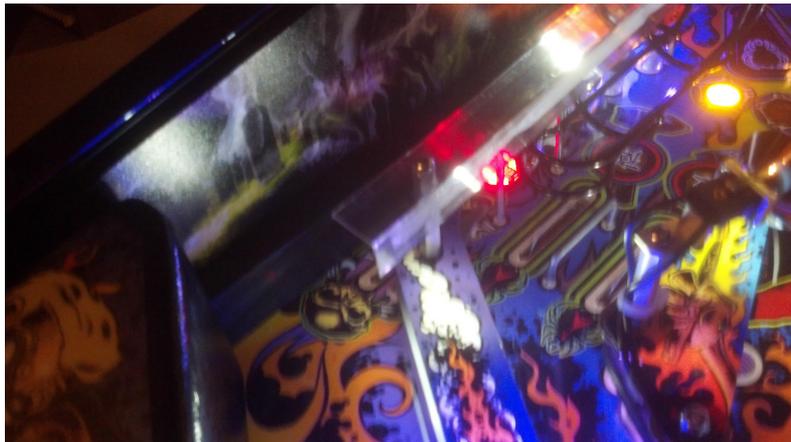


Thank you for purchasing the Metallica Pinblades and LEDs lighting kit. This is step by step directions for the installation of the LEDs to your machine.

Pinball Refinery is not responsible for any damage(s) to the pinball machine that might occur by adding this modification to your machine, by starting any of this installation you agree to these terms and conditions.

1. Unplug the power cord to the pinball machine, safety first. Now remove the lock down bar assembly, the playfield glass, and the pinballs. Be careful not to break the playfield glass when it's off the machine.
2. The kit will come with the metal hex mounting standoffs and hardware to complete the installation. There are 3 standoffs that are 1.5" and 1 that is 1.25" tall. The first mounting point will use a 1.5" standoff and you will remove the nut from the left return lane. Now replace it with the standoff and secure the plastic LED mounting bracket with the Phillips screw. The nut is not used anymore.



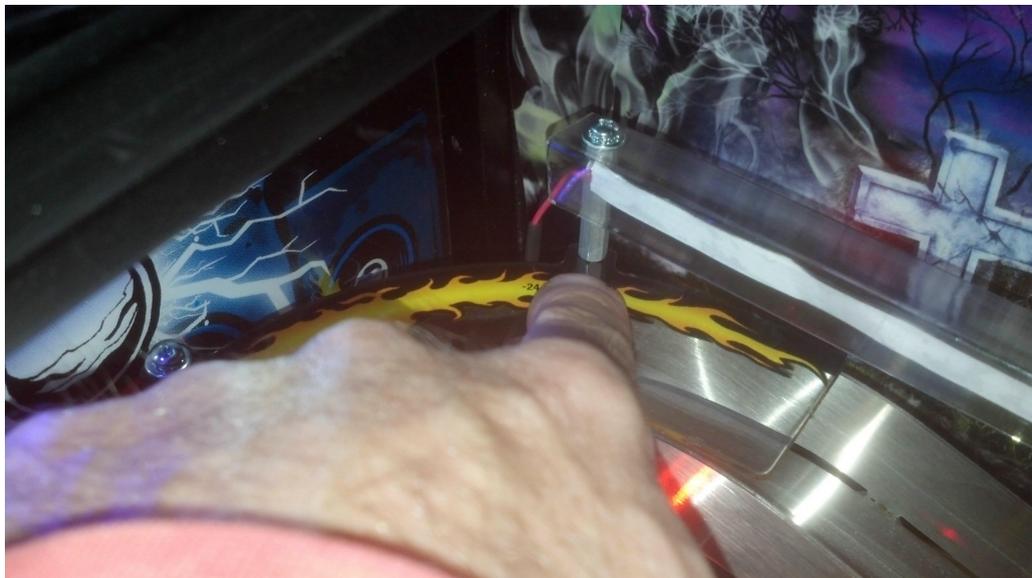
3. Now secure the top of the left LED strip bracket to the top area of the machine on the rear screw of the exit switch, remove the factory Phillips screw, install the 1.5" metal hex standoff and you will reuse the factory Phillips screw to secure them.



4. Now install the right side LED bracket to the ramp cover that holds the pinball in the ramp. Again just remove the factory Phillips screw, install the 1.5" metal hex standoff and secure the LED bracket to the standoff.



5. Continue to secure the right side LED bracket to the upper right area of the machine. Remove the factory Phillips screw on the right side of the ramp cover. Install the 1.25" metal hex standoff and reuse the factory Phillips screw to secure the LED bracket.



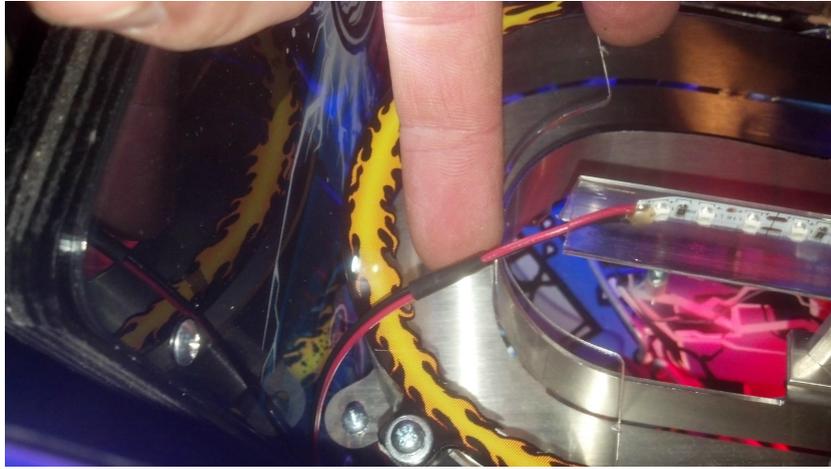
6. Now route the wire down under the playfield, we'll start on the right side.... There is an opening in front of the jet poppers for this wire to go through. Route the wire under this plastic so the pinball doesn't get interference and to the opening. Push the extra wire down and when we raise up the playfield, to route the wires.



