

TRUCK, AMBULANCE FFR, W/WINCH
STRENGTHENING OF ROOF POD ASSEMBLY SECURITY
MODIFICATION SUMMARY

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. The purpose of this instruction is to ensure that the Land Rover Ambulance Roof Pod Assembly is inspected and modified to ensure that the assembly does not separate from the vehicle while being operated.
2. In 2004, RODUM 20041869 was submitted due to a Roof Pod Assembly detaching from the vehicle during a front end collision. In 2012, RODUM 20120684 was submitted detailing that the fibreglass pod on the Roof Pod Assembly had detached while driving at 80km/hr. This EMEI brings together all information to ensure that all modes of failure have been addressed.
3. There are four parts to this modification, they are:
 - a. Inspection to ensure equipment is safe for use.
 - b. Installation of qty x 3 strengthening rails to the floor of the Roof Pod Assembly.
 - c. Fitment of Warning Decals for the lid of the Roof Pod Assembly.
 - d. Installation of the new frame mounting clamps that secures the frame to the gutter of the vehicle cabin.
4. **Associated Publications.** Reference may be necessary to the latest issue of the following documents:
 - a. RPS 02208, GP WP
 - b. Current version of the Technical Regulation of ADF Materiel Manual – Land (TRAMM-L) (available from DTR-A website <http://intranet.defence.gov.au/armyweb/Sites/DTRA>);
 - c. Electronic Supply Chain Manual (ESCM), Volume 4, Section 3 – Supply Management Processes, Stores Accounting General, ESCM website <http://escmv4web/8210.htm>; and
 - d. ESCM, Volume 6 – Manage Repairable Items, <http://escmv4web/2071.htm>.
5. **Authority.** CGSVSPO EC-003388 is the authority to carry out this modification.
6. **Modification Application.** This modification is to be applied to all Land Rover 110 Ambulance Roof Pod Assemblies.
7. **Items Affected.** This instruction details the inspection and modification of the Roof Pod Assembly fitted to the Land Rover 6x6 Ambulance.
8. **Priority – Group 1.** All applicable equipment is to be inspected and modified before further use.
9. **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 by ECN 229, ECN 146 or civilian equivalents.

NOTE

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

10. **Task Recording.** The conduct of this modification is to be recorded in a SDSS Work Order using MMM Standard Job Number 001473.
11. **Estimated Work hours.** For initial planning purposes only, it is estimated that this inspection and modification will take 4 work hours to perform.

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

13. Stores to be Discarded. The stores required to be discarded are listed in Table 2. All discarded stores are to be disposed of IAW current disposal instructions.

Table 1 Stores Required

Item	NSN	Mfr Part No	Designation or Description	Unit of Issue	Qty per Kit	Qty per Equip
1	2510-66-160-7190	KIT EC-003388	Kit, Roof Pod Assembly Strengthening (comprises items 2 to 6 and 8)	KT		1
2	2510-66-160-6870	973MM753-P01	Rail, Strengthening, L/R Roof Pod	EA	3	
3	5306-99-122-4910	SH110251	Bolt 10mm dia, length 25mm, pitch 1.5mm, grade 8.8	EA	6	
4	5305-99-122-5367	SH108251	Screw, machine 8mm dia, length 25mm, pitch 1.25mm, grade 8.8	EA	6	
5	5310-99-138-9228	-	Washer, lock, 10mm	EA	6	
6	5310-99-203-6405	-	Washer, lock, steel, 8mm	EA	6	
7	5340-66-160-6597	JYG0831	Pod, Clamp Assembly	EA	-	4
8	7690-66-160-6823	DE990140000	Decal, Warning, Roof Pod Lid	EA	2	-

Table 2 Stores To Be Discarded

Item	NSN	Mfr Part No	Designation or Description	Qty
1	5310-99-122-6476	WA110001	Washer, flat, extra large, 10mm I.D (RPS 02208, WP033)	6
2	5305-99-122-4909	SH110201	Screw, machine, metric, 10mm Dia, 1.50mm metric pitch, 20mm long (RPS 02208, WP035)	6
3	-	HYL9151	Gutter Mount Clamp (RPS 02208, WP027)	4

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DETAIL

Inspection of Roof Pod Assembly

WARNING

Care should be taken when working at heights, appropriate safety equipment should be utilised for this task or the Roof Pod Assembly should be removed from the cabin of the vehicle. Failure to do so may result in personal injury.

