



AEROLEDs™

Installation Instructions

Sunspot 36 LXi



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TABLE OF CONTENTS

1	System Description	4
2	Model Numbers	4
3	Airworthiness Limitations	4
4	Instructions for Continued Airworthiness	4
4.1	Installation	4
4.2	Installation Procedures	4
4.3	Troubleshooting	5
5	Wiring Diagrams	6
5.1	Wiring Diagram for Single Sunspot.....	6

1 System Description

SunSpot™ 36 LXi Landing and Taxi lights are designed as LED drop-in replacements for existing PAR36 light configurations. The SunSpot™ 36 LXi is a two terminal light only.

2 Model Numbers

Model	Part Number	Description	Voltage (V)	Current (Amps)	Weight (oz)
SunSpot 36LXi	01-1030-L-A	Landing	9-30	3.5 @ 14V	11.2
SunSpot 36LXi	01-1030-L-B	Taxi			

Table 1

3 Airworthiness Limitations

The Airworthiness Limitations section is FAA approved and specifies maintenance required under **14 CFR, §43.16** and **14 CFR, §91.403** of the Federal Aviation Regulations unless an alternative program has been FAA approved. There are no additional airworthiness limitations.

4 Instructions for Continued Airworthiness

Sunspot series LED landing or taxi light assembly contains no user serviceable items. Should any LED fail, unit must be replaced.

Interval	Inspection	Remedy	Notes
Pre-Flight	<ul style="list-style-type: none">Perform a functional check and observe that all LEDs are illuminated	<ul style="list-style-type: none">If all LEDs are not illuminated replace light as soon as is practicable	<ul style="list-style-type: none">Lights are not use serviceable.Lights are very bright and to reduce eye strain during inspection use an optical filter such as dark glasses or welding goggles.
Annually, unless the OEM specifies a shorter interval	<ul style="list-style-type: none">Perform a functional check and observe that all LEDs are illuminatedCheck mounting, connections, and wire integrity	<ul style="list-style-type: none">If all LEDs are not illuminated, the light must be replacedAdjust or replace wiring, and connectors as required	

Table 2

4.1 Installation

Consult **14CFR, §43.13-1B** for guidance on acceptable methods, techniques, and practices. Mount in approved bulb holder. For retrofit installation existing circuit breaker or fuse may typically be used. Procedures contained herein are not intended to conflict with procedures set forth by aircraft OEM, nor do they supersede FAA approved manuals and FAA regulations.

4.2 Installation Procedures

1. Reference the airframe manufacturer's maintenance manual to complete the following steps
2. If the AeroLEDs light(s) chosen for installation are higher wattage than the light(s) being removed, ensure the Electrical Load is not appreciably affected and ensure that all circuit components (circuit breaker, wire, switches, relays, etc., as applicable) are appropriate for the light(s) being installed

3. Prepare aircraft for maintenance:
 - a. Disconnect aircraft power and ground
 - b. Ensure all switches are in the OFF position
 - c. Pull landing/taxi light circuit breakers
 - d. Remove light covers to gain access to lamp assembly(s) and bracket(s)
 - e. Remove existing lamp(s) from brackets, mark and retain hardware
 - f. Record weight of removed lamps
4. Existing aircraft wiring, switches and breakers may be utilized.
5. Refer to aircraft manufacturer's service manual and/or illustrated parts catalog to identify landing and/or taxi light system installed in your aircraft. This will provide information on location of components and assembly details
6. Mount LED light with a minimum 4-inch clearance to exhaust system components unless adequate heat shielding is utilized to block radiant heat.
7. Reference airframe manufacturer's current maintenance manual and install LED light(s) in brackets using retained hardware
8. Ensure alignment key is fitted to bracket
9. Install suitable aircraft approved connectors or splices to connect landing light assemblies to wires routed from switch in accordance with wiring diagram(s)
10. Screw terminals are not polarity sensitive
11. Placard switches appropriately
12. Verify proper operation of LED light(s), as appropriate to installation
13. Using appropriate aircraft maintenance manual, verify light angle has not changed, and is oriented & aimed in accordance with manufacturer's instructions
14. Reinstall associated light hardware IAW aircraft maintenance manual
15. Perform an operational check of the light(s) to determine that the installed light(s):
 - a. Generate no objectionable glare to the pilot
 - b. Do not adversely affect the pilot by halation
 - c. Provide enough light for night operations, including hovering and landing
 - d. Will not adversely affect any installed systems or equipment with EMI/RFI interference
16. Record installation with appropriate logbook entry

Note: The use of shielded cable is recommended although not required for installation.

It is recommended that ground connections for all lights be made at a single location on aircraft central ground bus. This "single point ground" scheme helps to eliminate ground loops and ground bounce that can occur when using airframe as a ground.

4.3 Troubleshooting

1. Check for proper voltage at power input wire to light
2. Ensure light is adequately grounded
3. Check for continuity in wiring and connections
4. If wiring is verified, remove light and bench-check with appropriately sized power supply

If above actions do not correct problem, contact AeroLEDs tech support at 1-208-850-3294 for a resolution.

5 Wiring Diagrams

5.1 Wiring Diagram for Single Sunspot

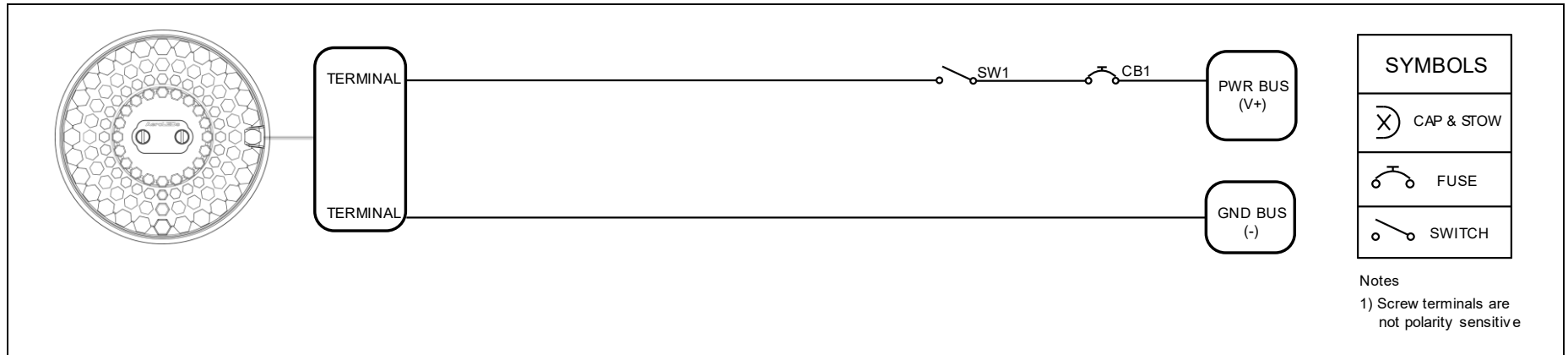


Figure 1