

*NULL ACTION
M-PACIFIC
20/17/95*

*NULL ACTION
M-PACIFIC
20/17/95*

TRUCK, LIGHT, MC2, LAND ROVER 110 6X6 - ALL TYPES

FITTING OF FUEL BALANCE PIPE

MODIFICATION INSTRUCTION

This instruction is authorised for use by command of the Chief of the General Staff. 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 GENERAL A 001.

Introduction

1. This instruction details the fitting of a balance pipe between the fuel tanks. The purpose of the balance pipe is to avoid fuel expulsion from the breather. The balance pipe was fitted in production and only a limited number of early vehicles are affected.

Associated Publications

2. The latest issue of the following references should be read in conjunction with this instruction:

- a. EMEI Workshop A 850 - Modifications, Trial Modifications and Local Modifications to Equipment;
- b. EMEI Workshop A 851 - Modifications to Equipment - Use of Modification Record Plates and Documentary Requirements; and
- c. HQ Logistic Command Equipment Maintenance Program (EMP) 14/91.

3. **Authority.** Project Perentie TVA TL9083 and Rover Australia Engineering Change 2098.

General

4. **Modification Application.**

- a. Land Rover 110 6x6, Cargo variant - up to and including ARN 50571;
- b. Land Rover 110 6x6, Cargo with Winch - up to and including ARN 50583;

c. Land Rover 110 6x6, Ambulance - up to and including ARN 50640; and

d. Land Rover 110 6x6, Long Range Patrol Vehicle - ARN 50501 and 50502.

5. **Items Affected.** Fuel system.

6. **Priority - Group 2.** All applicable Land Rover 110 6x6 variants should be modified when the vehicle is next in the workshop for repair or service.

7. **Action Required.** Actions detailed in this instruction are to be performed by RAEME personnel in units or sub units authorised to carry out unit, field or base repairs.

8. **Estimated Manhours to Perform.** For initial planning purposes only, it is estimated that this modification will take 1.0 manhours to perform.

9. **Stores Required.** The stores required are listed in Table 1 and are to be demanded through normal supply channels as detailed in HQ Log Comd EMP 14/91. Indents for the parts kit (Item 1 from Table 1) are to show the ARN of vehicles that parts are required for. The parts kit is supplied on the basis of one kit per vehicle and is not to be ordered for stock or procured locally. The items listed in Table 2, form part of the kit shown in Table 1. The items are shown for identification purposes and are not to be ordered separately to complete the modification.

Table 1 - Stores Required to Complete the Modification

Item	NSN	Mfr Part No	Description	Unit of Issue	Qty per Equip
1	2590-66-128-8445	BYG2119	Kit, Fuel Balance Pipe, Comprising Items 1 go 11 in Table 2	Kit	1

UNCONTROLLED WHEN PRINTED

Table 2 - Stores Detailed in Parts Kit (not to be ordered to complete the modification)

Item	Mfr Part No	Description	Unit of Issue	Qty per Kit
1	HYG4422 ✓	Rubber Mount	ea	2
2	BYG2024 ✓	Breather Cross Tube	ea	1
3	SE106201	Screw, 6 mm dia	ea	2
4	WA106041	Washer, 6 mm dia	ea	2
5	NY106041	Nut, Nyloc	ea	2
6	HYG4406 ✓	Conduit Clip	ea	2
7	MYH5323 ✓	Hose 0.14 m	ea	2
8	MYH5323	Hose 0.1 m	ea	2
9	MYH5323	Hose 0.05 m	ea	2
10	CJ600124	Hose Clip	ea	12
11	MYH3537	Tee Piece Nylon	ea	2

