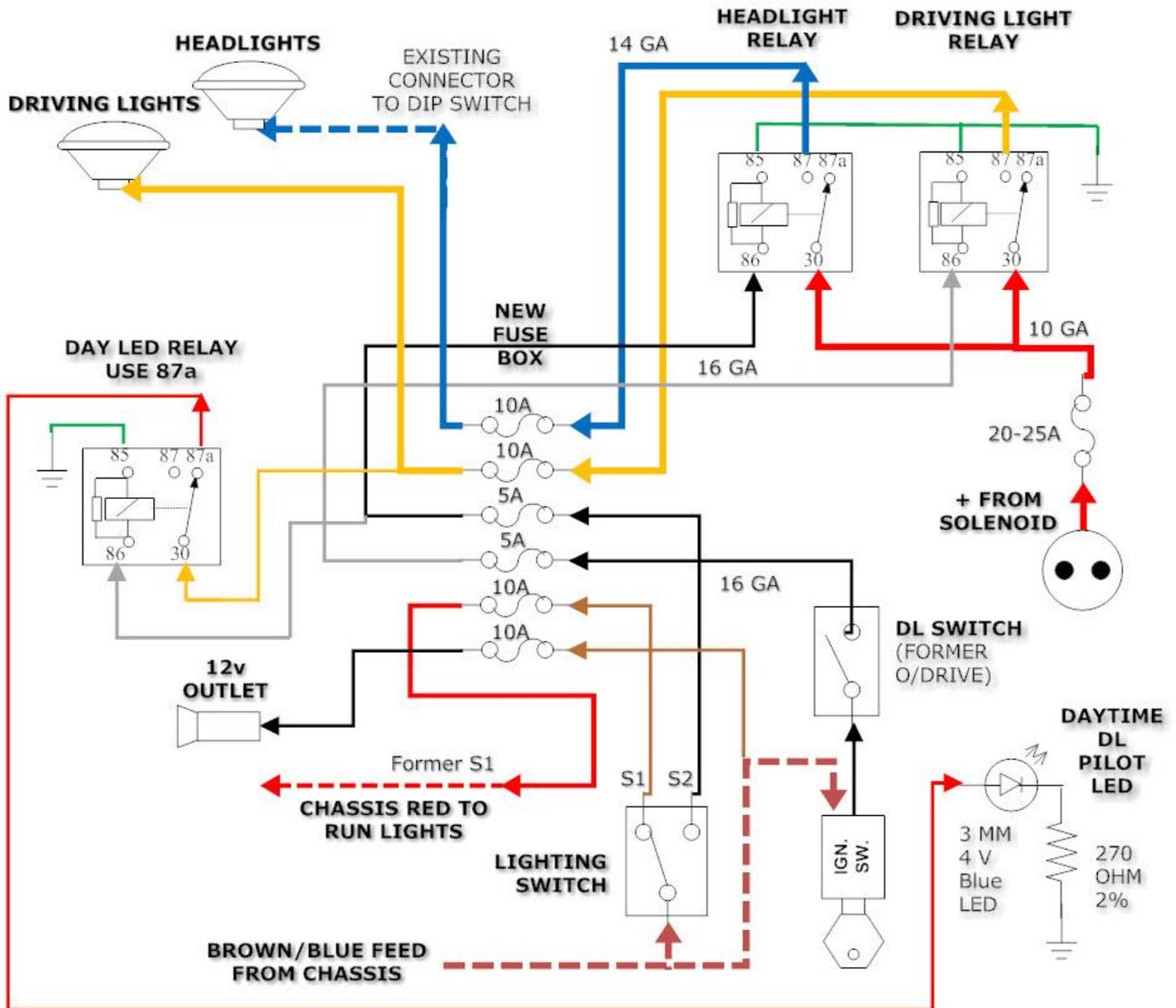


LUCAS DRIVING LIGHT INSTALLATION

Alternator car with 5-spd Transmission

Steve Gerow – 1959 BN6 – April 2011





Features of installation:

- 1) Heavy hot wire from solenoid is kept to short length, entirely in engine compartment
- 2) Headlight and Driving Light relays located in hollowed-out voltage regulator
- 3) Overdrive switch used for driving lights with the addition of LED indicator light
- 4) Indicator light is bright enough for broad daylight – only runs with headlights off.
- 5) Except for feed wire, all fuses in auxiliary fuse box
- 6) Use of drip irrigation tubing for protective sheathing
- 7) Use of hardware store heavy-duty shelf brackets for mounting brackets

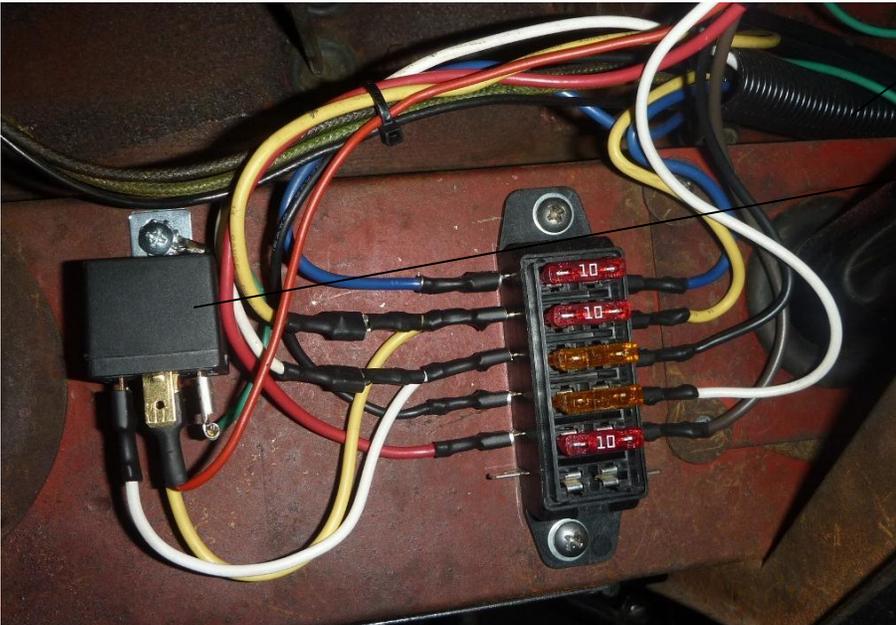
Details of components used at end.



