

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

REPLACEMENT OF PINS AND DECALS AND THE FITTING OF GREASE NIPPLES

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 pins in the lift frame with stainless steel pins and the fitting of grease nipples to the guide, centre rollers and frame lock of the Launch and Recovery Vehicle (LRV), NSN 2320-66-131-6653, as these items are currently binding. The instruction also details the replacement of the operator instruction plates on the operator platform with metal-backed decals, as the plates are becoming unreadable.

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

- a. EMEI Workshop A 850 – Modifications, Trial Modifications and Local Modifications to Equipment;
- b. EMEI Workshop A 851 – Recording Modifications to Equipment – Use of Modification Record Plates and Documentary Requirements;
- c. EMEI VEH G 783 – Truck, Transporter, Floating Bridge – Unit Repair;
- d. RPS 02216, Truck Transporter, Floating Bridge;
- e. Engineering Change Order (ECO) No EWE 5028; and
- f. EMEI General P section – Stores Procedure.

3. **Authority.** ECO No EWE 5028 is 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 following assemblies:

- a. Operator Platform,
- b. Front Lift Frame,
- c. Rear Lift Frame,

d. Guide Rollers,

e. Centre Rollers, and

f. Frame Lock.

6. **Priority – Group 2.** All applicable equipment is to be modified:

- a. when next in a workshop for Medium or Heavy 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.

7. **Action Required.** Actions detailed in this instruction are to be performed by RAEME workshops authorised to carry out Medium or Heavy repairs.

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 Manhours.** For initial planning purposes only, it is estimated that this modification will take 20 manhours to perform.

9. **Stores Required.** The stores required are listed in Table 1. The pins and decals can be obtained as modification kits by contacting the SO3 Engr Equip, MSLMD, AEMA, tel 03 9282 5513 or DNATS 8 32 5513. All other stores are to be demanded through normal supply channels.

10. **Items to be Removed.** The items to be removed are listed in Table 2. All stores removed are to be processed in accordance with EMEI General P section.

NOTE

The new pins and decals will retain the same NSNs and manufacturer's part no's as the items they are replacing.

Detail

11. **Replacement of Pins.** Remove the following pins from the lift frame and replace them with the new pins using anti-seize compound (refer to RPS 02216):

- a. 2 x SQB 019,
- b. 1 x SQD 010,
- c. 2 x SQG 024,
- d. 2 x SQG 035, and
- e. 2 x SQH 022.

12. **Modification of Guide Rollers.** The procedure is as follows:

- a. Disassemble roller from its mounting bracket. Inspect all components for damage and replace if required. Clean all axles and bushes.
- b. Drill and tap roller, as detailed in Figure 1.
- c. Fit grease nipple. Ensure that the top of the nipple does not protrude above the roller surface. Increase depth of bore hole where necessary.
- d. When reassembling the roller shim washers are to be used at the end of the axle. The purpose of this is to have a fixed axle when the bolt is tightened. Different thicknesses of washer may be required, the aim being to use the minimum thickness that fixes the axle but still allows free movement of the roller.

13. **Modification of Centre Rollers.** The procedure is as follows:

- a. Disassemble rollers from their mounting brackets. Inspect all components for damage and replace if required. Clean all axles and bushes.
- b. Drill and tap the roller, as detailed in Figure 2.
- c. Fit grease nipple, ensuring that the top of the nipple does not protrude above the roller surface. Increase the depth of the borehole where necessary. Also ensure that there is sufficient space below the nipple for grease to flow.
- d. Once nipple is fitted, plug weld the diagonal hole, as detailed in Figure 2.

- e. Reassemble the rollers into their brackets and the brackets onto the lift frame using anti-seize compound on the bolts.

NOTE

The above task would best be performed on a milling machine.

14. **Modification of Frame Lock.** The procedure is as follows:

- a. Disassemble the frame lock. Inspect all components for damage and replace if required.
- b. Drill the frame lock (SQD 018) and fit the grease nipple so that it faces to the rear of the vehicle, as shown in Figure 3. There is no requirement for the nipple to be counter-sunk.

15. Grease all rollers and the frame lock using XG 274 grease.

16. **Replacement of Instruction Plates.** Remove the following instruction plates from the operator platform and replace them with the new decals, riveting the decals in place (refer to RPS 02216):

- a. RAA 009,
- b. RAA 010,
- c. RAA 012,
- d. RAA 013, and
- e. RAA 014.

