



# Modifying a MALSR/ALSF Flash Head with a Trigger Amplifier Board Part Number 44A5903/1

## **Document No. ALN139**

Issued: December 20, 2007

Rev. B: March 20, 2008

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# Record of Changes

<b>Page</b>	<b>Rev</b>	<b>Description</b>	<b>EC No.</b>	<b>Checked</b>	<b>Approved</b>	<b>Date</b>
All	A	Initial Release	n/a	JR	JR	20DEC07
All	B	Added ICC wire to Fig. 2, added Fig. 4	1908	BE	JR	20MAR08

# Modifying a MALSR/ALSF Flash Head with a Trigger Amplifier Board

## Part Number 44A5903/1

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### 1. Introduction

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In some installations a MALSR/ALSF flash head is mounted far enough from its Individual Control Cabinet that the trigger signal strength at the flash head has degraded to the point that the flash head does not flash reliably. The 44A5903/1 Trigger Amplifier Board boosts the degraded trigger signal so that the flash head can flash reliably.

The 94A0504 kit includes the following item:

- 1) 44A5903/1 Trigger Amplifier Board with trigger wires, mounting bracket, capacitor, and hardware.



**WARNING:** Only personnel qualified to work on high voltage systems should attempt to make any adjustments on the equipment being modified.



**WARNING:** De-energize and lock-out the equipment being modified before servicing.



**WARNING:** HIGH VOLTAGES may be present. SERIOUS INJURY OR DEATH MAY OCCUR.

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## 2. General Instructions

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Read and understand the service bulletin before working on the equipment. Remove power, lock-out, and de-energize the equipment before performing this modification.

### REMOVING OLD FLASH HEAD TRIGGER TRANSFORMER AND CAPACITOR

- 1) See Figures 1 and 2.
- 2) Open the back door of the Flash Head.
- 3) Remove the trigger transformer (TG1) and capacitor (C1) from the door. Replace the screw and lock washer to seal the hole in the door or seal with suitable RTV silicon.
- 4) Remove Trigger transformer's YELLOW and RED wires from terminal block (TB1) position 1. Be careful to leave wire #191 from the lamp in position 1.
- 5) Remove the capacitor's wire from terminal block (TB1) position 2.
- 6) Carefully remove the flash lamp from the front of the assembly. Gently let it hang from its wires.
- 7) Remove the lamp wire (with capacitor) from the lamp's RED terminal.
- 8) Remove the ceramic standoff from the inside of the unit by unscrewing the screw in the bottom of the assembly. Leave the wires attached to the ceramic standoff for now.

