



US Department of Transportation
Federal Aviation Administration

MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)

OMB No. 2120-0020
Exp: 5/31/2018

Electronic Tracking Number

For FAA Use Only

INSTRUCTIONS: Print or type all entries. See Title 14 CFR §43.9, Part 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. §44701). Failure to report can result in a civil penalty for each such violation. (49 U.S.C. §46301(a))

1. Aircraft	Nationality and Registration Mark N12WZ	Serial No. 2206
	Make Socata	Model TB21
2. Owner	Name (As shown on registration certificate) Nortech Data Services	Address (As shown on registration certificate) Address 2711 CENTERVILLE RD STE 400
		City Wilmington State Delaware Zip 19808-1645 Country United States

3. For FAA Use Only

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	AIRFRAME	Socata	(As described in Item 1 above)	2206
<input type="checkbox"/>	<input type="checkbox"/>	POWERPLANT			
<input type="checkbox"/>	<input type="checkbox"/>	PROPELLER			
<input type="checkbox"/>	<input type="checkbox"/>	APPLIANCE	Type		
			Manufacturer		

6. Conformity Statement

A. Agency's Name and Address		B. Kind of Agency	
Name _____	Address _____	<input type="checkbox"/> U. S. Certificated Mechanic	<input type="checkbox"/> Manufacturer
City _____ State _____	Zip _____ Country _____	<input type="checkbox"/> Foreign Certificated Mechanic	C. Certificate No.
		<input type="checkbox"/> Certificated Repair Station	
		<input type="checkbox"/> Certificated Maintenance Organization	

D. I certify that the repair and/or alteration made to the unit(s) identified in item 5 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Extended range fuel per 14 CFR Part 43 App. B <input type="checkbox"/>	Signature/Date of Authorized Individual
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7. Approval for Return to Service

Pursuant to the authority given persons specified below, the unit identified in item 5 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is Approved Rejected

BY	FAA Ft. Standards Inspector	Manufacturer	Maintenance Organization	Persons Approved by Canadian Department of Transport
	FAA Designee	Repair Station	Inspection Authorization	Other (Specify)

Certificate or Designation No.	Signature/Date of Authorized Individual
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NOTICE

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

8. Description of Work Accomplished

(If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

Socata	TB-21
N12WZ	24 October 2016
Nationality and Registration Mark	Date

Installation of AeroLED Landing/Taxi, Nav/Strobe and Recognition lights.

A. Landing and Taxi Lights Installation

1. Removed OEM installed incandescent Landing and Taxi lights.
2. Mounted AeroLED Landing and Taxi LED bulbs into original housings using all original hardware and wiring. P/N's 01-1030-4587(Taxi) and 01-1030-4596(Landing) both FAA PMA. Original circuit breakers were retained with original markings. Lights were aimed as per originals and in accordance with Socata Maintenance Manual. Lights were installed in accordance with AeroLED installation guide 0019-0004 and AC43.13-1B.
3. Weight differential negligible.
4. Instructions for continued Airworthiness are contained in the AeroLED installation guide, document number 0019-0004.

B. Nav/Position/Strobe Light Installation

1. Removed OEM installed Whelen Light Assembly from both left and right wing tip.
2. Mounted AeroLED Nav/Position/Strobe assembly into the original locations using all original hardware and wiring. P/N's 11-1100-R and 11-1100-L both FAA PMA. Lights were installed in accordance with AeroLED Installation guide 0011-0005 Rev A and AC43.13-1B. Removed Strobe Power supply from aircraft and connected wires as specified in installation guide 011-0005 Rev A.
3. Weight and Balance modification due to power supply removal.
4. Instructions for continued Airworthiness are contained in the AeroLED installation guide, document number 0011-0005 Rev A.

C. Recognition Lights Installation

1. Removed OEM installed Whelen light assembly from both left and right forward wing tip.
2. Mounted AeroLED MicroSun into original locations using AeroLED mounting kit 800-101-PA46-L mounting bracket and original wiring. P/N 01-1170-A. Lights were installed in accordance with AeroLED installation guide 0104-0003 and AC43.13-1B.
3. Weight differential negligible.
4. Instructions for continued Airworthiness are contained in the AeroLED installation guide, document number 0104-0003 Rev A.

This modification was found to not interfere with any other system, or equipment and does not exceed 80% of Alternator output. RFI output was found to not interfere with radios or avionics.

All modifications are to be maintained IAW Socata TB-21 Maintenance Manual & AC43.13-1B, CH 11, Sec8.

Aircraft Weight and Balance / Equipment list revised.

Additional Sheets Are Attached

ICA for AeroLED Recognition Light Installation

N12WZ Socata TB-21 S/N: 2206

1. Introduction: Replaced existing Wing Mounted Recognition light assembly with AeroLED Microsun light assembly in both left and right wings.
2. Description: Replaced existing recognition light assembly with new AeroLED's MicroSun light assembly, PN 01-1170. Mounted in original location using AeroLED mounting kit 800-101-PA46-L. The recognition lights are operated with the existing light control circuit and switches and is protected with an existing breaker located on the main breaker panel in the aircraft. All existing wiring was used. All wires have been connected as per the AeroLED installation Guide. Installation was performed IAW AeroLED's installation guide, 0104-0003 Rev: A, Socata TB-21 Maintenance Manual, AC43.13-1B and FAA form 337 Dated October 24, 2016. Installation was tested and found to meet all lighting requirements found in CAR 3.700 through CAR 3.703 including light angles, intensity, color and wiring. Aircraft bus voltage is 28 volts.
3. Control and Operation: No Change
4. Servicing Information: Socata TB 21 Maintenance Manual
5. Maintenance Instructions: Socata TB 21 Maintenance Manual, AeroLED Installation Guide, AC43.12-1B Ch.11
6. Troubleshooting Information: Not Applicable
7. Removal and Replacement Information Socata TB 21 Maintenance Manual
8. Diagrams: AeroLED Installation Guide and Socata TB 21 Wiring diagram.
9. Special Instructions: None.
10. Application of Protective Treatments: None
11. Data: AeroLED Installation Guide and Socata TB 21 Wiring Diagrams
12. List of Special Tools: None.
13. Commuter Category Aircraft: Non Applicable
14. Recommended Overhaul Periods: Not Applicable
15. Airworthiness Limitations: None.
16. Revision: If a revision is required, the revision will be submitted to the local FAA FSDO in writing including the referenced FAA Form 337 and proposed changes to said document.
17. Weight and Balance: Changes negligible.

ICA for AeroLED Landing And Taxi Light Installation

N12WZ Socata TB-21 S/N: 2206

1. Introduction: Replaced existing Wing Mounted Taxi / Landing light bulb with AeroLED SunSpot 36 4596 and 4587 LED Landing Light Bulbs
2. Description: Replaced existing incandescent taxi/landing light bulb with new AeroLED's Sunspot Landing and Taxi lights. The Existing mounting bracket was used. The lights are operated with the existing Taxi / Landing light control circuit and switches and is protected with an existing breaker located on the main breaker panel in the aircraft. All existing wiring was used. The new bulbs produce an acceptable and improved level of light for night operations and ground taxi operations. Installation was performed IAW AeroLED's installation guide, 0019-004 Rev: IR, Socata TB-21 Maintenance Manual, AC43.13-1B and FAA form 337 Dated October 24, 2016.
3. Control and Operation: No Change
4. Servicing Information: Socata TB 21 Maintenance Manual
5. Maintenance Instructions: Socata TB 21 Maintenance Manual, AeroLED Installation Guide, AC43.12-1B Ch.11
6. Troubleshooting Information: Not Applicable
7. Removal and Replacement Information Socata TB 21 Maintenance Manual
8. Diagrams: AeroLED Installation Guide and Socata TB 21 Wiring diagram.
9. Special Instructions: None.
10. Application of Protective Treatments: None
11. Data: AeroLED Installation Guide and Socata TB 21 Wiring Diagrams
12. List of Special Tools: None.
13. Commuter Category Aircraft: Non Applicable
14. Recommended Overhaul Periods: Not Applicable
15. Airworthiness Limitations: None.
16. Revision: If a revision is required, the revision will be submitted to the local FAA FSDO in writing including the referenced FAA Form 337 and proposed changes.
17. Weight and Balance: Changes negligible.

ICA for AeroLED Nav/Strobe/Position Installation

N12WZ Socata TB-21 S/N: 2206

1. Introduction: Replaced existing Wing Mounted Nav/Strobe/Position light assembly with AeroLED Pulsar Nav/Strobe/Position light assembly in both left and right wings.
2. Description: Replaced existing incandescent and Xenon Nav/Strobe/Position light assembly with new AeroLED's Pulsar Nav/Strobe/Position light assembly. The new light assembly requires installation of a new mounting assembly. The NAV lights are operated with the existing light control circuit and switches and is protected with an existing breaker located on the main breaker panel in the aircraft. The Strobe lights are operated with the existing light control circuit and switches and is protected with an existing breaker located on the main breaker panel in the aircraft. All existing wiring was used. All wires have been connected as per the AeroLED installation Guide. The Strobe power supply is no longer required and was removed. Installation was performed IAW AeroLED's installation guide, 0011-0005 Rev: A, Socata TB-21 Maintenance Manual, AC43.13-1B and FAA form 337 Dated October 24, 2016.
Installation was tested and found to meet all lighting requirements found in CAR 3.700 through CAR 3.703 including light angles, intensity, color and wiring. Aircraft bus voltage is 28 volts.
3. Control and Operation: No Change
4. Servicing Information: Socata TB 21 Maintenance Manual
5. Maintenance Instructions: Socata TB 21 Maintenance Manual, AeroLED Installation Guide, AC43.12-1B Ch.11
6. Troubleshooting Information: Not Applicable
7. Removal and Replacement Information Socata TB 21 Maintenance Manual
8. Diagrams: AeroLED Installation Guide and Socata TB 21 Wiring diagram.
9. Special Instructions: None.
10. Application of Protective Treatments: None
11. Data: AeroLED Installation Guide and Socata TB 21 Wiring Diagrams
12. List of Special Tools: None.
13. Commuter Category Aircraft: Non Applicable
14. Recommended Overhaul Periods: Not Applicable
15. Airworthiness Limitations: None.
16. Revision: If a revision is required, the revision will be submitted to the local FAA FSDO in writing including the referenced FAA Form 337 and proposed changes to said document.
17. Weight and Balance: Weight and Balance amendment required.

Manufactured under TSO by:
AeroLEDs LLC
8475 West Elisa St.
Boise, ID 83709
(208) 859-1603

Installation Guide:

AeroLEDs Pulsar

P/N 11-1100-()-() Pulsar

The first –() indicates the mounting location, with –L being the left (red) and –R being the right (green) mounting location.

