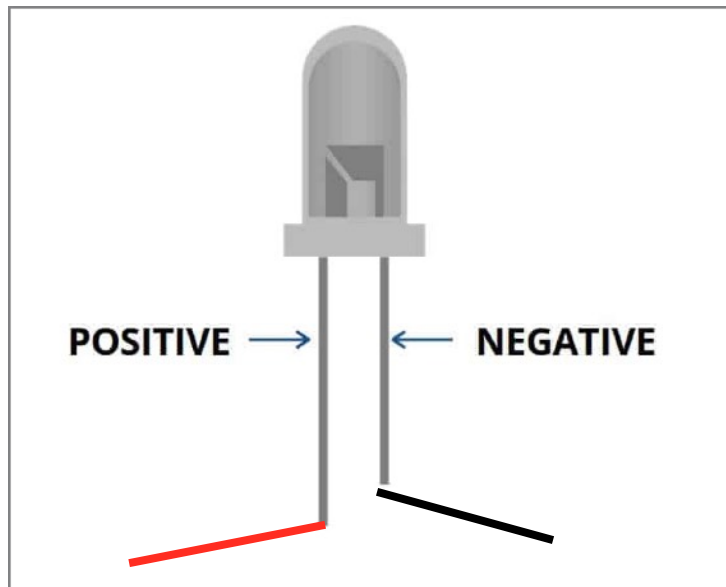
- Cut 1 piece of black 5mm heat shrink 200mm and feed over both cables now as later on you will not be able to do this.



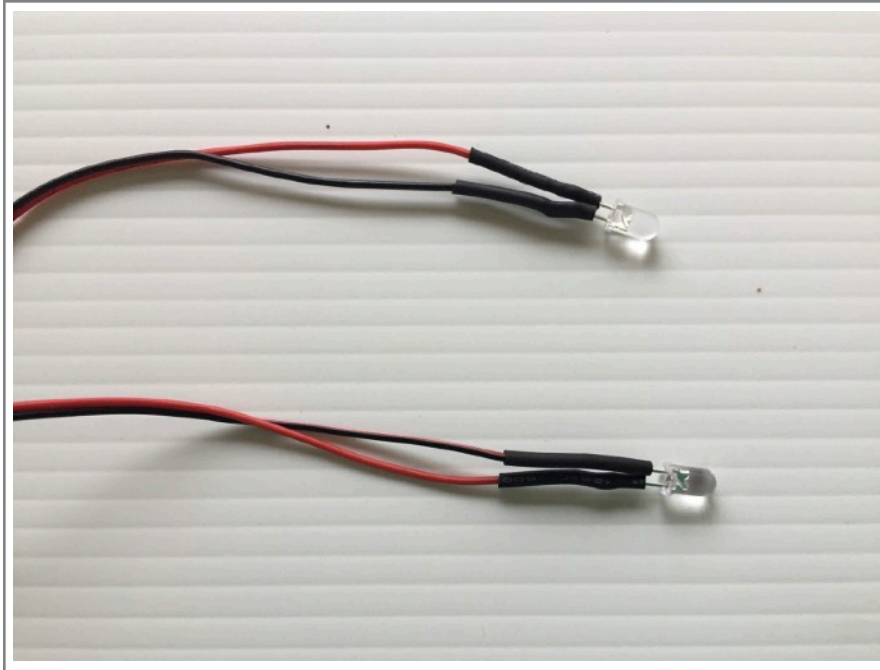
- Cut 2 piece of 40mm long 2.5mm black heat shrink to cover the resistor once installed.
- Cut 4 pieces of 25mm long 2.5mm black heat shrink to cover the wires joined to the LED.
- Strip each wire back approximately 6mm / 1/4" and tin with solder to both wires at the ends of the 2 cables ready to install the LED's.



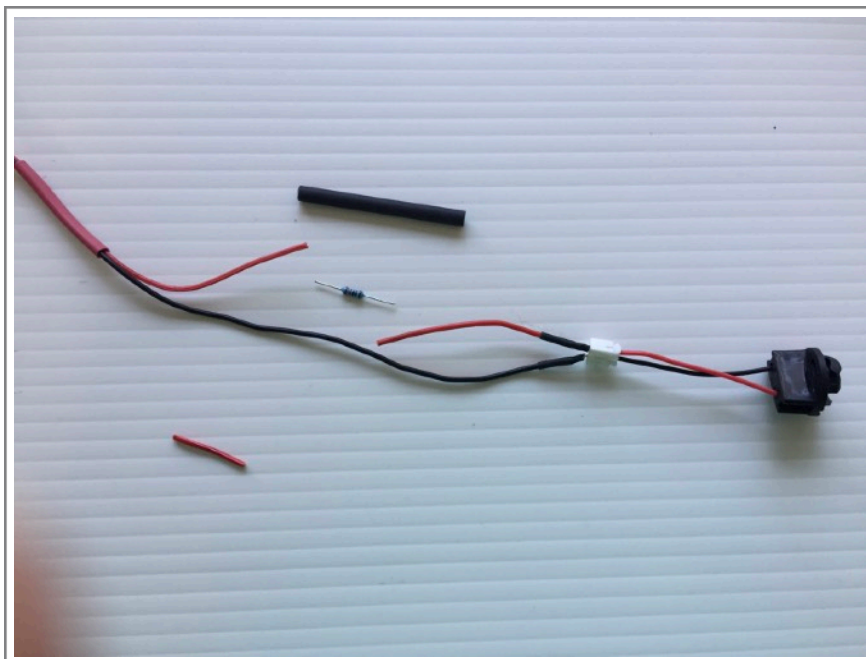
- Take 2 pieces of heat shrink and install over the wires before soldering the LED to the cable.
- Start first by installing the red LED since the red heat shrink has been applied to the cables, take note of the longer LED hard wire as this is the + / Positive side in which the red wire needs to be soldered to this LED leg. Trim this leg down to about 12mm.



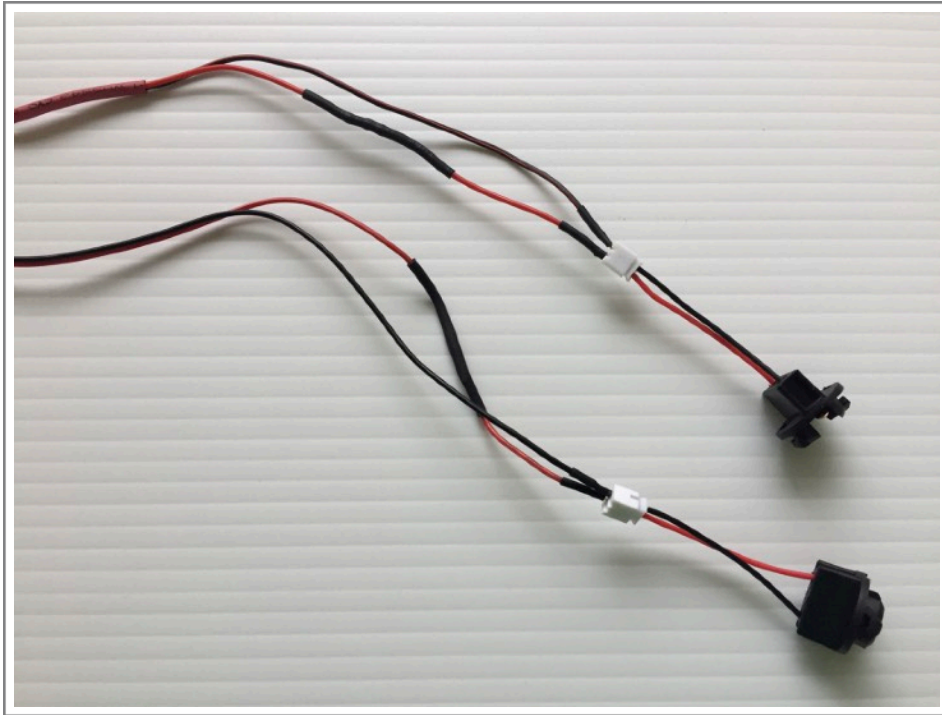
- Then trim the - / negative side leg of the LED down to 12mm long and then solder the black wire to the - / negative led of the led. Then heat up the heat shrink roughly 4mm before the back of the LED body for both wires.



