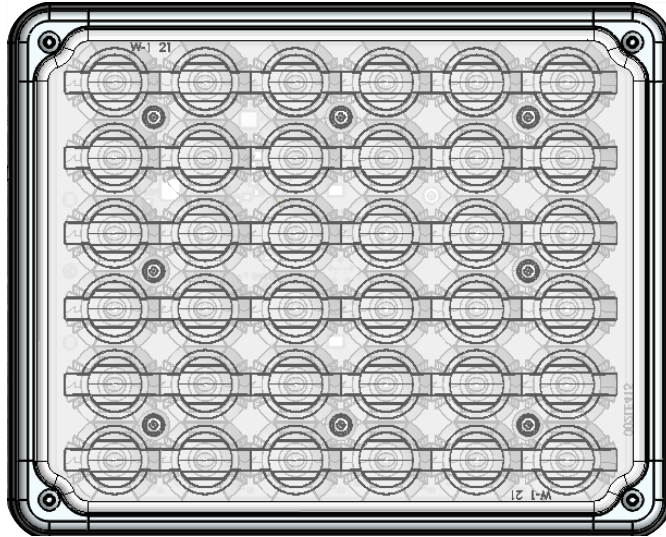


# nFUSE<sup>®</sup> P WARNING LIGHT

## EPSS0TF(X)-(X) - 9X7 P Warning - Screw & Stud Mount



Protected by U.S. Patent 10,703,260 and Patents Pending  
<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

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 **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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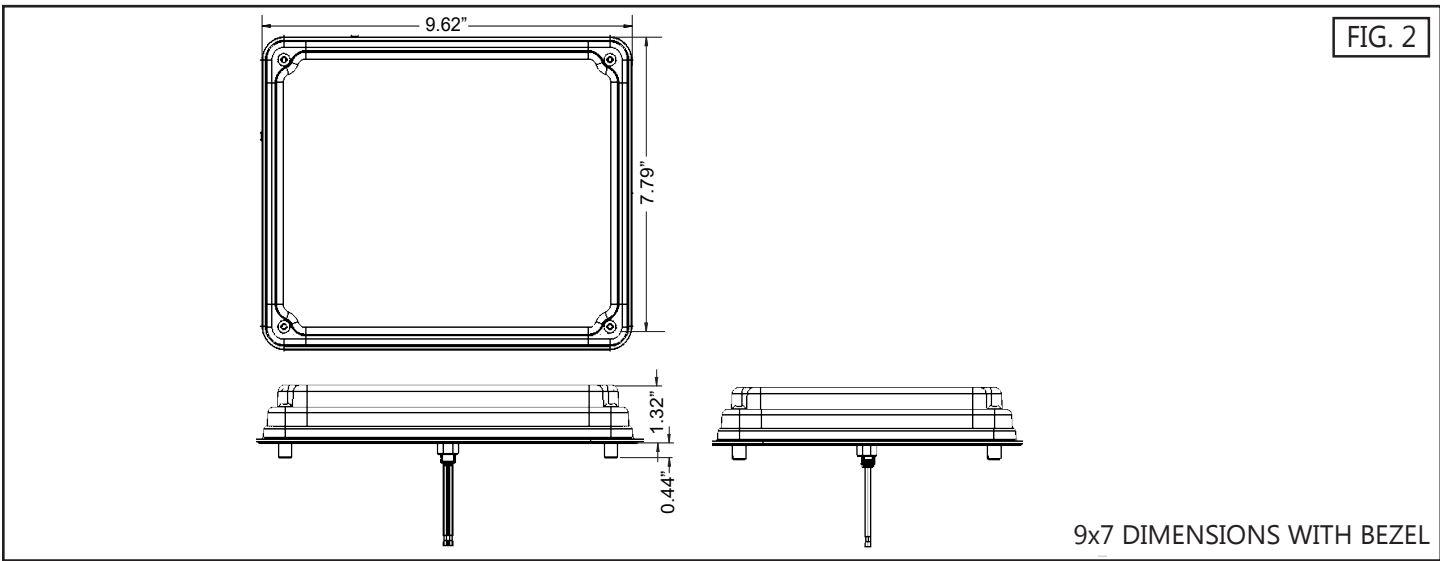
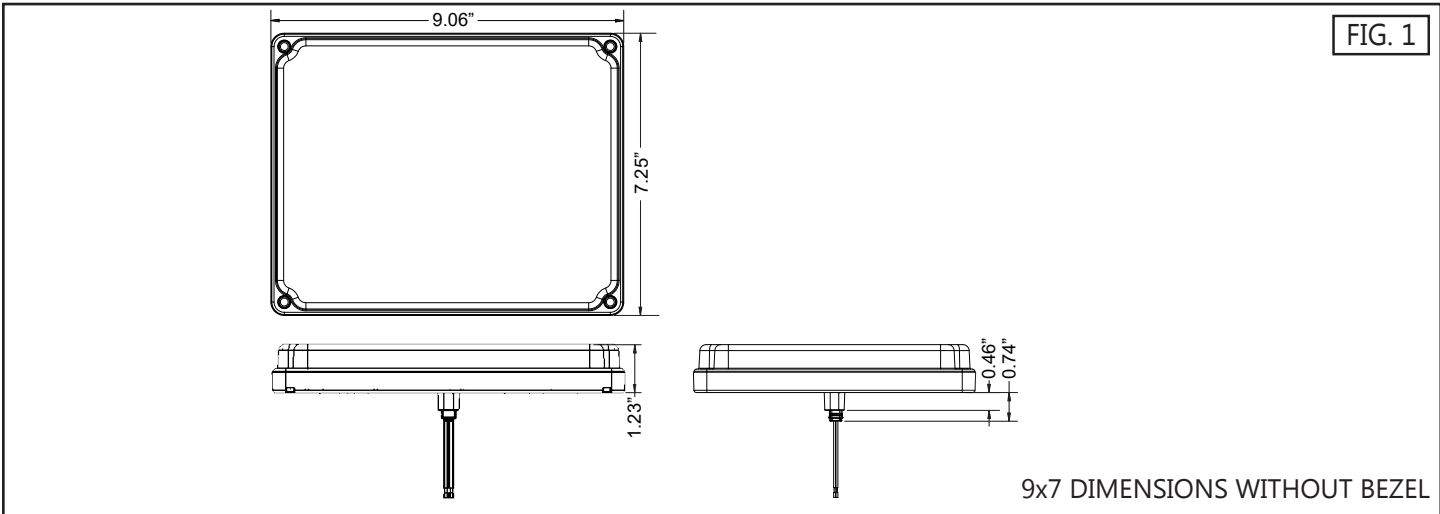
**NOTICE:**

