



HARMON CUSTOMS

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GEN 2 FORD RAPTOR LED BACKLIT LETTER INSTALLATION INSTRUCTIONS



READ THESE INSTRUCTIONS IN THEIR ENTIRETY BEFORE YOU BEGIN

Text or call us if you have any questions or issues. 702-366-6352

---Tools Needed---

- Ratchet/socket
- Heat gun or lighter
- Small flat tip screw driver
- Drill
- 7/64 drill bit
- Needle nose pliers
- Wire cutters

-To ensure nothing was damaged in shipping please inspect everything and also using a 9V battery touch the red to positive and black to negative on the backs of the letters to ensure the letters illuminate before beginning the install. Be careful to not pull on the wiring coming out of the back of the letter as you may dislodge the soldered joints.

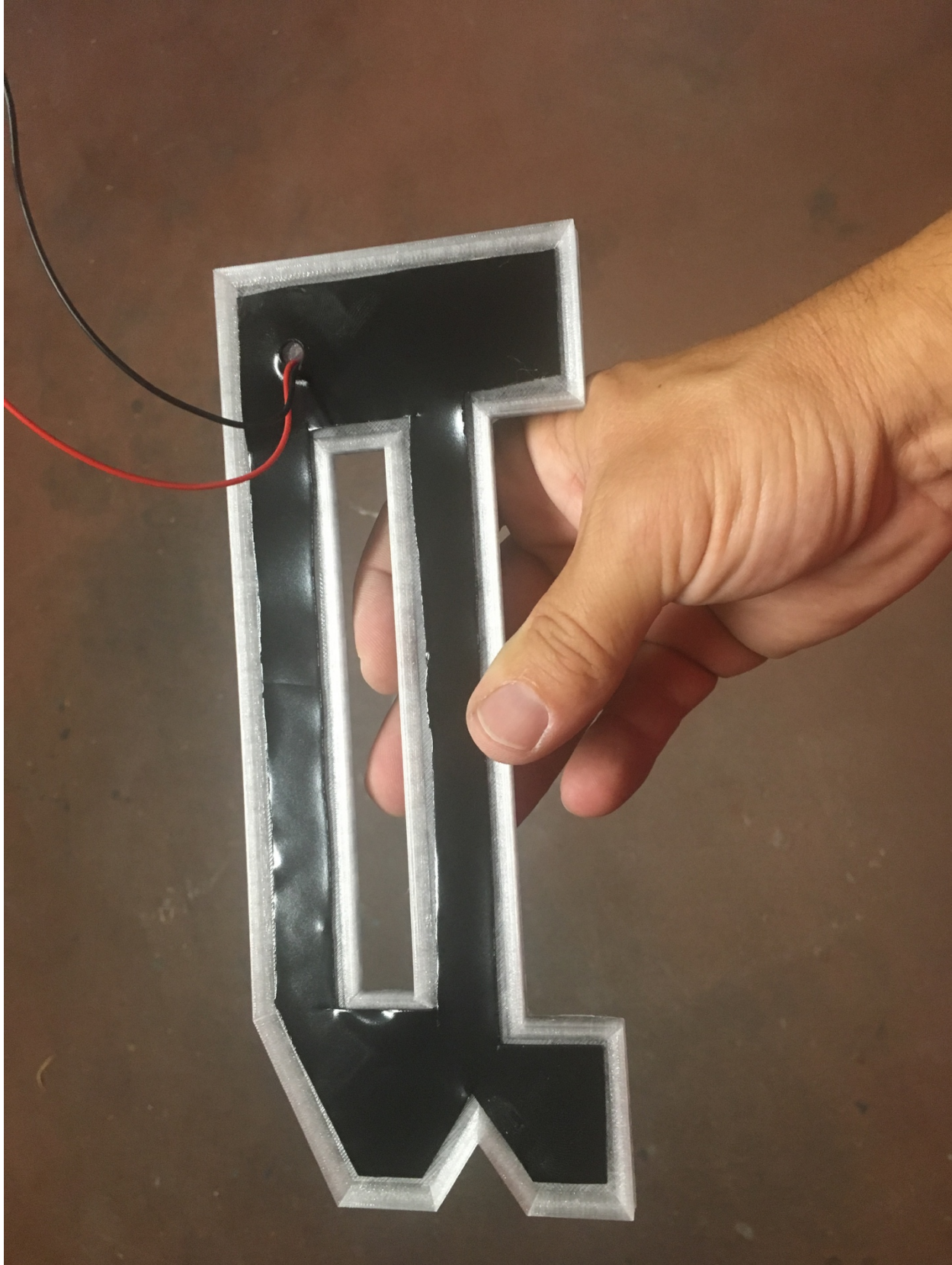
-Disconnect negative battery terminal

-Remove your grille. Steps can be found in the video below.

