0010-0004
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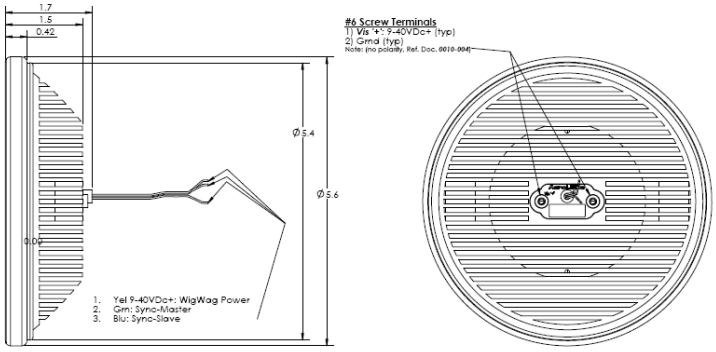
Installation Guide:
Sunspot 46
P/N 01-2030-HX or P/N 01-2030-LX
LED Landing light with
built-in pulse recognition mode



Operating Instructions:

Operational Voltage: **14 & 28 Volt Systems**
Input Current: **5A at 14V, 2.5A at 28V**

EQUIPMENT LIMITATIONS:
Mount in approved PAR46 bulb holder 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 Sunspot 46 LED landing or taxi light assembly is designed with 9 high power LEDs mounted behind lenses. Should any one LED fail, the unit must be replaced.

Interval	Description	Notes
50 hr.	• 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.	• 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
	• Inspect for discoloration of lens • Inspect mounting for security • Inspect all connectors for good engagement • Inspect wiring for chaffing / defects	
Annually	• 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 connecters to wires coming from landing light assemblies and wires routed from switch using wiring diagram shown on page 2. Note that the LX version only has screw terminals for #6 ring terminals and does not support the pulse function.
5. Remove existing landing light assembly from retainer and install LED SunSpot landing light assembly in the same location using the original hardware.
6. Install an appropriate aircraft approved switch and circuit breaker of correct rating for the lights installed for the pulse function. Original landing light switch/switches may be used, however, the circuit breakers are to be replaced with one(s) of appropriate rating for the lights installed.
7. Placard switches appropriately.
8. Power up aircraft and verify proper operation of SunSpot 46 LED landing light, in both pulsing and steady functions (as appropriate to the installation)
9. Using the appropriate aircraft maintenance manual, verify that the landing 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), and enter appropriate logbook entry detailing work.
13. Weight & balance change from standard position light assemblies to LED landing light assemblies is considered negligible. However, if additional power supplies or pulse function controllers were removed at this time, the weight & balance is to reflect those changes, and actual weight and locations are to be used for calculating changes.