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

- a. Deface the number 5 on the modification record plate.
- b. Complete the modification details in the Launch and Recovery Vehicle Record Book for Service Equipment (GM 120).
- c. Forward the modification completion details to:

National Fleet Manager Engr Equip
MSLMD
Army Equipment Management Agency
Victoria Barracks, St Kilda Rd
SOUTHBANK VIC 3006

- d. The return should include the following information:

- (1) Modification No: VEHICLE G 787-5
- (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	9905-66-134-9736	4001 01 001B	Plate, Instruction, Lever Operation, RH, Pontoon Lock	ea	1	1
2	9905-66-134-9741	4001 01 001D	Plate, Instruction, Danger	ea	1	1
3	9905-66-134-9742	4001 01 001E	Plate, Instruction, Frame Lock	ea	1	1
4	9905-66-134-9740	4001 01 001C	Plate, Instruction, Warning	ea	1	1
5	9905-66-134-9561	4001 01 001A	Plate, Instruction, Lever Operation, LH, Winch	ea	1	1
6	5315-66-134-9942	4001 13 004	Pin, Grooved, Headless	ea	4	4
7	5315-66-128-8819	4001 15 002	Pin, Grooved, Headless	ea	1	1
8	5315-66-134-9941	4001 13 002	Pin, Grooved, Headless	ea	2	2
9	NIC	4001 13 002	Pin, Cylinder Clevis	ea	2	2
10	NIC	-	Nipple, Grease, Hydraulic, Screwed, Standard, Straight, Fine Coated, Steel 1/8 BSP	ea		9
11	NIC	-	Shim washers various thickness, 20 mm ID x 40 mm OD	ea		as required
12	NIC	-	Loctite Anti-seize Compound			Qty
13	NIC	-	Rivets			Qty
14	NIC	-	Grease, XG 274			Qty

Table 2 – Items to be Removed

Item	NSN	Mfr Part No	Designation or Description	Unit of Issue	Qty per Kit	Qty per Equip
1	9905-66-134-9736	4001 01 001B	Plate, Instruction, Lever Operation, RH, Pontoon Lock	ea	1	1
2	9905-66-134-9741	4001 01 001D	Plate, Instruction, Danger	ea	1	1
3	9905-66-134-9742	4001 01 001E	Plate, Instruction, Frame Lock	ea	1	1
4	9905-66-134-9740	4001 01 001C	Plate, Instruction, Warning	ea	1	1
5	9905-66-134-9561	4001 01 001A	Plate, Instruction, Lever Operation, LH, Winch	ea	1	1
6	5315-66-134-9942	4001 13 004	Pin, Grooved, Headless	ea	4	4
7	5315-66-128-8819	4001 15 002	Pin, Grooved, Headless	ea	1	1
8	5315-66-134-9941	4001 13 002	Pin, Grooved, Headless	ea	2	2
9	NIC	4001 13 002	Pin, Cylinder Clevis	ea	2	2

