



WHELEN AEROSPACE TECHNOLOGIES

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Installation Guide/ICA:

71110()-series

Models 7111001 thru 7111008

P/Ns: 01-0771110-01 thru 01-0771110-08

LED Forward Position Light/Strobe Assembly

TSO-C30c
TYPE I, II
APPROVED

TSO-C96a
CLASS II
APPROVED

The conditions and tests required for TSO approval of this article are minimum performance standards. Those installing this article either on or within a specific type or class of aircraft must determine that the aircraft installation conditions are within the TSO standards which include any accepted integrated non-TSO functions. TSO articles and any accepted integrated non-TSO function(s) must have separate approval for installation in an aircraft. The article may be installed only according to 14 CFR part 43 or the applicable airworthiness requirements.

WARNING: This product can expose you to chemicals including Methylene Chloride which is known to the State of California to cause cancer, and Bisphenol A, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

POSITION LIGHT:

Operational Voltage: 14/28 VDC (nominal)

Input Current: 0.25 Amps

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. The strobe tube assembly must be connected to a strobe power supply, such as WAT model 70888, 70879 or other approved models.

Certain types of installations may require additional testing.

AIRWORTHINESS LIMITATIONS: The Airworthiness Limitations section is FAA approved and specifies inspections and other maintenance required under §43.16 and §91.403 of the Federal Aviation Regulations, unless an alternative program has been approved.

No airworthiness limitations are associated with the installation of the anti-collision/position light.

CONTINUED AIRWORTHINESS: The 71110() series LED wingtip position light assembly is designed with either 3 Green LED's or 4 Red LED's. Should any one LED fails, the unit must be repaired or replaced.

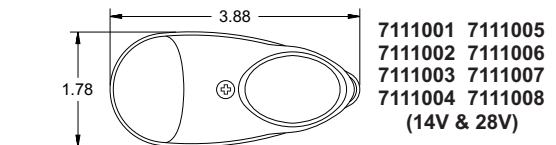
Inspect the lens, replace if there is excessive scratching, pitting, discoloration or cracking. For additional lens maintenance detail see SAE ARP5637.

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

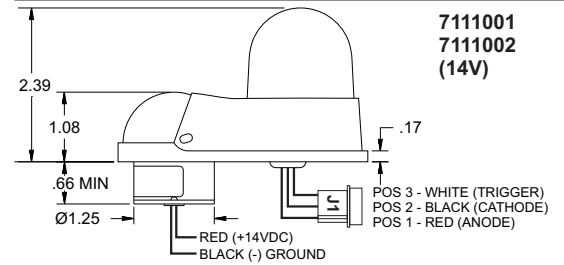
PERIODIC INSPECTIONS: An annual inspection shall be performed unless the OEM specifies a shorter interval.

INSTALLATION PROCEDURES: The following information is to assist in the installation of a WAT 71110() LED Forward Position Light/Strobe 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 71110() light assembly.
2. Using the mounting detail information provided, prepare the aircraft for means to secure the 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. Connect the strobe, J1 to the strobe power supply as shown.
4. Carefully remove the shroud from the light assembly. CAUTION! Do not touch the LEDs with either fingers or sharp objects. This could soil and/or damage the lens and effect the optical performance of the LEDs.
5. Using the appropriate hardware, install light assembly and insure that all leads are clear of any obstructions and secured as required. Secure light assembly using vibration resistant threaded fasteners.
6. Reinstall the lens so that the two notches are positioned under the shroud, with each notch equidistant to the centerline. Confirm proper gasket fit.
7. Install lens retainer. Reinsert #6 flat head screw and tighten firmly.
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.
9. Check all avionics systems for interference from the installation.
10. A flight check should be performed by a properly certified pilot.
11. If required, update aircraft records utilizing FAA Field Approval (Form 337) or equivalent.



