

DIRECTORATE GENERAL OF BORDER ROADS
GENERAL MAINTENANCE INSTRUCTION NO.94
ON
FUEL INJECTION SYSTEM – LORRY 3 TON DODGE 109 T-165” WB MODEL
(P6/354 ENGINES) (NEW BUYS)

Summary

1. Fuel Injection Pump provided with P6/354 Engines of Lorry 3 TON DODGE 109 T-165” WB MODEL (P6/354 ENGINES) (NEW BUYS) is of single Plunge Distributor type of BOSCH design. The pump is a compact and tight unit. It is lubricated throughout by Diesel fuel itself and thus requires no separate lubrication. Besides, filters have been provided in the system itself to protect it against premature wear, tear and frequent blockade of fuel system. To ensure perfect and trouble-free operation of the Fuel Injection Pump, driver of the vehicle should carry out regular maintenance of Fuel and Oil filters of the engine.

Aim

2. To lay down instruction on the maintenance and timely change of oil and fuel filters in Lorry 3 TON DODGE 109 T-165” WB MODEL (P6/354 ENGINES) (NEW BUYS).

Details

3. The driver of the vehicle should ensure the following, so as to eliminate at least 90% of the potential engine trouble by proper care and maintenance of filtration equipment: -.

- (a) Filter the Diesel fuel before filling into tank and keep filtered Diesel ready in jerricanes so marked.

Method :-

- (i) Use 3 to 4 layers of MUSLING clothes to filter fuel.
- (ii) Use TECALEMIT Refueling and Filtering unit (Available from M/s TECALEMIT (HIND) LTD, E3/12, JHANDEWALA Extn, New Delhi-1 for Rs.425/- Appx). These can be brought as Category ‘B’ Stores by Chief Engineer (Project) under their own powers as suggested vide HQ DGBR Ir No.67721/DGBR/E4/T dated 10 Mar 72.
- (b) Carry out regular and periodic maintenance of filter as Appendix ‘A’ attached.
- (c) Under no circumstances, allow the Fuel Injection Pump to be opened in field by maintaining Field Workshop. (It is to be opened even in the Base Workshops (GREF), if specialized equipment to repair Distributor type of FIP is held).
- (d) The fuel tank cap sits properly and is not loose in the fuel tank neck. The fuel tank cap washer be replaced whenever it is worn out.
- (e) Clean fuel tank(s) once a year.

- END -

FILTER MAINTENANCE

Air Filter

1. Clean Oil-bath Air Cleaner and renew its oil under norms working condition after every 4,500 KMs.

Note :- Clean the Air Cleaner earlier under dusty operating conditions to prevent dusty air entering into cylinders causing premature wear of piston, rings and cylinder liners.

Fuel Filters

2. (a) **Glass bowl filter.** Clean glass bowl and filter every 9,000 KMs or 300 hours, whichever is earlier.

(b) **Gauge type filter of Fuel Lift Pump.** Clean this filters every 12,000 KMs.

(c) **Final Filters**

(i) **Felt type filter.** Clean every 9,000 KMs or 300 hours, and change element every 27,000 KMs/900 hrs.

(ii) **Paper type filter** Clean paper type filter except by compressed air. It is basically throwaway type. So, replace every 27,000 KMs/900 hours.

Lubricating Oil Filter

3. The main full flow filter should not be cleaned, but replaced every 9000 KMs/300 hours.

Oil Sump Strainer

4. Sump Strainer is of wire gauze type, and is hence clean every 18,000/600 hours.

* * * * *