

STERN TRON PINBALL CITY TOWER MOD KIT

Thank you for purchasing my Stern Tron Pinball City Mod kit. This kit is designed to work with your Tron machine without any un-reversible modifications so at any time you can revert back to a factory layout if you wish.

Your kit will include the following: 1 x City tower body and cap marked "A" 1x City tower led assembly marked "A" 1 x City tower body and cap marked "B" 1x City tower led assembly marked "B" 1x Flynn Arcade and tower and led assembly marked "C" 1x Encom Tower with dual leds that are pre-installed marked "D" 1 x Shorter replacement post secured to led wiring marked "B" 4 x Green rubber spacers – Why green? Because when you drop them they are easy to find! These are taped to the inside of the box lid marked "X"

The installation process should take approximately an hour and requires minimal tools. For the installation you will require the following tools:

- 2 Philips screwdrivers one with a small pointed tip to remove the ramp screws, and one with a larger tip to remove the more common screws found on the tops of posts and plastics.
- ¼" open end wrench or a ¼" socket driver

Step 1

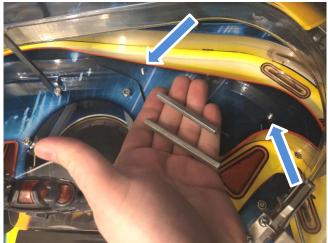
I strongly suggest the left entry ramp be fully removed and not just taken off half way, with it fully removed installation is much easier.

Start by raising the playfield and disconnect the connectors for the 2 flashers and ramp swing gates. Tag the connections to ensure you connect them correctly later. With this disconnected you will be able to pull the wire leads upward from the top of the playfield to take off the ramp completely.

Remove the 2 small countersunk head screws at the ramp entry, followed by the six (6) screws located along the ramp top lip. If you have the fancy neon glowing pool noodles on your rams take care to disconnect them and not damage them.

Step 2

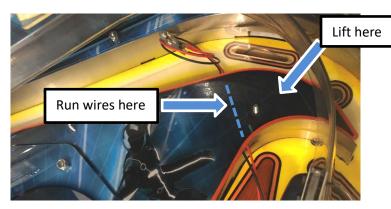
Remove the 2 hex metal post s that support the ramp along the rear and that hold down the plastic. Note: one metal post is longer than the other the longer one will be reinstalled later back in its original location and the shorter one will be needed for the city tower marked "A".

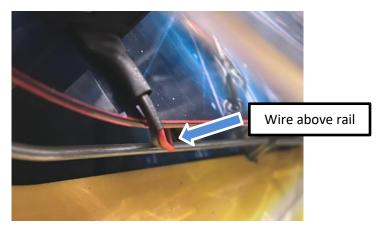


Next take the led assembly marked "A" and install it as shown. This can be easily done by gently lifting up on the plastic along its farthest right point to get it just slightly higher than the exposed threaded stud and fish the led assembly in from the side.

Note: There is formed round metal rail located under the back right side of this plastic. Ensure the led wire runs above this rail and not under it.

Do not lift the plastic too much or you can crack it !!!!!





Step 4

Carefully lift the front corner of the plastic and loop the alligator clip end of the led assembly and feed it thru the hole in the playfield that is located directly under the hole in the plastic. After this is done you should only have the lit side of the led assembly exposed out of the back of the plastic as shown in the next step.

Do not lift the plastic too much or you can crack it !!!!!



Take the led and place it over the far right exposed stud and push the green rubber over the post, the rubber will keep the led in place and give the metal something to clamp down on and not damage the led light.

Install the led so the wires are pointing to the rear of the playfield.

Don't worry about any extra wire slack currently exposed and sitting in the rear ball path, you will pull the slack up later near the end of the mod installation.



Step 6

Install the shorter of the two metal posts that were removed in step 2. The green rubber will compress giving the post something to tighten into.

Do not overtighten!! Snug is just fine!! If you overtighten you can damage the led! Also keep it just snug is to allow the post to be rotated to ensure the tower can be slightly rotated " righty tighty" or "lefty loosly" to align it correctly later.



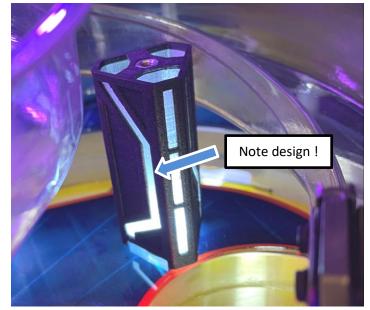


Step 7

Take the tower body and cap marked "A" and slide it over the post. Each tower is assembled on my end to fit a specific way. I installed the clear insert in the tower a certain way to ensure the led lamp pods do not get crushed. The flat back of the tower should be parallel to rear of the playfield.

Note the specific design on the side of the tower and install it in this direction.

Towers **CAN NOT** be interchanged as they are assembled to fit in specific locations.



Remove the metal post that my perfect flipper button finger is pointing at, also remove the plastic located below it.



Step 9

Remove this factory post and replace it with the shorter post in the kit that is secured to the led assembly "B". Reinstall the metal inner stud and snug it up. Reinstall the factory rubber and plastic.



Step 10

Take led assembly "B" (with the 90 deg head) and fish it thru the small hole in the playfield located just behind the pop bumper. The reason for my shorter post is to allow the tail of the led plate to go under the ramp lip as shown in the picture.

Install the led and place a green rubber over the exposed threads. Orientate the led as close as you can in the picture.

