

MANDATORY**SEL-24-10****TITLE**

ELECTRICAL POWER - MASTER CONTROL UNIT S/N INSPECTION AND REPLACEMENT OF WIRE HARNESS

EFFECTIVITY

MODEL	SERIAL NUMBERS
172S	172S12111, 172S12116, 172S12118, 172S12120, 172S12124, 172S12126, 172S12128, 172S12129, 172S12133, 172S12134, 172S12135, 172S12136, 172S12192
182T	18283030, 18283031, 18283032
206H	20608313
T206H	T20609528, T20609529, T20609530, T20609531, T20609532

REASON

Some S3100-594 Master Control Units (MCU) have been found with improper terminal crimps on the electrical connector for the W53-0069 Wire Harness. A terminal crimp that is not correct can have a loose connection which can cause electrical arcing that can lead to an electrical fire and/or complete loss of electrical power.

DESCRIPTION

This service document provides parts and instructions to inspect for suspect serial numbered MCU and to replace the W53-0069 Wire Harness if the serial number is identified as suspect. The new W53-0069 Wire Harness will have terminal wire crimps that are correct, secure, and will provide uninterrupted electrical power.

COMPLIANCE

MANDATORY. This service document must be accomplished in the next 50 flight hours, or at the next 100-hour or 12-month (annual-type) inspection, whichever occurs first from the date of receipt.

A service document published by Textron Aviation may be recorded as *completed* in an aircraft log only when the following requirements are satisfied:

- 1) The mechanic must complete all of the instructions in the service document, including the intent therein.
- 2) The mechanic must correctly use and install all applicable parts supplied with the service document kit. Only with written authorization from Textron Aviation can substitute parts or rebuilt parts be used to replace new parts.
- 3) The mechanic or airplane owner must use the technical data in the service document only as approved and published.
- 4) The mechanic or airplane owner must apply the information in the service document only to aircraft serial numbers identified in the *Effectivity* section of the document.
- 5) The mechanic or airplane owner must use maintenance practices that are identified as acceptable standard practices in the aviation industry and governmental regulations.

March 12, 2019

SEL-24-10
Page 1 of 4

Textron Aviation Customer Service, P.O. Box 7706, Wichita, KS 67277, U.S.A. 1-316-517-5800

This document contains technical data and is subject to U.S. export regulations. This information has been exported from the United States in accordance with export administration regulations. Diversion contrary to U.S. law is prohibited. ECCN: 9E991

MANDATORY**SEL-24-10**

No individual or corporate organization other than Textron Aviation is authorized to make or apply any changes to a Textron Aviation-issued service document or flight manual supplement without prior written consent from Textron Aviation.

Textron Aviation is not responsible for the quality of maintenance performed to comply with this document, unless the maintenance is accomplished at a Textron Aviation-owned Service Center.

CONSUMABLE MATERIAL

No specialized consumable materials are required to complete this service document.

TOOLING

No specialized tooling is required to complete this service document.

WEIGHT AND BALANCE INFORMATION

Negligible

REFERENCES

Model 172R/172S Maintenance Manual

Model 182S/182T/T182T Maintenance Manual

Model 206H/T206H Maintenance Manual

NOTE: To make sure all publications used are complete and current. Refer to www.txtavsupport.com.

PUBLICATIONS AFFECTED

None

ACCOMPLISHMENT INSTRUCTIONS

1. Open the external power access panel on the left side of the engine cowl.
 - A. If external power is applied to the airplane, make sure all switches are in the OFF/NORM position and disconnect external electrical power.
2. Look at the placard on the left side of the MCU and record the serial number.
 - A. If the serial number is in the Suspect Serial Number table that follows; the W53-0069 Wire Harness within the MCU must be replaced, go to Step 3.
 - B. If the serial number is not in the Suspect Serial Number table that follows; close the external power access panel and go to Step 11.

