

**Instructions for Continued Airworthiness
(ICA)
for
Light Emitting Diode (LED)
Aircraft Light System
Installed in Accordance With
STC SA02212AK
For
VARIOUS MODEL AIRCRAFT**

Doc. No.: LED 03-21
Rev: C
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Airworthiness Limitations

No additional airworthiness limitations apply.

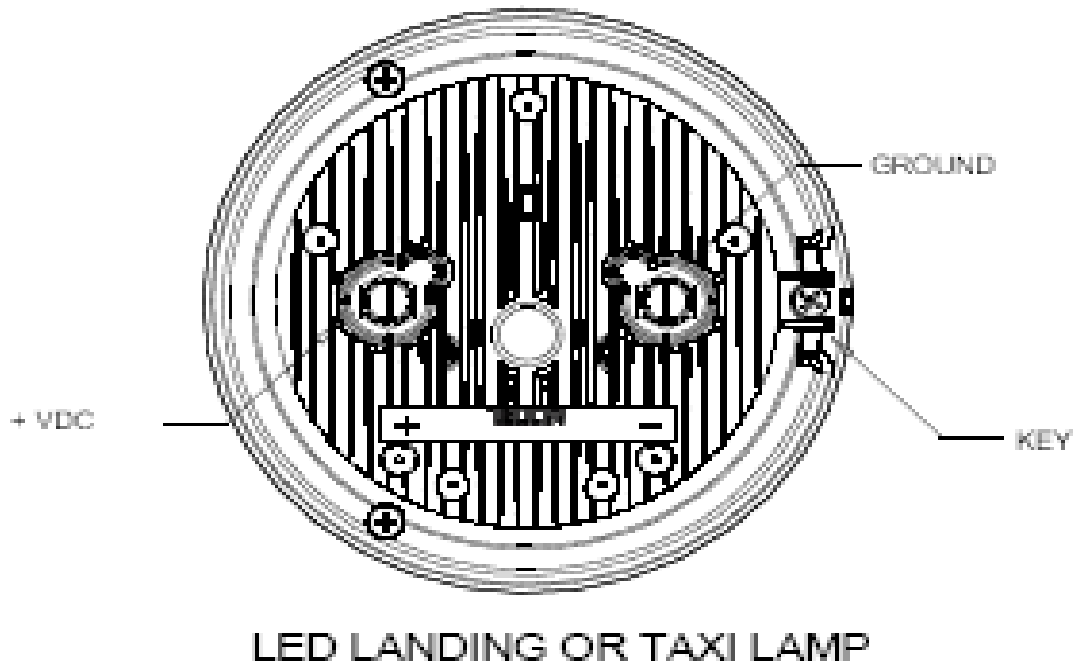
Log of Revisions

Rev.	Description	Pages	Approved	Date
IR	Initial release.	-		03/18/2010
A	Replace STC Number	1		06/18/2010
B	Revise Weight	6		12/07/2010
C	Add PAR46 lamps, change reference from ballast to lamp.	5,6,9,10		01/12/2011

Table of Contents

<u>SECTION</u>	<u>DESCRIPTION</u>	<u>PAGE</u>	<u>REVISION</u>
	Cover Page	1	-
	Log of Revisions	2	-
	Table of Contents	3	-
1.0	System Description and Parts List	4-5	-
2.0	Component Locations	6	-
3.0	Weight and Balance	6	-
4.0	Wiring Diagram	6	-
5.0	Abbreviations, Cautions, Warnings	7	-
6.0	Installation and Removal	7-8	-
7.0	Scheduled Inspection	9	-
8.0	Trouble-Shooting	10	-

1.0 Parts List:



Item No.1

Packing List

Qty	Item No.	PART NUMBER	Title	Notes
1	1	01-0771424-10	PAR 36 LANDING LIGHT 14V	1
1	1	01-0771424-15	PAR 36 TAXI LIGHT 14V	1
1	1	01-0771424-20	PAR 36 LANDING LIGHT 28V	2
1	1	01-0771424-25	PAR 36 TAXI LIGHT 28V	2
1	1	01-0790623-10	PAR 46 LANDING LIGHT 14V MODEL PLED461L	1
1	1	01-0790623-20	PAR 46 LANDING LIGHT 28V MODEL PLED462L	2

1 – Used on 14 Volt systems only.
2 – Used on 28 Volt systems only.

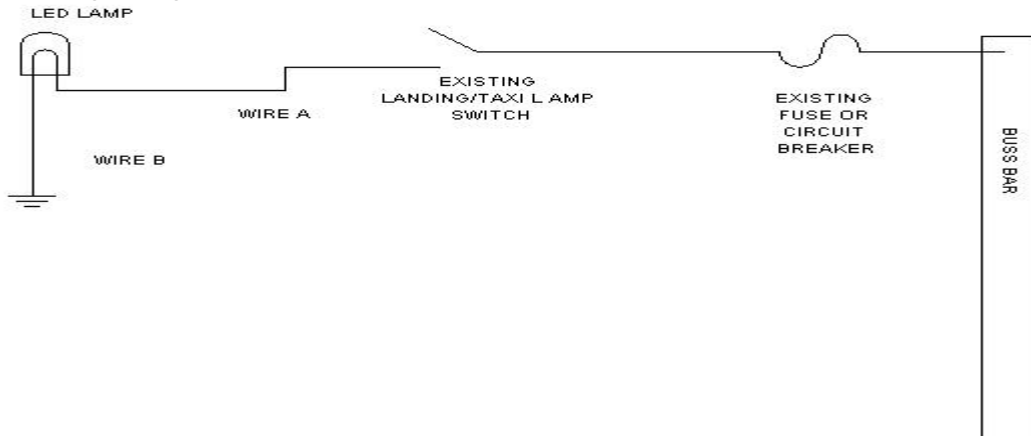
2.0 Component Locations

Refer to the aircraft records: Locate the weight and balance amendment that was prepared when the LED system was installed in your aircraft. This will specify where the components were located when installed. Note: If the components were subsequently relocated, a revised weight and balance should have been prepared for each revised location.

3.0 Weight and Balance

Component	Weight	Longitudinal Location	Lateral Location
Whelen ® PAR36 LAMP (Rev. -)	.6 LBS		
Whelen ® PAR36 LAMP (Rev. A)	.52 LBS		
Whelen ® PAR46 LAMP (Rev. -)	1.0 LBS		
Original LAMP			

4.0 Wiring Diagram



Wire	Application	Manufacturers Wire Code
Wire A	Landing or Taxi Lamp positive wire	See airframe manufacturers wiring diagram
Wire B	Landing or Taxi Lamp ground wire	See airframe manufacturers wiring diagram

5.0 Abbreviations, Cautions, Warnings

Abbreviations:

LED Light Emitting Diode

Cautions and Warnings:

1. Lamp contains no user repairable items.

6.0 Installation and Removal

Removal:

1. Prepare the aircraft for maintenance.
 - (A) Make sure all switches are in the OFF/NORMAL position.
 - (B) Disconnect the aircraft battery(s).
 - (C) Disconnect external power from the aircraft.
 - (D) Attach maintenance warning tags to the battery(s) and external power receptacle that have “**DO NOT CONNECT ELECTRICAL POWER-MAINTENANCE IN PROGRESS**” written on them.
 - (E) Pull landing/taxi light circuit breaker(s).
2. Reference airframe manufacturers current maintenance manual: Remove any light cover to gain access to lamp assembly(ies) and bracket(s).
3. Disconnect connection to positive aircraft power.
4. Disconnect ground from aircraft power.
5. Remove lamp(s) from brackets, mark and retain hardware.

Installation:

Reference airframe manufacturers current maintenance manual.

1. Install lamp(s) in brackets using retained hardware.
2. Connect positive wire to + terminal on lamp.
3. Connect negative wire to – terminal on lamp.
4. Reinstall any light cover(s) removed to gain access to lamp assembly(ies) and bracket(s).
5. Prepare aircraft for power up.

- (A) Make sure all switches are in the OFF/NORMAL position.
 - (B) Connect the aircraft battery(s).
 - (C) Remove maintenance warning tags to the battery(s) and external power receptacle that have “**DO NOT CONNECT ELECTRICAL POWER-MAINTENANCE IN PROGRESS**” written on them.
 - (D) Engage landing light circuit breaker.
 - (E) Perform a function check the system in accordance with section 8.0.
6. Record maintenance performed in aircraft records.

7.0 Scheduled Inspection:

Interval	Description	Notes
50 hour	<ul style="list-style-type: none">• Perform functional check on all lamps.• Replace components as required.	<u>The bulb is not repairable.</u>
100 hour	<ul style="list-style-type: none">• Perform functional check.• Check lamp for wear, corrosion or cracking. Replace as required.• Verify mounting security.• Verify wire connections are secure.• Verify all wire runs are not chafed or show signs of heat erosion.• Replace components as required.	<u>The bulb is not repairable.</u>
Annual	-- SAME AS 100 HOUR --	

8.0 Trouble-Shooting Procedure:

If the system fails to illuminate when the landing light switch is activated, you will need to trouble shoot the system. Remember that loose connections and corroded connections may give full voltage indications when measured without a load.

1. In case of failure to illuminate: The input voltage to the lamp is 14 or 28 volt according to the dash number in the part number. Voltage is specified on the part label at the + terminal. Troubleshoot as follows:
 - a. Check for bus voltage at power input wire to the lamp. Reestablish power if inadequate power is found.
 - b. Check for proper lamp part number per the aircraft manufacturer's system voltage.
 - c. Check for excessive resistance at lamp ground and repair if necessary.
 - d. Disconnect lamp, bench check lamp using verified power source of proper output. If lamp does not function, replace lamp.

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