<https://www.youtube.com/watch?v=JxsV6j51egc>



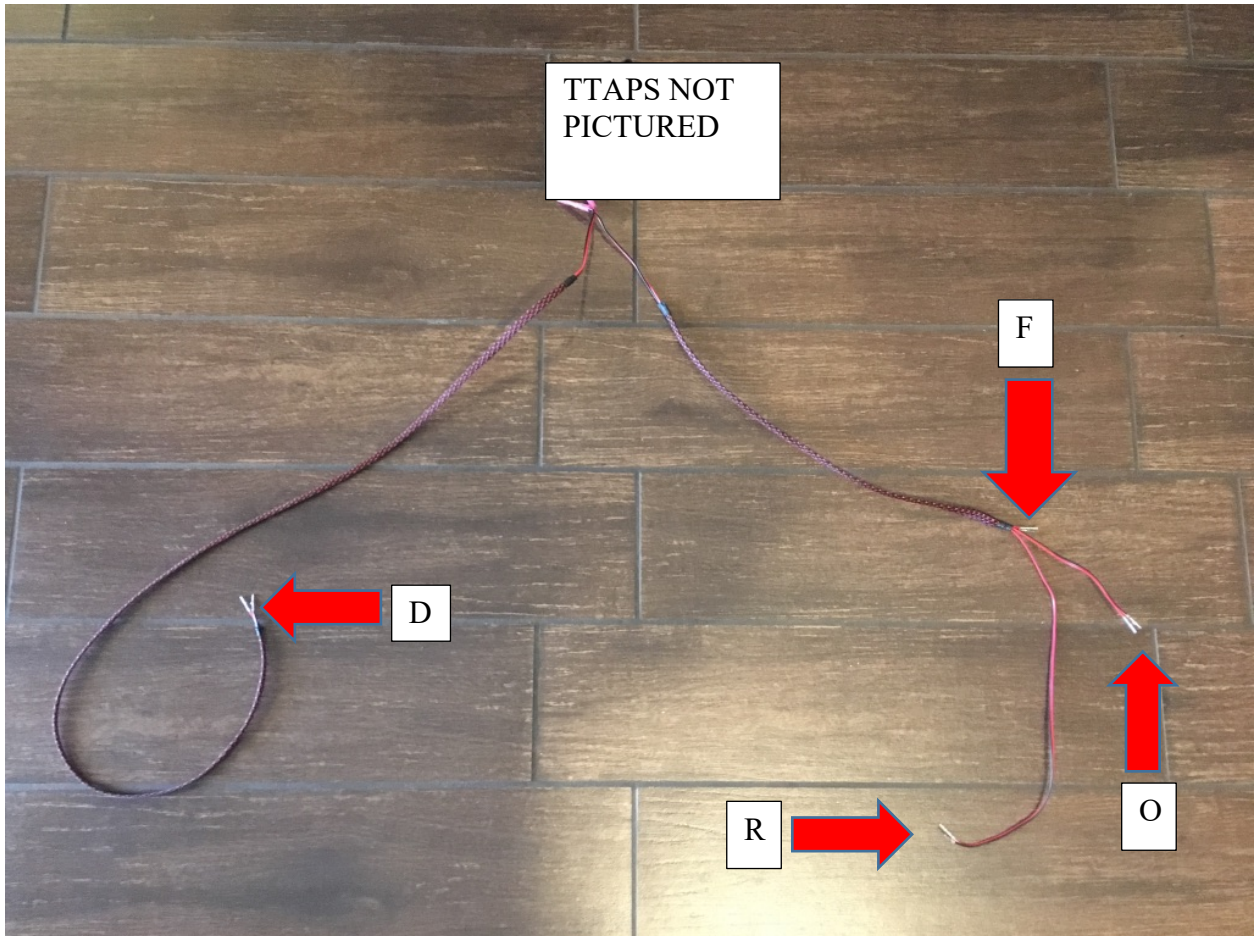
- Use the double-sided tape as a template and place the double-sided tape (with the backings still installed so they don't stick) on top of the letters of the grille and mark the holes for the wire to pass through, as pictured above.
- Drill the holes for the letters wiring.
- Clean the grille/letters with rubbing alcohol.
- Peel the paper backing side of the double-sided tape and place the tape on the backside of the of the LED backlit letters
- Then peel the red plastic side of the double-sided tape backing and CAREFULLY place the letters onto the grille. Be careful to feed the wire through the hole without pinching the wire. DO NOT PULL ON THE WIRES! As you could dislodge the soldered joints.





-The double sided 3M VHB tape is pressure sensitive and EXTREMELY strong. Once it is in place it is hard to remove so be sure that the letters are lined up before firmly pressing the letters against the grille. Don't push too hard as you could break your grille, firmly squeeze the letters to ensure a solid bond.

