TRUCK, HEAVY, MC3 (MACK) - ALL TYPES
COOLANT CONDITIONER CHECK VALVE

MODIFICATION INSTRUCTION

Issue of this instruction is authorized by the CONMEEA

Introduction

1. The durability of the check valves fitted to the engine coolant conditioner is not satisfactory. This instruction details the removal of the inlet check valve and inspection of the outlet valve.

General

2. Estimated Manhours to Perform. 0.2.
4. Modification Application. All subject vehicles.
5. Items Affected. Coolant conditioner check valves.
6. Action Required. By RAEME units authorized to carry out unit, field and base repairs in accordance with WKSP A 850.

| TABLE 1 - STORES REQUIRED (To be demanded through normal supply channels) |
|-----------------------------|-----------------------------|-----------------------------|
| Item | MPN | Designation | Qty per Equip |
| 1. | 63Ax3695 | CONNECTOR | 1 |

| TABLE 2 - STORES REMOVED (To be disposed of in accordance with GEN P series) |
|-----------------------------|-----------------------------|-----------------------------|
| Item | NSN | Designation | Qty per Equip |
| 1. | NIC | CONNECTOR, BRASS, SPECIAL MPN 63Ax3683 | 1 |

Detail

7. To carry out the modification, proceed as follows:
   a. Disconnect the inlet line from the coolant conditioner and remove the inlet check valve item 1, Fig 1.
   b. Remove the coolant conditioner housing from the thermostat housing.
   c. Inspect the outlet check valve and 'O' ring for serviceability, replace if necessary.
   d. Refit the coolant conditioner housing.
   e. Replace the coolant conditioner inlet check valve with the connector item 2, Fig 1.
f. Top up the cooling system ensuring the correct amount of additive is used.

g. Run the engine and check for leaks.

**FIG 1 - COOLANT CONDITIONER COMPONENTS**

1. Inlet check valve
2. Connector
3. Outlet check valve
4. Coolant conditioner housing

**Changing Coolant Conditioner**

8. Changing the coolant conditioner without an inlet check valve in the line can be accomplished with no significant loss of coolant when performed in accordance with the following procedure:

a. Shut down the engine and leave the engine stop in the off position.

b. Release any pressure from the cooling system by turning the radiator cap anti-clockwise to the first stop.

c. After the pressure has completely dissipated, press the cap down and remove.

d. Change the coolant conditioner and replace the radiator cap.

**Modification Record Plate**

9. The modification is to be recorded as follows:

a. Truck Cargo/Truck Cargo Winch Heavy MC3 (Mack) deface the numeral 17.

b. Truck Cargo with Crane Heavy MC3 (Mack) deface the numeral 18.

c. Truck Ammunition/Truck Gun Tractor Heavy MC3 (Mack) deface the numeral 17.

d. Truck Dump/Truck Dump Winch Heavy MC3 (Mack) deface the numeral 13.
e. Truck Tanker Fuel/Truck Tanker Water Heavy MC3 (Mack) deface the numeral 12.

f. Truck Bitumen Distributor Heavy MC4 (Mack) deface the numeral 7.

g. Truck Transit Mixer Heavy MC3 (Mack) deface the numeral 9.

h. Truck Wrecker Heavy MC3 (Mack) deface the numeral 8.