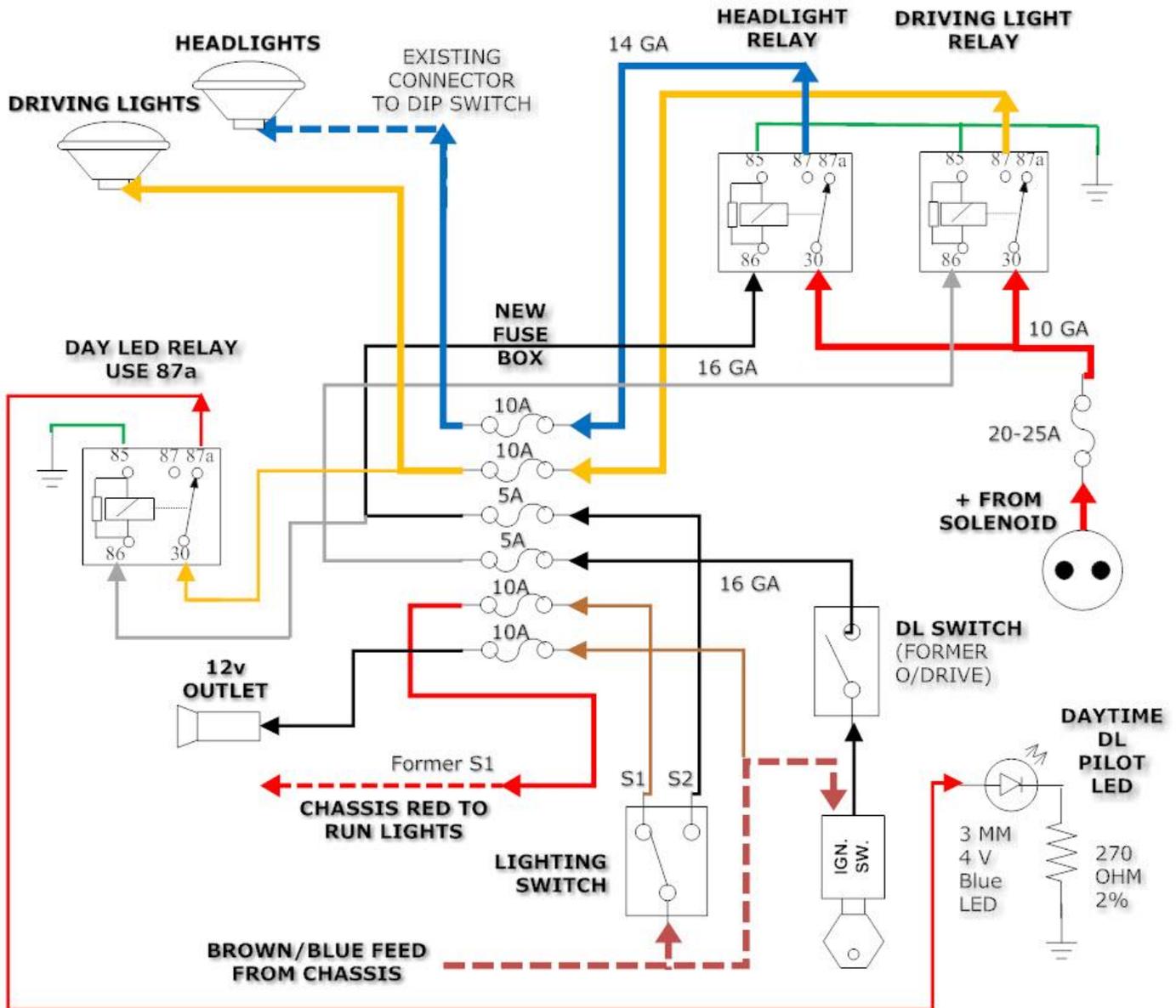


# LUCAS DRIVING LIGHT INSTALLATION

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

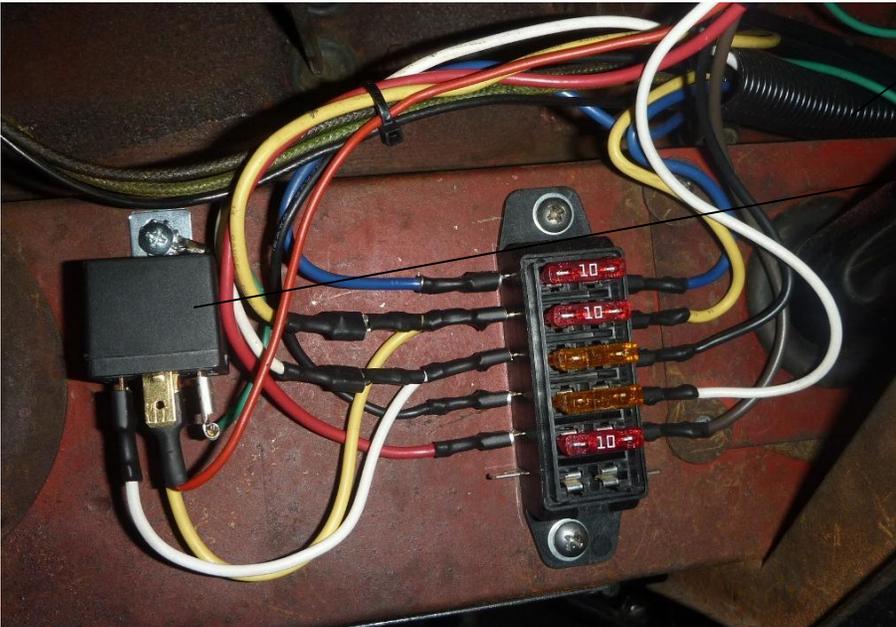
Details of components used at end.



