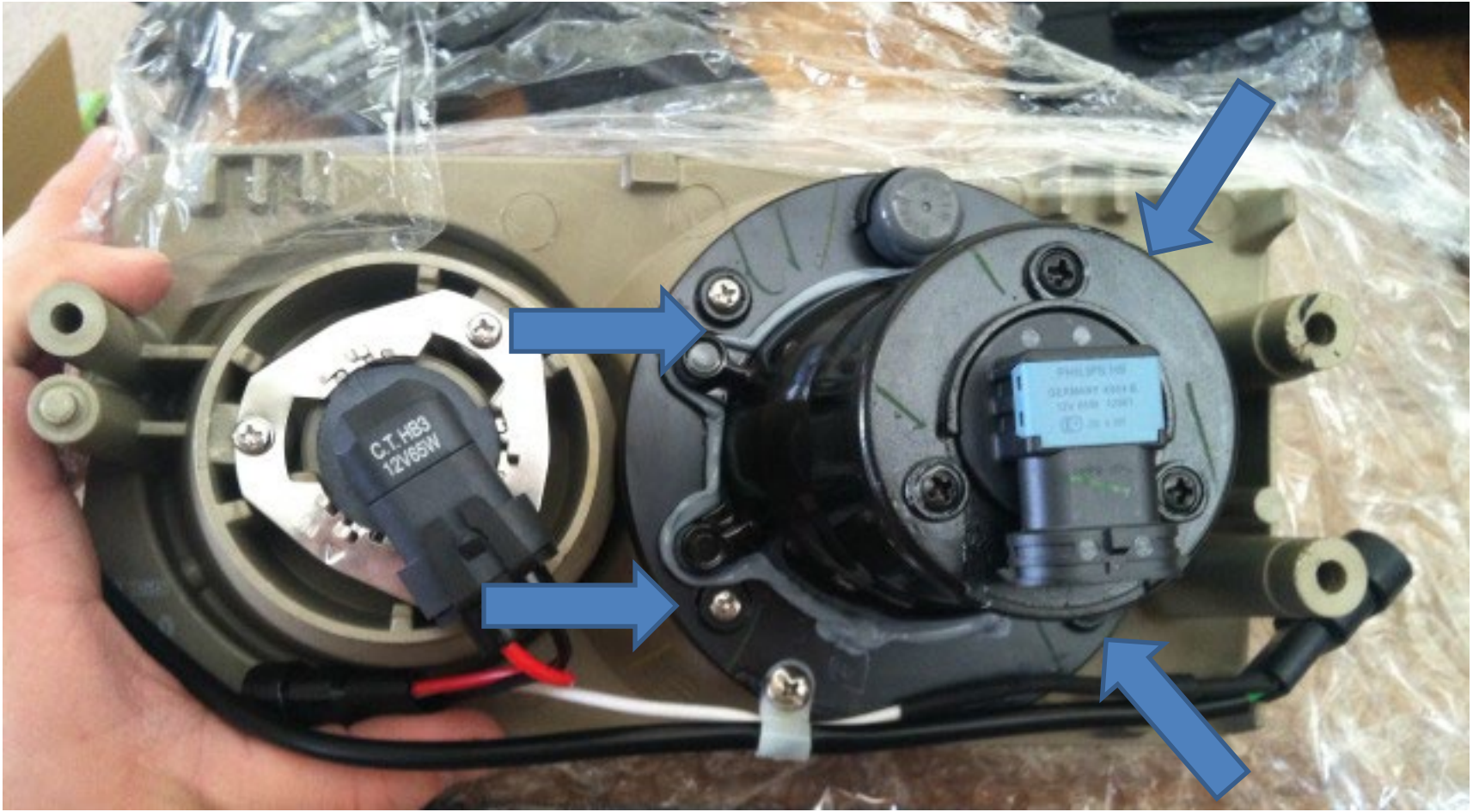




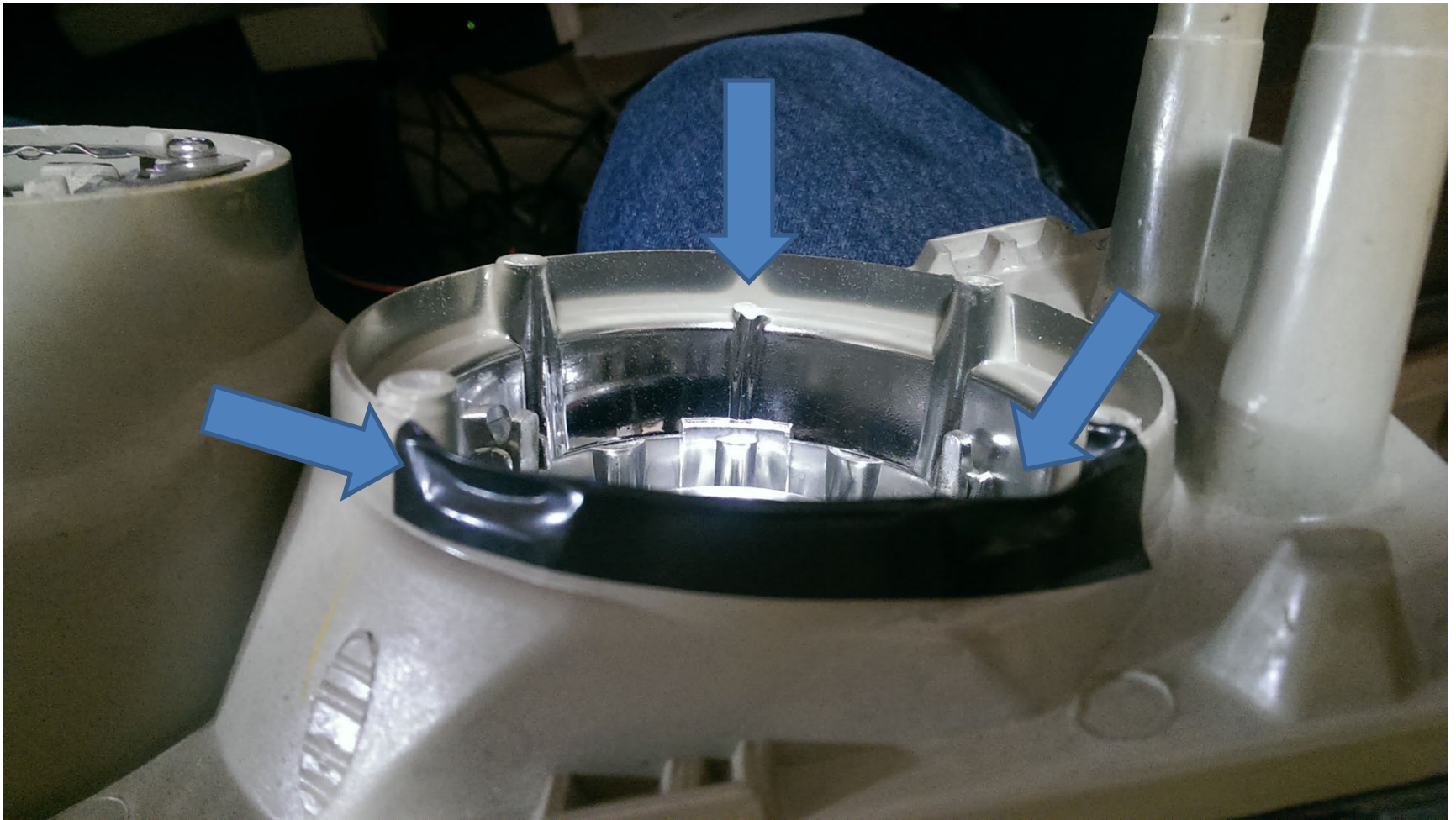
Radioflyer Innovations Bi-LED ACA Headlights Modification

