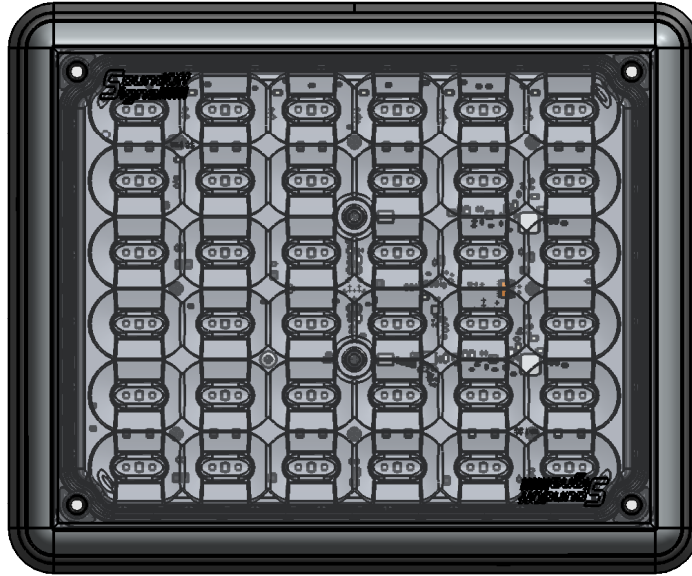




# 9x7 WARNING LIGHT

## EMPSE15C(X)-(X) - 9X7 Silicone Warning - Screw & Stud Mount



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<https://soundoffsignal.com/legal/patent-notification/>

### **WARNING**

- HIGH CURRENT interconnects must be properly terminated. Poor crimp quality can cause heat build-up and fire. Follow the crimp connector manufacturer instructions.
- DO NOT install this product or route any wires in the Air Bag Deployment Zone. Refer to vehicle Owner's Manual for deployment zones.
- Do NOT use system to disconnect headlights, brake lights or other safety equipment.
- Unit may become hot to touch during normal operation.
- Failure to properly install connectors, fuses or wiring may cause vehicle failure or fire.
- Installation must only be performed by trained technician. Installer must determine vehicle wiring configuration and proper integration of system.
- Use proper wire gauge. All power wires connecting to positive (+) or negative (-) battery terminal or local chassis ground (-) must be sized to supply at least 125% of max. current and properly fused at power source.
- Install protective grommets when routing wire through firewall or metal.
- Petroleum/silicone based lubricants will cause the silicone lens to discolor.

DIMENSIONS . . . . . 2

WARNING LIGHT OPTIONS . . . . . 2

TECHNICAL SPECIFICATIONS . . . . . 3

WIRING INFORMATION . . . . . 4-7

STUD MOUNT INSTALLATION . . . . . 8

SCREW MOUNT INSTALLATION . . 9-10

RETENTION CLIP INSTRUCTIONS . . 11

REPLACEMENT PARTS . . . . . 12

**WARNING**

ROUTE WIRES ONLY IN LOCATIONS THAT ARE NOT SUBJECTED TO POTENTIAL WEAR. MAKE SURE TO AVOID ROUTING WIRES IN THE DEPLOYMENT AREA OF YOUR AIR BAG. REFER TO YOUR VEHICLE'S OWNER'S MANUAL FOR AIRBAG DEPLOYMENT ZONES.



