

**TRUCK UTILITY LIGHTWEIGHT MC2 – LANDROVER SERIES 3 (ALL TYPES)  
CHASSIS TRANSMISSION CROSSMEMBER  
MODIFICATION INSTRUCTION**

Issue of this instruction is authorized by the CONMEA

### Introduction

1. This instruction details the measures to be taken to overcome the problem of cracking and deformation at the ends of the chassis transmission crossmember. The modification applies to all detachable transmission (ie No 4) crossmembers fitted to vehicles from body No 38460: chassis No 94320500 C onwards.
2. The first 400 vehicles delivered to Army had welded crossmembers, which are readily identified, and do not require modification in accordance with this instruction.
3. To meet operational requirements, some vehicles have already been modified in a manner similar to that detailed in this instruction. It is left to the engineering judgement of qualified RAEME personnel whether such vehicles require rework or further modification.

Note:

1. DSN and Designation used in this instruction were current at the date of issue. If twelve months or more have expired since issue, the DSN should be checked for supersession.

### General

4. **Estimated Manhours Required.** 3.0 (initial planning only).
5. **Priority.** Group 2.
6. **Modification to be Applied to.** All subject vehicles from body No 38460: chassis No 94320500C onwards.
7. **Items Affected.** Transmission (No 4) chassis crossmember and chassis side members.
8. **Action Required.** By RAEME workshops authorized to carry out field and base repairs in accordance with WKSP A 850.

**TABLE 1 – STORES REQUIRED** (to be demanded from 21 Sup Bn)

Item	DSN	Designation	Qty per Equip
1.	2510-66-113-7587	KIT, CROSSMEMBER, Modification AYG 5364, comprising:	1
2.		PLATE, angled, AYG 5366	2
3.		PLATE, heavy, AYG 5365	3
4.		BOLT, special, HZS 680	4
5.		NUT, special, NV 606041	4

### Detail

9. To carry out the modification, proceed as follows:
  - a. Disconnect the vehicle battery.
  - b. Disconnect wiring from the rear of the alternator.
  - c. On FFR vehicles, disconnect alternator and generator wiring and remove all communications equipment.
  - d. Raise the vehicle on a suitable hoist or jack it up and support with stands.
  - e. Drain the fuel tank and refit the drain plug.
  - f. Disconnect the fuel tank filler spout and breather hoses.
  - g. Remove the access cover plate under the driver's seat.
  - h. Disconnect the fuel pipe from the fuel tank gauge pick-up unit and the tank fuel gauge wire.
  - i. Remove the fuel tank from the vehicle.

Note:

1. Any auxiliary fuel tanks fitted under the passengers seat are also to be removed.
- j. Ensure that the vehicle and immediate surroundings are free of fuel residue/vapours before proceeding.
- k. Remove the four (4) nylock nuts from the transmission crossmember attachment bolts, to prevent damage during the welding operation.
- l. Using slave bolts and nuts instead of bolts, item 4 from Table 1, and nuts, item 5, join plates, items 2 and 3 as shown in Fig 1.

Note:

1. Slave bolts and nuts must be used during the welding operation to prevent damage to the lock nuts.

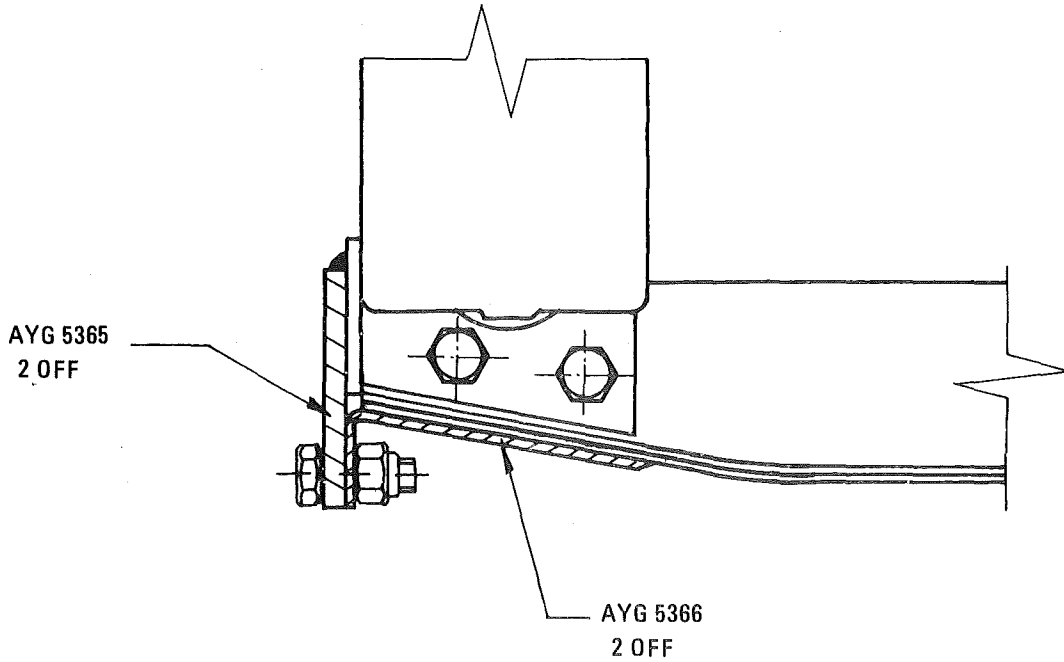


FIG 1 - METHOD OF FIXING PLATES

- m. Clean the crossmember and chassis plate surfaces where the modification plates are to be attached. This is necessary to ensure that plates mate correctly and permit good weld application.
- n. Clamp the plates in position, ensuring that they are centrally located in relation to both crossmember and chassis (see Figs 1, 2 and 3).

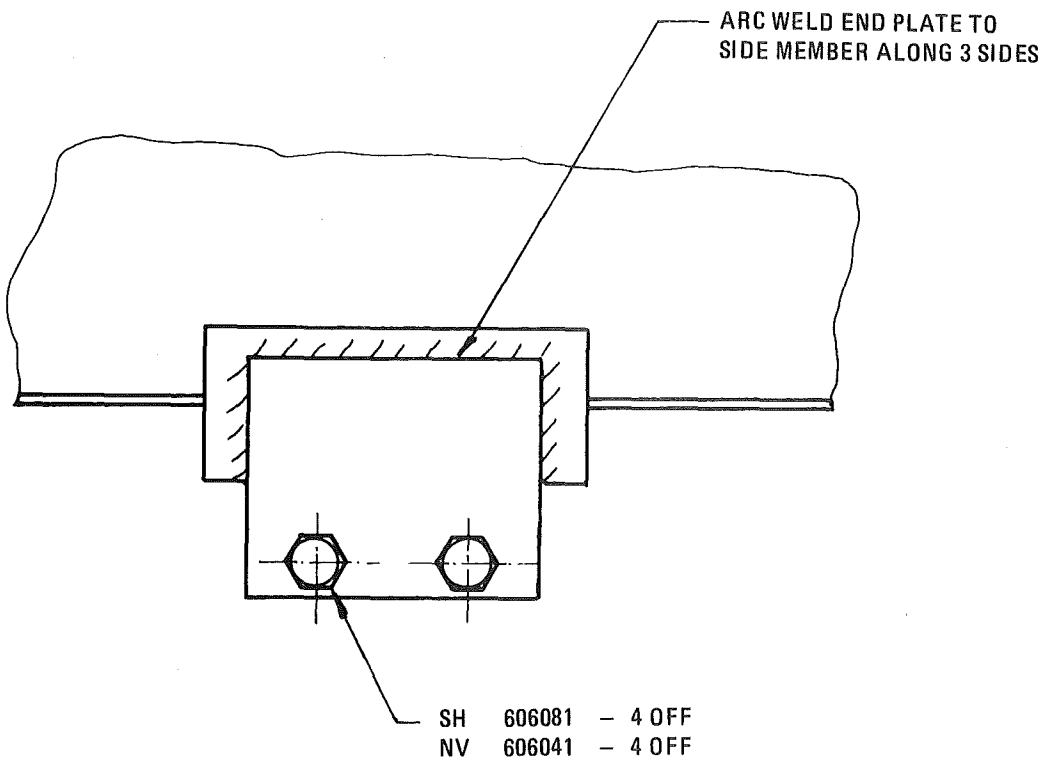
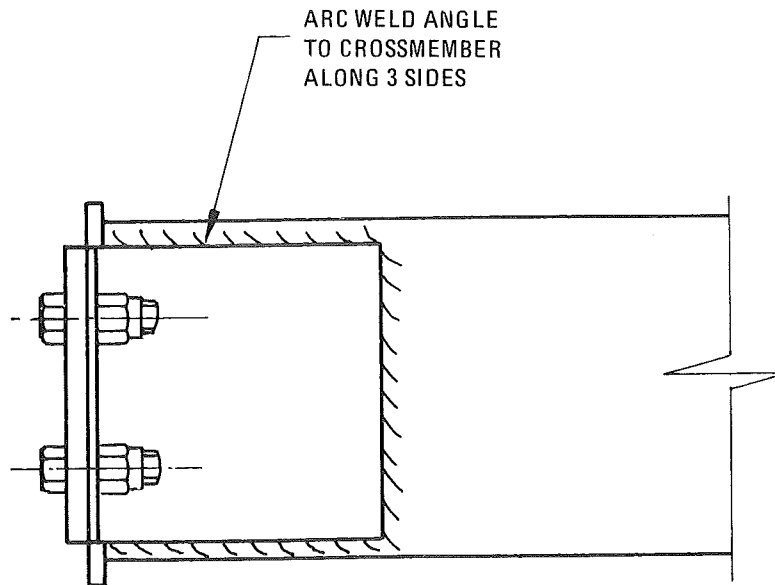


