## TITLE

ELECTRICAL POWER - TRANSMITTAL OF LAMAR TECHNOLOGIES LLC SERVICE INFORMATION LETTERS LSI-019 REVISION A AND LSI-021 (MANDATORY INSPECTION AND COMPLIANCE)

## EFFECTIVITY

### Group A Airplanes:

The following airplanes delivered from Cessna Aircraft Company with an MC01-3A internal change I.C. 13 or I.C. 14 Master Control Unit (MCU):

<table>
<thead>
<tr>
<th>MODEL</th>
<th>SERIAL NUMBERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>172R</td>
<td>172S11221 thru 172S11228 thru 172S11230, 172S11233, 172S11234, 172S11236 thru 172S11241, 172S11247 thru 172S11250, 172S11253 thru 172S11257</td>
</tr>
<tr>
<td>172S</td>
<td>172S11221 thru 172S11228 thru 172S11230, 172S11233, 172S11234, 172S11236 thru 172S11241, 172S11247 thru 172S11250, 172S11253 thru 172S11257</td>
</tr>
<tr>
<td>T182T</td>
<td>T18209088 thru T18209092, T18209096 thru T18209100</td>
</tr>
<tr>
<td>206H</td>
<td>20608348 thru 20608353</td>
</tr>
<tr>
<td>T206H</td>
<td>T20609072 thru T20609076, T20609078 thru T20609136</td>
</tr>
</tbody>
</table>

### Group B Airplanes:

The following airplanes with a part number X61-0029 Alternator Contactor installed as a replacement part in Master Control Unit MC01-2, MC01-2A, MC01-3 or MC01-3A with internal change I.C. 1 through I.C. 12 OR the following airplanes that have an MC01-3A internal change I.C. 13 or I.C. 14 Master Control Unit installed as a replacement part:

<table>
<thead>
<tr>
<th>MODEL</th>
<th>SERIAL NUMBERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>172R</td>
<td>172S11221 thru 172S11228 thru 172S11230, 172S11233, 172S11234, 172S11236 thru 172S11241, 172S11247 thru 172S11250, 172S11253 thru 172S11257</td>
</tr>
<tr>
<td>172S</td>
<td>172S11221 thru 172S11228 thru 172S11230, 172S11233, 172S11234, 172S11236 thru 172S11241, 172S11247 thru 172S11250, 172S11253 thru 172S11257</td>
</tr>
<tr>
<td>T182T</td>
<td>T18209088 thru T18209092, T18209096 thru T18209100</td>
</tr>
<tr>
<td>206H</td>
<td>20608348 thru 20608353</td>
</tr>
<tr>
<td>T206H</td>
<td>T20609072 thru T20609076, T20609078 thru T20609136</td>
</tr>
</tbody>
</table>

Also affected are all MC01-3A Master Control Units identified with I.C. 13 or 14 in service facility stock.
REASON

In MC01 Master Control Units (MCU) that have an X61-0029 Alternator Contactor installed, it is possible to assemble the MCU components such that the contactor case touches the distribution bus bar.

NOTE: MC01 Master Control Units identified with an internal change I.C. 1 through I.C. 6 that have not incorporated Cessna Service Bulletin SB00-24-01, Main Power Junction Box Circuit Breaker Retrofit Kit, are not equipped with a distribution bus bar.

NOTE: The MCU is also referred to as the power junction box.

DESCRIPTION


Lamar Technologies LLC Service Information Letter LSI-019 Revision A, Replacement of MC01 Distribution Bus Bar provides parts and instructions to remove and replace the distribution bus bar with a new distribution bus bar. The new distribution bus bar provides adequate clearance between the distribution bus bar and the case of the alternator contactor.

Lamar Technologies LLC Service Information Letter LSI-019 Revision A is for MC01 Master Control Units identified with an internal change I.C. 8 through I.C. 14.

Lamar Technologies LLC Service Information Letter LSI-021, Inspection of MC01 Distribution Bus Bar provides parts and instructions to do an inspection for clearance and if necessary to do a modification of the distribution bus bar installation. The modification provides adequate clearance between the distribution bus bar and the case of the alternator contactor.

Lamar Technologies LLC Service Information Letter LSI-021 applies to all I.C. 7 and to I.C. 1 through I.C. 6 Master Control Units that have accomplished Cessna Service Bulletin SB00-24-01 (Lamar Technologies LLC Service Information Letter LSI-004).

