SERVICE BULLETIN M20-245A DATE: 11 - 15 - 90

SUBJECT: MOONEY 24 VOLT AIRCRAFT ELECTRICAL WIRING MODIFICATION,

(Revision A modifies basic S.B. instructions).

MOONEY MODELS: M20J - S/N 24-3000 THRU 24-3122 MODEL/S/N AFFECTED:

M20K - S/N 25-1000 THRU 25-1213

TIME OF COMPLIANCE: AT NEXT SCHEDULED MAINTENANCE

INTRODUCTION: THE 24 VOLT ELECTRICAL SYSTEM IS WIRED IN A MANNER THAT RENDERS THE OVERVOLTAGE WARNING LIGHT IN THE ANNUNCIATOR PANEL ASSEMBLY INOPERATIVE SHOULD AN ALTERNATOR OVERVOLTAGE OCCUR. THIS S. B. PROVIDES INSTRUCTIONS TO REWIRE A PORTION OF THE CIRCUIT TO ENABLE THIS WARNING LIGHT.

## INSTRUCTIONS:

- 1. Disconnect VR-802 voltage regulator (for Alternator #1) located under the instrument panel on the co-pilot's side.
- 2. Locate existing wire number JK-PA12A18; push wire out of pin 8 of #1 regulator main harness receptacle.
- 3. Cut pin from wire, JK-PA12A18; cap wire end using AMP 324485 wire cap (included in kit).
- 4. Remove Glareshield per instructions in the appropriate S & M manual, Section 39-10-01.
- 5. Insert wire number JK-PA12B18 (included in kit) into pin 8 of voltage regulator receptacle and reconnect regulator.
- 6. Route wire number JK-PA12B18 along existing wire bundle to annunciator panel connector (JK-WT104A). Secure with lacing cord or Ty-Raps.
- 7. Locate wire number JK-WT02A22 connected to pin 1 of annunciator panel connector, JK-WT104A, and cut JK-WT02A22 wire approximately 6 inches back from connector.
- 8. Use AMP 320559 wire splice to re-connect wire number JK-WT02A22 and the unconnected end of new wire JK-PA12B18 (SEE FIGURE M20-245-1)
- 9. If **Dual Alternators** are installed, repeat Steps 1 through 5 with #2 regulator but on wire numbers JK-PA30A18 (Steps 1, 2 & 3) and JK-PA30C18 (Step 5). Route unconnected end of wire number JK-PA30C18 to vacuum switch on back of Artifical Horizon and connect to "white" terminal.
- 10. Remove the 1 amp Annunciator C/B and replace with a 2 amp C/B, included in Rev. A kit. 11. Functionally check operation of alternator(s) per POH/AFM, Section IV, Normal Procedures, Before Takeoff.
- 12. Enter compliance note in aircraft logbook and return aircraft to service.

This kit should be ordered from the Mooney Service Center in your area. Nor-WARRANTY: mal warranty billing policies will be in affect for this kit. Mooney Aircraft Corporation will allow up to 2.0 hours labor to accomplish this modification if a completed War ranty Claim is received within 1 year from the date of this Service Bulletin.

REFERENCE DATA: N/A

PARTS LIST: KIT P/N - SB-M20-245-1A (M20J & M20K only)

ITE	<u>M_</u>	<u>P/N</u>			<u> DESCRIPTION Q</u>	<u>ΓΥ</u>
1.		JK-PA12B18			WIRE ASSEMBLY	1
2.		JK-PA30C18			WIRE ASSEMBLY	1
3.		324485 .			WIRE CAP (AMP)	2
4.		320559 .			WIRE SPLICE (AMP)	1
5.	_	7277-2-2 .	_		C/B. ANNUNCIATOR (2 AMP)	1

FIGURES/ TABLES:

