Wire Harness Assembly Instructions

Your kit comes with wire and Loom. The Wire is precut to length.

YOU WILL NEED: WIRE STRIPPERS, ELECTRICAL TAPE & GOOD WIRE/TERMINAL CRIMPERS

You will see 3 groups of wire by length….
The Passenger Light wire is approx 15" long
The Drivers side wire harness is approx 64" long
The wire that goes to the switches is approx 60" long.

There are 3 colors of wire. These 3 colors may be bonded together (red, black & white) or individual. It doesn't really matter, as you will need to connect each color anyway.

Red- For power to the main light (White Fog)
White- For power to the Amber Halo
Black- For Grounding

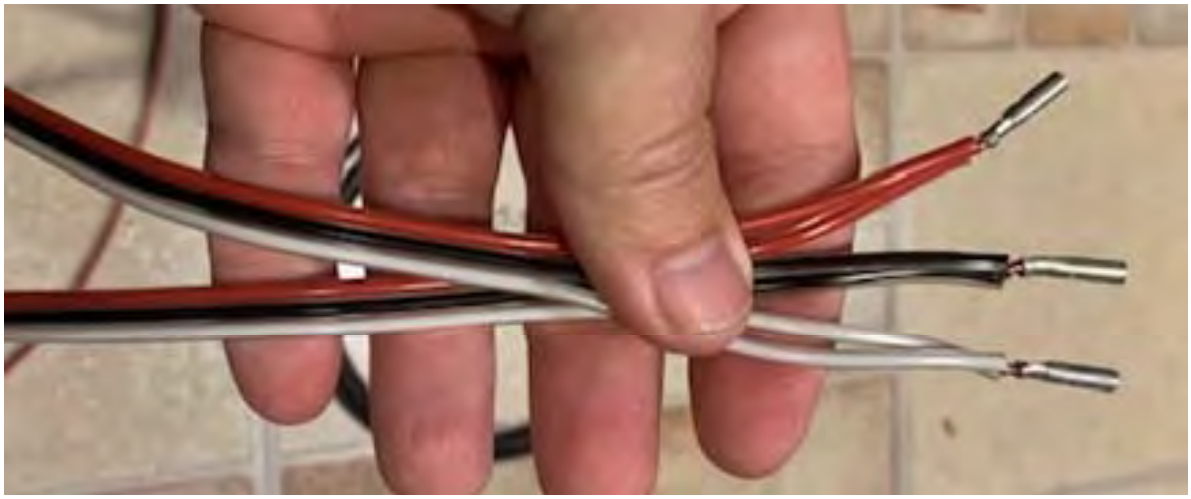
Now that you understand what the wire is for and why it is different lengths, you will understand how to group it. It is NOT necessary to MEASURE each wire. It's quite simple. The Longest is for the Drivers side, the shortest is for the passenger side and the middle length is for the switches and ground.

Step 1:

Group the SHORTEST wires of every color in ONE pile
Group the LONGEST of every color in another pile
Group the MEDIUM length wires of every color in a 3rd pile.

