

Document 0004-0004
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Installation Guide:
Sunray Plus
P/N 01-1150
LED Landing light with
built-in pulse recognition mode



Operating Instructions:

Operational Voltage: 14 & 28 Volt Systems
Input Current: 0.7A at 14V, 0.35A at 28V

EQUIPMENT LIMITATIONS:

Mount to bezel mounting plate, or use side mounting screw, with circuit breaker or fuse appropriate for rated current. The procedures contained herein are not intended to conflict with the procedures set forth by aircraft and engine manufacturers, nor do they supersede the FAA approved manuals and FAA regulations. If necessary, consult AC 43.13-1B for guidance on acceptable methods, techniques, and practices.

CONTINUED AIRWORTHINESS:

The Sunray Plus LED landing light assembly is designed with 1 high power LEDs mounted behind a lens. Should the LED fail, the unit must be replaced.

Interval	Description	Notes
50 hr.	<ul style="list-style-type: none"> Perform function check on landing light(s) 	Landing lights are not field repairable and should be sent to manufacturer for repair/replacement if defective
100 hr.	<ul style="list-style-type: none"> Perform function check on landing light(s) / replace unit if defective 	Landing lights are not field repairable and should be sent to manufacturer for repair/replacement if defective

	<ul style="list-style-type: none"> Inspect for discoloration of lens Inspect mounting for security Inspect all connectors for good engagement Inspect wiring for chaffing / defects 	
Annually	<ul style="list-style-type: none"> Perform function check on landing light(s) / replace unit if defective Inspect for discoloration of lens Inspect mounting for security Inspect all connectors for good engagement Inspect wiring for chaffing / defects 	Landing lights are not field repairable and should be sent to manufacturer for repair/replacement if defective

INSTALLATION PROCEDURES:

1. The installation procedure described in the following text is for a single light installation, but the procedure is identical for multiple light installations. The pulsing function of the replacement landing light(s) is a self-contained feature, and does not require the use of an externally mounted pulse light controller.
2. Remove cowlings and/or landing light lens to gain access to light assemblies.
3. Route 3-conductor shielded wire (minimum 20 AWG) from switch location to LED landing light assemblies through wings and/or cowling, securing as needed using tie-wraps or equivalent means to secure wire bundles.
4. Install suitable aircraft approved connectors to wires coming from landing light assemblies and wires routed from switch using wiring diagram shown on page 2.
5. Mount a suitable mounting plate with appropriate cutout and mounting holes for bezel mounting the light in the desired location and aimed in the desired direction.
6. Install an appropriate aircraft approved switch and circuit breaker of correct rating for the lights installed for the pulse function.
7. Placard switches appropriately.
8. Power up aircraft and verify proper operation of Sunray Plus LED light, in both pulsing and steady functions (as appropriate to the installation)
9. Using the appropriate aircraft maintenance manual, verify that the light angle has not changed, and is oriented & aimed in accordance with manufacturer's instructions.
10. Perform EMI test to verify there is no interference caused by light installation.
11. Reinstall cowlings or lens covers as needed.
12. Fill out and submit appropriate form 337 for work accomplished (unless installed under STC or installed in an experimental or LSA), and enter appropriate logbook entry detailing work.
13. Determine weight & balance change, and update aircraft weight and balance data.