Another view.....



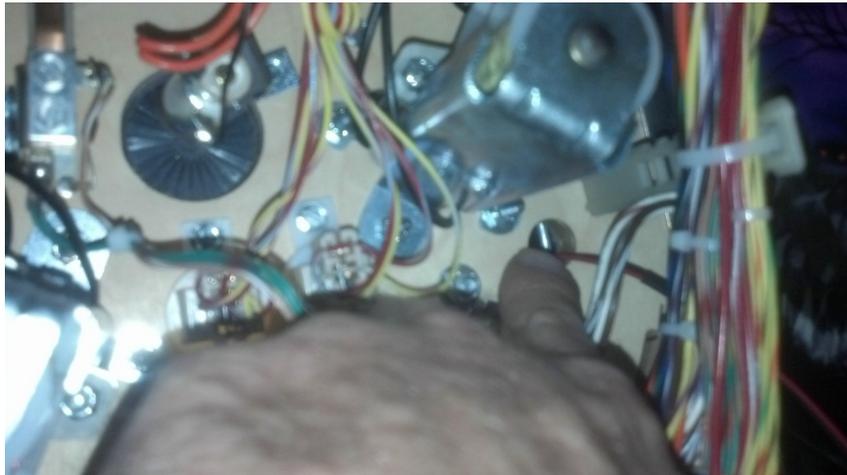
7. Route the left side wires to the far back left corner of the machine where you will see a factory harness go through.



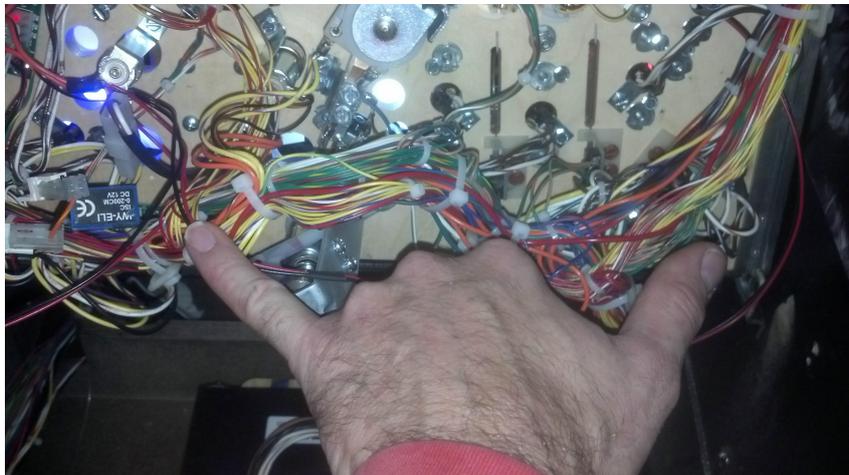
8. Now lift up the playfield and start routing the wires to the back area of Sparky. There are two flashers here that shine up to the rear area of Sparky's chair. Both of the LED strips will be connected to either one of these to factory flashers. Left side view as it comes through the playfield.



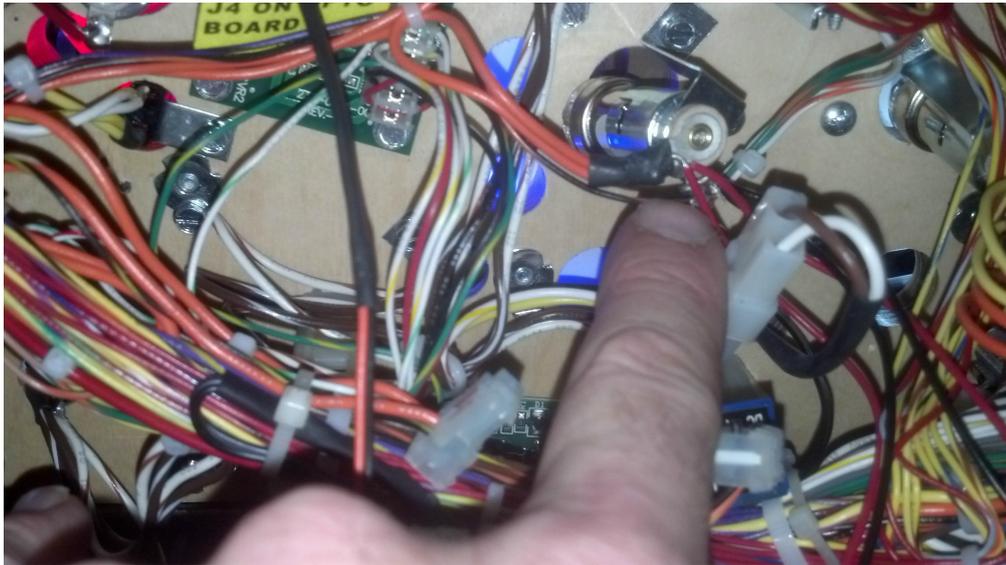
Right side view as it comes through the playfield



View of the wires routing to the flasher....



9. Sparky's flashers are side by side and you can see both of them on this picture. Solder the two LED wiring harness to the Sparky flasher, the LED's red wire will connect to the factory's orange wire. The LED's black wire will connect to the factory's black wire with the colored stripe. Now use the zip ties to secure the LED's harness to the factory's harness.



This completes the Metallica Pinblades LEDs installation. Enjoy the light show, it's incredible.

Thanks,
Steve
www.pinballrefinery.com