

## MKV Jetta DIY S6 type light construction



Start with stock Jetta grills.

Before anybody gives me grief about the lace doily, It's from Gramma Hop and yes, I know it's pretty!



Trim the lower slot out, here is what it looks like.



The lights I am using for this project are 10mm LEDs. These in particular are extremely bright. They are a new style 5 chip 265,000 mcd rated 85 degree angle light.



First we need to make a template of the lower slot for the lens. I will be making it out of clear acrylic 1/8" thick. You can use any color that suits your taste. You will need to make a template for the rear as well. The rear will be made out of metal and should be left long. You will see why later.

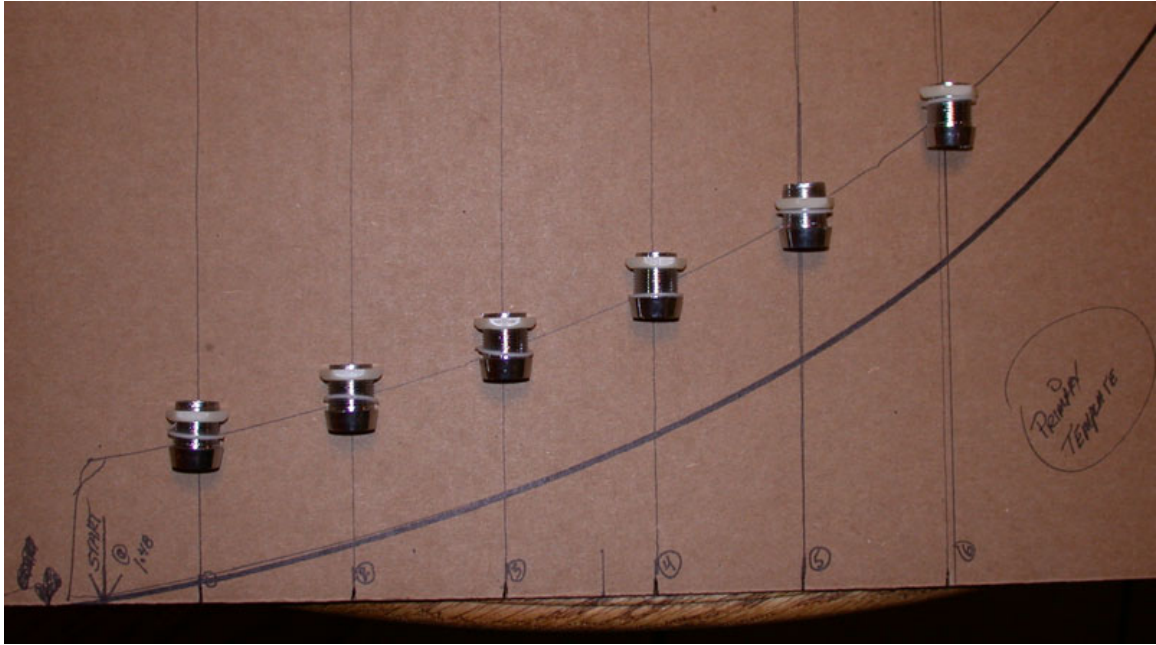


This is the template on the acrylic sheet I will be using.

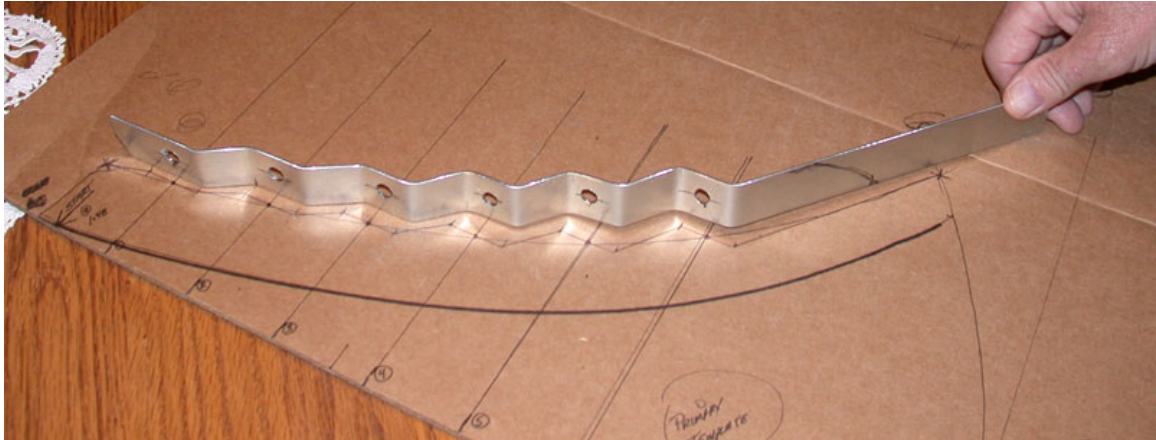


I used a band saw to cut mine out.