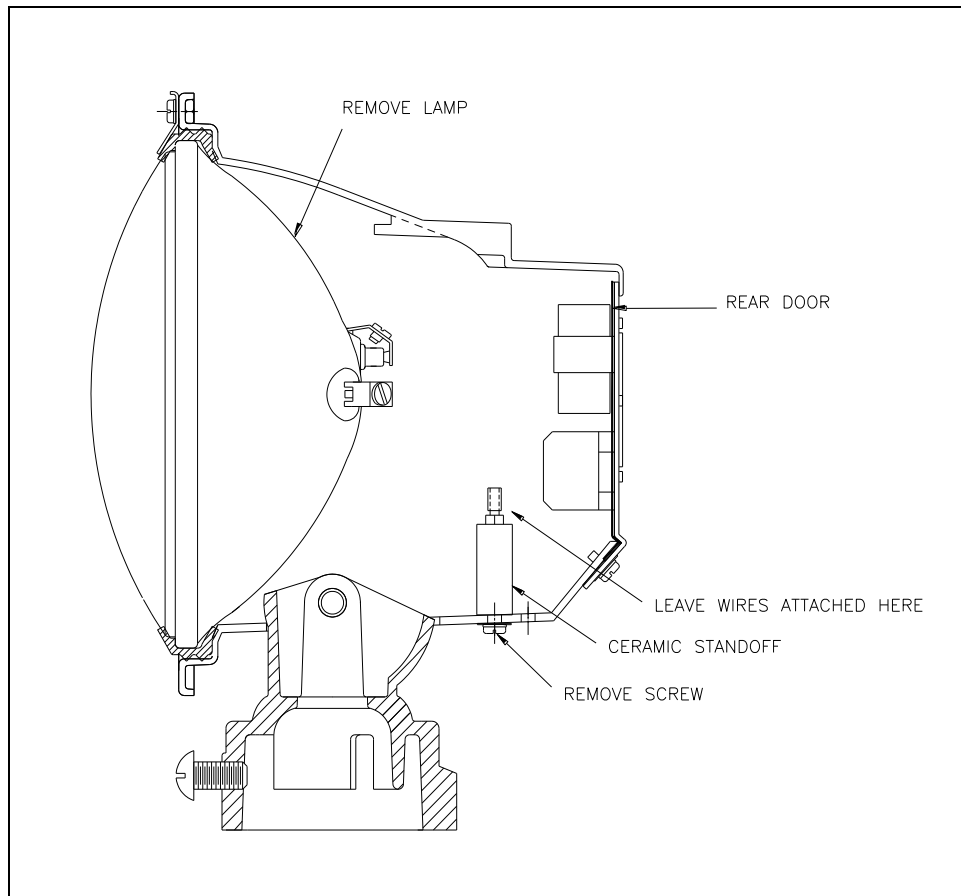


Figure 1: Flash head "Existing"

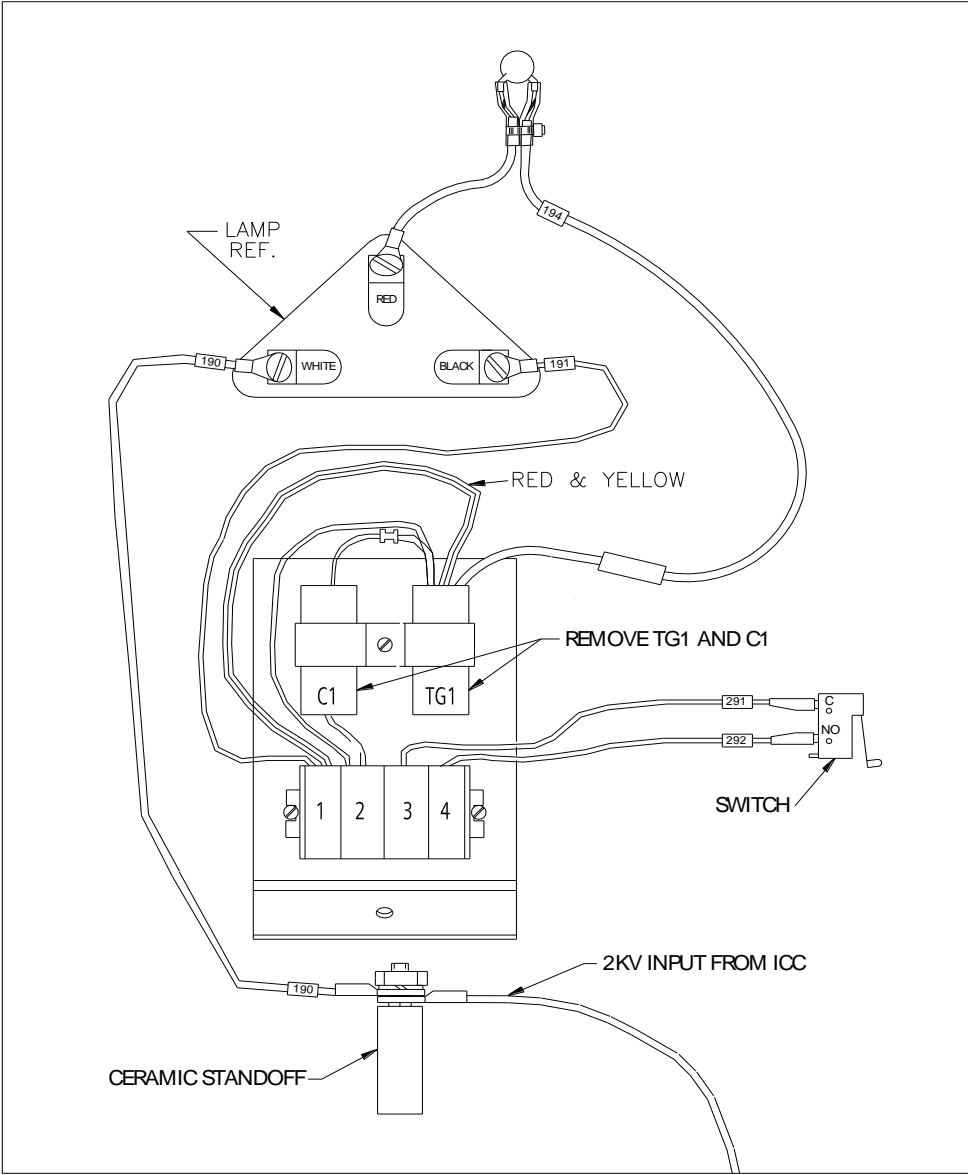


Figure 2: Existing wiring inside flash head

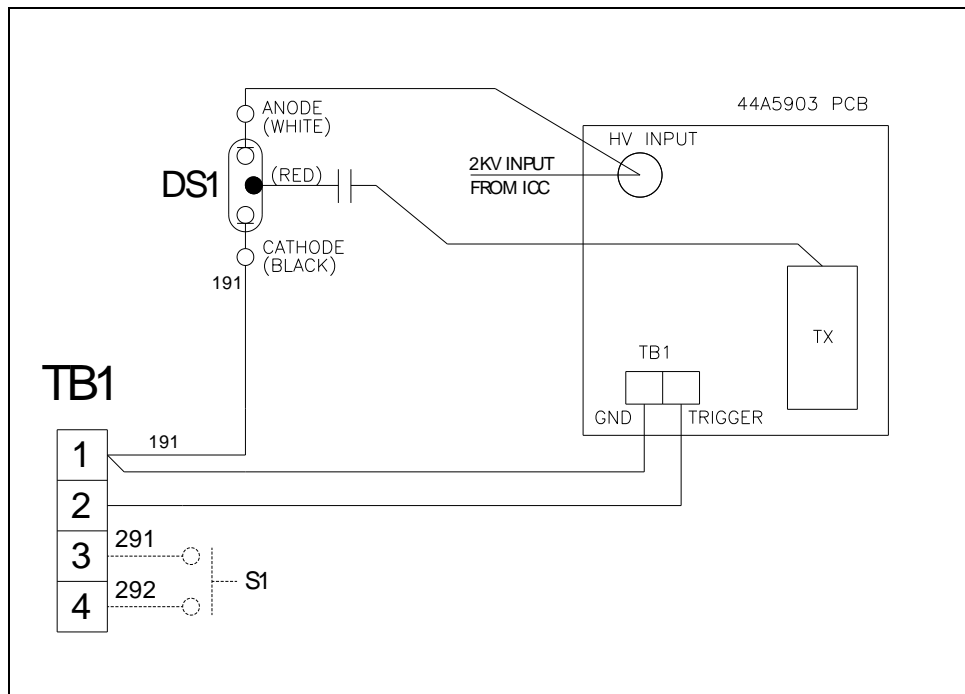
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**General Instructions  
(Continued)**

