

DIRECTORATE GENERAL BORDER ROADS
GENERAL REPAIR INSTRUCTION NO.88
ON
REPAIR CONTENT AND TECHNIQUES FOR BASE OVERHAUL OF
GENERATOR ASSEMBLY AND REGULATOR OF BEE VEHICLES

Introduction

1. The importance of care to be taken while cleaning, stripping finishing and preserving of components/assemblies during overhaul in the Workshop cannot be over-emphasized. Stripping of components must be done with serviceable tools, Where SMTs are authorized or special tools are required, These must be used to avoid damage to components undergo during repairs/overhaul. After stripping, the components undergo considerable handling during overhaul. Much damage can occur to these unless handling is done carefully.

Aim

2. The aim of this instruction is to lay down procedure for stripping, cleaning, repairing and reclamation for Generator Assembly and Regulator of BEE Vehicles during overhaul.

Details

3. The details are given as per Appendix 'A' to this instructions.

**REPAIR CONTENT AND TECHNIQUES: OVERHAUL OF GENERATOR ASSEMBLY
AND REGULATIONS OF BEE VEHICLES**

S/N	Item	Stripping and cleaning	Repairs	Reclamation	Remarks
01	Generator Assembly	<p>Strip/Armature and Caps, bearings dynamo pulley, Fan, field poles, coils and brush assembly.</p> <p>Clean armature and field coils in CTC. Clean other components in K.</p> <p>If armature coils are short/open circuited rewind the armature. Check armature shaft for band. If spring straighten on by bandings.</p> <p>If armature laminations are damaged badly, replace armature with a new one. The armature laminations could be stripped and the serviceable ones should be cannibalized.</p> <p>Replace unserviceable bush/ ball bearing with new one.</p> <p>Rewind serviceable field coil with new tape, apply fresh varnish and bake. Test for insulation. Replace coil with new one if open/short circulated or if insulation of wire is affected.</p>	<p>Check armature coils for short/ open circuit. If serviceable check commutator for uneven wear and turn down to get a polished surface. Under cut mark. If commutators needs excessive turning down, replace commutator with new one.</p>		<p>If armature shaft ends (Threaded or plain) are worn, build up worn portion by welding & machine down suitable.</p>

S/N	Item	Stripping and cleaning	Repairs	Reclamation	Remarks
			Replace old brushes with new one. Replace weak springs. Replace and plates with new one if cracked or badly warped. Paint externally with black enamel paint. Check for pitted/burnt points.		
	Starter switch/relay	Remove cover and clean with CTC	Replace with new one if beyond repair, otherwise file and polish down. Rewind coil if weak, or open/short circuited.		
02.	Regulator Assembly	Remove cover, rubber gasket, Cleanings in CTC.	Replace unserviceable components with new one i.e., short/open coils, weak/broken tension springs, short/open resistance, pitted or worn contact points. Adjust contact points after polishing points with point contact file. Replace rubber gasket with new one. Adjust contact points after polishing points with point contact file. Replace rubber gasket with new one. Paint externally with black enamel paint.		

CTC: Carbon Tetra Chloride, K: Kerosene oil