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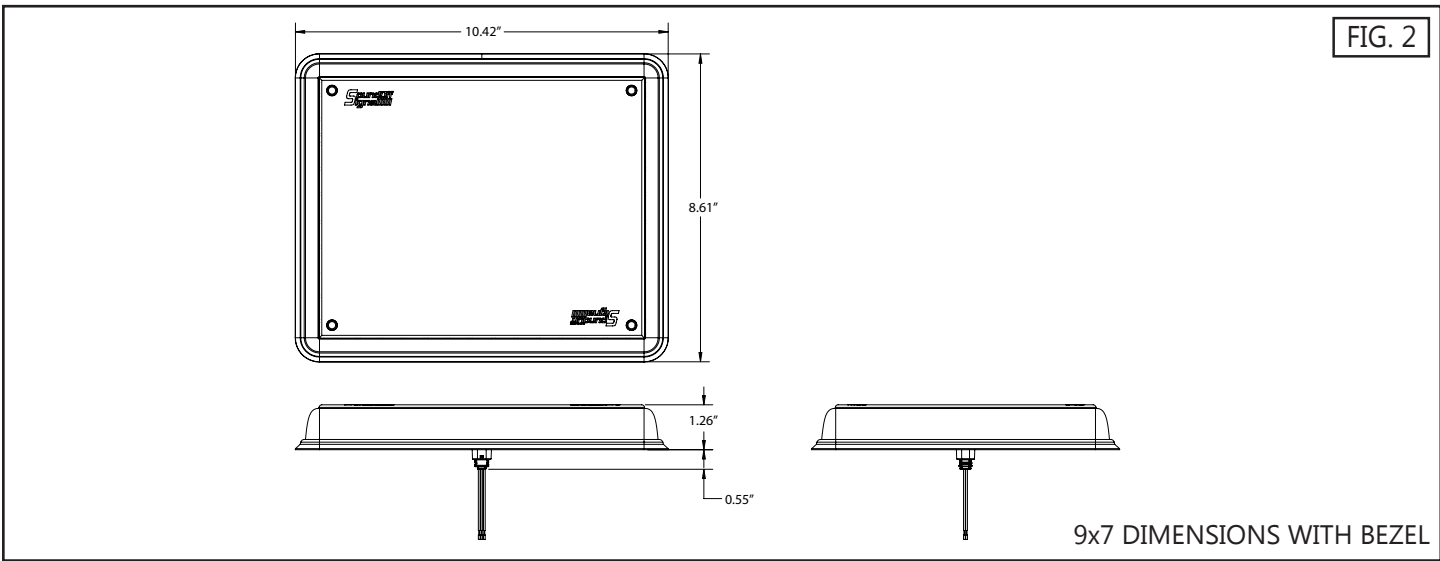
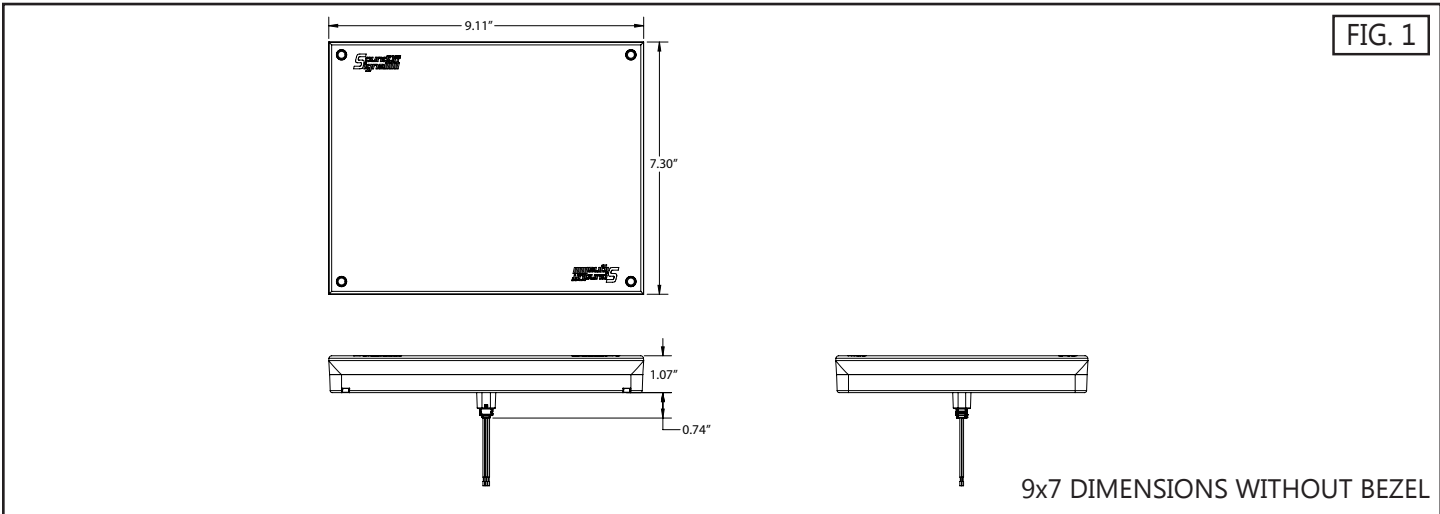
**NOTICE:**

Installers and users must comply with all applicable federal, state and local laws regarding use and installation of warning devices. *Improper use or installation may void warranty coverage. To review our Limited Warranty Statement & Return Policy for this or any SoundOff Signal product, visit our website at [www.soundoffsignal.com/tech-services/returns/](http://www.soundoffsignal.com/tech-services/returns/). If you have questions regarding this product, contact **Technical Services**, Monday - Friday, 8 a.m. to 5 p.m. ET at 1.800.338.7337 (press #4). Questions or comments that do not require immediate attention may be emailed to [techservices@soundoffsignal.com](mailto:techservices@soundoffsignal.com).*

ENHANCING SAFETY THROUGH INNOVATION

9X7 Silicone\_WARNING  
0000KP 0923 REV A

# DIMENSIONS & BEZEL INFORMATION:



# WARNING LIGHT OPTIONS:

## 9x7 LED OPTIONS

- Single Color
- Dual Color
- Split Left/Right
- Split Top/Bottom

## 9x7 LED COLOR OPTIONS

- Red
- Amber
- White
- Blue
- Green

## 9x7 CERTIFICATIONS

- SAEJ595
- California Title 13
- NFPA 1901-2009
- KKK-A-1822 (July 2021)

## 9x7 MOUNTING OPTIONS

- Stud Mount
- Screw Mount

## 9x7 AVAILABLE FLASH PATTERNS

- Double\*
- Double 2\*
- Inter-cycle
- Power Pulse\*
- Q-switch
- Quad\*
- Quad 2\*
- Quad Pulse-pop
- Quint\*
- Random 1
- Random 2
- Road Runner\*
- Steady-Burn Driver Title 13 Quad
- Steady-Burn/Road Runner
- Warp

\*Certified Flash Patterns

## PART NUMBERS (UNCONFIGURED)

- 9x7 - EMPSE15C(X)-(X)\*\*

\*\*See SoundOff Signal configurator or sales representative for specific color, lens, and mounting options.





# WIRING AND TABLE INFORMATION (CONT.): //

## FUNCTION TABLES

The functional operation of the LED module can be changed while applying the +V to the Red wire with the Black wire connected to ground. When the light is flashing, momentarily connect the White wire to ground for >4S and <5S (light will go steady high, steady low, off, steady high, steady low) then release. The function table will now advance to the next table (table 1 to table 2, table 2 to table 3, table 3 to table 4, or table 4 to table 1. In the case that the custom table is programmed, the order is 1 to 2, 2 to 3, 3 to 4, or 4 to 7 (custom), and 7 to 1.) Repeat above process until required function table is active.

## EXAMPLE:

If the light is using Function Table 2 with the Orange wire to power, which steady burns color 2, and you then apply the White wire to ground, to change the Function Table to number 3, this would cause the light to start flashing dual low power.

FUNCTION TABLE 1				
WIRE			LIGHT	
RED	ORANGE	WHITE	SINGLE	DUAL
+9-32V	-	-	FLASH	FLASH DUAL
-	+9-32V	-	CRUISE	STEADY COLOR 2
+9-32V	+9-32V	-	FLASH	STEADY COLOR 2
-	-	+9-32V	NO OP	NO OP
+9-32V	-	+9-32V	LOW PWR FLASH	FLASH COLOR 1
-	+9-32V	+9-32V	CRUISE	FLASH COLOR 2
+9-32V	+9-32V	+9-32V	LOW PWR FLASH	FLASH DUAL

FUNCTION TABLE 2				
WIRE			LIGHT	
RED	ORANGE	WHITE	SINGLE	DUAL
+9-32V	-	-	FLASH	FLASH COLOR 1
-	+9-32V	-	STEADY COLOR 1	STEADY COLOR 2
+9-32V	+9-32V	-	STEADY COLOR 1	STEADY COLOR 2
-	-	+9-32V	NO OP	NO OP
+9-32V	-	+9-32V	CRUISE	FLASH DUAL
-	+9-32V	+9-32V	STEADY COLOR 1	STEADY COLOR 2
+9-32V	+9-32V	+9-32V	STEADY COLOR 1	STEADY COLOR 2

FUNCTION TABLE 3				
WIRE			LIGHT	
RED	ORANGE	WHITE	SINGLE	DUAL
+9-32V	-	-	FLASH	FLASH DUAL
-	+9-32V	-	LOW PWR FLASH	FLASH DUAL LOW PWR
+9-32V	+9-32V	-	LOW PWR FLASH	FLASH DUAL LOW PWR
-	-	+9-32V	NO OP	NO OP
+9-32V	-	+9-32V	LOW PWR FLASH	FLASH DUAL LOW PWR
-	+9-32V	+9-32V	LOW PWR FLASH	FLASH DUAL LOW PWR
+9-32V	+9-32V	+9-32V	LOW PWR FLASH	FLASH DUAL LOW PWR

# WIRING AND TABLE INFORMATION (CONT.):

## REMOTE MODE: For use with bluePRINT® system only

Connecting the Green wire to ground before applying power to the Red or Orange wires will place the LED module into remote mode and the light output color will be directly controlled by the input wires as shown below.

For Cruise mode or Low Power control of the LED module, the signal to the control wires must be 100 +/- 2Hz using the duty cycle inputs listed below to produce the light output.

MPOWER® 9X7 LED LIGHT REMOTE MODE FUNCTIONALITY					
RED WIRE	ORANGE WIRE	SINGLE COLOR		DUAL COLOR	
		COLOR SWAP = OFF	COLOR SWAP = ON	COLOR SWAP = OFF	COLOR SWAP = ON
CRUISE	-	CRUISE COLOR 1	-	CRUISE COLOR 1	CRUISE COLOR 2
-	CRUISE	-	-	CRUISE COLOR 2	CRUISE COLOR 1
CRUISE	CRUISE	-	-	CRUISE COLOR 2	CRUISE COLOR 1
FLASH	-	FLASH COLOR 1	-	FLASH COLOR 1	FLASH COLOR 2
-	FLASH	-	-	FLASH COLOR 2	FLASH COLOR 1
FLASH	FLASH	-	-	FLASH COLOR 2	FLASH COLOR 1
STEADY ON	-	STEADY ON COLOR 1	-	STEADY ON COLOR 1	STEADY ON COLOR 2
-	STEADY ON	-	-	STEADY ON COLOR 2	STEADY ON COLOR 1
STEADY ON	STEADY ON	-	-	STEADY ON COLOR 2	STEADY ON COLOR 1
CRUISE	FLASH	-	-	FLASH COLOR 2/CRUISE COLOR 1 DURING OFF CYCLE OF FLASH	FLASH COLOR 1/CRUISE COLOR 2 DURING OFF CYCLE OF FLASH
CRUISE	STEADY ON	-	-	STEADY ON COLOR 2	STEADY ON COLOR 1
Flash	Steady ON	-	-	Steady ON Color 2	Steady ON Color 1

CRUISE MODE DUTY CYCLE (@ 100HZ)	
INPUT	LIGHT OUTPUT
40%	OFF
50%	5%
60%	10%

LOW POWER FLASH D.C. (@ 100HZ)	
INPUT	LIGHT OUTPUT
70%	30%
80%	40%
90%	50%

# WIRING AND TABLE INFORMATION (CONT.):

## ADVANCE PATTERN

Flash pattern can only be changed when the LED module is in a flashing mode (disabled in cruise or steady ON functions). When the light is flashing, momentarily connect the white wire to ground for >250mS and <1S (light will go steady high) then release. The flash pattern will advance to the next pattern. If the light module was at the last pattern, the pattern will reset to the 1st pattern.

## BACKUP PATTERN

This function is only valid when the LED module is in a flashing mode (disabled in cruise or steady ON functions). When the light is flashing, momentarily connect the white wire to ground for >1S and < 2S (light will go steady high, steady low) then release. The flash pattern will backup to the previous pattern. If the light module was at the first pattern, the pattern will change to the last pattern on the list.

## COLOR SWAP

This function is only valid for dual color warning light modules and can only be changed when the light module is in a flashing mode (disabled for single color modules and when light module is operating in cruise or steady ON functions). When the light is flashing, momentarily connect the white wire to ground for >2S and <3S (light will go steady high, steady low, off) then release. The light module will switch between Color Swap OFF and Color Swap ON. When Color Swap is OFF, the 1st color will flash 1st on a dual color pattern. When Color Swap is ON, the 2nd color will flash 1st on a dual color pattern.

## SIMULTANEOUS/ALTERNATE

This function can only be changed when the LED module is in a flashing mode (disabled in cruise or steady ON functions) and only has an effect when at least 2 LED modules have the green sync wire connected together. When the light is flashing, momentarily connect the white wire to ground for >3S and <4S (light will go steady high, steady low, off, steady high) then release. The light module will switch between Simultaneous and Alternate each time this sequence is done. To have light modules flash simultaneously, both light modules need to be set to the same sequence type (Set-Up Table). To have light modules flash alternately, the light modules need to be set to different sequence types (Set-Up Table).

