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Safety Messages for Installers of Warning Light Equipment

⚠ WARNING

People's lives depend on your safe installation of our products. It is important to read, understand and follow all instructions shipped with the products. Listed below are some other important safety instructions and precautions you should follow:

- To properly install this light, you must have a good understanding of automotive electrical procedures and systems, along with proficiency in the installation and use of safety warning equipment.
- Do not install equipment or route wiring in the deployment path of an airbag.
- If a vehicle seat is temporarily removed, verify with the vehicle manufacturer if the seat needs to be recalibrated for proper airbag deployment.
- When drilling into a vehicle structure, ensure that both sides of the surface are clear of anything that could be damaged.
- Locate the light control so the VEHICLE and CONTROL can be operated safely under all driving conditions.
- Do not attempt to activate or deactivate the light control while driving in a hazardous situation.
- Frequently inspect the light to ensure that it is operating properly and that it is securely attached to the vehicle.
- This product contains high-intensity LEDs. Do not stare directly into the lights at a close range, or permanent damage to your eyesight may occur.
- Refer to the instructions packed with related products for additional precautions and information.
- File these instructions in a safe place and refer to them when maintaining and/or reinstalling the product.

Failure to follow all safety precautions and instructions may result in property damage, serious injury, or death.

Introduction

This publication has instructions for installing Federal Signal ICON® Series Model ICSPL13-AW and ICSPL21-AW utility light bars. The lights have aluminum brackets and stainless steel hardware that permit vertical adjustment.

⚠ CAUTION

This device is intended for off-road use only.

Unpacking the Product

After unpacking the product, inspect it for damage that may have occurred in transit. If it has been damaged, do not attempt to install or operate it. File a claim immediately with the carrier, stating the extent of the damage. Failure to identify damage before installation could lead to the rejection of any claim. Carefully check all envelopes, shipping labels, and tags before removing or destroying them. Ensure that the parts listed in Table 1 are included in the package. If you are missing any parts, contact Federal Signal Customer Support at 1-800-264-3578, 7 a.m. to 5 p.m., Monday through Friday (CT).

Table 1 Kit Contents

Mount Type	Description	Qty
End Mounting Kit	End Mounting Bracket, Aluminum, Powder Coated Black	2
	Stainless Steel Round Head Machine Screw, M8-1.25 X 25 mm	2
	Stainless Steel Hex Head Bolt, M8-1.25 X 30 mm	2
	Stainless Steel Washer, for M8	2
	Stainless Steel Lockwasher, for M8	4
	Stainless Steel Hex Nut, M8-1.25	2
Back Mounting Kit	Back Mounting Bracket Arm, Aluminum, Powder Coated Black	2
	Back Mounting Bracket Foot, Aluminum, Powder Coated Black	2
	Stainless Steel Hex Head Bolt, M8-1.25 X 30 mm	2
	Stainless Steel Hex Head Bolt, M6-1.0 X 20 mm	2
	Stainless Steel Washer, for M8	2
	Stainless Steel Lockwasher, for M8	2
	Stainless Steel Hex Nut, M8-1.25	2
	Stainless Steel Locknut, M6-1.0	2

Installing the Utility Bar

To prepare for the installation:

- Ensure that the battery voltage is the same as the voltage rating of the utility light bar.
- Verify that the utility light bar and mounting hardware fit the vehicle.
- Determine where to mount the utility light bar on the vehicle.
- Decide where to route wiring for the utility light bar.

⚠ WARNING

AIRBAG DEPLOYMENT: Do not install equipment or route wiring in the deployment path of an airbag. Failure to observe this warning will reduce the effectiveness of the airbag or potentially dislodge the equipment, causing serious injury or death.

To mount the utility light bar:

1. Determine the mounting location for the light and the installer-supplied control switch.

NOTICE

DRILLING PRECAUTIONS: When drilling holes, check the area you are drilling into to ensure that you do not damage vehicle components. All drilled holes should be deburred, and all sharp edges should be smoothed. All wire routings going through drilled holes should be protected by a grommet or convolute/split loom tubing.

