

DIRECTORATE GENERAL BORDER ROADS
GENERAL MAINTENANCE INSTRUCTION NO.139
ON
MAINTENANCE OF FUEL FILTER : DIESEL ENGINE WITH CAV-
DPA FUEL INJECTION EQUIPMENT WITH/AGGLOMERATOR
ASSEMBLY
OF
HINDUSTAN BEDFORD TRUCKS

Summary

1. This regulation lays down the instructions for proper maintenance of fuel filters: Diesel Engine with CAV-DPA fuel Injection Equipment with Agglomerator Assembly of Hindustan Bedford Trucks.

Item effected

2. Fuel filter : Diesel Engine with CAV-DPA Fuel Injector Equipment with Agglomerator Assembly.

Action by all Base Wksps/Field Wksps (GREF)

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

Details

4. **Fuel Injection Pump :**

This CAV-DPA Pump is flange mounted on a carrier attached to the compressor. The pump is a high precision equipment and needs to be protected from slightest trace of dirt and water, Failure to do this will result in scored or even seized Rotor & Head of the Pump. The repairs would be quite costly.

To prevent such failures the Fuel Filters must be maintained in the following manner :

	1.	<u>Chassis-Mounted Glass Bowl Type Pro-Filter :</u>
Inspect daily and attend as necessary.		Inspect daily and if there is any water sediment inside the glass bowl of this pre-filter, drain out, clean and replace the glass bowl. Air vent (bleed) the fuel system before starting engine.
	2.	<u>Agglomerator Assembly :</u>
Drain out water and sediment every 1,500 Km.		This is fitted to the rear left hand side of the engine. This fuel filter consists of Filter Element fitted between a head and a Sediment Chamber with a Drain Plug at the bottom.

Replace filter element every 3000 Km.		Water or sediment must be drained from the sediment chamber by taking out the bottom plug every 1,500 Km and fuel system Air Vented (bled) before starting the engine.

		The filter Element of this unit must be replaced every 3000 Km. Or 3 months whichever occurs earlier.
	3.	<u>Main Fuel filter Assembly :</u>
		This filter assembly is fitted between the fuel Injection Pump and the Agglomerator.
Replace Filter Element every 10,000 Km.		This consists of a Filter element fitted between a head and a bottom cover.
		The filter Element must be replaced and the Bottom cover cleaned every 10,000 Km. Or 4 months which ever occurs earlier and the fuel system Air, vented (blead) before starting the engine.

Important : Do not replace both filter Elements at the same time. If both Elements need to be changed, first replace the Agglomerator filter. Then run the engine for about 100 Kms. And replace the main fuel filter element.

NOTE : Fuel Filter Elements should be replaced more frequently if operating on dusty roads and/or where fuel storage condition is poor.

DAILY MAINTENANCE SCHEDULE

1. Wash and clean inside and outside of vehicle.
2. Check water in radiator.
3. Check oil level in engine.
4. Check fan belt tension ($\frac{1}{2}$ " minimum).
5. Engine oil pressure at idling speed.
6. Engine oil pressure at cruising speed.
7. Check fuel line for leakages.
8. Check oil leakages from engine, steering box, gear box, rear axle, wheels, etc and replenish or rectify as necessary.
9. check air cleaner and top up if necessary.
10. Lubricate steering linkages, universal joints, spring and shackle pins
11. Check spring 'U' bolts and nuts for proper torque.
12. Check clutch pedal free play.
13. Check brake pedal free play.

14. Check electrolyte level in battery and add distilled water only if necessary.
15. Check door locks, hinges and seats.
16. Check all lights and instrument controls.
17. Check air pressure in tyres.
18. Check wheel nuts and studs.