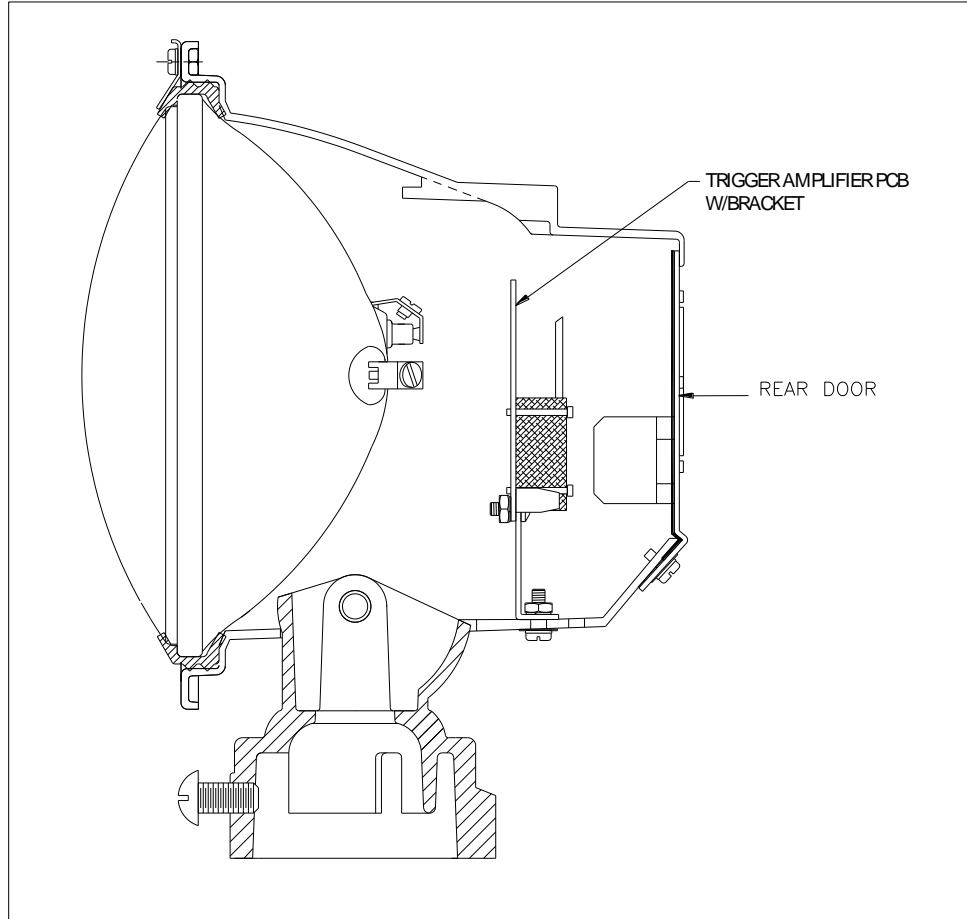
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**ADDING THE NEW TRIGGER AMPLIFIER BOARD**

- 1) See Figure 3 for new wiring schematic.
- 2) Remove both wires from the ceramic standoff and connect to the “HV INPUT” terminal on the 44A5903/1 Trigger Amplifier Board.
- 3) From the lamp side of the housing, connect the wire from the Trigger Amplifier Board terminal (TB1) label “GND” to the door terminal block position 1. This wire should now be connected to wire #191 that goes to the lamp.
- 4) Connect the wire from Trigger Amplifier Board terminal (TB1) label “TRIGGER” to the door terminal block position 2.
- 5) Find the wire from the Trigger Amplifier Board Transformer that has a capacitor in series with it. Connect this wire to the RED terminal on the lamp.
- 6) Carefully insert the Trigger Amplifier Board into the housing and connect its mounting bracket to the bottom hole that the ceramic standoff used – see Figure 4.
- 7) Verify that your lamp assembly is wired per Figure 3.
- 8) Carefully reassemble the lamp and rear door.
- 9) The modification is complete.



**Figure 3**



**Figure 4: Flash head "Modified"**