



03.W3031 Random Flash  
Ground Switching Headlight Flasher  
INSTRUCTIONS

**Attention Installers: This flasher must be installed by a qualified technician.**

It is the final responsibility of the installer of headlight flashers to determine their compatibility with the vehicle make and model in which they will be installed. Incorrect wiring of headlight flashers could result in costly problems or even permanent damage to the vehicle's computer module.

**NOTE:** Do not install any **SHO-ME**® headlight flashers on 2000 model year or newer Dodge Durangos or Dodge Dakotas. Our flashers are **not** compatible with these vehicles and may lead to the failure of their computer systems.

The 03.W3031 flasher is designed to flash headlights on vehicles with ground switching headlight systems. "Positive Ground" (or "ground switching") means that the headlight "common" wire is connected to +12 volts, and the headlight is activated when the dimmer switch connects ground (0 volts) to the high OR low beam.

This flasher will provide a ground (0 volts) to the headlights when flashing or when high beam override is active. Because of this switching arrangement, the ground wire of the flasher must be fused, as it will be carrying the load of the headlight circuit. Wire the flasher as shown in the diagram, noting the fuse sizes on "Positive and Ground".

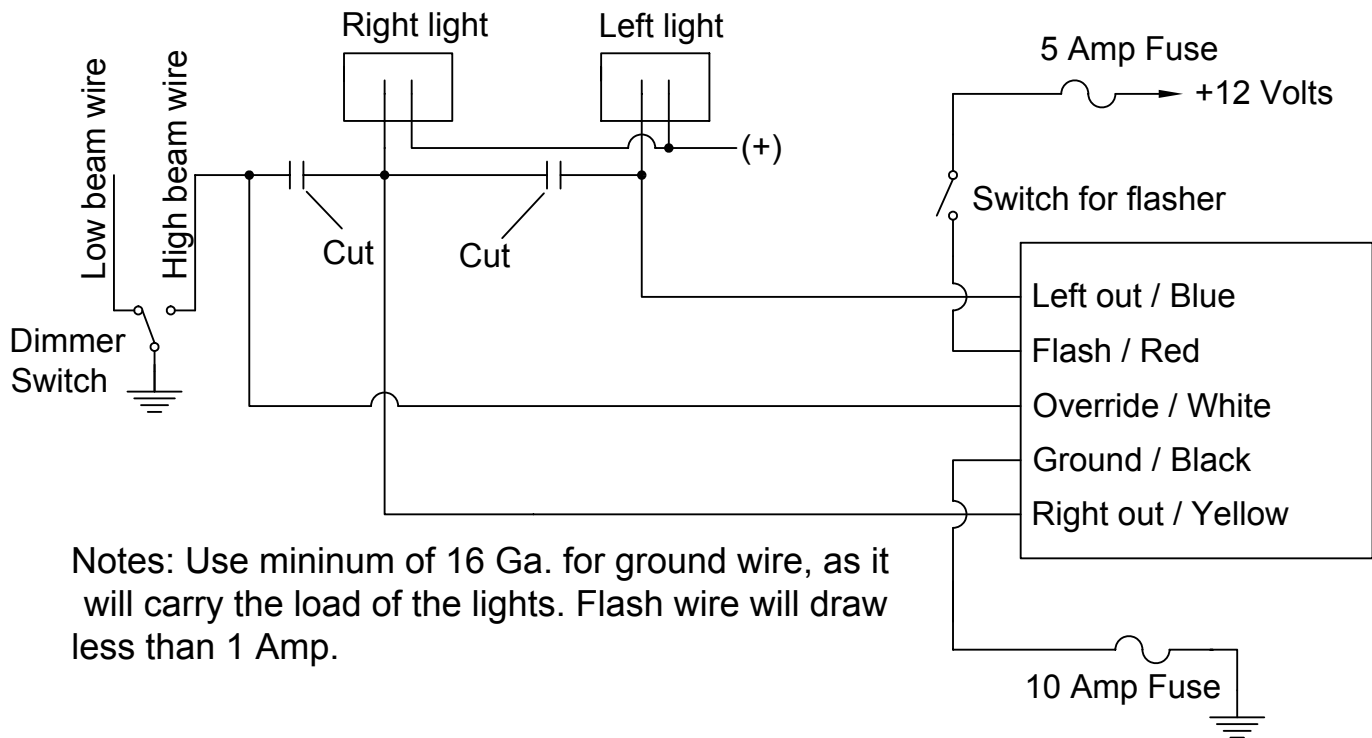
To facilitate using smaller switches for headlight control, it is common to find headlight relay(s) on modern vehicles. These relays may be used for different purposes on various vehicles. One relay is generally used to supply power (+12V) to the headlights when the headlight switch is turned on. In order to make use of a headlight flasher on a vehicle that uses a relay as described, an additional relay can be installed to imitate the function of the original relay each time the flasher is turned on. Or, simply turn on the headlights every time the flasher is turned on depending on the requirements of the installation.