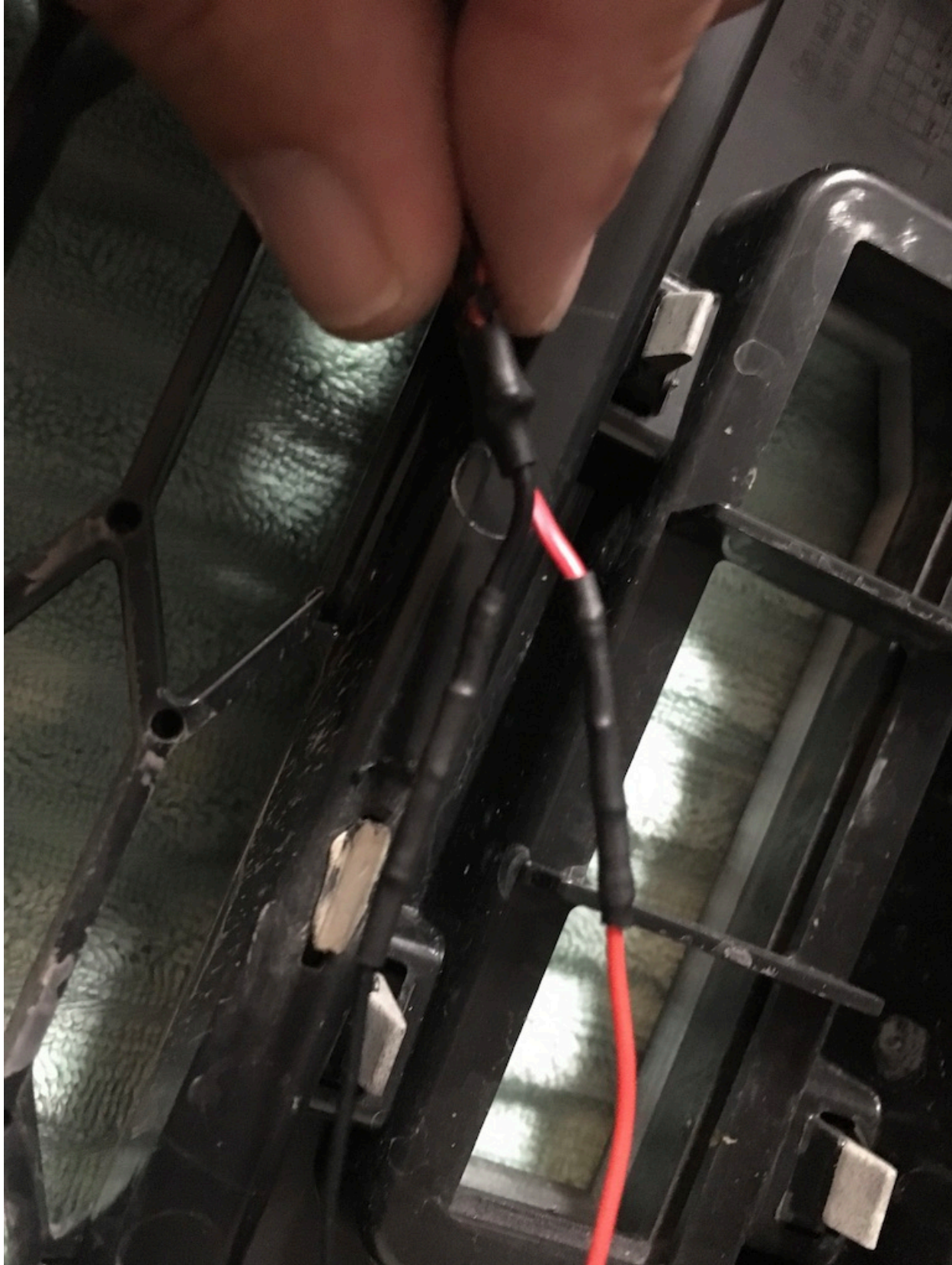
-If mis-aligned and you have to re-position (hopefully not) DO NOT PULL ON THE LETTERS. As you could disbond the letter from the backing. You will need to use fishing line to saw the letters off and start over.



