

WHELEN[®]

ENGINEERING COMPANY INC.

Route 145, Winthrop Road,
Chester, Connecticut 06412
Phone: (860) 526-9504
Fax: (860) 526-2009
Internet: www.whelen.com
Sales/Service e-mail: aviation@whelen.com

Installation Guide:
Models 7080500, 7080501
P/N:01-0770805-00, 01-0770805-01
LED Tail Position
Light Assembly

Specifications:

Lamp:..... White LED (Light Emitting Diode)
Operational Voltage:..... +28 Volts DC
Average Input Current:..... 0.30 Amps
Weight:..... 0.3 lbs.
Approvals:..... FAA TSO-C30c Type III

Models:

<u>Model Number</u>	<u>Part Number</u>	<u>Description</u>
7080500	01-0770805-00	Standard Unit (No connector)
7080501	01-0770805-01	Amp #207359-1 connector and 12 AWG chassis ground

EQUIPMENT LIMITATIONS: The approved tail position light assembly should be mounted vertically and as far aft on the aircraft as possible.

CONTINUED AIRWORTHINESS: The LED tail light assembly is designed with 6 vertical rows of 12 LED's. Each row has 2 segments consisting of 6 LED's. If any one segment fails, the unit will continue to meet the light output requirements of TSO-C30c Type III. If 2 segments fail, the unit must be replaced (see Fig. 1).

INSTALLATION PROCEDURES: The following information is to assist you in installing a Whelen tail position light.

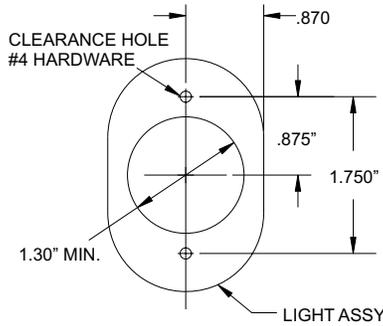
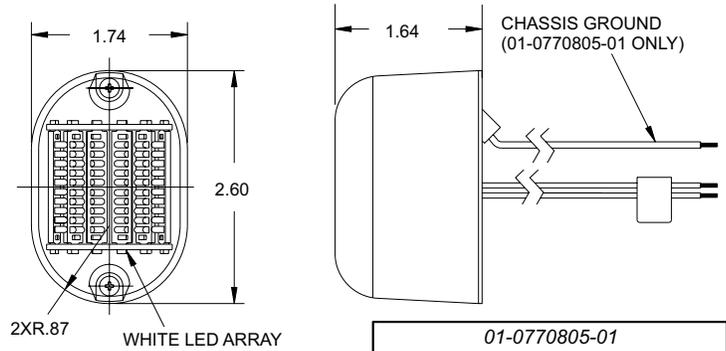
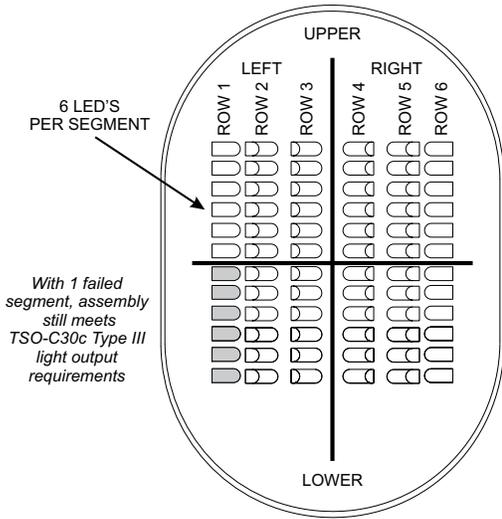
1. Choose the appropriate 70805 () series replacement light assembly which is most applicable to your aircraft.
2. Remove the old light, locate and save the existing +28 VDC lead and (-) ground leads. Clean and prep ends as required.
3. Use existing mounting holes and hardware.
4. Connect the existing +28 VDC lead to the white 20 AWG lead on the input cable assembly (supplied with light assembly). Connect the existing ground lead to the black 20 AWG wire on the input cable assembly. If a chassis ground wire exists on the aircraft, connect it to the chassis ground wire

Note: If a special adaptor plate is required, contact Whelen Aviation Division for requirements.

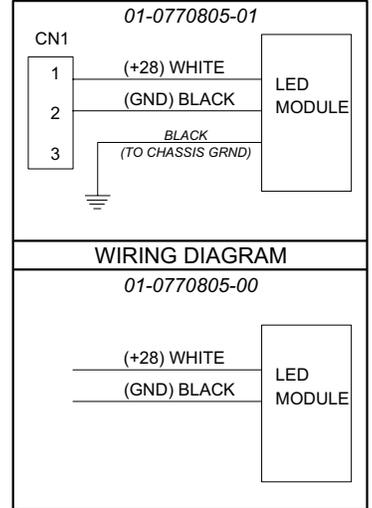
assembly. Both leads must be connected by FAA approved techniques using approved hardware.

