

TRUCK, TANK, WATER, HEAVY, MC3, MACK

TANK COMPARTMENT DELIVERY PIPES

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. The tank compartment delivery pipes are prone to cracking in the area near the manifolds and at the first bend on compartment three delivery pipe, where it comes out of the tank. The pipes are all rigid mounted and the cracks are caused from vibration as a result of tasking on rough unpaved roads.

2. This instruction details the procedure for modifying the tank compartment delivery pipes to prevent cracking as a result of vibration.

3. **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. AMMA LOG(C) 93/2976 of 31 Jul 98; and
- d. EMEI Vehicle G 754, Issue 1, Aug 85 – Truck, Tank, Water, Heavy, MC3, Mack – Field and Base Repair.

4. **Authority.** Ref C is the authority to carry out this modification.

General

5. **Modification Application.** This modification is to be applied to Truck, Tanker, Water, MC3, Mack.

6. **Items Affected.** This modification alters the following assemblies:

- a. compartment one delivery pipe,
- b. compartment two delivery pipe, and
- c. compartment three delivery pipe.

7. **Priority - Group 2.** All applicable equipment is to be modified:

- a. upon failure of the tank compartment delivery pipes,
- b. prior to issue from depot or pool stock, or
- c. by the 30 Jun 99.

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.

8. **Action Required.** Actions detailed in this instruction are to be performed by RAEME workshops or civilian contractors 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 vehicle Record Book for Service Equipment (GM 120).

9. **Estimated Manhours.** For initial planning purposes only, it is estimated that this modification will take 6 manhours to perform.

10. **Stores Required.** The stores required are listed in Table 1. All stores are to be demanded through normal supply channels and are available at DNSDC.

11. **Special Equipment Required.** A hand-held hacksaw with 18 TPI blade is required to complete all cuts.

Detail

12. Procedures for modification of the tank compartment delivery pipes are as follows:



ENSURE THAT WATER TANK IS DRAINED PRIOR TO COMMENCING MODIFICATION.

- a. Cut compartment one, two and three delivery pipes (using hand-held hacksaw with an 18 TPI blade), 200 mm from the delivery pipe to manifold flange, as shown in Figure 1.



COMPARTMENT THREE SUPPLY PIPE WILL NEED TO BE SUPPORTED AFTER IT IS CUT, AS VEHICLES MAY BE MISSING SUPPORT BRACKET.

- b. Remove 40 mm of pipe from the compartment pipes that attach to the manifold, at the point where the first cuts were made.
- c. Remove manifold by loosening the three water compartment delivery line 'U' bolts until it is possible to slide the manifold out of the manifold supporting bracket.
- d. Remove compartment three delivery pipe from the base of the tank.
- e. Remove compartment three delivery pipe support bracket (if fitted).
- f. Slide compartment three delivery pipe rearward as far as possible without removing it from the chassis of the vehicle.
- g. Cut compartment three delivery pipe (using hand-held hacksaw with an 18 TPI blade), 200 mm forward of the last bend, as shown in Figure 1.
- h. Remove 40 mm of pipe from rear piece of compartment three delivery pipe, which attaches to the base of the tank, at the point where the first cut was made.
- i. Clean burrs from both internal and external diameter of the pipes, at the position of all cuts.
- j. Slide compartment three delivery pipe forward to original location.
- k. Fit hoses (Item 4, Table 1) to compartment one, two and three delivery pipes at manifold end of pipes at the point where the pipes were cut.
- l. Place four clamps (Item 5, Table 1) over each piece of hose.
- m. Refit manifold by sliding pipes into 'U' bolts on manifold securing bracket and sliding flange end of delivery pipes into hose joints until they butt up to the

delivery compartment pipes that are affixed to the vehicle.