The second –() indicates minor changes

LED Position and

Anti-Collision Lights

Distributed by AeroLEDs LLC:

Phone: (208) 850-3294

www.aeroleds.com

sales@aeroleds.com



The conditions and tests required for TSO approval of this article are minimum performance standards. It is the responsibility of those installing this article either on or within a specific type or class of aircraft to determine that the aircraft installation conditions are within the TSO standards. TSO articles must have separate approval for installation in aircraft. The article may be installed only if performed under 14 CFR part 43 or the applicable airworthiness requirements.

TSO C-30c Type I, Type II, and Type III and TSO C-96a Class II approved

Deviations: Tested to DO-160E instead of DO-160B as called out in TSO-C-30c and TSO C-96a

Operating Instructions:

Below current values are for each individual light:

Operational Voltage: 14 & 28 Volt Systems

Position Input Current: 0.4A at 14V, 0.2A at 28V

Strobe Average Current: 0.8A at 14V, 0.4A at 28V

Strobe Peak Current: 2.5A at 28V for 0.2 seconds

5.0A at 14V for 0.2 seconds

EQUIPMENT LIMITATIONS:

All aircraft:

Mounting bracket p/n 01-1109 must be used to install the lights to the mounting surface to provide the required cross-side cutoff for the red and green position lights as shown in the diagram on page 3.

Aircraft for which type certificate was applied for after April 1, 1957 to August 11, 1971:

The anti-collision system must produce a minimum of 100 effective candelas in Aviation Red or White, 360° around the vertical axis, 30° above and below the horizontal plane.

Aircraft for which type certificate was applied for after August 11, 1971:

The anti-collision system must produce a minimum of 400 effective candelas in Aviation Red or White, 360° around the vertical axis, 30° above and below the horizontal plane.

Rotorcraft for which type certificate was applied for after February 5, 1976:

The anti-collision system must produce a minimum of 150 effective candelas in Aviation Red, 360° around the vertical axis, 30° above and below the horizontal plane.

CONTINUED AIRWORTHINESS:

The Pulsar LED navigation and anticollision light assembly is designed with 4 forward navigation LEDs, 2 rear position LEDs, and 18 LEDs mounted beneath the anti-collision lens. Should any one LED fail, the unit must be repaired or replaced. View LEDs with welding goggles for eye safety.

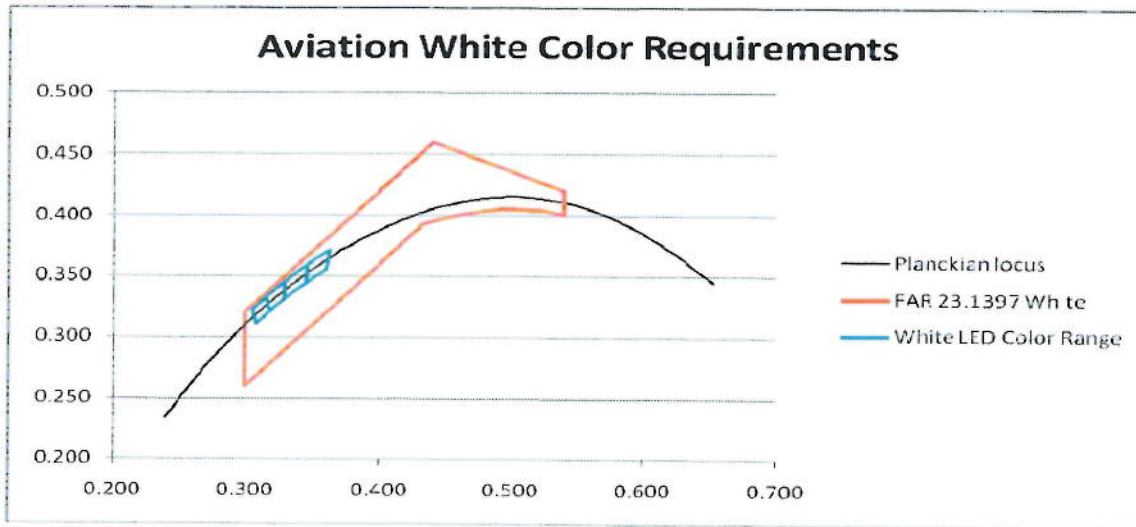
INSTALLATION PROCEDURES:

1. The installation procedure described in the following text is for a single light installation, but the procedure is identical for multiple light installations. Ensure that the proper part number, left (-L) or right (-R) is installed on the correct side of the aircraft.
2. Print out the installation template (the page 3 of this document), however be sure to set up the printer driver to NOT use Page

Scaling so the printer will replicate the template to the proper 1:1 scale, otherwise the template will be too small. The proper scaling can be verified by placing the included Mounting Bracket over the printout to ensure a 1:1 fit.

3. By design, the Mounting Bracket locks into the product body.
4. Print the template as described above and confirm a 1:1 scaling of the printout.
5. Attach the template to the wingtip (mounting) position and mark the screw and wire hole locations.
6. Mount the bracket using three 6-32 100 degree countersunk screws. **Ensure that the mounting bracket is grounded to structure via the mounting screws.** If necessary, route a ground strap from one mounting screw to structure ground or terminate the ground shield from the shielded wire bundle to a mounting screw. Proper chassis ground is required for protection from direct lightning effects.

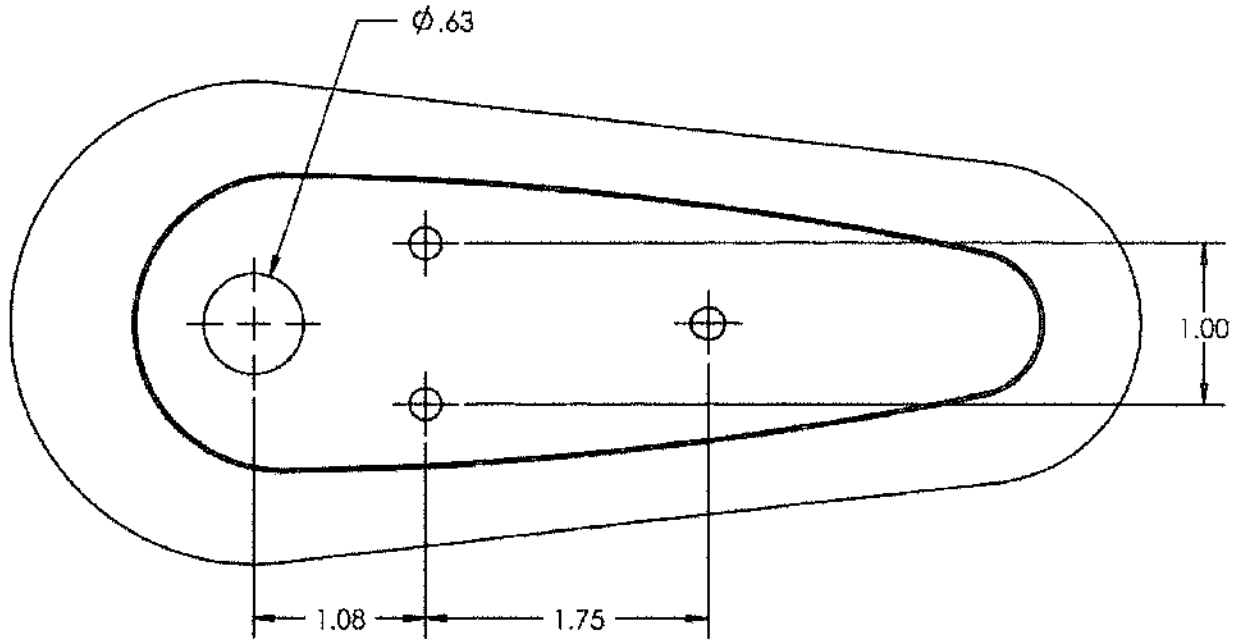
7. Connect the red wire to switched power for the position lights, connect the yellow wire to switched power for the strobe lights, connect the black wire to the same structure ground used to ground the mount, and connect the green wire to the synchronization wire from the other installed light(s). It is recommended that the attached wiring diagram be followed for minimum RFI. **WARNING: Do not connect the strobe power wire to a Xenon strobe power pack. This can damage the light and voids the warranty.**
8. Attach the light to the mounting bracket and anchor in place with the 8-32 hex head set screw (provided) that inserts into the rear of the light.
9. Check all avionics systems for interference from this installation.
10. A flight check should be performed by a properly certified pilot.
11. Update aircraft records, complete Form 337 and obtain FAA field approval for installation, or install per approved STC or TC.



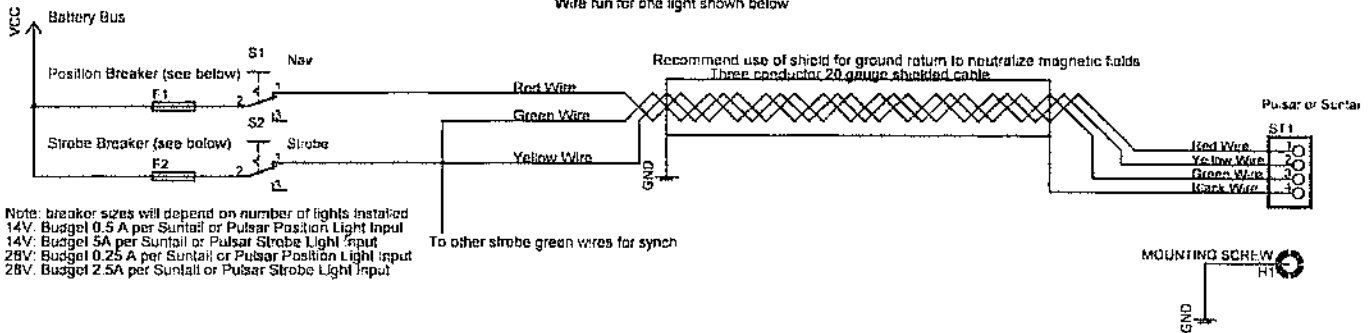
Red Position Light Chromaticity (typical): $x=0.695, y=0.303$