FIG 2 - METHOD OF WELDING TO CHASSIS PLATE



BOTH ENDS OF CROSSMEMBER  
TO BE MODIFIED THUS

### FIG 3 – METHOD OF WELDING TO CROSSMEMBER

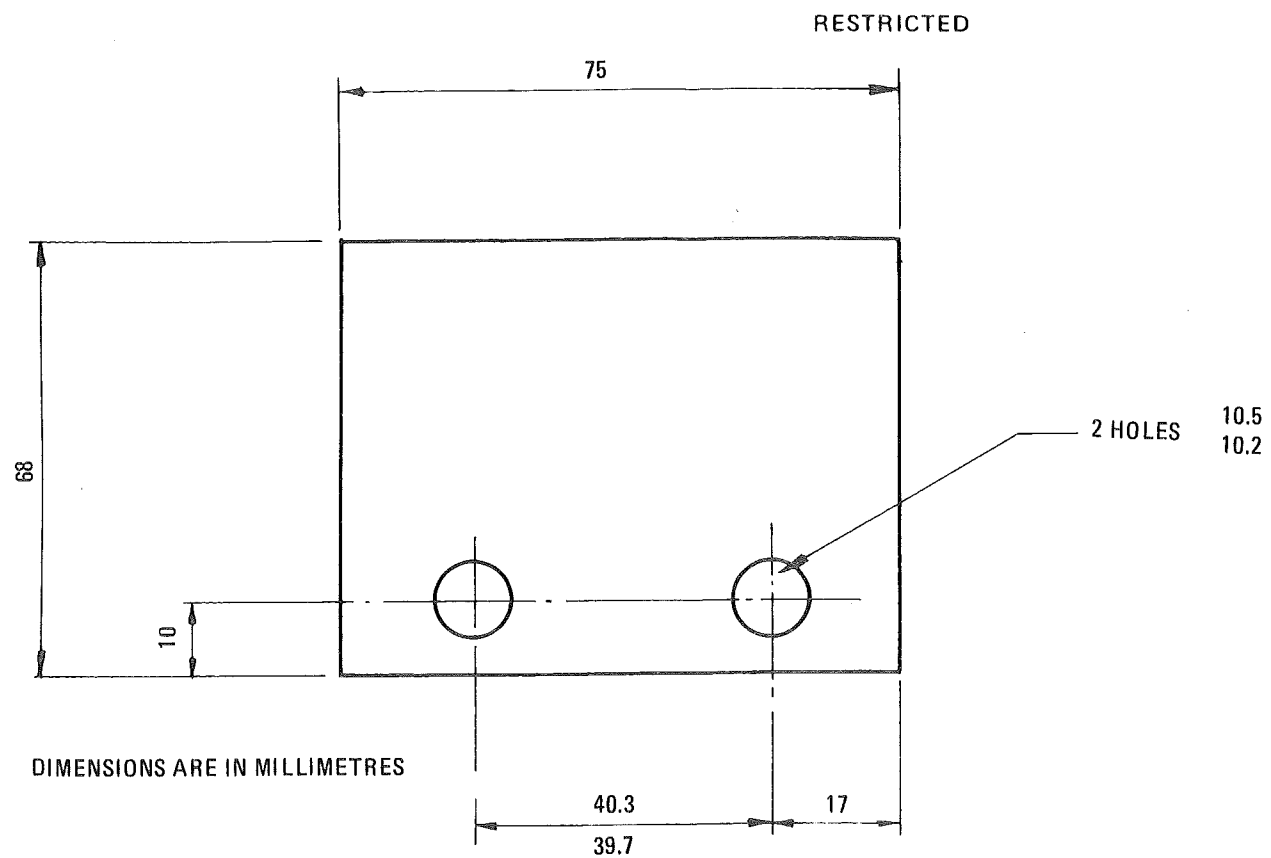
- o. Using a suitable welding technique and a 3.25 mm mild steel rod, affix the modification plates to the chassis plate and crossmember as shown in Figs 2 and 3.
- p. Clean the weld affected areas and paint in accordance with WKSP B 700.
- q. Replace and tighten the four(4) nylock nuts on the crossmember attachment bolts.
- q. Replace and tighten the four (4) nylock nuts on the crossmember attachment bolts.
- r. Remove the slave nuts and bolts from the modification plates and fit the four (4) bolts and nuts, items 4 and 5 from Table 1.
- s. Replace all components in reverse order to that given in sub-paragraphs 9 a to 9i.