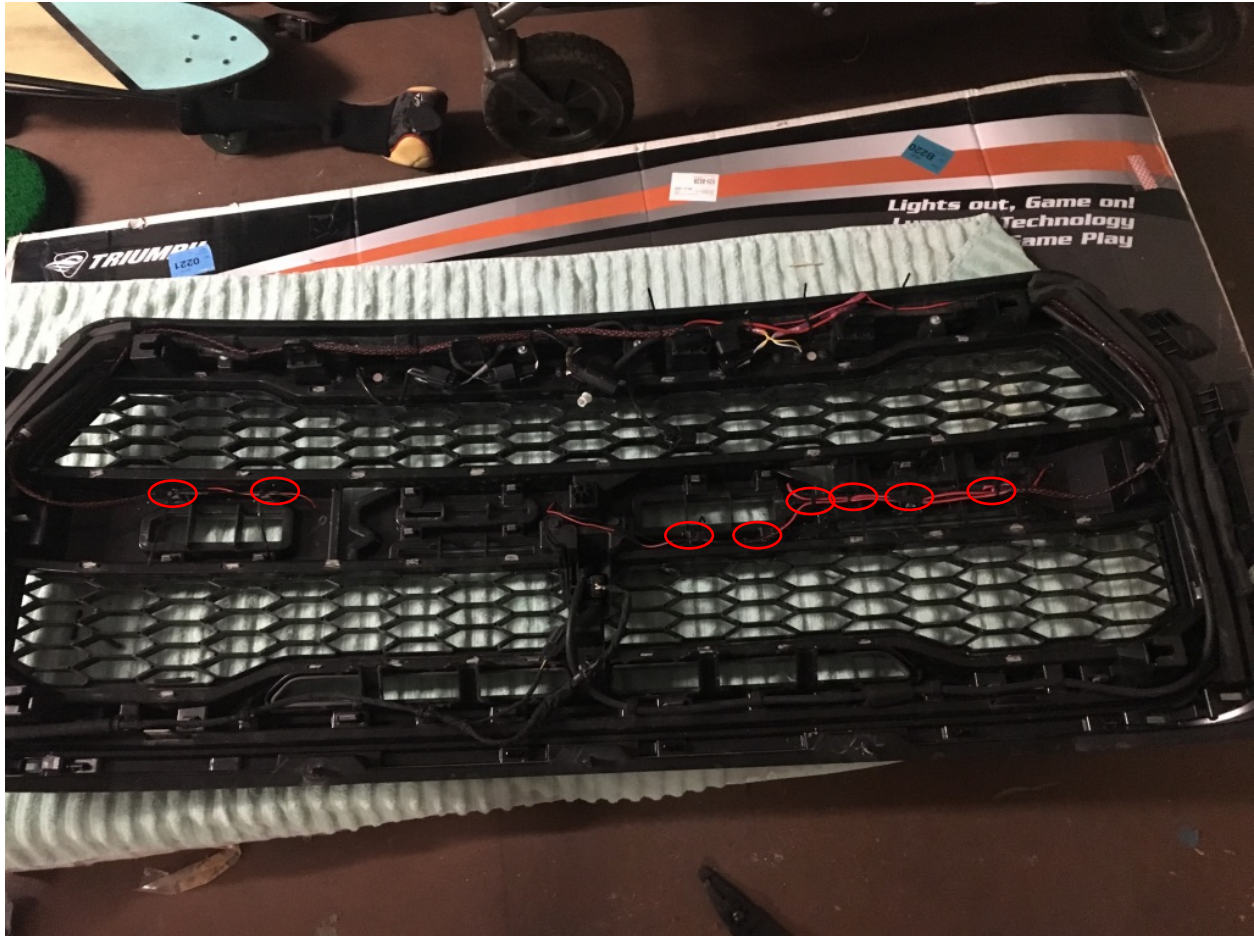


-Position the wiring harness onto the backside of the grille similar to the picture above.

-Plug the letters wiring into the wiring harness (red to red) (black to black) (PRESS FIRMLY) per the picture above, and heat shrink the connections using the supplied heat shrink and a heat gun or lighter to seal out any moisture. Be sure the heat shrink is properly positioned and no bare metal on the pins are visible. Be sure to not pull the wiring coming out of the back of the letter too tightly as you may damage the soldered connection on the inside, you should have just a little bit of a slack to the wire as it leaves the back of the letter. **CAUTION: DO NOT APPLY POWER BEFORE THESE CONNECTIONS ARE HEAT SHRUNK AND EVERYTHING IS INSTALLED.**



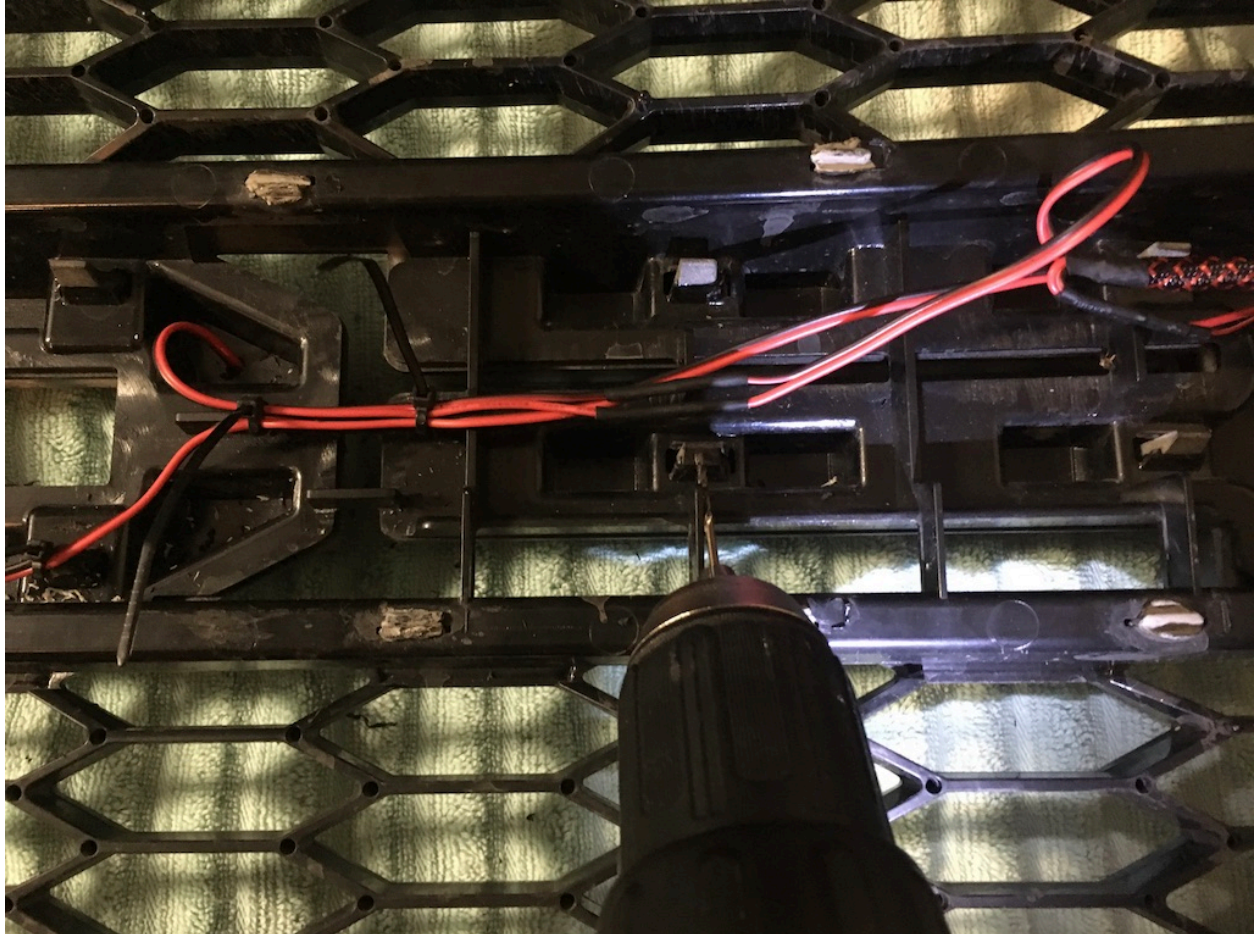
- Route (just lay in place for now) wiring harness along the sides of the grille as pictured.
- Drill approximately 8-9 small holes using a 7/64 drill bit for equivalent, in the backside of your grill as the locations pictured below in order to secure using the supplied zip ties.
- You may have to drill a few more along the sides and top if you do not have the front camera option, as you will use the camera washer line to route/secure the harness to if you have that option.

