

WHELEN[®]

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Installation Guide: Aviation model 9061001, 9061002 P/N 01-0790610-01, 01-0790610-02 LED Position, Anti-Collision and Infrared Light Assembly



TSO-C30c
 TYPE I, II & III; APPROVED

TSO-C96a
 CLASS I; APPROVED

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.

SPECIFICATIONS:

Nominal Operational Voltage:28 VDC
 (Operation from 22-32 VDC)

Input Current:

LED Position Light 0.23 Amps
 LED Anti-Collision Light (Avg.) 0.73 Amps
 LED Anti-Collision Light (Pulse@.25 Sec.) 3.9 Amps
 LED Infrared Light (Avg.) 0.06 Amps
 LED Infrared Light (Pulse@.25 Sec.) 0.3 Amps

Flashrate 45 ±5 / Min.

EQUIPMENT LIMITATIONS:

An approved lighting system consists of two lights, one located on each wingtip. The baseplate must be mounted parallel to the vertical and horizontal centerlines of the aircraft to project the patterns properly.

Per FAR 23.1401(d) or 25.1401(d) do not operate the anti-collision light and the infrared light at the same time.

The Infrared Light is a non-TSO function.

Certain types of installations may require additional testing.

CONTINUED AIRWORTHINESS:

The forward position light is designed with 4 Green LEDs or 5 Red LEDs. The tail position light is designed with 2 LEDs. The infrared light is designed with 12 LEDs. The anti-collision light is designed with 36 LEDs. If any one LED fails, the unit 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. Inspect the lens. Replace if there is excessive scratching, pitting, discoloration or cracking.

Note: The anti-collision light will automatically shut-off after 9-10 flashes if a failure is detected.

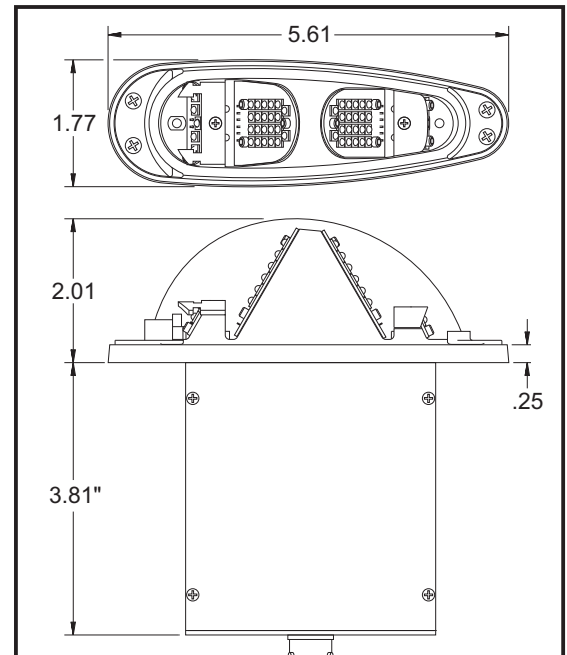
INSTALLATION PROCEDURES:

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 single light installation, but is identical for multiple light installations.

