

WHELEN AEROSPACE TECHNOLOGIES

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Installation Guide/ICA:

71105( )-series

Models 7110501, 02, 03, 04, 05, 06, 11, 12, 13, 14

P/N: 01-0771105-01, -02, -03, -04, -05, -06, -11, -12, -13, -14

LED Forward Position Light Assembly

TSO-C30c  
TYPE I, 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.

OPERATING INSTRUCTIONS:

**Operational Voltage:** . . . . . 14/28 VDC (nominal)

**Input Current:** . . . . . 0.25 Amps

**EQUIPMENT LIMITATIONS:** An approved forward position lighting system consists of two lights, one located on each wingtip.

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 LED forward position light.

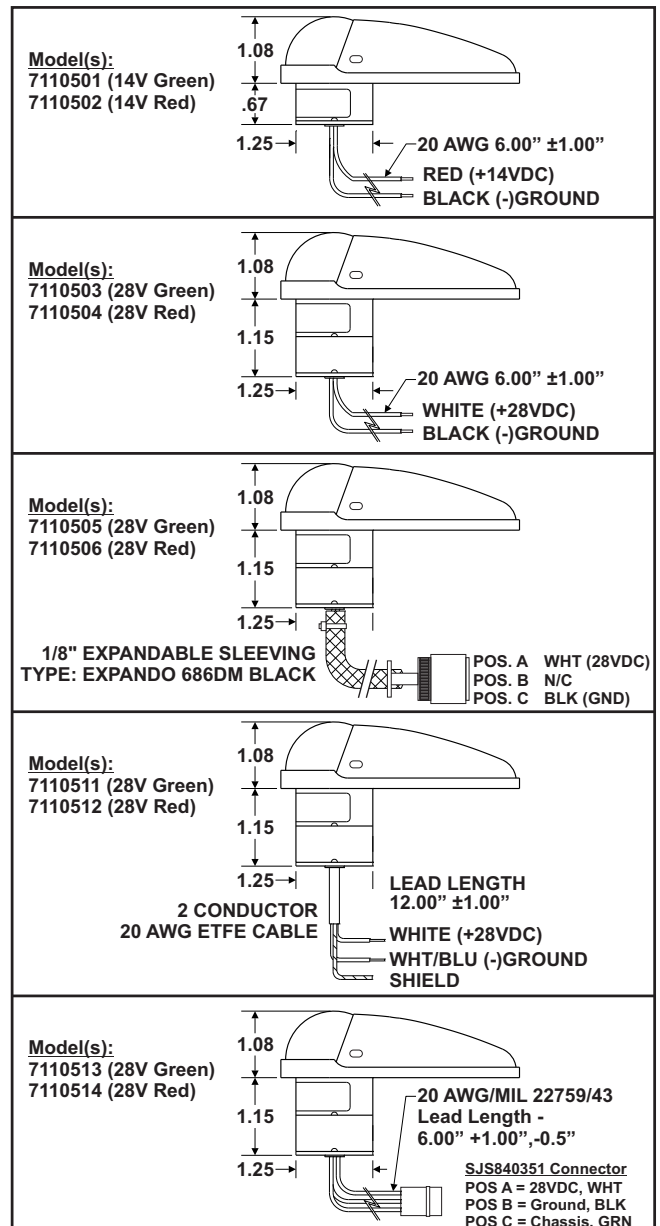
**CONTINUED AIRWORTHINESS:** The 71105 series LED wingtip position light assembly is designed with either 3 Green LED's or 4 Red LED's. If any one LED fails, the unit must be repaired or replaced. Inspect the lens, replace if there is excessive scratching, pitting, discoloration or cracking. For additional 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.

