TRUCK MEDIUM MC2 (UNIMOG) ALL TYPES
CHANGE OF ENGINE SHUTDOWN METHOD

MODIFICATION INSTRUCTION

Issue of this instruction is authorised by the CONMEA

Introduction

1. This instruction details modification of the throttle control linkages to maintain positive fuel injection pump shut off (no fuel position) when the engine is stopped. This is to ensure compliance with ADR 17.

2. Once modified, the subject vehicles engine is stopped using the hand throttle control lever instead of the exhaust brake.

General

3. **Estimated Manhours to Perform.** 1.0 hr (initial planning only).

4. **Priority.** Group 2.
   
   a. All equipments on issue to units are to be modified when next in workshops for servicing/repairs.
   
   b. All equipments held by supply depots should normally be modified before issue. However, where this would delay priority issue, equipments may be released unmodified provided their record books are endorsed with details of the outstanding modification.

5. **Modification to be Applied to.** All subject trucks up to and including ARN 39010. All trucks produced after this have been modified in production.

6. **Item Affected.** Throttle linkage.

7. **Action Required.** By RAEME workshops authorised to carry out unit, field and base repairs, in accordance with WKSP A 850.

| TABLE 1 - STORES REQUIRED (To be requested from 21 Sup Bn quoting this EMEI and vehicle ARNs requiring mod stores) |
|---|---|---|---|
| Item | Depot Stock No | Designation | Qty per Equip |
| 1. | 2530-97-121-1656 | Stop (Mercedes-Benz 425 300 00 87) | 1 |
| 2. | 5310-97-121-1657 | Nut, 6 mm Self-Locking (Mercedes-Benz 913 004 00 60 02) | 1 |

| TABLE 2 - STORES REMOVED (To be disposed of in accordance with GEN P series) |
|---|---|---|
| Item | NSN | Designation | Qty per Equip |
| 1. | NIC | Stop (Mercedes-Benz 425 302 01 28) | 1 |
8. To carry out the modification, refer to Figures 1, 2 and 3 and proceed as follows:

a. Remove the hand throttle plastic stop, item 1, Table 2, from the engine bulk head in the cabin.

b. Modify the new plastic stop, item 1, Table 1, as shown in Fig 1. Fit the new stop to the bulkhead, ensuring it is positioned centrally on the mounting bolts. (See Note 1).

c. Remove the engine rear access cover from the cabin bulkhead.

d. Bend the left hand side lever as shown in Fig 2, until it clears the exhaust brake stop pin. (See Note 2).

e. Raise the hand throttle control lever fully upwards towards the dash board and loosen the hand throttle vertical control rod lock nut at the ball joint in the engine compartment.

f. Remove the rod from the ball joint and modify it as shown in Fig 3.

g. Refit the rod to the ball joint and lower lever arm (the arm with the nylon roller), do not secure the lock nut.

h. Position the hand throttle control lever in the idle run/slot of the plastic stop. Start the engine and screw the vertical control rod down until the collar on the rod depresses the lower lever arm to a position that will maintain the engine idle at 700-800 rpm. Stop the engine and secure the lock nut.

i. Fit the self-locking nut, item 2, Table 1, to the newly threaded portion of the vertical control rod.

j. Fully depress the accelerator pedal and ensure the fuel injection pump (F.I.P) is in the full fuel position. Adjust the self locking nut on the vertical control rod until it is positioned with a clearance approximately 2 mm to 4 mm below the lower lever arm. (See Note 3).

k. Replace the engine rear access cover.

Note:

1. The new plastic stop incorporates a steel insert in the 'slotted' area and can be identified by an additional two holes in the body where the metal insert is visible.

2. On some vehicles the lever may have been bent in production.

3. Ensure the full fuel position is attained without compressing the spring loaded plunger built into the F.I.P. control rod assembly.
9. **Functional Check.** On completion of the modification place the hand throttle control lever in the stop (top) position on the plastic stop. With no weight on the accelerator pedal the engine should not start. Place the hand throttle control lever in the idle/run position and the engine should start. Depress the exhaust brake button and the engine should not stop. (If the engine does stop, adjust as per Amendment No 5 to VEH G 603 paragraph 81e). Raise the hand throttle control lever to the stop position and the engine should stop.

10. **Modification Record Plate.** On completion of the modification deface the numeral 11 from the modification plate situated on the right hand side of the drivers seat base.

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**FIG 1 - HAND THROTTLE PLASTIC STOP**

**FIG 2 - LEFT HAND SIDE LEVER**
NEW WORK IN FULL LINE
EXISTING PARTS IN CHAIN LINE
DIMENSIONS ARE IN MILLIMETRES

FIG 3 - HAND THROTTLE VERTICAL CONTROL ROD