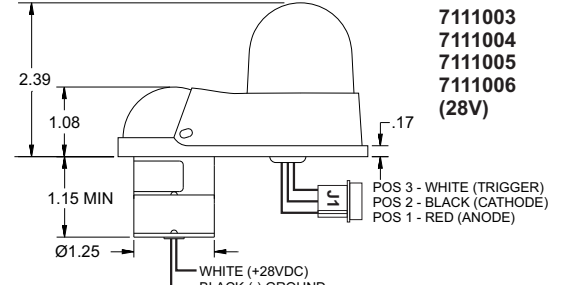
7111001 7111005
7111002 7111006
7111003 7111007
7111004 7111008
(14V & 28V)



7111001
7111002
(14V)

POS 3 - WHITE (TRIGGER)
POS 2 - BLACK (CATHODE)
POS 1 - RED (ANODE)

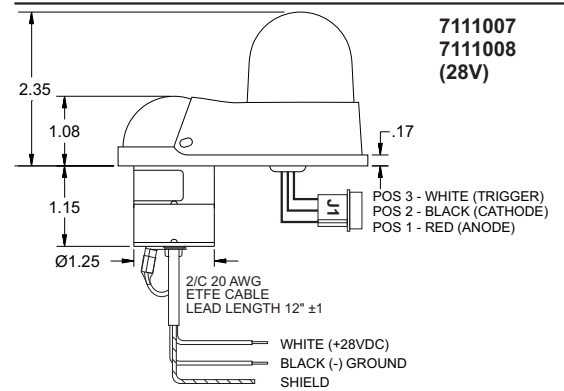
RED (+14VDC)
BLACK (-) GROUND



7111003
7111004
7111005
7111006
(28V)

POS 3 - WHITE (TRIGGER)
POS 2 - BLACK (CATHODE)
POS 1 - RED (ANODE)

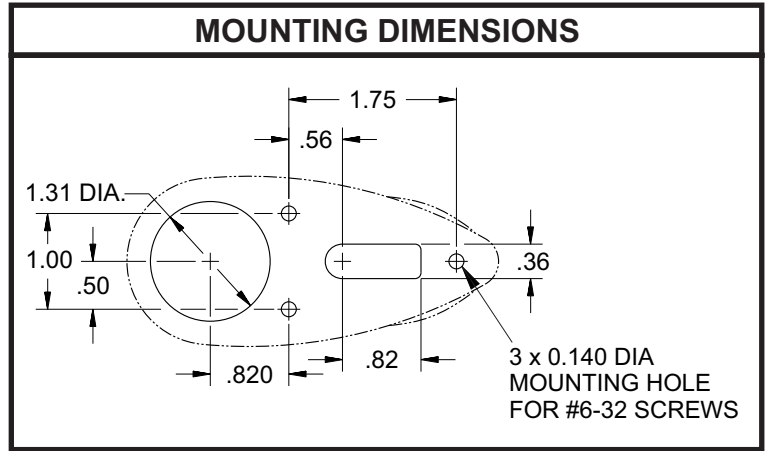
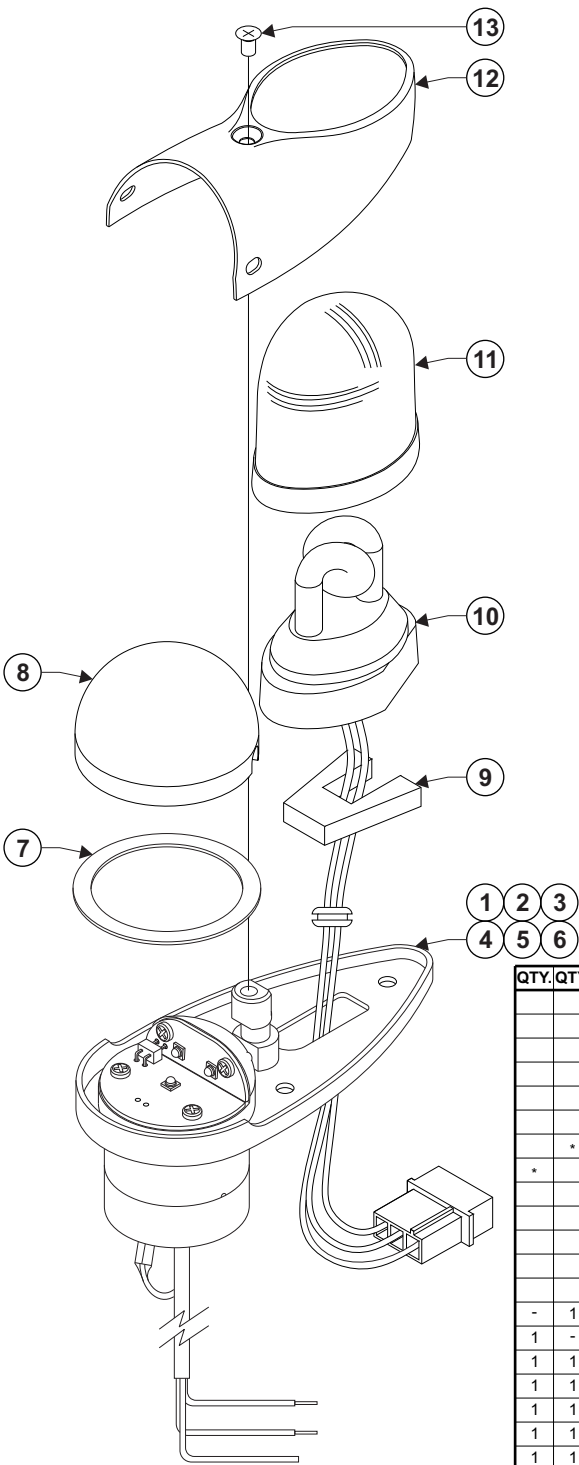
WHITE (+28VDC)
BLACK (-) GROUND