2. Drill two 8-millimeter (5/16-inch) holes at the mounting locations for the mounting bolts. Use the supplied hardware to secure the bracket to the vehicle as shown in the illustrations. For end mounting, see Figure 1. For back mounting, see Figure 2.

Figure 1 Exploded View with End Mounting Bracket

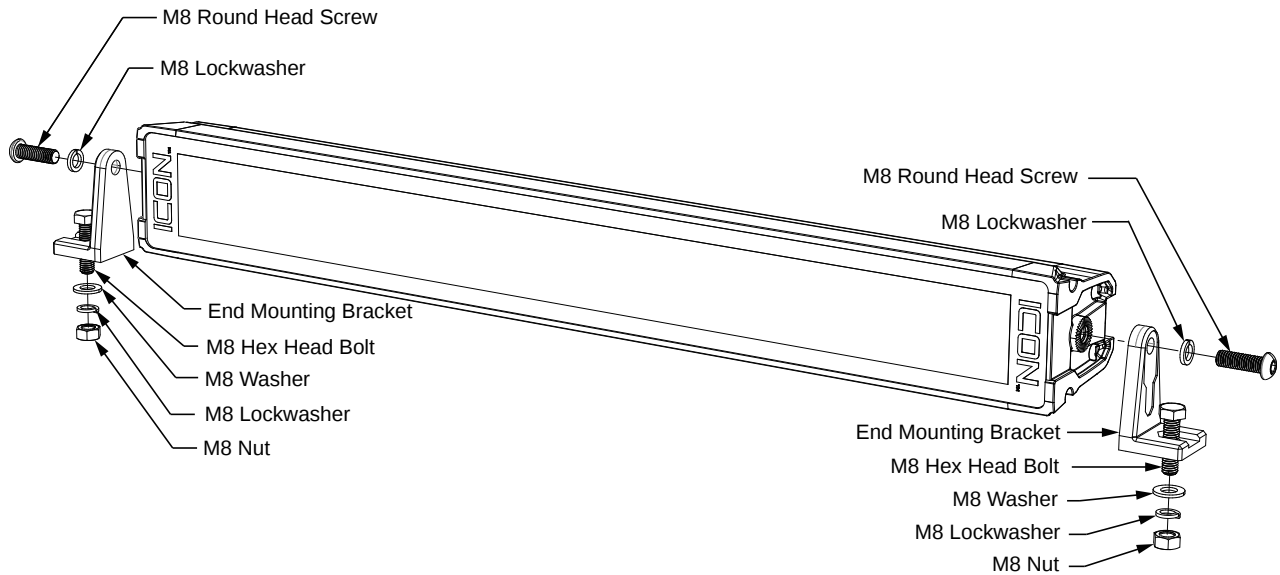
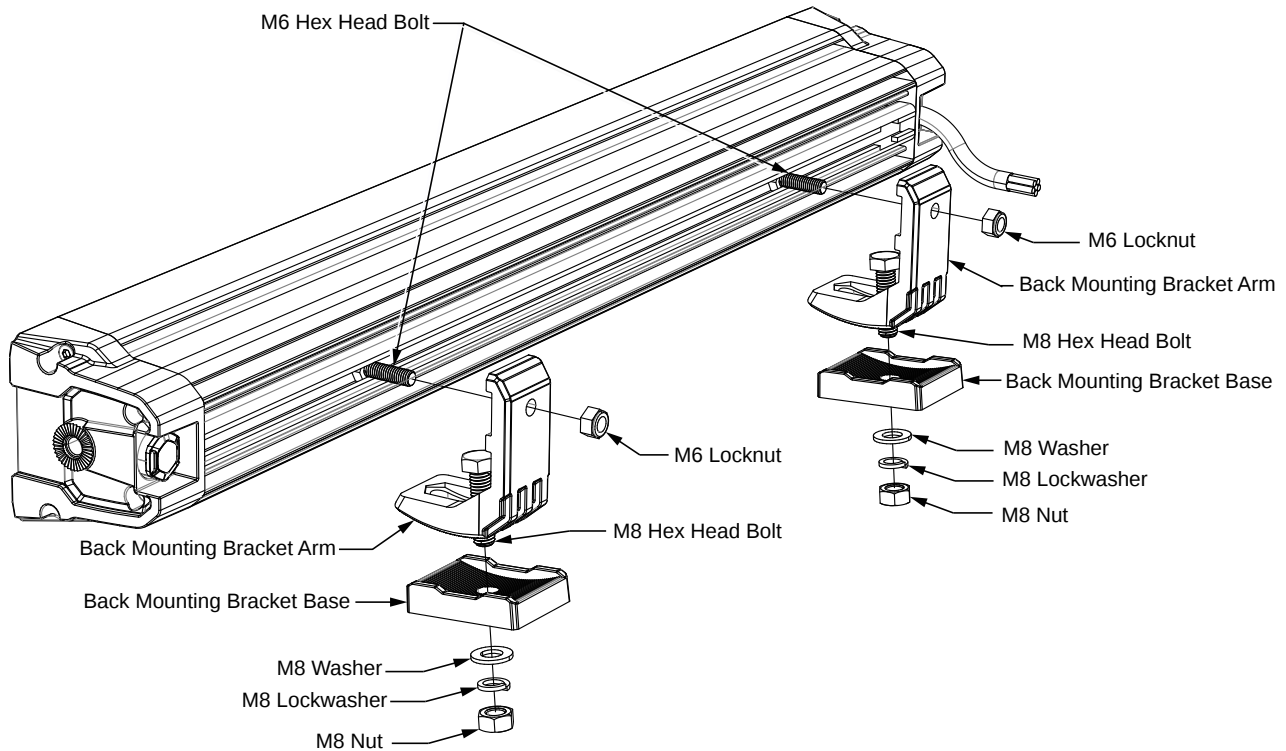


Figure 2 Exploded View with Back Mounting Bracket



3. Route wires from the power source to the locations of the control switches. Install user-supplied fuses and fuse holders as close as possible to the power source. Refer to Table 2 for minimum wire gauges and fuse ratings for each wire/function on the utility light bar.

NOTICE

HIGH CURRENT DEVICE: A utility light bar is a high current system. In order for the system to function properly, separate negative (-) and positive (+) connections must be made. All negative connections should be connected to the negative battery terminal, and appropriate fuses should be installed on the positive connections as close to the battery terminal as possible. Ensure that all wires and fuses are rated correctly to handle the system amperage requirements.

Table 2 Wiring and Functions

Wire Color	Wire Function	Minimum Gauge	Recommended Fuse	
			Model No.	Fuse Rating at 12.8 Vdc
Red	White Combo Light	14 AWG	ICSPL13-AW	5 A
			ICSPL21-AW	10 A
Gray	White Position Light (+)	18 AWG	All Models	1 A
Green	Amber Warning Light (+)	18 AWG	All Models	1 A
Yellow	Amber Position Light (+)	18 AWG	All Models	1 A
Black	Ground (-)	14 AWG	All Models	-

- Route wire from the switches to the location of the utility light bar. Refer to Table 2 for minimum wire gauges for each wire/function on the utility light bar.
- Route a 14 AWG wire from the installation area of the light to the nearest convenient chassis ground. The battery is recommended.

⚠ WARNING

LIGHT HAZARD: To be an effective warning device, an emergency warning system produces bright light that can be hazardous to your eyesight when viewed at a close range. Do not stare directly into the lights at a close range, or permanent damage to your eyesight may occur.

- Check the wiring and test the light for proper operation.



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