

**Stern - 2016
Ghostbusters (GB)**

Flat Iron Mod v1

The “Flat Iron Mod” is hand crafted in Australia by a GB owner for GB owners around the world who love their game and want to transform their boring captive ball area on the right with an iconic building - New York’s famous Flat Iron Building to add a bit more atmosphere. This mod is a relatively simple one to fit - no soldering, no complex tools and no removal of plastics or brackets - just follow the detailed instructions to install.



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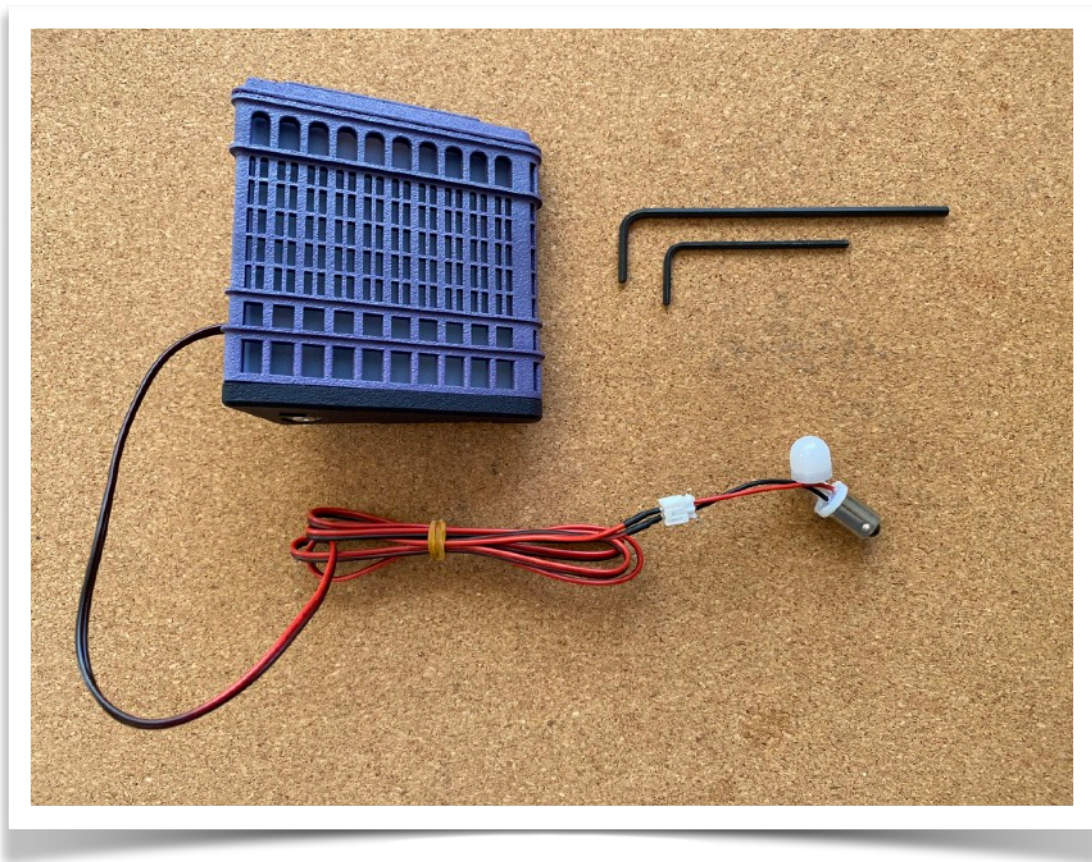
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1 - Mod Parts

When you unpack your mod, you will find the following components with the mod already pre-assembled (see photo below):

- 1 x **Flat Iron Mod Kit**
- 1 x **Bulb Adaptor and Extension Lead** (not fitted to the mod)
- 1 x **2mm Allen / Hex Key**
- 1 x **2.5mm Allen / Hex Long Arm Key**



2 - Tools and Safety Notes

Tools necessary to install the mod

- 1 x Phillips screwdriver (is not provided)
- 1 x 2mm metric Allen / Hex key (provided in the kit)
- 1 x 2.5mm metric Allen / Hex Key (provided in the kit)



SAFETY NOTES:

Make sure that your machine is powered off and the power cord running from your machine to the wall outlet has been turned off / disconnected to remove all risk of electrocution.