Green Position Light Chromaticity (typical): $x=0.081, y=0.469$

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

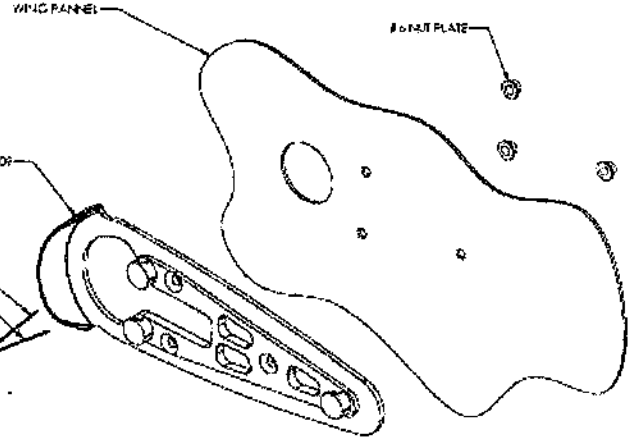
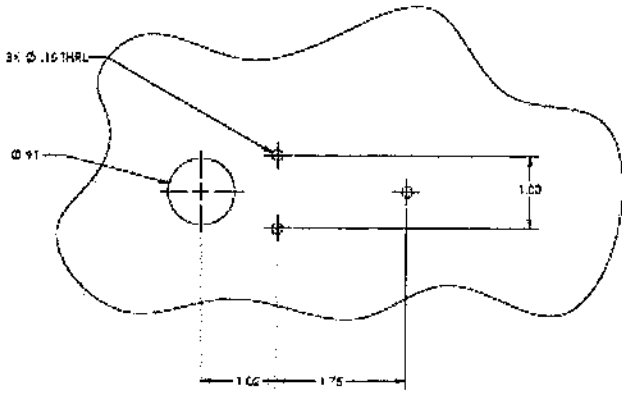


Recommended Wiring for Pulsar 11-1180-(-), 11-1103-(-) and Suntail 11-1160 Lights
Wire run for one light shown below

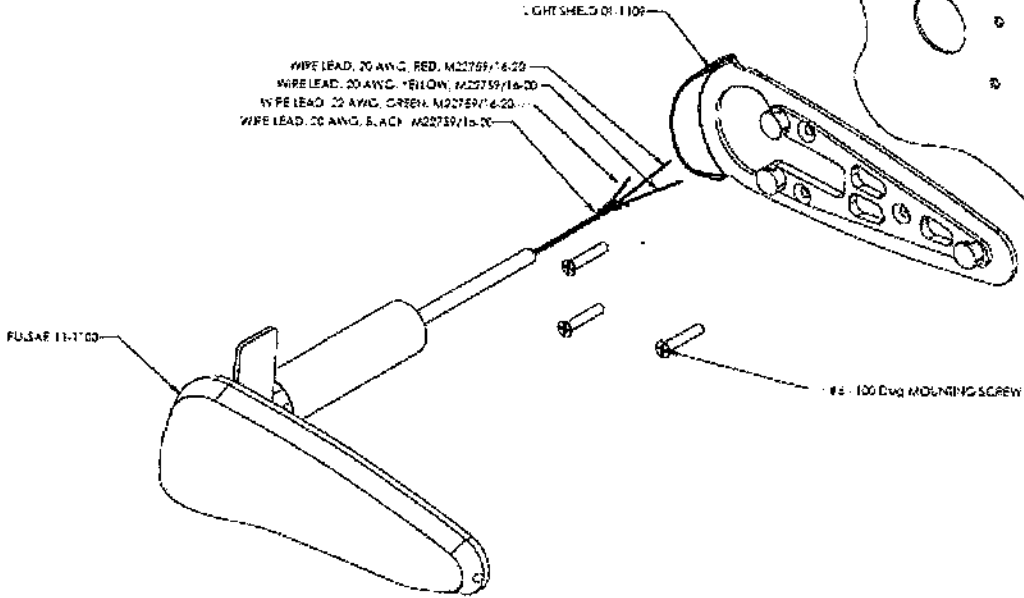


Note: breaker sizes will depend on number of lights installed
 14V: Budget 0.5 A per Suntail or Pulsar Position Light Input
 14V: Budget 5A per Suntail or Pulsar Strobe Light Input
 28V: Budget 0.25 A per Suntail or Pulsar Position Light Input
 28V: Budget 2.5A per Suntail or Pulsar Strobe Light Input

To other strobe green wires for synch



- WIRE LEAD, 20 AWG, RED, M22759/16-20
- WIRE LEAD, 20 AWG, YELLOW, M22759/16-20
- WIRE LEAD, 22 AWG, GREEN, M22759/16-20
- WIRE LEAD, 20 AWG, B, ACH, M22759/16-20





Document 0019-0004
 AeroLEDs LLC
 8475 W. Elisa St.
 Boise, ID 83709
 Phone: (208) 850-3294
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Installation Guide:
Sunspot 36 4596 and 4587
P/N 01-1030-4596 or P/N 01-1030-4587
LED Landing or Taxi light



Operating Instructions:

Operational Voltage: 28 Volt Systems
Input Current: 3.5A at 28V

EQUIPMENT LIMITATIONS:

Mount in approved PAR36 bulb holder with circuit breaker or fuse appropriate for rated current. For retrofit installation existing circuit breaker or fuse can typically be used. 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.

AIRWORTHINESS LIMITATIONS:

The Airworthiness Limitations section is FAA approved and specifies maintenance required under Secs. 43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved. There are no new (or additional) airworthiness limitations associated with this equipment and/or installation.

The Sunspot 36 LED landing or taxi light assembly is designed with 15 high power LEDs mounted behind a lens. The lights contain no user repairable items; should more than two LEDs fail, the unit must be replaced.

Interval	Description	Notes
50 hr. after initial installation	<ul style="list-style-type: none"> Perform function check on all light(s) Replace components as required 	Landing and taxi lights are not field repairable and should be sent to manufacturer for repair/replacement if defective
100 hr. after initial installation	<ul style="list-style-type: none"> Perform function check on landing light(s) / replace unit if defective Inspect mounting for security Inspect all connectors for good engagement Replace components as required 	Landing and taxi lights are not field repairable and should be sent to manufacturer for repair/replacement if defective
Annually	--SAME AS 100 HOUR--	Landing and taxi lights are not field repairable and should be sent to manufacturer for repair/replacement if defective

Troubleshooting: Check for bus voltage at power input wire to the light, reestablish power if inadequate power is found. Check for excessive resistance at light ground and repair if necessary. Remove and bench check light if wiring is verified good.

INSTALLATION PROCEDURES:

1. The installation procedure described in the following text is for a single light installation, and multiple light installations. Wiring diagrams are provided for single light installations, typically existing wire and switches and breakers will be utilized.
2. Refer to the aircraft manufacturer's service manual and/or illustrated parts catalog: Locate the landing and/or taxi light system installed in your aircraft. This will provide details on the location of the components and the assembly details.
3. **WARNING:** If the aircraft being modified incorporates a remote sensor (flux gate) compass: DO NOT mount the LED light within 24 inches of the remote compass components. After installation of the LED lighting system, a compass swing MUST be performed with the landing/taxi lights ON & OFF and the position error card must be annotated accordingly.
4. **WARNING:** DO NOT mount the LED light with less than 4 inches clearance to exhaust system components unless an adequate heat shield is utilized to block radiant heat.
5. **WARNING:** On all aircraft that are being modified it is IMPORTANT to check the size of the power supply wire to the landing lights. Confirm that wire of sufficient wire gauge is installed for the wire length:
24 Volts: 16GA for up to 100 feet, 18GA for up to 80 feet, 20GA for up to 50 feet.
If the aircraft power supply wire is undersize it MUST be removed and a new wire installed in its place. Reference: AC43.13-1B Paragraph 11-66(d) and Figure 11-2. Ensure appropriately rated breaker or fuse is used for the wire gauge.
6. **REMOVAL:**
 - a. Prepare the aircraft for maintenance: Make sure all switches are in the OFF/NORMAL position, attach maintenance warning tags, pull landing/taxi light circuit breakers.

- b. Reference airframe manufacturers current maintenance manual to remove any light covers to gain access to lamp assembly(s) and bracket(s).
 - c. Disconnect connection to positive aircraft power.
 - d. Disconnect ground from aircraft power.
 - e. Remove existing lamp(s) from brackets, mark and retain hardware.
 - f. Record weight of removed lamps.
7. **INSTALLATION:**
- a. Reference airframe manufacturer's current maintenance manual and install LED light(s) in brackets using retained hardware.
 - b. Connect the power and ground wires to the screw terminals using #6 ring terminals. The screw terminals are not polarized, so the power and ground can be connected to them in either order.
 - c. Original landing light switch/switches may be used.
 - d. Placard switches appropriately.
 - e. Power up aircraft and verify proper operation of LED light(s).
 - f. Using the appropriate aircraft maintenance manual, verify that the light angle has not changed, and is oriented & aimed in accordance with manufacturer's instructions.
 - g. Perform EMI test to verify there is no interference caused by light installation.
 - h. Reinstall any light cover(s) removed to gain access to lamp assembly(ies) and bracket(s).
 - i. Enter appropriate logbook entry detailing work, and if necessary fill out and submit appropriate form 337 for work accomplished.
 - j. Perform an operational check of the landing/taxi light(s) in accordance with 14CFR 91.407 (b) and/or (c) to determine that the installed landing/taxi light(s) provide enough light for night operations in accordance with 14CFR 23.1383.
 - k. Weight & balance change from standard position light assemblies to LED landing light assemblies is considered negligible.

DO-160E Section	Compliance Level
4	F2
5	S2
6	B
7	A
8	U
9	H
10	S
11	F
12	S
13	F
14	T
15	A
16	Z
17	A
18	Z
19	ZC
20	RR
21	H
22	A3E3
24	C

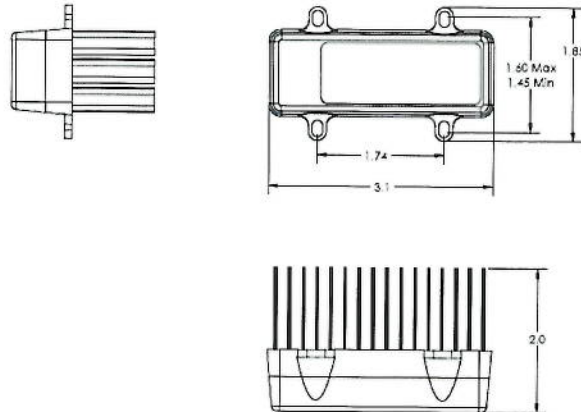
INSTALLATION INSTRUCTIONS REVISION RECORD SHEET

Revision Number	Effective Date	Inserted By	Page Numbers Revised
IR	06/30/2016	Dean Wilkinson	All



Document 0104-0003
 AeroLEDs LLC
 8475 W. Elisa Street
 Boise, Idaho 83709
 Phone: (208) 850-3294
www.aeroleds.com
sales@aeroleds.com

Installation Guide:
Microsun
P/N 01-1170
LED light with
built-in pulse recognition mode



Operating Instructions:

Operational Voltage: 14 & 28 Volt Systems
Input Current: 1.5A at 14V, 0.75A at 28V

EQUIPMENT LIMITATIONS:

Mount in bezel mounting plate 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 Microsun LED light assembly is designed with 3 high power LEDs mounted behind a lens. Should any one 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 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
Annually	<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 	
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3. Route wire (minimum 20 AWG) from switch location to LED 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. 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.
6. Placard switches appropriately.
7. Power up aircraft and verify proper operation of Microsun LED light, in both pulsing and steady functions (as appropriate to the installation)
8. Using the appropriate aircraft maintenance manual, verify that the light angle has not changed, and is oriented & aimed in accordance with manufacturer's instructions.
9. Perform EMI test to verify there is no interference caused by light installation.
10. Reinstall cowlings or lens covers as needed.
11. Fill out and submit appropriate form 337 for work accomplished (unless installed under STC), and enter appropriate logbook entry detailing work for certified aircraft.
12. 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.