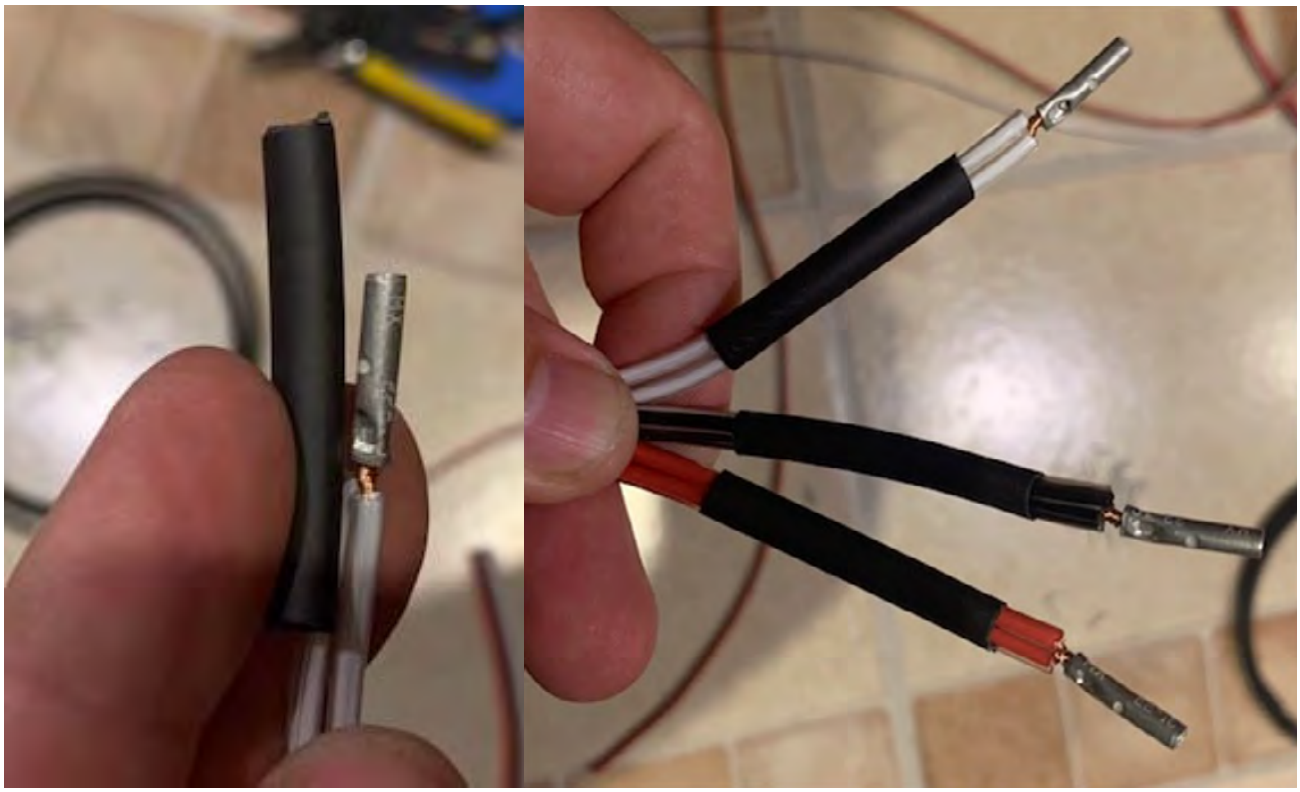
Step 2:

Now, the fist group you want to combine are the LONGEST and the SHORTEST. (You will combine them SIDE BY SIDE by using wire strippers and taking about ¼ inch or so of insullation off of one end of each of them.
Line them up SIDE BY SIDE, twist them together and insert them in a butt (crimp) connector as seen in the pic below and crimp it down TIGHT. Again, notice that these 2 groups are SIDE BY SIDE, not end on end. That leaves the other end OPEN for the last wire group. You will connect all 3 colors like this for ONE harness for ONE pair of lights. So you will need to do this 3 TIMES in all…