## PATTERN RESET

This function is only valid when the LED module is in a flashing mode (disabled in cruise or steady ON functions). When the light is flashing, momentarily connect the white wire to ground for >5S and <6S (light will go steady high, steady low, off, steady high, steady low, off) then release. The flash pattern will reset to the 1st pattern in the list.

## FACTORY RESET

This function is only valid when the LED module is in a flashing mode (disabled in cruise or steady ON functions). When the light is flashing, momentarily connect the white wire to ground for >6S and <7S (light will go steady high, steady low, off, steady high, steady low, off, steady high) then release. The LED module will reset to: pattern=1, Function Table=1, Color Swap=OFF, Simultaneous.

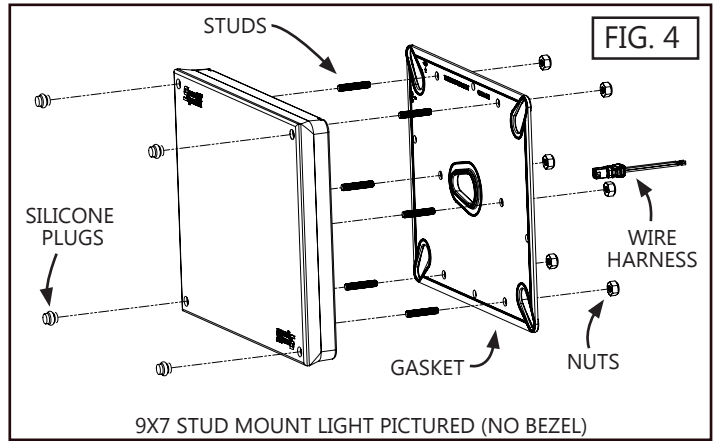
## LOCKOUT CONFIGURATION WIRE

This function will disable the wire tap configuration mode that is activated by holding the white wire to ground. The lock out is activated by applying ground to the white wire for >7 seconds and <8 seconds per the table below. The function can be disabled by tapping the wire to ground and releasing 8 times within 5 seconds. The light will flash 8 times when the feature is enabled or disabled to notify the user of a setting change.

SETUP TABLE			
SECONDS		USER INTERFACE	
FROM	TO	VISUAL FEEDBACK	ACTION TAKEN
0	1	STEADY-HIGH (60%)	FORWARD ONE PATTERN
1	2	STEADY-LOW (30%)	BACKWARD ONE PATTERN
2	3	OFF	COLOR SWAP (OFF OR ON )
3	4	STEADY - HIGH (60%)	SEQUENCE TYPE: SIMULTANEOUS OR ALTERNATE
4	5	STEADY - LOW (30%)	SEE FUNCTION TABLE
5	6	OFF	RESET TO PATTERN 1
6	7	STEADY-HIGH (60%)	FACTORY RESET (PATTERN 1, COLOR SWAP: OFF, SIMULTANEOUS) SEPARATE COLOR CONTROL: OFF
7	8	STEADY - LOW (30%)	LOCK OUT WHITE CONFIGURATION WIRE
If held longer than 8 seconds, the light will go back to flashing the current pattern and no action will be taken.			

# STUD MOUNT INSTALLATION: //

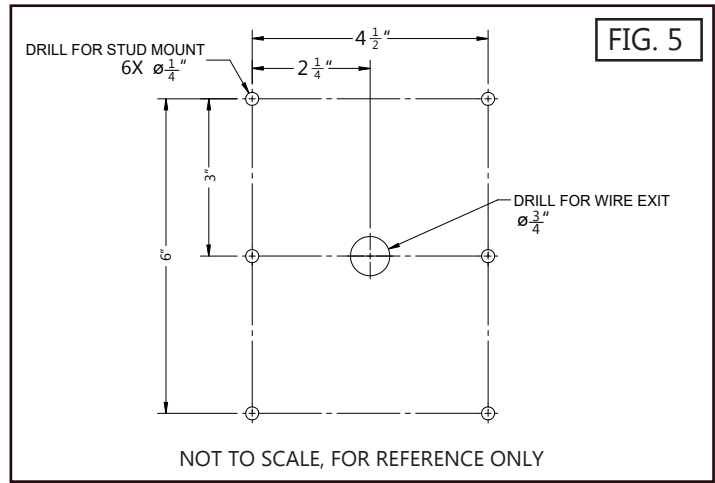
1. Remove the four, white packaging extrusions from the perimeter of the light.
2. Drill (6) 1/4" holes to mount light and 3/4" wire hole (see Fig. 5).
3. Insert (4) Silicone Plugs into Light to Seal Screw Holes. (Use a 50% Isopropyl alcohol, 50% deionized water mix for lubrication if necessary).



4. Thread studs into the back of light.
5. Align the gasket to the mounting surface. Horizontal and vertical orientations are indicated on gasket for proper seal.
6. Press light assembly against gasket, against mount surface.
7. Secure the light to mounting surface using (6) supplied nuts, on the back side of vehicle mount surface.

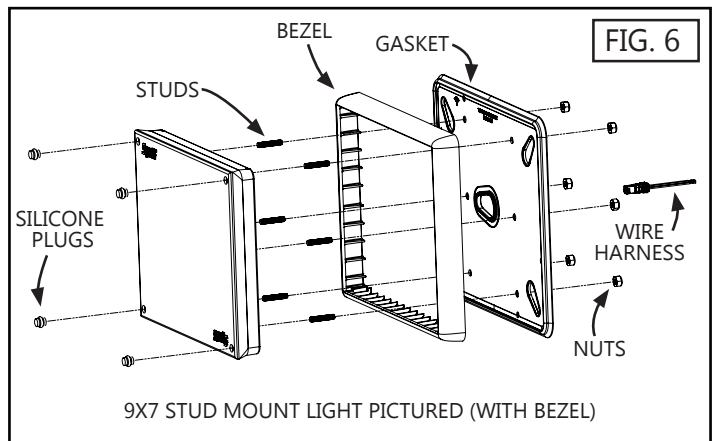
**NOTE:** Tighten until gasket is compressed. **DO NOT** over tighten and strip casting threads. **DO NOT USE POWER TOOLS TO TIGHTEN.**

8. Plug the wire harness into the back of the light. Reference **page 11** for retention clip installation.



# STUD MOUNT (WITH BEZEL) INSTALLATION: //

1. Remove the four, white packaging extrusions from the perimeter of the light.
2. Drill (6) 1/4" holes to mount light and 3/4" wire hole (see Fig. 5).
3. Insert (4) Silicone Plugs into the light to seal screw holes. (Use a 50% Isopropyl alcohol, 50% deionized water mix for lubrication if necessary).



