

# WHELEN<sup>®</sup>

ENGINEERING COMPANY INC.

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

## Installation Guide: Models 7155404, 7155405, 7155406 P/Ns: 01-0771554-04 01-0771554-05 01-0771554-06 LED Tail Position Light Assembly



TSO-C30c  
TYPE 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.

### OPERATING INSTRUCTIONS:

**Nominal Operational Voltage:** .28 VDC  
(Operation from 22-30 VDC)

**Input Current:** . . . . .0.125 Amps

**EQUIPMENT LIMITATIONS:** An approved tail position light 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.

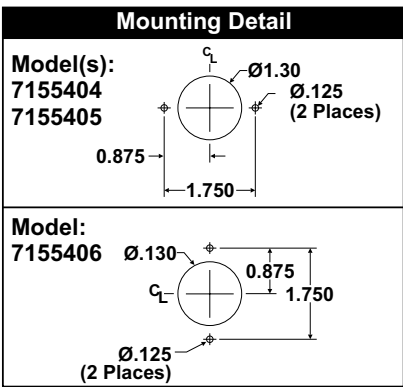
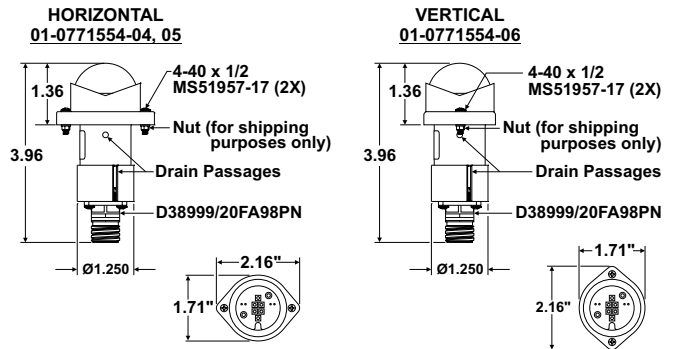
**CONTINUED AIRWORTHINESS:** The 71554( ) series LED tail position light assembly is designed with 6 LEDs. Should any one LED fail the unit must be repaired or replaced.

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

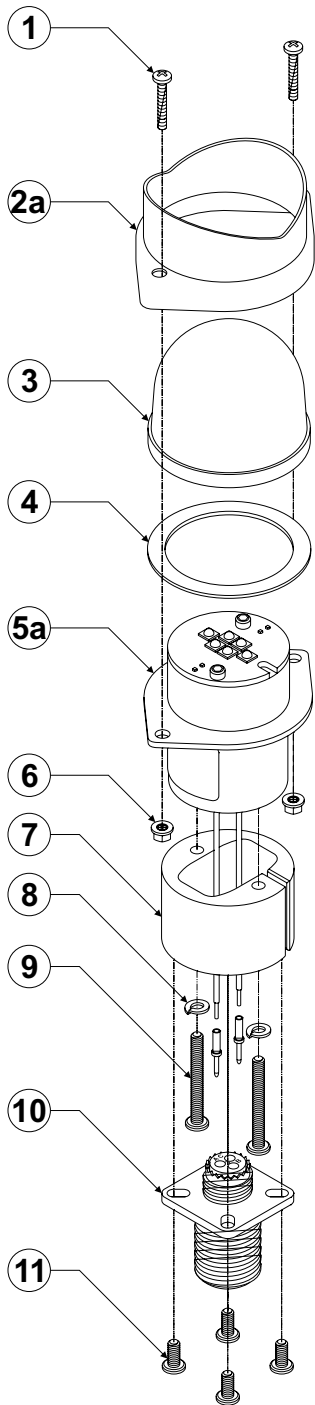
Inspect the lens. Replace if there is excessive scratching, pitting, discoloration or cracking.