Clamp with bail holds relays in place

Wires route through grommet in firewall behind regulator shell.

Hot feed wire in pvc sheath (drip irrigation tubing)



Flex conduit passes in front of heater

Items located on air plenum

Pilot light daytime relay.

Relay not used here for power-reasons, but as a switch.

When the driving lights are on and headlights are off (day), power goes through 87a terminal and pilot light is lit. With headlights on, relay is energized and contact is broken with 87a and pilot light is off.



Brackets cut and drilled to fit from 1/4" x 1-1/4"- section heavy duty shelf brackets from hardware store.

Ground wire.

Connector from chassis to lighting

Wire sheathed in PVC tubing from firewall forward under shroud, up to bracket and across inside of apron to other light.



Crossover tube zip-ties to
Inserted piece of welding rod clamped
between two brackets. No holes drilled for
this.

Furniture leg caps provide weather
protection.



Instead of a lighted switch, decided to use the overdrive switch, which hasn't been busy since I got my 5-speed Toyota trans.

Wanted smallest possible pilot light and decided to put it in the switch bezel so the hole in the dash underneath could be covered up later if necessary.

Light is bright enough to see in the daytime, but way to bright for at night. At night there isn't much need for the pilot light anyway because the driving lights are pretty hard to miss.



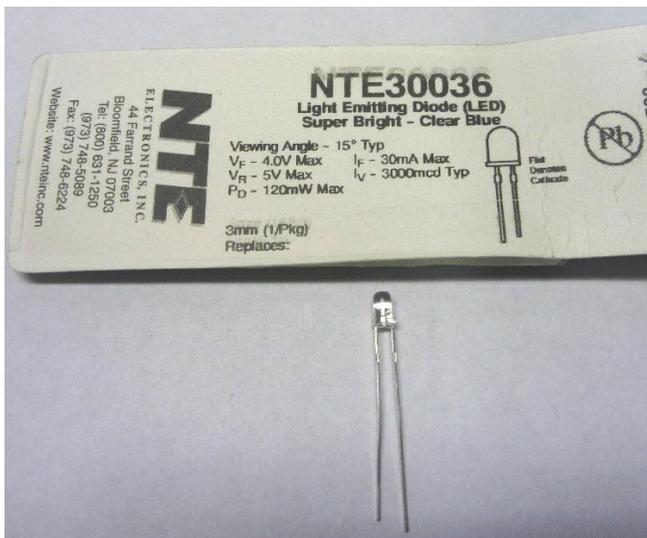
LED is insulated and zip-tied to switch wire. This makes it rigid enough to protrude into the holder and stay there.

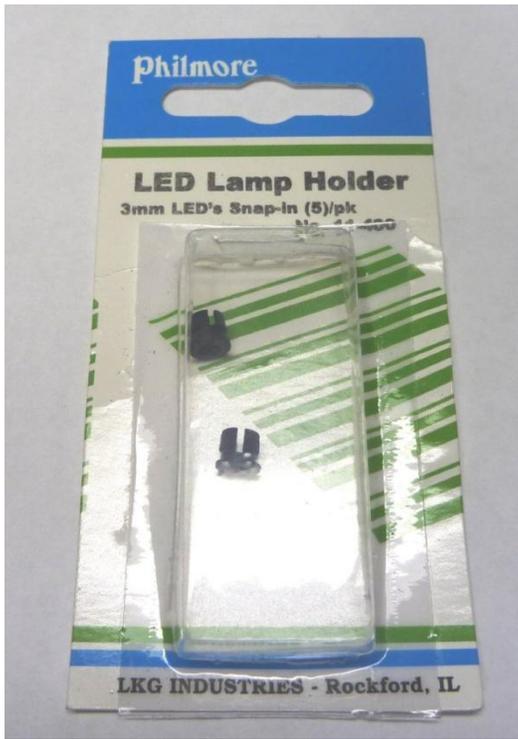
Note resistor in series. Thought it was a good idea to keep the resistor in the open.

COMPONENTS USED

The screenshot shows the WiringProducts.com website. The top navigation bar includes links for 'Smart Glow Fuses', 'MAXI Fuses', 'Fuse Block', 'Fuse Holders', 'Automotive Fuses', and 'Fuse Ki'. The main content area features a product listing for a '6 Circuit ATO/ATC Fuse Block' priced at \$11.30. The product description highlights it as 'Our most popular selling fuse block!' and provides technical details: '6 position ATO/ATC fuse block is a larger version of our 4 position fuse block. Slightly longer in length, with a total of 6 independent fused circuits. Clear cover with a gasket protects your circuits from dust and water spray. Electrical connections are made using 1/4" female push-on terminals. Maximum load per fuse is 30 amps. Max load capacity for all circuits combined is 65 amps.'

I liked this fusebox because of the side entry. The clear top has an o-ring seal.





Good thing there are 5 in the pack – I lost two during installation.



I drilled 1/8\"/>

(End)