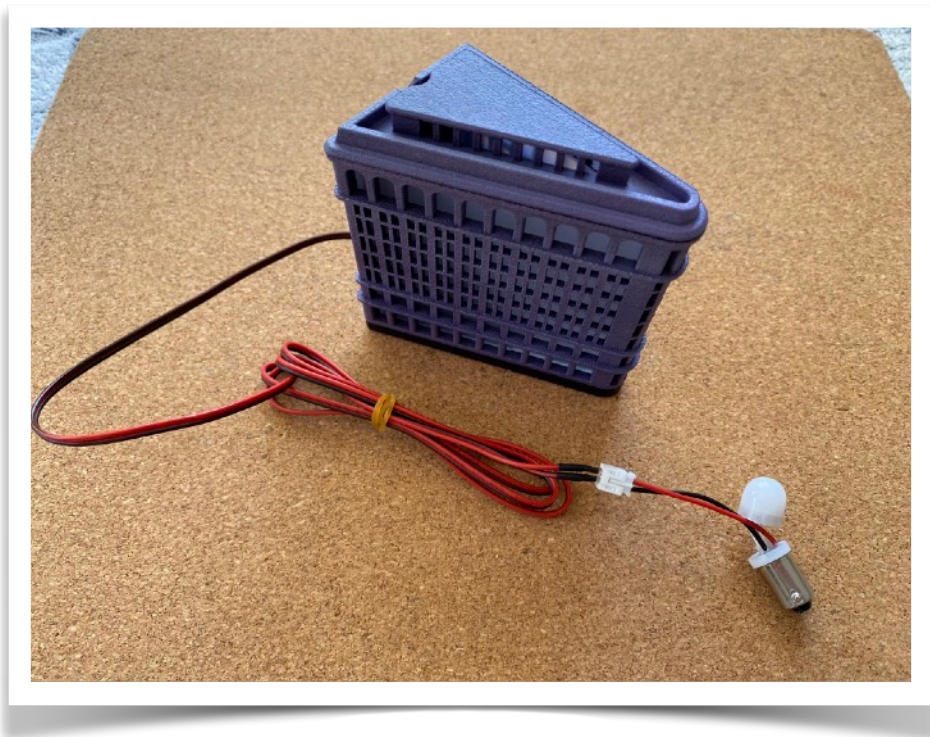
Read through all these instructions carefully & completely before attempting the installation of this enhancement. Although you may know your machine inside and out, there are a few things to consider before proceeding.

3 - Mod Pre-assembly

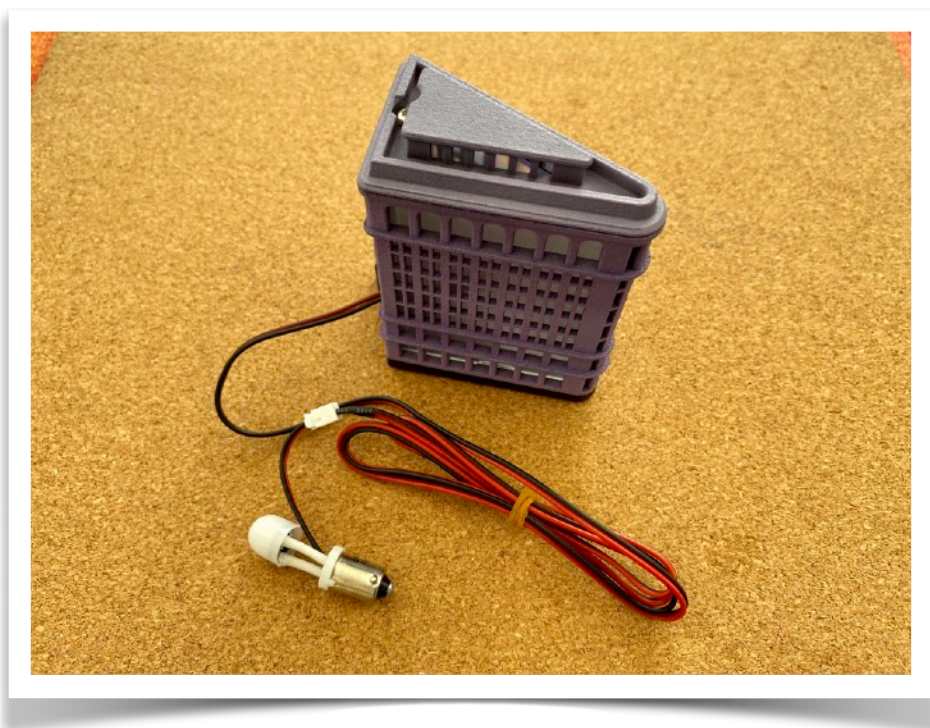
Your mod is supplied pre-assembled to test fitment before being sent to you making the install very simple.

The Pro and Premium/ LE Buildings are different in design at the back of the building with the Premium / LE version being more cut away to allow Slimers hand / body to swing past with a possible slight hand slide (depending of slimes placement on the crimped wire). But from front both versions of the mod still looks like the traditional famous building.

Pro Flat Iron



Premium / LE Flat Iron



4 - Game Preparation

So remove the following:

- lockdown bar
- playfield glass
- playfield out on to it's pegs or playfield brackets
- remove all the balls in the game as you will need to lift the playfield up to connect the mod lead to a GI socket later in the assembly.

