

TRUCK, HEAVY, MC3 – MACK – ALL TYPES

MACK, 'R' MODEL, MC3, CIRCUIT BREAKER FITMENT

MODIFICATION INSTRUCTION

This instruction is authorised for use by command of the Chief of Army. It provides direction, mandatory controls and procedures for the operation, maintenance and support of equipment. Personnel are to carry out any action required by this instruction in accordance with EMEI General A 001.

Introduction

1. This instruction details the fitment of a circuit breaker modification kit to the Mack 'R' series FOV, less the Truck Tanker Fuel (TTF) variant.
2. **Associated Publications.** Reference may be necessary to the latest issue of the following documents:
 - a. Technical Regulation of Army Materiel Manual (TRAMM);
 - b. TRAMM, Volume 3, Section 2, Chapter 2, Fleet Engineering Change Management Process;
 - c. MEMA, Volume 1, Chapter 9 – Army Unit Stores Accounts; and
 - d. MEMA, Volume 2, Chapter 20 – Accounting for Repair Parts.
3. **Authority.** Authority for the fitment of this modification kit is Engineering Change Order (ECO) No MHB 020/02 – Replacement of Mack R Model FOV, Glass Fuses with Manual Reset Circuit.

General

4. **Modification Application.** This modification is to be applied to all Mack 'R' series vehicles, less the TTF variant. It is to be applied to all stock on issue to units and depot and mobilisation reserve or in-service storage.
5. **Relationship to Other Modifications.** This modification supersedes EMEI Vehicle G 797-1, which installed the fuses into the vehicle electrical systems.
6. **Items Affected.** This modification alters the following assemblies:
 - a. Circuit Board Assy, and
 - b. Glass Fuse holders.
7. **Priority – Group 2.** All applicable equipment is to be modified:
 - a. when next in a workshop for Light Grade Repair, or
 - b. prior to issue from depot or pool stock.

NOTE

Where modification would delay priority issues of depot or pool stock, equipment may be issued unmodified providing the equipment record book is endorsed appropriately.

8. **Action Required.** Actions detailed in this instruction are to be performed by RAEME tradespeople, ECNs 229-2, 146-2 and 418-2 (or civilian equivalent), authorised to carry out Light Grade Repair.

NOTE

On receipt of this instruction, enter all relevant information other than date completed in the modification section of the GM 120 – Record Book for Service Equipment.

9. **Estimated Workhours.** For initial planning purposes only, it is estimated that this modification will take one workhour to perform.

10. **Stores Required.** The stores required are listed in Table 1. All stores are to be demanded through normal supply channels. Overseas units are to demand stores through supporting supply chains.

11. **Items to be Removed.** The items to be removed are listed in Table 2. All stores removed are to be processed in accordance with the MEMA Volume 1, Chapter 9, and MEMA Volume 2, Chapter 20.

Detail

12. **Disassembly.** Disassemble as follows:

- a. Remove fuse panel cover.
- b. Remove all existing fuses and fuse holders from the fuse board.

13. **Fitment of Circuit Breaker Kit.** The fitment of the circuit breaker kit is as follows:

- a. Fit a circuit breaker into the electrical recesses on the extreme left and right of the old fuse holder female connections.
- b. As per Figure 1, fit the aluminium hold-down bracket (supplied in the kit) over the circuit breakers, and mark the fuse board body ready for drilling.

CAUTION

TO ENSURE THAT THE DRILL BIT DOES NOT CUT THROUGH ELECTRICAL COMPONENTS UNDER THE FUSE BOARD, DEPTH GAUGE THE DRILL BIT TO 1 CM, UTILISING ELECTRICAL TAPE OR SIMILAR.

- c. Drill a 3 mm hole on each pre-positioned mark, in preparation for mounting circuit breakers and aluminium hold-down bracket.
- e. Position the circuit breakers into the electrical recesses, ensuring that the correct amperage circuit breaker is fitted to the corresponding recess, as marked on the fuse panel, eg 15 A to 15 A.
- f. Clamp the circuit breakers into position, utilising the aluminium hold-down bracket and anti-vibration rubber strip (supplied in the kit). The hold-down bracket is secured utilising the two self-tapping screws (supplied in the kit) in the pre-drilled holes in the fuse board.

g. Figure 2 shows the completed modification.

14. Post Modification Testing. Test all circuits to ensure that each circuit is closed. A circuit breaker is in open circuit when the trigger mechanism is in the extreme extended position. Refit the fuse panel cover on completion of testing.