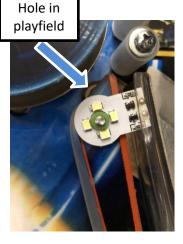
Step 11

Reinstall the metal post from step 8. The green rubber will compress giving the post something to tighten into.

Do not overtighten!! Snug is just fine!! If you overtighten you can damage the led! Also keep it just snug is to allow the post to be rotated to ensure the tower can be slightly rotated " righty tighty" or "lefty loosly" to align it correctly later.

Take the tower body and cap marked "B" and slide it over the post. Note the specific design on the side of the tower and install it in this direction facing the gem pop bumper.





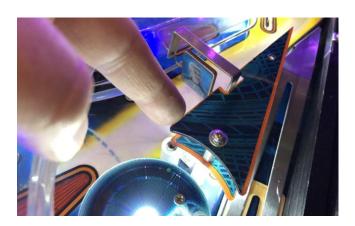




Remove the upper plastic, the two short metal posts under it and the lower plastic that Castor is admiring and grinning about.

Retain one of the screws to be used later to hold down Flynn's arcade .

You will not need these existing plastics anymore.



Step 13

We will skip this step because it is unlucky.

Step 14

This is getting easy eh? It's just like the other steps almost.

Grab assembly "C" and separate the led Wires and fish the wires thru the same hole as the spinner switch in the playfield.

Install the leds on the exposed threaded posts and install the green rubbers to keep them in place.



Step 15

Reinstall the short metal studs retained from step 12.

Do not overtighten!! Snug is just fine!! If you overtighten you can damage the led!

Try to align the leds like show in the picture.

Do not get all excited and install Flynn's arcade just yet. Having the extra space to do step 16 is nice. We will install the Flynn arcade later in step 22. Note : Ensure the led wires do not touch or interfere with the spinner switch.

Addendum Note : Step 15.1 - remove the screw from the top of this post or the Flynn arcade will not sit flat and it will crack when installed Lets reinstall the ramp! Carefully reinstall the left ramp using all those perfect pictures you took so you know what goes where. Lol yeah right..... you never took pictures did you ?

Place the ramp down from the top and fish all the disconnected wires from the ramp gates and flashers back thru the playfield holes.

After fishing the wires take a look at the towers and ramp lips. Make sure the towers are rotated and adjusted to look like the pictures.

Reinstall only the first 3 screws on the ramp Lip that are located closest to the player end of the machine and work to the rear. Leaving out the last 3 lip screws will allow you to slight lift the ramp for the Encom tower install.





Step 17

Remove the small plastic located to the left of the Quorra spinner. This is still easy to take off with the ramp back in position. The reason for installing the ramp before you install the Encom tower is the tower can get in the way and cause issues when reinstalling the ramp.

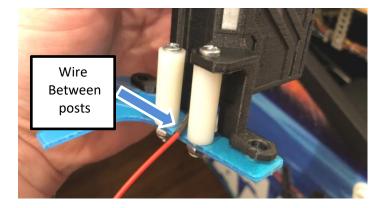


Step 18

With the small plastic assembly off remove the white post that is closest to the player and retain it for reinstallation.

Secure the Encom tower using the retained hardware. Snug up the bolt and the white post, do not overtighten the bolt so you can still rotate the tower to line up with the 2 screw holes in the plastic.

Ensure the wire is running between the posts!



Fish the led wire thru the existing playfield hole that the spinner switch uses.

Install the Encom tower and plastic assembly back into position using the retained 2 screws.

I bet right about now you think that I messed up and created a spot that the ball can get stuck behind the Encom Tower during game play, but you are mistaken.

The rear lower section of the tower is cut out To allow the ball to roll under it and drop Back into the Quorra spinner area.

Don't believe me? Give it a try.....



Step 20

Finish the ramp reinstallation by taking the 2 of the last 3 larger Philips screws and inserting them into the tower caps.

Each tower cap is made for a specific tower. The caps that were with each tower allow the cap top to be sloped away from the player. See the pictures to see how they install. The designs will line up when installed correctly allowing the player to see the illuminated sloped tops.

I do treat the cap screw shoulders with CA glue to help reinforce that area so you might notice a slight discolouration on the cap bottom near the screw area.

Do not overtighten!! Snug is just fine!!

Step 21

Install the last larger Philips screw to the ramp lip along the rear and install the 2 retained small screws that go at the ramp entry.





Take Flynn's arcade and place it over the 2 Short metal posts. Reuse one of the screws Removed in step 12.

Do not overtighten!! Snug is just fine!!



Step 23

Lift the playfield and locate all the new led wires that you pushed thru the playfield holes.

Plug the alligator clip half of the led leads as required.

Gently pull out any slack in the led wires. Carefully take up the slack for the rear tower "A" When the slack is taken up properly the wire will run towards the rear of the machine and then quickly return under the plastic. Refer back to the left picture in step 6. You can see the wire running along the top of the plastic and then it will do a 180 and return under the plastic.

The gator clips now need to chomp down on a few of the playfields GI (General illumination) sockets. GI sockets are the lights automatically turn on and remain on all the time when the machine is power on.

Find a GI socket that is close and clip the gator jaws on one socket tab and the other gator clip on the other socket tab. The led wire colours or gator clip colours are not important, any wire can be can be connected to either + positive or - negative sides of the GI socket.

Make sure you gator clip is not bridging or making contact with anything metal or electrified, also make sure the rubber boot is covering as much as possible of the gator jaws.

Turn on the machine and verify all items are working.

Go play Tron!