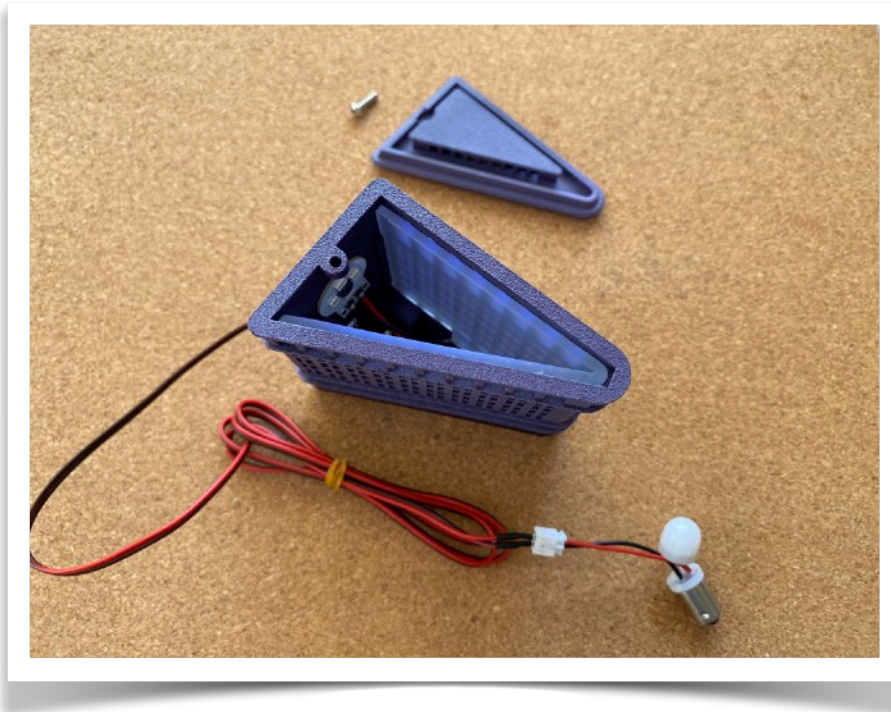


NOTE: These instructions are the same for both the Pro Version and the Premium / LE Version of the mod. While the Base Plate, Building and Roof are different between the 2 versions, the installation is the same.

All images in this manual are of the Pro Version Mod installation.

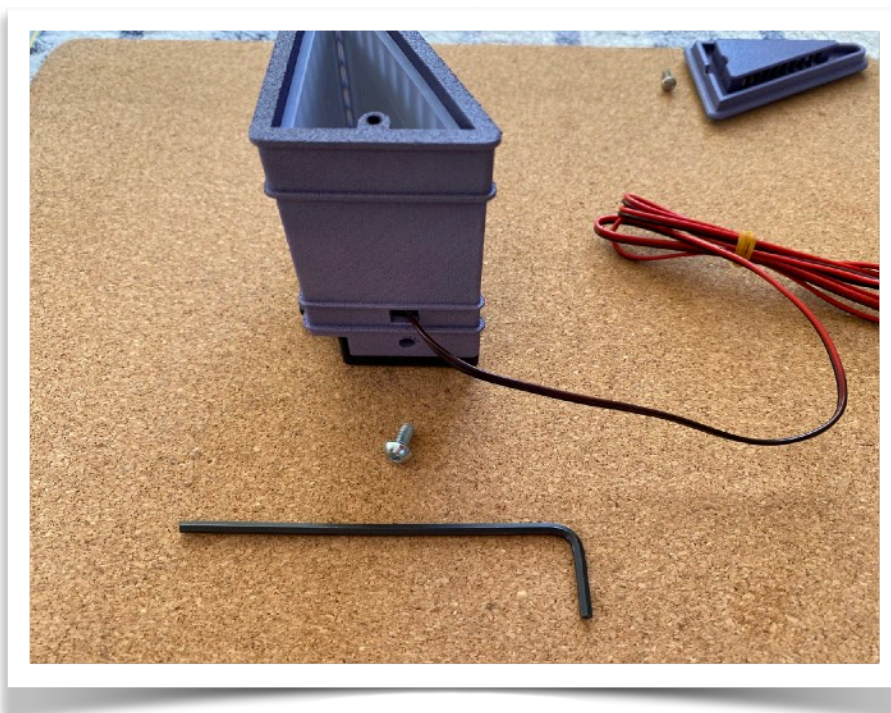
5 - Mod Preparation for Installation

You will need to remove the single bolt from the top of the roof - set the bolt aside as you will need this for re-assembly. The roof then slides back approximately 2mm before lifting up and out.



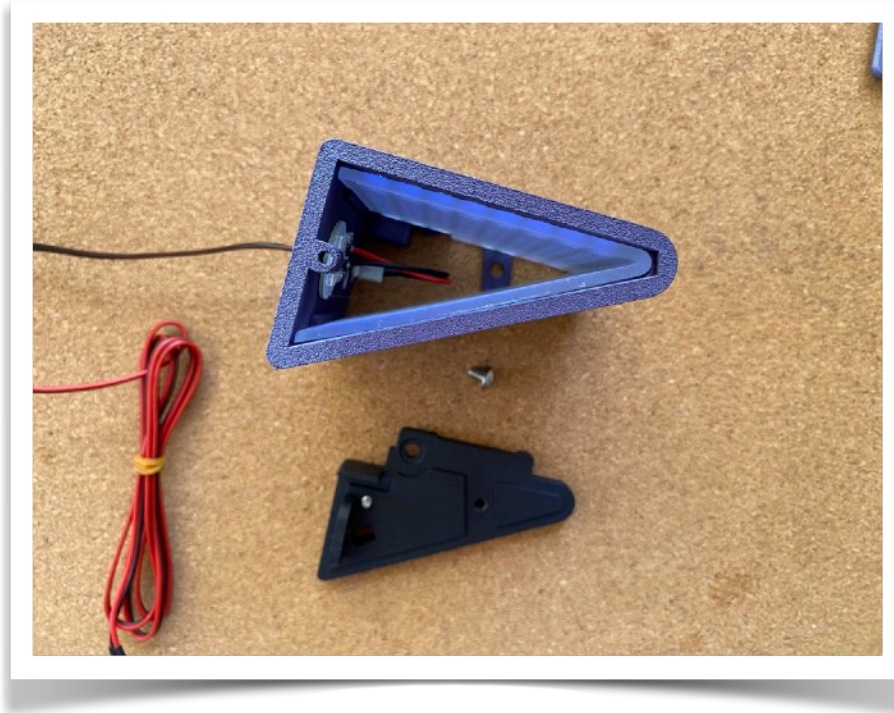
Then you will need to remove the bolt from the back of the mod - set the bolt aside as you will need this for re-assembly.

