

Headlight LED's

I want to give advance special thanks to Butch Vincent for the following article he shared with all of us at www.ridersrally.com . He had posted a picture of his headlights with inserted blue LED's. I thought it was one of the most professional effect lighting add-ons I had ever seen and asked him how he did it. Following was his article in response.

Installing LEDs in the headlights:

I used the Lunar Accents kit to install in mine. (see picture)After using it, I will save a few bucks the next time and buy individual LEDs. Great kit for the first time use. I purchased them at <http://www.superbrightleds.com>
Education does have its price.

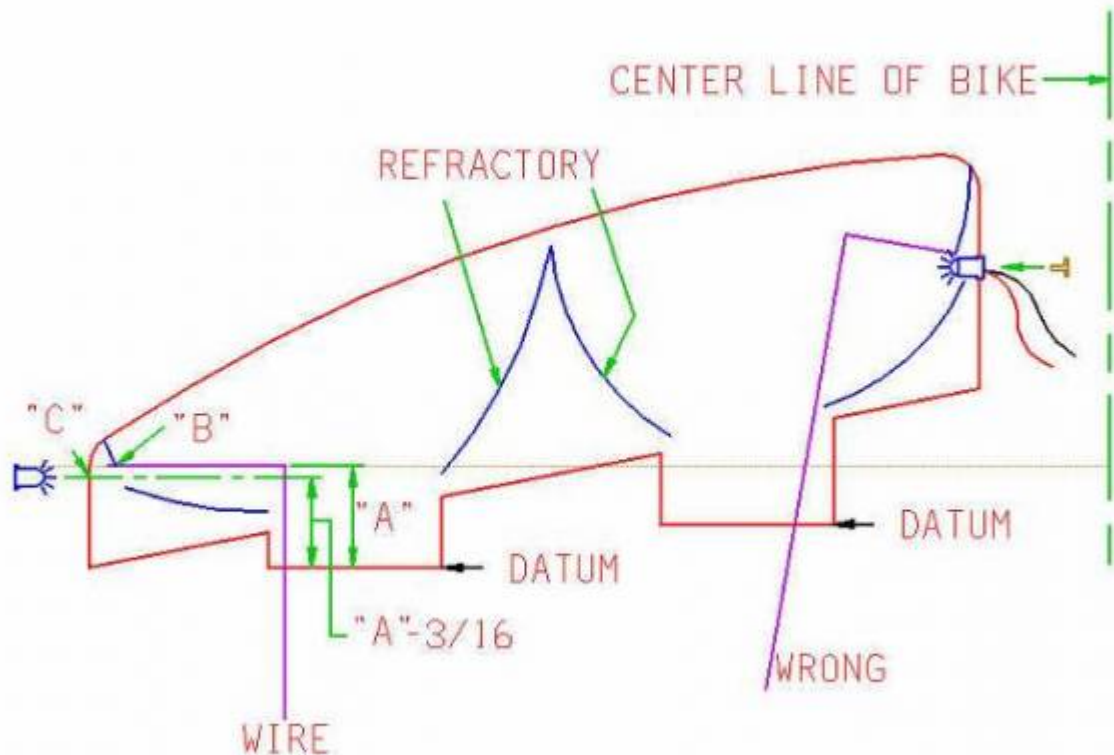


Remove the fairing and be careful not to bust the standoffs. In order to remove the fairing without breaking a standoff follow the directions in the service manual and also do the following:

Remove the black plastic upper vent louvers using a small screwdriver to pop them out. The air ducts that feed these louvers are held in place with a plastic rivet exactly like the black panel up above the timing chain cover. They pass through from the inside to out, through a flange that is molded onto the vent tube and into a hole in the steel framework. They are very hard to see and can be removed with a pair of needle nose pliers by grabbing the neck of the plunger and pulling towards the centerline of the bike. Now the fairing can slide forward and be removed. The pictures in the manual show the vent tubes in the fairing when it is removed yet they do not tell you that the rivets need to be removed in order to accomplish this task.

Caution!!! If you only follow the Honda manuals instructions you will break the standoff. I hope this saves someone some grief if they ever have to remove their front fairing.

I am using the left headlight assembly in my example.