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 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.

Figure 1

Wiring Diagram for single LED Microsun light

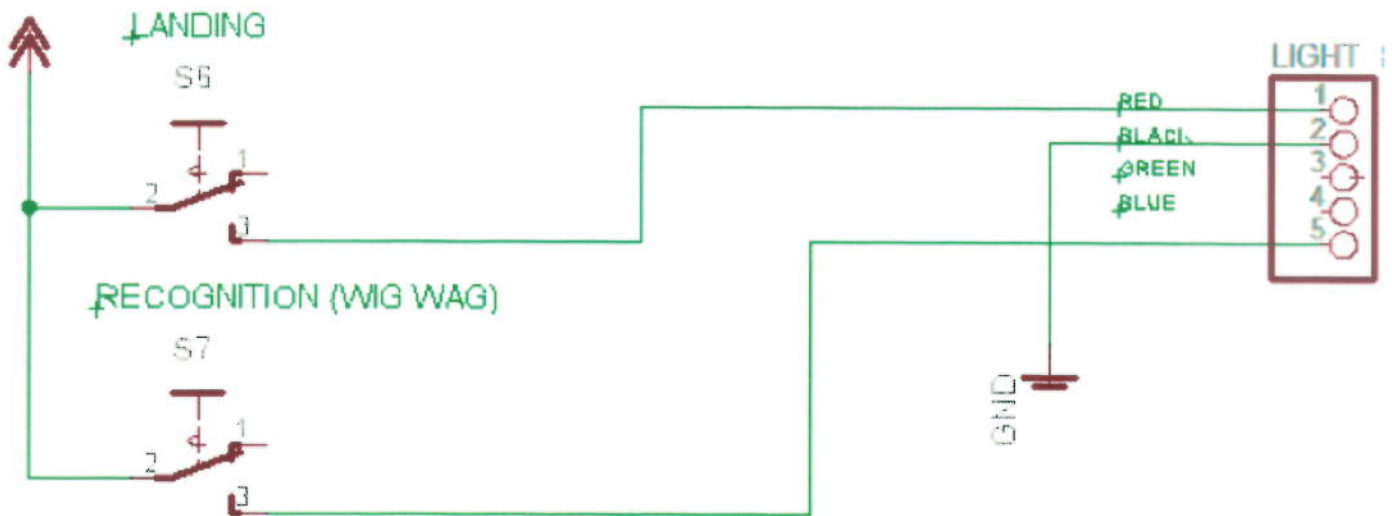


Figure 2

Wiring Diagram for dual LED Microsun lights

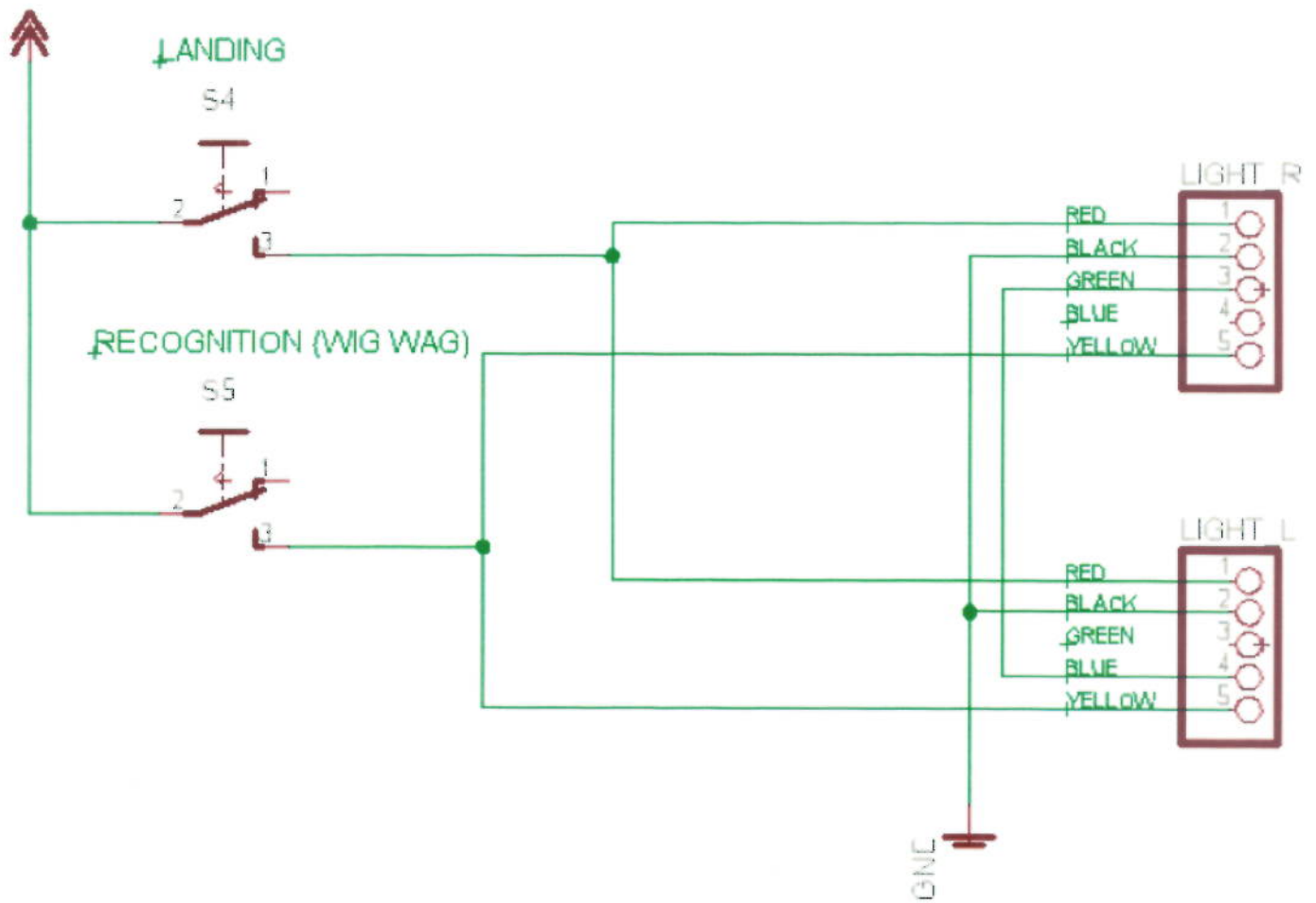
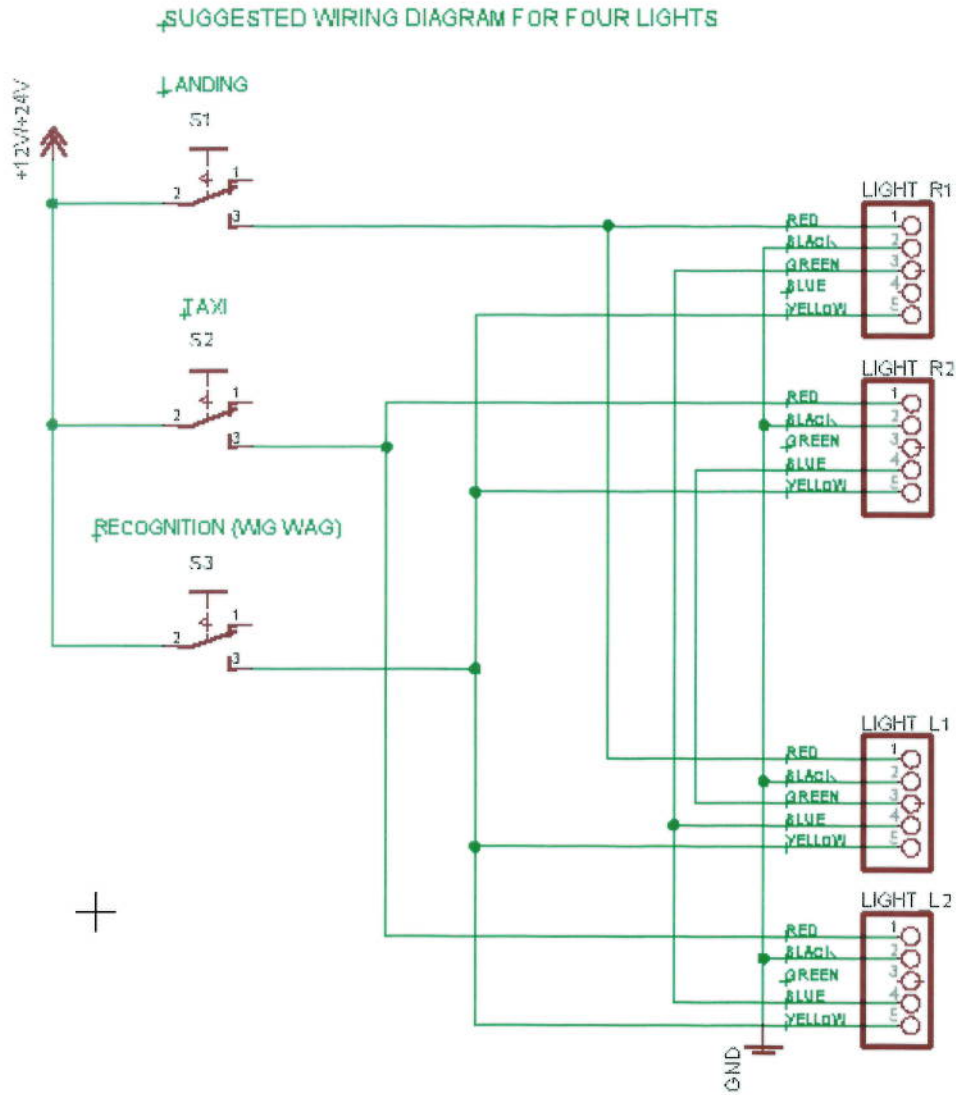


