



Morimoto CCFL Angel Eyes

Tools & Materials Required:

- Thumb tack
- Small drill bit & drill or dremel tool
- thin metal wire (found in the "picture hanging" accessories section @ hardware store)
- thin tipped permanent marker
- needle nose pliers
- wire clippers

Product used: http://www.theretrofitsource.com/product_info.php?products_id=103



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INNOVATIVE HEADLIGHT UPGRADES
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Important Notes:

The CCFL rings are very very fragile. They are made of thin glass and have virtually no flexibility to them. Be careful working with them or they will break.

We do not recommend clear silicone or epoxy to hold the rings in place, as the rings get quite warm during operation and could potentially weaken the hold of a glue, or cause it to yellow over time and just look bad. The wiring method works effectively at holding the rings in place permanently, accurately, and is very hard to notice unless you press your nose up to the headlight housing.

Step 1: Pick three evenly spaced locations the front face of your shroud or bezel and mark them with a small dot with your permanent marker. These will mark the holes you'll poke through to string the CCFL ring up.

Step 2: Take your thumb tack, work it through the front face of the shroud until you make 2 holes for each area you marked. Leave about 2mm of spacing in between the hole. Believe it or not, the plastic should make way for the tack, we've found this to be the most accurate way of producing small, hard to see holes.

One hole:

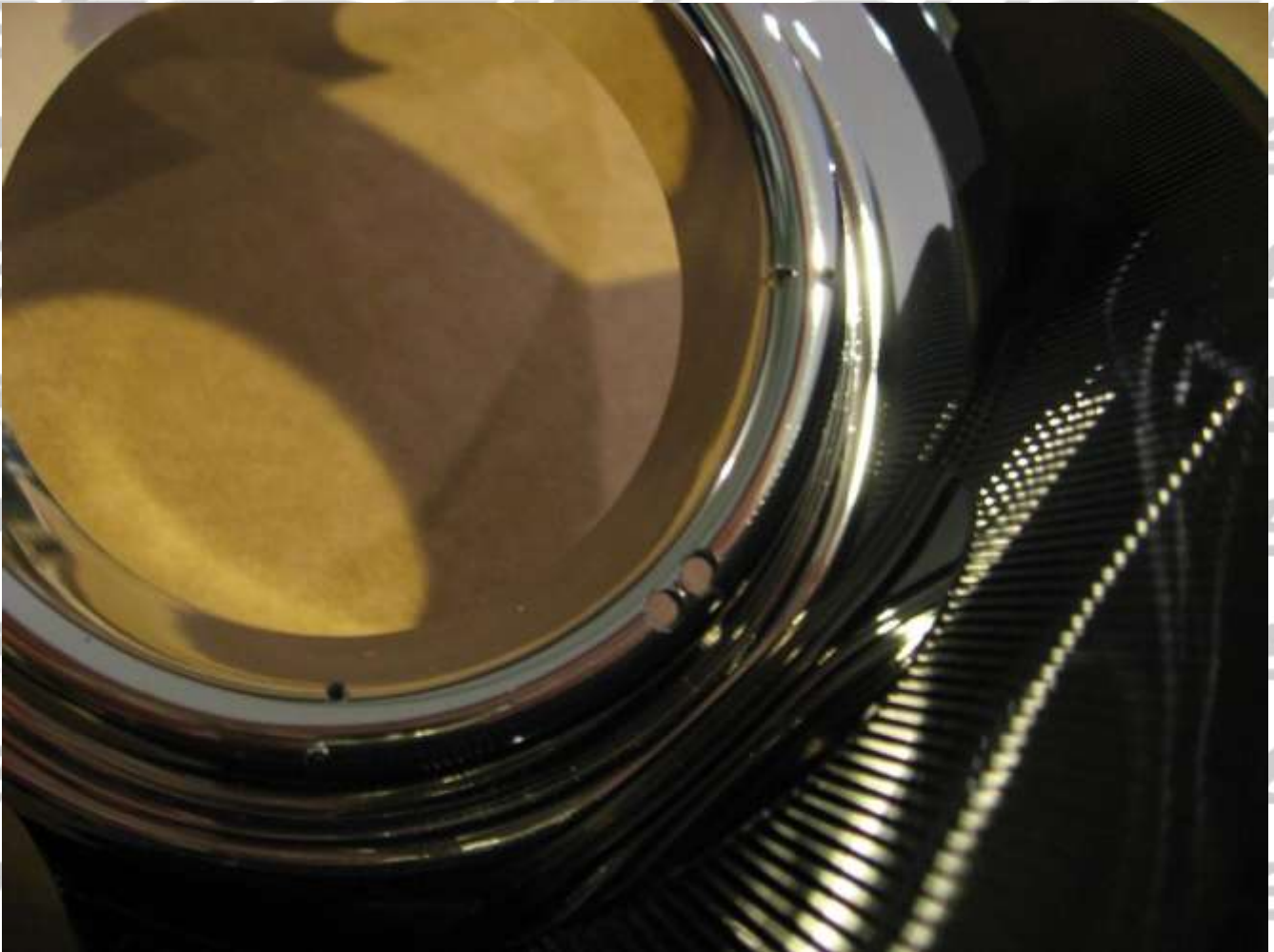


Two holes:

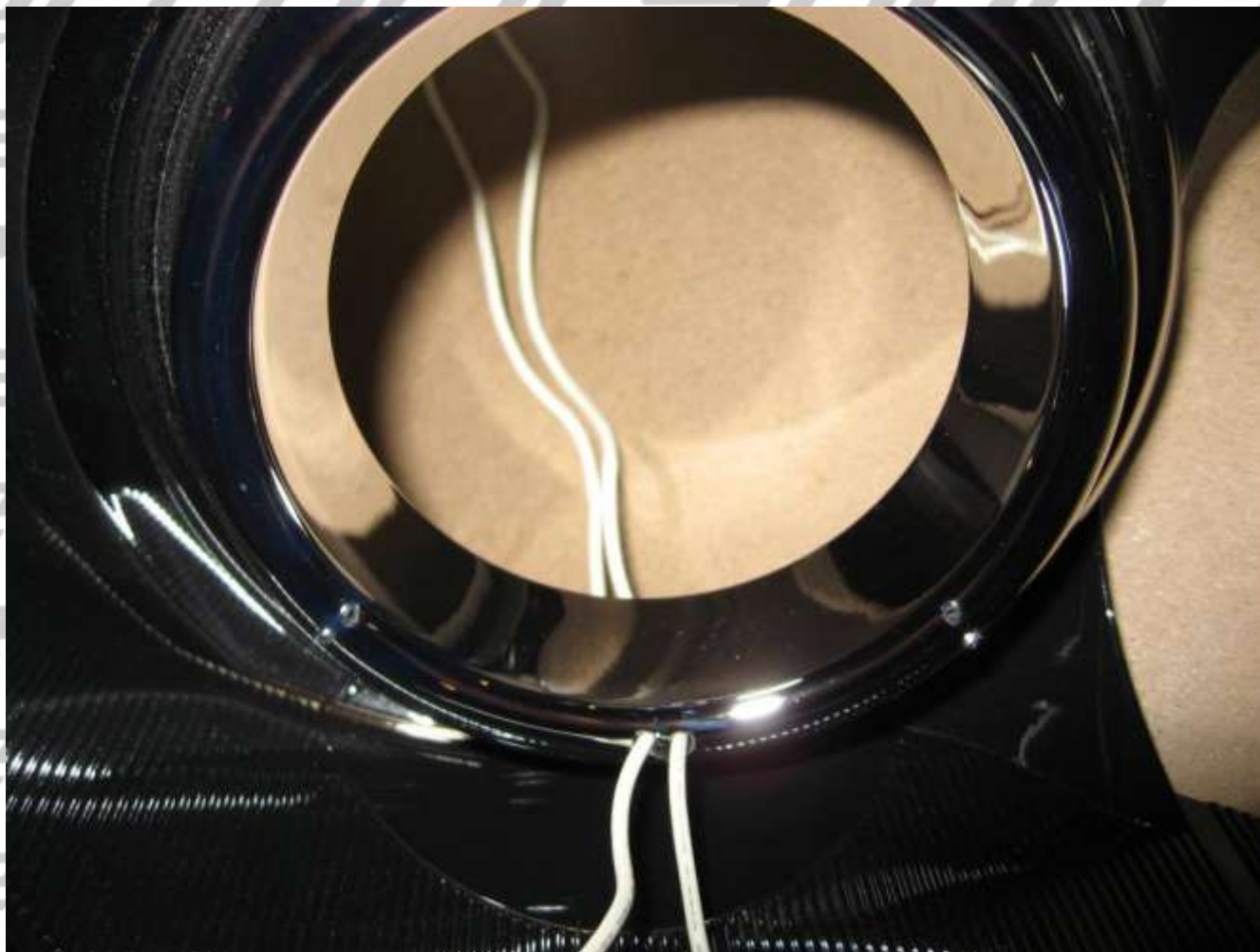


Step 3: Use your drill bit to make two other holes towards the bottom of the bezel for the CCFL's wiring to pass through. It is a good idea to "mark" these two holes with your thumb tack just to give the drill bit somewhat of a "depression" to sit in before you go at it. You're less likely to drag the bit across the face of your bezel and scratch it that way.

Prepared bezel face:



Step 4: Put the wires from the CCFL through the holes and work the shrink tubing through the holes until it sits flush:



Sitting Flush:



Step 5: Now take the thin metal wire and start to "string up" the CCFL ring to the face of the bezel you just poked all the holes in. We used green wire in this how-to just to demonstrate - but a silver/natural metal colored wire tends to be less visible of course. Do one area at a time, twist it up on the backside with your needle nose pliers (dont wind it up too much, see what happens below!) and then clip off the excess with your clippers.

Starting the threading process:



Finishing the process:



Disclaimer: Do not twist the wire too much on the backside of the bezel or else you will snap the CCFL ring.

This is what could happen:



Step 6: Now that the CCFL ring is attached to the face of your shroud/bezel, you will take the small black plastic clips and insert them onto the pins on the end of the wiring. These will then plug into the outputs from the inverter boxes.

Note: If you are only using 1 CCFL ring per headlight, you will only be utilizing one output per inverter box. (they have two each) If you are using 2 rings per light, then both outputs will be used.

Step 7: Locate the positive and ground input wires on the inverter box and tie them in with whatever power source you want the angel eyes to come on with. (ie splice these wires in with your parking/corner lights if you want the rings on at the same time, or with the low beam outputs if you want them to just come on with your headlights)

Note: it is recommended that the inverter box be mounted outside of the headlight housing. Typically there is never any issues with the CCFL rings burning out, and if any component is to go bad, it would be the inverter. Putting it inside the headlight housing will make this a lot more of a pain to replace if ever need be.

