



WHELEN AEROSPACE TECHNOLOGIES

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

TSO-C30c
TYPE I, II
APPROVED

TSO-C96a
CLASS II
APPROVED

The conditions and tests required for TSO approval of this article are minimum performance standards. Those installing this article either on or within a specific type or class of aircraft must determine that the aircraft installation conditions are within the TSO standards which include any accepted integrated non-TSO functions. TSO articles and any accepted integrated non-TSO function(s) must have separate approval for installation in an aircraft. The article may be installed only according to 14 CFR part 43 or the applicable airworthiness requirements.

WARNING: This product can expose you to chemicals including Methylene Chloride which is known to the State of California to cause cancer, and Bisphenol A, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SPECIFICATIONS:

- Nominal Operational Voltage: 28VDC
Input Current -
Position Light (Red): 0.2 Amps
Position Light (Green): 0.15 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.

AIRWORTHINESS LIMITATIONS: The Airworthiness Limitations section is FAA approved and specifies inspections and other maintenance required under §43.16 and §91.403 of the Federal Aviation Regulations, unless an alternative program has been approved.

No airworthiness limitations are associated with the installation of the LED wingtip position/anti-collision light.

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.

PERIODIC INSPECTIONS: An annual inspection shall be performed unless the OEM specifies a shorter interval.

INSTALLATION PROCEDURE: The following information is to assist you in installing a WAT 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.

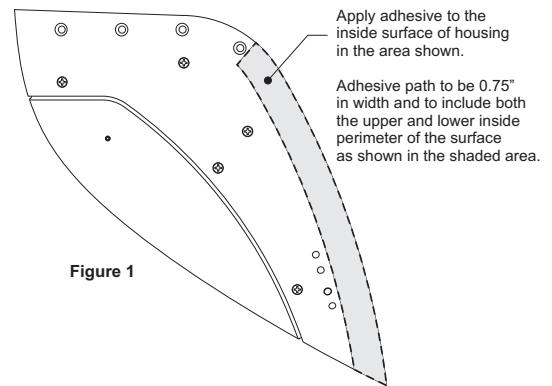
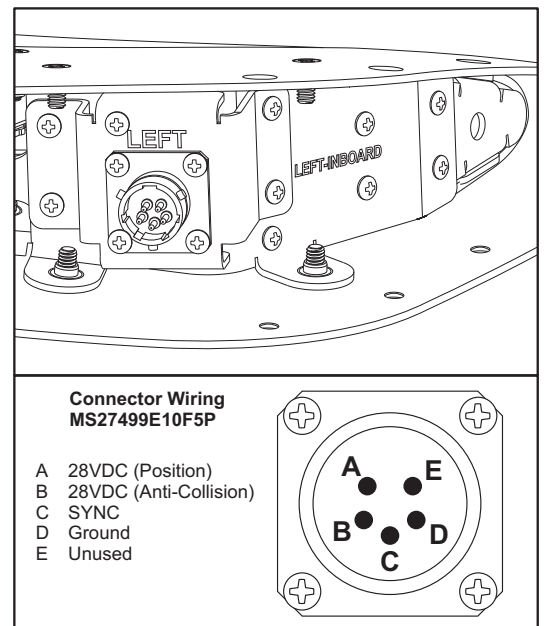
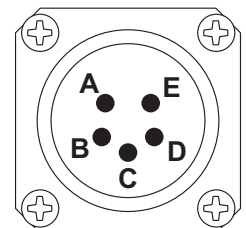


Figure 1



Connector Wiring
MS27499E10F5P

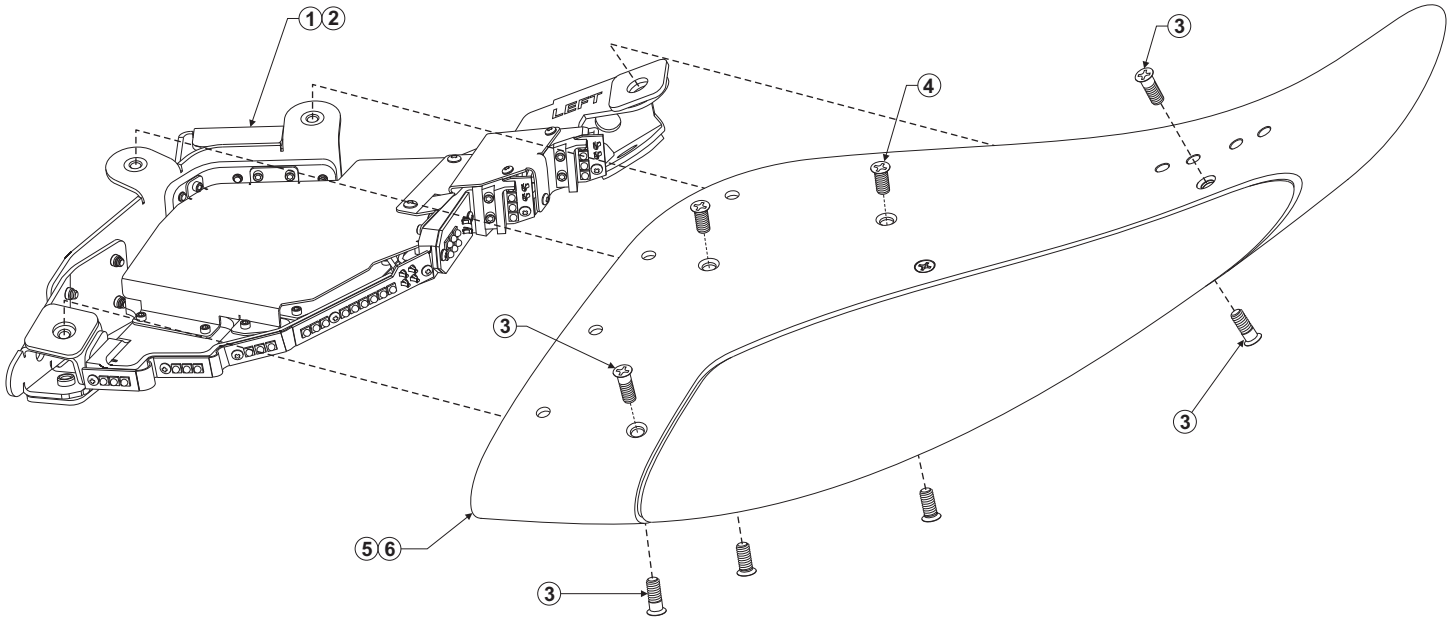
- A 28VDC (Position)
B 28VDC (Anti-Collision)
C SYNC
D Ground
E Unused



- 5. Check all avionics systems for interference from this installation.
6. A flight check should be performed by a properly certified pilot.
7. If required, update aircraft records utilizing FAA Field Approval (Form 337) or equivalent.

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	_____	BASE ASSEMBLY, RIGHT
1	-	2	_____	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