I made a tracing of the angle of the grill standing on edge. This way the lights will all face forward when installed. This sheet of cardboard has a square edge on the front. This is that angle straight across the front of the car. Mark the template at equal spaces for the lights. The electrical formula for the lamps worked out for 6 lights for me.(2 sets of 3)



You will see I have made marks on the template so the lights will all face forward in the same direction. if not, the lights will form an ark or half circle. The metal strap I am using to mount the lamps is #16 gauge thick. You will need to mark it like the template. You can bend it by hand in a small vise like I did. Next, drill holes where the lights are to be placed. Mine are 1/2" holes.





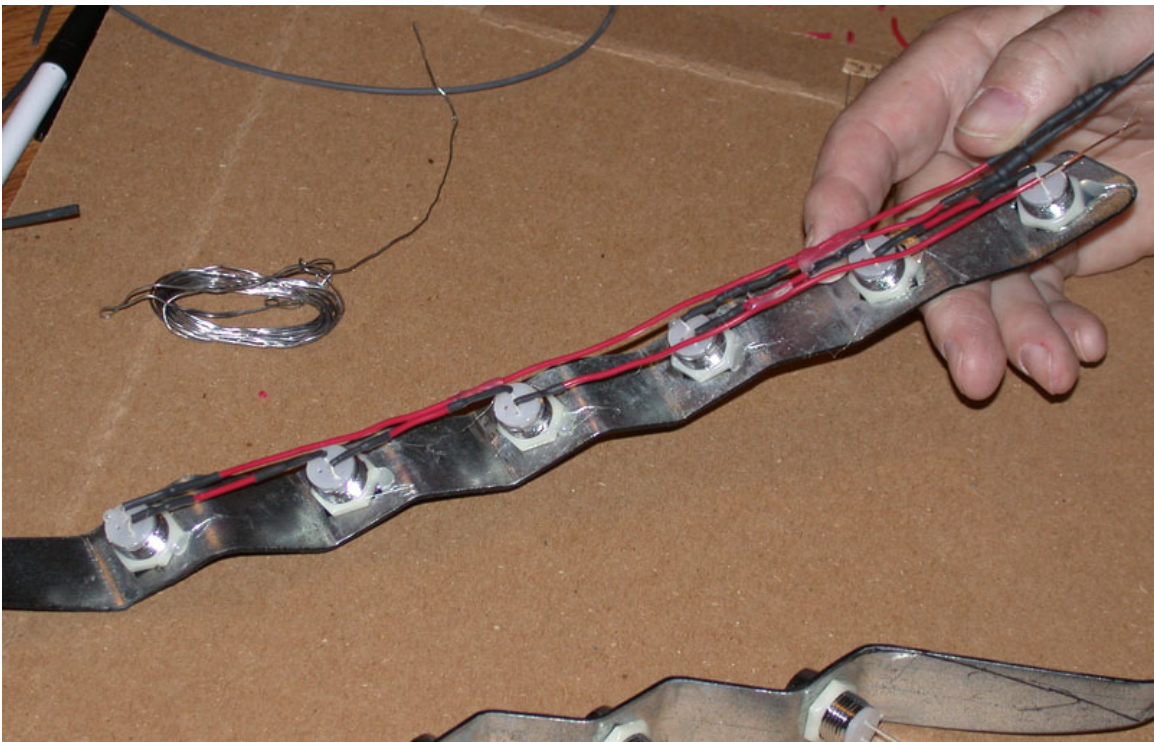
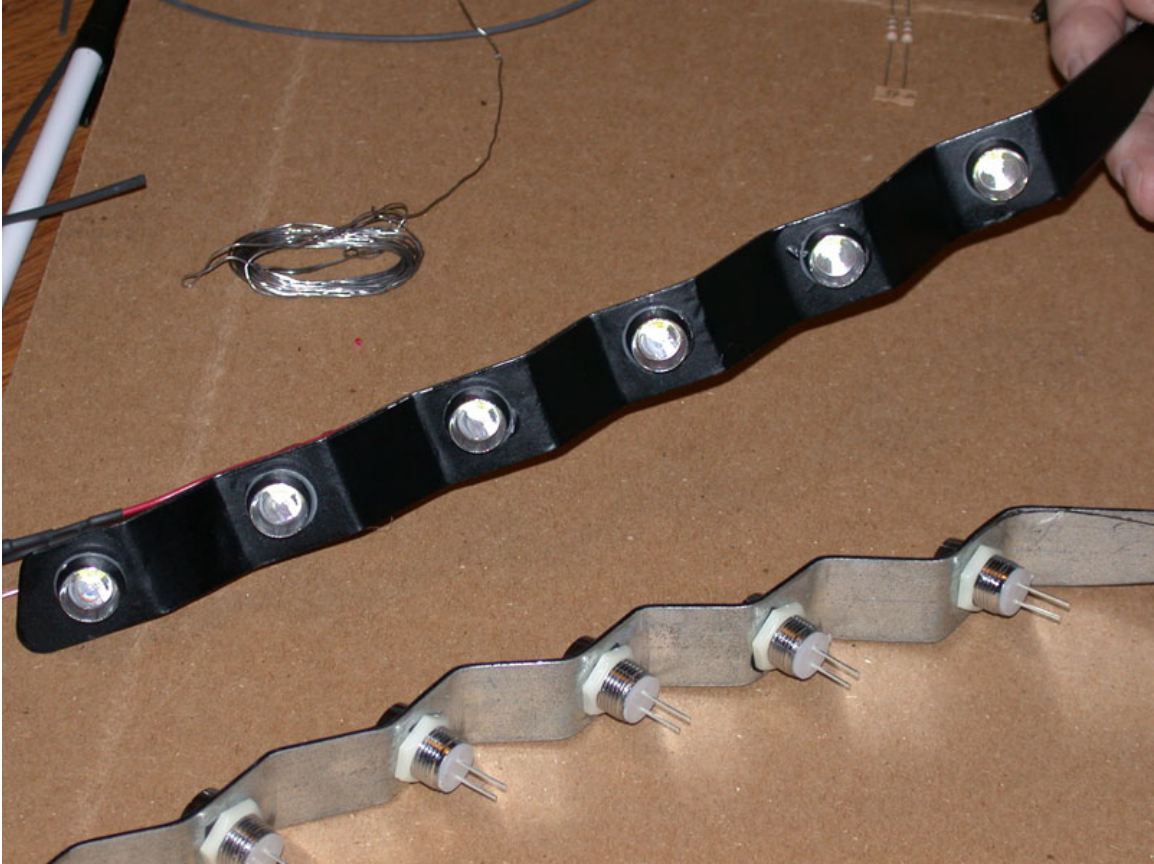
After trimming the front lens, I used a hot glue gun to secure the lens in the grill. Be sure not to go below the edge because the glue will show thru the front.



