

**MODEL 8100
 HID/HALOGEN MOTORCYCLE HEADLIGHT**

WARNING

HAZARDOUS VOLTAGE INSIDE! TO PREVENT ACCIDENTAL SHOCK, REMOVE POWER AND WAIT FIVE (5) MINUTES BEFORE SERVICING. FAILURE TO COMPLY COULD RESULT IN SERIOUS INJURY.

THEORY OF OPERATION:

High Intensity Discharge (HID) Lighting describes a type of light source producing light energy by means of an arc sustained within a gaseous enclosure. This system is comprised of three (3) major components:

- **BULB** – Contains Environment & Arc
- **STARTER** – Boosts the Voltage from the Ballast
- **BALLAST** – Provides High Voltage to the Starter

HID ADVANTAGES:

- Daylight Color Impression (*Brilliant Blue/White Light*)
- 4-5 Times More Light*
- 10 Times the Life*

* HID provides 4-5 times the output of Incandescent or Halogen lights using the same levels of input energy.

GENERAL OPERATION:

The Speaker HID/Halogen Motorcycle Headlight is designed for long life. It is resistant to vibration and shock. When input power is introduced to the ballast system, an arc is struck in the bulb between two contacts. Although HID offers extra long life, frequent re-striking of the arc will shorten the bulb life. Once the arc is struck, it is preferable to leave the lamp on until it is no longer needed.

Keeping the lens clean of debris will also extend the life and performance of the bulb. Debris on the lens could cause damage due to trapped heat. Damage of this nature is not covered by the warranty, and can be prevented by simply cleaning the lens with mild soap and water.

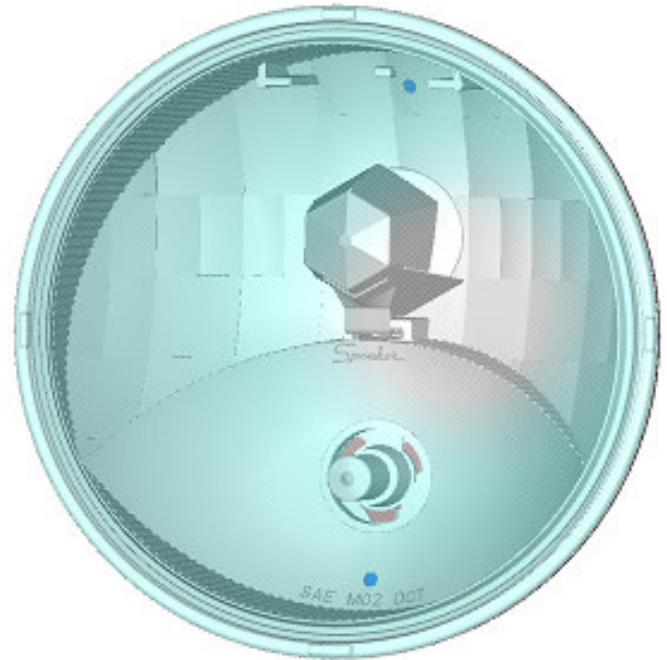
INSTALLATION:

Please see the installation instructions provided with this document.

BULB REPLACEMENT:

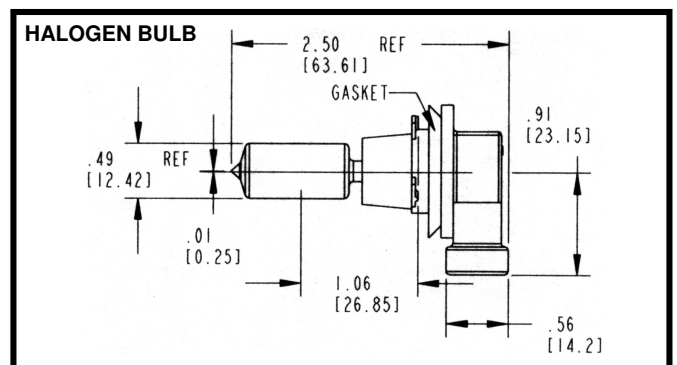
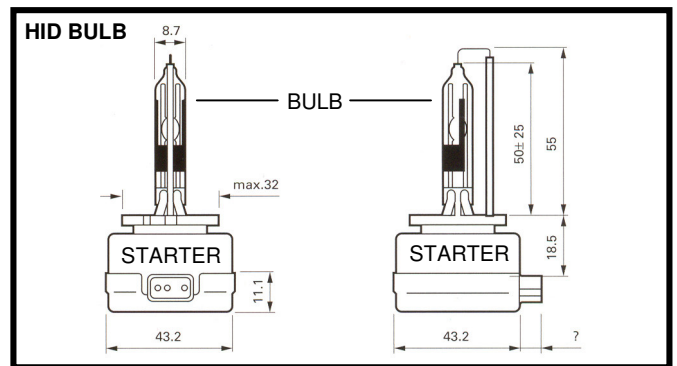
Always wear eye protection when replacing bulbs! Do not touch glass! If stained, use alcohol to clean.

- Wait for bulb to cool.
- Disconnect power supply and wait five minutes.
- Remove used bulb from its connector socket.
- Insert new bulb by aligning it with its connector socket.
- Replace electrical connector.
- Test the bulb to see if it functions and if it is aligned correctly.



