Speaker®
Engineered Lighting Solutions

Model 6309
Electronic Solid State Flasher

Electrical Specifications:

Operating Voltage: 12-80V DC
Input Current: 100mA Min/ 5A Max
Flash Rate: 70 ± 10 Flashes per minute
Duty Cycle: 50 ± 10%

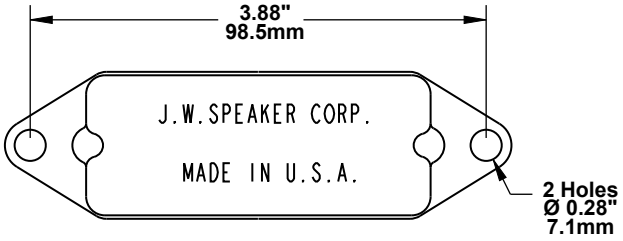
The 6309 flashers are encapuslated to be highly vibration resistant.

Mounting Instructions:

The flasher should be mounted where good air circulation exists and away from any heat source.

Two mounting holes of .28 in. (7.1mm) diameter are provided with a center to center spacing of 3.88 in. (98.4mm).

MOUNTING TEMPLATE



WARNING: DO NOT CONNECT THE 6309 FLASHER DIRECTLY ACROSS A POWER SOURCE. THIS WILL DESTROY THE FLASHER. THE LAMP MUST BE CONNECTED IN SERIES WITH ONE OF THE TWO WIRES.

CAUTION: THE BULB VOLTAGE MUST BE THE SAME AS THE POWER SOURCE VOLTAGE.

Wiring Connections:

This flasher may be connected as either a high side or low side switch. If the lamp load is polarized, such as an LED lamp, connect as below. If the load is a non-polarized bulb, then the lamp connections are interchangeable but the proper flasher connections must be observed.

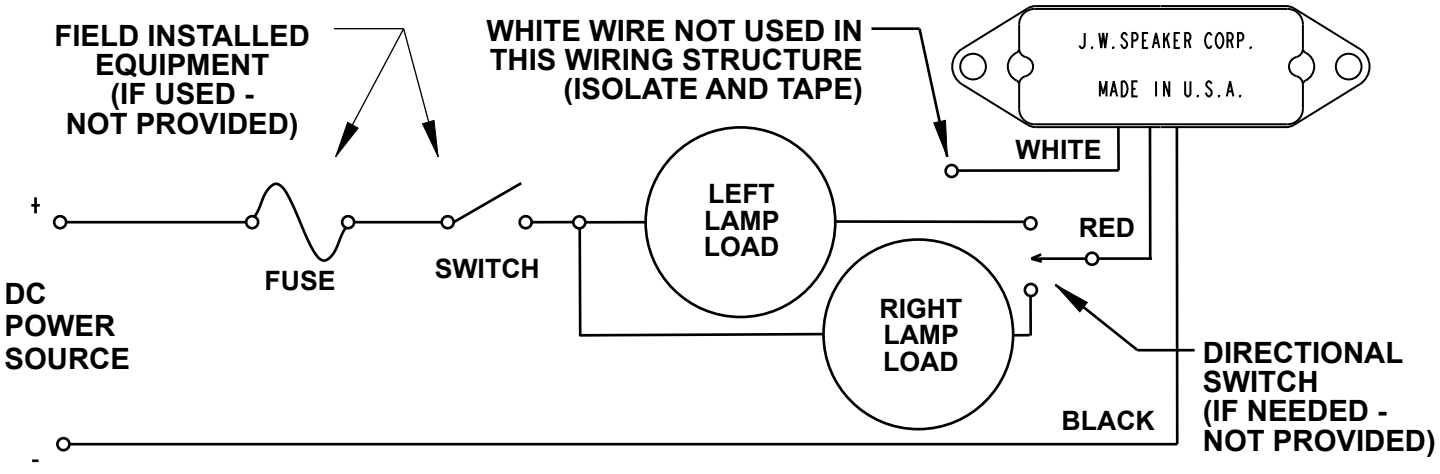
For clarity, optional connections are shown in the wiring diagram but not included in the text description. If your flasher has a white wire, it is not used except for the optional LED wiring scheme covered below. If the white wire is not used, isolate and tape it off.

