

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) 9063001, 9063002, 9063003, 9063004
P/N(s): 01-0790630-01, -02, -03, -04
LED Wingtip Anti-Collision /
Position Light Assembly



MADE IN THE U.S.A.

TSO-C30c TYPE I & II; APPROVED
 TSO-C96a CLASS II; APPROVED

SPECIFICATIONS:

Nominal Operational Voltage:..... 28VDC
 (Operational from 22-32VDC)
 Input Current -
 Green LED Position Light 0.23 Amps
 Red LED Position Light 0.26 Amps
 LED Anti-Collision Light (Avg.) 0.57 Amps
 Flashrate..... 45 ± 5 FPM

EQUIPMENT LIMITATIONS:

An approved forward lighting system consists of two wingtip assemblies. The wingtip attachment is defined in Whelen Document TF172

Certain types of installations may require additional testing.

CONTINUED AIRWORTHINESS:

The anti-collision light is designed with 30 LEDs. The position light is designed with 14 red or 12 green LEDs.

If any one bank of LEDs fails for the Anti-Collision light or the position light, the assembly still meets the FAR requirements for intensity and chromaticity. If a second bank of LEDs fails for either the Anti-Collision light or the Position light, the electronics module must be replaced.

Note: The unit has an internal diagnostic circuit to detect failures. If a failure of multiple banks of LEDs is detected, the unit will shut off that portion of the lighthouse after 20-25 seconds.

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.

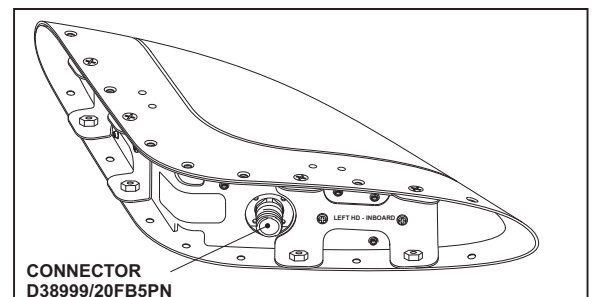
INSTALLATION PROCEDURE:

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 single light installation, but is identical for a second light installation.

1. Remove and discard the 8 (eight) screws and nuts shown.
2. Remove Lens/Retainer assembly from the LED module
3. Position the Lens/Retainer assembly onto the wingtip mounting flange in its mounted position.
4. Using the Lens/Retainer assembly as a template, mark the 22 mounting hole locations onto the wingtip mounting flange.

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.

5. Remove the Lens/Retainer assembly from the wingtip mounting flange and drill to provide #10 threaded mounting holes. NOTE: The H-bracket holes (8 places) do not receive threads at this time.
6. Remove the H-brackets from the LED module. Do not discard the (4) #10 screws.
7. Place the appropriate H-bracket into its installed position inside the wingtip mounting flange. Secure the H-bracket to the wingtip mounting flange using a Cleco clamp at the 4 mounting hole locations.
8. With the H-bracket in position, match-drill and rivet a #10, 2-lug nut plate to the inside of the H-bracket (4 places). NOTE: The H-bracket is now permanently affixed to the aircraft. Repeat for the remaining H-bracket.
9. Secure the LED module onto the installed H-brackets using the original hardware.
10. Make the necessary wiring connections and test for proper operation of the LED module.
11. Using the appropriate #10 flat head screws, install the Lens/Retainer assembly onto the wingtip mounting flange.
12. Check all avionics systems for interference from this installation.
13. A flight check should be performed by a properly certified pilot.
14. Update aircraft records, complete form 337 and obtain FAA field approval for installation, as necessary.