#### Modification Record Plate

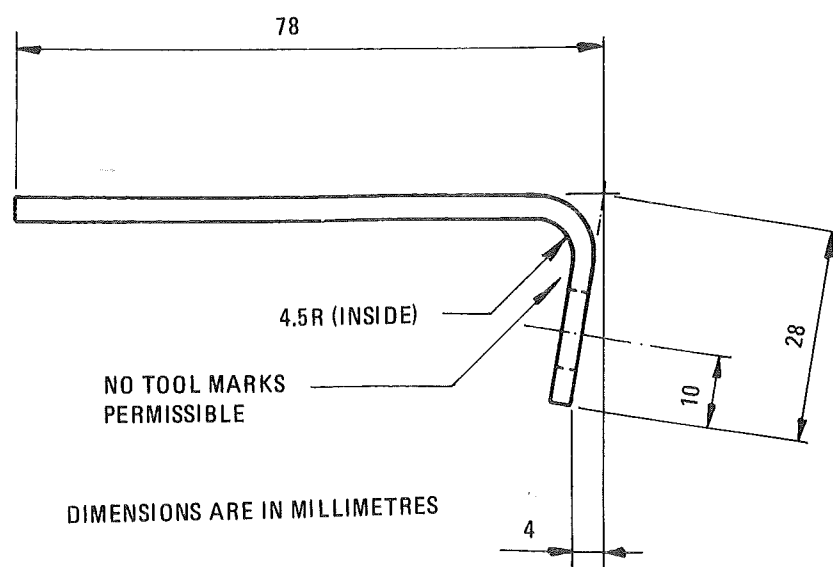
- 10. Deface the numeral 13 on the vehicle modification record plate.

#### Manufacturing Details

- 11. In the event that similar modifications are required in the future, modification plate manufacturing details are shown in Fig 4.



AYG 5365 N.S.D END PLATE  
MATERIAL - 6 THICK MILD STEEL



AYG 5366 NSD ANGLE  
MATERIAL 3.0 CRC

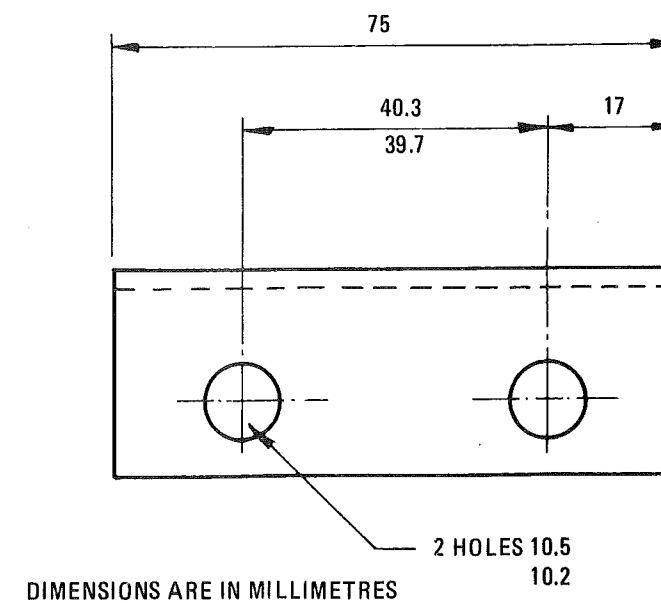


FIG 4 - REINFORCING PLATE MANUFACTURING DETAILS  
E N D