Figure 3

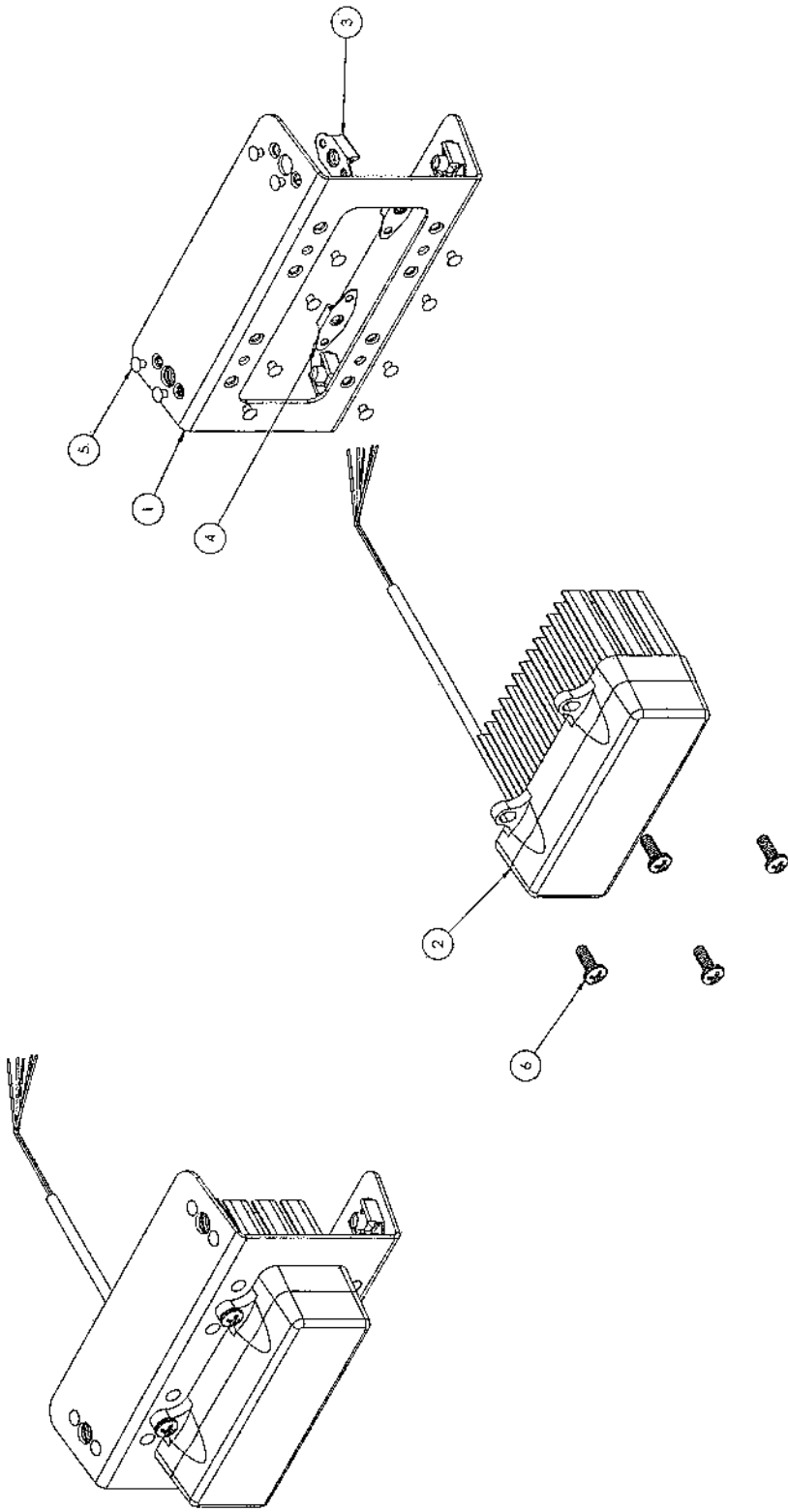
Wiring Diagram for four LED Microsun light assemblies



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	08/16/2012	Dean Wilkinson	All
A	10/07/2016	Dean Wilkinson	1



ITEM NO.	PART NUMBER	DESCRIPTION	Stock Size	Material	QTY.
1	800-101-PA46-L	PIPER BRACKET LEFT		ALUM	1
2	01-11700-MICROSINK	MICROSINK			1
3	RN40370	ANCHOR NUT	#6-32	CARBON STEEL HEAT TREATED	4
4	RN40281	ANCHOR NUT	#6-32	STEEL HARDENED	4
5	Malsbu Rivet	COUNTERSINK RIVET	3/32 DIA 3/16 LENGTH	SOLID ALUM	16
6	90272A146	SCREW, RH PH, 3/75 LENGTH	#6-32		4

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 form or by any means, electronic,
 mechanical, photocopying, recording,
 or by any information storage and
 retrieval system, without the prior
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 CONFIDENTIAL

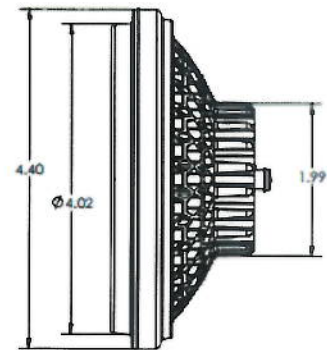
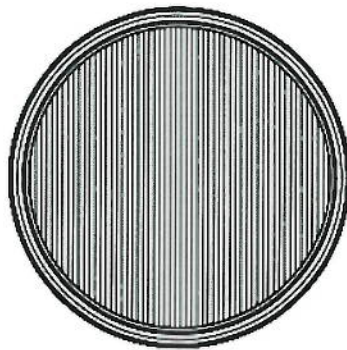
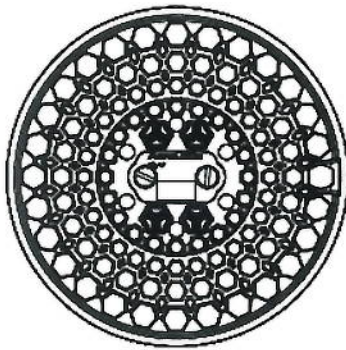
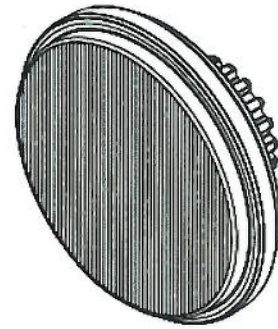
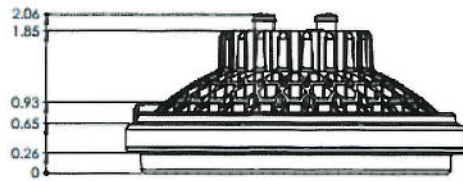
INJECTION MOLDING
 DIMENSIONS IN INCHES
 DIMENSIONS IN MILLIMETERS
 DIMENSIONS IN METERS
 DIMENSIONS IN FEET
 DIMENSIONS IN KILOMETERS
 DIMENSIONS IN MILES
 DIMENSIONS IN KILOGRAMS
 DIMENSIONS IN POUNDS
 DIMENSIONS IN OUNCES
 DIMENSIONS IN GRAMS
 DIMENSIONS IN KILOGRAMS
 DIMENSIONS IN METERS
 DIMENSIONS IN FEET
 DIMENSIONS IN KILOMETERS
 DIMENSIONS IN MILES
 DIMENSIONS IN KILOGRAMS
 DIMENSIONS IN POUNDS
 DIMENSIONS IN OUNCES
 DIMENSIONS IN GRAMS

AEROLEADS
 ENGINEERING DRAWING
PA46-L

REF: DWG NO. **C** 800-100-PA46-L
 WEIGHT: 0.100 LBS
 SCALE: 1:1



Product Datasheet
SunSpot 36-4587 Taxi Light
 01-1030-4587



Voltage Range: 28 VDC
 Current Draw at 28VDC: 3.5 Amps Max
 Power Consumption: 100 Watts
 Thermal Protection: Built In
 Landing Lens Candela: 55,000+
 Landing Beam Angle: 10x30 Degrees
 Total LED Lumens: 6000+
 LED Count: 15

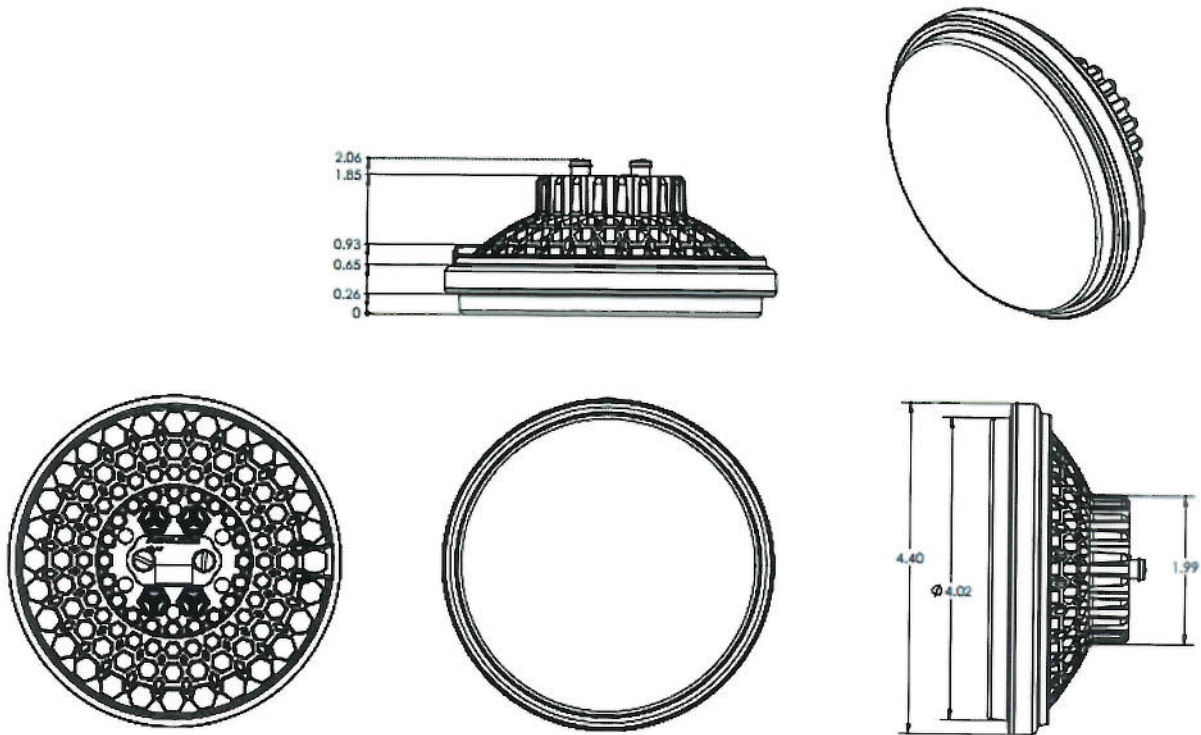
Height: 4.4" Diameter (round)
 Width: 4.4" Diameter (round)
 Depth: 1.86"
 Weight: 10 Oz
 Heat Sink Material: Black Powder Coated Aluminum
 Lens Material: Polycarbonate
 Lens Protection: UV Resistant Hard Coat
 Clamp Mount: PAR 36 Ring Clamp
 Rated Life: 50,000 Hours
 Temperature Range: -55C to +70C