4. Thread studs into the back of light.
5. Place the bezel behind the light.
6. Align the gasket to the mounting surface. Horizontal and vertical orientations are indicated on gasket for proper seal.
7. Press light/bezel assembly against gasket, against mount surface.
8. Secure the light to mounting surface using (6) supplied nuts, on the back side of vehicle mount surface.

**NOTE:** Tighten until gasket is compressed. **DO NOT** over tighten and strip casting threads. **DO NOT USE POWER TOOLS TO TIGHTEN.**

9. Plug the wire harness into the back of the light. Reference **page 11** for retention clip installation.



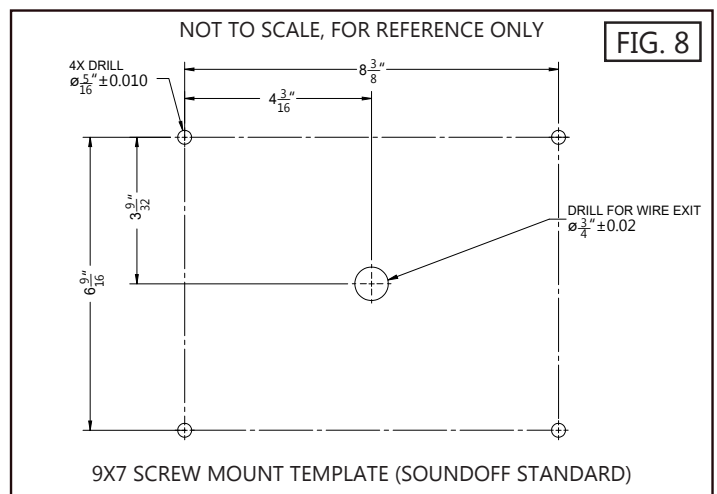
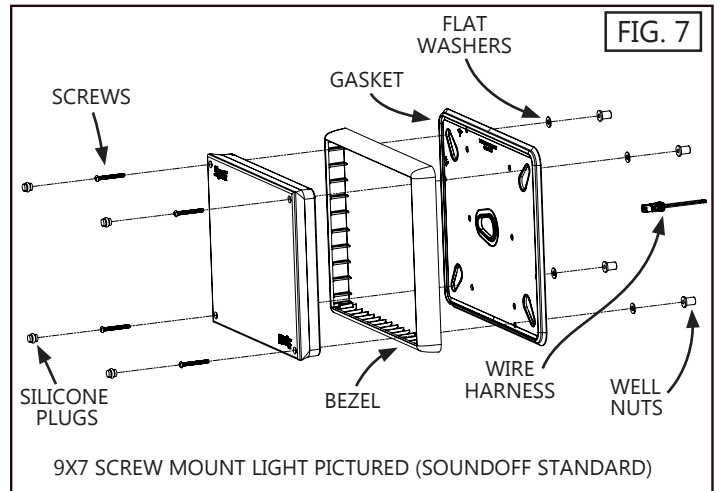
# SCREW MOUNT (SOUNDOFF STANDARD) INSTALLATION: //

1. Remove the four, white packaging extrusions from the perimeter of the light.
2. Drill for SoundOff Signal mount pattern. Reference **Fig. 8** for hole sizes.
3. Place the bezel behind the light.
4. Place Bezel and light onto gasket.
5. Insert supplied screws through the bezel, light, and gasket.
6. Place flat washers onto inserted screws.
7. Attach the well nuts to the screws. Hold the screws in place and hand tighten the well nuts against the flat washers to secure. Ensure the lip of the bezel is properly seated in the gasket.
8. Pull the wire harness through the opening and plug into the back of the light (see wiring diagram). Reference **page 11** for retention clip installation.
9. Secure the entire light assembly to the mounting surface. Insert the well nuts into the drilled holes and tighten to 7 turns past full contact.
10. Insert (4) Silicone Plugs into the light to seal screw holes. (Use a 50% Isopropyl alcohol, 50% deionized water mix for lubrication if necessary).

**NOTE:** Tighten until gasket is compressed. **DO NOT** over tighten. **DO NOT USE POWER DRIVER.** Horizontal and vertical orientations indicated on gasket for proper drainage.