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 nFUSE P WARNING  
0623 REV B

# DIMENSIONS & BEZEL INFORMATION:



# WARNING LIGHT OPTIONS:

## 9x7 LED OPTIONS

- Single Color

## 9x7 LED COLOR OPTIONS

- Red
- Amber
- White
- Blue
- Green

## 9x7 LENS COLOR OPTIONS

- Red
- Amber
- Blue
- Clear
- 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 - EPSSE0TF(X)-(X)\*\*

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

# TECHNICAL SPECIFICATIONS: ////////////////////////////////////

## OVER-VOLTAGE PROTECTION

When an over-voltage condition is detected, the module will flash an over-voltage warning pattern of 50mS ON/950mS OFF to alert of the over-voltage condition and protect the electronics from damage due to heat/voltage.

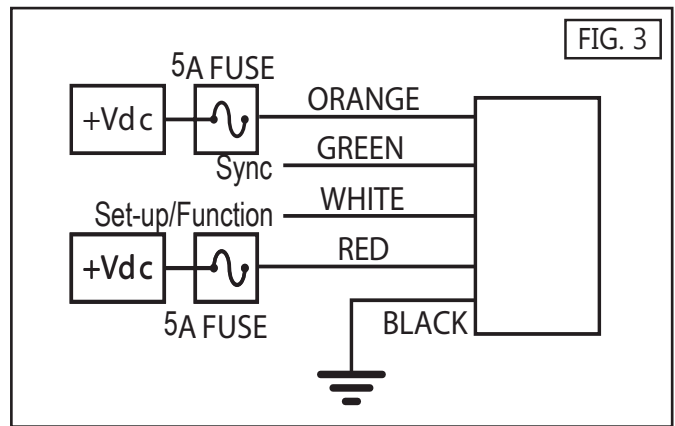
## THERMAL COMPENSATION PROTECTION

The LED module is designed to provide maximum power output while providing protection to the electronic components by reducing the output power at extreme temperatures.

