

TRUCK UTILITY LIGHTWEIGHT MC2 LANDROVER SERIES 3  
ALL TYPES  
REPLACEMENT OF EMISSION CONTROL AIR PUMP, WITH PULSE AIR SYSTEM  
MODIFICATION INSTRUCTION

Reference: A. AC in WM 29996/2, 29998/3, 29999/3

Introduction

1. Instances of failure have been reported of NSN 4310-66-106-1552 air pump fitted to the later issue Truck Utility Lightweight MC2 Landrover Series 3.
2. Leyland Australia has successfully completed trials of an alternative anti-pollution method, pulse air system, which complies with ADR 36.
3. This instruction authorizes the removal of the air pump and details the work required to modify the exhaust circuit, of the emission control, to a pulse air system.

Note:

1. NSN and Designation used in this instruction were current at the date of issue. If twelve months or more have expired since issue, the NSN should be checked for supersession.

General

4. Estimated Manhours to Perform. 3.0 hrs (initial planning only).
5. Priority. Group 2.
6. Modification to be Applied to. All Landrover Series 3 vehicles fitted with the emission control air pump, when the air pump fails.
7. Items Affected. Exhaust manifold front and rear adaptor assemblies and the air cleaner.
8. Action Required. By RAEME unit, field and base repair workshops in accordance with WKSP A 850.

TABLE 1 - STORES REQUIRED (To be demanded through normal supply channels)

Item	NSN	Designation	Qty per Equip
1.	5330-66-100-5851	GASKET SET, EXHAUST MANIFOLD, SET OF 3 GASKETS	2
2.	4720-66-046-6420	HOSE, RUBBER, ENGINE COOLANT, 3/4 IN ID, W/TWO PARALLEL WHITE STRIPES	30 IN

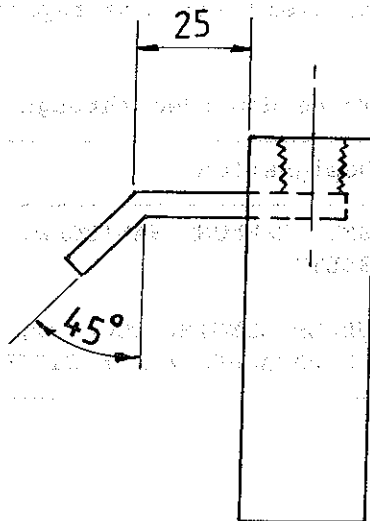
TABLE 2 - STORES REMOVED  
(To be disposed of in accordance with EMEI GEN P 101 Series)

Item	NSN/MFR No	Designation	Qty per Equip
1.	4310-66-106-1552	COMPRESSOR, RECIPROCATING, POWER DRIVEN, EMISSION CONTROL	1
2.	3030-66-117-3039	BELT, V, AIR PUMP DRIVE (CARGO)	1
3.	3030-66-107-1521	BELT, V, AIR PUMP DRIVE (FFR)	1
4.	ERC 2456	HOSE, AIR PUMP TO CHECK VALVE	1
5.	HYG 1137	BRACKET, AIR PUMP ADJUSTMENT	1

Detail

9. The work required to modify the emission control exhaust circuit to a pulse air system is as follows:

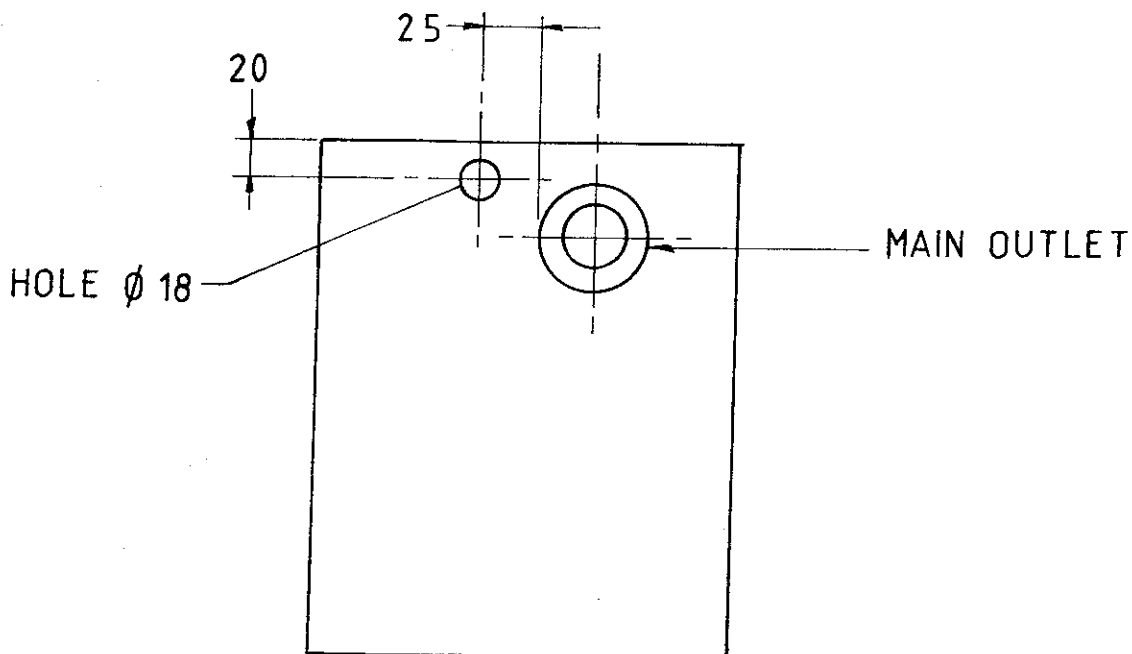
- a. Remove items 1 to 5. Retain the two hose clamps and the hose fitting from the rear end-plate of the air pump.
- b. Remove the exhaust manifold.
- c. Remove the front and rear exhaust manifold adaptor assemblies complete with air rail.
- d. Modify the air tubes in the adaptor assemblies as shown in Fig 1, using a 3 mm dia pin punch inserted about 20 mm into the base of the tube and gently heat the area to be bent. Ensure that the bent portion of the tube is central to the vertical plane.



DIMENSIONS ARE IN MILLIMETRES

FIG 1 - ADAPTOR ASSEMBLY WITH MODIFIED AIR TUBE

- e. Blow air into the check valve and check that each air tube is clear.
- f. If air is not exhausted at any of the tube outlets, remove the air rail and rectify the restriction using a 3 mm drill. Drill through the wall of the air tube via the threaded part in the exhaust manifold adaptor assembly.
- g. Ensure all swarf is removed and refit air rail to the exhaust manifold assemblies.
- h. Fit the exhaust manifold adaptor assemblies, with gaskets on both sides, item 1, Table 1, to the engine.
- i. Refit the exhaust manifold.
- j. Remove, dismantle and drill the air cleaner as shown in Fig 2, weld the retained hose fitting into the drilled hole and paint in accordance with WKSP B 700.



DIMENSIONS ARE IN MILLIMETRES

FIG 2 - AIR CLEANER WITH MODIFIED HOLE LOCATION

- k. Remove all swarf from the air cleaner.
  - l. Assemble and refit the air cleaner.
  - m. Connect the air cleaner to the check valve on the air rail using item 2, Table 1, and the two hose clamps retained during dismantling.
10. On completion of the modification deface the numeral 15 on the modification plate located in the cab.

E N D