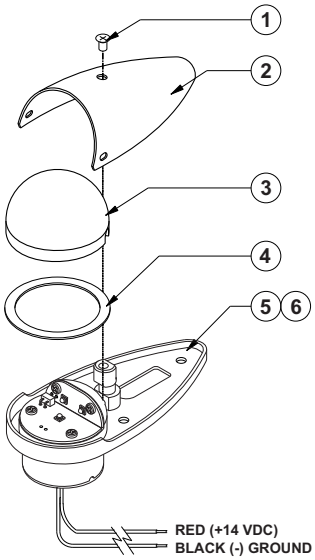
**PERIODIC INSPECTIONS:** An annual inspection shall be performed unless the OEM specifies a shorter interval.

**INSTALLATION PROCEDURES:** The following information is to assist in the installation of a WAT LED Forward Position Light System.

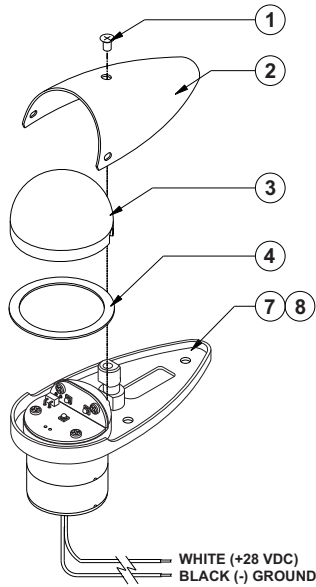
1. Choose the appropriate 71105( ) series replacement light assembly.
2. The installation procedure described in the following text will be confined to a single light installation, but is identical for multiple light installations.
3. Remove the old light, locate and save the existing +VDC lead and (-) ground lead. Clean and prep ends as required.
4. Make sure the existing system is equipped with an appropriate sized breaker. Connect the existing +14/28 VDC lead to the POSITIVE wire on the input cable assembly (supplied with the light assembly). Connect the existing ground lead to the GROUND wire on the input cable assembly or use the supplied connector as shown in the illustrations. Both leads must be connected by an approved FAA connection. Insure that the wire leads clear of any obstructions and ty-wrap as required.
5. 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 LEDs and effect the optical performance of the LEDs.
6. Position the base of the new light assembly onto the mounting surface. Insert three (3) #6-32 pan head screws into the mounting hole and tighten firmly. Reinstall the lens so that the two notches are positioned under the shroud, with each notch equidistant to the centerline.
7. Check all avionics systems for interference from the installation.
8. A flight check should be performed by a properly certified pilot.
9. If required, update aircraft records utilizing FAA Field Approval (Form 337) or equivalent.



