



3656 Paragon Drive
Columbus, Ohio 43228
Phone: (800) 989-2718
Fax: (614) 527-3547
www.weldoninc.com

SUPPLEMENTAL WARNING LIGHT KIT

Installation Instructions

IMPORTANT! Read this document completely before installing your Supplemental warning light. Store this document in a safe place for future reference.

For Safe Installation and Operation

To properly and safely install this lighting device you must have a good understanding of vehicle electrical systems and the procedures necessary to service them. There are several safety standards available. Please reference these standards whenever applicable.

Installation of the Supplemental warning light requires drilling onto a mounting surface. Check that both sides of the drill location are clear of any obstruction, such as wire harnesses or other devices.

All wire exit areas must be free of burrs and sharp edges to prevent wire damage.

DO NOT install this Supplemental light, any device or wire in the deployment zone of the vehicle airbag(s). Refer to vehicle documentation for locations of all airbags.

The Supplemental light uses high intensity Light Emitting Diodes (LEDs). Do not stare directly into the lamp from close range. Permanent eye damage or blindness may occur.

FAILURE TO FOLLOW THESE SAFETY INSTRUCTIONS COULD RESULT IN DAMAGE TO THE VEHICLE AND INJURY OR DEATH TO VEHICLE OCCUPANTS!

SUPPLIMENTAL KIT INCLUDES:

1 x 5 Amp Fuse

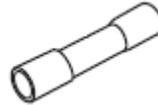
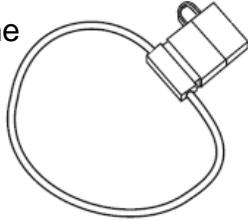


4x Rubber Grommet



6 x 20-18 AWG Heat shrink/crimps

1 x 5 Amp in line Fuse holder

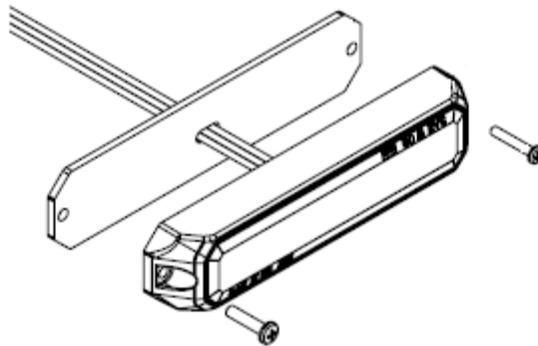


11 x 16-14 AWG Heat shrink/crimps

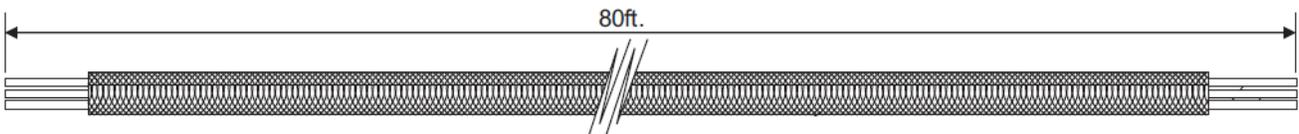
25 x Black wire ties



4 x Warning LED lights with mounting screws and gasket



1 x 80 ft Wiring harness



VEHICLE BODY PREPARATION:

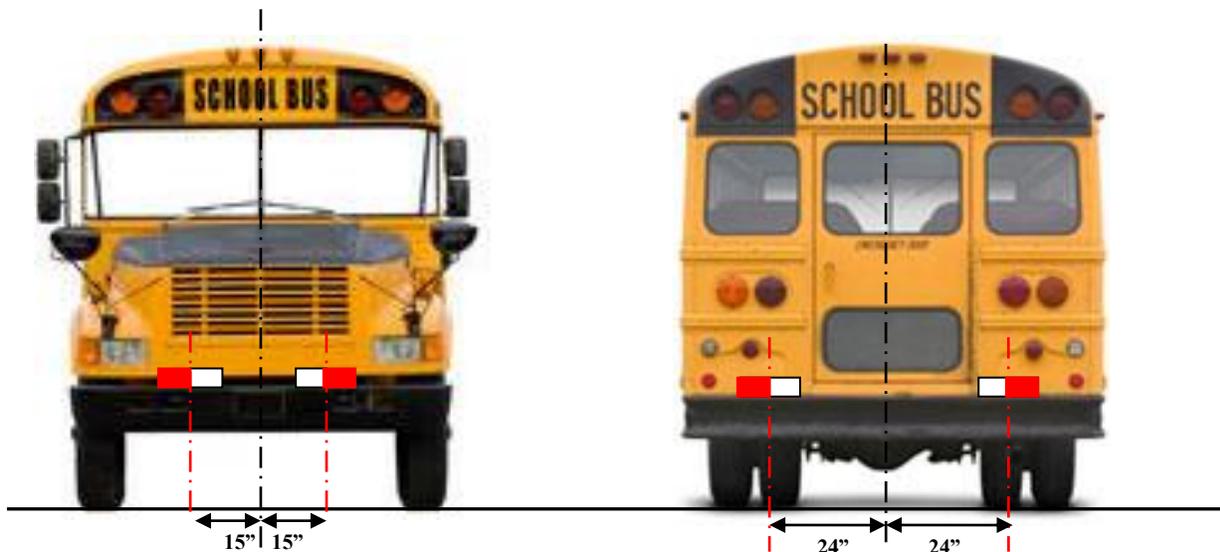
1. When determining the location of the lamp, make certain that the lamp will not interfere with any existing components on the vehicle. Take note of any moving parts in the mounting area.
2. The light output from the lamp must not be obstructed.
3. Do not mount the lamp directly to tread plate or bumper. Light must be mounted no more than 6 inches from bumper. (Use supplied template with light for correct height)

WARNING LIGHT PLACEMENT AND MOUNTING INSTRUCTIONS:

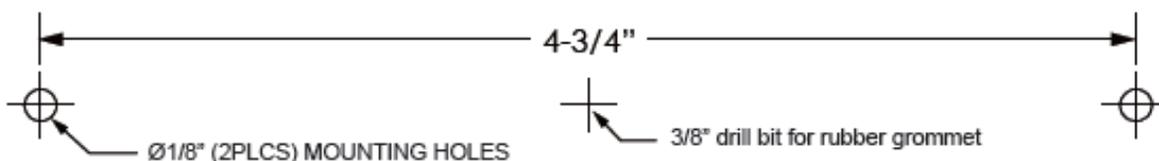
	Conventional Bus	Transit Bus
Front of Bus	Mounted with the center of the lamp 15" from the center of the bus. Mounted within 6 inches of the top of bumper	Mounted with the center of the lamp 15" from the center of the bus. Mounted 4 – 6" above the top of the headlight assembly.
Rear of Bus	Mounted with the center of the lamp 24" to each side of the center of the rear of door. No more than 4 inches above bumper.	Mounted with the center of the lamp 24" to each side of the center of the rear of door. No more than 4 inches above bumper.



The red portion of each lamp must be nearest the sides of the bus; the white portion of the lamp towards the center.



1. Using supplied template: Locate, mark and drill two mounting holes using a 1/8" drill bit.
2. Using supplied template: Locate, mark and drill one wire exit hole using a 3/8" drill bit.
3. Install supplied rubber grommet into the wire exit hole to prevent damage to the wires.
4. Feed the Supplemental light wires through rubber grommet and mount Supplemental light to metal surface with supplied screws.