7111007
7111008
(28V)

POS 3 - WHITE (TRIGGER)
POS 2 - BLACK (CATHODE)
POS 1 - RED (ANODE)

2/C 20 AWG
ETFE CABLE
LEAD LENGTH 12" ±1
WHITE (+28VDC)
BLACK (-) GROUND
SHIELD



QTY.	QTY.	QTY.	QTY.	QTY.	QTY.	QTY.	QTY.	QTY.	ITEM	PART NUMBER	DESCRIPTION
								*		01-0771110-01	7111001 POS/STROBE LIGHT, 14V (GRN)
								*		01-0771110-02	7111002 POS/STROBE LIGHT, 14V (RED)
					*					01-0771110-03	7111003 POS/STROBE LIGHT, 28V (GRN)
				*						01-0771110-04	7111004 POS/STROBE LIGHT, 28V (RED)
		*								01-0771110-05	7111005 POS/STROBE LIGHT, 28V (GRN)
		*								01-0771110-06	7111006 POS/STROBE LIGHT, 28V (RED)
	*									01-0771110-07	7111007 POS/STROBE LIGHT, 28V (GRN)
*										01-0771110-08	7111008 POS/STROBE LIGHT, 28V (RED)
		-	-	-	-	-	1	1			71110 ASS'Y, POSITION/STROBE LIGHT 14V (GRN)
		-	-	-	-	-	1	-	2		71110 ASS'Y, POSITION/STROBE LIGHT 14V (RED)
		-	1	-	1	-	-	3			71110 ASS'Y, POSITION/STROBE LIGHT 28V (GRN)
		1	-	1	-	-	-	4			71110 ASS'Y, POSITION/STROBE LIGHT 28V (RED)
-	1	-	-	-	-	-	-	5			71110 ASS'Y, POSITION/STROBE LIGHT 28V (GRN)
1	-	-	-	-	-	-	-	6			71110 ASS'Y, POSITION/STROBE LIGHT 28V (RED)
1	1	1	1	1	1	1	1	7	38-0231440-00		GASKET, LENS - LED POSITION LIGHTS
1	1	1	1	1	1	1	1	8	68-3950902A30		LENS, CLEAR FWD POSITION LIGHT HARDCOAT
1	1	1	1	1	1	1	1	9	38-0130107-00		GASKET, A427-4 1/4" THICK
1	1	1	1	1	1	1	1	10	36-0050626-01		ASS'Y, FLASHTUBE 6.00" LEADS W/GROMMET
1	1	1	1	1	1	1	1	11	68-2290005-34		LENS, CLEAR/COATED A612
1	1	1	1	1	1	1	1	12	19-171122-200		RETAINER, LENS MODEL 71110 IRIDITE/COMPLETE
1	1	1	1	1	1	1	1	13	14-0050508-27		SCREW, 6-32 5/16 PFHMS CSINK MS51959-27