Note: for reassembly to use the longer of the 2 x M4 bolts here - this is 8mm long in the threaded section.

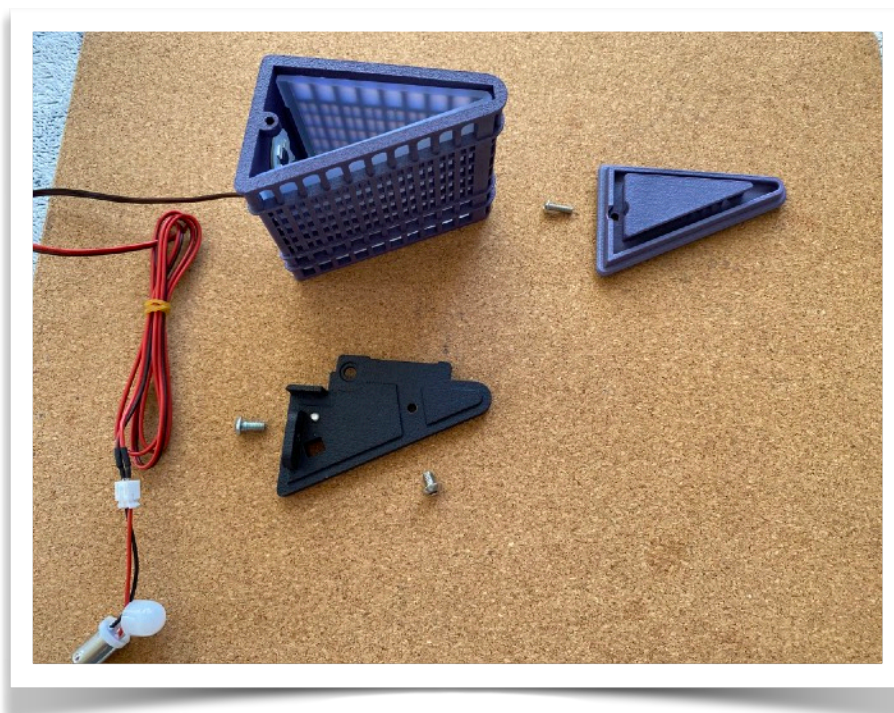


Then you will need to remove the bolt from within the building at the bottom - set the bolt aside as you will need this for re-assembly. Now the main building can lift off the mod's base plate. Take note the resin window panel is just slide from the top, so make sure it does not fall out if you tip the building upside down.

Note: for reassembly to use the shorter of the 2 x M4 bolts here - this is 6mm long in the threaded section as this is critical.



Here are all the parts once the mod is dis-assembled ready to assemble into your game.



6 - Fit the Flat Iron Base Plate

Remove the one lower bolt holding the gate - careful not to dislodge the post underneath the bracket.

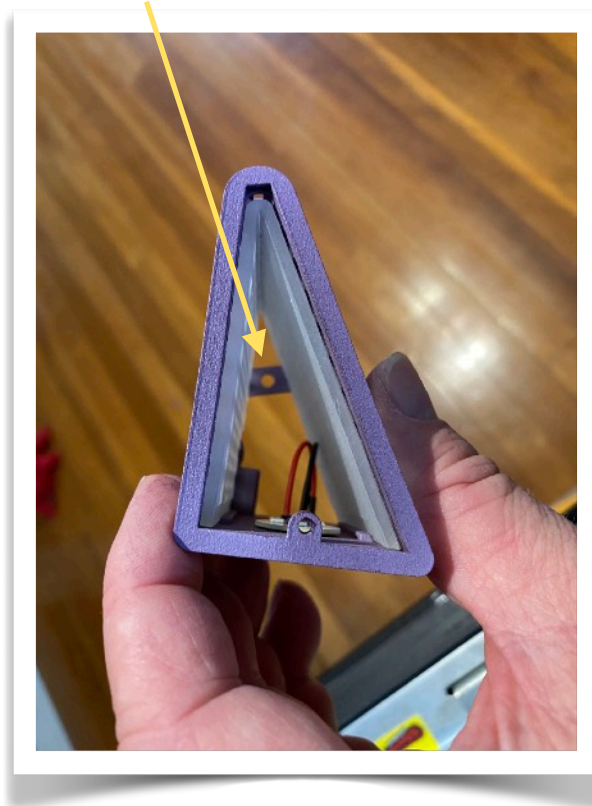


Locate your Mod Base Plate and locate so the small vertical panel rests against the gate bracket and re-install the bolt that you just removed and tighten down. You will notice the base plate has a magnet fitted to the bottom as well - this is just for a little more hold strength and the side vertical section stops any twisting of the plate. The square hole is an optional feed hole for the power cable.

