

TRUCK, UTILITY, LIGHTWEIGHT, FFR, MC2 - LAND ROVER 110 AND TRUCK, UTILITY, LIGHTWEIGHT, FFR, WINCH, MC2 - LAND ROVER 110

RELOCATION OF RAVEN RADIO FRAME MOUNTING

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 relocation of the RAVEN radio frames, inboard by approximately 25 mm. This is due to the fitting of the Roll Over Protection System (ROPS) (see [EMEI Vehicle G 117-1](#)) and is to be actioned at the time of fitting ROPS to vehicles already fitted with RAVEN.
2. The other FFR vehicles to be fitted with RAVEN, are to be modified at the time of initial installation by either the Raven Commissioning Team or the owner unit of the equipment at the time.
3. This EMEI is essentially a reprint of Issue 1 with minor amendments to the description of items in Table 1 and the labelling of components in Figure 2 to clarify their identification.
4. **Associated Publications.** Reference may be necessary to the latest issue of the following documents:
 - a. Technical Regulation of Army Materiel Manual (TRAMM) (available from DTR-A website <http://intranet.defence.gov.au/armyweb/Sites/DTRA>);
 - b. TRAMM, Volume 3, Section 2, Chapter 2, Fleet Engineering Change Management Process;
 - c. Defence Supply Chain Manual (DSCM), Volume 4, Section 3 – Supply Management Processes, Stores Accounting General (DSCM website <http://dknln009.car.defence.gov.au/dscm/index.htm>); and
 - d. DSCM, Volume 6 – Manage Repairable Items.

GENERAL

5. **Modification Application.** This modification is to be applied to all subject vehicles.
6. **Items Affected.** This modification affects the body cargo area.
7. **Priority – Group 2.** All applicable equipment is to be modified:
 - a. when next in a workshop for Light, Medium or Heavy 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 technical maintenance organisations authorised to carry out Light, Medium or Heavy Grade Repairs.

NOTE

On receipt of this instruction, enter all relevant information (other than Date Completed) in the modifications section of the vehicle GM 120 – Record Book for Service Equipment.

9. Estimated Work Hours. For initial planning purposes only, it is estimated that this modification will take 1.5 work hours to perform.

10. Stores Required. The stores required are listed in Table 1. All stores are to be demanded through normal supply channels.

DETAIL

11. Modification of Mounting Position. The procedure is as follows:

- a. Position the packing tubes (Table 1, Item 2), as shown in Figure 1. Locate the radio frame clamping bolts (Table 1, Item 3), ensuring that the packing tubes are not fouling on other existing rivnuts that are in the capping.
- b. With the packing tubes firmly clamped in position, mark and centre punch the position of the holes (qty 3 each side) for the screws that will secure the packing tubes to the capping.
- c. Remove the packing tubes and drill the premarked areas with a 5.3 mm (13/64 inch) drill.
- d. As the packing tube securing tubes are self tapping, it is essential to have the thread started prior to attempting to fit the packing tubes. To do this, place the point of the self tapping screw (Table 1, Item 4) in the pre-drilled hole. Using a suitable hammer, lightly tap the head of the screw that will force the screw into the starting position.
- e. Using a socket and ratchet handle with applied force, start the first few threads of the self tapping screw. Once all threads are started, remove all screws and then secure the packing tubes, as previously described (shown in Figures 1 and 2).
- f. Fit the lower frame clamps to the existing threaded plates (fitted below the wheel arch boxes) using the appropriate components (Table 1, Items 5 to 12), as shown in Figure 2. Ensure that the split pin (Table 1, Item 12) is splayed to prevent the loss of the clamp assembly, once fitted.
- g. Position the RAVEN radio frame by fitting the upper mounting bolts, but do not fully tighten them at this stage.
- h. Fit the lower clamping plate pegs into the radio frame base holes and securely tighten the clamping bolts.
- i. Securely tighten the upper radio frame clamping bolts, ensuring that the flat and spring washers (Table 1, Items 9 and 11) are used.