Figure 1

Wiring Diagram for single LED SunSpot landing light

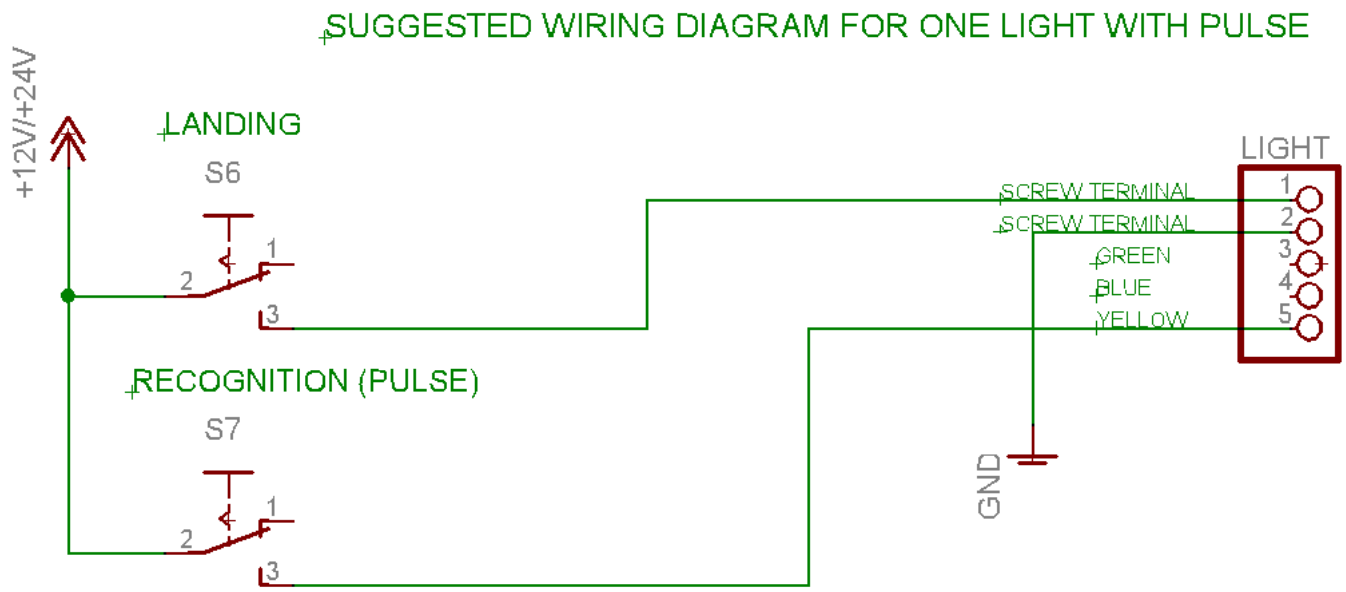


Figure 2

Wiring Diagram for single LED SunSpot light without pulse

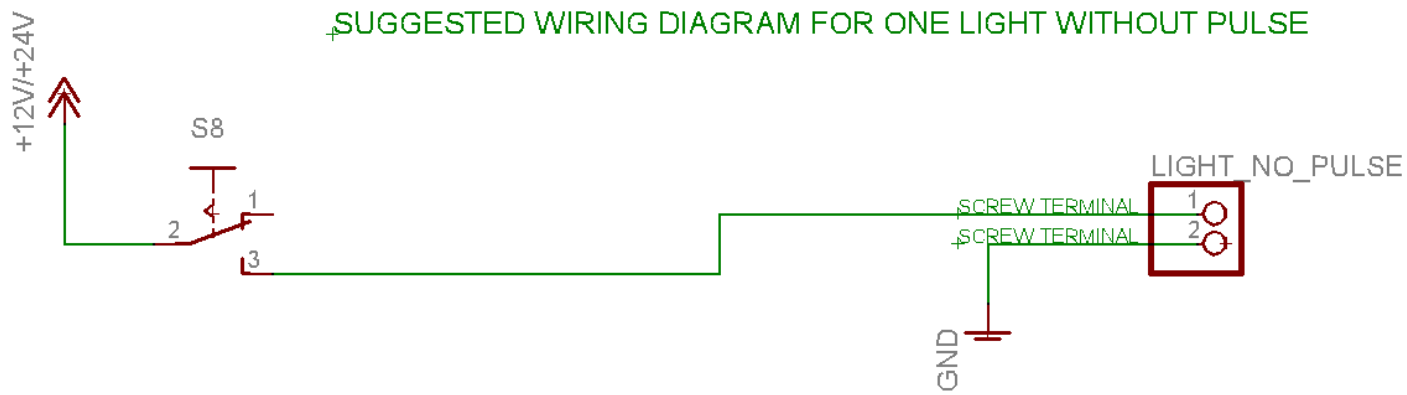