DIY Kit Conversion Instructions

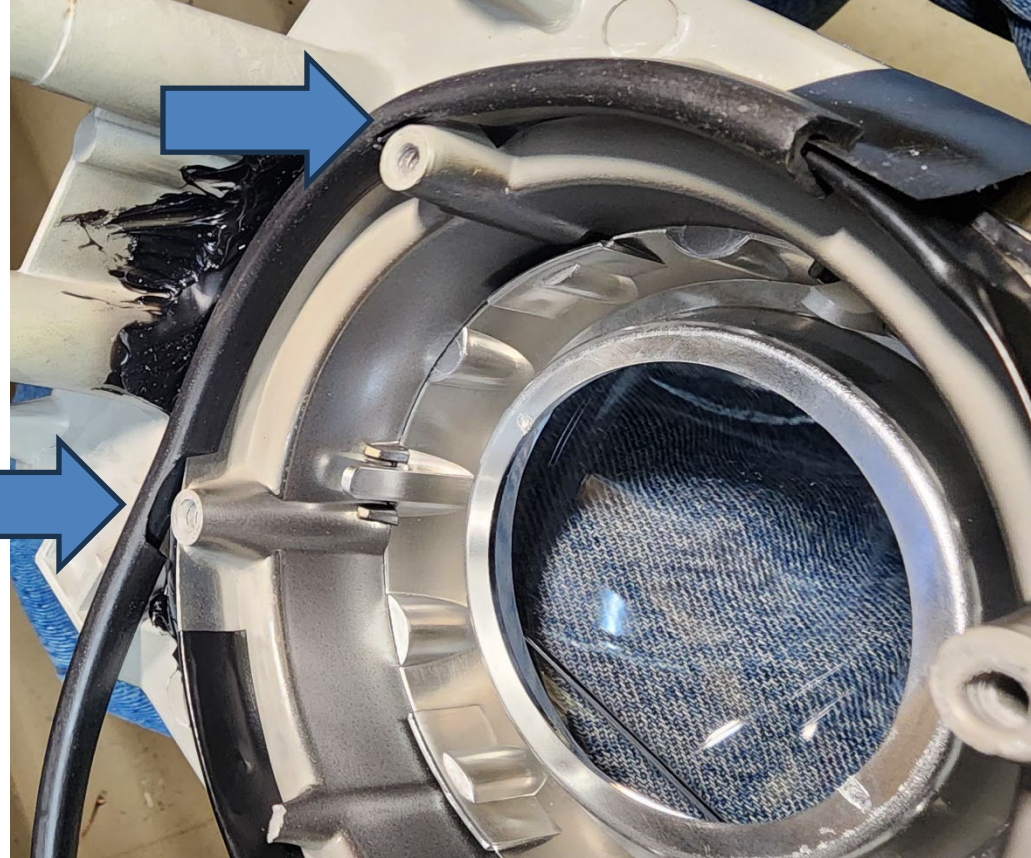
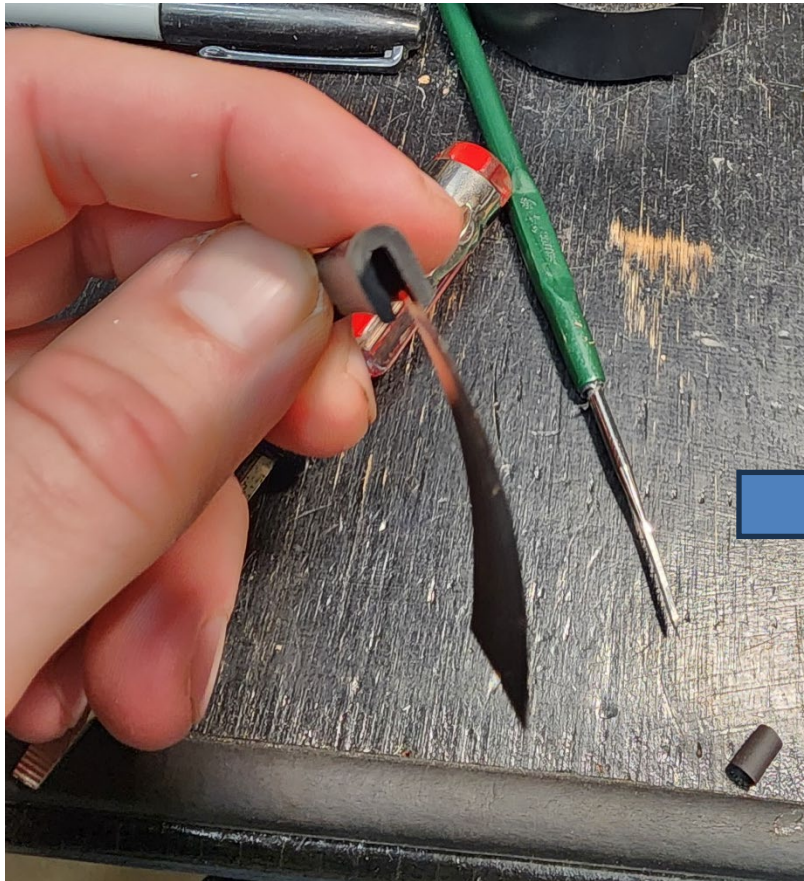
1. Remove the factory projector by removing the 4 silver Phillips head screws on the backside of the housing. A gentle tap on the projector to break it loose may be required. (Original ACA projector shown. If you're upgrading from our Bi-Xenon system, you can skip to step 4



