

DIRECTORATE GENERAL BORDER ROADS  
GENERAL MAINTENANCES INSTRUCTION NO. 78

ON

MAINTENANCE OF VEHICLE AND EQUIPMENTS BY PROJECT

Introduction

1. During periodic maintenance checks of vehicle and equipment, it is noticed that common components such as fuel tank, radiator caps, oil filter, fuel filter and air cleaners continue to be found damaged, dirty and even deficient. It is because due attention is not given by the drivers/operators and Mobile Maintenance Team, while carrying out periodical maintenance.
2. Detailed instruction have already been laid down the maintenance of radiator cap, fuel tank cap, oil filter, Fuel filter and other components in several GENERAL MAINTENANCES INSTRUCTION from serial NO. 18 to 45.

Action by

3. (a) Projects/Units: Take action as per details given in succeeding paragraphs.  
(b) Field Workshops (GREF): Check these aspects during periodic inspection of vehicles and equipment, when reports to workshops for repairs. Also take follow up action till these defects and discrepancies are set right.  
(c) SO-1/SO-II (EME) Projects: Carry out surprise checking to ensure proper maintenance and also advise the its follow accordingly.  
(d) Maintenance Team: Inspect vehicles and equipment to check for proper maintenance of the aforesaid components by the user units and replace fast moving par in accordance with GENERAL MAINTENANCE INSTRUCTION No. 33.

Details

4. A defect analysis of these defective components with the resultant ill-effects is highlighted at Appx 'A'.
5. It is desired that a special drive be launching by SO-I/SO-II (EME) projects immediately with a view to:-
  - (a) Carry out special maintenance to clear oil, fuel and oil filters and replace where due or damaged.
  - (b) Insist on Task Force and units to replace to tied belts, washers, radiator caps, fuel tank cap and strain and grease nipples.

6. The following action shall be taken to improve maintenance:
- (a) The operator and drivers must know maintenance team and also when next due (i.e next date or hours run). A slip to this effect (Maintenance Task Next due) may be pasted in the driver's cab at a prominent place.
  - (b) The cases or premature failure of vehicles and eqpt due to maintenance lapses should be viewed seriously.
  - (c) Unit/Field/Workshop will made entries for each maintenance task carried out in the log book of the vehicle or equipment with details of stores/spares consumed. A few cases may be checked by SO-I/SO-II (EME) Projects at random to assess implementation of preventive and periodic maintenance tasks.
  - (d) The attention of all SO-I.SO-II (EME) Project is again invited to re-peruse paras 12 to 15 of GENERAL WORKSHOP INSTRUCTION No. 18 to take necessary action to check if systematic maintenance on all the fat vehicles and equipments head with units has been carried out.

GMI No. 78 dated 15 Dec 1972

Appx 'A' to HQ DGBR GMI No. 78 dt 15 Dec 1972.

S/No.	Effectuated part	Maintenance	Effects	Remedy or recommendation
1.	Radiator	Dirty and rusty	Cause engine overheating	Flush radiator with soda solution minimum once every six months to remove soles and rust from the radiator. Appx 'A' to GMI No. 51 also refer.
2.	Radiator Caps	(a) Radiator cap rusty or deficient	(a) Permits entry of dust into radiator water, which adds to formation of seals in the radiators	(a) connect radiator caps with the radiator by means of a small metallic chain to avoid its lose.
		(b) Radiator cap washer perished or deficient	(b) Allows water spillage.	(b) check radiator cap. If rusty with the help of kerosene oil and emery paper.
			(c) Reduce cooling effect and thereby causes overheating.	(c) Check washer for serviceability and replace if perished or deficient.
3.	Fuel Tank Caps	(a) Cap found deficient or rusty	(a) permits ingress of dust into fuel tank which clogs fuel line.	(a) Replace cap washer soon, if perished or deficient.
		(b) Fuel Tank cap washer found deficient or perished.	(b) Causes fuel spillage and rapid evaporation of fuel	(b) Cap will be chained to the fuel tank to avoid its loss.
		(c) Fuel Tank strainer found deficient or punctured.		(c) Repair or replace punctured strainer promptly
				(d) Always use strainer while filling fuel tank.
4.	Fuel Filter	(a) Fuel filter found dirty or clogged.	(a) Fuel remains dirty thereby carburetor components in the IC	(a) Clean or change fuel filter and its element at the period specified by the maker.

		(b) Fuel Filter found punctured	engine and FIP and Injector components in the CI engines got worn out. This in turn causes excessive fuel consumption and poor pulling power once parts are worn.	(b) Replace punctured or damage filter element immediately.
				(c) Clean 100% Fuel tanks and later once a year. (No cotton waste to be used to clean fuel tanks)
5.	Oil Filter	(a) Oil filter dirty or heavy	(a) Engine oil dirty and oil passages blocked causing starvation of lubrication/ and journals and bearings getting burnt resulting into Engine knocking and premature failure of engine.	(a) Check and clean oil filter elements at laid down period even by manufactures or by HQ in Technical instruction.
		(b) Oil filter punctured or damaged	(b) Engine overheating due to insufficient lubrication of all moving parts.	(b) Replace oil filter elements periodically as specified by Makor's.
			(c) Early wear or moving parts of engine by the abrasive action of dirt and sand in oil.	(c) Clean the engine sump minimum once a year and refill fresh oil (Caution provision sump gaskets in adequate quantity before hand to replace the gasket while refitting sump after cleaning.