Figure 3

Wiring Diagram for dual LED SunSpot lights

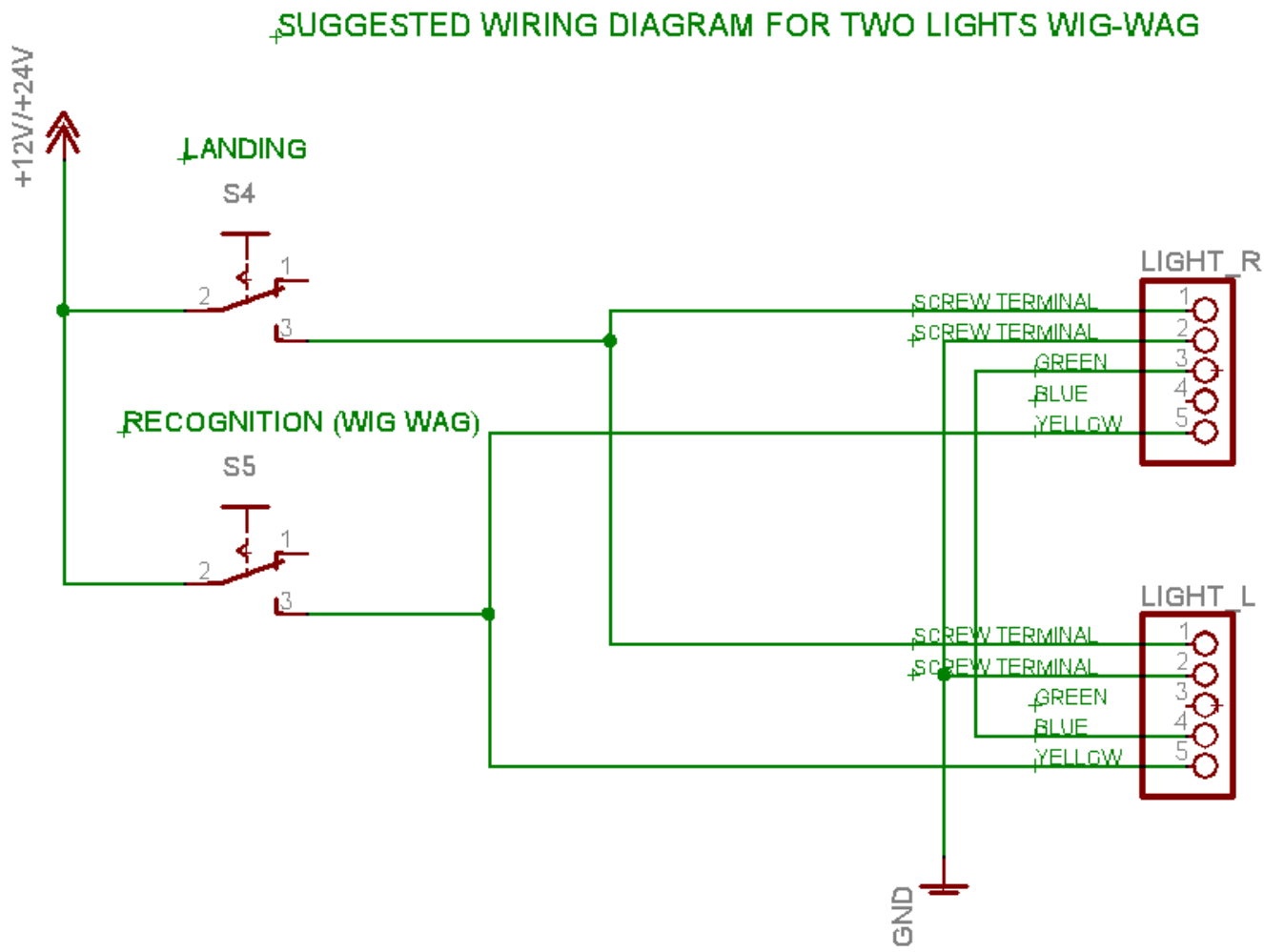
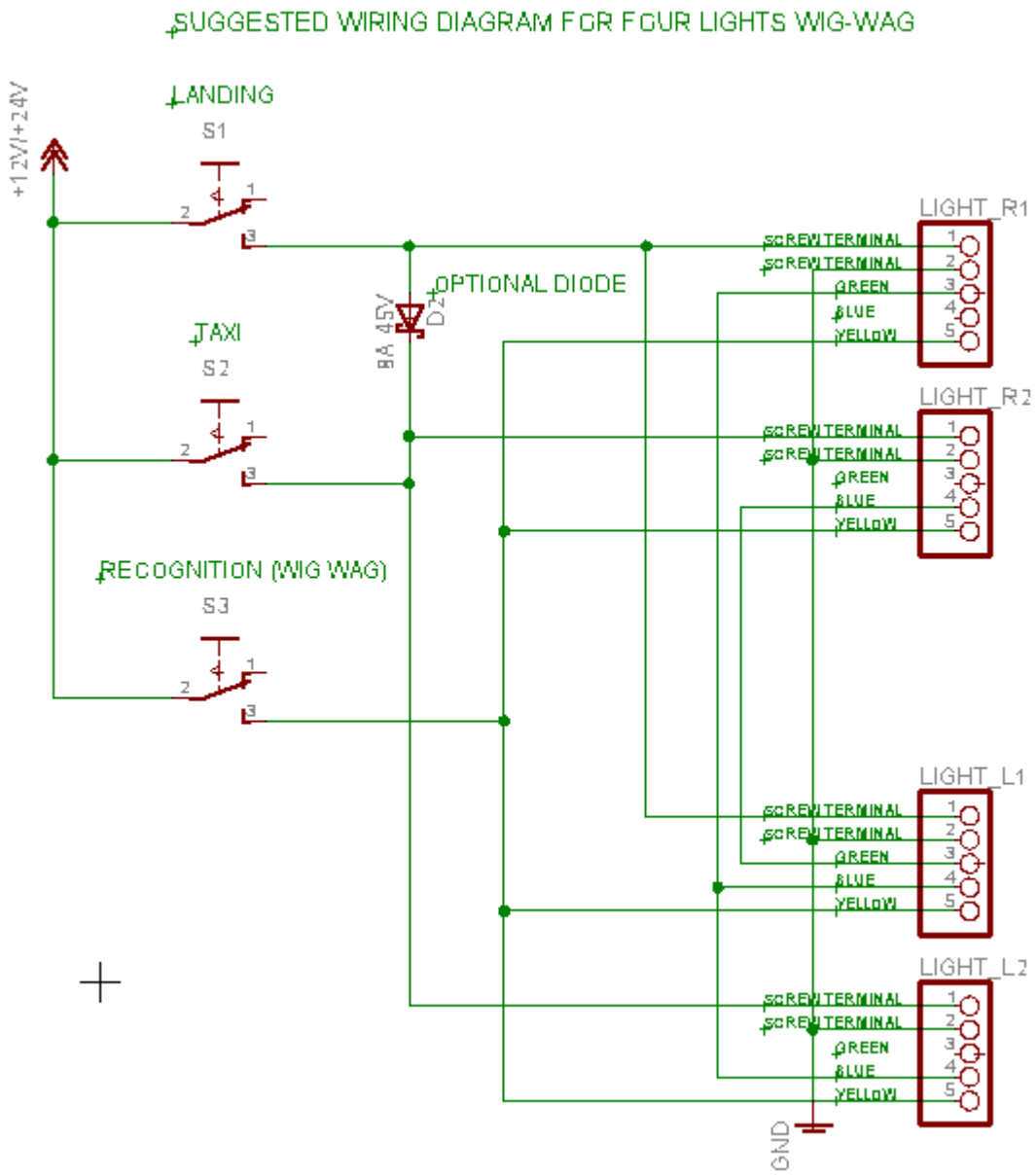


Figure 4

Wiring Diagram for four LED SunSpot lights



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	12/09/2010	Dean Wilkinson	All
A	04/12/2011	Dean Wilkinson	All
B	06/29/2011	Dean Wilkinson	2, 4
C	12/06/2012	Dean Wilkinson	All