For a low side switch, connect the vehicle positive to the lamp positive, the lamp negative to the flasher red wire and the flasher black wire to the vehicle negative. **See Figure 1.**

For a high side switching function, connect the vehicle positive to the flasher red wire, the flasher black wire to the lamp positive and the lamp negative to the vehicle negative. **See Figure 2.**

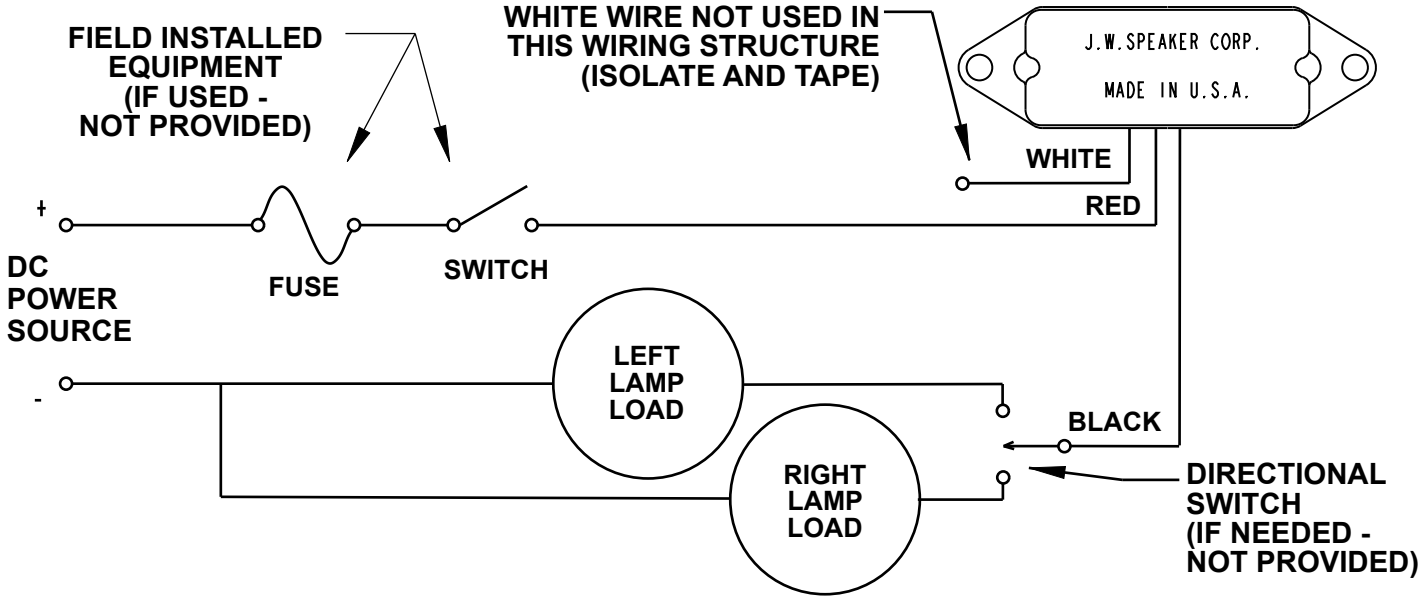
If the flasher is connected in reverse, the lamp may illuminate but will not flash. This will not damage the flasher, but long term operation in this mode is not recommended.

FIGURE 1 - LOW SIDE WIRING DIAGRAM



CONTINUED ON BACK

FIGURE 2 - HIGH SIDE WIRING DIAGRAM



Optional LED Lamp Wiring:

There are numerous internal designs for LED lamps that are typically low current designs. Low current loads are difficult to flash and these designs are beyond the control of J.W. Speaker. Even if the lamp current is greater than 100mA, the internal design may affect the flasher's ability to flash the lamp.

If your LED lamp does not flash properly, wire it as follows. This optional wiring scheme requires that the flasher be on the low side (i.e. the black wire from the flasher must be connected to the vehicle negative). Connect the lamp as below for a low side switch such that the lamp is connected between the flasher and the vehicle positive. Then connect the unused white wire to the vehicle positive. This should allow the lamp to flash properly. **See Figure 3.**

FIGURE 3 - LOW SIDE DIAGRAM SHOWING LED/LOW POWER OPTION