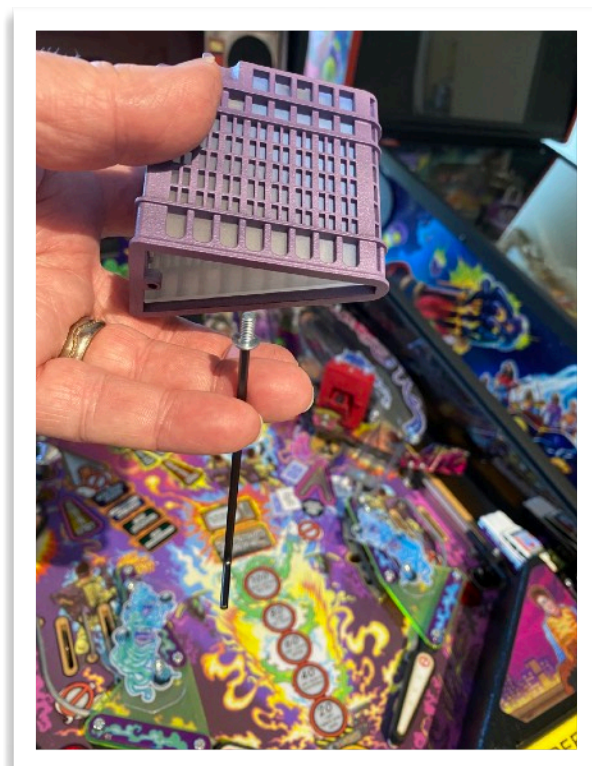


7 - Fit the Flat Iron Building to the Base Plate

This next step is a little tricky and this is my technique in installing the building to the base plate. Note following this step will make it easier to install this bolt. Note the tab at the bottom of the building that the 6mm long bolt has to go into.



Take the building and the bolt you removed prior and the long handle Allen key and turn the building upside down and ready your bolt on the Allen key and feed in upside down to the tab and pass through.



Then feed the bolt into the hole and hold the Allen key in the bolt and so it is already in the hole.



Then lower the building onto the base plate while placing positive pressure to the bolt with your Allen key so not to fall out and tighten the mod down to the base plate.



Lastly locate the other earlier removed 8mm bolt and look around the back of the mod and pass the bolt through the round available hole and secure the building to the base plate vertical tab and tighten.

