### TRUCK TRANSPORTER, FLOATING BRIDGE, MC3, W/WINCH, MACK, LAUNCH AND RECOVERY VEHICLE (LRV)

#### **REPLACEMENT OF SOCKET, WIRE ROPE**

## **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 replacement of the wire rope socket (NSN 4030-66-134-9917, RPS 02216 Group SQF, Item 10) on the lift winch assembly of the LRV. The replacement of the old resin-fixed socket with the new wedge type socket will allow quick and easy refitting of the socket in the event of the wire rope breaking.

**2.** *Associated Publications.* Reference may be necessary to the latest issue of the following documents:

- **a.** TRAMM Volume 3, Section 2, Chapter 2 Fleet Engineering Change Management Process;
- EMEI Workshop A 851 Recording Modifications to Equipment – Use of Modification Record Plates and Documentary Requirements;
- **c.** Engineering Change Order (ECO) No EE 032/00;
- d. Engineering Change Order No EE 035/02;
- e. MEMA Volume 1, Chapter 9 Army Unit Stores Accounts; and
- **f.** MEMA Volume 2, Chapter 20 Accounting for Repair Parts.

**3.** *Authority.* ECO EE 032/00 and EE 035/02 are the authority to carry out this modification.

#### General

**4.** *Modification Application.* This modification is to be applied to all launch and recovery vehicles.

5. *Items Affected.* This modification alters the lift winch assembly.

6. *Priority – Group 1.* All applicable equipment is to be modified:

**a.** prior to further use, or

**b.** prior to operation of the lift winch assembly.

#### 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.

7. *Action Required.* Actions detailed in this instruction are to be performed by workshops authorised to carry out Light, Medium or Heavy Grades of Repair.

#### NOTE

On receipt of this instruction, enter all relevant information other than date completed in the modifications section of the Launch and Recovery Vehicle Record Book for Service Equipment (GM 120).

**8.** *Estimated Workhours.* For initial planning purposes only, it is estimated that this modification will take 1 workhour to perform.

**9.** *Stores Required.* The stores required are listed in Table 1. Rope sockets can be delivered directly by contacting the SO3 Engr Equip, ENG SPO, LSD, DMO, on tel (03) 9282 4194. Other stores are to be demanded through normal supply channels.

**10.** *Items to be Removed.* The existing rope socket is to be removed and is to be processed in accordance with MEMA Volume 1, Chapter 9, and MEMA Volume 2, Chapter 20.

#### Detail

**11.** *Replacement of Rope Socket.* Firstly, ensure the rope diameter is 16 mm before fitting. The procedure is as follows:

**a.** Reeve the rope through the socket, install the wedge and pull tight, as shown in Figure 1.



Figure 1 – Reeving Rope Through Socket

**b.** Leave approx 200 mm of the rope end protruding from the socket, as shown in Figure 2, so that slippage will be evident.



Figure 2 – Protrusion of Dead End

**c.** Apply a wire rope grip to the tail (only) of the rope below the socket to prevent dislodgment of the wedge (Figure 3).



DO NOT PLACE ROPE GRIPS ACROSS BOTH LIVE ROPE AND DEAD END AS IT WILL LEAD TO SEVERE DAMAGE TO WIRE ROPE.



Figure 3 – Wire Rope Grip to Tail

**12.** *Removing Rope*. Should replacement on shortening be required, the rope and wedge may be removed by dismantling the socket body using a 10 mm allen key (Figure 4). The socket bodies and wedge must be inspected for excessive wear at the point the wire rope strands are jammed into them. Re-assemble socket body by tightening the socket head cap screws to 76 N.m prior to re-reeving the wire rope.



CARE SHOULD BE TAKEN WHEN DISMANTLING THE SOCKET BODIES AS WIRE ROPE MAY SPRING OPEN.



#### Figure 4 – Removing Rope from Socket

**13.** *Recording Action.* On completion of the modification the following action is to be taken:

- **a.** Deface the number 15 on the LRV modification record plate located under the hydraulic controls on the LRV operator's platform.
- **b.** Complete the modification details in the LRV Record Book for Service Equipment (GM 120).
- **c.** Forward the modification completion details to:

SO3 Engr Equip ENG SPO, LSD, DMO Victoria Barracks, St Kilda Rd SOUTHBANK VIC 3006

#### ELECTRICAL AND MECHANICAL **ENGINEERING INSTRUCTIONS**

- d. The return should include the following information:
  - (1) Modification No: EMEI Vehicle G 787-15
- (2) Unit:
- (**3**) ARN:
- (4) Completion Date:

# Table 1 – Stores Required

Item	NSN	Mfr Part No	Designation or Description	Unit of Issue	Qty per Kit	Qty per Equip
1	4030-66-134-9917	LRV/SQF/10	Socket, Wire Rope	ea	1	1
2	4030-66-055-4131	0469.5709	Grip, Wire Rope	ea	1	1

END Distribution List: VEH G 59.0 - Code 2 (Maint Code) (Sponsor: ENG SPO, Eng Equip Sect) (Job No 200201942)