



THIS BULLETIN DOES NOT CHANGE AIRCRAFT TYPE DESIGN

SUBJECT: M20V ALTERNATOR WIRING, MOUNTING AND SECURITY
[Chapter 24 - ELECTRICAL POWER]

MODELS/ SN
AFFECTED: Mooney M20V - 33-0001 THRU 33-0018

TIME OF
COMPLIANCE: **Before Next Flight**

INTRODUCTION: There was a report in the field, of an M20V Acclaim Ultra with an alternator cable damaged on the RH exhaust crossover tube. Mooney Engineering has determined the cable was incorrectly positioned. This allowed the wire to contact the RH exhaust crossover tube causing a short circuit to the alternator. This resulted in damage to the cable and crossover tube. This requires mandatory compliance by owners. **The attached compliance card needs to be filled out and returned to Mooney International Corporation upon completion of this Service Bulletin M20-340C.**

INSTRUCTIONS: **Read entire procedures before beginning work.**

- 1.1. Turn master switch - OFF.
- 1.2. Remove top and bottom cowling, refer to Mooney Service and Maintenance Manual.
- 1.3. Locate alternator cable (refer to Figure SBM20-340-1). Inspect cable for any signs of damage; chafing, cracks in shielding, burnt spots, etc., if cable is damaged, contact MOONEY TECHNICAL SUPPORT support@mooney.com for a replacement cable.
- 1.4. Locate RH exhaust crossover tube. Inspect for damage; holes, cracks, etc., if damaged contact MOONEY TECHNICAL SUPPORT support@mooney.com for a replacement crossover tube, refer to Figure SBM20-340-1.
- 1.5. Assure the existing alternator cable clamp is located on the RH engine mount to as indicated in Figure SBM20-340-2 (center). The clamp should be located at the indicated location, approximately 11" (11" \pm 0.5") from the RH engine mount mounting boss.
- 1.6. From RH engine mount mounting boss, measure along engine mount tube approx 16" (16" \pm 0.5") to locate cushion clamps mounting alternator field sensor and cylinder thermocouple wires to engine mount, refer to Figure SBM20-340-2.
- 1.7. Remove (1 qty) mounting bolt AN3-5A, (1 qty) NAS1149F0363P Washer, (1 qty) MS21045L3 Nut, connecting the large and small cushion clamps together, refer to Figure SBM20-340-3.
- 1.8. Insert alternator cable into new MS21919WCJ6 Clamp, mount to existing cushion clamps with new hardware; (1 qty) AN3-6A Bolt, (1 qty) NAS1149F0363P Washer, (1 qty) MS21045L3 Nut, stack clamps as shown in Figure SBM20-340-3.
- 1.9. Tighten stacked clamp assembly together and torque to 20-25 In. Lbs. Make sure slack in alternator cable stays taut along engine mount between the two cushion clamps and assure clearance of at least 2" between the alternator cable and the crossover pipe as shown in Figure SBM20-340-3.
- 1.10. Install top and bottom cowling, refer to Mooney Service and Maintenance Manual.



THIS BULLETIN DOES NOT CHANGE AIRCRAFT TYPE DESIGN

NOTE:

Fill out compliance card and send by MAIL or FAX to Mooney International Corporation as indicated on the attached Compliance Card.

- 1.11. Return aircraft to service.
- 1.12. Procedure complete.

WARRANTY: Mooney International Corporation, will warrant labor 1 hour when corrective action is done in accordance with procedures of this Service Bulletin for aircraft currently covered under the Mooney International Corporation factory warranty program.

REFERENCE DATA: 1. Mooney M20V Service and Maintenance Manual

PARTS LIST: Mooney International Corporation, Service Bulletin Parts Kit(s): Not Ordered As Kit
Order parts as required below (Standard Shop Supplies):

<u>Item</u>	<u>P/N</u>	<u>Description</u>	<u>Qty</u>
1.	MS21919WCJ6	CLAMP	1
2.	AN3-6A	BOLT	1
3.	NAS1149F0363P	WASHER	1
4.	MS21045L3	NUT	1