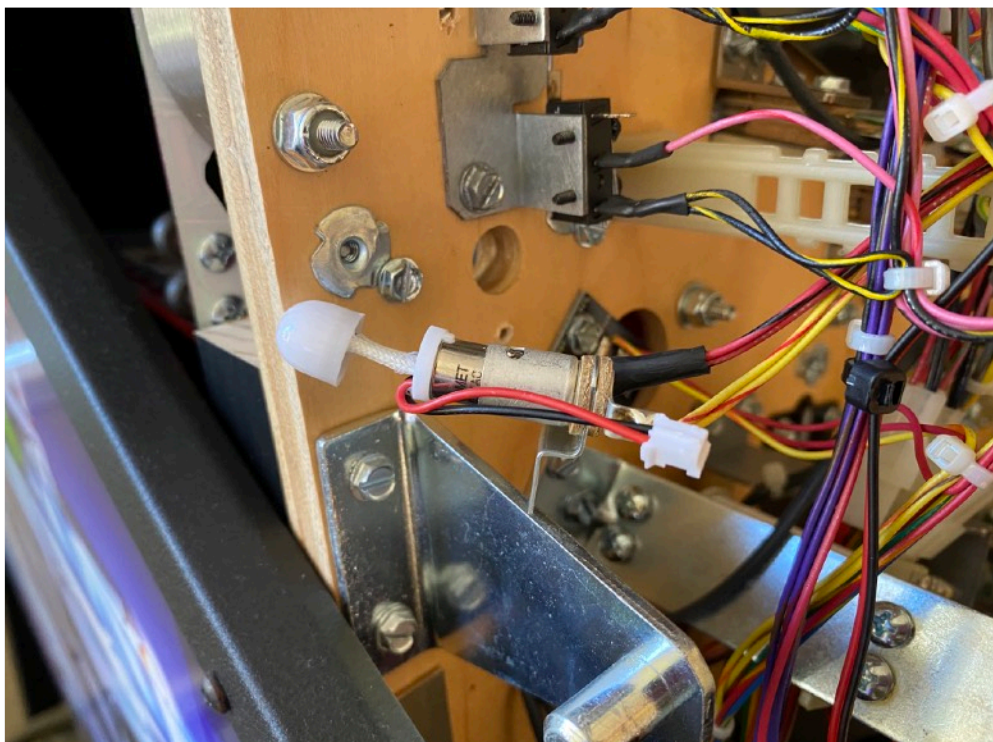
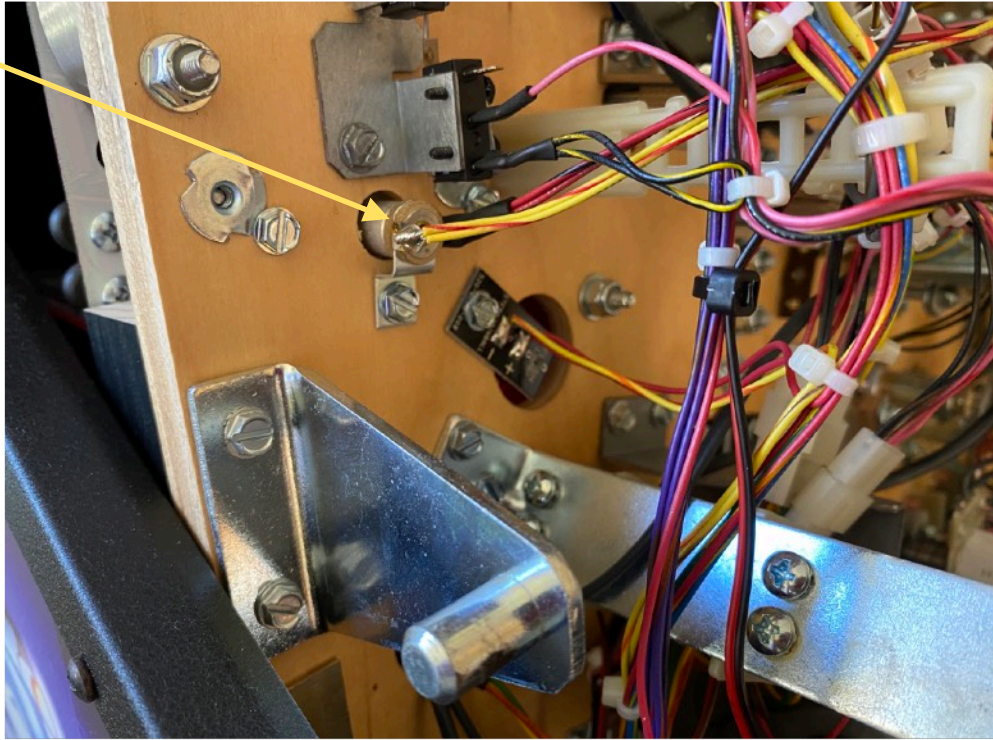


NOTE: Do NOT install the Roof just yet - this will occur in Step 11

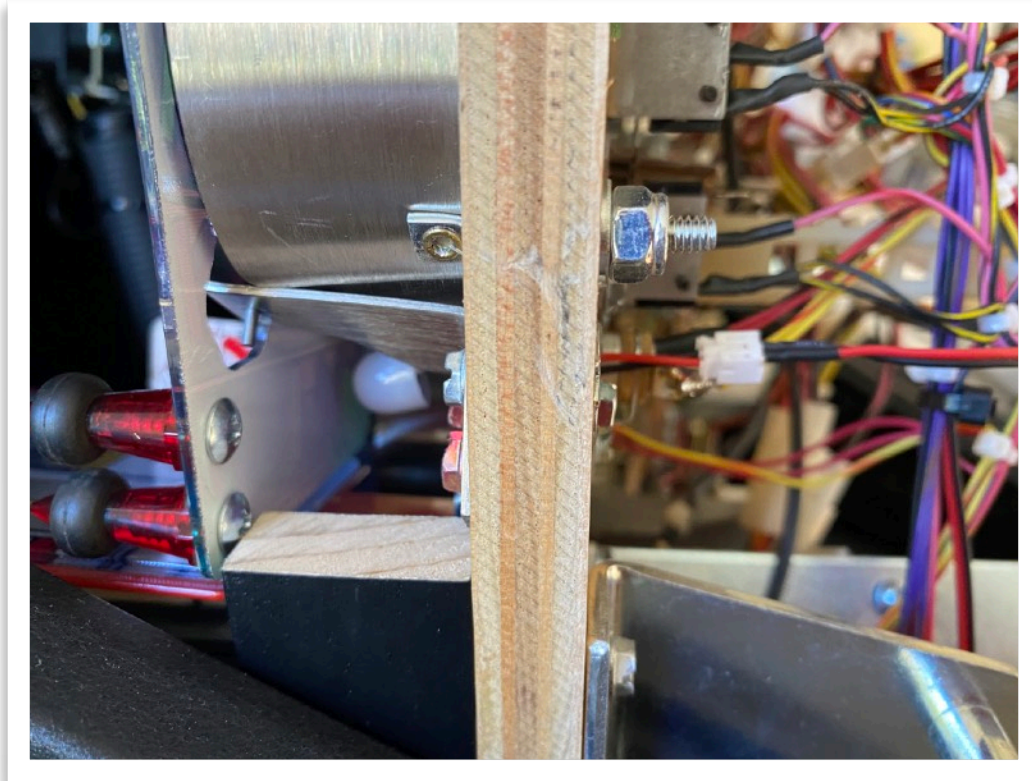
8 - Installing the Wiring to GI

No plastic needs to be removed as the wiring can be connected to a GI socket with the playfield simply lifted up vertically and leaning against the backbox.

