

DIRECTORATE GENERAL BORDER ROADS  
GENERAL MAINTENANCE INSTRUCTION NO. 148

ON  
MAINTENANCE OF FUEL FILTER: DIESEL ENGINE WITH CV DP A  
FUEL INJECTION EQUIPMENT WITH AGGLOMERATOR ASSEMBLY  
OF  
HINDUSTAN BED FORD TRUCKS

**Summary**

1. This regulation lays down the instructions for proper maintenance of Fuel Filters ; Diesel Engine with CV DP I Fuel Injection Equipment with Agglomerator Assembly of Hindustan Bedford Trucks . this instruction is in addition to GMI 139 .

**Item effected**

2. Fuel Filter ; Diesel Engine with CV DP A Fuel Injection Equipment with Agglomerator Assembly .

**Action by Base Wksps / Fd Wksps (GREF)**

3. To adhere to the instruction given in detail as under ;

**Details**

4. Fuel injection pump .

To ensure protection of the CV DP a fuel injection pump, it is strongly recommended that the following checks are carried out regularly.

**Daily Pre-filter** - Inspect Glass bowl of this chassis strainer filter for presence of Dust and water. Drain out and clean the bowl and strainer if required. Refit the strainer and the bowl and air vent (bleed) the fuel system.

(Every week or every 1,500 kms or whenever pre-filter glass bowl over-flow with water).

**Agglomerator** - Loosen drain plug at the bottom of the Agglomerator bowl. Drain all sediment and water. Tighten drain plug and air vent (bleed) the fuel system.

**Every Six Months**

**Fuel Tank & suction Pipes Strainer** - Remove drain plug from the bottom and the suction pipe with its strainer from the top of the fuel tank. Clean the tank and the strainer using clean fuel and compressed air. Refit the drain plug. Before re-fitting the suction pipe, check its soldered joint with the elbow. Re-soldered if any crack or looseness of the joint is observed. Refit the suction pipe and carefully check the union joint with the elbow. Any leak at this joint will allow air to pass into fuel system.

**Every 6000 KM**

**Agglomerator Filter Element** - This element must be replaced periodically and the fuel system should be air in vent.

**Every 18000 KM** - ----- do-----

### Main filter Element

NB: If both the elements (Agglomerator and Main Filter) need to be replaced, do not change them at the same time. The Agglomerator fitment should be replaced first and the vehicle run for approximately 100 km. before the Main Filter is replaced.

### Important

The CAV- DPA pump being high precision equipment needs to be protected from misuse and slightest trace of dust and water. failure to do this will result in scored or even seized. Rotor and Head of Fuel injection pump. The repairs would be very costly.

To prevent such failure the following precautions should be observed besides maintenance of the Filters:

#### Always Air vent(block) the system

- After draining the pre filter / Agglomerator,
- After replacing filter element,
- After prolonged storage.

#### To prevent Head & Rotor Feizure

- Never crank Engine for more than 30 secs,
- Ensure there is plenty of fuel in the tank
- Ensure there is no air leak or obstruction in fuel lines.

#### Air Venting ( ) the fuel system

- Clean extensions of vent screw and plugs and surrounding areas,
- Ensure that the feed pump rocker arm is away from the cam to afford full priming,
- Slacken vent plugs on Agglomerator and Main Filter and vent screw on CAV-DPA pump,
- Hand pump feed pump priming lever till clean Fuel free from air issues from the vent plugs and screw
- continue priming and successively tighten vent plugs screw of the Agglomerator, Main Filter and the CAV- DPA pumps,
- clean the surrounding area and then slacken any two high pressures pipe unions at injector end. Pump throttle  $\frac{3}{4}$  open and crank engine by self starter for 20 seconds when clean fuel should flow out through the pipe ends. Tighten the unions carefully.
- Start the engine and run at idling speed,
- With the engine, dry the areas around all air vent plugs, screw and pipe connections. Check for leaks and higher vents and connections as necessary.

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