15. Recording Action. On completion of the modification, the following action is to be taken IAW TRAMM, Volume 3, Section 2, Chapter 2, Annex D:

- a. Deface the number 28 on the equipment modification record plate.
- b. Complete the modification details in the GM 120 – Record Book for Service Equipment.
- c. Forward the modification completion details using form GM 119 – Advice of Change in Build State (TRAMM, Volume 3, Section 2, Chapter 3, Annex C) to:

Fleet Manager Heavy B Vehicles
MOB SPO, DMO
Victoria Barracks, St Kilda Rd
SOUTHBANK VIC 3006

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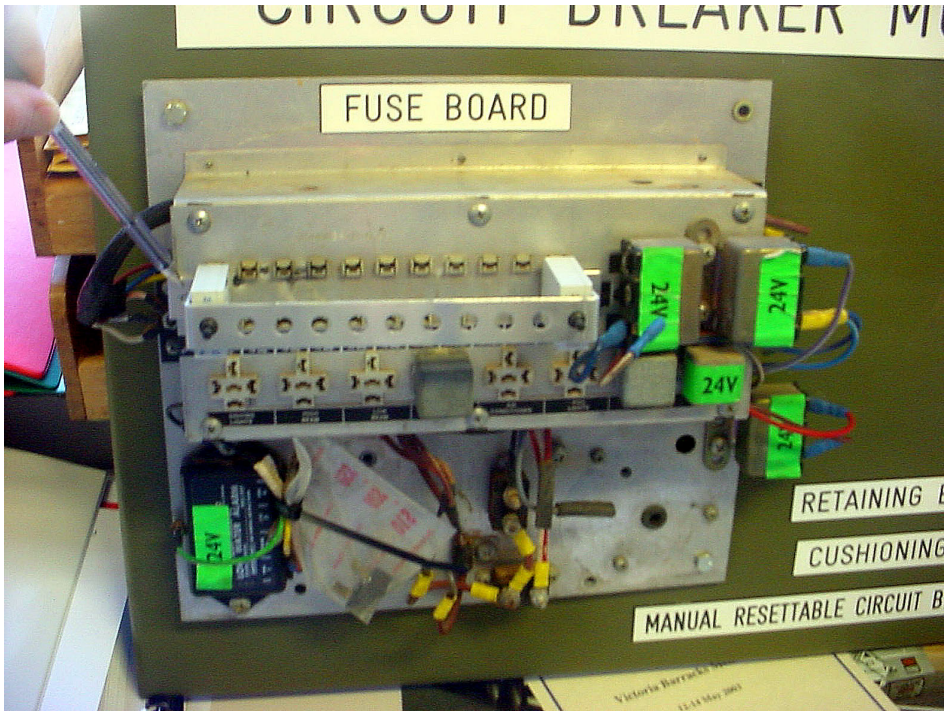


Figure 1 – Pre-marking Aluminium Hold-down Bracket Holes

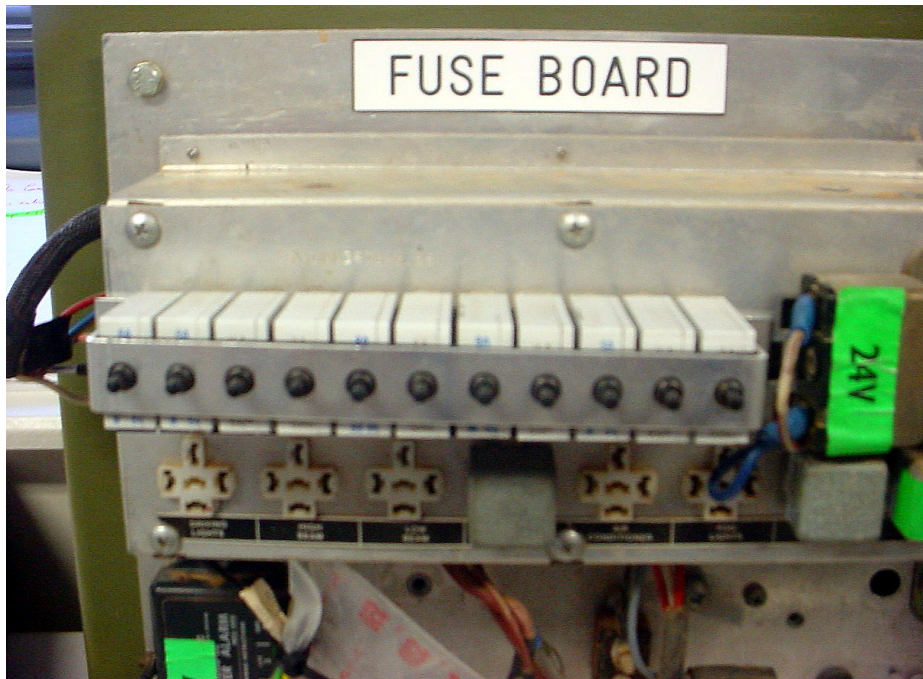


Figure 2 – Completed Circuit Breaker Modification

Table 1 – Stores Required

Item	NSN	Mfr Part No	Designation or Description	Unit of Issue	Qty per Kit	Qty per Equip
1	5925-66-149-1318	SAE-158-KF	Kit, Circuit Breaker Modification, Mack 'R' Model, MC3	ea	1	1
NOTE						
Ensure only one kit per vehicle is ordered, as there is only enough stocks of kits for current fleet numbers.						

Table 2 – Items to be Removed

Item	NSN	Mfr Part No	Designation or Description	Qty per Equip
1	5920-66-122-8790	303010	Fuse Cartridge, 10 A	4
2	5920-00-404-9283	303015	Fuse Cartridge, 15 A	3
3	5920-00-538-1068	303020	Fuse Cartridge, 15 A	3
4	NIC	85AX62	Fuse Holder	20

END

Distribution List: **VEH G 50.0 – Code 2** (Maint Level)
(Sponsor: MOB SPO, Hvy B Vehs)
(ECO No MHB 020/02)

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