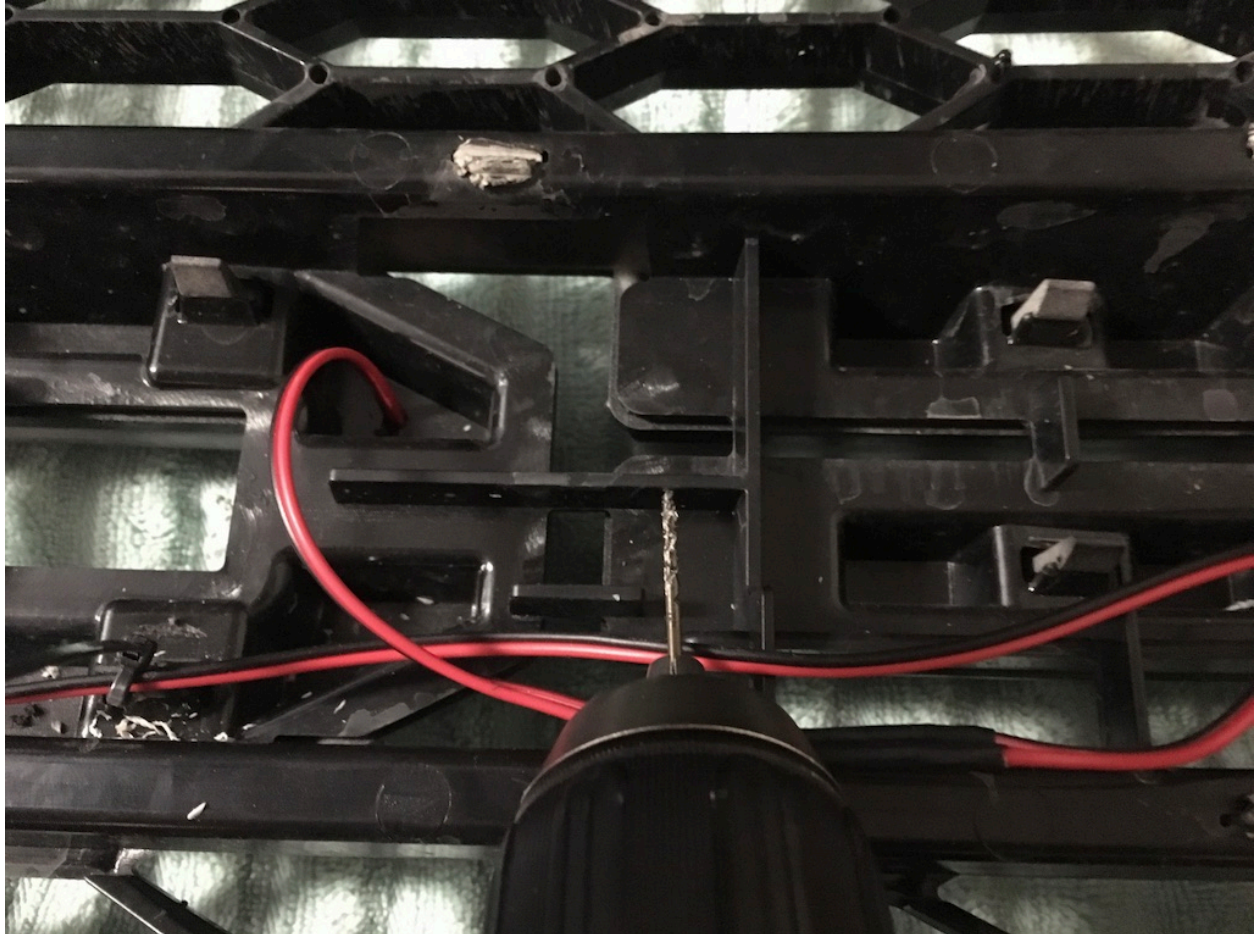


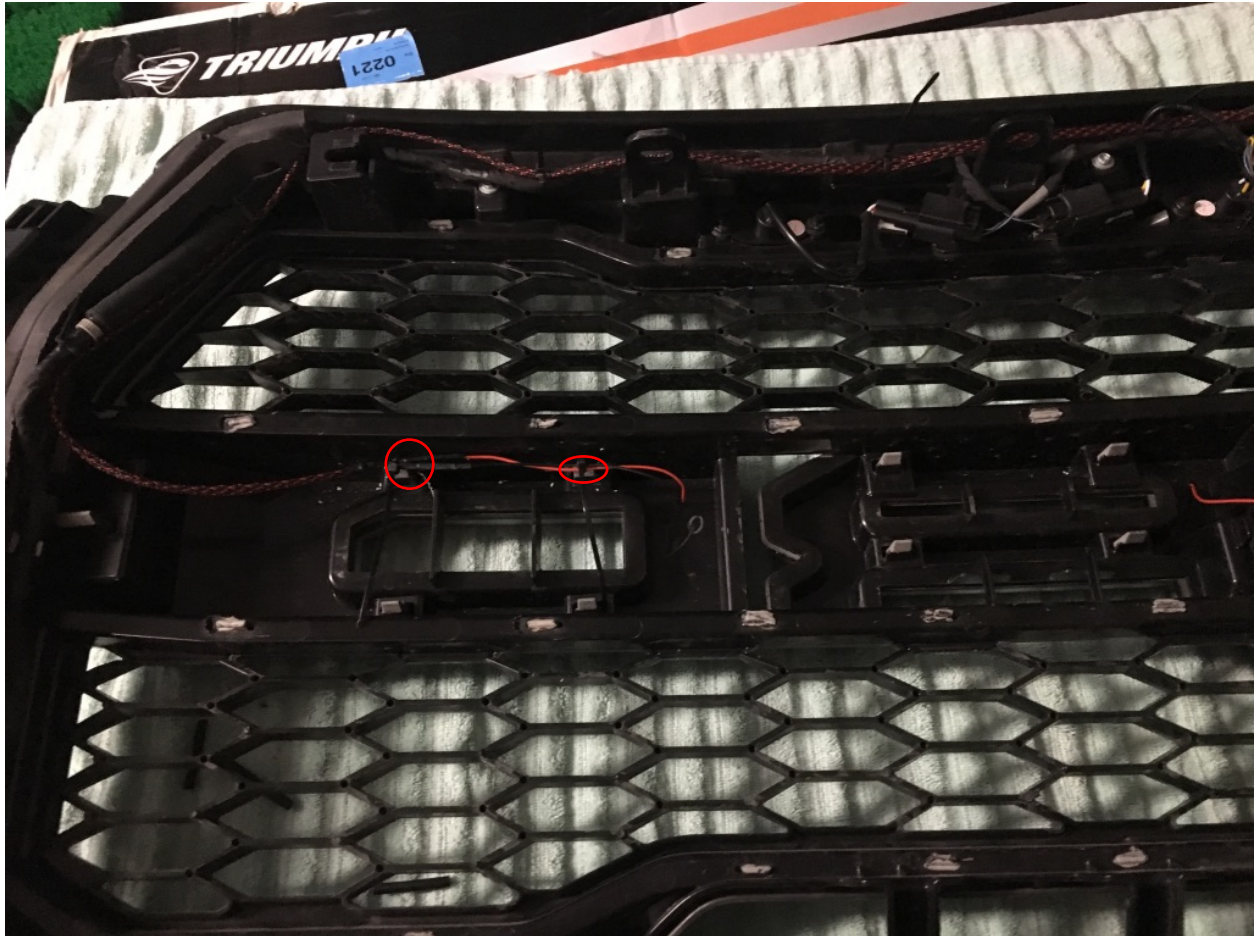


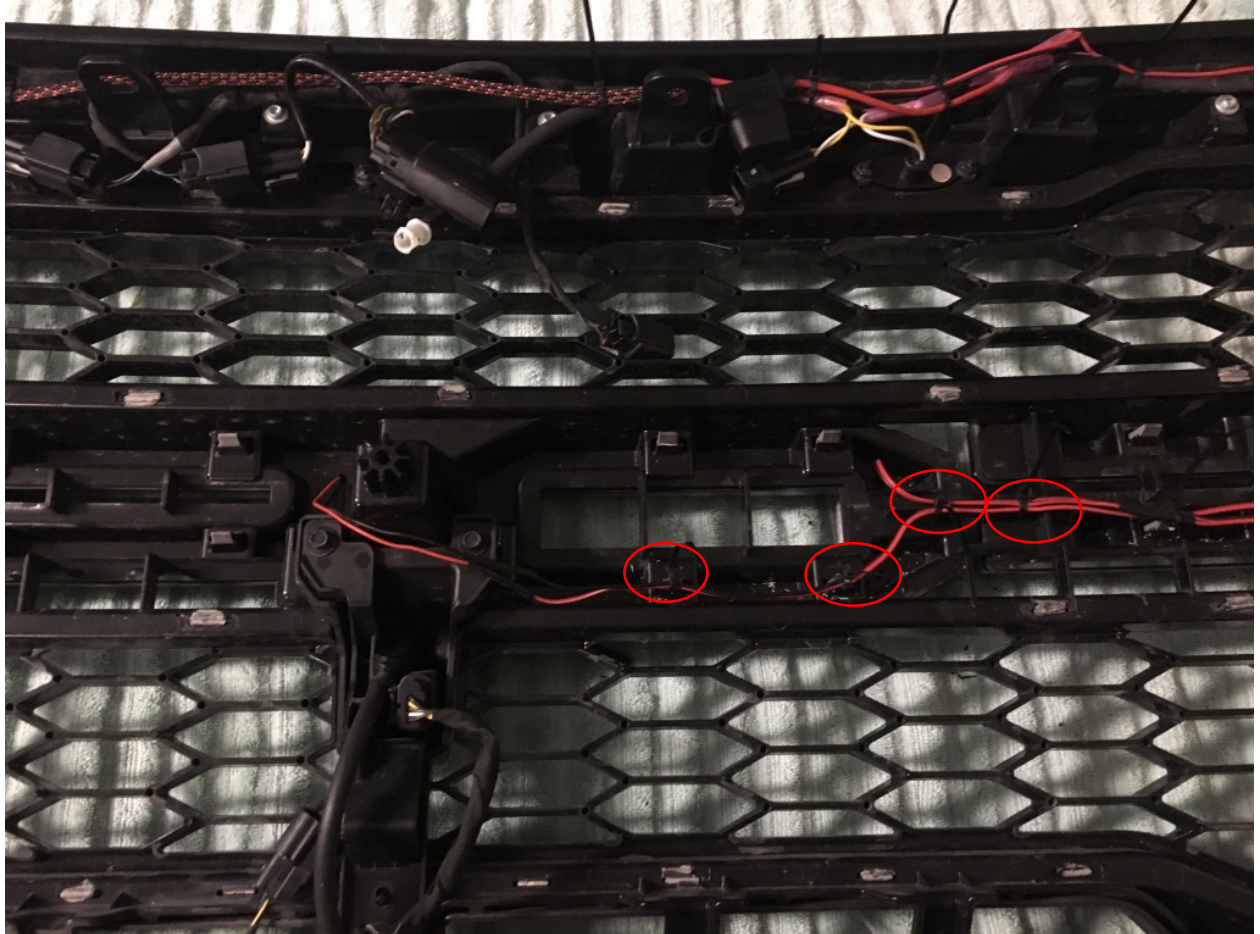


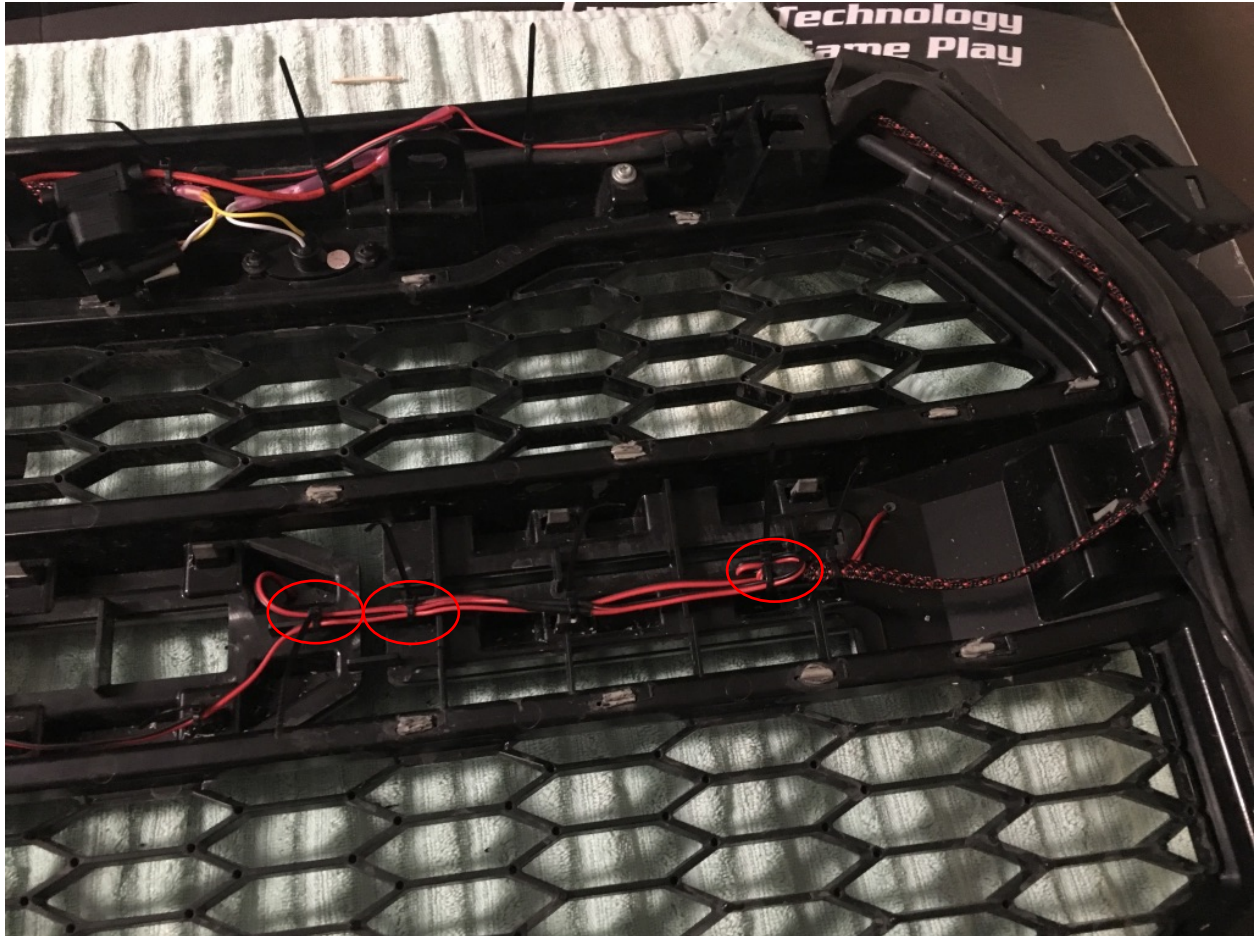






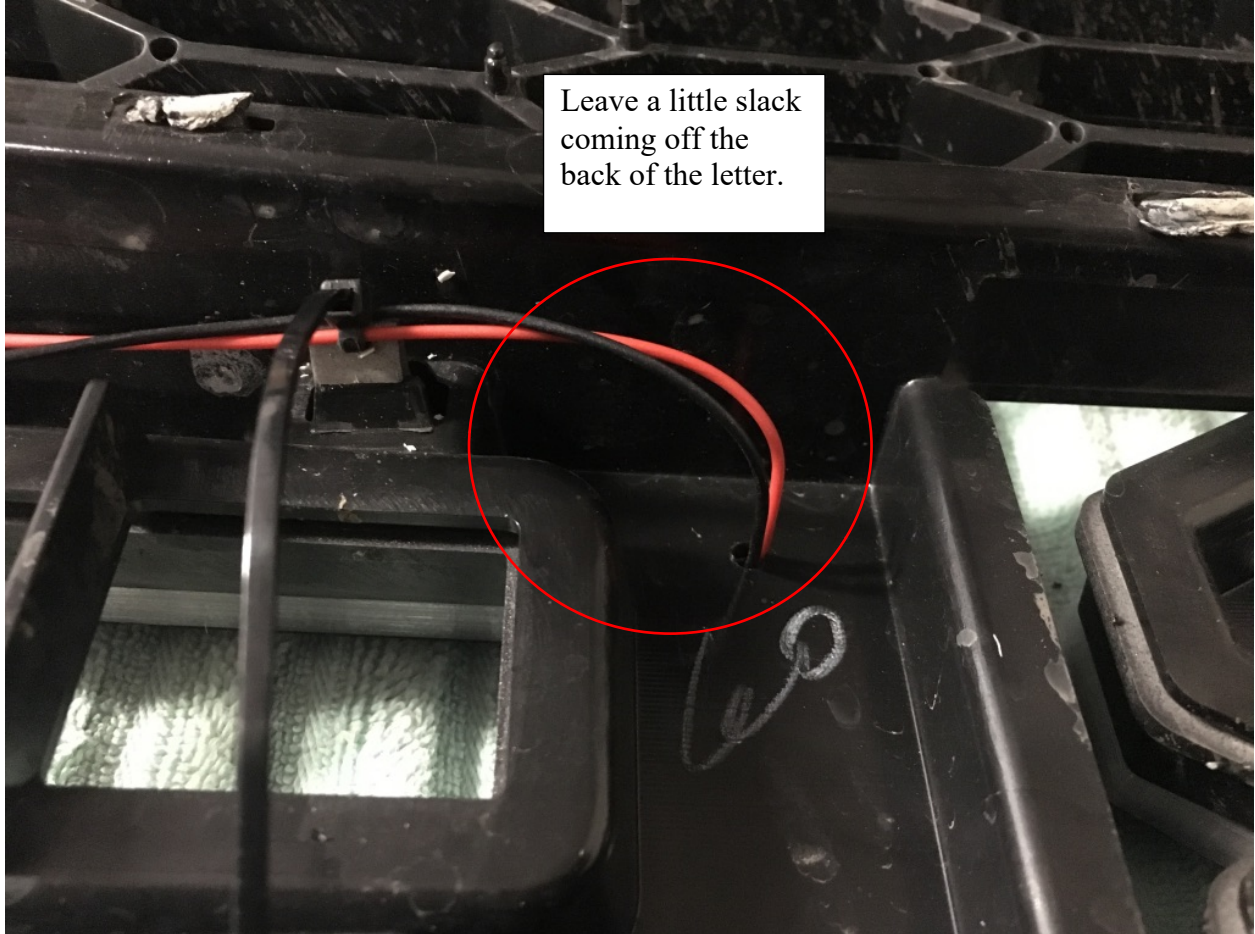






-Working from the letters, out towards the edge of the grille secure the wiring harness with the zip ties. (leave a little slack coming off the backside of the letters) Use zip ties to secure around the perimeter of the grille as well, to the camera washer/harness (if applicable).