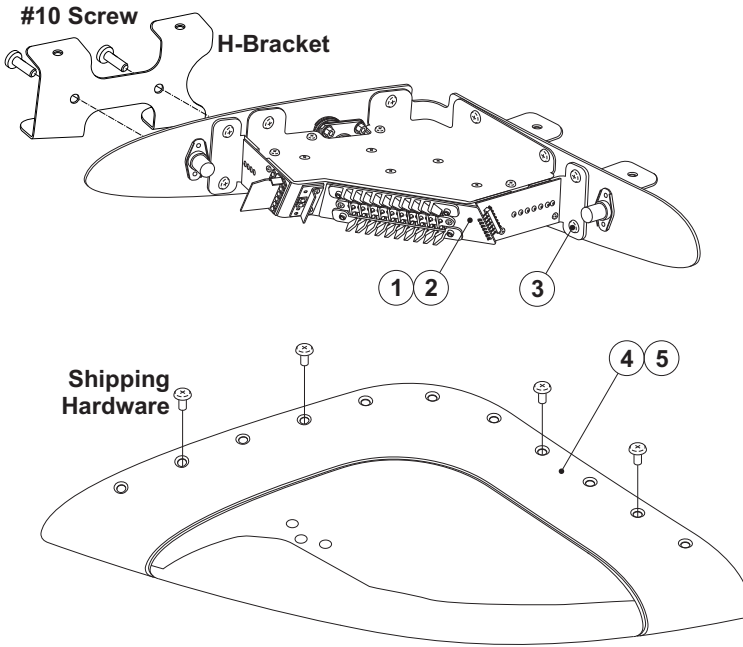
CONNECTOR
 D38999/20FB5PN

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

Connector Wiring	
A	28VDC (Position)
B	Ground
C	28VDC (ACL)
D	Ground
E	SYNC (see note)

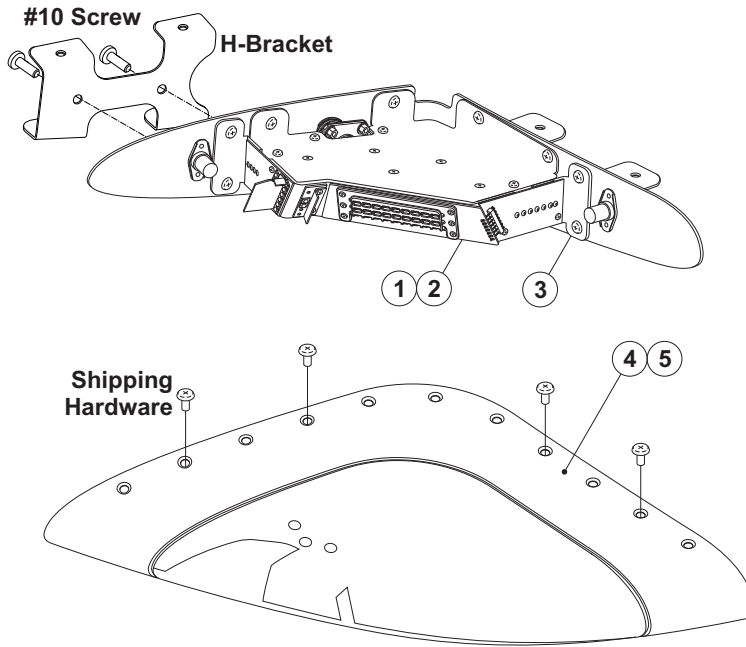
Aviation

Model(s) 9063001, 9063002



- 1 01-0290657-R0 LED Module, Right, Green
- 2 01-0290657-L0 LED Module, Left, Red
- 3 14-06221C-060 Screw, 6-32 x 3/8 PPHMS
- 4 02-0390641-R0 Assy, Lens/Retainer, Right
- 5 02-0390641-L0 Assy, Lens/Retainer, Left

Model(s) 9063003, 9063004



- 1 01-0290657-R1 LED Module, Right, Green
- 2 01-0290657-L1 LED Module, Left, Red
- 3 14-06221C-060 Screw, 6-32 x 3/8 PPHMS
- 4 02-0390641-R1 Assy, Lens/Retainer, Right
- 5 02-0390641-L1 Assy, Lens/Retainer, Left