THIS EDGE ON TOP OF BUMPER

121129

Rev. A

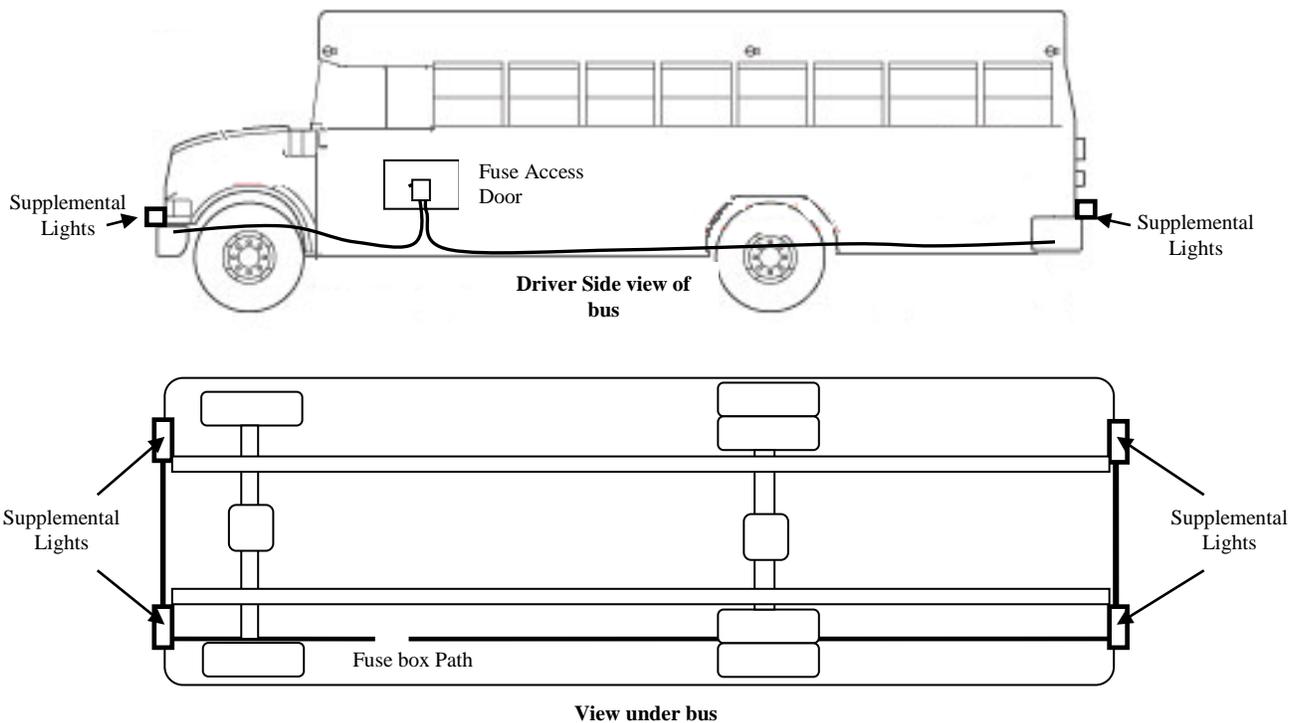
SUPPLIED WIRING HARNESS INSTALLATION:

The wiring harness can be run under the bus to connect all Supplemental lights together.

1. Recommended starting point for wiring harness is:
 - a. Front Lights: Front Curb side
 - b. Rear Lights: Back Curb side
2. Use supplied black wire ties to attached wiring harness to undercarriage points where needed.
3. Front and rear path of wiring harness must meet up to fuse box. Cut off excess wiring harness before connecting to STOP ARM.
(Suggested path is shown in diagram below)



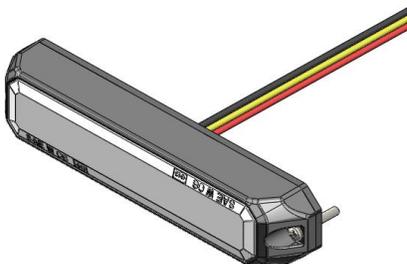
Wire harness must be mounted away from any moving or heat generating parts. (Shocks, Axels, Exhaust pipes, etc.)