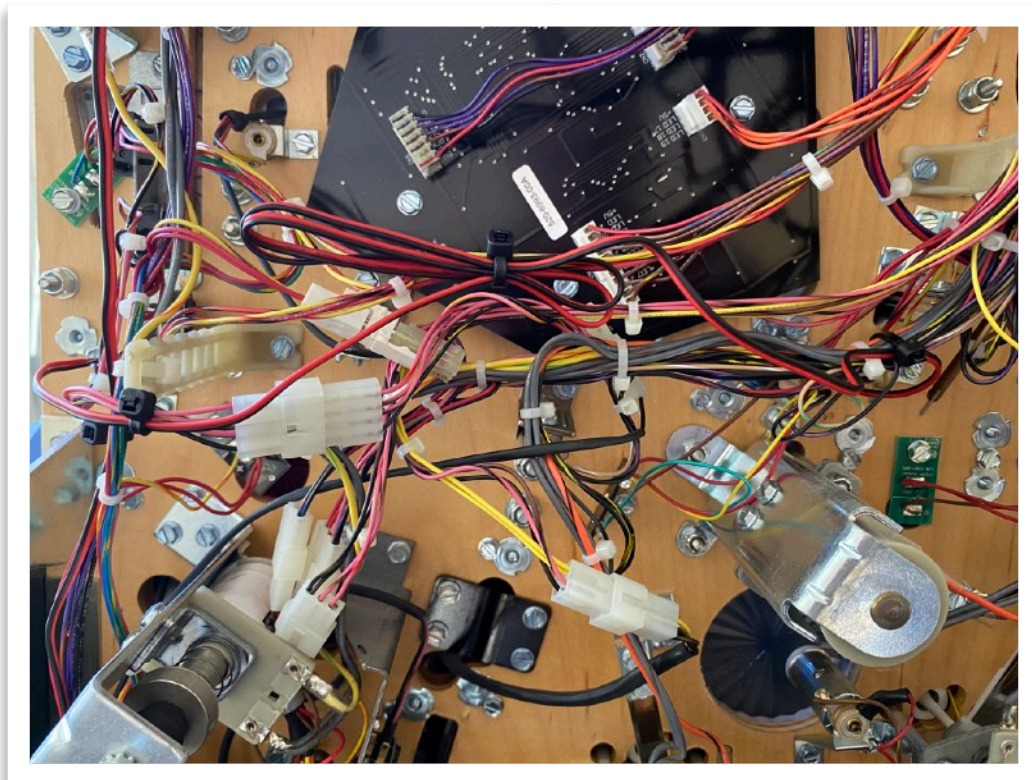
Now remove the bulb socket closest to the playfield bracket which is just infant of the Fire House. Then remove the existing Stern led bulb and insert the supplied Comet bulb with the adaptor lead bulb socket and fasten back into the same hole / mounting point.



Shows the bulb and location relative to the Fire House



The lead crosses over to the Ghost Target just higher (when the playfield is up) than the pop bumper and feed a tail through to the top side of the playfield. Secure excess cable to other cabling in the area so it does not flop around.



9 - Connect the Power Lead to the Flat Iron Building

The lead (red and black wire) will pop out from the ghost target / captive ball area and now just route the cable to your liking and connect to the star post led lead that is sticking out of the building body. In product versions of the mod I have painted a section of the lead so the red cable does not stand out.



Once connected push the socket of the power lead and star post lead so it just passes through the building and sits just inside, and then push the excess lead back under the playfield.



10 - Testing the Flat Iron Mod

Power up your game and in attract mode the **GI will light up and the Flat Iron Mod should also light up.**

If it works, you are all ok to proceed to enjoying your new mod. If it doesn't check that the bulb works and check the 2 socket ends of the extension lead in case a pin has been pushed out and not making a connection.

If there is any excess cable fed under the playfield, you will need to lift the playfield once again and secure the cable.

Now you can lower the playfield back into playing position - proceed to the **Section 11**.

11 - Fit the Flat Iron Roof to the Building

Take note that the roof has a special lip so it keys under a special tab, meaning the roof is clean in design and just requiring one bolt to secure the roof down.



Place the roof on top of the building and slide forward so it keys in and then take the bolt you previously removed, install and lock the roof down to the building.



12 - Set Up your Game

You are now ready to lower you playfield if it is out back into the cabinet and re-install the games balls and power up.

13 - Enjoy

Now your mod is installed and operational, it will operate when ever the games GI is active.

Enjoy.