SUSPECT SERIAL NUMBERS

80Q06501	80Q06502	80Q06503	80Q06504
80Q06505	80Q06506	80Q06508	80Q06509
80Q06510	80Q06801	80Q06802	80Q06803
80Q06804	80Q06805	80Q06810	80Q22306
80Q22308	80Q22309	80Q32605	80Q48102
80Q48103	80Q48110		

3. Prepare the airplane for maintenance.
 - A. Make sure that the airplane is electrically grounded.
 - B. Remove the upper engine cowl. (Refer to the applicable Model Maintenance Manual, Chapter 71, Cowl - Maintenance Practices.)
 - C. Disconnect the airplane batteries.

MANDATORY**SEL-24-10**

- D. Attach maintenance warning tags to the batteries and external power receptacle that have **"DO NOT CONNECT ELECTRICAL POWER - MAINTENANCE IN PROGRESS"** written on them.
4. Remove the front cover (and cooling shield for T206H airplanes) from the MCU.
5. (Refer to Figure 1.) Replace the W53-0069 Wire Harness in the MCU as follows:
 - A. Disconnect the electrical connector for the W53-0069 Wire Harness.
 - B. Remove the three terminal nuts and MS35338-44 Lock Washers; keep the nuts and discard the lock washers.
 - C. Remove the W53-0069 Wire Harness keeping attention to the routing of the wires inside the J-Box.
 - (1) Make the removed W53-0069 Wire Harness unusable by cutting the connectors off and discarding.
 - D. Install the new W53-0069 Wire Harness with the wires routing the same as the removed wire harness.
 - E. Install the three terminals, MS35338-44 Lock Washers, and kept nuts; torque the nuts to 25 Inch-Pounds.
 - F. Connect the electrical connector for the W53-0069 Wire Harness.

B21819

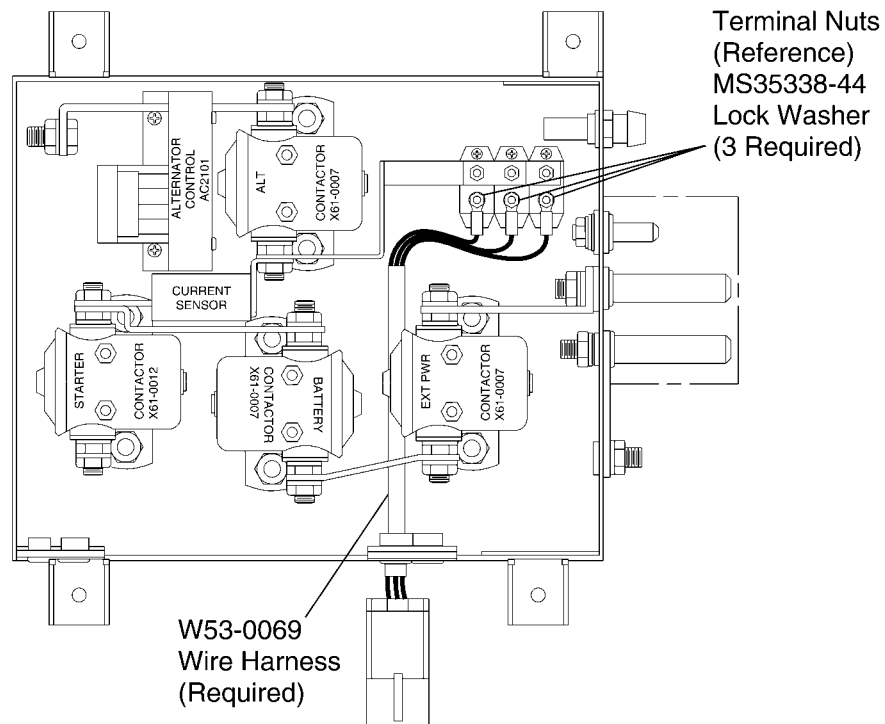


Figure 1. MCU Wire Harness (Sheet 1)

AA0558T1007

6. Install the front cover (and cooling shield for T206H airplanes) onto the MCU.
7. Remove the maintenance warning tags and connect the airplane batteries.
8. Move the airplane to location to do an engine run.
9. Do an engine running operational test of all electrical systems. (Refer to the applicable Model POH for engine operations.)
10. (After the operational test.) Install the upper engine cowl. (Refer to the applicable Model Maintenance Manual, Chapter 71, Cowl - Maintenance Practices.)

MANDATORY**SEL-24-10**

11. Make an entry in the airplane logbook that states compliance and method of compliance with this service document.

MATERIAL INFORMATION

The part below may be necessary to complete this service letter.

NEW P/N	QUANTITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
SEL-24-10		Kit , consisting of the following parts:		
W53-0069	1	Wire Harness	Same	Discard old Install new
MS35338-44	3	Lock Washer	Same	Discard old Install new

Please contact a Textron Aviation Authorized Service Facility for current cost and availability of parts listed in this service document.

TITLE

ELECTRICAL POWER - MASTER CONTROL UNIT S/N INSPECTION AND REPLACEMENT OF WIRE HARNESS

TO:

Cessna Model 172S, 182T, 206H and T206H Aircraft Owner

REASON

Some S3100-594 Master Control Units (MCU) have been found with improper terminal crimps on the electrical connector for the W53-0069 Wire Harness. A terminal crimp that is not correct can have a loose connection which can cause electrical arcing that can lead to an electrical fire and/or complete loss of electrical power.

COMPLIANCE

MANDATORY. This service document must be accomplished in the next 50 flight hours, or at the next 100-hour or 12-month (annual-type) inspection, whichever occurs first from the date of receipt.

LABOR HOURS

For planning purposes only:

WORK PHASE	LABOR-HOURS
Inspection	0.2
Modification	1.3

MATERIAL AVAILABILITY

PART NUMBER	AVAILABILITY	COST
SEL-24-10	*	*

* Please contact a Textron Aviation Authorized Service Facility for current cost and availability of parts listed in this service document.

WARRANTY

This service document is *mandatory*. Eligible airplanes may qualify for parts and labor coverage to the extent noted in the *Labor Hours* and *Material Availability* sections of this document.

Eligibility: All airplanes identified within the serial number effectivity of this service document.

Parts Coverage: Textron Aviation-owned and Textron Aviation-authorized Service Facilities, operators, or other maintenance facilities may submit a claim for the parts required to accomplish this service document as defined in the *Material Availability* section of this document.

Labor Coverage: Textron Aviation-owned and Textron Aviation-authorized Service Facilities rated to perform maintenance on the specific model of Cessna Aircraft may submit a claim for the labor necessary to accomplish this service document as defined in the *Labor Hours* section of this document.

Credit Application: After this service document has been accomplished, a claim must be submitted to Textron Aviation within 30 days of the service document completion. Claims for compliance of this service document are to be filed as a W4 type claim.

Please submit your claim form online at ww2.txtav.com/Parts or email the completed Textron Aviation Claim Form to warranty@txtav.com. If submitted on-line a Return Authorization will be provided. If a paper claim is submitted your claim will be entered into the system and a Return Authorization will be sent to you.

The Return Authorization must accompany any required return parts (see *Material Availability*), to the point of purchase.

Parts to be returned to Textron Aviation Parts Distribution should be forwarded to:

Textron Aviation Parts Distribution
Warranty Administration
285 South Greenwich Road
Bldg B89, Docks 1-4
Wichita, KS 67206
USA

Expiration: March 12, 2020 (after this date the owner/operator assumes the responsibility for compliance costs)

Textron Aviation reserves the right to void continued airplane warranty coverage for the parts affected by this service document until the service document is accomplished.

NOTE: As a convenience, service documents are now available online to all our customers through a simple, free-of-charge registration process. If you would like to sign up, please visit the Customer Access link at www.txtavsupport.com to register.