NOTE

Inspect the Roof Pod Assembly prior to work being conducted.

NOTE

If any of the following inspection criteria points are found to be deficient, the Roof Pod Assembly is to be repaired or replaced before the modification is conducted.

- 14.** Inspect the Roof Pod Assembly as follows:
- a.** Inspect the Roof Pod Assembly to ensure there are no unauthorised modifications, holes and damaged brackets that are affecting the assembly. Figure 1, depicts an example of an unauthorised modification and cracking in the edge of the lid of the Roof Pod Assembly.

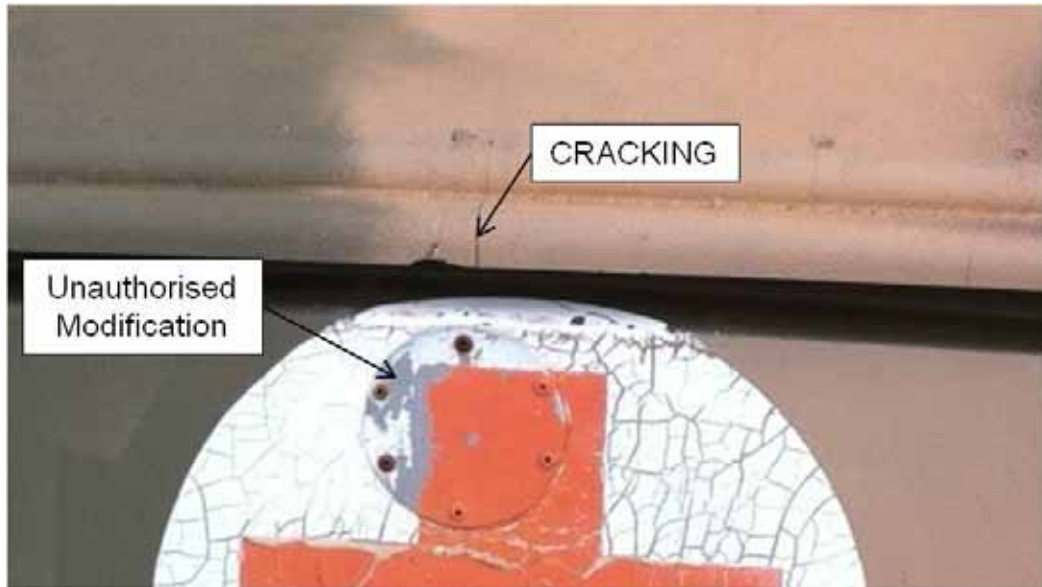


Figure 1 Unauthorised Modification

- b. Inspect the frame assembly that secures the Roof Pod Assembly to the cabin of the vehicle for:
- (1) security;
 - (2) damage or distortion;
 - (3) rust;
 - (4) straight gutter rails; and
 - (5) unauthorised modifications.
- c. Inspect the fibre glass Roof Pod Assembly and lid for cracking, tears, distortion and weakening of the fibre glass. Examples of this damage are depicted in Figure 2.

