

WHELEN[®]

ENGINEERING COMPANY INC.

51 Winthrop Road
 Chester, Connecticut 06412-0684
 Phone: (860) 526-9504
 Fax: (860) 526-2009
 Internet: www.whelen.com
 Sales/Service e-mail: aviation@whelen.com

Installation Guide:
Model(s) 90738L0, 90738R0
P/N(s): 01-0790738-L0, -R0
**LED Wingtip Position/
 Anti-collision Light Assembly**



TSO-C96a
 CLASS II;
 APPROVED

TSO-C30c
 TYPE I & II;
 APPROVED

SPECIFICATIONS:

Nominal Operational Voltage: 28VDC
 Input Current -
 Position Light: 0.2 Amps
 Anti-Collision Light (Avg.): 0.45 Amps
 Anti-Collision Light (Pulse): 2.4 Amps
 Anti-Collision Light Flashrate: 45 FPM ±5 FPM

EQUIPMENT LIMITATIONS:

An approved forward lighting system consists of two lights, one located on each wingtip.

Certain types of installations may require additional testing.

CONTINUED AIRWORTHINESS:

The anti-collision light is designed with 24 White LEDs. The position light is designed with 8 Red or 7 Green LEDs.

If any one LED fails, the model must be repaired or replaced.
 NOTE: To reduce eye strain, use an optical filter such as dark glasses or a blue covering dome during LED inspection.

The lens area of the assembly is equipped with an abrasion resistant, protective mask. This mask should be inspected for excessive scratching, pitting, discoloration, cuts, blisters, perforations or edge lifting. Replace the lens/retainer assembly as required.

The abrasion protective mask requires periodic cleaning and waxing. Clean lens with a non-alcohol based cleaning solution. After cleaning, wax lens with a non-silicon based paste wax.

INSTALLATION PROCEDURE:

The following information is to assist you in installing a Whelen light system. The installation procedure described in the following text will be confined to a left light installation.

1. Make the necessary wiring connections and test for proper operation of the LED module.
2. Apply a suitable adhesive to the inside surface of the housing in the area shown in Figure 1.
3. Using the appropriate #8 flat head screws, install the Lens/ Retainer assembly onto the wingtip mounting flange.
4. Apply sealant to the edge of the light assembly. Sealant to cover the entire perimeter of the assembly.
5. Check all avionics systems for interference from this installation.
6. A flight check should be performed by a properly certified pilot.
7. Update aircraft records, complete form 337 and obtain FAA field approval for installation, as necessary.

The conditions and tests required for TSO approval of this article are minimum performance standards. It is the responsibility of those installing this article either on or within a specific type or class of aircraft to determine that the aircraft installation conditions are within the TSO standards. TSO articles must have separate approval for installation in aircraft. The article may be installed only if performed under 14 CFR part 43 or the applicable airworthiness requirements.

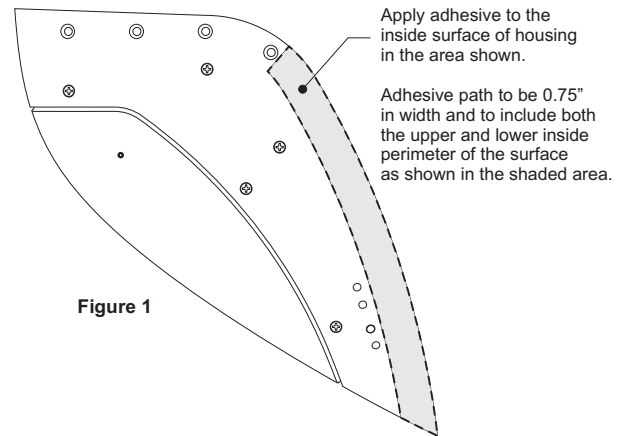
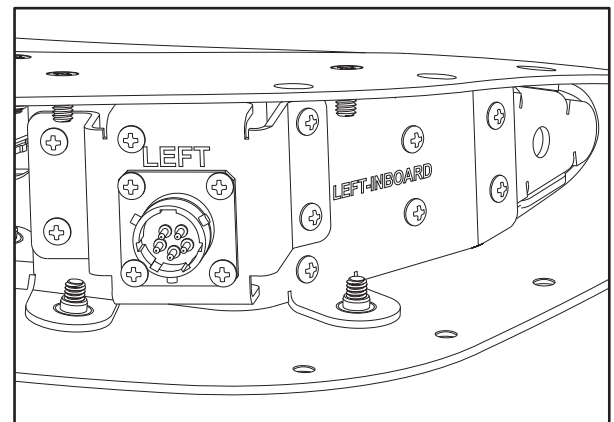
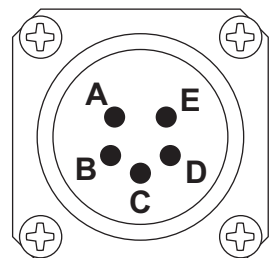