Product Datasheet

SunSpot 36-4596 Landing Light

01-1030-4596



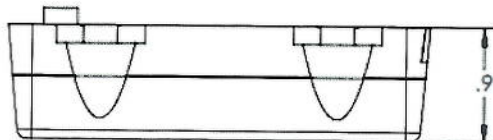
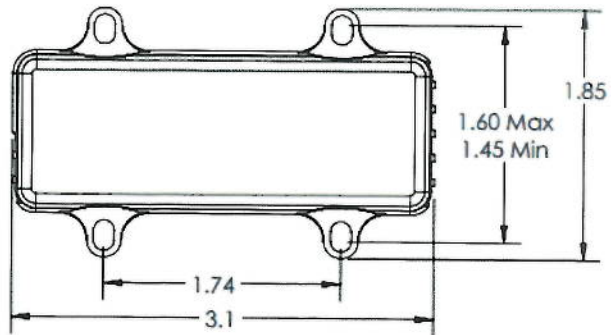
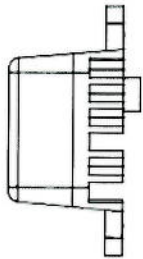
Voltage Range: 28VDC
 Current Draw at 28VDC: 3.5 Amps Max
 Power Consumption: 100 Watts
 Thermal Protection: Built In
 Landing Lens Candela: 150,000+

Landing Beam Angle: 10 Degrees
 Total LED Lumens: 6000+
 LED Count: 15

Height: 4.4" Diameter (round)
 Width: 4.4" Diameter (round)
 Depth: 1.86"
 Weight: 10 Oz
 Heat Sink Material: Black Powder Coated Aluminum
 Lens Material: Polycarbonate
 Lens Protection: UV Resistant Hard Coat
 Clamp Mount: PAR 36 Ring Clamp
 Rated Life: 50,000 Hours
 Temperature Range: -55C to +70C



Product Datasheet
MicroSun Taxi/Recognition Light
01-1170-A



Voltage Range: 9-36VDC
 Current Draw at 14VDC: 1.5 Amps Max
 Power Consumption: 21 Watts Max
 Pulse Light Feature: Built In
 Wig Wag Sync: Built In
 Thermal Protection: Built In
 Candela: 8,000+
 Beam Angle: 30 Degrees
 Total LED Lumens: 1500+
 LED Count: 3

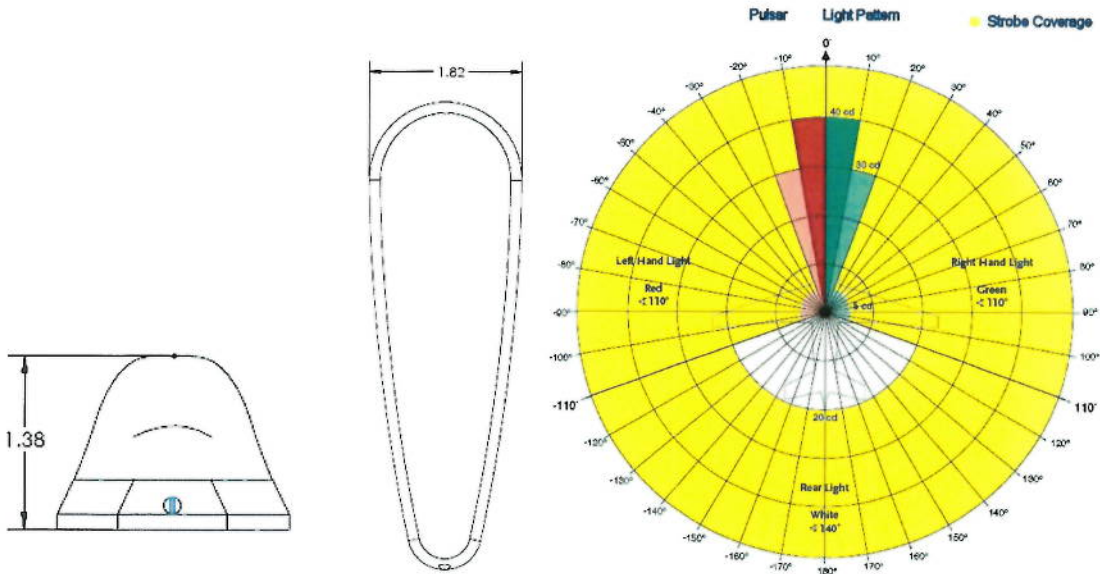
Height: 1.2"
 Width: 3.1"
 Depth: 0.9"
 Weight: 2.25 Oz
 Heat Sink Material: Black Anodized Aluminum
 Lens Material: Polycarbonate
 Screw Mount: 4x 6-32 Machine Screws
 Rated Life: 50,000 Hours
 Temperature Range: -55C to +70C



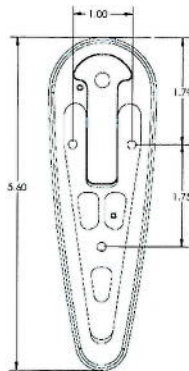
Product Datasheet

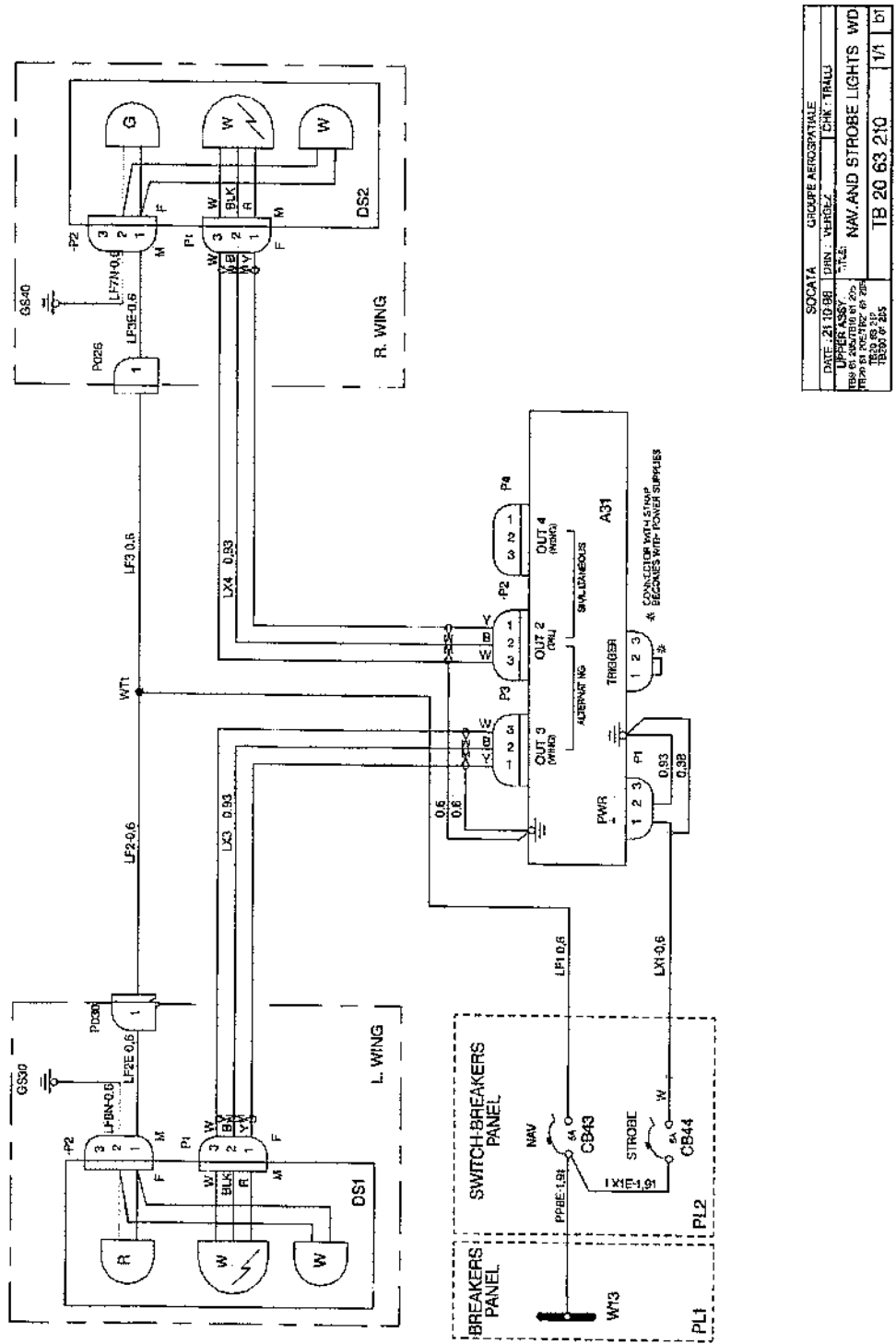
Pulsar Nav/Position/Strobe Light

11-1100-()-() red and green



Voltage Range:	9-36VDC	Length:	5.6"
Position Light Current:	0.4A : 14V, 0.2A : 28V	Width:	1.82"
Strobe Peak Current:	5A : 14V, 2.5A : 28V for 0.19 seconds	Depth:	1.38"
Power Consumption:	17 Watts Avg	Weight:	4 Oz
Strobe Power Supply:	Built In	Heat Sink Material:	Clear Anodized Aluminum
Strobe Synchronization:	Built In	Lens Material:	Polycarbonate
Thermal Protection:	Built In	Screw Mount:	3x 6-32 Machine Screws
Nav/Position Light:	TSO C-30c Type I, Type II, Type III	Rated Life:	50,000 Hours
Strobe:	TSO C-96a Class II	Temperature Range:	-55C to +70C
LED Count:	18		