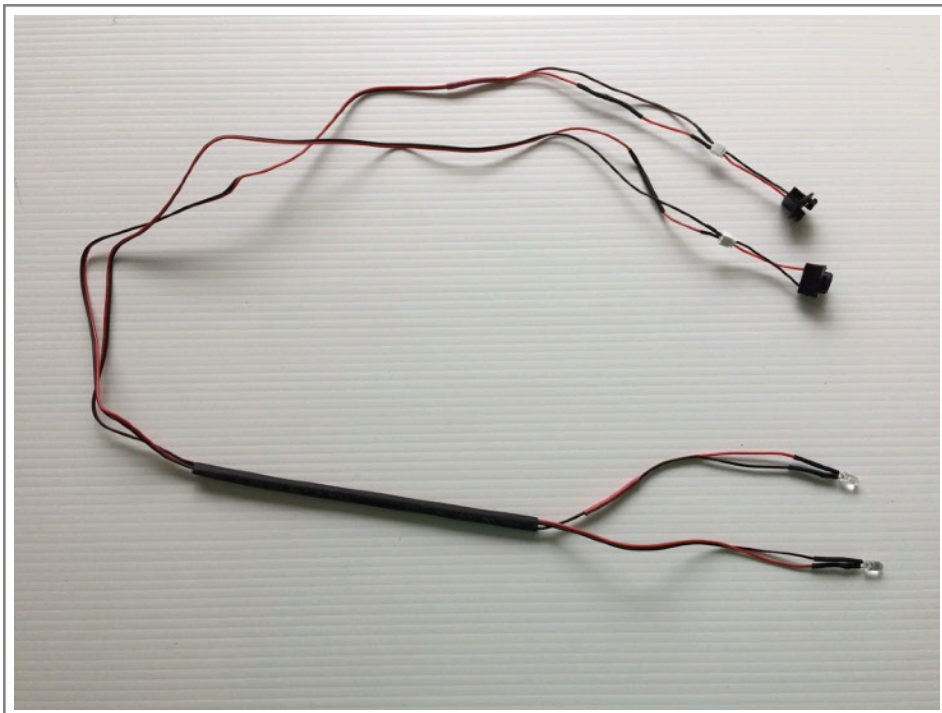
- Now it is time to solder the 220R Resistor to the red lead new the Matrix Twist Socket. Split the red / black lead roughly 100mm so you can install a resistor to the Red Wire. Cut approximately a 20mm section out of the Red wire and install the longer piece of heat shrink (40mm) before soldering the resistor in line.