ELECTRICAL CONNECTIONS:

COLOR	FUNCTION	DESCRIPTION
Red	+VBatt	+9 to +36 VDC
Black	Ground	
Yellow	For Light Synchronization	Synchronizes lights and changes flash pattern of lights

The Supplemental warning lamps will operate best when the power and ground paths are free from electrical interference caused by other devices. When wiring the lamps, provide a clean, dedicated power and ground supply to the lamp network.



Use supplied 20-18 AWG Heat shrink/crimps on wire connections starting points that require two wires to be connected together.

Use supplied 16-14 AWG Heat shrink/crimps on other connections that require three wires to be connected together.

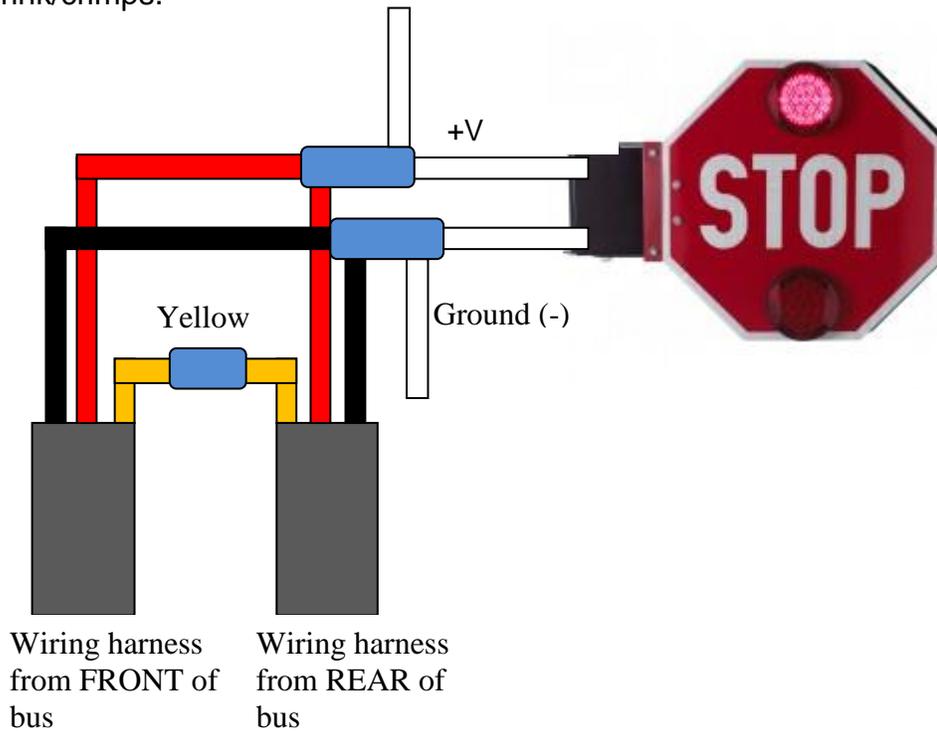


All crimps must be heat shrunk to provide proper corrosion resistant sealing to all connections.



Supplemental lights must come on when stop arm is activated and red lights are flashing.

1. Using 16-14 AWG heat shrink/crimps, **SPLICE** red and black wires from wiring harness to power and ground of red lights on stop arm.
2. Yellow (Synchronization) wires must be attached together using 20-18 AWG heat shrink/crimps.



Flash Patterns:

The Supplemental lamp flash pattern can be changed through the wire-touch method. No auxiliary device is necessary.

WITH LAMP POWERED, apply POWER (RED Wire) to YELLOW wire momentarily to switch between PRIMARY and ALTERNATE flash patterns

FP#	Flash Patterns	FLASH RATE
1	PRIMARY	SINGLE 75±10 FPM(SPLIT)
2	ALTERNATE	QUAD 75±10 FPM(SPLIT)