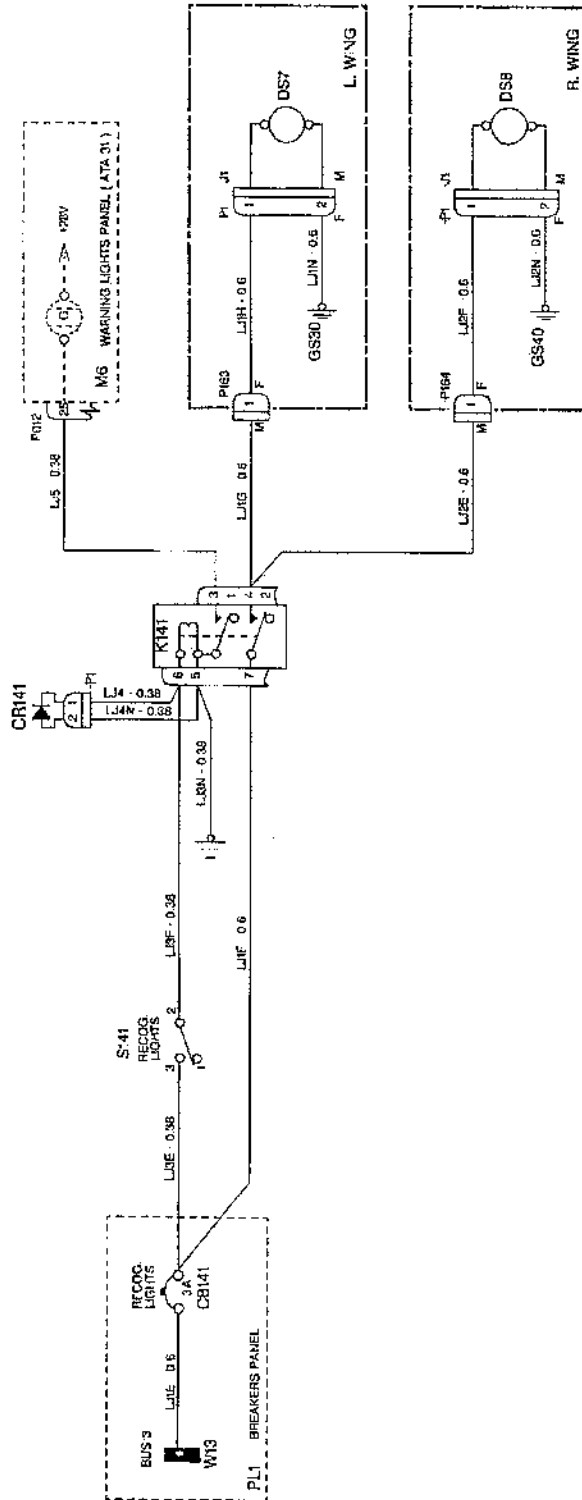




SOCATA	GRUPE AEROSPATIALE
DATE: 21 10 88	DRN: VERGEZ
UPPER ASSY	CHR: TRALLI
PREP: A. G. G. G.	TITLE: NAV. AND STROBE LIGHTS WD
TB 20 63 210	1/1
TB 20 63 210	1/1



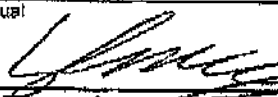
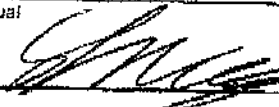
Feux de navigation
Navigation lights

AFAD
Validité / Validity : Tous/All



Feux de reconnaissance
Recognition lights

SOCATA	GRUPPE AEROSPATIALE
DATE: 09/01/92	DRN: 00021
WATER ASSY	FILE: C8141
TB20 63 817	RECOGNITION LIGHTS - WD
	TB 20 63 818
	1/2

 <p>US Department of Transportation Federal Aviation Administration</p>		MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)		Form Approved OMB No. 2120-0020 2/28/2011		Electronic Tracking Number	
INSTRUCTIONS: Print or type all entries. See Title 14 CFR §43.9, Part 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. §44701). Failure to report can result in a civil penalty for each such violation. (49 U.S.C. §46301(a))							
1. Aircraft		Nationality and Registration Mark N9294N		Serial No. 3246104			
		Make PIPER		Model PA-32R-301		Series	
2. Owner		Name (As shown on registration certificate) LAWSON PHILIP W		Address (As shown on registration certificate) Address 406 PINEHURST ST City VICKSBURG State MS Zip 39180-5452 Country USA			
3. For FAA Use Only							
The data/condition identified herein complies with the applicable airworthiness requirements and is approved only for the above described aircraft, subject to conformity inspections by a person authorized in FAR Part 43, Section 43.7 (a).							
		Date 12/07/2009		Signature of Inspector 		SW-FSDO-31	
4. Type		5. Unit Identification					
Repair	Alteration	Unit	Make	Model	Serial No.		
<input type="checkbox"/>	<input checked="" type="checkbox"/>	AIRFRAME	_____	(As described in Item 1 above)		_____	
<input type="checkbox"/>	<input type="checkbox"/>	POWERPLANT					
<input type="checkbox"/>	<input type="checkbox"/>	PROPELLER					
<input type="checkbox"/>	<input type="checkbox"/>	APPLIANCE	Type				
			Manufacturer				
6. Conformity Statement							
A. Agency's Name and Address				B. Kind of Agency			
Name FRANK MAY Address 5855 HWY 61 SOUTH City VICKSBURG State MS Zip 39180 Country USA				<input checked="" type="checkbox"/> U. S. Certified Mechanic <input type="checkbox"/> Foreign Certified Mechanic <input type="checkbox"/> Certified Repair Station <input type="checkbox"/> Certified Maintenance Organization			
				Manufacturer C Certificate No. 426239616			
D. I certify that the repair and/or alteration made to the unit(s) identified in item 5 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.							
Extended range fuel per 14 CFR Part 43 App B <input type="checkbox"/>		Signature/Date of Authorized Individual FRANK MAY  12-12-09					
7. Approval for Return to Service							
Pursuant to the authority given persons specified below, the unit identified in item 5 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Rejected							
BY	FAA Fit. Standards Inspector	Manufacturer	Maintenance Organization		Persons Approved by Canadian Department of Transport		
	FAA Designee	Repair Station	<input checked="" type="checkbox"/>	Inspection Authorization	Other (Specify)		
Certificate or Designation No. 426239616		Signature/Date of Authorized Individual FRANK MAY  12-12-09					

NOTICE

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

8. Description of Work Accomplished

(If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

N9294N

Nationality and Registration Mark

12-12-09

Date

Replaced existing Nose Landing Gear mounted taxi / landing light bulb with new AeroLEDs AeroSun SunSpot Landing light. The existing mounting bracket is used. The light is operated through the existing Taxi / Landing Light Switch & is circuit protected using the existing 15 Amp Taxi / Land Light Circuit Breaker. This aircraft is also equipped with wingtip mounted Landing / Taxi lights. Existing wiring is used. The new bulb produces an acceptable, improved, level of light for night landing & taxiing. Installation was performed i/a/w AeroLEDs' installation instructions, Piper PA-32R -301 Maintenance Manual & FAA Form 337 dated 12/08/08. Note: This aircraft utilizes a 24 volt electrical system & therefore uses a GE 4591 bulb. The GE 4591 is identical in size, shape, fit & function as the 12 volt GE 4509. The AeroSun SunSpot is designed for input voltage of 9 volt to 28.8 volt.

This modification was found to not interfere with any other systems or equipment & does not exceed 80% of alternator output. RFI output was found to not interfere with radios or avionics. Wig.Wig.flasher system is not installed on this aircraft.

Modification is to be maintained i/a/w Piper PA-32R-301 Maintenance Manuals & AC43.13-1B, Ch. 11, Sec. 8.

Aircraft Weight & Balance / Equipment List revised.

END

Additional Sheets Are Attached

ICA for AeroLEDs AeroSun LED Light Bulb Installation
N9294N Piper PA-32R-301 s/n 3246104

- 1) Introduction:
Replaced existing Nose Landing Gear mounted Taxi / Landing Light bulb with AeroLEDs AeroSun SunSpot landing light bulb.
- 2) Description:
Replaced existing Nose Landing Gear mounted taxi / landing light bulb with new AeroLEDs AeroSun SunSpot Landing light. The existing mounting bracket is used. The light is operated through the existing Taxi / Landing Light Switch & is circuit protected using the existing 15 Amp Taxi / Land Light Circuit Breaker. This aircraft is also equipped with wingtip mounted Landing / Taxi lights. Existing wiring is used. The new bulb produces an acceptable, improved, level of light for night landing & taxiing. Installation was performed i/a/w AeroLEDs' installation instructions, Piper PA-32R -301 Maintenance Manual & FAA Form 337 dated 12/08/08. Note: This aircraft utilizes a 24 volt electrical system & therefore uses a GE 4591 bulb. The GE 4591 is identical in size, shape, fit & function as the 12 volt GE 4509. The AeroSun SunSpot is designed for input voltage of 9 volt to 28.8 volt.
- 3) Control & Operation:
No change.
- 4) Servicing Information:
Piper PA-32R-301 Maintenance Manuals.
- 5) Maintenance Instructions:
Piper PA-32R-301 Service / Maintenance Manuals, AC43.13-1B Ch. 11.
- 6) Troubleshooting Information:
Not Applicable.
- 7) Removal & Replacement Information:
Piper PA-32R-301 Maintenance Manuals.
- 8) Diagrams:
AeroSun Installation Instructions & Piper PA-32R-301 Wiring Diagrams.
- 9) Special Instructions:
None.
- 10) Application of Protective Treatments:
None.
- 11) Data:
AeroSun Installation Instructions & Piper PA-32R-301 Wiring Diagrams.

12) List of Special Tools:

None.

13) Commuter Category Aircraft:

Not applicable.

14) Recommended Overhaul Periods:

Not Applicable

15) Airworthiness Limitations:

None.

16) Revision:

If a revision is required, revision will be submitted to the local FAA FSDO in writing, including the referenced FAA Form 337 & proposed changes to said document.