2. Break off the knob marked by the arrow and use a small strip of electrical tape folded over to block off the cutouts on the bottom part of the housing.



3a. Install a section of electrical tape (about 1.5-2") on the INSIDE of the U shaped weatherstrip as shown with sticky side facing AWAY from the side with cutouts. Then mount the weatherstrip on the lip of the headlight housing with the cutout side facing inward lining up with the bolt mounts as shown



3b. Bring the other end of the U profile weatherstrip around and open it up to allow it to stick to the electrical tape so that both ends of the weatherstrip are mirroring each other with the electrical tap in the middle.



3c. Wrap the electrical tape around the outside of the U-profile weatherstrip and attach it to the inside lip of the headlight housing as shown. (this provides a complete seal with no gaps when compressed by the new projector assembly weather seal).



4. The provided spacers have a lip. This lip slips under the foam weatherstrip to help hold it in place during installation. Line the spacer up with the holes in the aluminum plate. (Nova Edition projector show, but this applies to both projectors)



5. Insert the screws provided from the back side of the projector plate through the spacer. The combination of screw and spacer will hold both in place during installation. (Nova Edition projector show, but this applies to both projectors)



6. Secure the projector assembly to the headlight housing by lining up the screws with the screw holes in the projector housing. (Cooling fan goes on the bottom) This may require some willing of each screw. I suggest making sure all 4 screws are partially inserted into the holes before tightening. Tighten **BY HAND** until you feel resistance from the compression of the nylon spacer. The foam strip will compress providing a solid seal to the housing. (Nova Edition projector show, but this applies to both projectors)



Connections (Standard Projector)

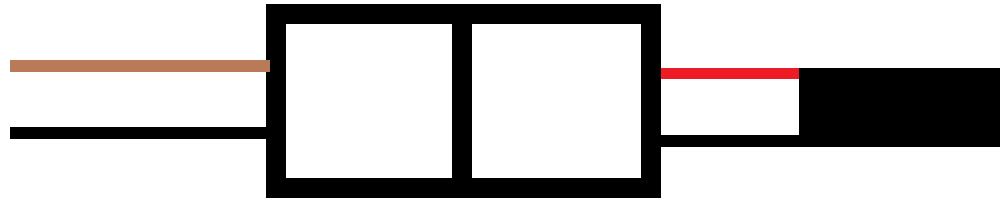
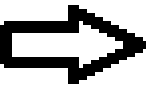
7a. Set the headlight in the opening and secure the lifting arm to the headlight motor shaft. On the driver's side connect the factory low beam connector (tan and black wires) directly to the LED wires coming out of the back of the projector. Then connect the high beam (green and black wires) to the connector that goes between the high beam bulb and wires coming from the bottom of the projector.