SEB-24-01 accomplishes the necessary modification of master control units that were originally equipped with a X61-0029 Contactor (I.C. 13 and I.C. 14) or with an X61-0029 Contactor installed as a replacement part (I.C. 1 through I.C. 12).

COMPLIANCE

MANDATORY. This service bulletin must be accomplished at the next 100-hour or 12-month (annual-type) inspection, whichever occurs first.

APPROVAL

Cessna received FAA approval for the technical data in this publication that changes the airplane type design.

Cessna received EASA approval for the technical data in this publication that changes the airplane type design.

WEIGHT AND BALANCE INFORMATION

Negligible

REFERENCES

Cessna Service Bulletin SB00-24-01, Main Power Junction Box Circuit Breaker Retrofit Kit Installation
Lamar Technologies LLC Service Information Letter LSI-021, Inspection of MC01 Distribution Bus Bar
Lamar Technologies LLC Service Information Letter LSI-019 Revision A, Replacement of MC01 Distribution Bus Bar

Lamar Technologies LLC Service Information Letter SIL LSI-004, Service Information for Master Control Units, part numbers MC01-2A and MC01-3A

NOTE: Make sure all publications used are complete and current. Refer to www.cessnasupport.com.

ACCOMPLISHMENT INSTRUCTIONS

1. Prepare the airplane for maintenance.
   A. Make sure that the airplane is electrically grounded.
   B. Make sure that all switches are in the OFF/NORM position.
   C. Disconnect electrical power from the airplane.
      (1) Disconnect external electrical power.
      (2) Disconnect the airplane battery.
   D. Attach maintenance warning tags to the battery and external power receptacle that have "DO NOT CONNECT ELECTRICAL POWER - MAINTENANCE IN PROGRESS" written on them.

2. Do an inspection to determine what you need to do to accomplish this service bulletin as follows:
   C. Carefully read Cessna Service Bulletin SB00-24-01, Main Power Junction Box Circuit Breaker Retrofit Kit installation and Lamar Technologies LLC Service Information Letter SIL LSI-004, Service Information for Master Control Units, part numbers MC01-2A and MC01-3A.
   D. Find the identification tag that is installed on the outer shell of the master control unit (MCU).
      NOTE: The internal change (I.C.) level of the MCU should be shown on this identification tag.
   E. If the I.C. level of the MCU is 1 through 6, look for a placard that is installed adjacent to the identification tag of the MCU that has LSI-004 written on it.
      NOTE: This placard should be installed on airplanes that have accomplished SB00-24-01.
   F. Refer to the TABLE and the attached Lamar Technology LLC service information letters to find the configuration that is applicable to your airplane.
### TABLE

<table>
<thead>
<tr>
<th>IF YOUR MCU CONFIGURATION IS</th>
<th>YOU MUST REFER TO THE DOCUMENT / INSTRUCTIONS SHOWN BELOW TO ACCOMPLISH THIS SERVICE BULLETIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.C. 15 and later</td>
<td>No action required</td>
</tr>
<tr>
<td>I.C. 13 or I.C. 14</td>
<td>LSI-019, Revision A</td>
</tr>
<tr>
<td>I.C. 8 through I.C. 12</td>
<td>X61-0029 Alternator Contactor LSI-019, Revision A</td>
</tr>
<tr>
<td></td>
<td>X61-0007 Alternator Contactor SEB-24-02</td>
</tr>
<tr>
<td>I.C. 7</td>
<td>X61-0029 Alternator Contactor LSI-021</td>
</tr>
<tr>
<td></td>
<td>X61-0007 Alternator Contactor SEB-24-02</td>
</tr>
<tr>
<td>I.C. 1 through I.C. 6</td>
<td>LSI-004 placard not installed SEB-24-02 if/when SB00-24-01 is accomplished</td>
</tr>
<tr>
<td></td>
<td>LSI-004 placard installed AND X61-0029 Alternator Contactor installed</td>
</tr>
<tr>
<td></td>
<td>LSI-004 placard installed AND X61-0007 Alternator Contactor installed</td>
</tr>
<tr>
<td></td>
<td>SEB-24-02</td>
</tr>
</tbody>
</table>

3. Accomplish the applicable Lamar Technologies LLC Service Information Letter.
5. Remove the maintenance warning tags and connect the airplane battery.
6. Make sure that the BEACON light (on ELECT BUS 1) and the NAV light (on ELECT BUS 2) are operational.
7. Make an entry in the airplane logbook that states compliance and method of compliance with this service bulletin.