## SYNC 2

Synchronizing the flashing of multiple light modules is accomplished by connecting the green wires of different light modules together. Up to 24 light modules can be connected for synchronized flashing. All light module flash patterns must be set to the same flash pattern # to ensure proper operation. Refer to the 'Flash Pattern' section in Set-Up Table (page 4) to setup light modules to flash in alternate or simultaneous flash pattern. NOTE: Will work with Sync 2 Products only, such as mPower, 5-Wire nForce, and 5-Wire Intersector lights.

9x7 P SERIES WARNING LIGHT TECHNICAL SPECIFICATIONS				
	Input Voltage:		9-32Vdc	
	<b>WARNING LIGHT CURRENT CONSUMPTION (Amps)</b>			
	12.8Vdc		25.6Vdc	
	<b>Peak</b>	<b>Average</b>	<b>Peak</b>	<b>Average</b>
<b>Red</b>	1.90	0.95	0.95	0.48
<b>Amber, Blue, Green, or White</b>	2.20	1.10	1.10	0.55



CERTIFICATION	APPLICABLE COLORS
SAEJ595	Red, Amber, Blue, White, Green
CALIFORNIA TITLE 13	Red, Amber, Blue
NFPA 1901-2009	Red, Amber, Blue, White
KKK-A-1822F (JULY 2021)	Red, Amber, Blue, White, Green

# WIRING AND TABLE INFORMATION:

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.

WIRE HOOK-UP TABLE	
WIRE COLOR:	FUNCTION:
RED	Power (Primary)
BLACK	Ground
GREEN**	Sync2 *
WHITE to GROUND	Setup Wire (See Setup Table on Left*)
WHITE to POWER	Function Wire
ORANGE	Power (Secondary)

\*\* To sync multiple mPower lights, connect the green wire from each light together.

\* Will NOT work w/ other sync products such as Ghost, LED3, & 4 wire Intersector w/external flasher

\* Will Work with Sync 2 products nFORCE Secondary Lights, nFORCE FIT and 5 wire Intersector Lights.

FLASH PATTERNS		CERTIFICATIONS		
PATTERN #	SINGLE COLOR	FLASHES PER MINUTE	HIGH POWER	LOW POWER
1	QUINT	70	SAE, KKK	SAE, KKK
2	WARP	360	NA	NA
3	INTER-CYCLE	-	NA	NA
4	DOUBLE	70	SAE, KKK	SAE, KKK
5	QUAD	80	SAE, NFPA, KKK	SAE, NFPA, KKK
6	POWER PULSE	180	SAE, NFPA, KKK	SAE, NFPA, KKK
7	ROAD RUNNER	118	SAE, CA13*, NFPA, KKK	SAE, CA13*, NFPA, KKK
8	Q-SWITCH	-	NA	NA
9	STEADY-BURN / ROADRUNNER (SEQUENCE TYPE 1: STEADY BURN, SEQUENCE TYPE 2: ROADRUNNER)	- / 118	NA	NA
10	STEADY-BURN DRIVER TITLE 13 QUAD (SEQUENCE TYPE 1: STEADY BURN, SEQUENCE TYPE 2: TITLE 13 QUAD)	- / 65	NA	NA
11	QUAD 2	67	SAE, KKK	SAE, KKK
12	DOUBLE 2	95	SAE, NFPA, KKK	SAE, NFPA, KKK
13	RANDOM 1	-	NA	NA
14	RANDOM 2	-	NA	NA
15	QUAD PULSE-POP	75	SAE, CA13*, NFPA, KKK	SAE, CA13*, NFPA, KKK

\*CA13 AMBER is met in Low Power Only



# 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, or table 3 to table 1. In the case that the custom table is programmed, the order is 1 to 2, 2 to 3, or 3 to 7 (custom), and 7 to 1.) Repeat above process until required function table is active.