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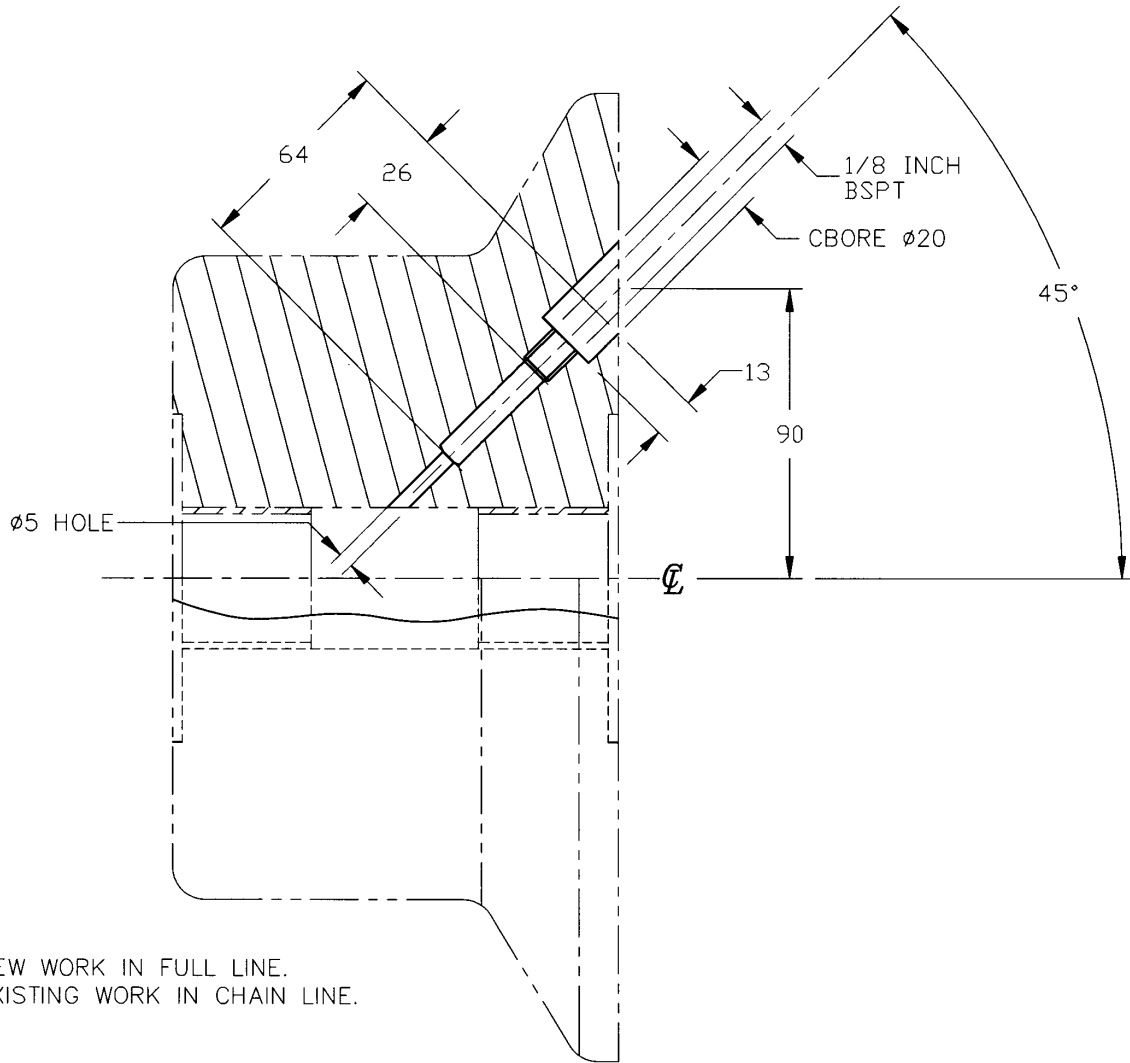