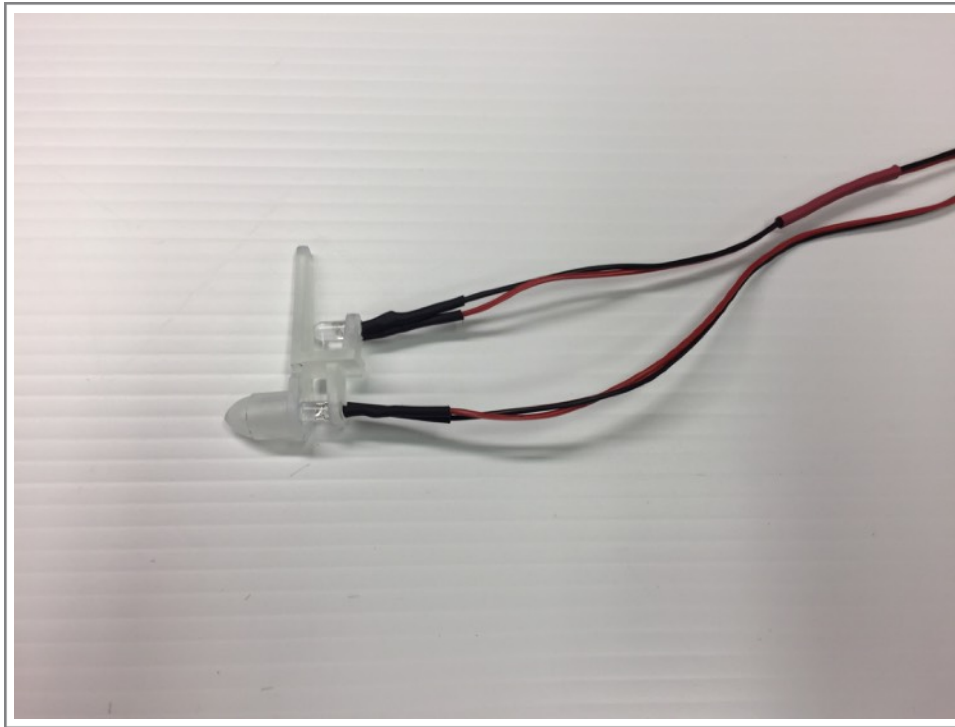
- Now heat the heat shrink so the resistor and wire is protected and nothing can earth out / short the wire.



- Repeat the process for the other 2 core wire, white LED and 150R Resistor.



- Now install the Red LED into the top slot of the tail light lens and the white LED into the bottom cone shaped section. The 3mm exposed LED leads slide into the groves of the resin part and then carefully rotate 90 degrees to lock the led into the lens. Do this for both LED's.