- n. Tension 'U' bolts.
- o. Fit hose (Item 4, Table 1) to compartment three delivery pipe at the position of the fourth cut.
- p. Slide four clamps (Item 5, Table 1) over hose and then butt rear piece of compartment three delivery pipe onto the remaining portion of compartment three delivery pipe and join loosely with hose.
- q. Replace compartment three delivery pipe flange to tank gasket.
- r. Resecure compartment three delivery pipe to tank.
- s. Tension all securing clamps (Item 5, Table 1) ensuring that there are two clamps at either end of each hose.

NOTE

Ensure that there is a 40 mm gap between the end of each pipe, under the flex hose to allow pipe to flex.

- t. Drill four 12 mm holes in the left hand subframe for compartment three support bracket (Figure 2).
- u. Mount support bracket (Item 6, 7 and 8, Table 1) from inside of subframe to compartment three delivery pipe (Figure 1).

13. Post Modification Testing. Fill water tank and inspect hoses for leaks.

14. Recording Action. On completion of the modification, the following action is to be taken:

- a. Deface the number 16 on the vehicle modification record plate.
- b. Complete the modification details in the vehicle Record Book for Service Equipment (GM 120).
- c. Forward the modification completion details to:

Fleet Manager
Army Materiel Management Agency
GPO Box 840J
SOUTHBANK VIC 3006

d. The return should include the following information:

- (1) Modification No: EMEI Vehicle G 757-6
- (2) Unit: eg 1 CSSB.
- (3) Vehicle ARN:
- (4) Completion Date:

Table 1 - Stores Required

Item	NSN	Mfr Part No	Supplier Part No	Designation or Description	Unit of Issue	Qty per Kit	Qty per Equip
1	NIC	NTC MOD/001	NTC MOD/001	Kit Tank Compartment Delivery Pipe comprising of:	ea		1
2	NIC	GSK AH 100	NTC GSK AH 100	Gasket, Cork, Alfonz HAR Foot Valve	ea		4
3	NIC	GSK 11	NTC GSK 11	Gasket, Cork, 4 in. TTMA	ea		3
4	NIC	DUNLOP D204 (100 mm)	NTC MON102250	Hose, Heavy Duty (length 250 mm)	m	4	4
5	NIC	HS-HC 104-112 S	NTC SC 113-21	Clamp, Hose, Steel, Adjustable, Zinc-Coated, Worm Drive W/Safety Collar, 4-1/8 in. to 4-1/8 in. size range	ea	16	16
6	NIC	BR-001	NTC BR-001	Bracket, Compartment Three Support	ea	1	1
7	5305 66 019 3782	AS 2465	BF5C 030Z	Bolt, UNF, Hexagon Head 2A, Steel, Hex, HD, Zinc-Plated, 3/8 in. x 1 1/4 in. long	ea	4	4
8	5310 00 959 1488	MS51922-21	NYFC	Nut, 3/8, Self-Locking, Hexagon, UNF, 2B, P Steel Type P, Zinc-Coated, 3/8 in. W/ Nylock Insert	ea	4	4
9	5310 00 044 6548	446548	WFCB	Washer, Flat, Steel, CAD or Zinc-Coated, 3/8 in. ID x 3/4 in. OD x 0.065 in. thick	ea	8	8