Figure 1 – Guide Roller Modification

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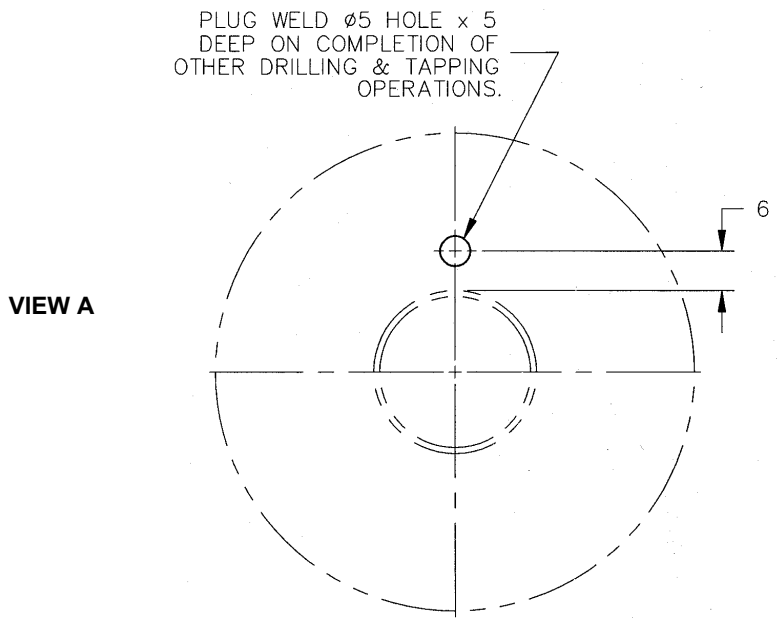
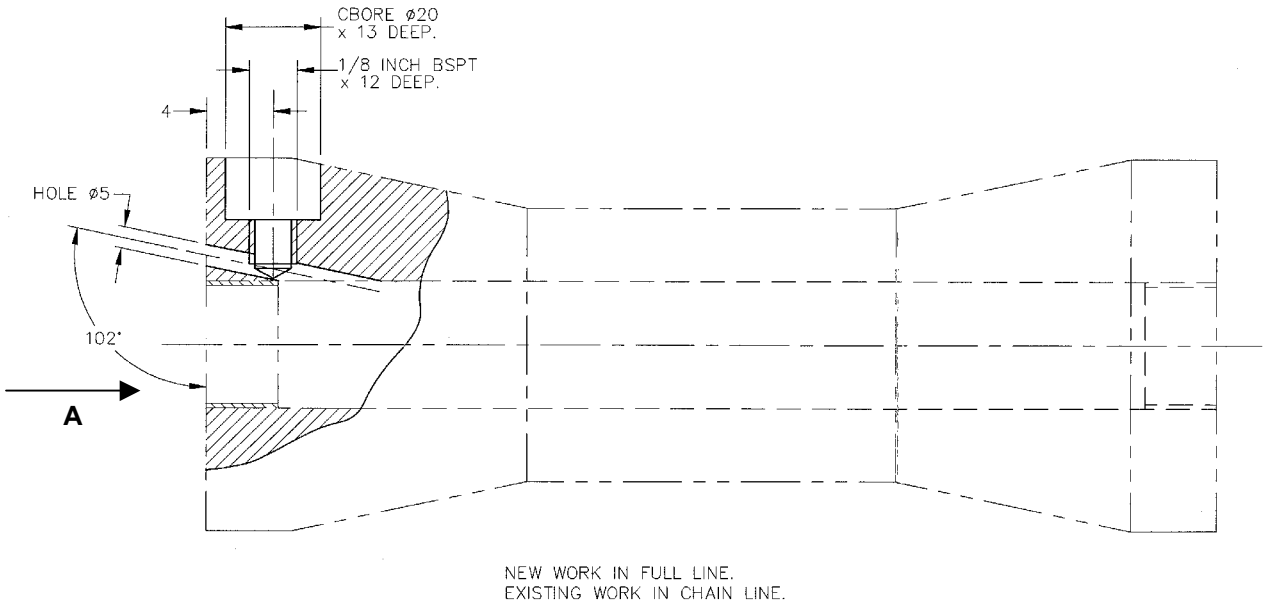


Figure 2 – Centre Roller Modification

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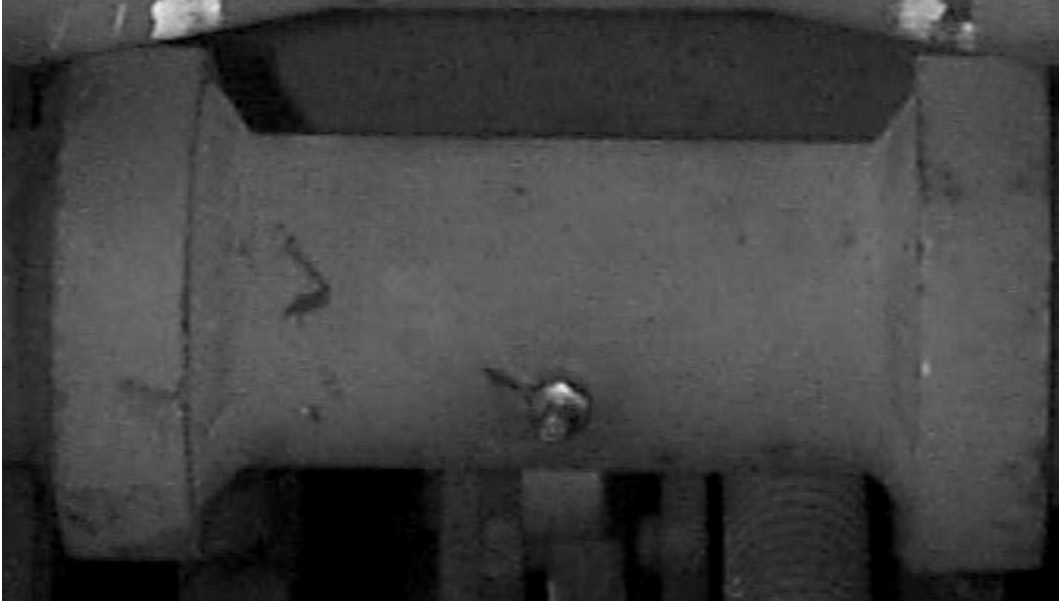


Figure 3 – Modification of Frame Lock

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List VEH G 59.0 – Code 3 (Job No 930025)