

WHELEN[®]

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Installation Guide: Aviation model OR5002V P/N 01-0771774V02 LED Tail Position / Anti-Collision Light Assembly (28V)

TSO-C30c
 TYPE III;
 APPROVED



TSO-C96a
 CLASS II & III;
 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:.....	28VDC
(Operational from 22-32VDC)	
Input Current:	
Position Lights	0.1 Amps
Anti-Collision Light (Avg.)	0.36 Amps
Anti-Collision Light (Pulse)	1.9 Amps
Flashrate	45 ± 5 FPM

EQUIPMENT LIMITATIONS:

An approved lighting system consists of three lights, one located the tail and one on each wingtip. Model OR500() is a tail position and anti-collision light. The assembly should be mounted as far aft on the aircraft as practicable on a thermally conductive surface. The baseplate must be mounted parallel to the vertical and horizontal centerlines of the aircraft to project the patterns properly.

Certain types of installations may require additional testing.

CONTINUED AIRWORTHINESS:

The tail position light is designed with 4 LEDs. The anti-collision light is designed with 18 LEDs. If any one LED fails, the unit must be repaired or replaced.

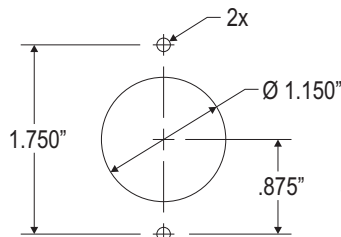
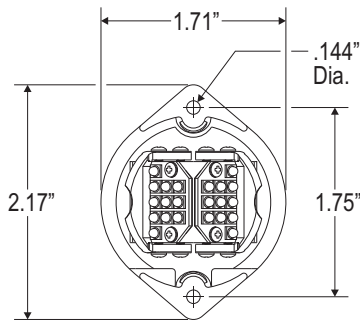
Inspect the lens, replace if there is excessive scratching, pitting, discoloration or cracking.

Note: To reduce eye strain, use an optical filter such as dark glasses or a blue covering dome during LED inspection.

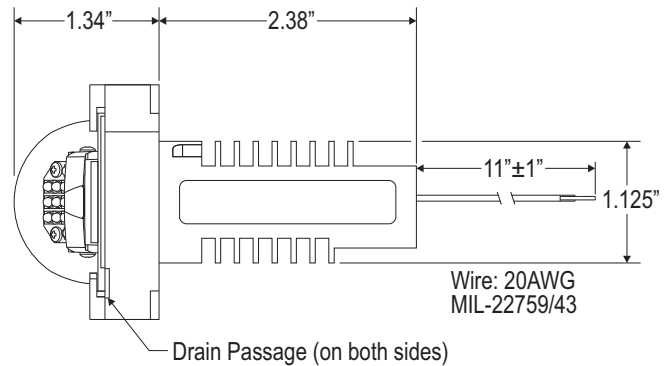
INSTALLATION PROCEDURES:

The following information is to assist you in installing a Whelen light system.

1. Choose the appropriate light assembly.
2. Using the mounting detail information provided, prepare the aircraft for means to secure the light assembly.
3. Connect the light inputs according to the chart shown. Connect the power lead to an appropriate sized breaker. Connections to be in accordance with FAA approved methods. **Note:** SYNC is a low-power, bi-directional control signal. Connecting to the synchronize signal of any Whelen LED anti-collision assembly to another Whelen anti-collision assembly will cause the lights to flash at the same time. If Synchronization is not necessary, the connection may be left open.
4. Proper installed orientation is achieved with the drain hole down. **Note: The arrow on the label must point up.** Install the light assembly on to the aircraft. Insure that all leads are clear of any obstructions and secured as required.
5. When necessary, waterproof the light base to aircraft. Apply single-part Silicone (RTV) or equivalent around any open area where water could get in. Do not cover the drain hole or the back of the unit.
6. Check all avionics systems for interference from this installation.
7. A flight check should be performed by a properly certified pilot.
8. Update aircraft records, complete Form 337 and obtain FAA field approval for installation, if required.