### MATERIAL INFORMATION

The applicable parts below may be necessary to accomplish this service bulletin:

<table>
<thead>
<tr>
<th>NEW P/N</th>
<th>QUANTITY</th>
<th>KEY WORD</th>
<th>OLD P/N</th>
<th>INSTRUCTIONS/DISPOSITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AN960-10</td>
<td>2 (If required)</td>
<td>Flat Washer</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>AN960-10L</td>
<td>4 (If required)</td>
<td>Flat Washer</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>P52-0037</td>
<td>1 (If required)</td>
<td>Bus Bar Replacement Kit</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>
TITLE
ELECTRICAL POWER - TRANSMITTAL OF LAMAR TECHNOLOGIES LLC SERVICE INFORMATION LETTERS LSI-019 REVISION A AND LSI-021 (MANDATORY INSPECTION AND COMPLIANCE)

TO:

REASON
This owner advisory is to inform you that SEB-24-01 has been issued.

In MC01 Master Control Units (MCU) that have an X61-0029 Alternator Contactor installed, it is possible to assemble the MCU components such that the contactor case touches the distribution bus bar.

NOTE: MC01 Master Control Units identified with an internal change I.C. 1 through I.C. 6 that have not incorporated Cessna Service Bulletin SB00-24-01, Main Power Junction Box Circuit Breaker Retrofit Kit, are not equipped with a distribution bus bar.

NOTE: The MCU is also referred to as the power junction box.

DESCRIPTION

Lamar Technologies LLC Service Information Letter LSI-019 Revision A, Replacement of MC01 Distribution Bus Bar provides parts and instructions to remove and replace the distribution bus bar with a new distribution bus bar. The new distribution bus bar provides adequate clearance between the distribution bus bar and the case of the alternator contactor.

Lamar Technologies LLC Service Information Letter LSI-019 Revision A is for MC01 Master Control Units identified with an internal change I.C. 8 through I.C. 14.

Lamar Technologies LLC Service Information Letter LSI-021, Inspection of MC01 Distribution Bus Bar provides parts and instructions to do an inspection for clearance and if necessary to do a modification of the distribution bus bar installation. The modification provides adequate clearance between the distribution bus bar and the case of the alternator contactor.

Lamar Technologies LLC Service Information Letter LSI-021 applies to all I.C. 7 and to I.C. 1 through I.C. 6 Master Control Units that have accomplished Cessna Service Bulletin SB00-24-01 (Lamar Technologies LLC Service Information Letter LSI-004).

SEB-24-01 accomplishes the necessary modification of master control units that were originally equipped with a X61-0029 Contacto (I.C. 13 and I.C. 14) or with an X61-0029 Contacto installed as a replacement part (I.C. 1 through I.C. 12).

COMPLIANCE
MANDATORY. This service bulletin must be accomplished at the next 100-hour or 12-month (annual-type) inspection, whichever occurs first.

LABOR HOURS
Inspection man-hours are negligible.
If necessary, 1.0 man-hour to accomplish the replacement of the distribution bus bar in accordance with Lamar Technologies LLC Service Information Letter LSI-019 Revision A, Replacement of MC01 Distribution Bus Bar.

If necessary, 1.0 man-hour to accomplish the modification of the distribution bus bar installation in accordance with Lamar Technologies LLC Service Information Letter LSI-021, Inspection of MC01 Distribution Bus Bar.

WARRANTY

For all airplanes identified within the serial effectivity:

If necessary, applicable parts credit and a labor allowance credit of 1.0 man-hour per airplane will be provided to accomplish the replacement of the distribution bus bar in accordance with Lamar Technologies LLC Service Information Letter LSI-019 Revision A, Replacement of MC01 Distribution Bus Bar.

If necessary, applicable parts credit and a labor allowance credit of 1.0 man-hour per airplane will be provided to accomplish the modification of the distribution bus bar installation in accordance with Lamar Technologies LLC Service Information Letter LSI-021, Inspection of MC01 Distribution Bus Bar.

Freight will be credited at the most economical method unless pre-approved by Cessna.

To receive credit, the work must be completed and a warranty claim submitted by a Cessna Authorized Service Facility within 30 calendar days of service bulletin compliance before the credit expiration dates shown below.

<table>
<thead>
<tr>
<th>Region</th>
<th>Expiration Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td>October 7, 2015</td>
</tr>
<tr>
<td>International</td>
<td>October 7, 2015</td>
</tr>
</tbody>
</table>

Please contact a Cessna Authorized Service Facility for detailed information and arrange to have Cessna service bulletin SEB-24-01 accomplished on your airplane.