Driver's side connection

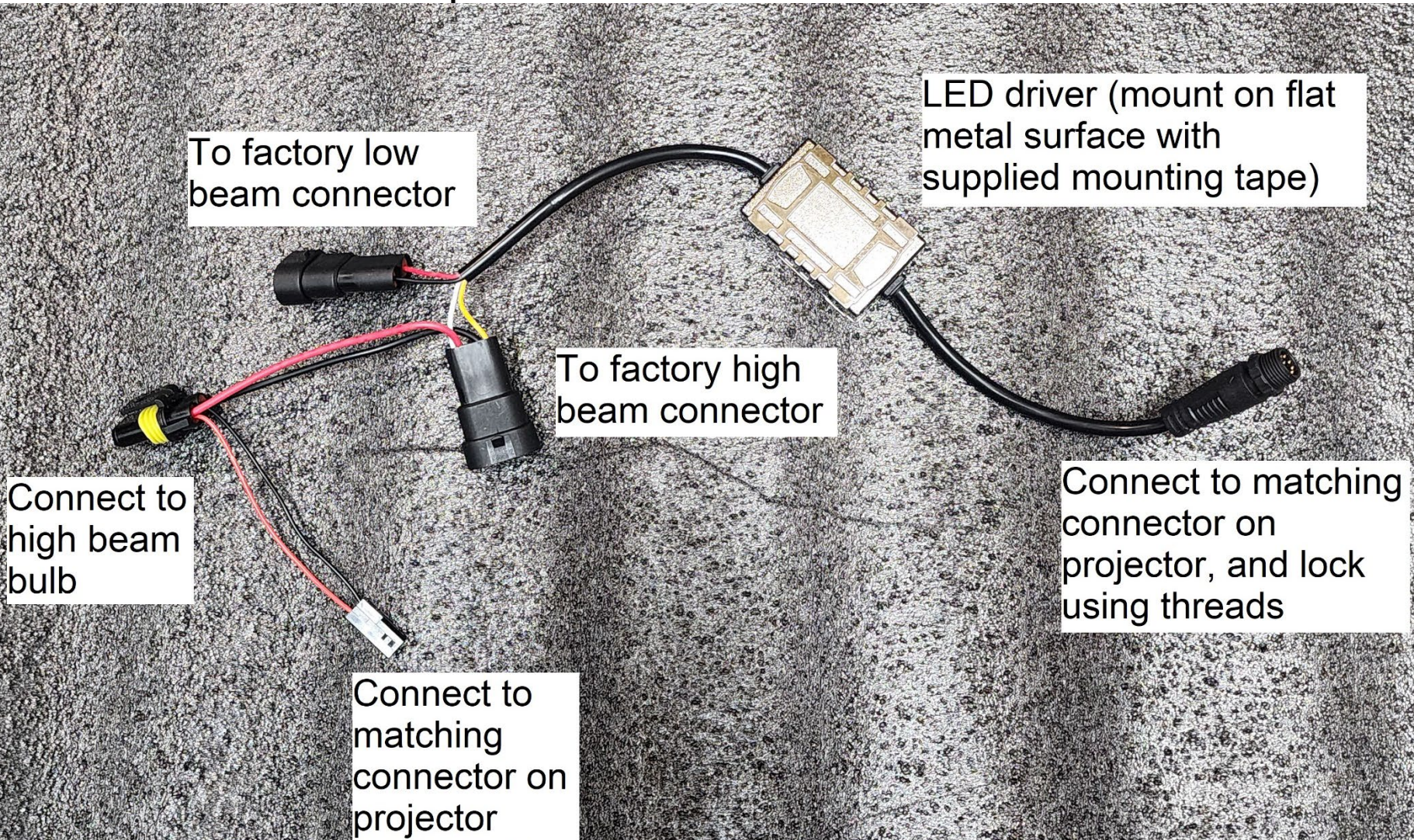
Factory low
beam
connector

To LED driver



Connections (Nova Edition)

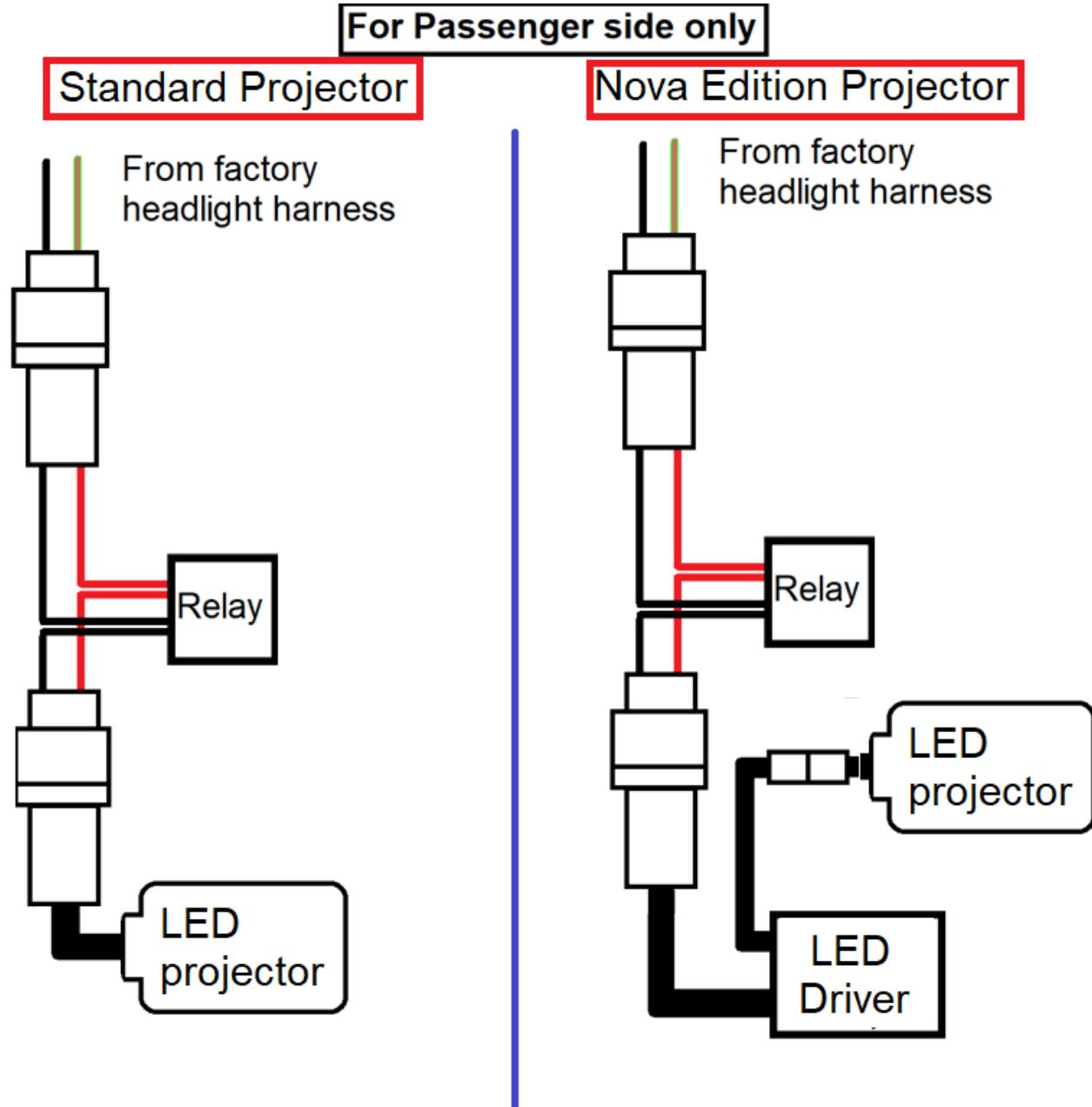
7b. Make the following connections as shown. Make sure the black wires line up.



8. This wiring is specific to the PASSENGER SIDE ONLY

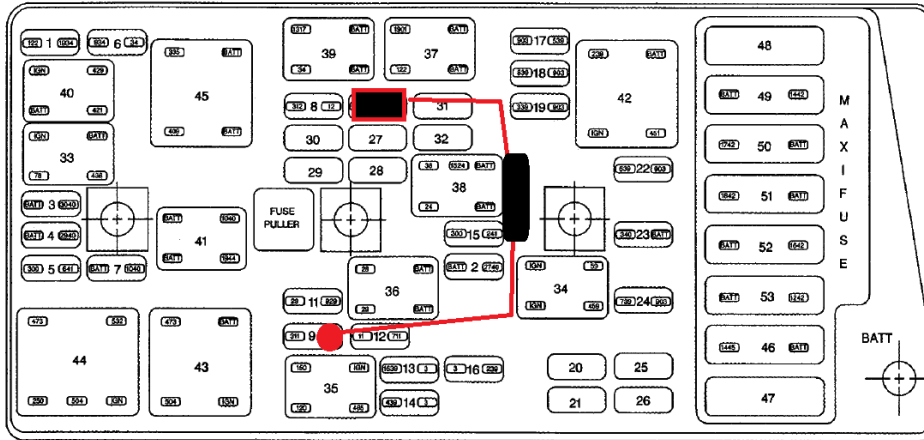
Locate the supplied relay harness with a male and female connector. This installs between the factory low beam connector and the LED projector (standard projector) or between the factory low beam connector and the LED driver (for the NOVA series projector)