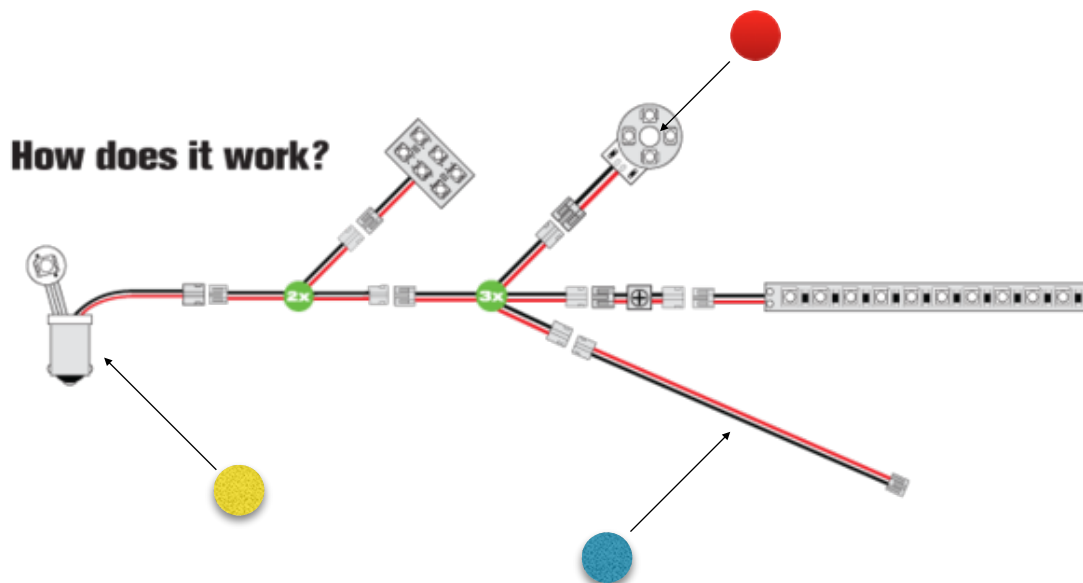
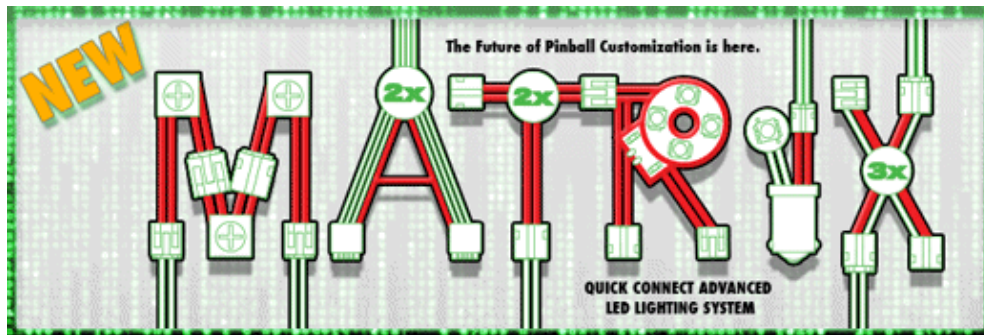
Above is Pro Version in
a Pro Game

To the Right is a
Premium / LE Version
in a Premium Game






14 - Spare Lighting Parts

- Lighting is supplied by Comet Pinball based in Colorado in the USA using their cool products from their Matrix range. See a coloured arrows referencing the components.



To find these parts:

-  <https://www.cometpinball.com/products/quick-connects?variant=12387006677036>
-  <https://www.cometpinball.com/products/matrix-extension-wires?variant=12493662158892>
-  <https://www.cometpinball.com/products/star-post-lights>

15 - Credits

A Big Thanks to Brooke from the USA and Anthony from Australia in aiding me in testing fitting the Premium / LE versions of the Flat Iron in their games to ensure fit, as well as issuing us with measurements and photos, and in the end making this version of the Mod possible, thank you very much.

16 - Issues and Adjustments

One small issue has been raised with the Premium / LE version of the Flat Iron, where sliders fingers would just slide past the building.

- Remove the top plastic plate on the Slimer swing arm and then loosen the nuts under plate. Once loosened, slide the brackets forward which allows Slimer to hang further back on the arm. Takes just a few minutes to adjust.
- The Flat Iron can be pivoted a little to the right as far as it will go without affecting the gate - and then lock down the Flat Iron Base Plate.



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 back for repair. Approval from Swinks Pinball must be received before any items can be returned for repair or replacement. All parts, cables, 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 or exchange. Refunds are not given. Freight will be covered by Swinks Pinball on the return trip back to you **only**.*

In stating that we want everyone to love and enjoy their Flat Iron Mod - so if you have any issues at all please, please reach out via the well known Pinside forum or another forum or via email and we will promptly help you out.

Email: swinks.pinball@gmail.com

PRODUCT DISCLAIMER:

Please remember that this is a "MOD." We took great effort in designing and testing our product in order to produce a high quality product, but it is not a Stern 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. The Mod's parts are professionally 3D printed by Zelta3D using MJF & SLS nylon & Resin processes which may have some minor print lines, colour variances (which follows through the dye and some paint process) or clouding (on the resin parts) - which are all part of the process and treated to the best of our ability to make the parts look nice and professional. In addition the purple dye process and paint process will be unique to each mod and is meant to be directional to create shadowing to simulate a night atmosphere. Once the mod is installed into the game with game lighting these minor effects will not be clearly visible from the players perspective and the mod will give your machine that cool night time city feeling.