**⚠ WARNING**

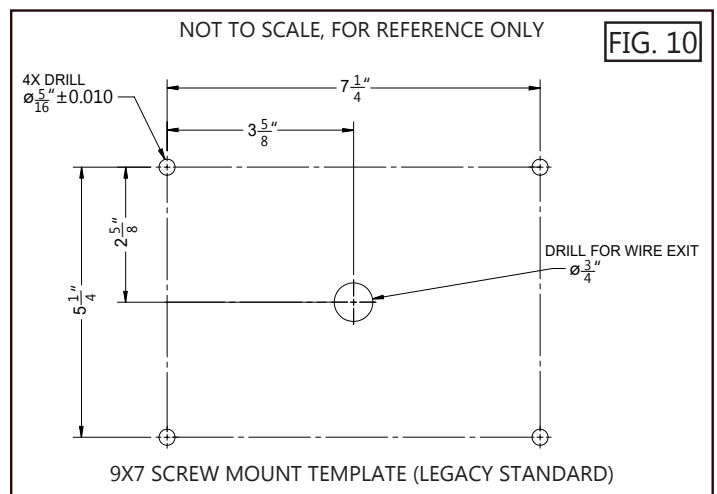
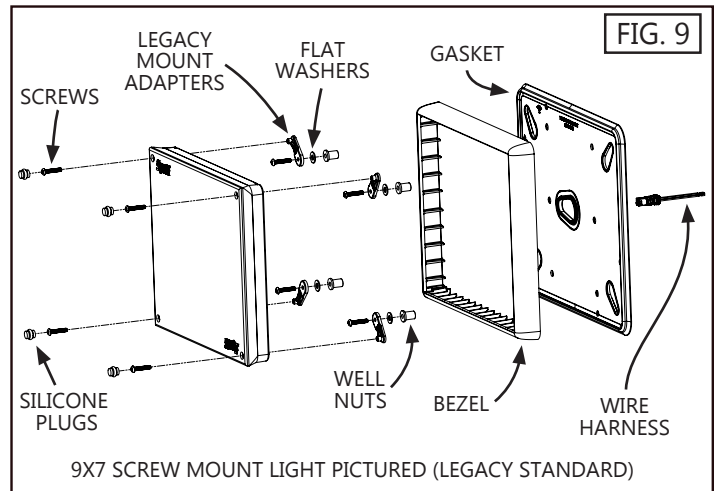
PETROLEUM/SILICONE BASED  
LUBRICANTS WILL CAUSE THE  
SILICONE LENS TO DISCOLOR.



# SCREW MOUNT (LEGACY STANDARD) INSTALLATION: //

1. Remove the four, white packaging extrusions from the perimeter of the light.
2. Drill for Legacy Standard hole pattern. Reference **Fig. 10** for hole sizes.
3. Insert well nuts into drilled holes, fully seat to mount surface.
4. Align gasket to mount surface (note horizontal and vertical orientations indicated on gasket for proper seal).
5. Place (4) adapter castings into gasket openings.
6. Insert (4) screws through (4) adapter castings into (4) washers and (4) well nuts and tighten to secure to vehicle surface. Tighten to 7 turns past full contact (Press screw into well nut to improve bite and prevent spinning. Hand tighten until well nut is secure).
7. Pull the wire harness through the opening and plug into the back of the light (see wiring diagram). Reference **page 11** for retention clip installation.
8. Place the bezel behind the light.
9. Place the light and bezel into gasket, pressing light, bezel, and gasket against mount surface.
10. Secure the assembly using (4) supplied screws. Tighten to 1/8 turn past full contact.
11. Insert (4) Silicone Plugs into the light to seal screw holes. (Use a 50% Isopropyl alcohol, 50% deionized water mix for lubrication if necessary).

**NOTE:** Tighten until gasket is compressed. **DO NOT** over tighten. **DO NOT USE POWER DRIVER.** Horizontal and vertical orientations indicated on gasket for proper drainage.

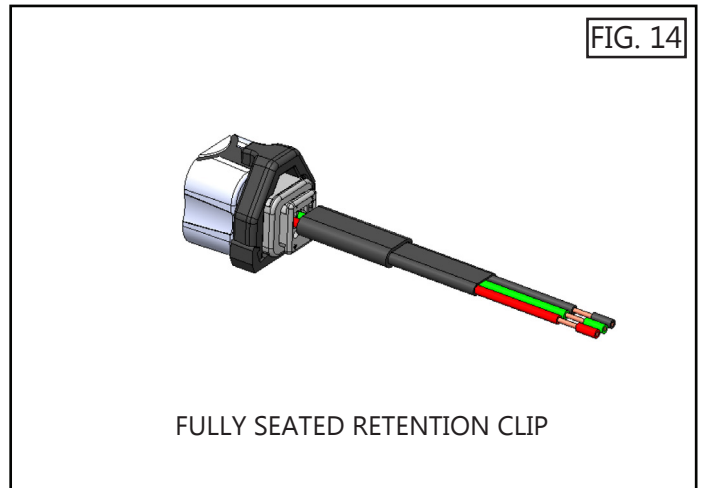
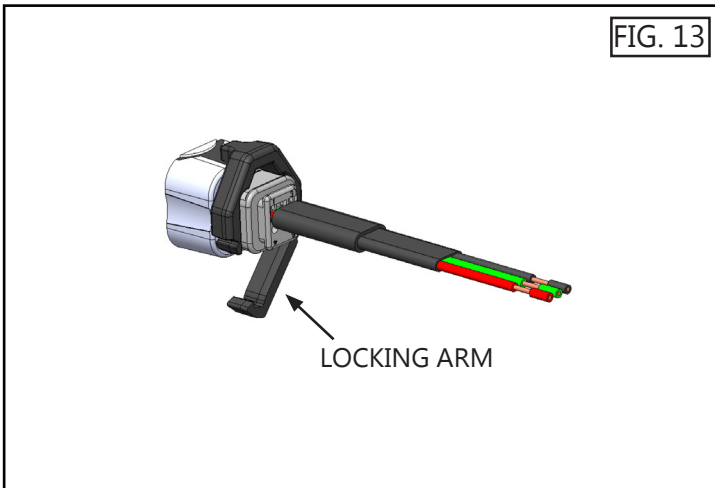
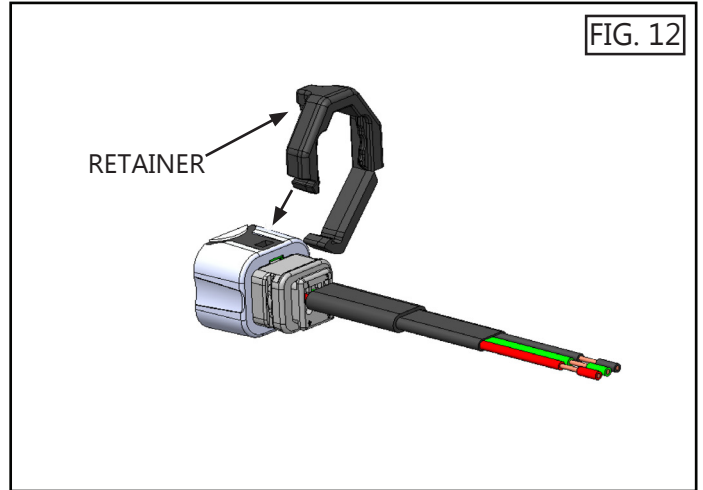
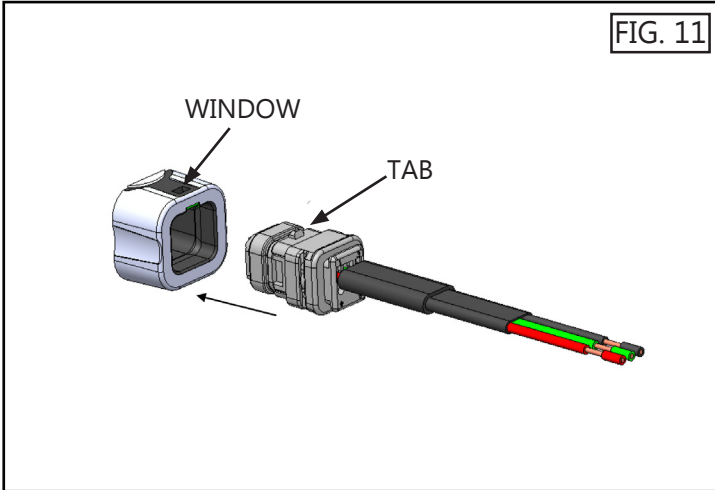