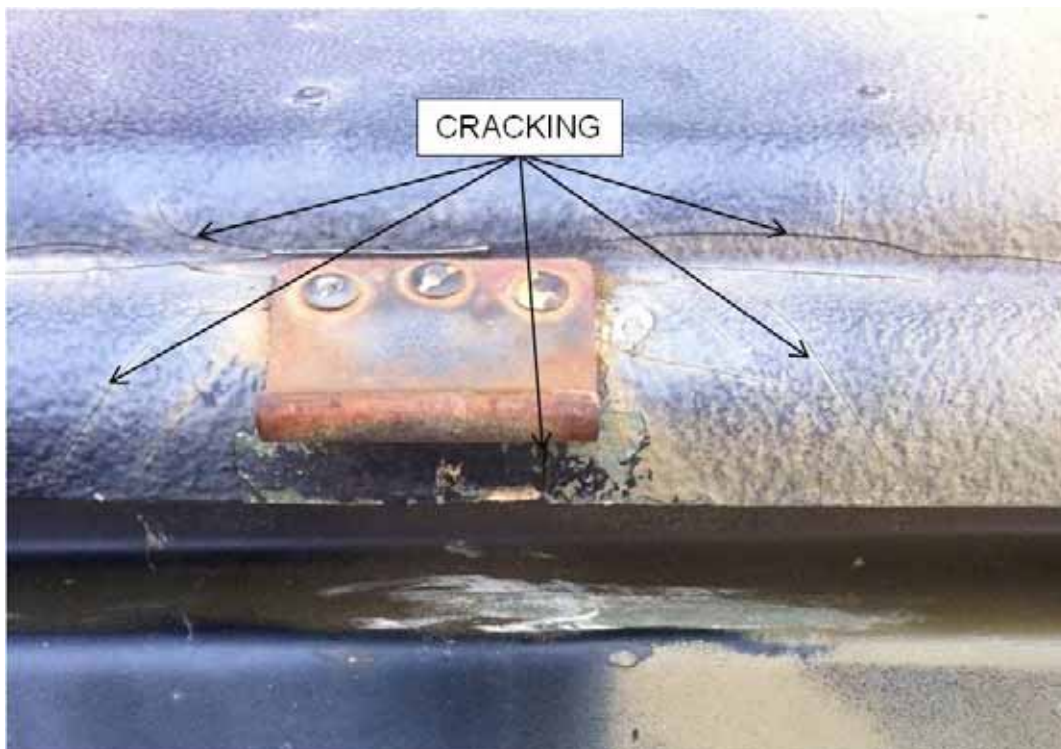


Figure 2 Cracking around the Pod Lid Catch

- d. Inspect the hinge assembly that secures the lid to the Roof Pod Assembly and the fibre glass around the hinge, ensuring that it is serviceable and that all fasteners are tight and secure.

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- e. Inspect the Locking Arm Assembly for the lid for the following:
 - (1) ensure that it functions correctly,
 - (2) mounting points are secure,
 - (3) fasteners are secure, and
 - (4) the fibre glass around the mounting brackets is not damaged.
- f. Inspect the two locking latch mechanisms and lid catches to ensure that it can be locked and that it has a strengthening plate behind the bracket (on the inside of the pod) to spread the load and sandwich the bracket to the fibre glass. Check to ensure that the rivets mounting the locking latch and catches are secure.
- g. Inspect the grab handles to ensure they are secure and the fibre glass around the mounting points is not damaged.
- h. Inspect the seal in the lid to ensure that it is intact and secure.

NOTE

Old style Gutter Mount Clamps, as detailed in Table 2, Item 3 and shown in Figure 3, should be discarded and the new Pod, Clamp Assembly, detailed in Table 1, Item 4 is to be fitted. Instructions on how to fit the new Pod, Clamp Assembly are detailed further on in this instruction. The new Pod, Clamp Assembly has two horizontal adjusting screws that provide a positive locking system onto the gutter of the vehicle cabin. Examples of incorrect and modified clamps are shown in Figure 4.

- i. Inspect the Roof Pod Assembly gutter mount clamp configuration.



Figure 3 Old Style Gutter Mount Clamp



Figure 4 Incorrect and Modified Gutter Mount Clamps

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Fitment of Rail Strengthening to Roof Pod Assembly

15. Ensure that the inspection of the Roof Pod Assembly, detailed in Para 14, has been conducted prior to fitment of Strengthening Rails.
16. Remove the six bolts that secure the Roof Pod Assembly to the frame and discard items 1 and 2 detailed in Table 2.
17. Position the three Strengthening Rails detailed in Table 1, Item 1 to the inside of the Roof Pod Assembly ensuring that all holes are aligned (Figure 5).
18. Fit the qty x 6 ea bolts and lock washers (Table 1, Items 2 &3) through the Strengthening Rails, Roof Pod Assembly floor and into the mounting frame.
19. Tighten bolts so that they are firm and the Strengthen Rail is pulled down to the fibreglass.