WARNING

HID and Halogen bulbs contain gas under pressure and could shatter. Protect the bulbs against abrasions, scratches and liquids. Do not touch the glass envelopes! Operate the bulbs only in a lamp assembly. Replace bulbs if damaged or cracked. Wear eye protection when handling! Disconnect power before removing! Treat used bulbs as special waste.





WARNING



DISCONNECT INPUT POWER TO BALLAST BEFORE SERVICING UNIT!

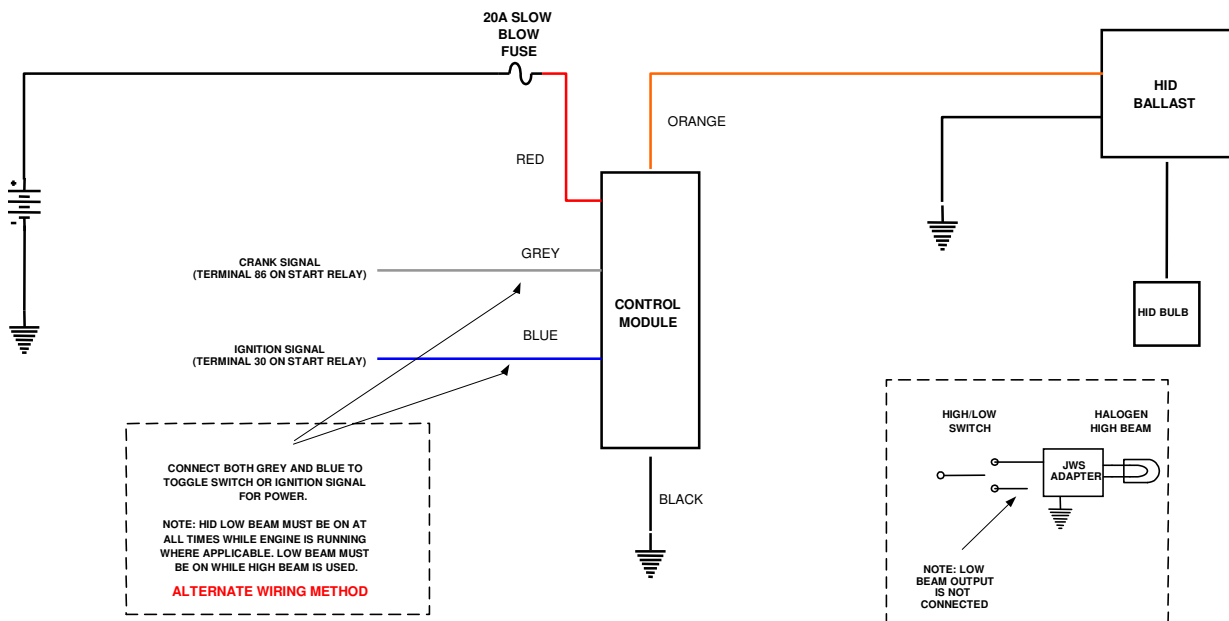
TROUBLESHOOTING CHART

PROBLEM	INSPECT/POSSIBLE CAUSE	SOLUTION
UNIT DOES NOT LIGHT	HID Internal Protection Circuit	Remove power from HID system. Wait 30 seconds and reapply power.
	In-Line Fuse	Replace fuse.
	Wiring Polarity	Unit must be wired positive to the red lead and negative to the black lead.
	Electrical Connections & Cords	Replace if damaged.
	Low/No Voltage Input	Repair or replace defect in input system.
	Bulb Burned Out	Replace bulb.
	Ballast Failure	Replace ballast assembly.
ARC STRIKES BUT WILL NOT SUSTAIN	Input Current	Repair or replace defective input system.
	Bulb Burned Out	Replace bulb.

SYSTEM SPECIFICATIONS

SERIES	BALLAST INPUT VOLTAGE	MAXIMUM AMP DRAW	AMBIENT OPERATING TEMPERATURE	BULB IDENTIFIER	OUTPUT (LUMENS)	COLOR TEMPERATURE	FUSE SPECIFICATIONS
Model 8100	9-16 VDC	20A Max (<i>initial</i>) 3.18A Max (<i>steady state</i>)	-40 C to 85 C	D1R (35W)	3200 lm	4100 K	20 Amp Slow Blow (BUSS MSD-L)

WIRING DIAGRAM:



ONE-YEAR WARRANTY:

This product is warranted against defects in material and workmanship for 1 year from the original date of purchase. Products found to be defective during the warranty period will be repaired or replaced (*at Speaker's option*) without charge to you. **Prior authorization is required from customer service before Speaker will accept any merchandise.** You can contact customer service toll free at 1-877-406-1482, Monday through Friday between 7:30 a.m. and 4:00 p.m. central standard time (CST). The product must be returned, shipping prepaid by you, with the original invoice.

J.W. Speaker Corporation | ATTN: Customer Service | N120 W19434 Freistadt Road | Germantown, WI 53022

Repaired or replaced product will be returned to you shipping prepaid by Speaker. This warranty does not cover bulbs, sealed beams, products subjected to misuse, neglect, accident, improper installation, deliberate destruction, or use in violation of instructions furnished by Speaker. **THE PRODUCT WARRANTY PROVIDED ABOVE IS EXCLUSIVE. SPEAKER WILL HAVE NO OTHER LIABILITY OR OBLIGATION TO YOU WITH REGARDS TO THE PRODUCT. NO OTHER WARRANTIES OF ANY KIND ARE MADE, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF TITLE, NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**