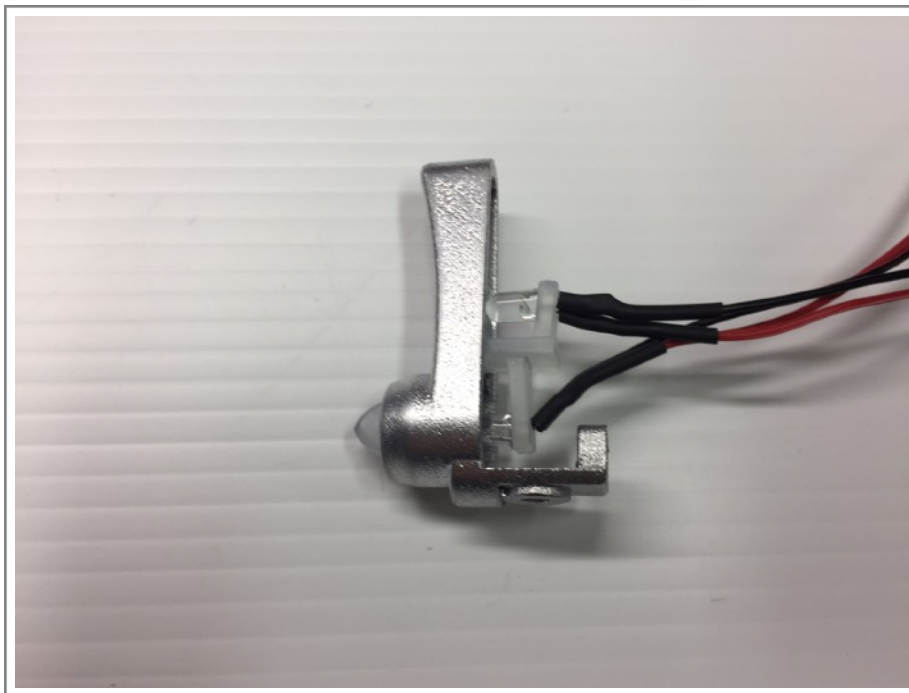


Step 3 - Fitting the Lens (with LEDs) to the Painted Bumper

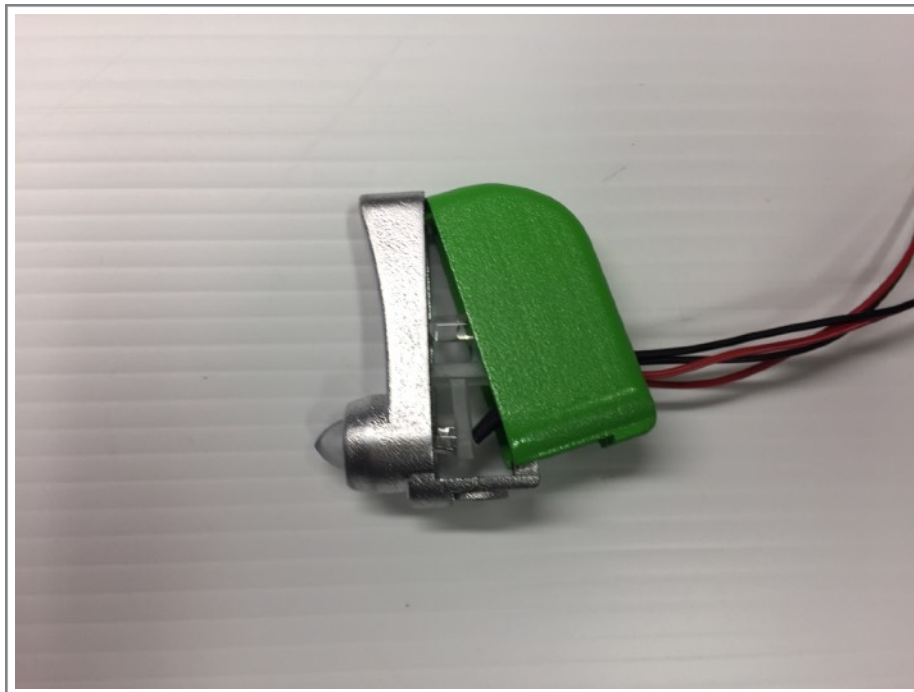
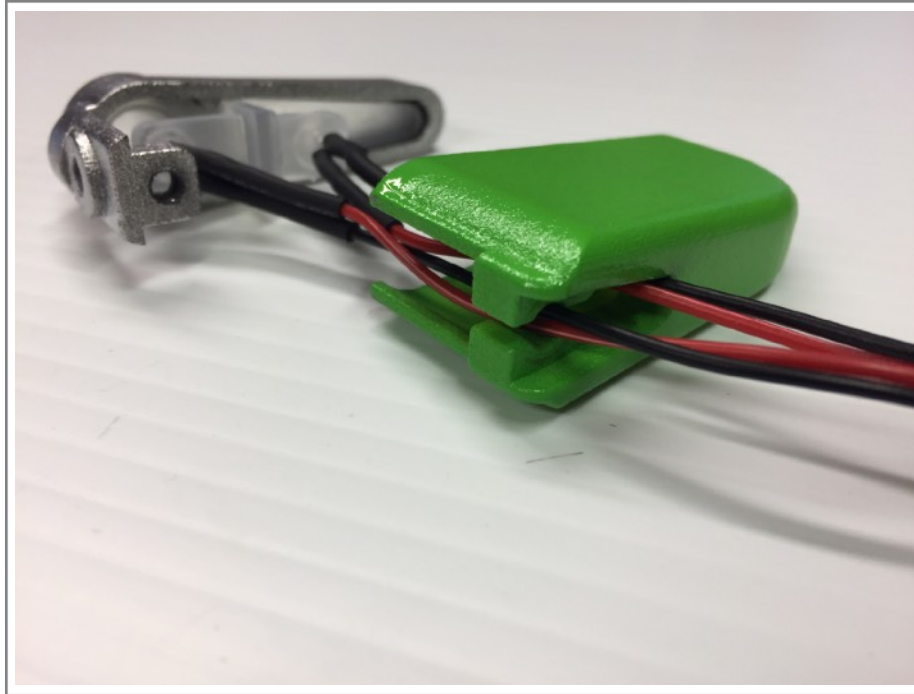
- This is slightly tricky so take your time. Align the cone part of the lens to the bottom section of the Bumper but with the Lens at an angle roughly 45-90 degrees and push lightly into place (do not be forceful as the lens may crack). Alternatively you can cut off the bottom led mount and fasten the white LED into the back of the conical section.