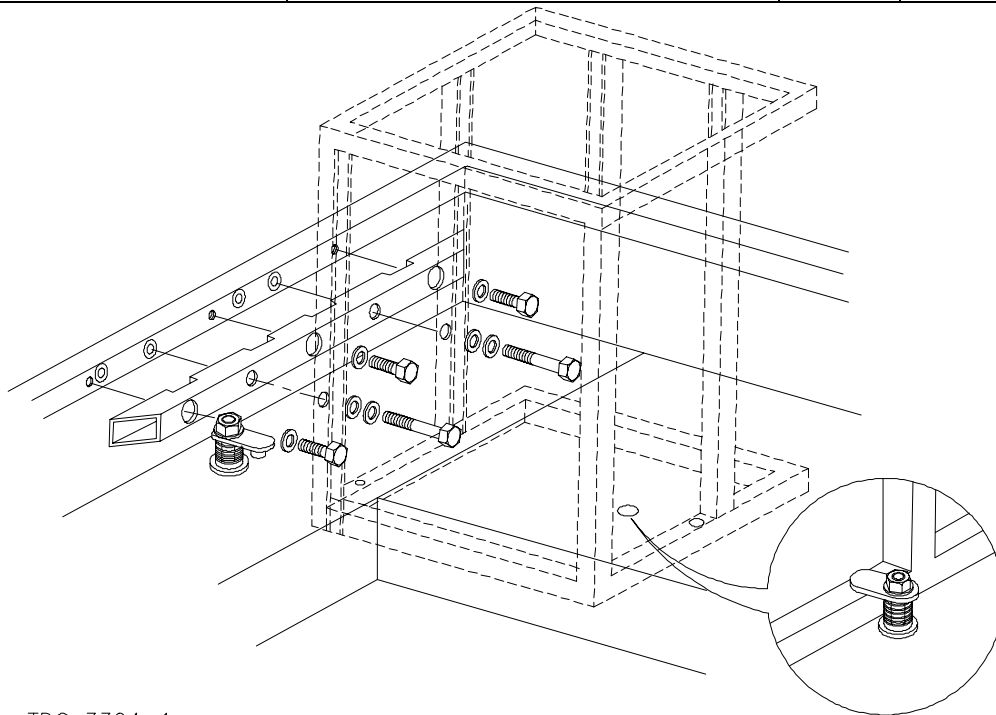
12. Recording Action. On completion of the modification, the following action is to be taken in accordance with TRAMM, Volume 3, Section 2, Chapter 2, Annex D:

- a. Deface the number 13 on the vehicle modification record plate.
- b. Complete the modification details in the vehicle GM -120 – Record Book for Service Equipment.

Table 1 Stores Required

Item	NSN	Designation or Description	Unit of Issue	Qty per Kit	Qty per Equip
1	2540-66-128-6015	Modification Kit, RAVEN Frame Mounting consisting of	Ea	NA	1
2	2540-66-128-6010	Packing Tube, 25 mm sq x 450 mm lg	Ea	2	NA
3	5306-99-122-5256	Screw, Cap, Hexagon Head	Ea	4	NA
4	5305-66-128-5341	Screw, Self Tapping	Ea	6	NA
5	5330-66-128-6011	Clamp, RAVEN Frame	Ea	4	NA
6	5305-66-128-6012	Screw, Machine Special, M8 x 90 mm lg	Ea	2	NA
7	5305-66-128-6013	Screw, Machine Special, M8 x 50 mm lg	Ea	2	NA
8	5360-66-128-6014	Spring, Helical, Compression	Ea	4	NA
9	5310-99-122-6475	Washer, Flat, 17 mm outside diameter	Ea	8	NA
10	5310-99-785-2434	Washer, Flat, 31.5 mm outside diameter	Ea	4	NA
11	5310-99-138-9227	Washer, Lock, Spring for 8 mm bolt	Ea	4	NA
12	5315-99-138-2203	Split Pin, 2 mm diameter x 12 mm long	Ea	4	NA
13	NA	Land Rover Installation Drawing HYG 5819	Ea	1	NA