Figure 1



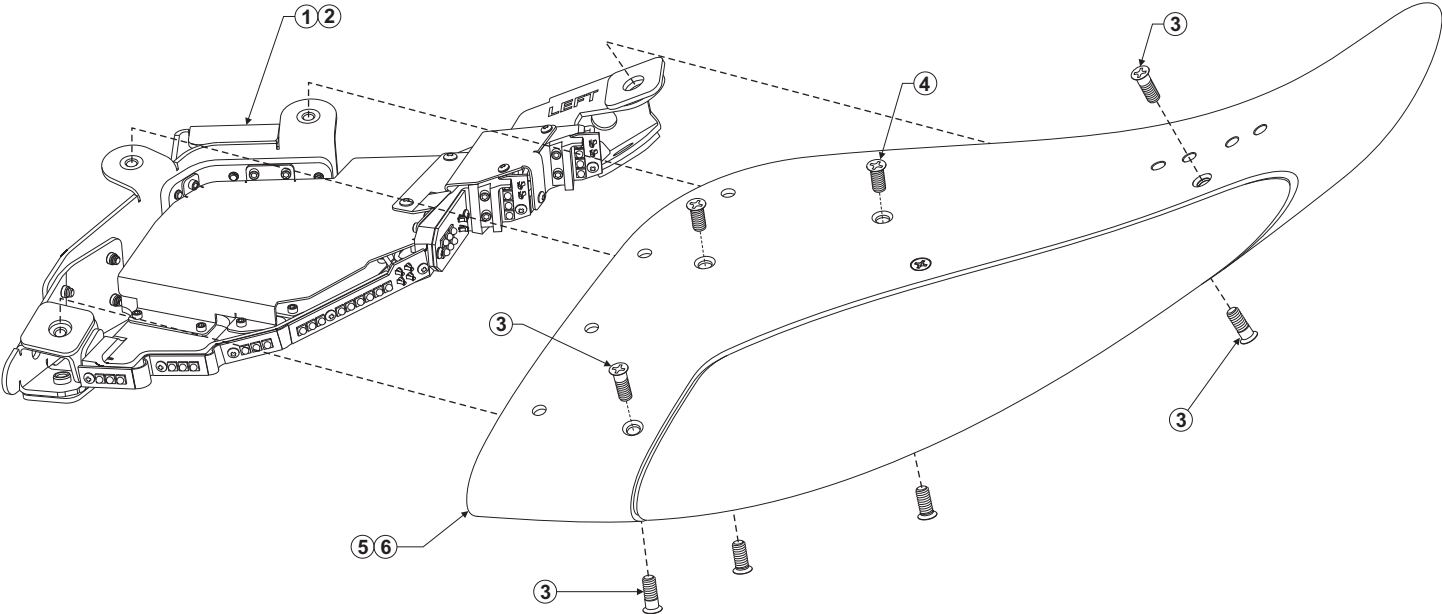
**Connector Wiring
 MS27499E10F5P**

- A 28VDC (Position)
- B 28VDC (Anti-Collision)
- C SYNC
- D Ground
- E Unused



Aviation

LEFT SIDE SHOWN FOR REFERENCE ONLY



QTY	QTY	ITEM	PART NUMBER	DESCRIPTION
	*		01-0290738-R0	MODEL 90738R0 (RIGHT)
*			01-0290738-L0	MODEL 90738L0 (LEFT)
-	1	1	02-0390766-R0	BASE ASSEMBLY, RIGHT
1	-	2	02-0390766-L0	BASE ASSEMBLY, LEFT
6	6	3	14-0018560-C2	SCREW, #8-32, 100° CSINK (NAS8702-2)
4	4	4	14-0018560-C1	SCREW, #8-32, 100° CSINK (NAS8702-1)
-	1	5	02-0390765-R0	RETAINER, SUB-ASSEMBLY, RIGHT
1	-	6	02-0390765-L0	RETAINER, SUB-ASSEMBLY, LEFT