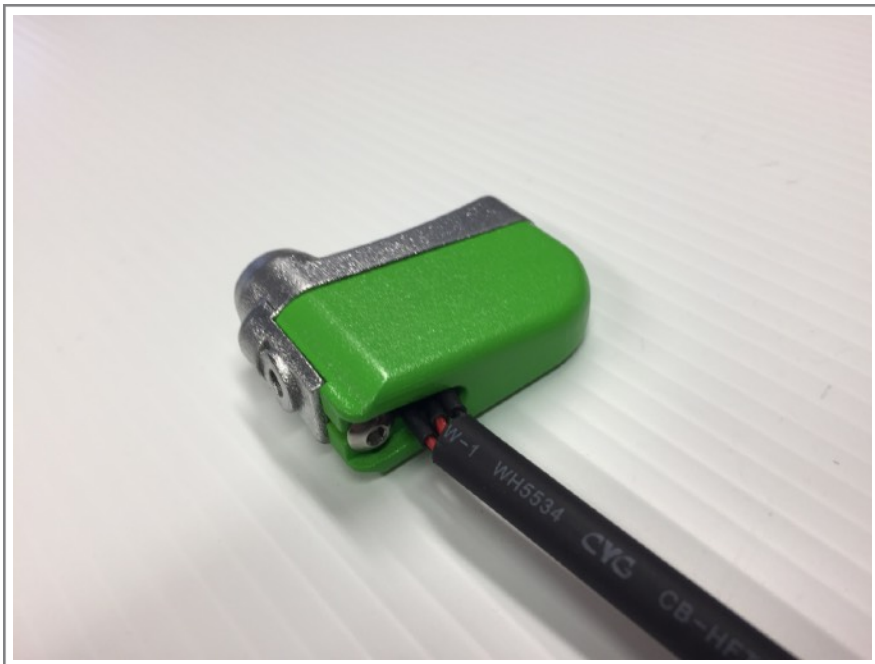
- Then push the lens in and lift the lens so is vertical and carefully insert into the bumper - it will catch slightly at the top of the bumper so wiggle and push at the main triangle lens and NOT via the LED's or LED's mount points.



- Now your part is ready to be installed but first lets do a pre-assembly check. You will need to slide the body panel over the wires with the provided slot in the bottom. The space within the tail light is tight so you need to gently bend the wire and LED legs so the body panel can install into place. The body panel will catch at the top into the bumper and then the bottom pivots in up to the point of locking together - keep adjusting until the body panel fits nicely against the bumper.



- Now slide the body panel fully in place and install the screw / bolt to lock the body to the bumper. The wires may restrict the close fit assembly or the lens may not be seated nicely so take your time and install. Once assembled remove the screw & body panel and leave the wires in their bent shape as this will make life easier when installing the mod into your game.



SAFETY NOTE: Before you begin with fitting parts to the game, make sure that your machine is powered off and the cord running from your machine to the wall outlet has been disconnected.

Read through these instructions completely before attempting the installation of this enhancement. Although you may know your machine inside and out, there are a few things to consider before proceeding.