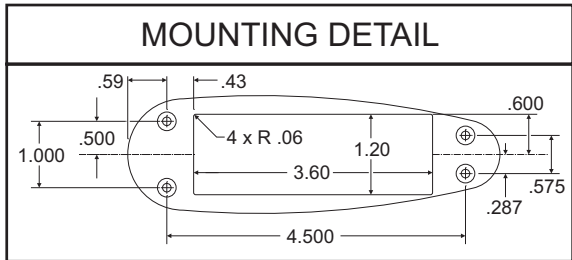
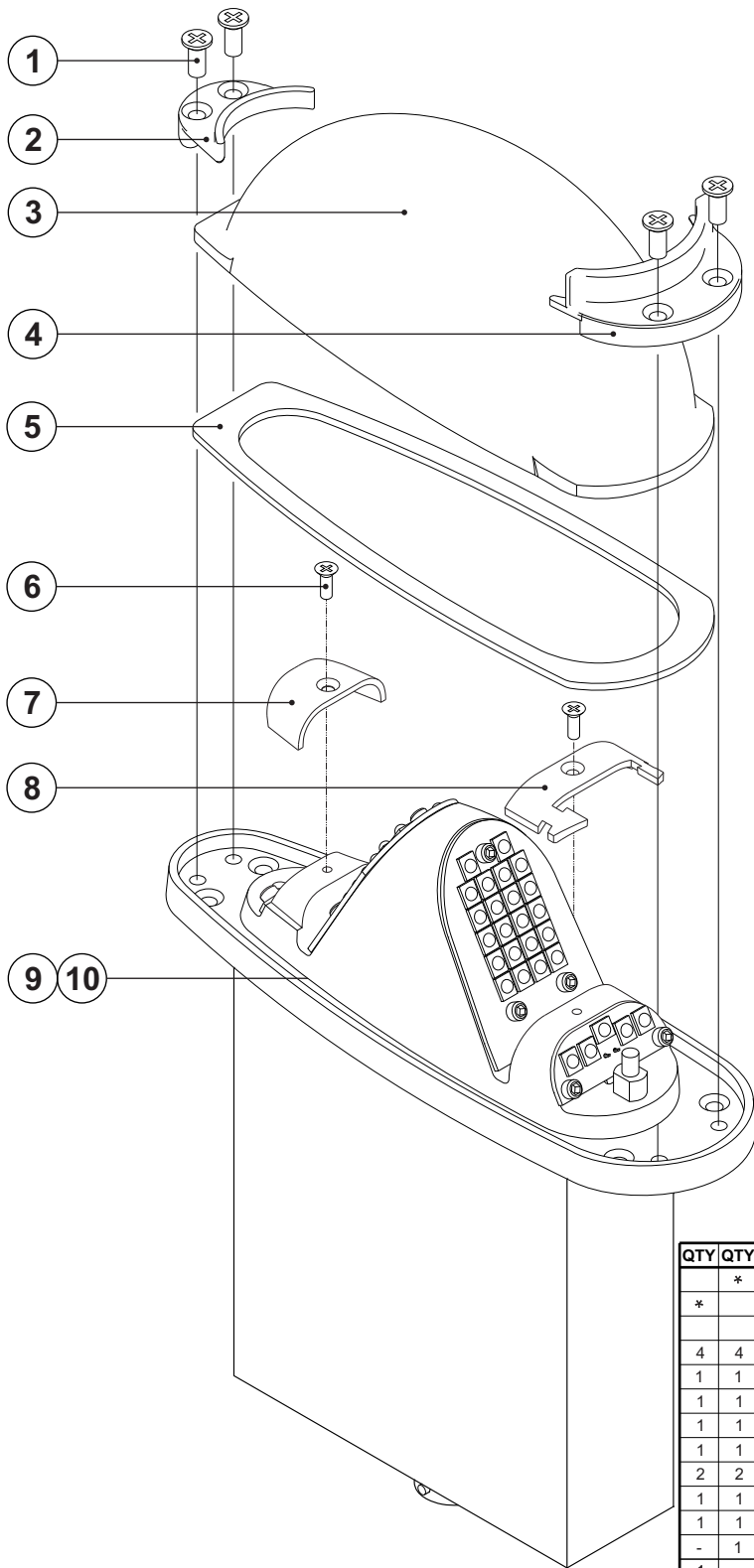
1. Choose the appropriate Model 90610() light assembly.
2. Using the mounting detail information provided, prepare the aircraft for means to secure the LED light assembly.
3. Connect the inputs according to the chart shown. Connect the power leads to an appropriately sized breaker. Connections to be in accordance with FAA approved methods.
4. Remove the lens retainers and carefully remove the lens. Using appropriate hardware, install the light assembly and insure that all leads are clear of any obstructions. Secure as required. Secure the light assembly using vibration resistant threaded fasteners.
5. Carefully reinstall the lens and retainers.

6. Waterproof the lightbase to aircraft. Apply single-part Silicone (RTV) or equivalent around any open area where water could get in.
7. Check all avionics systems for interference from this installation.
8. A flight check should be performed by a properly certified pilot.
9. Update aircraft records, complete Form 337 and obtain FAA field approval for installation, as necessary.

Note: SYNC is a low power bi-directional control signal. Connecting to the synchronize signal of any Whelen LED anti-collision assembly will cause the lights to flash at the same time. If synchronization is not necessary, the connection may be left open.



MS27508E10F5P Connector Wiring	
POS. A	+28V POSITION
POS. B	+28V ANTI-COLLISION
POS. C	+28V INFRARED
POS. D	GROUND
POS. E	SYNC



QTY	QTY	ITEM	PART NUMBER	DESCRIPTION
	*		01-0790610-01	ASS'Y, GREEN POS. / A-C / INFRARED LIGHT
*			01-0790610-02	ASS'Y, RED POS. / A-C / INFRARED LIGHT
4	4	1	14-005508B03	SCREW, 4-40 X 5/16 PFHMS 100° C'sk, BLACK
1	1	2	19-151003-100	RETAINER, REAR
1	1	3	68-3990574A30	LENS, HARDCOATED
1	1	4	19-171471-100	RETAINER, FRONT
1	1	5	38-0231219-00	GASKET, LENS
2	2	6	14-026116-04M	SCREW, 2-56 X 1/4 P82FHMS SS w/NYLON
1	1	7	11-651008-000	SHROUD, TAIL POSITION LIGHT
1	1	8	11-651016-000	SHROUD, FORWARD POSITION LIGHT
-	1	9	01-0290674-01	ASS'Y, LIGHTHEAD MODEL 9061001, GREEN
1	-	10	01-0290674-02	ASS'Y, LIGHTHEAD MODEL 9061002, RED