

**THIS BULLETIN IS FAA APPROVED FOR ENGINEERING DESIGN**

SERVICE BULLETIN M20-288

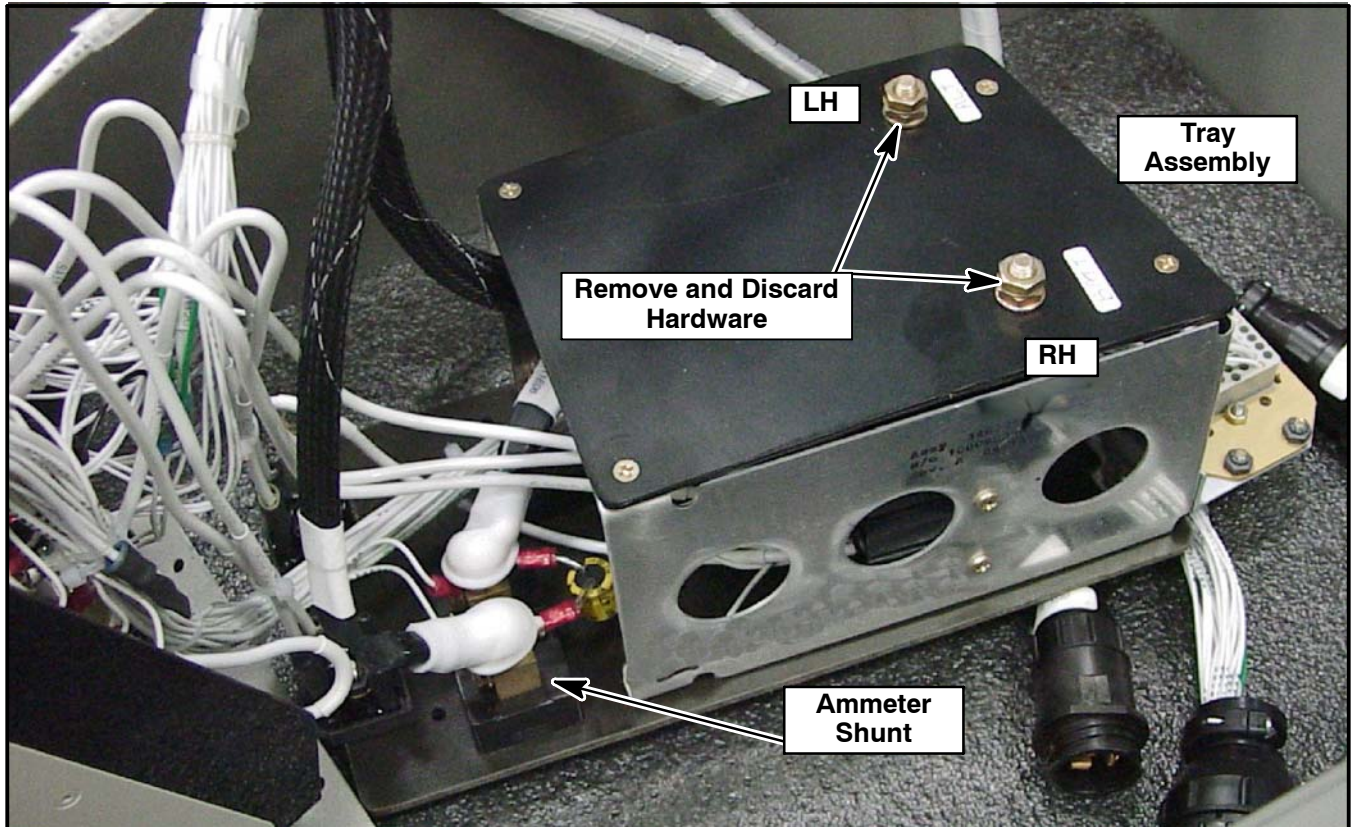
Date: June 20, 2005

- SUBJECT:** ALTERNATOR WIRING
- MODELS/ SN AFFECTED:** **ONLY AIRCRAFT WITH FACTORY INSTALLED "OPTIONAL" AIR CONDITIONING**
MOONEY M20M, S/N 27-0318 and UNIT 27-0326 THRU 27-0334
MOONEY M20R, S/N 29-0333 THRU 29-0378
- TIME OF COMPLIANCE:** AT NEXT SCHEDULED ANNUAL INSPECTION, BUT WITHIN NEXT 100 FLIGHT HOURS.
- INTRODUCTION:** This Bulletin is to rework Only aircraft with factory installed "Optional Air Conditioning" to alleviate heat build up at circuit breaker panel interconnect.
- INSTRUCTIONS:** Read entire procedure before beginning work.
1. Turn master switch - OFF.
 2. Remove & slide out Circuit Breaker Panel:
 - A. Remove screws attaching glareshield and cover plate, carefully lift glareshield to expose wire disconnects for glareshield lights. Disconnect wires and lift glareshield off.
 - B. Remove two screws from face of circuit breaker panel at upper right and left edges.
 - C. Remove two screws from underneath, near edge of panel face.
 - D. Panel should now be free to slide aft approximately 4-5 inches. This will allow access to plumbing and electrical connections.
- NOTE:**
- In some instances, components, other than the one to be removed, must be removed or at least some wiring or plumbing disconnected to gain access to the desired component.**
3. Locate and remove wire number PA10D02 from alternator "Out" Circuit Breaker #BR90 (ref. Figure SB M20-288-1).
 4. Locate and remove wire number PB11E06 (Ammeter Shunt) (ref. Figure SB M20-288-1).
 5. Remove existing hardware at tray assembly, and discard (ref. Figure SB M20-288-1)