Figure 1

Wiring Diagram for single LED Sunray Plus landing light

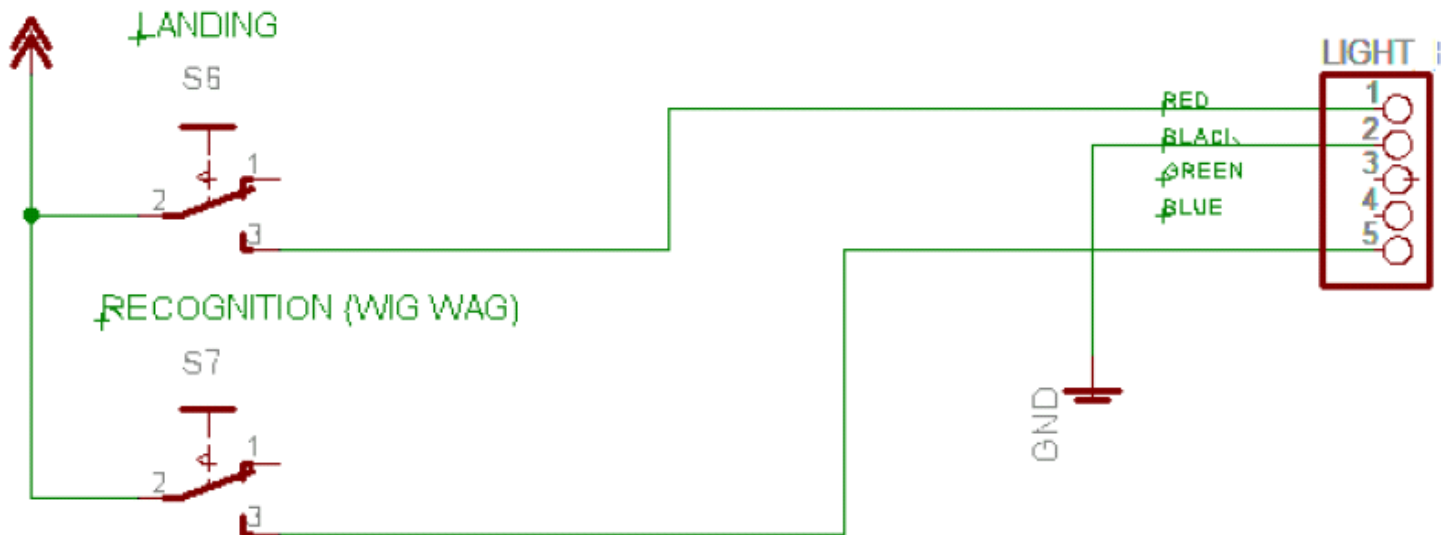


Figure 2

Wiring Diagram for dual LED Sunray Plus landing lights

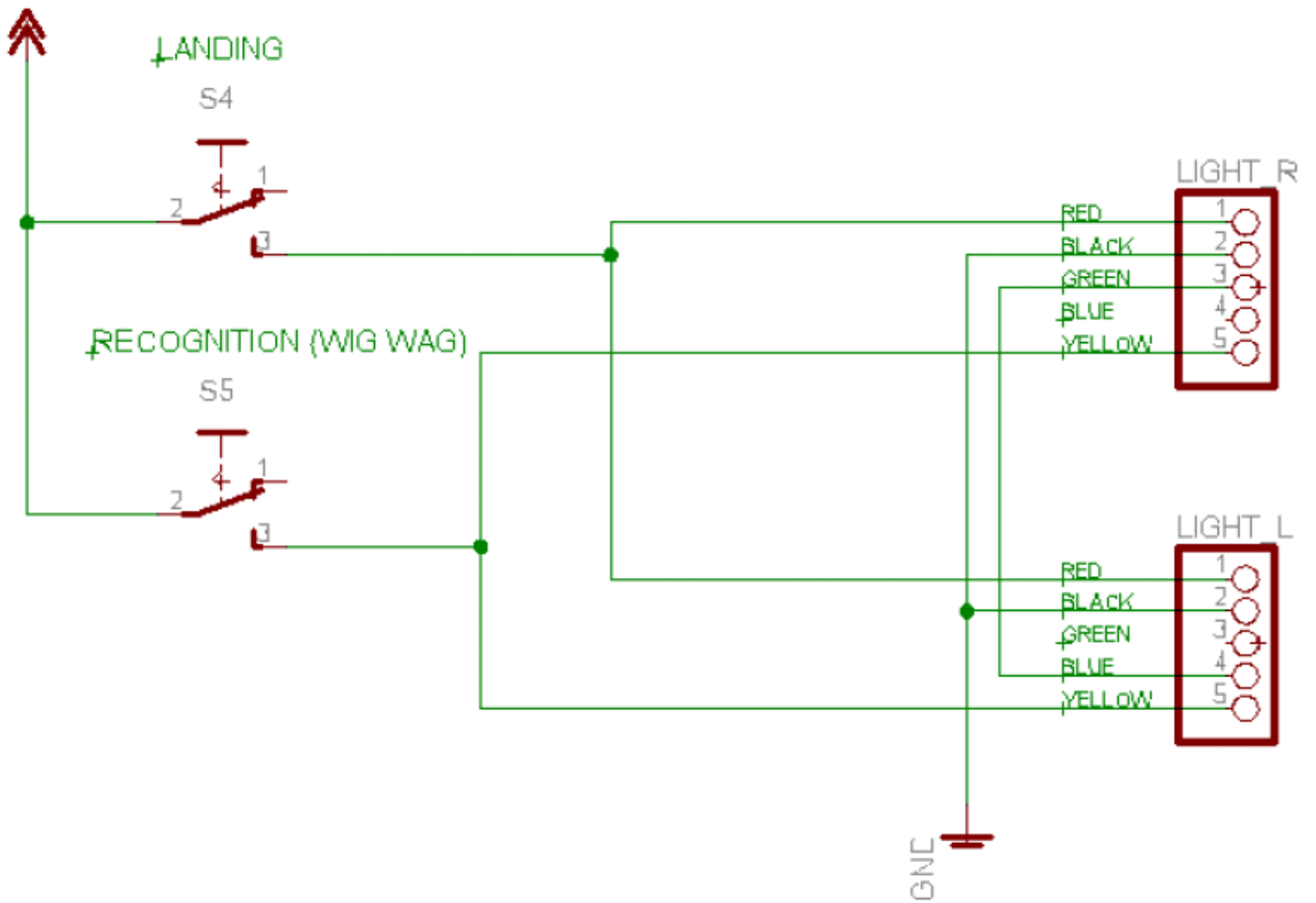
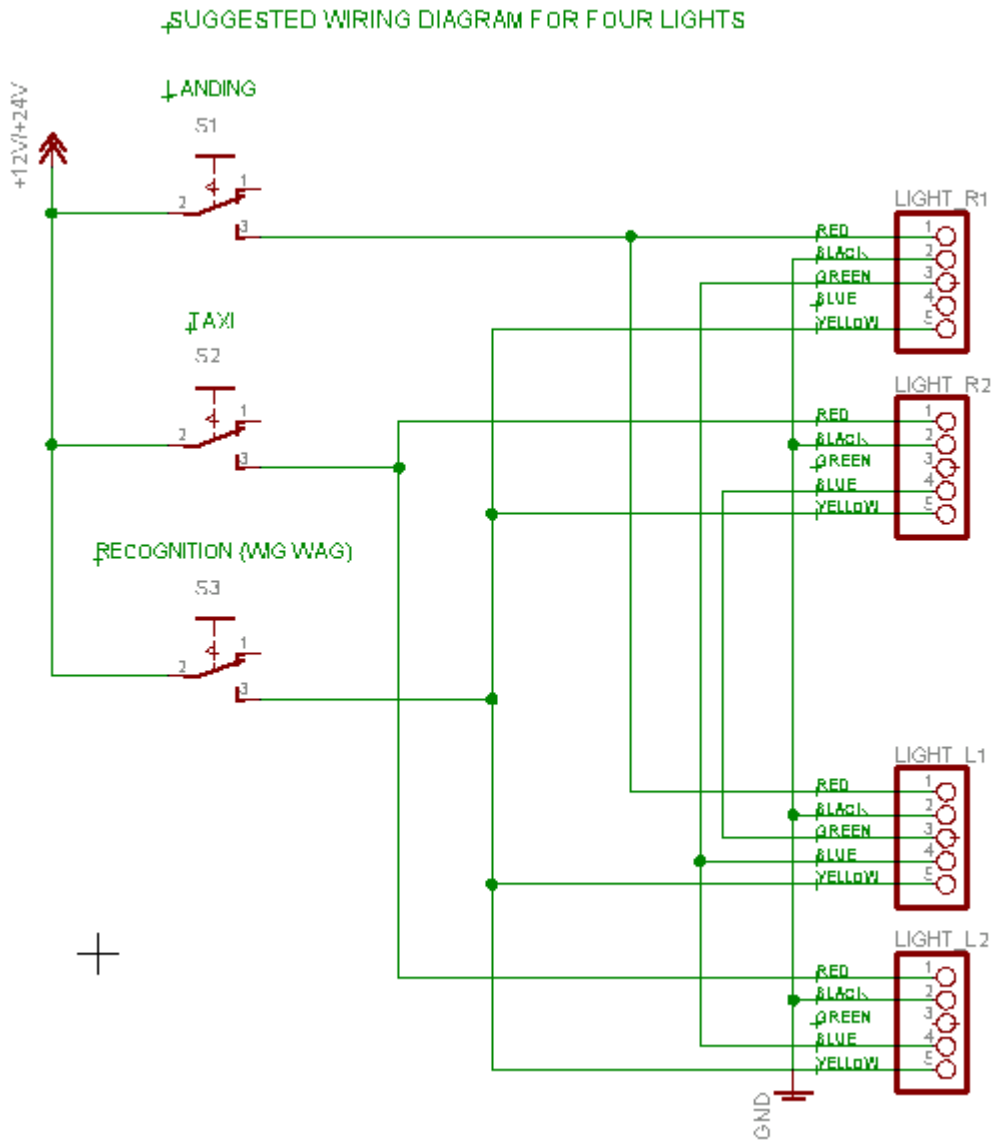


Figure 3

Wiring Diagram for four LED Sunray Plus landing light assemblies



DO-160E Section	Compliance Level
4	F2
5	F2
6	C
8	U
9	H
10	S
11	F
12	D
13	F
14	S
15	A
16	Z
17	A
18	Z
19	ZC
20	RR
21	H
22	A2E2

INSTALLATION INSTRUCTIONS REVISION RECORD SHEET

Revision Number	Effective Date	Inserted By	Page Numbers Revised
IR	4/02/2012	Dean Wilkinson	All
A	10/11/2012	Dean Wilkinson	All