**MAJOR REPAIR AND ALTERATION
(Airframe, Powerplant, Propeller, or Appliance)**

OMB No. 2120-0020
Exp. 03/2014

Electronic Tracking Number

For FAA Use Only

INSTRUCTIONS: Print or type all entries. See Title 14 CFR §43.9, Part 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. §44701). Failure to report can result in a civil penalty for each such violation. (49 U.S.C. §46301(a))

1. Aircraft	Nationality and Registration Mark N97GG	Serial No. 480
	Make PILATUS	Model PC-7
2. Owner	Name (As shown on registration certificate) ASTRA 7 LLC	
	Address (As shown on registration certificate) Address 105 TESLUQUE VILLAGE RD	
	City SANTA FE	State NM
	Zip 87506-0023	Country USA

3. For FAA Use Only

THE DATA IDENTIFIED HEREIN COMPLIES WITH THE APPLICABLE AIRWORTHINESS REQUIREMENTS AND IS APPROVED FOR THE ABOVE DESCRIBED AIRCRAFT, SUBJECT TO CONFORMITY INSPECTION BY A PERSON AUTHORIZED IN FAR 43 SECTION 43.7

DATE 3/26/2014 FAA INSPECTOR [Signature]

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
<input type="checkbox"/>	<input type="checkbox"/>	AIRFRAME	<u>PILATUS</u>	<u>(As described in Item 1 above)</u>	<u>480</u>
<input type="checkbox"/>	<input type="checkbox"/>	POWERPLANT			
<input type="checkbox"/>	<input type="checkbox"/>	PROPELLER			
<input type="checkbox"/>	<input type="checkbox"/>	APPLIANCE	Type		
			Manufacturer		

6. Conformity Statement

A. Agency's Name and Address		B. Kind of Agency		C. Certificate No.
Name <u>NEIL A. WEAVER</u>	Address <u>3600 COLLEGE PARKWAY HANGAR 34</u> City <u>CARSON CITY</u> State <u>NEVADA</u> Zip <u>89706</u> Country <u>USA</u>	<input checked="" type="checkbox"/> U. S. Certificated Mechanic	2036732	
		<input type="checkbox"/> Foreign Certificated Mechanic		
		<input type="checkbox"/> Certified Repair Station		
		<input type="checkbox"/> Certified Maintenance Organization		

D. I certify that the repair and/or alteration made to the unit(s) identified in item 5 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Extended range fuel per 14 CFR Part 43 App. B <input type="checkbox"/>	Signature/Date of Authorized Individual <u>[Signature]</u> <u>12 March 2014</u>
--	--

7. Approval for Return to Service

Pursuant to the authority given persons specified below, the unit identified in item 5 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is Approved Rejected

BY	FAA Fit. Standards Inspector	Manufacturer	Maintenance Organization	Persons Approved by Canadian Department of Transport
	FAA Designee	Repair Station	Inspection Authorization	Other (Specify)

Certificate or Designation No. 2036732	Signature/Date of Authorized Individual <u>[Signature]</u> <u>12 March 2014</u> <u>NEIL WEAVER</u>
---	---

NOTICE

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

B. Description of Work Accomplished
(If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

Pilatus	PC-7
N97GG	3 March 2014
Nationality and Registration Mark	Date

Installation of AEROLEDs Landing and Taxi LED bulbs

1. Removed OEM installed incandescent Landing and Taxi light bulbs.
2. Mounted AEROLEDs Landing and Taxi LED bulbs into original housings using all original hardware and wiring. P/N's 01-1030-L-A and 01-1030-H-A both FAA PMA. Original 5 Amp circuit breakers were retained with original markings. Lights were aimed as per originals and per Pilatus Maintenance Manual No. 01715. This installation produces an acceptable amount of light for night operations. AEROLEDs Installation Manual 0003-0004 Rev.C., is attached.
3. Weight differential negligible.
4. Instructions for Continued Airworthiness are contained in AEROLEDs Installation Manual No. 0003-0004 Rev. C., There are no repairs for bulbs.
5. This modification to be maintained/inspected IAW Pilatus Manual 01715 and AEROLEDs Installation Manual No. 0003-0004 Rev. C.

Nothing Follows

Additional Sheets Are Attached

ICA CHECKLIST FOR FIELD APPROVAL

N97GG PILATUS PC-7 s/n 480

ICA ITEM

1. Introduction
Replaced existing landing and taxi light bulbs with AeroLEDs sun spot bulbs. P/N 01-1030-L-A and 01-1030-H-A.
2. Description
Replaced existing landing and taxi light bulbs with AeroLEDs sun spot bulbs. All original mounting hardware, mounts and wiring were utilized. Original circuit breakers (2) of 5 amps were retained as were original placards. All wiring is factory installed. The lights are aimed per originals. The installation produces an acceptable amount of light for night operations. AeroLEDs installation manual 0003-0004 is attached.
3. Control & Operation Information
(Optional) 3 position switch to replace original landing light switch which will allow selection of Wig-Wag function. Labeled **ON-OFF-FLASHING. EATON MS24650-29A** or equivalent. Installation was found not to interfere with any other equipment and does not exceed 80% of electrical output. RFI output was tested on pulse and found not to interfere with radios/avionics.
4. Servicing Information
Pilatus Aircraft PC-7 Maintenance Manual Document No. 01715 and AeroLEDs Document 0003-0004 Rev. C. or later.
5. Maintenance Instructions
Pilatus Aircraft PC-7 Maintenance Manual Document No. 01715 and AeroLEDs Document 0003-0004 Rev. C. or later, and AC43.13-B.
6. Trouble Shooting Information
AeroLEDs installation guide 0003-0004 Rev C. or later.
7. Removal & Replacement
Pilatus maintenance manual # 01715.
8. Diagrams
AeroLEDs installation Document 0003-0004 and Pilatus Wiring Manual No. 01718.
9. Special Instructions
Attached.
10. Application of Preventive Treatments
None.
11. Data
Pilatus Aircraft PC-7 Maintenance Manual No. 01715 and AeroLEDs Document 0003-0004.
12. List of Special Tools
None.
13. Commuter Category Aircraft
Not Applicable.
14. Recommended Overhaul Period
No additional overhaul time limitations.
15. Airworthiness Limitations
None
16. Revision Revisions must be submitted to local FSDO with proposed changes.



U.S. Department of Transportation
Federal Aviation Administration

MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)

Form Approved
OMB No. 2120-0023
11/30/2007

Electronic Tracking Number

For FAA Use Only

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act 1958)

1. Aircraft	Nationality and Registration Mark N6047B	Serial No. 34047	
	Make Cessna	Model 182	Series
2. Owner	Name (As shown on registration certificate) Rumfield, Scott G. Rumfield, Linda J.		Address (As shown on registration certificate) Address 14800 Zircon Cir.
			City Anchorage State AK Zip 99516-4335 Country United States

3. For FAA Use Only

The technical data identified herein has been found to comply with applicable airworthiness requirements and is hereby approved for use only on the above described aircraft, subject to conformity inspection by a person authorized in § 43.7

David Mathew
05/29/2010
FAA-AAL-CMO-07

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial Number
<input type="checkbox"/>	<input checked="" type="checkbox"/>	AIRFRAME	_____	(As described in Item 1 above)	_____
<input type="checkbox"/>	<input type="checkbox"/>	POWERPLANT			
<input type="checkbox"/>	<input type="checkbox"/>	PROPELLER			
<input type="checkbox"/>	<input type="checkbox"/>	APPLIANCE	Type		
			Manufacturer		

6. Conformity Statement

A. Agency's Name and Address		B. Kind of Agency	
Name David Mathew		<input checked="" type="checkbox"/> U.S. Certificated Mechanic	<input type="checkbox"/> Manufacturer
Address 4201 Floatplane Dr.		<input type="checkbox"/> Foreign Certificated Mechanic	C. Certificate No.
City Anchorage State AK		<input type="checkbox"/> Certificated Repair Station	3489472
Zip 99502 Country United States		<input type="checkbox"/> Certificated Maintenance Organization	

D. I certify that the repair and/or alteration made to the unit(s) identified in item 5 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Extended range fuel per 14 CFR Part 43 App B <input type="checkbox"/>	Signature/Date of Authorized Individual <i>David Mathew</i> 7-1-2010
---	--

7. Approval for Return to Service

Pursuant to the authority given persons specified below, the unit identified in item 5 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is APPROVED REJECTED

BY	FAA Fit Standards Inspector	Manufacturer	Maintenance Organization	Person Approved by Canadian Department of Transport
	FAA Designee	Repair Station	<input checked="" type="checkbox"/> Inspection Authorization	Other (Specify)

Certificate or Designation No. 3489472	Signature/Date of Authorized Individual <i>David Mathew</i> 7-1-2010
--	--

NOTICE

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

8. Description of Work Accomplished

(If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

N6047B

7-1-2010

Nationality and Registration Mark

Date

- 1.) Description
Replaced existing navigation light assemblies with AeroLED Pulsar NS series wingtip assemblies and the SunTail tail nav light assemblies. The installed nav lights are circuit protected through the use of a 1 amp circuit breaker switch which is appropriately placarded. The strobe light functions were wired in and use a 10 amp circuit breaker switch located adjacent to the nav light switch, and is appropriately placarded. All wiring & wires used meet criteria found in AC 43.13-1B Chapter 11, section 5 & 6, and AeroLED's installation instructions and associated wiring diagrams which are attached. The new nav light assemblies were installed in the same location as the original assemblies using mounts included with light assemblies. Installation was tested and found to meet all lighting requirements found in CAR 3.700 through CAR 3.703, including light angles, intensity, color and wiring. Aircraft bus voltage is 14 volts.
- 2.) Control & Operation Information
No Change
- 3.) Servicing Information
Appropriate Cessna 182 maintenance manual
- 4.) Maintenance instructions
Appropriate Cessna 182 maintenance manual
AC 43.13-1B Chapter 11
- 5.) Troubleshooting Information
Not applicable
- 6.) Removal & Replacement Information
Appropriate Cessna 182 maintenance manual
- 7.) Diagrams
AeroLED installation instructions & wiring diagram
- 8.) Special Instructions
None
- 9.) Application of Protective Treatments
None
- 10.) Data
Appropriate Cessna 182 maintenance manual
AeroLED installation instructions & wiring diagram
- 11.) List of Special Tools
None
- 12.) Commuter Category Aircraft
Not applicable
- 13.) Recommended Overhaul Periods
No additional overhaul limitations
- 14.) Airworthiness Limitations
No additional airworthiness limitations
- 15.) Revision
If a revision is required, revision is to be submitted to the local FAA Flight Standards Office in writing, including the referenced 337 and proposed changes to said document
- 16.) The above installed modification was found to not interfere with any other systems or equipment and does not exceed 80% of alternator output. RFI output on strobe function was tested and found to not interfere with radios or avionics.
- 17.) Aircraft weight & balance change negligible and the equipment list was revised.

----- END -----

Additional Sheets Are Attached