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.



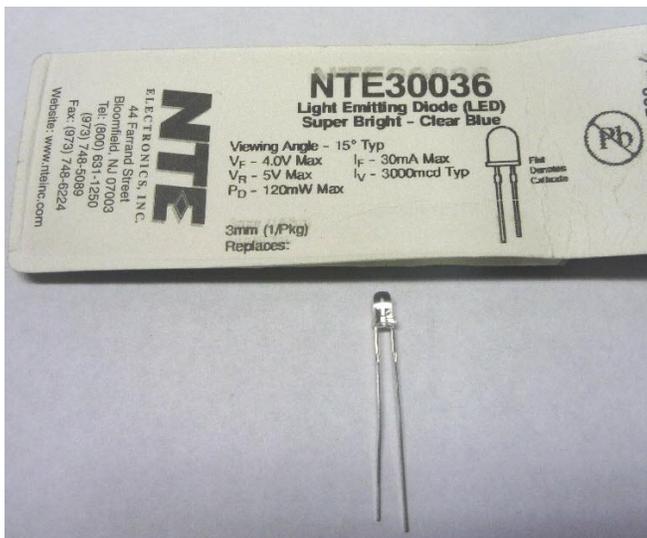
LED is insulated and zip-tied to switch wire. This makes it rigid enough to protrude into the holder and stay there.

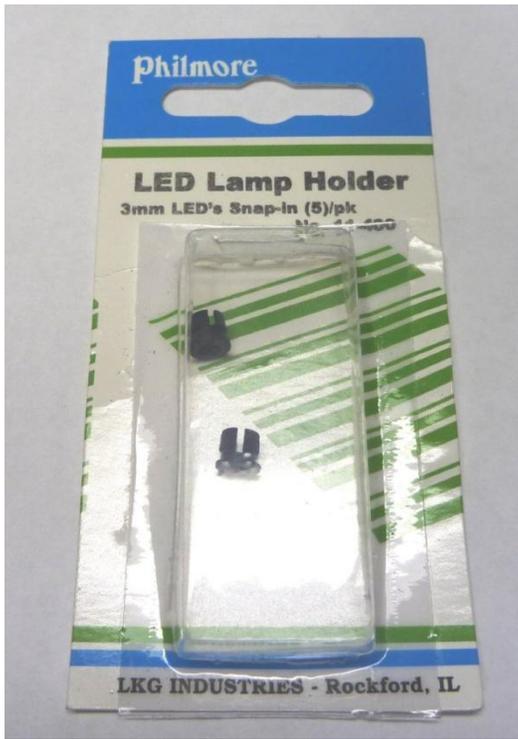
Note resistor in series. Thought it was a good idea to keep the resistor in the open.

# COMPONENTS USED

The screenshot shows the WiringProducts.com website. The top navigation bar includes 'WiringProducts.com', 'The Place to buy Electrical supplies', and logos for VISA, MasterCard, American Express, and DISCOVER. There is a 'Live Help' chat icon and a BBB Accredited Business logo. The main menu lists various products: Automotive Wire, Battery Cable, Wire Terminals, DC Circuit Breakers, Toggle Switches, Automotive Switches, 12 Volt Automotive Relays, and Wire Loom. A search bar is present with the text 'Search Phrase:'. Below the navigation, there are links for 'Smart Glow Fuses', 'MAXI Fuses', 'Fuse Block', 'Fuse Holders', 'Automotive Fuses', and 'Fuse Ki'. The breadcrumb trail reads 'Home > Fuses, Fuse Blocks, and Fuse Holders > Fuse Block'. The main heading is 'Fuse Blocks', followed by a description: 'Automotive fuse blocks for power distribution in automotive and other 12 volt and 24 volt electrical systems. Fuse blocks are available in different styles and mounting options.' The product being featured is the '6 Circuit ATO/ATC Fuse Block' (AF-CFB6) priced at \$11.30 for 1 piece. A description states it is '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.' A small image of the fuse block is shown with a magnifying glass icon. The availability is listed as 'In stock'.

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" holes in these for the wires and used them as thread and moisture protectors on the bottoms of the light mounts.

(End)