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

## REMOTE MODE:

### 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.

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%

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

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



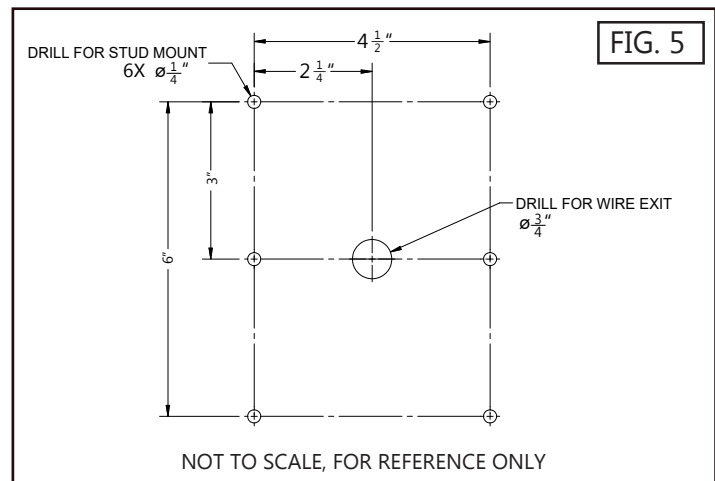
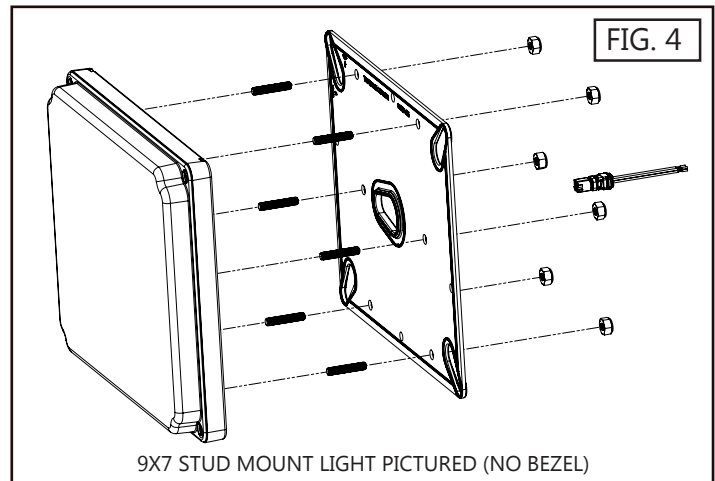
9X7 P SERIES LED LIGHT REMOTE MODE FUNCTIONALITY			
RED WIRE	ORANGE WIRE	SINGLE COLOR	
		COLOR SWAP = OFF	COLOR SWAP = ON
CRUISE	-	CRUISE COLOR 1	-
-	CRUISE	-	-
CRUISE	CRUISE	-	-
FLASH	-	FLASH COLOR 1	-
-	FLASH	-	-
FLASH	FLASH	-	-
STEADY ON	-	STEADY ON COLOR 1	-
-	STEADY ON	-	-
STEADY ON	STEADY ON	-	-
CRUISE	FLASH	-	-
CRUISE	STEADY ON	-	-
Flash	Steady ON	-	-

## STUD MOUNT INSTALLATION: //

1. Drill (6) 1/4" holes to mount light and 3/4" wire hole (see **Fig. 5**).
2. Thread studs into the back of light.
3. Align the gasket to the mounting surface. Horizontal and vertical orientations are indicated on gasket for proper seal.
4. Press light assembly against gasket, against mount surface.
5. 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.**

6. Plug the wire harness into the back of the light. Reference **page 10** for retention clip installation.

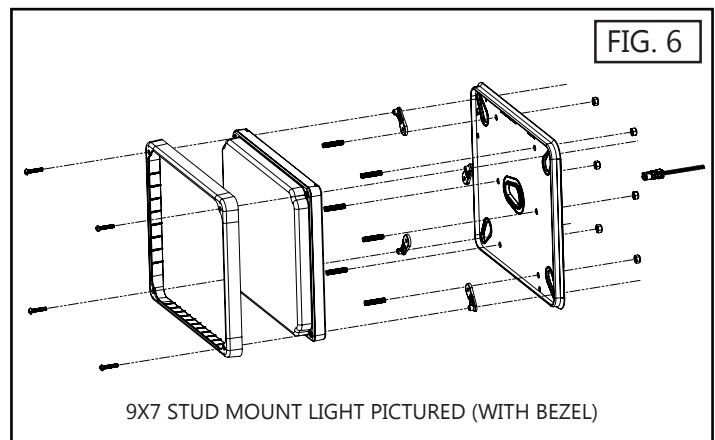


## STUD MOUNT (WITH BEZEL) INSTALLATION: //

1. Drill (6) 1/4" holes to mount light and 3/4" wire hole (see **Fig. 5**).
2. Thread studs into the back of light.
3. Place (4) adapter castings into back of light.
4. Place bezel over front of light.
5. Insert (4) screws through bezel, light, and into adapter castings. Tighten to secure bezel to 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.**

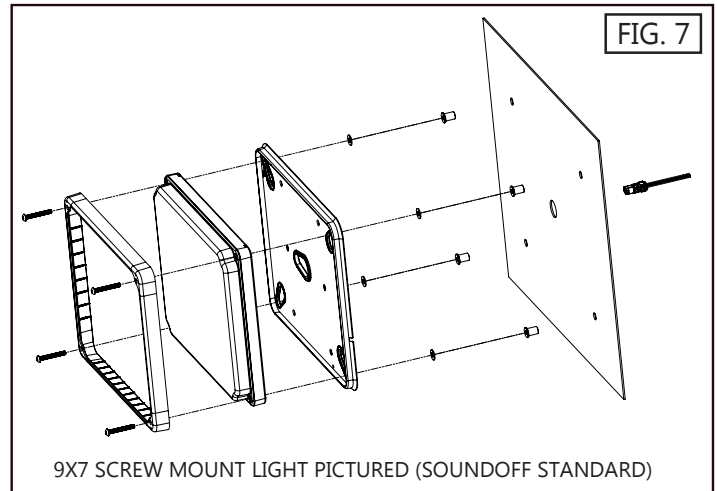
9. Plug the wire harness into the back of the light. Reference **page 10** for retention clip installation.



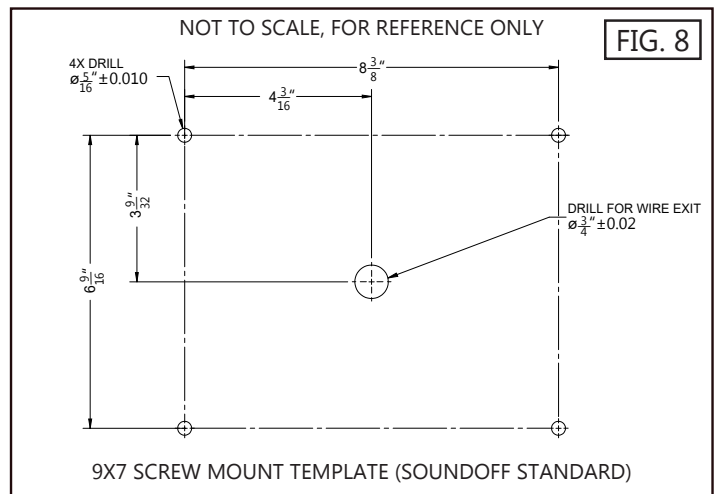
# SCREW MOUNT (SOUNDOFF STANDARD) INSTALLATION: //

1. Drill for SoundOff Signal mount pattern. Reference **Fig. 8** for hole sizes.
2. Place Bezel over light.
3. Place Bezel and light onto gasket.
4. Insert supplied screws through the bezel, light, and gasket.
5. Place flat washers onto inserted screws.
6. Secure bezel and light together by attaching 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.
7. Pull the wire harness through the opening and plug into the back of the light (see wiring diagram). Reference **page 10** for retention clip installation.
8. 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.

**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.



9X7 SCREW MOUNT LIGHT PICTURED (SOUNDOFF STANDARD)



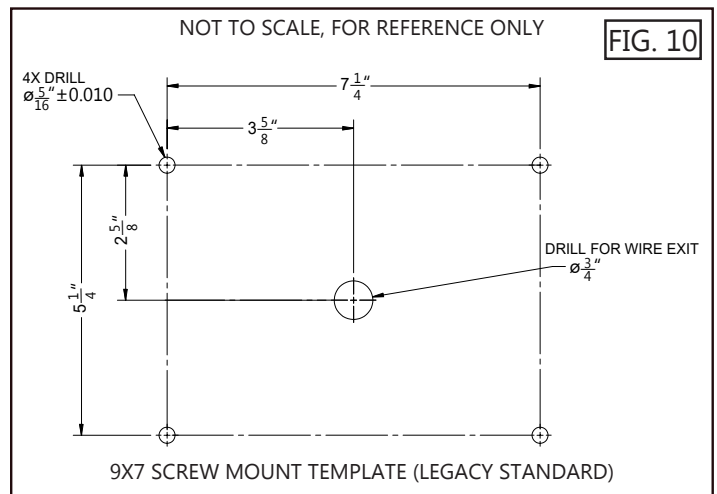
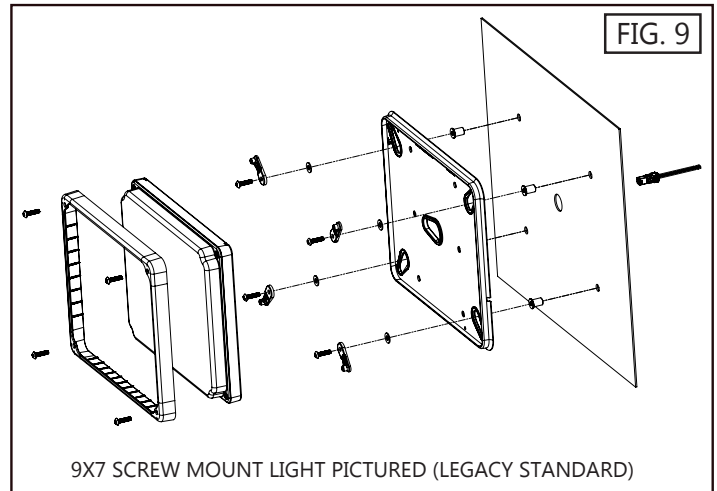
9X7 SCREW MOUNT TEMPLATE (SOUNDOFF STANDARD)



# SCREW MOUNT (LEGACY STANDARD) INSTALLATION: //

1. Drill for Legacy Standard hole pattern. Reference **Fig. 10** for hole sizes.
2. Insert well nuts into drilled holes, fully seat to mount surface.
3. Align gasket to mount surface (note horizontal and vertical orientations indicated on gasket for proper seal).
4. Place (4) adapter castings into gasket openings.
5. 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).
6. Pull the wire harness through the opening and plug into the back of the light (see wiring diagram). Reference **page 10** for retention clip installation.
7. Place light into gasket, pressing light and gasket against mount surface.
8. Place bezel over light.
9. Secure the bezel/light mount surface using (4) supplied screws. Tighten to 1/8 turn past full contact.

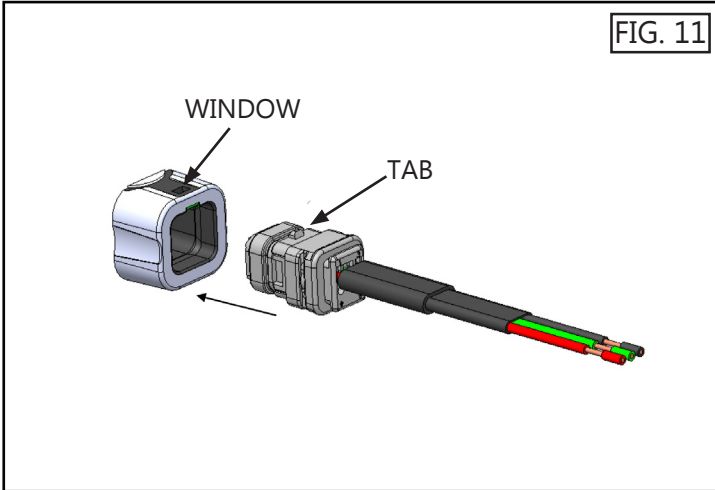
**NOTE:** Tighten until gasket is compressed. **DO NOT** over tighten. **DO NOT USE POWER DRIVER.** Horizontal and vertical orientations indicated on gasket for proper drainage.



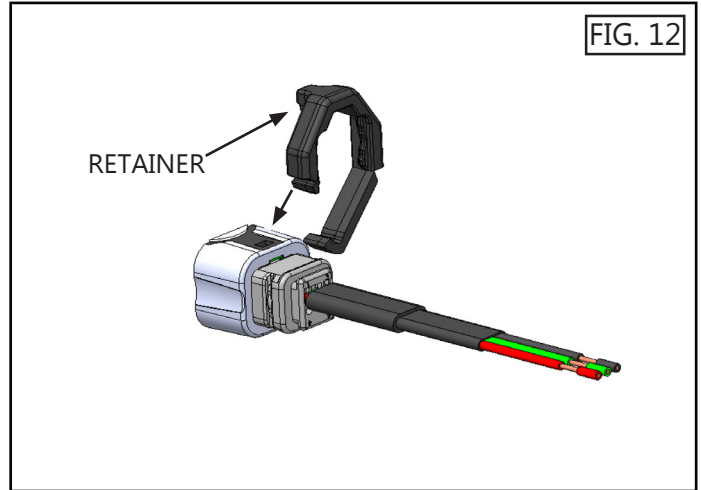
# RETENTION CLIP INSTRUCTIONS: //////////////////////////////////////

**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.

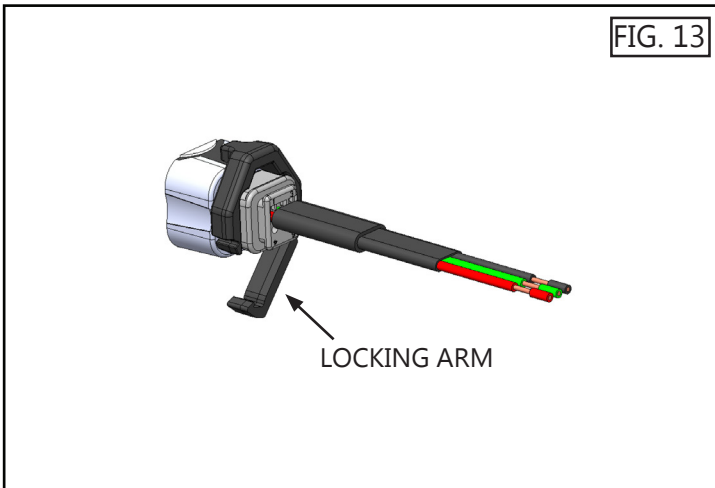
1. Plug harness into light housing, aligning tab to window, as shown in **Fig 13**.
2. Install the retainer clip over harness/light interface, inserting retainer into window, as shown in **Fig. 14**.
3. Press retainer clip's locking arm to snap closed.



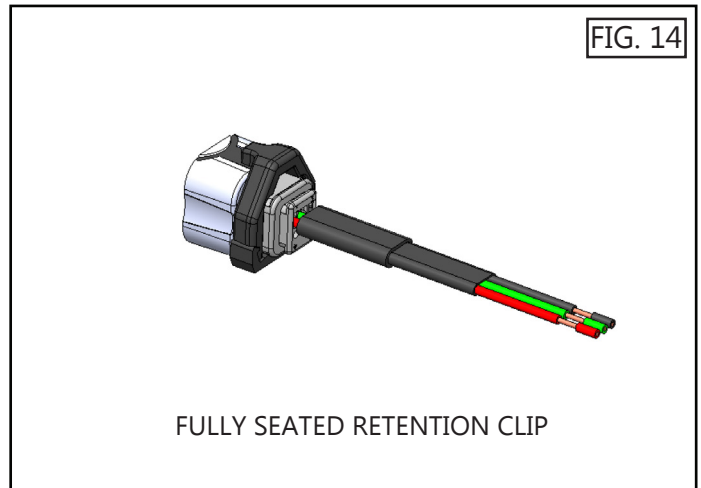
**FIG. 11**



**FIG. 12**

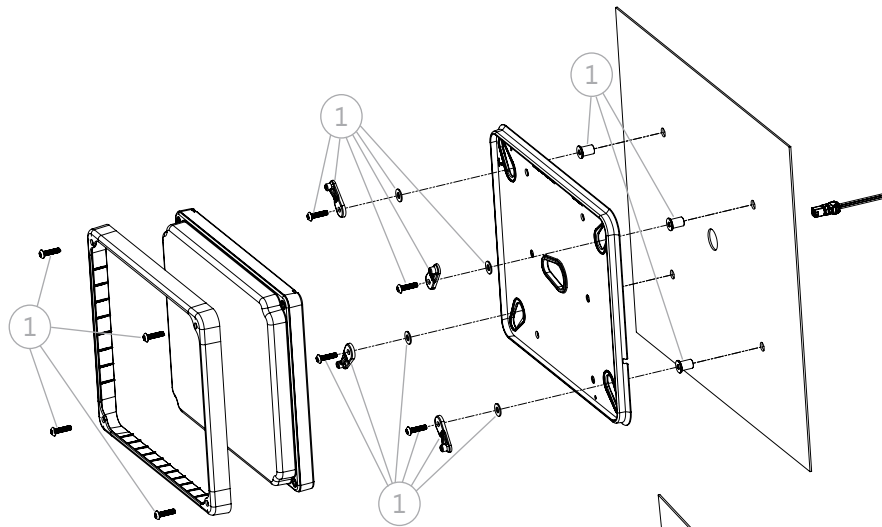


**FIG. 13**

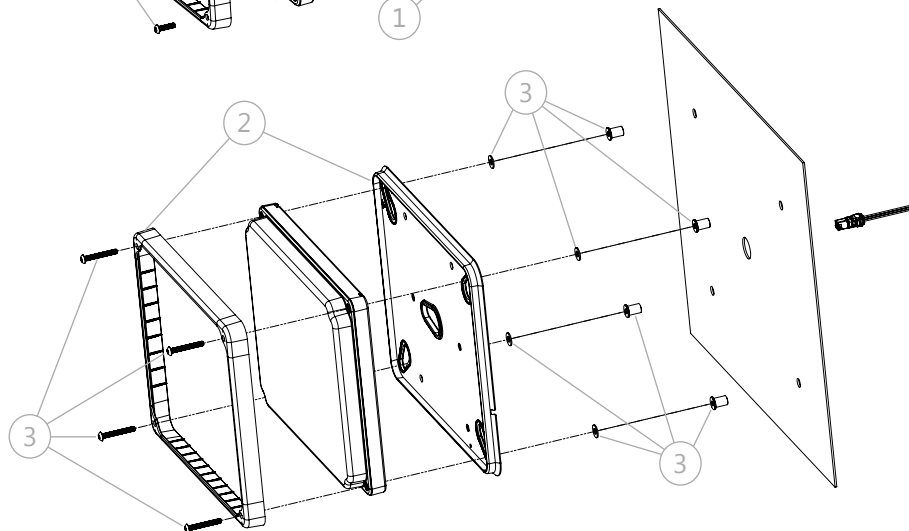


**FIG. 14**

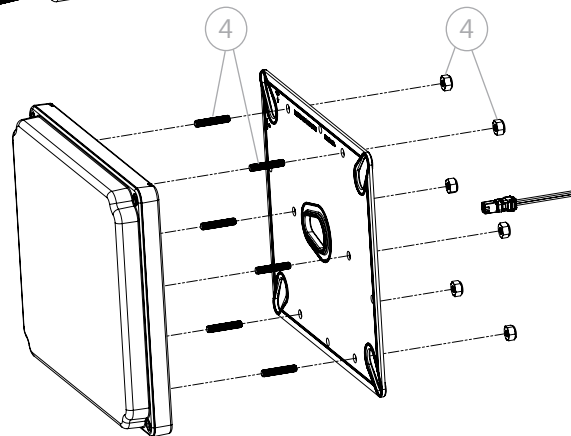
# 9X7 P SERIES REPLACEMENT PARTS & ACCESSORIES: //



LEGACY STANDARD  
SCREW MOUNT



SOUNDOFF STANDARD  
SCREW MOUNT



STUD MOUNT

ITEM #	PART#	DESCRIPTION
1	PPS9HK06-SM	LEGACY MOUNT ADAPTER KIT
2	PPS9BZL01B	P-SERIES 9X7 SINGLE BLACK
2	PPS9BZL01C	P-SERIES 9X7 SINGLE CHROME
3	PPS8HK01-SM	SCREW MOUNT KIT
4	PPS8HK01-ST	STUD MOUNT KIT*

\*Stud mount kit (PPS8HK01-ST) includes only 2 studs. If 6 studs are needed, 3 stud mount kits must be ordered.

# 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.