Instructions for Continued Airworthiness MaxPulse Landing Light Controller

Part Numbers 9200-000-A and 9200-000-B STC SA01861SE

Please check web site at <u>www.seatoneng.com</u> for the latest revision of this manual

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Revision	Date	Page(s)	Reason for Revision
IR	6/1/2008	1 of 1	Draft – not released
А	6/1/2008	1 of 1	Draft – not released
В	6/11/2008	1 of 1	Draft – not released
С	7/17/2008	1 of 1	Initial Release
D	6/25/2013	All	Rewrite of the ICA to conform with 14 CFR and Parts
			21.50, 23.1529, and Appendix G to Part 23
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Introduction

1.2 Scope	The following information is necessary to carry out the service, maintenance, and inspection of the MaxPulse Landing Light Controller, part numbers 9200-000-A and 9200-000-B.	
1.4 Purpose	The purpose of this Instructions for Continued Airworthiness (ICA) manual is to provide the information necessary to service, maintain, and inspect MaxPulse 9200-000-A and 9200-000-B.	
1.6 Applicability	These Instructions for Continued Airworthiness are applicable to Seaton Engineering Corporation's MaxPulse 9200-000-A and 9200-000-B covered by STC SA01861SE and the Approved Model List (AML) attached to SA01861SE. Copies of these documents are available at <u>www.seatoneng.com</u> or by contacting the manufacturer directly.	
1.7 Abbreviations	FAA Federal Aviation AdministrationICA Instruction for Continued AirworthinessAML Approved Model ListPPM Pulse per Minute	
1.8 Distribution of Instructions for Continued Airworthiness		

Before performing maintenance ensure that the Instructions for Continued Airworthiness (ICA) in your possession is the most recent revision. Current revision levels of all manuals are posted on Seaton Engineering Corporation's website at <u>www.seatoneng.com</u>. Current revision levels are also available directly from the manufacturer.

Description		
2.2 Part# 9200-000-A	 Seaton Engineering's 9200-000-A is a dual circuit landing light controller. It gives the pilot the ability to control his landing light(s) in a variety of ways. In an aircraft with dual landing lights, this controller gives the pilot the options of: X - Both circuits off S - Starboard (right) on only P - Port (left) on only S + P - Both lights on A44 - Lights alternate at 44 PPM (pulse per minute) B44 - Both lights flash at 44 PPM A88 - Lights alternate flash at 88 PPM A120 - Lights alternate flash at 120 PPM 	
	The 9200-000-A accepts spade connectors for easy installation.	
	The 9200-000-A is STC and PMA approved and is DO-160E Qualified.	
2.4 Part# 9200-000-B	Seaton Engineering's 9200-000-B is identical to the 9200-000-A with the exception of accepting ring terminal connectors.	
Control, Special Proc	edures	
3.2 Operation Information	Seaton Engineering's dual circuit landing light controller is operated by the control knob. This knob's functions are defined by the placard (supplied) located on the aircraft panel behind the knob. By turning the knob clockwise it is possible to sequence through the switch functions. By turning the knob fully counter- clockwise the first position is located. This is notated by the X on the placard. By rotating the knob clockwise the following	

functions are selected: X - Both circuits off

- S Starboard (right) on only
- P Port (left) on only
- S + P Both lights on
- A44 Lights alternate at 44 PPM (pulse per minute)
- B44 Both lights flash at 44 PPM
- A88 Lights alternate flash at 88 PPM
- A120 Lights alternate flash at 120 PPM

Servicing Information

4.2 Servicing information The 9200-000-A and 9200-000-B have no repairable parts and if a failure occurs, the part must be replaced in its entirety.

Maintenance Instructions

5.1 Inspecting the unit	The MaxPulse 9200-000-A and 9200-000-B require an annual/100 hour visual inspection of the installation for security of the unit and a check of the wiring for any chafing or loose connections.
5.2 Testing the unit	The functional test procedure is available in Section 7.8 of this ICA or check <u>www.seatoneng.com</u> for the latest version.
Troubleshooting	

6.2 Troubleshooting If a malfunction occurs, check the wiring used for installation against the wiring diagram available in the installation manual, or at <u>www.seatoneng.com</u>. Also check any circuit breakers used for functionality.

Removal and Replacement

7.2 Removal and Replacement	The 9200-000-A and 9200-000-B are small units normally installed on the instrument panel of the aircraft.
7.4 Removal	Disconnect the wire leads from the back of the unit. These will be either pull off spade connectors or screw off ring connectors, depending on which unit is installed. Then remove the control knob on the front of the unit. Once this knob is removed access is gained to the nut securing the unit to the panel. Remove this nut and the unit will be removable from behind the panel.

7.6 Replace	Replacement consists of a reversal of procedure from removal. The replacement unit will also come furnished with an installation manual, Document #9150-001. A functional test procedure should be followed after reinstallation.
7.8 Functional Test Procedure	The following test procedure should be run whenever a unit has been installed or rewired.

Observation: Please check the website at <u>www.seatoneng.com</u> for the latest revision of this document.

Testing Procedure

Upon completion of the installation, perform the functional test procedure. During the functional test, the following actions and observations should be made.

The installer should check each communication, navigation, or surveillance radio receiver in the airplane following the landing light controller installation. For radio receivers that can be tuned to multiple channels, tune the receiver to low, mid, and high channels. For all other radio receivers in the aircraft, turn the radios on and monitor the audio output or displays for interference when the landing light controller is turned on. If adverse interference is noted on the radio output or displays and troubleshooting does not uncover errors in the installation or wire routing, remove the landing light controller from the aircraft and replace with a serviceable unit.

The MaxPulse 9200-000-A and 9200-000-B have passed DO-160E Sec 21 testing for electromagnetic emissions/interference and it is extremely unlikely that any interference will occur.

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Testing Procedure continued -

Test Procedure		Check
Rotate the MaxPulse rotary switch fully counter-clockwise the FIRST POSITION Both circuits should be off.	х	
Turn the Master Power Switch to the ON position.	ON	
Rotate the MaxPulse switch clockwise to the Second Position	S>	
The starboard light should come on and remain on.	< D	
The port light should come on and remain on.		
Rotate the MaxPulse switch clockwise to the Fourth Position The port and starboard lights should come on and remain on.	P+S	
Rotate the MaxPulse switch clockwise to the Fifth Position The port and starboard lights should alternate on and off 44 times per minute	A44	
Rotate the MaxPulse switch clockwise to the Sixth Position Both port and starboard lights should turn on and off 44 times per minute	B44	
Rotate the MaxPulse switch clockwise to the Seventh Position The port and starboard lights should alternate on and off 120 times per minute	A88	
Rotate the MaxPulse switch clockwise to the Eighth Position The port and starboard lights should alternate on and off 120 times per minute	A120	
Return the Master Power Switch to the OFF position. Test complete.	OFF	

Diagrams 8.2 Inspection Access	Not applicable.
Special Inspection Require 9.2 Inspection Requirements	ments None
Application of Protective T 10.2 Protective Treatments	reatments None
Data 11.2 Structural Fasteners	All required hardware is included with the unit.
List of Special Tools 12.2 Special Tools Needed	None
For Commuter Category Ai 13.2 Commuter Category	rcraft Not applicable.
Recommended Overhaul P	eriod
14.2 Overhaul Period	No additional overhaul time limitations.
Airworthiness Limitation	
15.2 Airworthiness Limitation	The Airworthiness Limitations section is FAA approved and specifies maintenance required under Sections 43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved.
	The MaxPulse 9200-000-A and the MaxPulse 9200-000-B Landing Light Controller, manufactured by Seaton Engineering Corporation, have no repairable parts and if a failure occurs, the part must be replaced in its entirety.
Revision	
16.2 Revision	All revisions to this ICA will be submitted to the FAA for acceptance. After the revision has been accepted, the latest revision will be listed at <u>www.seatoneng.com</u> .
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