5. Make sure the existing system is equipped with an appropriate sized breaker.
6. Remove two #4-40 screws from tail light assembly.
7. Install light assembly and insure that all leads are clear of any obstructions and ty-wrap as required. Secure light assembly using approved vibration resistant hardware methods.
8. Re-mount the lens onto the assembly. Attach lens with mounting screws (provided) using a torque value of 2 - 4 in./lbs. to prevent lens fracture.
9. Check all avionics systems for interference from this installation.
10. When waterproofing the assembly to the aircraft, apply aviation-approved single part silicone (RTV) or equivalent around the periphery only. RTV should never be used between the rear surface of the light assembly and its mounting surface.
11. Update aircraft records, complete Form 337 and obtain FAA field approval for installation.

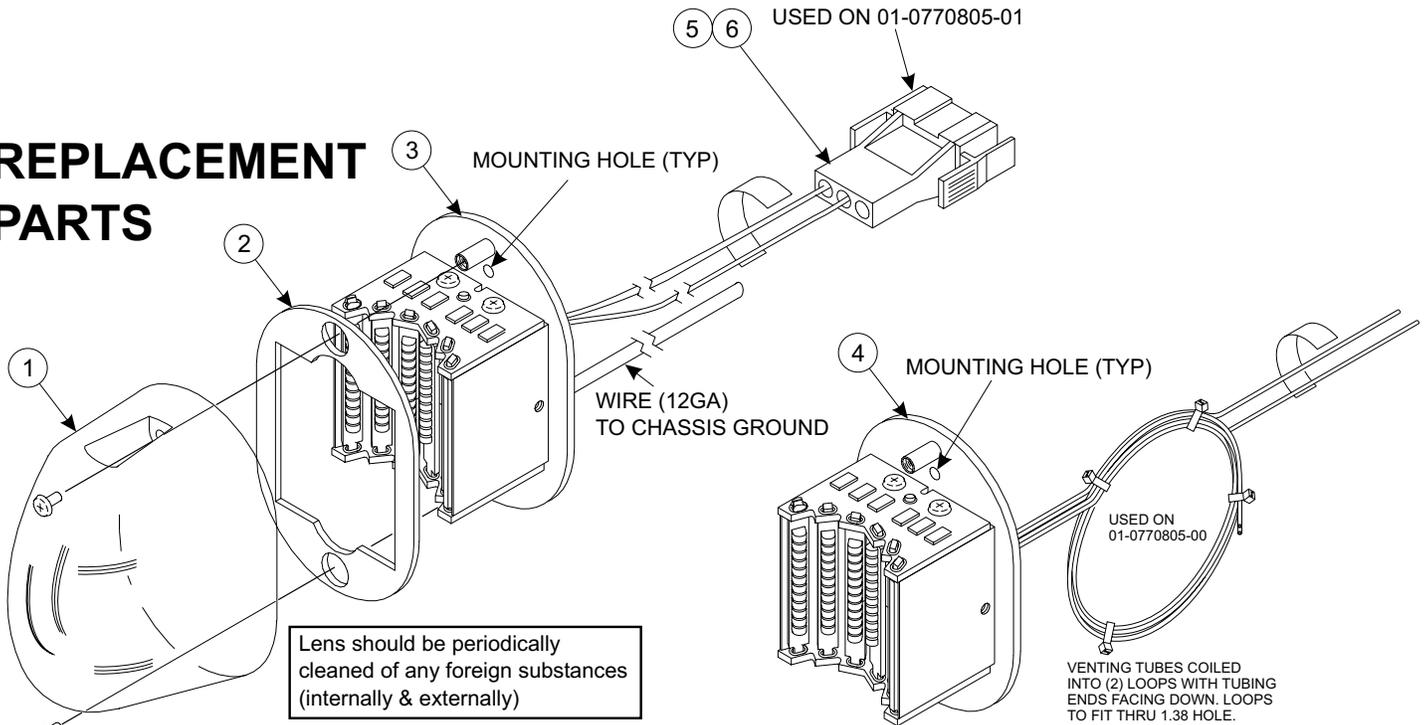
Figure 1



RECOMMENDED MOUNTING HOLE PATTERN



REPLACEMENT PARTS



#4 - 40 X 5/16 PPHMS
w/Nylon Locking Element
P/N: 14-040216-05M
Torque: 2 - 4 in./lbs.

2	-	6	39-0501316-1A	AMP PIN #66103-4, 20-24 AWG
1	-	5	39-0403024-91	AMP 3 PIN CONN. #207359-1
-	1	4	01-0290252-00	LED/PCB MODULE ASSEMBLY
1	-	3	01-0290252-01	LED/PCB MODULE ASSEMBLY w/GROUND WIRE
1	1	2	38-0250795-00	GASKET, LENS
1	1	1	68-3970804A30	LENS, LED TAIL POSITION LIGHT
1	-	-	01-0770805-01	LED TAIL POSITION LIGHT
-	1	-	01-0770805-00	LED TAIL POSITION LIGHT
QTY.	ITEM	PART NUMBER	DESCRIPTION	