THIS BULLETIN IS FAA APPROVED FOR ENGINEERING DESIGN

SERVICE BULLETIN M20–297
Date: June 14, 2007

SUBJECT: Charging system diode removal on BATT #1 wire.

MODELS/ SN AFFECTED:

- M20R: 29-0475 thru 29-TBA
- M20TN: 31-0001 thru 31-TBA

TIME OF COMPLIANCE: AT NEXT SCHEDULED ANNUAL INSPECTION, BUT WITHIN NEXT 100 FLIGHT HOURS.

INTRODUCTION: The charging system has been revised to remove the specified diode in this Service Bulletin according to Mooney Engineering Group. The removed diode will allow the charging system to correctly trickle charge BATT #1 when BATT #2 is selected.

INSTRUCTIONS: Read entire procedures before beginning work.

1-1. Turn master switch – OFF.
1-2. Remove LH Tailcone access panel.
1-2. Locate Master Relay #1, remove neccessary cable ties to access diode on wire #PB28D18 (approx 3-4” between relay and BATT #1 inline fuse connector) (ref. Figure SB M20-297-1).
1-3. Cut and remove diode (ref. Figure SB M20-297-1).
1-4. Crimp Butt Splice (P/N D–436–37) to wire, use a heat gun to shrink butt splice to wire (heat shrink tubing is not neccessary). Install Cable Ties as required to stow and secure wire (ref. Figure SB M20-297-2).
1-5. Turn master switch – ON.
1-6. Verify proper operation of electrical equipment and charging system (also refer to Chapter 24 MAC Service & Maintenance Manual).
1-8. Return aircraft to service.

WARRANTY: Mooney Airplane Company, Inc. will warrant labor (approximately 1/2 hour), when done in accordance with the procedures of this Service Bulletin for aircraft currently covered under the Mooney Airplane Company, Inc. factory warranty program.

REFERENCE DATA: MAC Service & Maintenance Manual (applicable A/C)


<table>
<thead>
<tr>
<th>Item</th>
<th>P/N</th>
<th>Description</th>
<th>Qty</th>
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<tbody>
<tr>
<td>1.</td>
<td>D–436–37</td>
<td>Butt Splice (Blue)</td>
<td>1</td>
</tr>
<tr>
<td>2.</td>
<td>T50R9M4</td>
<td>Cable Ties</td>
<td>4</td>
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REMOVE DIODE FROM BATT#1 WIRE (#PB28D18)

BATT #1 MASTER RELAY

BATT #1 FUSE HOLDER

BEFORE PROCEDURE

CABLE TIE AS REQUIRED (P/N T50R9M4)

ATTACH BUTT SPLICE (P/N D-436-37) TO WIRE (#PB28D18) (HEAT SHRINK SPLICE AFTER CRIMPING)

BATT #1 MASTER RELAY

AFTER PROCEDURE

Figure SB M20-297-1 - REMOVE DIODE

Figure SB M20-297-2 - INSTALL BUTT SPLICE AND STOW WIRE