Suggested Mounting Detail

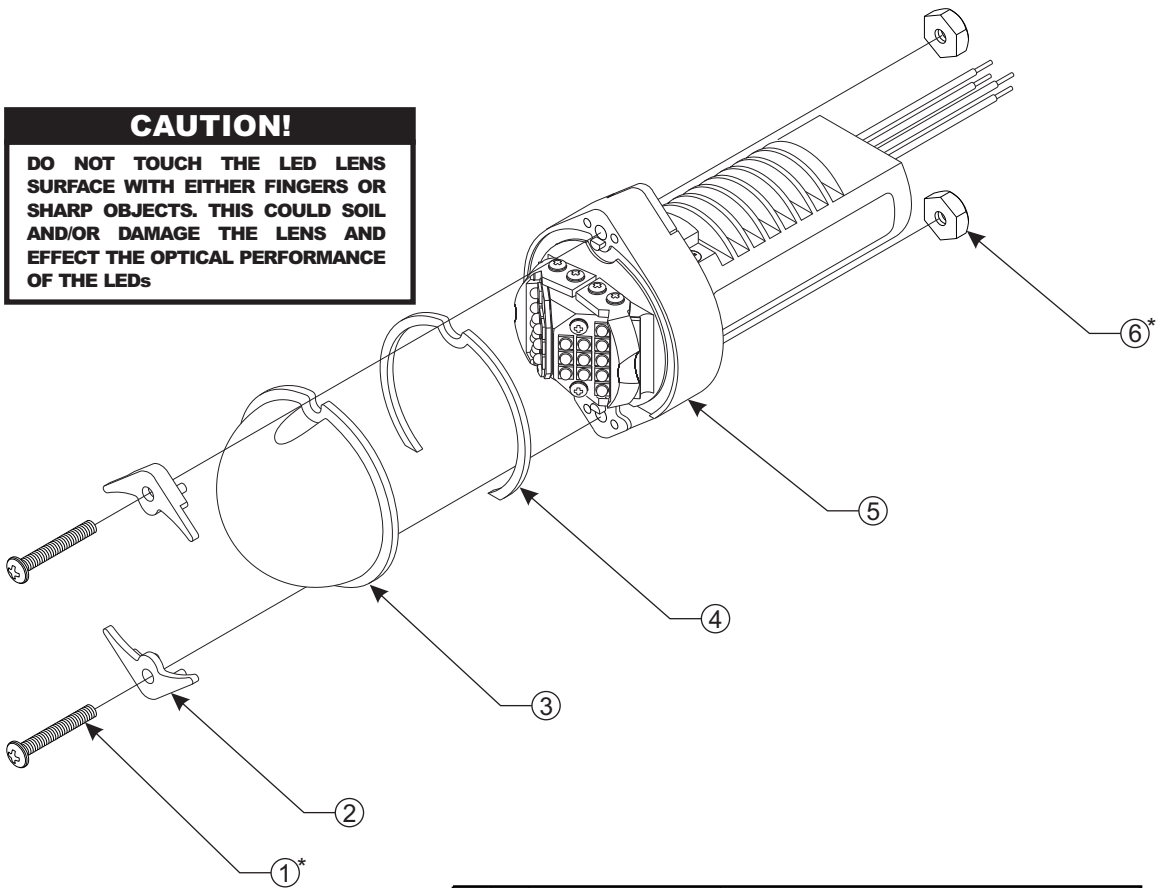


WIRING

- White+28VDC (ACL)
- Orange+28VDC (POS)
- Yellow.....SYNC
- BlackGround

CAUTION!

DO NOT TOUCH THE LED LENS SURFACE WITH EITHER FINGERS OR SHARP OBJECTS. THIS COULD SOIL AND/OR DAMAGE THE LENS AND EFFECT THE OPTICAL PERFORMANCE OF THE LEDs



QTY	ITEM	PART NUMBER	DESCRIPTION
		01-0771774V02	Orion-500, Model OR5002V (28VDC)
2	1*	14-040216-160	Screw, #4-40 x 1", PPHMS, SS
2	2	19-151080-100	Retainer
1	3	68-3951061A31	Lens, Model 90667
1	4	38-0131364-00	Gasket
1	5	01-0290717-01	Sub-Assy, Orion-500, Model OR5002V (28VDC)
2	6*	13-040130-040	Nut, #4-40 x 1/4, Hex Brass

* For Shipping Purposes Only