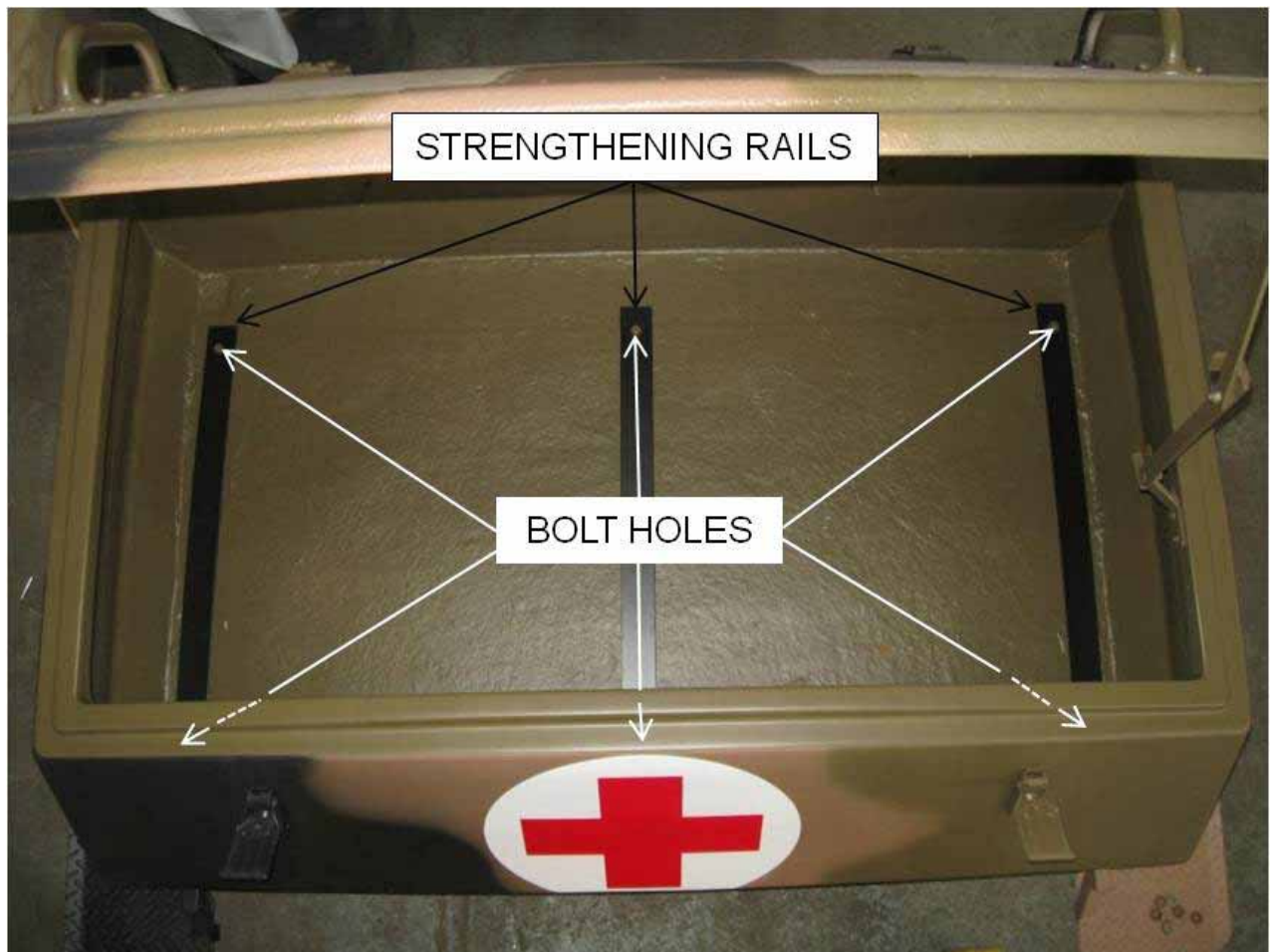


Figure 5 Position of Strengthening Rails

Warning Decal

NOTE

Ensure that the Roof Pod Assembly lid is clean and dry, free from dust and other chemicals that may affect the adhesive qualities of the decal.

20. Two Warning Decals (Figure 6), detailed in Table 1, Item 5 must be fitted to the lid of the Roof Pod Assembly. These decals are placed centrally between the grab handle and the outer edge of the pod lid, one on each side of the lid. Figure 7, details placement location of the Warning Decals.

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Figure 6 Warning Decal

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Figure 7 Warning Decal Locations on Roof Pod Lid

Pod, Clamp Assembly

NOTE

The Roof Pod Assembly must be inspected to ensure that the old style Gutter Mount Clamps are discarded (Table 2, Item 3) and the new style Pod, Clamp Assemblies are fitted (Table 1, Item 4).

