Use the LDD-L Series Mean Well Step-Down Mode CC DC-DC LED Drivers found here http://www.ledsupply.com/led-drivers/mean-well-ldd-l-series-cc-step-down-mode for \$3.49 (March 2017) + shipping & Handling. You can also use the LDD-H series buts it more expensive and larger. The only difference between these two is that H series can accept up to 56V input voltage while the L series can accept up to 24V. On a 12V car, even with alternator running at full speed you will not get to the 24V limit.

In my first try, I used Scotch-lock connectors to connect the wires of the car harness to the wires of the LDD-500H Series. It was not very pretty! Others instead cut the plug off the car harness and directly soldered the wires to the LDD-H wired module with better results than the scotch-lock method. See my post here on how I did it originally with an LDD-H series wired version. <u>http://x3.xbimmers.com/forums/showpost.php?p=21190416&postcount=60</u>

In this guide I used the L series PIN style and 500 mA (LDD-500L), as its smaller, cheaper and input voltage range more appropriate for the car. Make sure you get the 500mA version and NOT the 600mA version. The 500mA can also be found at online electronics parts stores such as Mouser, Sager and others. Use <u>www.octopart.com</u> and search for LDD-500L. As with the H series, this has a dimming pin that is not used and can be cut off or bent out of the way.

Mouser: <u>http://www.mouser.com/ProductDetail/Mean-Well/LDD-500L</u> \$3.93 (March 2017) Sager: <u>https://power.sager.com/ldd-500l-2719566.html</u> \$3.08 (March 2017)

The time, I did not want to use the finicky scotch-lock connector or solder wires. I noticed that the car harness plug to the Valeo circuit board has removable plugs. So I used a small pin to pop the white tabs up and pulled the wires with plugs out of the white Valeo connector. Then it was an easy matter to push the plugs onto the pins of the Meanwell LDD-500L and crimp them with a needle nose plier to get a good grip and then hot glue the module where the Valeo board used to be for a nice and neat DIY repair! Enjoy the pictures below!

Wiring: +V In Pin = Red wire plug from the connector -V In Pin = Black wire plug from the connector

Dim Pin = Ignore this pin, bend it or cut it off

+V Out Pin = Pink wire plug from the connector -V Out Pin = Gray wire plug from the connector



Mean Well LDD-500L module: smaller & cheaper than the LDD-500H series



Fig 00 Remove the plug from harness by inserting a safety pin or jewelers screw driver under white tab and gently lifting while pulling on wire.



Fig 01 Gray wire Plug removed from Harness



Fig 02 Crimp the plug a little bit so you have a snug fit onto the pin of the LDD module.



Fig 03 Once slightly crimped, push plug onto module and then use needle nose to crimp it into place, gently!



Fig 04 Hot glue the LDD-500L module into place where the Valeo board used to be. You are all done!



Fig 05 and one more picture!