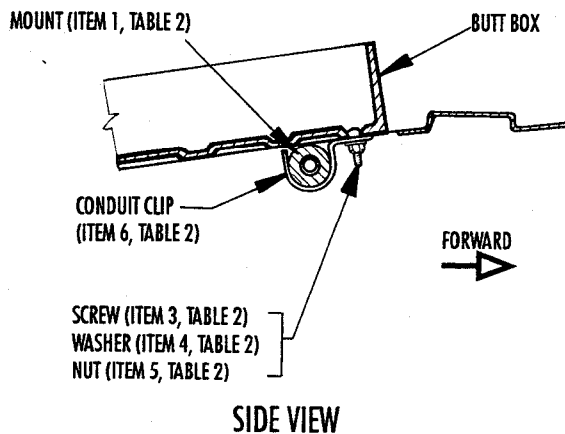
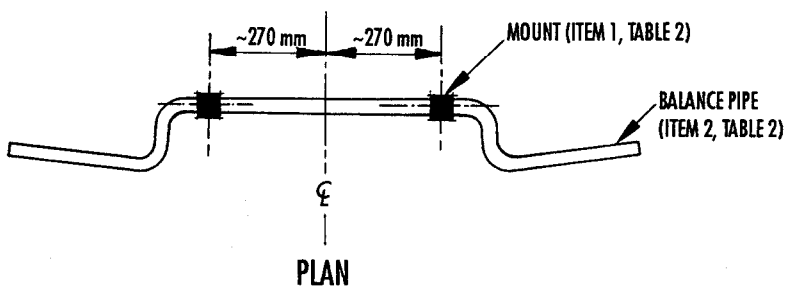
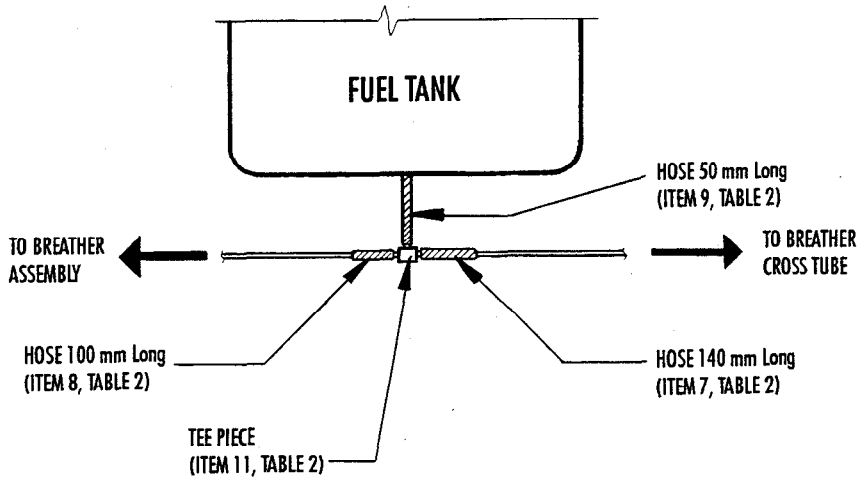


Figure 1 - Balance Tube Location

UNCONTROLLED WHEN PRINTED



NOTE: ALL HOSES TO BE HOSE CLAMPED

Figure 2 - Fuel Breather Tee Piece Location

Fitting of Fuel Balance Tube

10. Proceed as detailed in the following paragraphs:

- a. Remove both butt boxes and drill out only the front rivnut on each of the butt boxes using a 9 mm drill bit.
- b. Attach the rubber mounts (Item 1) onto the breather cross pipe (Item 2) at approximately 270 mm from the centre of the tube, as shown in Figure 1.
- c. Refit the butt boxes using the original screws in the rear holes.
- d. Mount the breather pipe underneath the rear cab floor using the new screws, nuts, washers and conduit clamp (Items 3, 4, 5 and 6) through the front butt box holes, as shown in Figure 1.
- e. Adjust the position of the balance pipe and mounts so that they are central about the body.
- f. Fit the hose sections (Items 7, 8 and 9) and hose clamps (Item 10) to the nylon Tee pieces (Item 11), as shown in Figure 2.
- g. Remove the existing fuel breather hose from the rear of both fuel tanks and breather filler neck assembly.

NOTE

Place a receptacle to catch any fuel overflow.

- h. Fit the clamps (Item 10) and Tee piece hoses to the fuel tank, filler breather assembly and breather cross pipe on both sides of the vehicle, as shown in Figure 2.
 - i. Check that all connections are tight.
11. **Post Modification Testing.** Fill both fuel tanks above the breather height and check for leaks.
12. **Recording Action.** On completion of the modification:
- a. deface the number 29 on the modification plate located on the driver's seat base;
 - b. enter the details of the modification in Part 3 of the GM 120, Record Book for Service Equipment, for the subject vehicles, including the vehicles modified in production; and
 - c. notify HQ Log Comd Fleet Manager Light B Vehicles that the modification has been completed quoting affected ARN and owner unit.

UNCONTROLLED WHEN PRINTED

END

List VEH G 20.0 - Code 1 (MEA 940025)