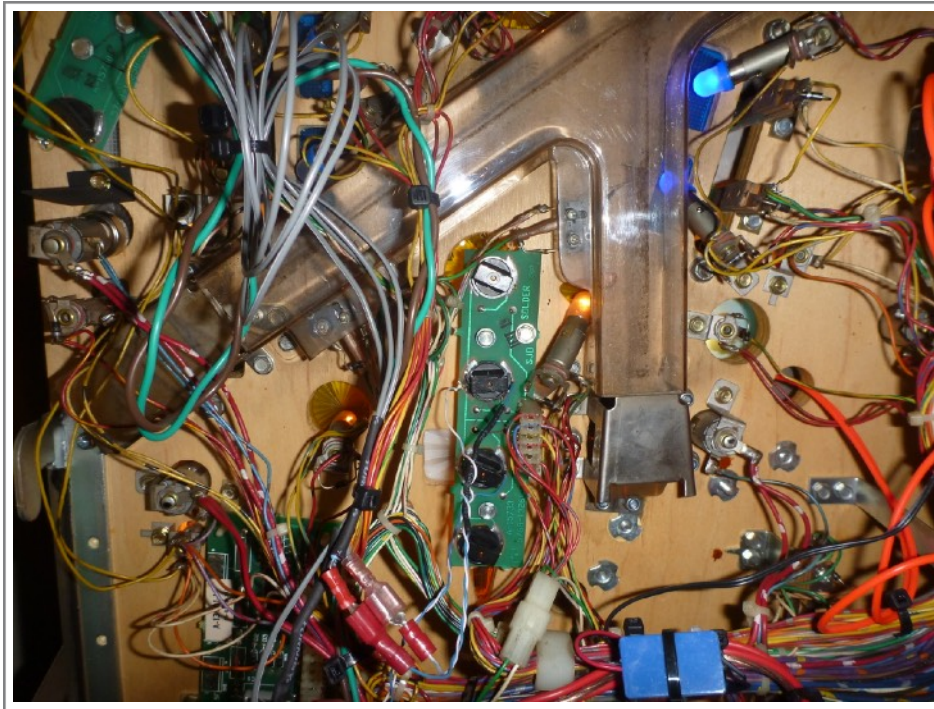
Step 4 - Assembling the Mod to the Game

- There is a post in front of the targets on the left hand side - remove the screw on top of this and then locate the bumper with it's wires if possible and re-install the screw. Our apologies for an old photo with the wires not pre-installed into the bumper.



- Now install the body panel over the wires and up to the body panel lock in the top and then pivot the bottom to the bumper and then install the locking screw.
- You will notice you still have a 150mm heat shrink over the cables - move this up to the mod for the moment.
- Now disconnect the matrix twist sockets from the wires and drop the cables in behind the targets to the underside of the playfield.

- Now lift the playfield (remove the balls of course before lifting) and locate the light board under the “Parking Ok” and the “Move your Car” insert and this is the final place to connect to.
- Install a LED cable twist matrix socket with the Red Heatshrink into the “Parking Ok” socket and the white LED into the “Move Your Car”.



Note: with mods and wiring supplied with the red wire to the positive leg and the resistor to the positive side - the testing phase comes down to a little bit of luck as the games polarity can vary - but at least the LED in the mod is protected with a resistor to the positive leg. A LED typically will only work one way when plugged into the board so is a 50/50 chance that it may work first go, and may need to rotate the socket and then also the LED that plugs into the Matrix socket.

- Now tidy up and remove any slack in the cabling under the playfield.
- Lastly our preference is to heat up the heat shrink new the mod but you can choose to tidy up with a cable tie and just slide the heat shrink down the cable. We used a small cable tie under the mod to keep the wire close to the post to avoid hang ups with the target. Place this cable tie as high as possible to the underside of the mod and with the bulky head of the cable tie hidden under the plastic. I did notice that once this head of the cable tie moved a little and when the target was hit next to the mod it got stuck in as got caught up with the target. You will see the target get caught and held back and your game will get an error dot with the error on the cola target. Once the cable and cable tie are fitted correctly the issue will not re-occur.
- You are now good to go and enjoy your mod.



RETURN POLICY:

There is no return policy as this mod is a “do it yourself” mod from Shapeways. Refunds are not given as Shapeways is a separate entity to Swinks.

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 or 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. The 3 main components are 3D printed and some sections may have some visible print lines. You may notice these print lines when handling but once the mod is painted and installed they will not be clearly visible from the players perspective. In downloading this manual and purchasing the mod you are accepting the finish quality of this relatively affordable unique mod.