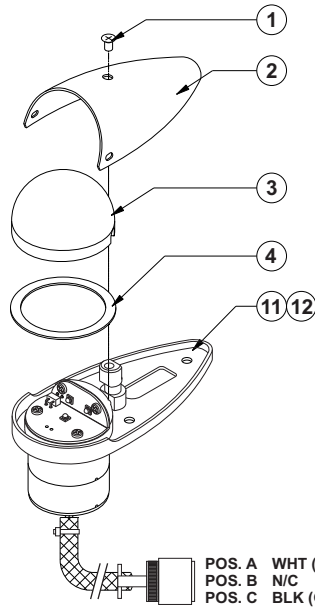
**Models:  
7110501, 7110502**



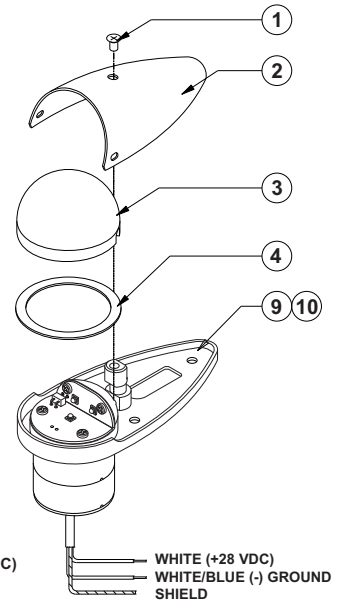
**Models:  
7110503, 7110504**



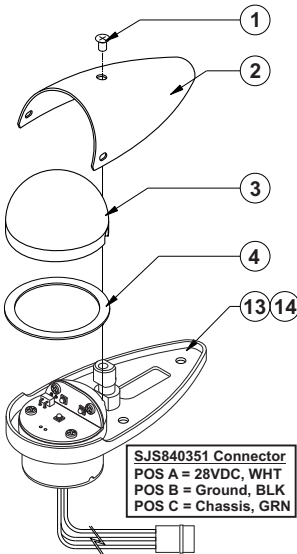
**Models:  
7110505, 7110506**



**Models:  
7110511, 7110512**



**Models:  
7110513, 7110514**



QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	ITEM	PART NUMBER	DESCRIPTION
										*		01-0771105-01	7110501 LED FORWARD POS. LIGHT - 14V (GRN)
									*			01-0771105-02	7110502 LED FORWARD POS. LIGHT - 14V (RED)
									*			01-0771105-03	7110503 LED FORWARD POS. LIGHT - 28V (GRN)
									*			01-0771105-04	7110504 LED FORWARD POS. LIGHT - 28V (RED)
									*			01-0771105-11	7110511 LED FORWARD POS. LIGHT - 28V (GRN) w/SHIELD CABLE
					*							01-0771105-12	7110512 LED FORWARD POS. LIGHT - 28V (RED) w/SHIELD CABLE
				*								01-0771105-05	7110505 LED FORWARD POS. LIGHT - 28V (GRN) w/CONNECTOR
	*											01-0771105-06	7110506 LED FORWARD POS. LIGHT - 28V (RED) w/CONNECTOR
	*											01-0771105-13	7110513 LED FORWARD POS. LIGHT - 28V (GRN) w/CONNECTOR
*												01-0771105-14	7110514 LED FORWARD POS. LIGHT - 28V (RED) w/CONNECTOR
1	1	1	1	1	1	1	1	1	1	1	1	14-0050508-27	SCREW, 6-32 x 5/16 (PFHMS / CSNK MS1959-27)
1	1	1	1	1	1	1	1	1	1	1	2	19-150002-020	RETAINER, FORWARD POSITION LENS CLEAR IRIDITE
1	1	1	1	1	1	1	1	1	1	1	3	68-3950902A30	LENS, CLEAR FORWARD POSITION LIGHT HARDCOAT
1	1	1	1	1	1	1	1	1	1	1	4	38-0231440-00	GASKET, LENS - LED POSITION LIGHT
-	-	-	-	-	-	-	-	-	-	-	5		ASSY, POS. LIGHT 14V (GREEN) 71105-SERIES
-	-	-	-	-	-	-	-	-	-	1	6		ASSY, POS. LIGHT 14V (RED) 71105-SERIES
-	-	-	-	-	-	-	-	-	1	-	7		ASSY, POS. LIGHT 28V (GREEN) 71105-SERIES
-	-	-	-	-	-	-	-	1	-	-	8		ASSY, POS. LIGHT 28V (RED) 71105-SERIES
-	-	-	-	-	-	-	1	-	-	-	9		ASSY, POS. LIGHT 28V (GREEN) 71105-SERIES w/SHIELD CABLE
-	-	-	-	1	-	-	-	-	-	-	10		ASSY, POS. LIGHT 28V (RED) 71105-SERIES w/SHIELD CABLE
-	-	-	1	-	-	-	-	-	-	-	11		ASSY, POS. LIGHT 28V (GREEN) 71105-SERIES w/CONNECTOR
-	-	1	-	-	-	-	-	-	-	-	12		ASSY, POS. LIGHT 28V (RED) 71105-SERIES w/CONNECTOR
-	1	-	-	-	-	-	-	-	-	-	13		ASSY, POS. LIGHT 28V (GREEN) 71105-SERIES w/CONNECTOR
1	-	-	-	-	-	-	-	-	-	-	14		ASSY, POS. LIGHT 28V (RED) 71105-SERIES w/CONNECTOR

**Mounting Dimensions**