The drawing is NOT to scale.

1. Remove the headlight assembly from the fairing.
2. Remove the rubber boots and bulbs from the mounting sockets.
3. Bend a piece of wire (piece of coat hanger will work) at a 90 degree angle. One leg should be about 2-1/2 inches long, the other leg 6"- 8". The accuracy of the 90 degree angle will affect your measurement so check it before you use it.
4. Insert the wire (purple lines in the drawing) into the light socket area.
5. I went in until it touched the most forward part of the refractory ("B" in diagram) There is about a 3/8 gap in the refractory from front to back.
6. Make sure you are holding the wire "square to the world" so that you don't miss measure. Place a line on the wire that is in line with the back of the housing where the rubber boot slips on. This will be your "datum" surface. Use a fine line and not a fat marker. A fat line can move it quite a bit if you're not careful.
7. Remove the wire and measure the distance from the 90 degree bend back up the wire to the mark. This is Distance "A".
8. Subtract 3/16" from Distance "A".
9. Roll the headlight assembly so that if lit, it would shine on the ceiling.

10. Place it on a good flat surface. (bench top, plywood, etc.) It will naturally want to fall over.

11. 2 people required. Hold it firmly so the "datum" surface, rim area where the rubber slips on, sits flat on the work surface.

12. 2nd person, Place a mark ("C" in diagram) on the side of the headlamp assembly that is the measurement you calculated (Distance "A" - 3/16")

13. I placed the LEDs directly at 3:00 o'clock (Inside) and 9:00 o'clock (outside) when sitting on the bike.

14. Drill a 1/16" diameter hole in the housing.

15. Push the drill bit in to see exactly where you came through at.

16. Adjust your location if needed and drill the appropriate diameter hole for your LED to fit into. Try to be careful not to let chips fall into the housing while drilling. They could be tough to get out. Static will make them want to cling to the walls. You also take a chance on smudging or scratching the refractory surface in the removal process

Here is where you follow the directions in the Lunar Accents (www.superbrightleds.com) package if you choose to use their product. They offer 7 colors. The advantage is, it is more a plug and play kit. You get two LEDs, grommets, and plastic pins in each package for \$16.95 per kit (2 kits required) \$5.00 shipping. \$38.90 total cost. Hook your reds and blacks together and wire accordingly. When installing the little plastic pin in the grommet, I cut the pin short so as not to tip the LED crooked. The LEDs are nearly impossible to see when installed, yet, I just didn't want them laying over in the housing from the rivet pushing them in further than required.

If you want to save a couple of bucks and "Do It Yourself" you can buy individual LEDs for \$1.29 each, plus \$5.00 shipping. Install the appropriate resistors (\$3.00 at Radio Shack) and same thing, wire accordingly. A dab of silicone to hold the LED in place, seal it, you're done.

Hint: It is good to have your wife help hold the assembly when marking the holes to be drilled. If you are off too much and need to replace the housing it would certainly be from her not holding it flat when you, ever so carefully, marked the location of the hole. She should be much more understanding than if you messed it up by yourself.

Have fun reinstalling the fairing.

Someone had mentioned using some computer LEDs. For the effect you are looking for, they may not be bright enough. Computer LEDs are more for indicating that something is energized, visible, yet comfortable to the eye. The Lunar Accents products are a bit offensive to the eye if you look directly at the LED. Hence, the eye catching blue. Keep in mind you are not looking directly into the LED.



I was asked if I installed a switch to drop out the headlight, and how I tied into the harness. Yes, I did tap into the lo-beam relay. I cut the blue wire ("04") on the lo-beam relay and installed a switch. This works well because you can drop out the lo-beam by using the switch and if you want the headlight on, you can hit your high-beam and you have lights. This movement is more natural than reaching for a switch on the panel when you want light. Not that I planned it that way, it just works out, just a little "cookie" in life. Cookies can be good, ya know.



While you have the bike apart you can easily light the edge of your windshield.



I hope this gives the tips you are looking for. I'm not real good at giving instructions or drawing, so please, bear with me on this.

Once again, I want to thank Butch Vincent for allowing me to share this incredible tech tip with all of you.

GL1800 Tech Tips