 6. Locate and move jumper wire number PA12E02 and 20 AWG jumper wire [annotated "(REG SENSE BREAKER) JUMPER"] in figures SB M20-288-1 and SB M20-288-2 from bottom of circuit breaker #BR90 (ref. fig SB M20-288-2).
 7. Route wire PA10D02 (from RF Filter) on top of 800407 Tray Assembly to Alternator "Out" circuit breaker #BR90 (ref. Figure SB M20-288-2).
 8. Route wire #PB11D06 (from Firewall #3) through the .75 hole in 340306 bracket. Install nylon "caterpillar" grommet (Cut to fit), and secure with 3M 8001 adhesive (ref. Figure SB M20-288-2).
- NOTE:**
- In some installations, the above wires may need re-routing to gain the required length for connections. If harness PA10D02 has insufficient length to reach circuit breaker, use harness PA10D02 supplied with kit. Route PA10D02 wire harness to the specified location. Use tie wraps TYB23M as required.**
9. Install Circuit Breaker Panel back in reverse order as in #2 procedure above.
 10. Turn master switch - ON.
 11. Complete log book entry.
 12. Return aircraft to service.
- WARRANTY:** Mooney Airplane Company, Inc. will warrant labor (approximately 3 hours) when done in accordance with procedures of this Service Bulletin.
- REFERENCE DATA:** Applicable MAC Service and Maintenance Manuals (Electrical Panels & Components) Chapter 39

PARTS LIST: Mooney Airplane Company, Inc., Parts Kit M20-288-000

<u>Item</u>	<u>P/N</u>	<u>Description</u>	<u>Qty</u>
1.	MS21266-IN	Nylon grommet material (Cut to fit)	AR
2.	8001	3M 8001 super weather strip adhesive	AR
3.	PA10D02	Harness Assembly (40 inch length)	1
4.	TYB23M	Wrap, Tie	AR

FIGURES/TABLES:



Schematic Diagram:

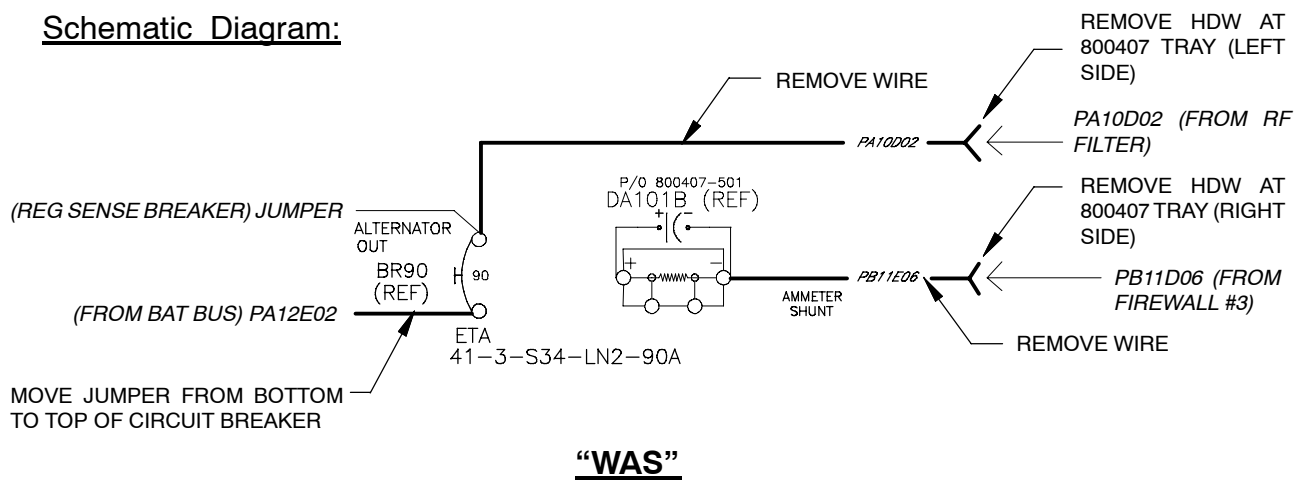
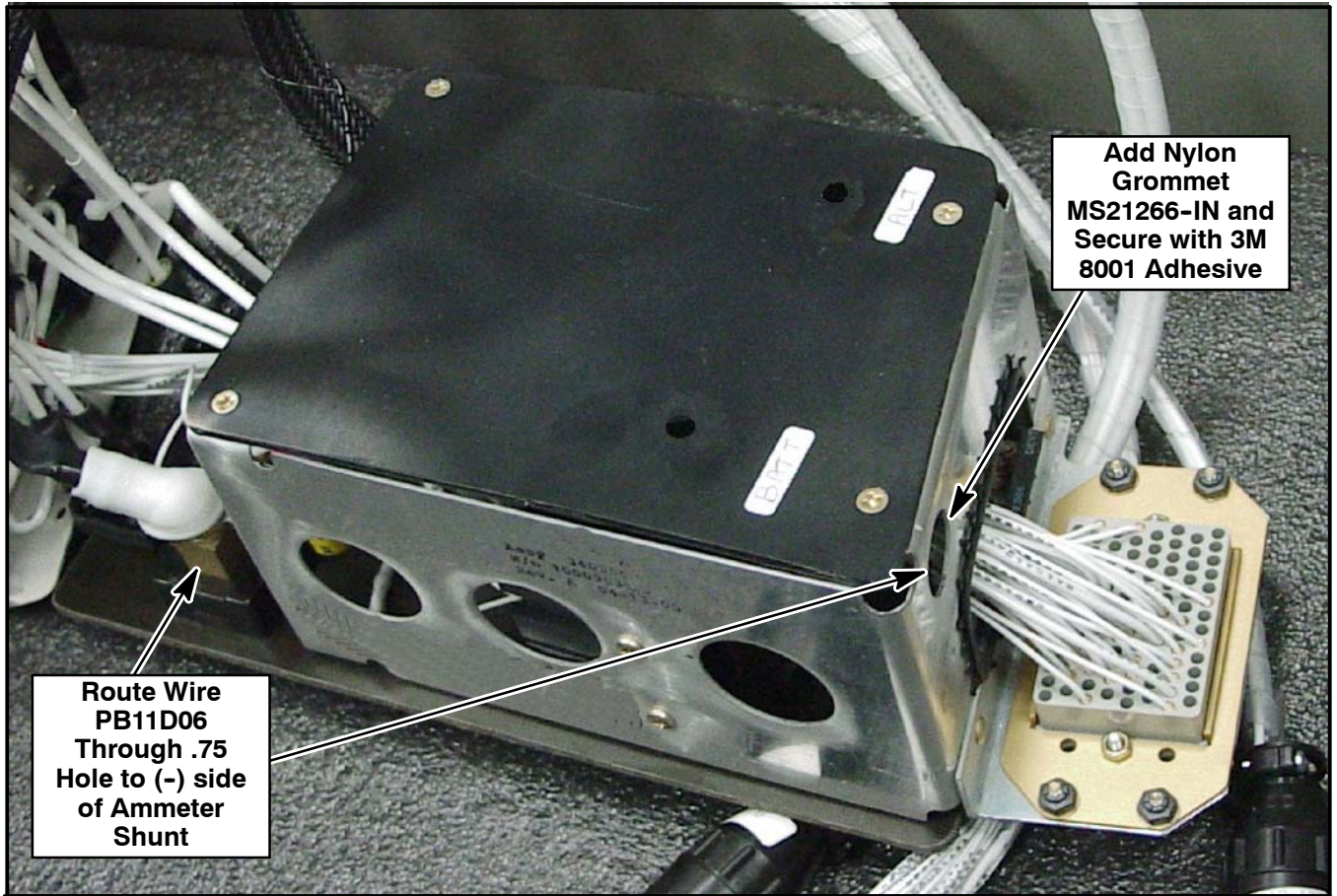