**⚠ WARNING**  
 PETROLEUM/SILICONE BASED  
 LUBRICANTS WILL CAUSE THE  
 SILICONE LENS TO DISCOLOR.

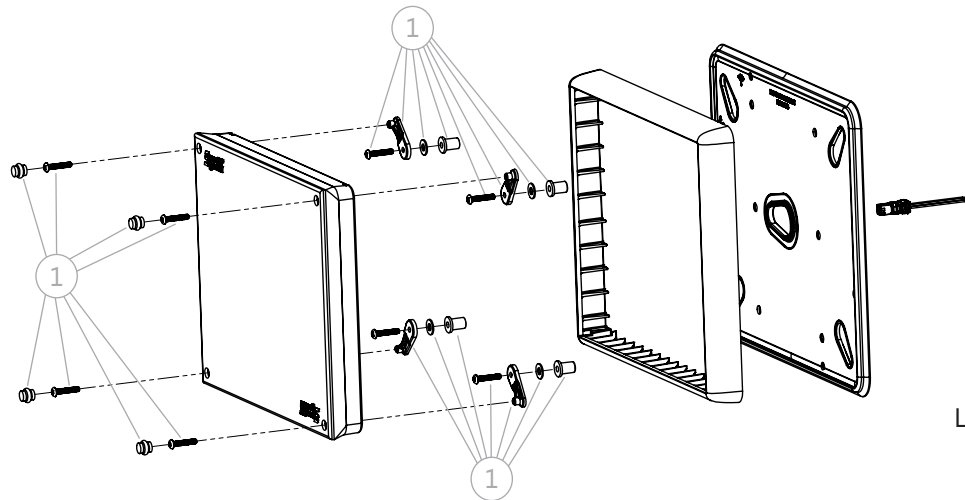
# RETENTION CLIP INSTRUCTIONS: //

**NOTE:** In the event the harness needs to be disengaged from the light, these instructions can be used to reattach and apply the retention clip.

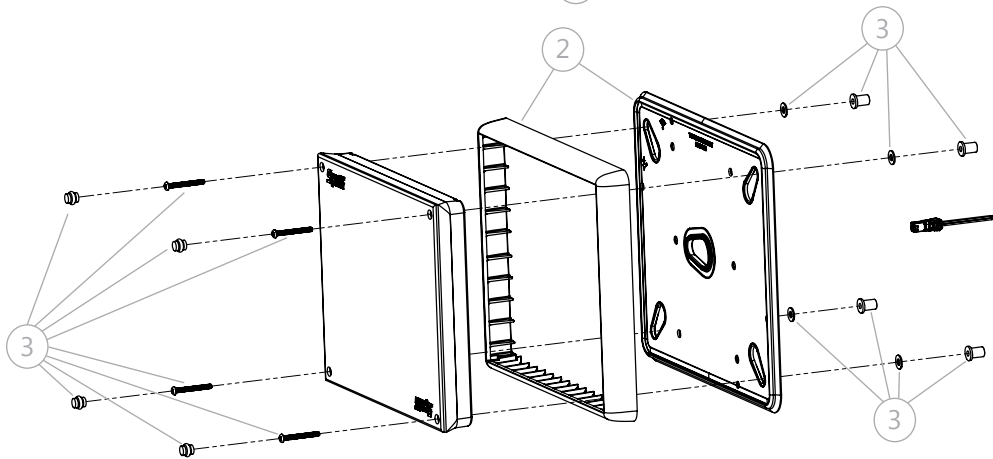
1. Plug harness into light housing, aligning tab to window, as shown in **Fig 13**.
2. Install the retainer clip over harness/light interface, inserting retainer into window, as shown in **Fig. 14**.
3. Press retainer clip's locking arm to snap closed.



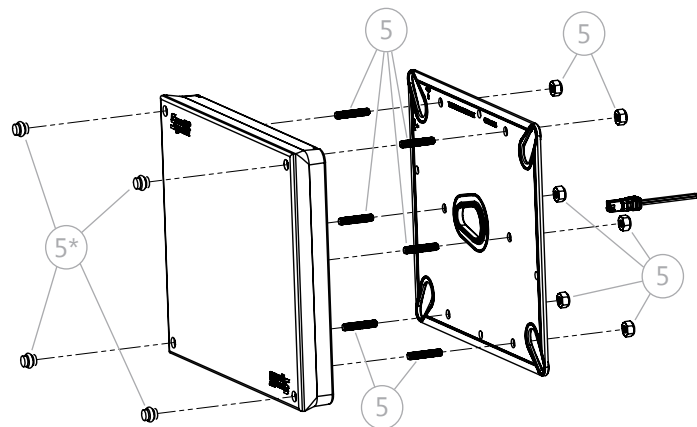
# 9X7 SILICONE REPLACEMENT PARTS & ACCESSORIES: //



LEGACY STANDARD  
SCREW MOUNT



SOUNDOFF STANDARD  
SCREW MOUNT



STUD MOUNT

ITEM #	PART#	DESCRIPTION
1	PMP9HK01-SM	LEGACY MOUNT ADAPTER KIT
2	PMP9BZL01B	MPOWER 9X7 SINGLE BLACK
2	PMP9BZL01C	MPOWER 9X7 SINGLE CHROME
3	PMP9HK02-SM	SCREW MOUNT KIT (FOR SUBSTRATE UP TO 0.157" THICK)
4	PMP9HK03-SM	SCREW MOUNT KIT (FOR SUBSTRATE 0.157" TO 0.354" THICK) (NOT SHOWN)
5	PMP9HK05-ST	STUD MOUNT KIT
6	PMP9HK04	MPOWER 9X7 CORNER PLUG KIT*

\*mPower Corner Plug Kit (PMP9HK04) is included in Item #1, #3, #4, & #5 along with being sold separately as Item #6.

# WARRANTY & RETURN GOODS PROCEDURE

## **CLEANING & CARE OF YOUR LIGHTBAR:**

Keeping the lenses clean and scratch free will optimize the performance of the light. The exterior of the light including lenses should be cleaned with mild soapy water and a soft cotton cloth to remove dirt, grime and insects. Never use window cleaners or harsh chemicals on the lenses; this may cause failure of the lenses or reduce clarity resulting in the reduction of light output.

## **MOUNTING INTEGRITY:**

A review of bolt/hardware/mounting bracket integrity should be performed at the beginning and end of each shift.

## **WARNING MESSAGES - PLEASE READ:**

**WARNING** - CARE MUST BE TAKEN WHEN DRILLING THROUGH THE VEHICLE NOT TO DRILL INTO ANY EXISTING WIRING AND NOT TO DRILL THROUGH THE HEADLINER OR SUPPORT MEMBERS OF THE VEHICLE. CHECK BOTH SIDES OF THE MOUNTING SERVICE PRIOR TO DRILLING. DE-BURR ANY HOLES AND REMOVE ANY METAL SHARDS OR REMNANTS.

**WARNING** - ROUTE WIRES ONLY IN LOCATIONS THAT ARE NOT SUBJECTED TO POTENTIAL WEAR. MAKE SURE TO AVOID ROUTING WIRES IN THE DEPLOYMENT AREA OF YOUR AIR BAG. REFER TO YOUR VEHICLE OWNER'S MANUAL FOR AIR BAG DEPLOYMENT ZONES.

**WARNING** - ALL CUSTOMER SUPPLIED POWER WIRES CONNECTING TO THE POSITIVE (+) OR NEGATIVE (-) BATTERY TERMINAL OR LOCAL CHASSIS GROUND (-) MUST BE SIZED TO SUPPLY AT LEAST 125% OF THE MAXIMUM CURRENT AND PROPERLY FUSED AT THE POWER SOURCE WITH APPROPRIATELY RATED FUSE.

**IMPORTANT:** When passing cables through fire wall or other sheet metal, insert grommet to protect the cable!

## **WARRANTY RETURN PROCESS:**

Please scan QR code or visit  
<https://soundoffsignal.com/support-page/returns/>



Alternatively contact your SoundOff Signal Sales Representative, Customer Services staff or our Technical Department (800.338.7337) for a RMA #, Return Merchandise Authorization Number.

The following information is required for issuance of the RMA #:

- Reason for returning the product\*
- Address where replacement product is to be shipped\*
- Telephone number where you may be reached\*
- SoundOff Signal invoice number on which product was purchased\*\*
- SoundOff Signal part number and serial number\*\*
- E-mail address where RMA # should be e-mailed\*\*
- Fax number where RMA # should be faxed\*\*

\* RMA # will not be given without this information.

\*\* If available, please provide this information.

SoundOff Signal will NOT accept returns without an RMA #. Each RMA # is good for only one (1) return and will expire (30) days after the date it was issued. Products must be shipped back to SoundOff Signal and the RMA # clearly marked on the outside of the package near the shipping label. Please use the following address on your shipping label:

SoundOff Signal  
ATTN: RMA # / Technical Services  
3900 Central Parkway  
Hudsonville, MI 49426

## **WARRANTY EXCLUSIONS:**

Shipping & Handling, labor and service fees are non-refundable. SoundOff Signal is not liable for any damage due to installation or personal injury as a result of using SoundOff Signal product.

## **WARRANTY FORFEITURE:**

Warranty will not be granted if the Warranty Return Policy & Procedure rules are not strictly followed. Physical damage resulting from customer abuse will void warranty. Warranty will also be voided if any SoundOff Signal and/or manufacturer serial tags, product stickers, seals, or the like, are removed, altered or tampered with. Returned product that is damaged by shipping via the RMA # procedure is not the responsibility of SoundOff Signal.

Document effective date on cover and below supersedes previously dated policies and statements.

There are no other warranties, expressed or implied, including, but not limited to, any implied merchantability or fitness for a particular use. SoundOff Signal reserves the right to modify this warranty statement at any time; or to discontinue, modify, or upgrade any products of its manufacture with design improvements without prior notice.