21. To fit the new style Pod, Clamp Assemblies correctly proceed as follows (Figure 8):

NOTE

Mount the Roof Pod Assembly centrally in place on the cabin roof, ensuring that the old style Gutter Mount Clamps have been removed.

NOTE

The part numbers detailed below are for fitment purpose only and are not to be ordered individually. The Pod Clamp Assembly is only to be ordered as a complete assembly (NSN 5340-66-160-6597, MPN JYG0831).

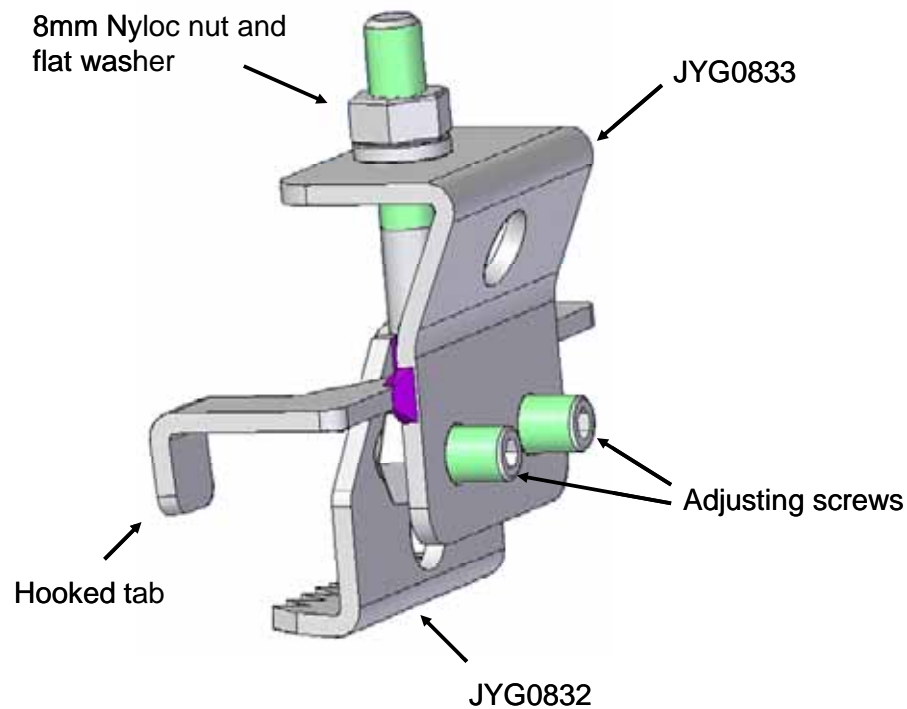


Figure 8 Pod Clamp Assembly – NSN 5340-66-160-6597 / MPN JYG0831

- a. Place item JYG0832 with the threaded post through the bracket of the Roof Pod Assembly, ensuring that the jagged teeth of the retention lip engage with the underside of the vehicle roof gutter.
- b. Position item JYG0833 over the threaded post of item JYG0832, ensuring the two hooked tabs engage on the other side of the rail of the Roof Pod Assembly (Figure 9).
- c. Fit the 8mm flat washer and 8mm Nyloc nut and tighten.

NOTE

Utilise a suitable thread locking product for the two adjusting screw threads.

- d. Tighten the two adjusting screws with an Allen Key, until the rail is against the gutter (Figure 10).
- e. Re-check and tighten the 8mm Nyloc nuts as required.



Figure 9 Pod Clamp Assembly Tabs Engaged



Figure 10 Pod Clamp Assembly Fitted

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POST MODIFICATION TEST

22. Check the security of the Roof Pod Assembly to the cabin of the vehicle, check for correct operation of the Roof Pod Assembly lid and securing of the fibreglass pod to frame.

RECORDING ACTION

23. On completion of the modification the following action is to be taken in accordance with the TRAMM-L:
- Deface number 23 on the Land Rover 6x6 modification record plate located on the driver's seat base.
 - Complete the modification details in Part 3 (Record of Modifications) of the vehicle's Record Book for Service Equipment – GM120.
 - Complete the MILIS MSE600 screen and update the 'Reference Codes' tab.
 - Forward the modification completion details using form GM119 – Advice of Change in Build State to:

National Fleet Manager
Light B Vehicles
CGSV SPO
Level 7, Defence Plaza
661 Bourke Street
Melbourne, Vic, 3000

END

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