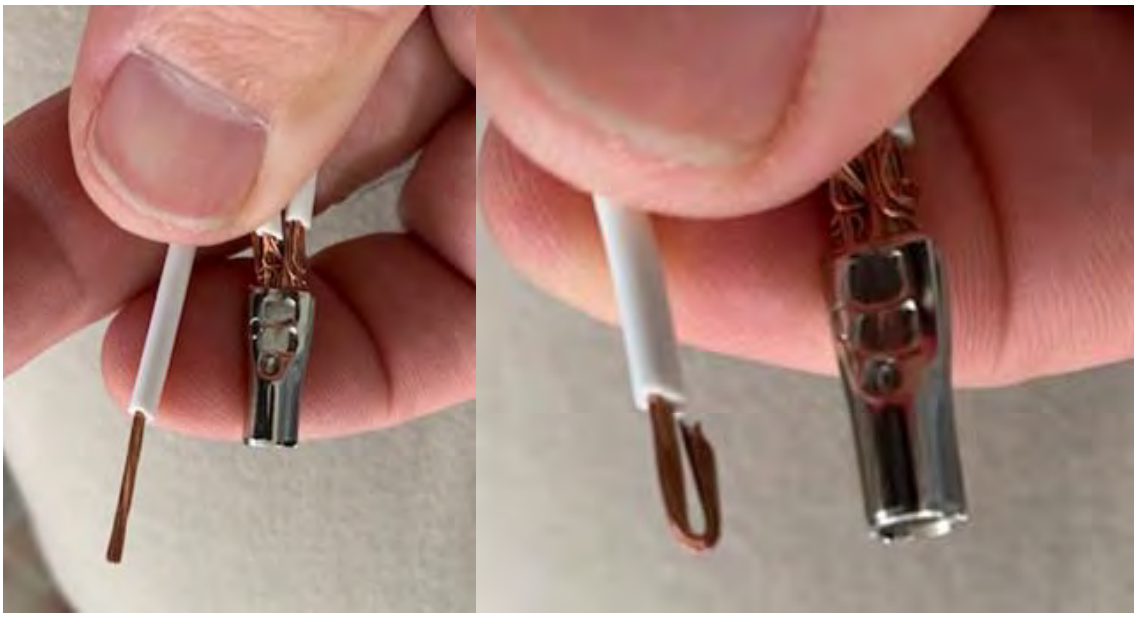
Step 3:

Cut off a piece of heat shrink tubing 1 & 1/2” long (again 1.5” PER PIECE) and slide them over your already crimped pairs of wire, leaving the connector exposed to crimp your last wire group.



Step 4:

Now you are ready to connect the other end. Grap from your THIRD group of wires (The MIDDLE length) and strip about 1/2" or so off each wire color and FOLD the wire over. I like to do this because when you crimp it down, it will be TIGHTER and less likely to pull out. It is important to crimp it down HARD when you crimp the terminals.



Step 5:

Now you can crimp down your 3 harness. Then slide the heat shrink over the exposed connectors and wire so that it is completely covered. Then use a small tourch or electric heat gun to shrink it over the wires. If you use a tourch, be careful. You can melt both the wire insullation, and the heat shrink tubing if you just HOLD the flame in one spot. You want to wave the flame around close to it. Don't touch the flame to the material. Keep it back a little. If you use an electric gun like on the right, it is easier to control and hard to burn or melt the material.


Step 6:

Repeat steps 2-5 two more times until you have all 3 groups of wire with all 3 colors assembled.

Step 7:

Start assembling the loom on the harness by lining up all the groups up together. (If you want to hook the 3 light pairs up to individual switches, you may want to number your 3 groups 1, 2 and 3 on all 3 ends. If you plan on combining them all into one switch, it won't matter.

I like to start with the short end first. Cut a piece of your loom off long enough for the short end that goes to the passenger lights as seen in the pic below. It may help to line up your 3 harnesses first so the ends are lined up of your wires by taping around the 3 groups.

Step 8:

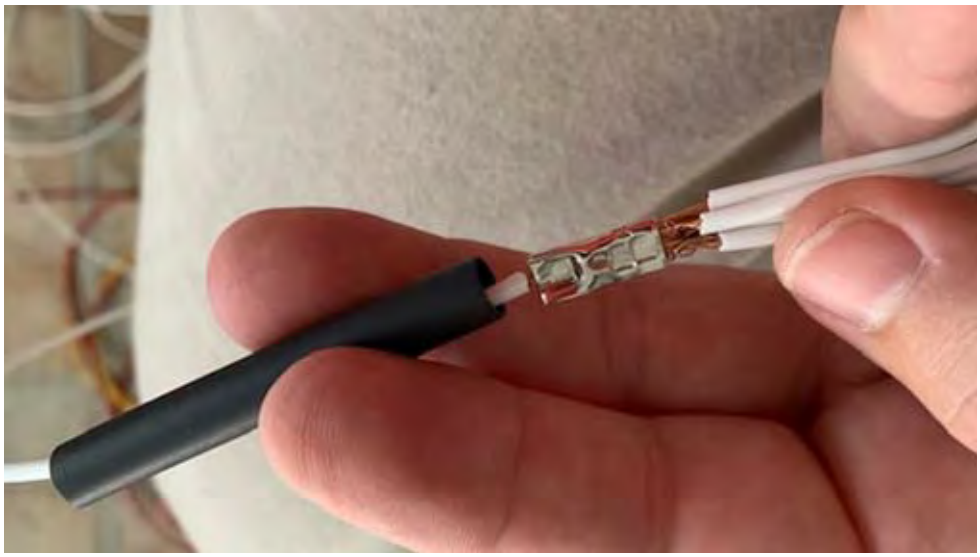
Once you've got the short piece on, start at the other end with the long loom from the LONGEST end first that would go to the driver side lights. When you get to the middle where the other loom meets up and the wires are combined, push the wire in the loom and wrap electrical tape around that area and around where the small loom end meets the long loom. (See Pics below)

Step 9:

Before you run the loom any further, Separate the 3 black wires on the last end pull them straight and line them up on their ends. If any are longer than the other, you can cut off the ends to match. You will then strip all 3 about 1/4" and twist the wire together and insert it into the ring terminal (See pic) Then run one of the smaller pieces of loom from the terminal end down covering the black wire.

Step 10: (Optional)

Right below where the black wires loom ends, you can cut off all 3 white wires equal. Discard 2 of the wires you cut off and take ONE and combine them as seen in the picture below. This is just like what you did in step 5 earlier. In this case though, you only need to have one power source for the amber lights. You wouldn't turn them on and off independantly. This way it makes it cleaner later. Then slide your 1 ½" Heat shrink over the crimp to seal the exposed wire and shrink it down. Or, you can just combine them at the end of the harness if you prefer.



Step 11:

Now you can bring your fat loom you started up to meet the smaller loom that is on your black wire. See pic.

Now you have a choice to make. If you want to connect the white amber wire to a switch (for example switch 5 or 6 that are low amp) then run the white and red wires all up together in the fat loom. Like seen below. Just like the middle section, tape together where the two pieces of loom meet. If you decide to connect the white wire for the ambers to a wire that powers the amber markers. You can use the other small piece of loom to backtrack that to the grill area or the headlight area where the marker light wire is. If your concerned about warranty. I would just recommend connecting it to a switch. There are 6 of them and the 5 and 6 switches are only 5 amps. Not good for many things. If you just leave the switch on ALL the time that the ambers are on, it will always power off when the truck turns off and power on when it is turned on.

Step 12:

Now that your harness is assembled, you can go back and make things easier by connecting the remaining but connectors to each end. This way, when you are ready to connect your lights, the connectors are on. You simply need to put heat shrinh tube over the wire, insert the color coordinated wire from the lights that match and crimp it down. Don't forget the heat shrink. If the wires are exposed, they will short out and blow a fuse.

Note: It doesn't matter which black wire goes to which light as long as ALL the lights are connected to one. Remember, we combined all the black wires togther when building the harness. Also, that goes for the white wires as well. They are also combined. So it doesn't matter which one goes to which light as long as ALL the lights are connected to one.
The red wires. These will ONLY matter which light you connect to them if you did not decide to connect them to one switch. If you combine them all together at the end and put them on one switch, it doesn't matter. If you are connecting them individually (Like on switches 1, 2 and 3) then hopefully you numbered them all as mentioned earlier. In that case, connect #1 to the same position light on each side of the bumper (Driver Side/Passenger Side) and then #2, and then #3. You could then choose where to connect those numbered wires at the switch wires depending on which switch you want each pair on.

When your harness is complete, it should look like this