-DO NOT PULL THE WIRES TIGHTLY COMING OUT OF THE BACK OF THE LETTERS. LEAVE A LITTLE STRAIN RELIEF/SLACK. Like the picture below.



Leave a little slack
coming off the
back of the letter.

-Install the t-taps onto the wires of the passenger side marker light at the top of the grille. You may have to cut away some of the protective sheeting to get to the exposed wire. Another option is to cut the wiring harness and splice the letters wiring harness into it, or you can wire to any 12V power source of your choice. If you choose wiring to another 12v power source we suggest not having the letters powered on all of the time so you can prolong the life of the LED's and avoid heat buildup.



-Install the supplied t-taps to the passenger side marker light wiring harness. Yellow wire is positive, white is the negative. So yellow of the truck side to red on the harness side, and white on the truck side to black on the harness side. We suggest using silicone to make the connections as waterproof as possible. The alternative method

would be to cut the plug harness and splice in the wiring using wire crimps, and heat shrink.

-Install grille, while being careful that your wiring is not getting pinched or chafed at any point.

-Connect the negative battery terminal.

-Test the lights as necessary.

-I WANT YOUR FEEDBACK. Good or bad. If you have a suggestion on how to make something better, easier, faster, etc please feel free to let me know. THANK YOU!

-ENJOY YOUR NEW LIGHTS! Send us some pics!
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