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

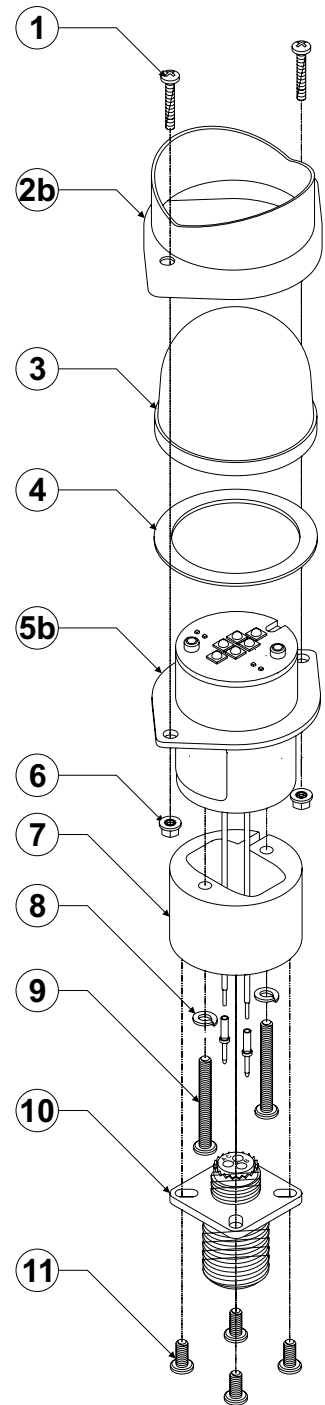
1. Choose the appropriate 71554( ) light assembly.
2. Using the mounting detail information provided, prepare the aircraft for means to secure the LED light assembly.
3. Connect the position light inputs according to the chart shown. Connect the power lead to an appropriate sized breaker. Connections to be in accordance with FAA approved methods.
4. Remove and discard the two screws and nuts holding the retainer to the unit. Carefully remove the lens retainer and lens from the assembly. CAUTION! Do not touch the LED surface with either fingers or sharp objects. This could soil or damage the lens and effect the optical performance of the LEDs.
5. Install light assembly and insure that all leads are clear of any obstructions. Note that proper orientation is achieved with the drain hole down and the "TOP" label is up..



6. Reinstall the lens and confirm proper gasket fit.
7. Install the lens retainer. Using appropriate hardware secure as required. Secure light assembly using vibration resistant threaded fasteners.
8. 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 drain hole.
9. Check all avionics systems for interference from this installation.
10. A flight check should be performed by a properly certified pilot.
11. Update aircraft records, complete Form 337 and obtain FAA field approval for installation, as necessary.



**Model: 7155404 / 7155405**



**Model: 7155406**

**CONNECTOR D38999/20FA98PN**

Position	Signal	Wire
A	28VDC	White
B	Ground	Black
C	N/C	-

QTY	QTY	QTY	ITEM	PART NUMBER	DESCRIPTION
		*		01-0771554-04	MODEL 7155404 LED TAIL POSITION LIGHT (HORIZ)
	*			01-0771554-05	MODEL 7155405 LED TAIL POSITION LIGHT (HORIZ)
	*			01-0771554-06	MODEL 7155406 LED TAIL POSITION LIGHT (VERT)
2	2	2	1	14-0050505-18	SCREW, 4-40 x 5/8 PPHMS MS51957-18
-	1	1	2a	19-0150350-06	RETAINER MASK, HORIZONTAL
1	-	-	2b	19-0150350-07	RETAINER MASK, VERTICAL
1	1	1	3	68-3970991-30	LENS, CLEAR HARDCOAT, TAIL POSITION LIGHT
1	1	1	4	38-0231260-00	GASKET, LENS
-	1	1	5a	01-0271552-01	ASSY, 28V LED TAIL POSITION LIGHT (HORIZONTAL)
1	-	-	5b	01-0271552-02	ASSY, 28V LED TAIL POSITION LIGHT (VERTICAL)
2	2	2	6	13-040130-040	NUT, 4-40 x 1/4 HEX BRASS
1	1	1	7	07-551038-100	CONNECTOR ADAPTOR (HELI-COILS)
2	2	2	8	16-0050506135	WASHER, #4 LOCK-SPRING
2	2	2	9	14-040216-160	SCREW, 4-40 x 1 PPHMS
1	1	1	10	39-2J03017-00	WALL MOUNT D38999/20FA98PN
4	4	4	11	14-0050505-13	SCREW, 4-40 x 1/4 PPHMS