THIS BULLETIN DOES NOT CHANGE AIRCRAFT TYPE DESIGN

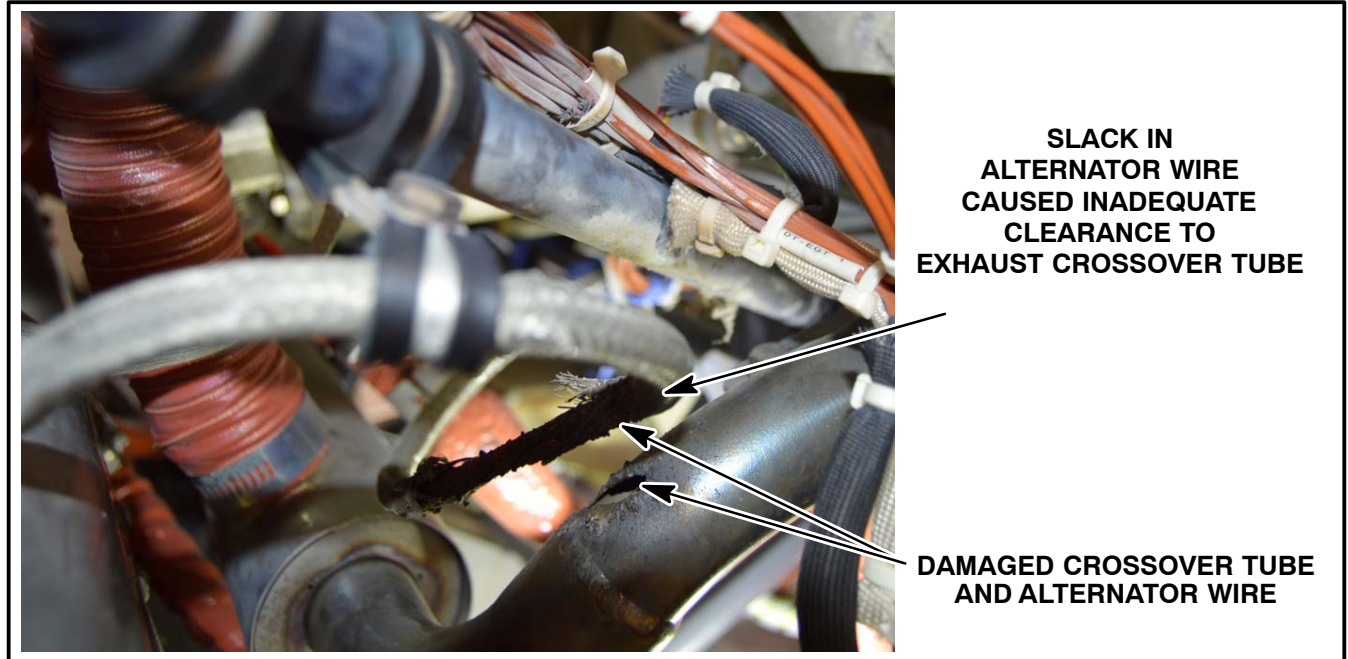


Figure SB M20-340-1 - EXISTING ALTERNATOR CABLE ROUTING

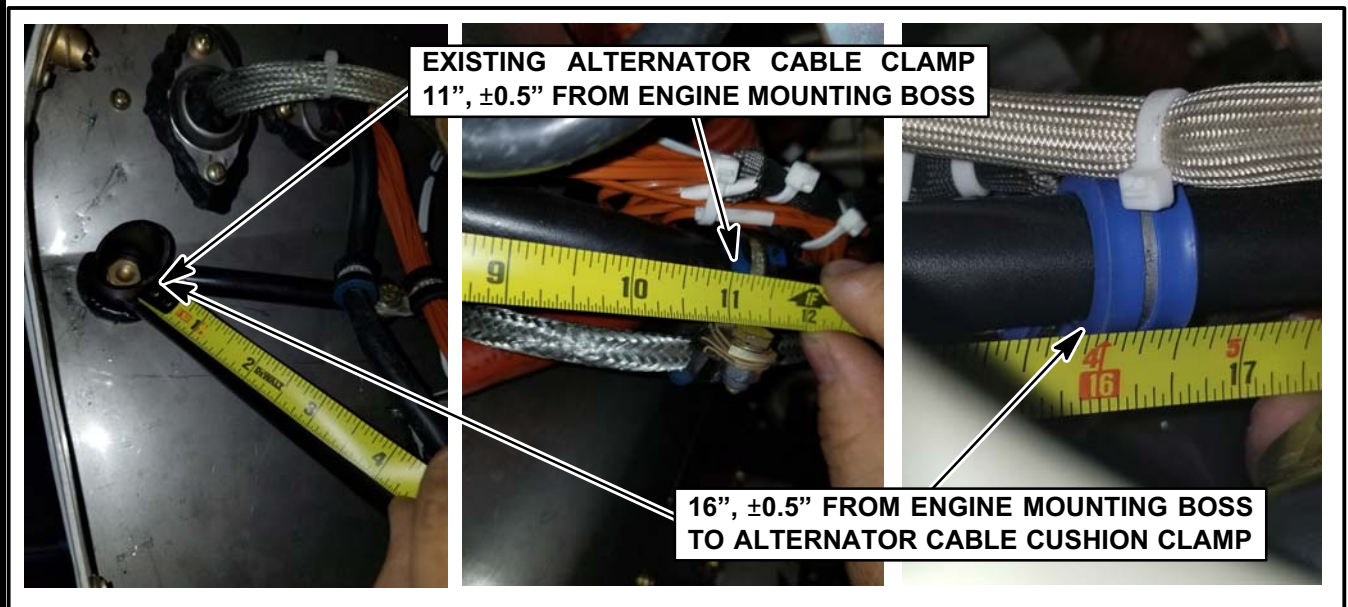
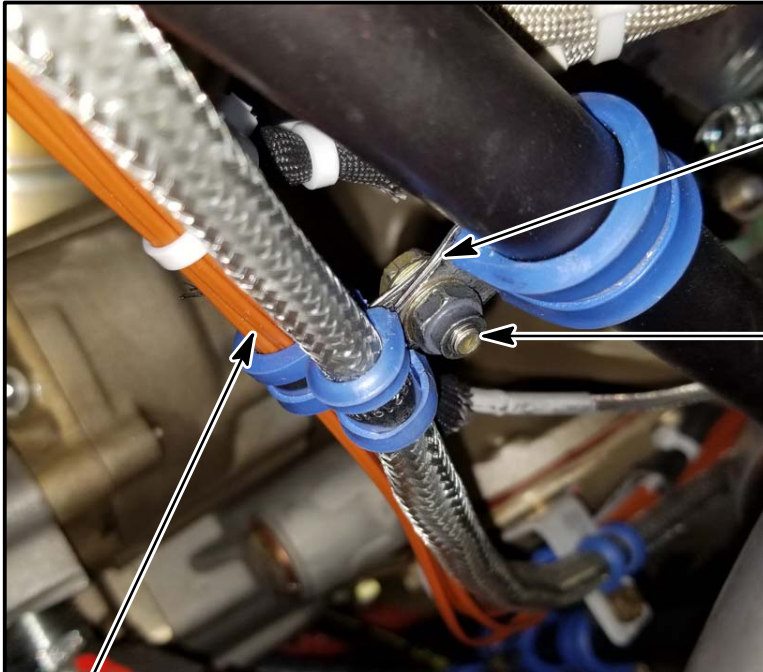


Figure SB M20-340-2 - ALTERNATOR CABLE ROUTING LOCATION (RH ENGINE MOUNT)



THIS BULLETIN DOES NOT CHANGE AIRCRAFT TYPE DESIGN



REF:
STACK CLAMPS AS SHOWN

AN3-6A BOLT (1 QTY)
NAS1149F0363P WASHER (1 QTY)
MS21912WCJ6 CLAMP (1 QTY)
MS21045L3 NUT (1 QTY)
(TORQUE TO 20-25 In. Lbs)

NOTE:
KEEP ALTERNATOR CABLE TAUT
WHILE CLAMP IS TORQUED.

REF:
ALTERNATOR FIELD SENSOR
AND CYLINDER THERMOCOUPLE
WIRES

CAUTION:
ALLOW MINIMUM 2" SPACE
BETWEEN EXHAUST TUBE
AND MS21912WCJ6 CLAMP



Figure SB M20-340-3 - NEW ALTERNATOR CABLE MOUNTING



THIS BULLETIN DOES NOT CHANGE AIRCRAFT TYPE DESIGN

MOONEY INTERNATIONAL CORPORATION
KERRVILLE, TEXAS 78028 – FAX 830-257-4635

SERVICE (BULLETIN) (INSTRUCTION) NO. _____ HAS BEEN COMPLIED
WITH ON AIRCRAFT MODEL _____ SERIAL NUMBER _____

Tach. Time: _____ N-Number _____ (Reg. No.)
Owner: _____ Date of Compliance: _____
_____ Complied By: _____

Inspection Report: _____

Form 07-0001

PLACE
STAMP
HERE

MOONEY INTERNATIONAL CORPORATION
ATT'N: TECHNICAL SUPPORT
165 Al Mooney Road North
Kerrville, Texas 78028

SEND ALL COMPLIANCE CARDS TO:
Mooney International Corporation ATTN:Tech Pubs Dept.
165 Al Mooney Road North
Kerrville, TX 78028
FAX: (830) 257-4635 or EMAIL TO: techpubs@mooney.com

To submit Technical Publication changes, visit our website:
<https://www.mooney.com/service>
or email a request to: techpubs@mooney.com