TRUCK, AMBULANCE, LIGHT, 4 LITTER, FFR, WINCH, MC2 - LAND ROVER 110 6X6

REMOVAL OF TOW COUPLING

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 process to remove the tow coupling from the ambulance variant.
2. The clearance hole for the tow coupling in the rear step has previously allowed road dust to enter the ambulance module, which has resulted in OH&S issues for both patients and operators.
3. This modification includes modification of the rear step, by adhering a cover plate to the tow coupling clearance hole to prevent dust entering the module after the pintle hook has been removed.
4. The ambulance variant has not generally been used to tow trailers. This is because connecting a trailer severely restricts access through the rear door and the vehicle cannot be used in its intended role.

Associated Publications.

5. Reference may be necessary to the latest issue of the following documents:
   a. **EMEI Vehicle G 203** – Truck, Cargo, Light and Truck, Cargo, Light, Winch, MC2 – Land Rover 110 6x6 – Light Grade Repair;
   b. **EMEI Vehicle G 223** – Truck, Ambulance, Light, 4 Litter, FFR, Winch, MC2 – Land Rover 110 6x6 – Light Grade Repair;
   c. **EMEI Vehicle G 224-1** – Truck, Ambulance, Light, 4 Litter, FFR, Winch, MC2 – Land Rover 110 6x6 – Medium and Heavy Grade Repair;
   e. TRAMM, Volume 3, Section 2, Chapter 2, Fleet Engineering Change Management Process;
   g. DSCM, Volume 6 – Manage Repairable Items.

6. **Authority.** DMO Engineering Change Order LTB 015/05 is the authority to carry out this modification.
7. **Standard Job Number.** MMM Standard Job Number 005699 has been raised for the implementation of this modification.

GENERAL

8. **Modification Application.** This modification is to be applied to Land Rover 6x6 ambulance variants.
9. **Items Affected.** This modification removes the tow coupling and alters the rear step assembly.
10. **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.

11. **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. Work is to be performed by the following qualified tradespeople:
   
a. ECN 229 Vehicle Mechanic;
b. RAAF Ground Support Equipment Fitter Class 1;
c. ECN 235 Metalsmith;
d. RAAF Ground Welder; or
e. Civilian equivalent.

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.

12. **Estimated Workhours.** For initial planning purposes only, it is estimated that this modification will take 1.25 workhours to perform.

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

14. **Items to be Removed.** The items to be removed are listed in Table 2. All stores removed are to be processed in accordance with DSCM, Volume 4, Section 3 – Supply Management Processes, Stores Accounting General.

DETAIL

15. **Removal of Tow Coupling.** Remove the tow coupling in accordance with EMEI Vehicle G 203 Frame – Group 16. Return the removed tow coupling to store, so that it can be retained for use on other 6x6 Land Rover variants.

16. **Modification of Rear Step.** The procedure is as follows:
   
a. Remove the seal from around the tow coupling clearance hole in the vertical section of the rear step assembly and discard.
b. Manufacture a cover plate 240 mm square from 3 mm thick Grade 5005 H34 aluminium sheet (refer Table 1, Item 1).
c. De-burr and place the cover plate centrally over the tow coupling clearance hole and mark the edges of the cover plate.
d. Using a clean scuffing device, such as a Scotchbrite pad, scuff up a 15 to 20 mm wide strip, immediately inside the marked area around the tow coupling clearance hole and the corresponding area on the cover plate.
e. Thoroughly clean the scuffed areas ensuring all grime and grease is removed.
f. Support the step assembly so that the tow coupling clearance hole is horizontal.
g. Following the manufacturer’s instructions, adhere the cover plate to the step with Sikaflex (Table 1, Item 3) ensuring the cover plate is centrally located over the clearance hole.

17. **Recording Action.** On completion of the modification, deface number 48 on the Vehicle Modification Record Plate and complete the modification details in the Vehicle GM 120 – Record Book for Service Equipment in accordance with TRAMM, Volume 3, Section 2, Chapter 2, Annex D.
### Table 1  Stores Required

<table>
<thead>
<tr>
<th>Item</th>
<th>NSN</th>
<th>Mfr Part No</th>
<th>Designation or Description</th>
<th>Unit of Issue</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>AS/NZS 1734/5005-0</td>
<td>Plate, Cover, Aluminium Grade 5005 H34 3 mm thick, 240 mm square.</td>
<td>Each</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>8030-66-136-3396</td>
<td>Sikaflex-221</td>
<td>Sikaflex, Grade 221, White</td>
<td>Each</td>
<td>1</td>
</tr>
</tbody>
</table>

### Table 2  Items to be Removed

<table>
<thead>
<tr>
<th>Item</th>
<th>NSN</th>
<th>Mfr Part No</th>
<th>Designation or Description</th>
<th>Qty per Equip</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2540-66-128-5861</td>
<td>HYG 3354</td>
<td>Pintle Assembly, Towing, Land Rover 110 Vehicles</td>
<td>1</td>
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<tr>
<td>2</td>
<td>5306-99-122-2792</td>
<td>BH 112141</td>
<td>Bolt, Machine, ISO Metric, Hx Hd, Steel, 12 mm by 70 mm lg</td>
<td>4</td>
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<tr>
<td>3</td>
<td>5310-99-139-9037</td>
<td>NV 112041</td>
<td>Nut, Self Locking, Hex, ISO Metric, 12 mm Thread</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>5310-99-122-6477</td>
<td>WA 112081</td>
<td>Washer, Flat, Rd, Steel, 12 mm bolt size</td>
<td>4</td>
</tr>
</tbody>
</table>