Figure SB M20-288-1



Schematic Diagram:

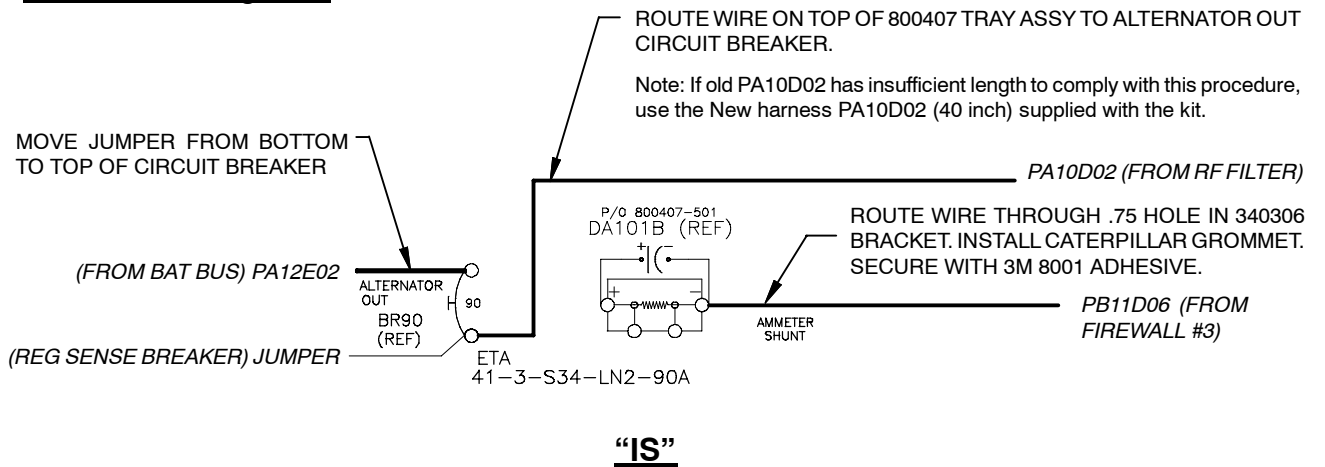


Figure SB M20-288-2