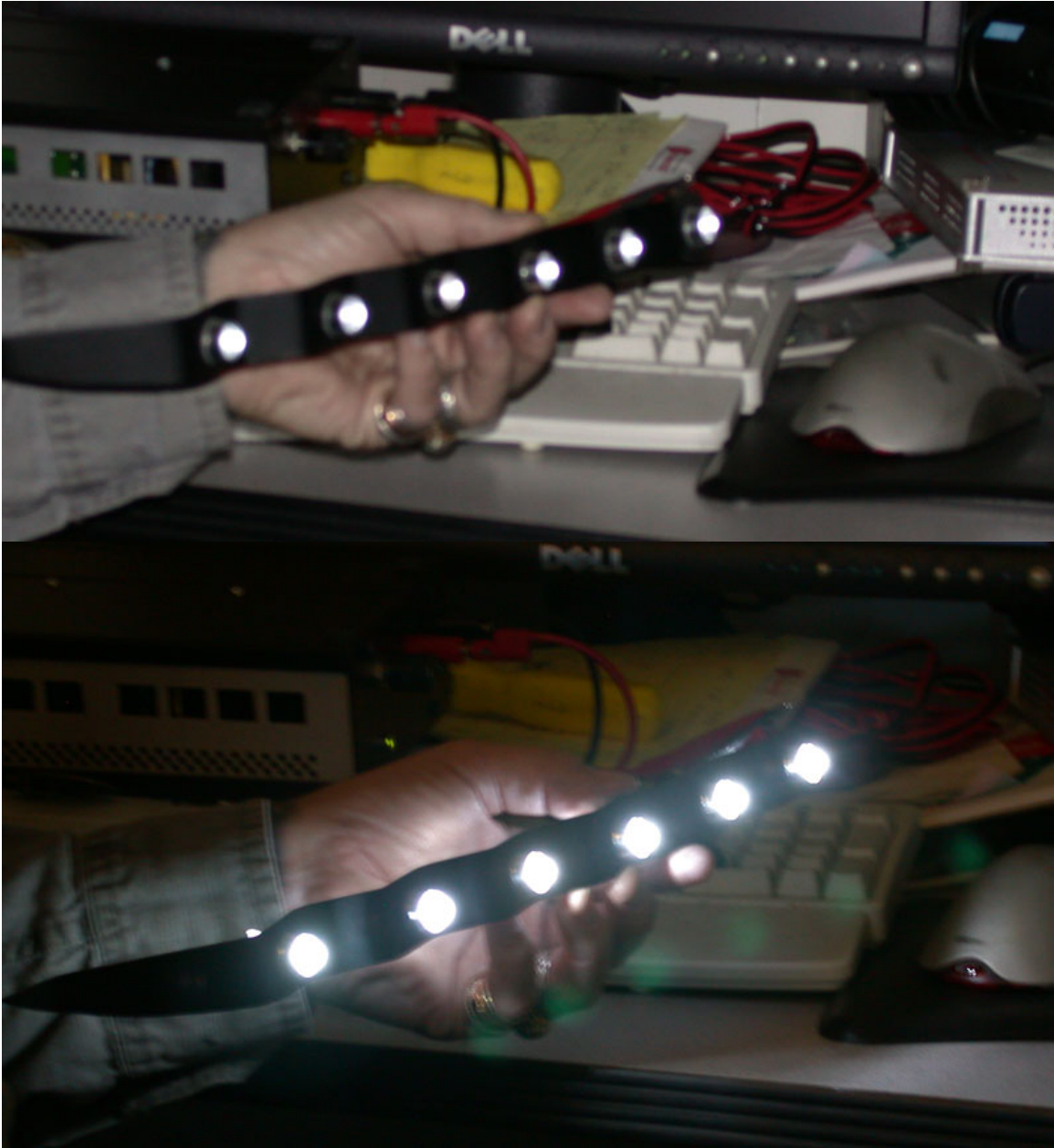
tape the edge of the front and use a urethane sealer /adhesive to glue the bottom. Smooth it out with your finger. Take your time and it will look nice.



Here I am shaping the metal straps for the light bar.



Above the lights are installed in the rear strap and wired up.



A couple of pictures lit up. Next the strap needs to be final fitted to the grills. DO NOT buy 12volt cheapie LEDS. You will be disappointed because they will be dim. Your car produces 14.2 volts to the lamps. For those who are not electronics wizards, here is a link to help you figure out resistors for voltage levels.

[http://metku.net/index.html?sect=view&n=1&path=mods/ledcalc/index\\_eng](http://metku.net/index.html?sect=view&n=1&path=mods/ledcalc/index_eng)



They are fitting pretty good. They still need minor finishing around the edges to seal them up. Take your time and it will go smoothly. I will light them up for a quick look.



I just need to finish off the edges and then install them in my car. I used urethane around all the edges to seal it up. Nothing fancy here. You won't see it anyway. I also soldered on longer leads to connect them to the car wiring.



Here is a photo in the car with the lamps off. Daytime.

With the lamps on, it's night time so you get the picture.







## A parts listing for those interested.

- A pair of Jetta grills
- 1 sheet of 1/8" acrylic plastic. *you can use any color that suits your needs. anything thicker and you won't be able to work with it.*
- urethane automotive window sealer (2) tubes
- #18 gauge stranded wire (*I used zip cord*) 30 to 40 feet)
- 12 LEDs (*I used 3.0 to 3.8 volt LEDS @ 3.4volts 100ma each (2 sets of 3 each in series with a single 39 ohm 1/2 watt resistor)*)
- 39 ohm 1/2 watt resistors
- 12 LED holders
- 16 gauge 15/16" X 17" long strips of sheet metal (2)
- hot glue gun for temporary holding of stuff

## Suppliers

- The vortex for the grills
- <http://www.sloanswoodshop.com/> for the acrylic sheet. They have many choices.
- Wire, just about anywhere. I used a local stereo shop
- Resistors from [www.digikey.com](http://www.digikey.com) or [www.mouser.com](http://www.mouser.com) or [www.futurlec.com](http://www.futurlec.com)
- [http://stores.ebay.com/TopBright-Led-Store\\_10mm-5-Chips-High-Power-Led\\_W0QQcolZ4QQdirZ1QQfsubZ13192520QQftidZ2QQtZkm](http://stores.ebay.com/TopBright-Led-Store_10mm-5-Chips-High-Power-Led_W0QQcolZ4QQdirZ1QQfsubZ13192520QQftidZ2QQtZkm) for the LEDS and holders.
- Metal strapping, you can get it at a local hardware store. Home Depot carries it sometimes. You may have to buy larger and cut it yourself.

And that people is about it. Please do not IM or email me to death with questions concerning this project. I won't be answering any questions...PERIOD. If you don't understand the above DIY, you're not ready to build the project.