9. The Driver's side will NOT have a relay harness. Plug the factory low beam directly into the projector (standard) or LED driver (Nova edition)



Installation of Hi-4 harness

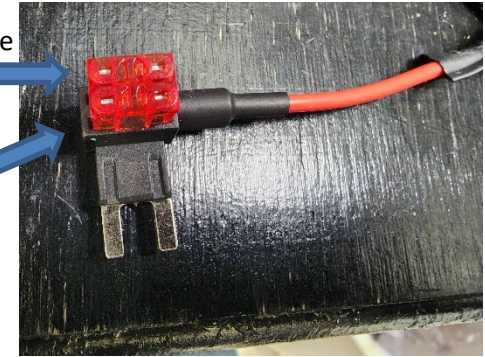
9. Remove the cover of the under-hood fuse box. Fuse 10 will be removed from the factory location and installed on the lower slot of the add-a-fuse. Add-a-fuse is installed in the #10 slot. Fuse # 9 is tapped with other side of harness



Included Fuse



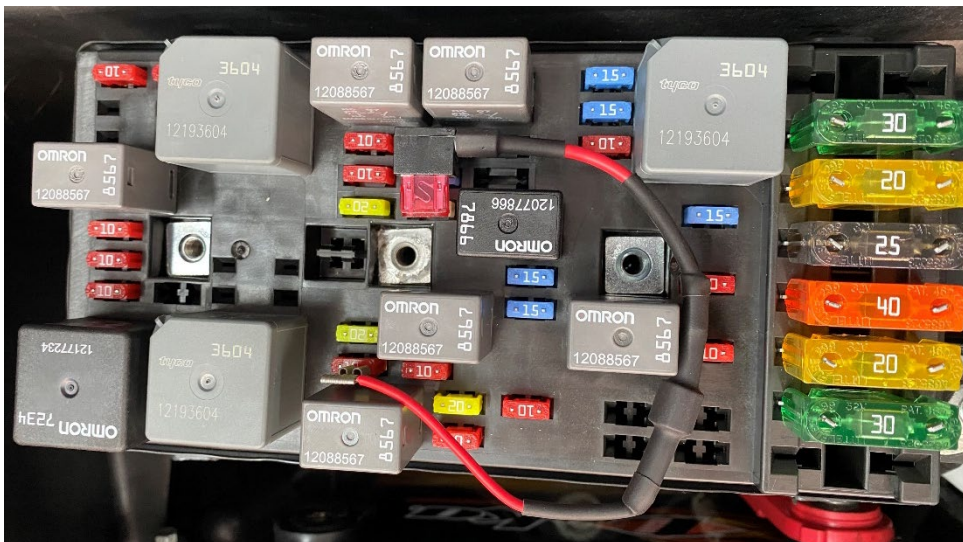
Factory #10 fuse goes in lower slot



Tap the fuse as shown using the fuse taps supplied with your harness. The leg of the fuse will slide through the tap and back into the fuse socket. The fuse may not seat completely, but as long as you have good contact it will work as intended. Fuse taps install like this:



Once installed, test your lights again to ensure full function. Your low beams should remain lit when in high beam mode.



Aiming.

10. Park your car on a level surface 15-20 feet away from a wall (preferably a white or light colored wall) You may need painter's/masking tape and a tape measure as well.

The lower (left) portion of the cutoff should be between 22 and 24" for a stock ride-height car. Lowered cars should be 21-22" from the ground.

The "step" in the cutoff pattern should shoot directly in front of each headlight roughly the width of the car. This way, the steps (which are the most intense part of the beam pattern) remain parallel down the road and never cross. This adjustment may need to be done several times to get it perfect and you'll know after you've driven the car at night for a while.