Special Note to Authorized Service Facilities:

When you complete the warranty claim, the labor allowance claimed shall be itemized for each above action completed.

Access the QR code for the instructional video link that follows or use the URL address:

Select this link:


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 Support Login" link at www.Cessna.com to register.
SUBJECT: Service Information for Master Control Unit, Part Number MC01-3A. Removal/Replacement of Distribution Bus Bar.

REASON: In MC01-3A installations that have an X61-0029 alternator contactor and an N55-0011 Distribution Bus Bar it is possible to assemble the components such that the bus bar contacts the case of alternator contactor.

PURPOSE: To provide instructions for removal and replacement of the Distribution Bus Bar with a new bus bar that will not allow contact with the case of the alternator contactor.

EFFECTIVITY:
1) All MC01-3A Master Control Units identified with Internal Change (I.C.) 13 or 14 on the nameplate label.
2) All MC01-3A Master Control Units identified with I.C. 8 thru 12, AND which have had Alternator Contactors replaced with P/N X61-0029.

Note: X61-0029 became available for replacement in the MCU starting 09/21/2011.

Note: MC01-3A I.C. 15 and later is equipped with the new bus bar and is not applicable for this change. The new bus bar is identified with red heat shrink.

AIRCRAFT MODELS: Refer to Cessna service document.

INFORMATION:
New contactor X61-0029 was released in September 2011 (See LSI-015) and is slightly longer than the legacy contactor X61-0007. With the X61-0029 contactor and N55-0011 distribution bus bar it is possible to position the components in such a way to allow the bus bar to contact the case of the contactor (see figure 1). In order to prevent the possibility of contact between the bus bar and the alternator contactor, the bus bar should be replaced per the following procedure:

PARTS REQUIRED:

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>P52-0037</td>
<td>Bus Bar Replacement Kit</td>
<td>1</td>
</tr>
<tr>
<td>N55-0092</td>
<td>Power Distribution Bus Bar (red heat shrink)</td>
<td>1*</td>
</tr>
<tr>
<td>L51-0019</td>
<td>LSI-019 Modification Label</td>
<td>1*</td>
</tr>
<tr>
<td>LSI-019</td>
<td>Service Information Letter</td>
<td>1*</td>
</tr>
</tbody>
</table>

Note *: Part of Bus Bar Replacement Kit.
PROCEDURES:

NOTE: This procedure assumes that the MCU has been removed from the aircraft. If the MCU is to be reworked on the aircraft refer to Cessna service document.

1) Remove the cover from the MC01. Retain attaching hardware.
2) Inspect for alternator contactor P/N X61-0029 and for a Distribution Bus Bar with black heat shrink sleeving (see Figure 1). If both parts are installed, proceed to the next step. If X61-0007 contactor is installed, the following procedures to replace the bus bar are not necessary; proceed to step 6. If a distribution bus bar with red sleeving is found, the bus bar has already been replaced; proceed to step 6.
3) Replace distribution bus bar with a new, revised distribution bus bar.
   a. Remove the existing distribution bus bar with black shrink sleeve from the MC01 by removing attaching nuts and washers. Retain hardware.
   b. Using retained hardware install the new N55-0092 distribution bus bar with red shrink sleeve into the MC01. During installation verify that the bar fits loosely on the contactor and breaker studs and is not preloaded. It may be necessary to loosen contactor mounting hardware and reposition components to allow proper fit of the bus bar(s). On the contactor stud insure that a flat washer is on each side of the CS3200-1 Current Sensor, if installed. (Note: Installations with CS3100 Current sensors do not require flat washers.) After installation, re-install remaining washers and nuts. Tighten contactor nuts to 35-45 in-lbs., and circuit breaker stud nut to 10-15 in-lbs.
4) Inspect and verify there is a minimum of 0.100" clearance between alternator contactor and new bus bar.
5) Place label, P/N L51-0019, on the outside of the MCU directly above the existing product ID label, indicating that LSI-019 has been complied with (see Figure 1).
6) Reinstall MCU cover with retained attaching hardware.
INSPECT FOR .100" MINIMUM CLEARANCE IN THIS AREA

ALTERNATOR CONTACTOR

DISTRIBUTION BUS BAR

COMPLIES WITH LSI-019 BUS BAR MOD

Install L51-0019 Label Here
SUBJECT: Service Information for Master Control Unit, Part Number MC01-2, MC01-2A, MC01-3, and MC01-3A. Inspection of Distribution Bus Bar Clearance.