Daytime running lights, when doubling as headlights, can be a difficult obstacle to overcome while installing a headlight flasher. Originally, vehicle manufacturers used a PWM (pulse width modulation) circuit to reduce the voltage applied to the headlights. This allowed them to efficiently burn the lamp at reduced intensity. However, the cost of the PWM circuit led them to discover that by connecting the lamps in series, they could effectively apply 7 volts to each bulb. A headlight control module generally does this switching. In order to install a headlight flasher on such a vehicle, the daytime running lights must be disabled anytime the flasher is active. If the vehicle manufacturer has provided a means of controlling whether the day time running lights are active or not, installation of the flasher will be simplified. (This control may be an actual wire on the headlight control module, or a separate switch on the emergency brake, (etc.). Either disables the running lights permanently, or wire a relay to the flasher switch to temporarily disable them anytime the flasher is active. The goal is to make the vehicle turn off the running lights, (thereby restoring normal headlight configuration) rather than "brute force".

When selecting a location to mount the flasher, keep in mind that the life of an electronic device is directly dependent on the temperature in which it is operated - the cooler the unit, the longer the life. Select a mounting location that is away from sources of extreme heat.



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Notes: Use minimum of 16 Ga. for ground wire, as it will carry the load of the lights. Flash wire will draw less than 1 Amp.

**LIMITED WARRANTY**

Able 2 Products Company warrants each new product (except bulbs, strobe tubes, strobe power supplies and LED Products) to be free from defects in material and workmanship for a period of two years from the date of purchase. During this warranty period, the obligation of Able 2 is limited to repairing or replacing, as Able 2 may elect, any part or parts, which after examination by Able 2 are determined to be defective, when they are delivered pre-paid. This limited warranty does not cover travel expense, the cost of specialized equipment for gaining access to the product, or labor charges for the removal and re-installation of the product.

Able 2 Products Company shall not be liable for incidental or consequential damages, including but not limited to : Loss of use of vehicle, Rental of substitute vehicle, Loss of time, Loss of work, Inconvenience, Transportation expenses, Telephone, Lodging, Loss of revenue, Loss of and /or damage to personal property for or arising out of breach of any express or implied warranty of its products.

Use of lamp or other electrical load of a wattage higher than installed or recommended by the factory, or use of inappropriate or inadequate wiring or circuit protection causes this limited warranty to become void. Able 2 Products Company will in no way be liable for any loss of profits or any indirect or consequential damages arising out of any such defect in material and workmanship whether loss is due to negligence or breach of warranty. This limited warranty does not apply to shipping damage, accident, alteration, tampering, misuse or abuse and unauthorized service.

This limited warranty is expressly in lieu of all other express or implied warranties, including the implied warranty of merchantability and the implied warranty of fitness for a particular purpose, and of all other obligations or liabilities on the part of Able 2 Products Company. There are no warranties, unless expressed in authorized Able 2 literature, which extend beyond the description of the face hereof. No dealer, distributor, employee, or representative of the company is authorized to change this warranty in any way or to grant any other warranty.

**WARRANTIES:**

All LED Products . . . . .	5 Years
T Model & Potted Strobe Power Supplies . . . . .	2 Years
All Other Strobe Power Supplies . . . . .	5 Years
All Other Products EXCEPT Bulbs . . . . .	2 Years (under normal use)
Strobe Tubes . . . . .	1 Year (under normal use)

NOTE: Halogen and Incandescent Bulbs are not covered by warranty.

**PRODUCT RETURNS**

If a product must be returned, contact our factory by calling 1-800-641-4098 to obtain a Return Authorization Number (RA) before you ship the product. Write the RA Number clearly on the package and return it to Able 2 Products Company, P.O. Box 543, 804 E. Hwy. 248, Cassville, MO 65625-0543. A packing slip should be included with all shipments listing the sender's name, address, daytime phone number and description of defect. Your product will be put in first-class operating condition or replaced with a new part, and returned pre-paid.