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Figure 1 Schematic of Left-hand Side Installation

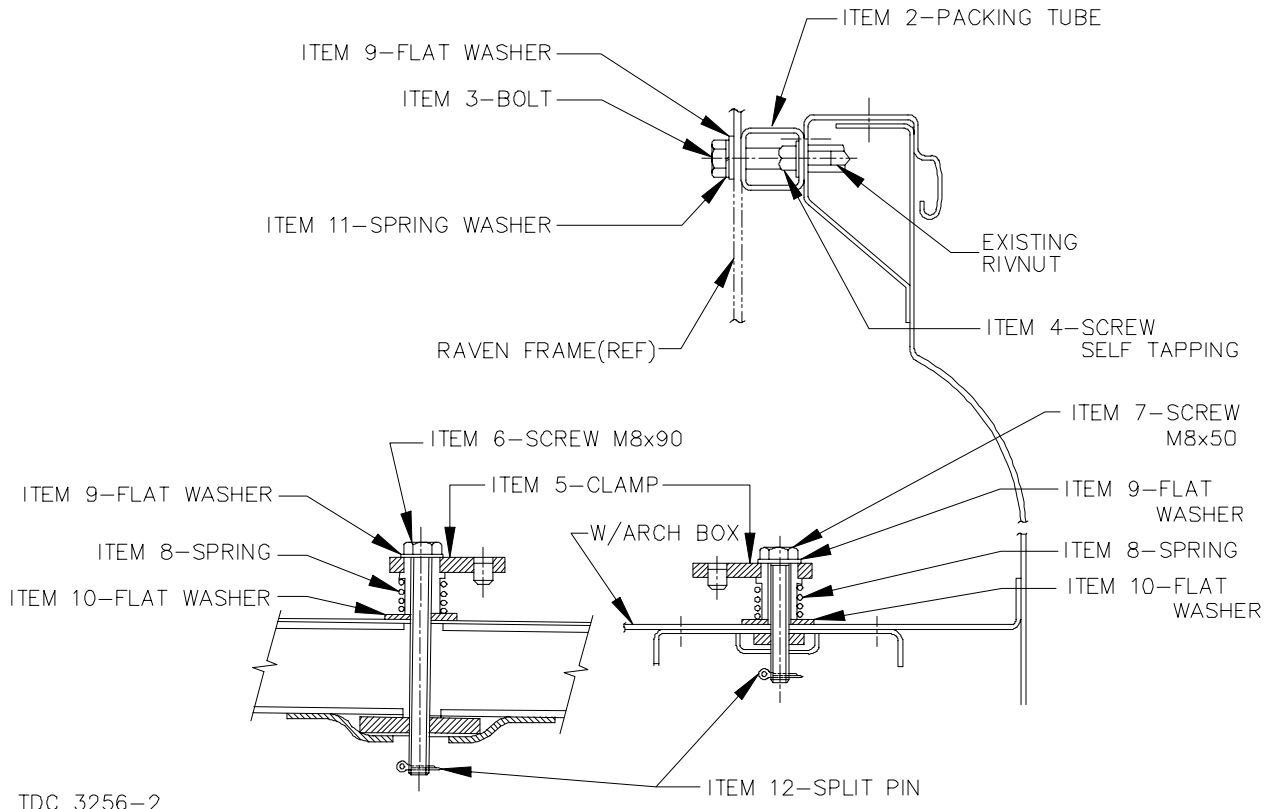


Figure 2 Packing Tube and Lower Clamp Installation (Right-hand Side Only)

END

Distribution List: VEH G 16.1 – Code 2 (Maint Level)
(Sponsor: LV SPO, LT B Vehicles)
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