REASON: In Number MC01-2, MC01-2A, MC01-3, and MC01-3A installations that have an X61-0029 alternator contactor and a Circuit Breaker Retrofit Kit (see LSI-004) it is possible to assemble the components such that the distribution bus bar contacts the case of alternator contactor.

PURPOSE: To provide instructions for inspection and rework of the Distribution Bus Bar installation to insure adequate clearance with the case of the alternator contactor.

EFFECTIVITY: 1) MC01-2, MC01-2A, MC01-3, and MC01-3A Master Control Units identified with Internal Change (I.C.) 1 thru 6 on the nameplate label which have had the original Alternator Contactor replaced with a new X61-0029 contactor AND which have a Circuit Breaker Retrofit kit per LSI-004.

2) MC01-2A and MC01-3A Master Control Units identified with Internal Change 7 on the nameplate label which have had the original Alternator Contact replaced with a new X61-0029 contactor AND which have a Circuit Breaker Retrofit kit originally installed by Lamar.

Note: X61-0029 became available for replacement in the MCU starting 09/21/2011.

AIRCRAFT MODELS: Refer to Cessna service document.

INFORMATION: New contactor X61-0029 was released in September 2011 (See LSI-015) and is slightly longer than the legacy contactor X61-0007. With the X61-0029 contactor and N55-0009 distribution bus bar used in the Circuit Breaker Retrofit Kit, it is possible to position the components in such a way to allow the bus bar to contact the case of the contactor (see figure 1). In order to prevent the possibility of contact between the bus bar and the alternator contactor, the bus bar should be inspected per the following procedure and reworked if necessary:

PARTS REQUIRED:  

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>AN960-10</td>
<td>Flat Washer (If rework is required)</td>
<td>2</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AN960-10L</td>
<td>Flat Washer (If rework is required)</td>
<td>4</td>
</tr>
</tbody>
</table>
NOTE: This procedure assumes that the MCU has been removed from the aircraft. If the MCU is to be reworked on the aircraft refer to Cessna service document.

1) Remove the cover from the MC01. Retain attaching hardware.

2) Inspect for alternator contactor P/N X61-0029 and for Circuit Breakers as shown in Figure 1. If both parts are installed, proceed to the next step. If X61-0007 contactor is installed, the following procedures to inspect the bus bar are not necessary; proceed to step 5. If a fuse block is found instead of circuit breakers, proceed to step 5.

3) Inspect for clearance between the bus bar and the contactor as shown in Figure 2. If the clearance is less than .050", rework as follows:
   a. Loosen the distribution bus bar at the contactor end, and remove the attaching nut and washers from the circuit breaker end. Retain hardware.
   b. Lift bus bar from circuit breaker stud and install two (2) AN960-10 flat washers onto the stud. Reinstall bus bar and hardware. During installation verify that the bar fits loosely on the contactor and breaker studs and is not preloaded. Tighten nut to 10-15 in-lbs.
   c. Verify that a minimum of 1 ½ full threads is showing above the nut. (It may be necessary to use a thinner AN960-10L washer, or a combination of an AN960-10L washer with only one AN960-10 washer to maintain proper thread engagement.)
   d. It may be necessary to loosen contactor and/or circuit breaker mounting hardware and reposition components to allow proper fit of the bus bar(s). On the contactor stud insure that a flat washer is on each side of the CS3200-1 Current Sensor, if installed. (Note: Installations with CS3100 Current sensors do not require flat washers.) After installation, re-install remaining washers and nuts. Tighten contactor nuts to 35-45 in-lbs., and circuit breaker stud nut to 10-15 in-lbs.

4) Inspect and verify there is a minimum of 0.050" clearance between alternator contactor and the distribution bus bar.

5) Reinstall MCU cover with retained attaching hardware.
INSPECTION OF MC01 DISTRIBUTION BUS BAR

**Figure 1**

- Alternator Contactor
- Distribution Bus Bar
- Circuit Breaker Upgrade Kit (3 Circuit Breaker Kit Shown)
- Inspect for .050" minimum clearance in this area

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**Figure 2**

- Retained Nut
- Retained Flat Washer and Lock Washer
- Add up to 2 AN960-10 or 4 AN960-10L washers to obtain clearance
- Circuit Breaker Bus Bar
- Circuit Breaker
- Inspect for a minimum of .050" clearance in these areas
- Alternator Contactor