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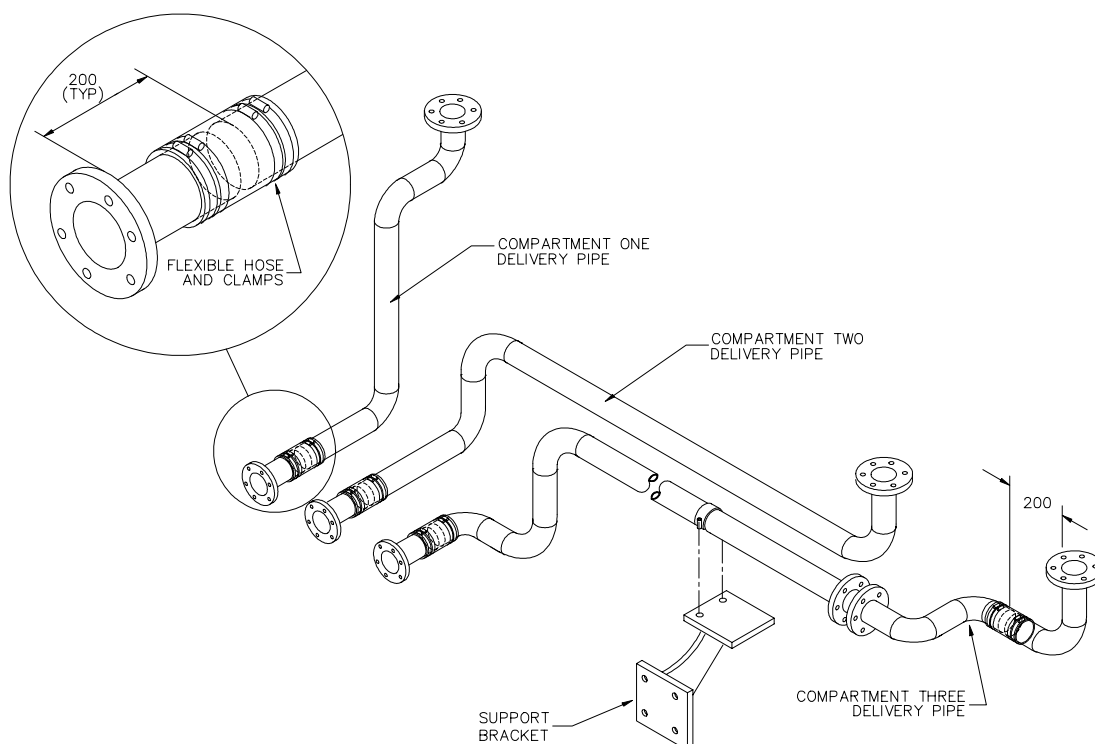


Figure 1 – Compartment Pipes Flex Pipe Locations

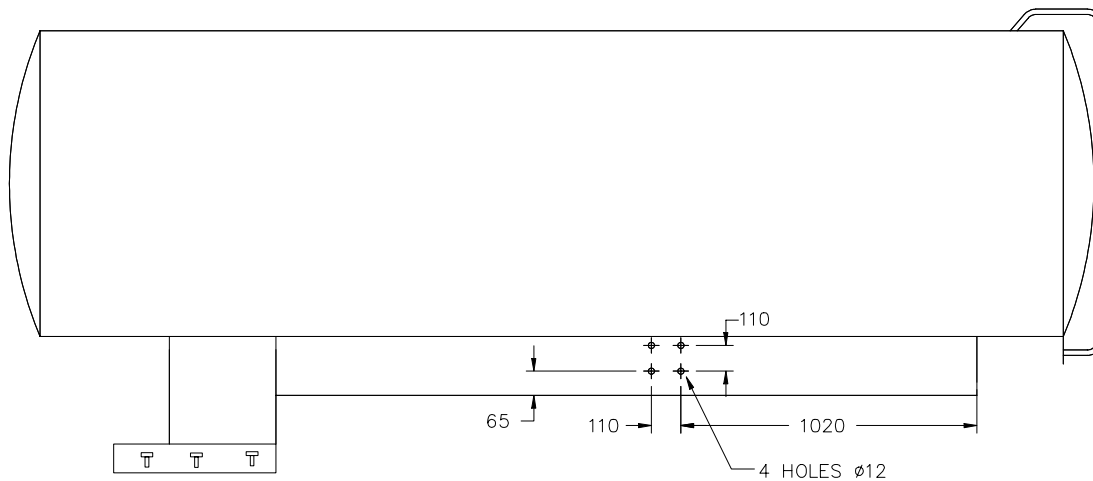


Figure 2 – Water Tanker Subframe Compartment 3 Support Bracket Location

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END

Distribution List: **VEH G 55.0 - Code 2** (Maint Level)
(Job No: 9601640)