

DIRECTORATE GENERAL BORDER ROADS

GENERAL REPAIR INSTRUCTION NO. 86

ON

REPAIR : CONTENT AND TECHNIQUES FOR BASE OVERHAUL OF HARMONIC BALANCER, FLY WHEEL, FLY WHEEL HOUSING AND CLUTCH ASSEMBLY OF 'BEE' VEHICLES,

Introduction

The importance of care to be exercised while cleaning, stripping, finishing and preserving of components/assemblies during overhaul in the Workshop cannot be overemphasised. Stripping of components must be done with serviceable tools. Where SMTs are authorised or special tools are required, these must be used to avoid damage to components during repair/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 Harmonic Balancer, Fly Wheel, Fly Wheel housing and clutch assy of BEE Vehicles.

Details

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

HQ DGBR GRI NO. 86 DATED JUL 74

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Srl No	Item	Stripping & Cleaning	Repair	Reclamation	Remarks
1	2	3	4	5	6
1	Harmonic Balancer	Clean in K	Remove dents by hammering. If rubber packing are unserviceable, remove rivets and change rubber packings. Build up starting dogs by welding (where fitted and worn).		
2.	Fly Wheel	Clean in K	Replace if surface is deeply discoloured or shows fine cracks. Replace ring by shrinking if tooth are damaged or worn. Where the ring is integral with the fly wheel, build up if only 3 or 4 non-adjustment teeth are broken. If more teeth are broken replace fly wheel. In case of excessive wear on tooth replace fly wheel ring with new. Wheel Fly wheel for warping and balance on lathe. Grind down if uneven using tool post grinder.		Use of cutting tool is not advise due to possibility
3.	Fly Wheel Housing	Strip Clutch release bearing pivot where fitted, Clean housing with CS or K.	Build up pivot by hard welding rod and finish by grinding. Weld housing and build up locating pins and finish by filing.		In certain makes types of engine housing are must be kept with the blocks.

Contd...P/2

1	2	3	4	5	6
4.	Clutch assy	Strip clutch assy, cover, release bearing, lover and shaft. Clean with K	Replace worn lining and broken springs in clutch plate. Check rivets. Check wear on splines and clutch disc. Replace disc if splines are worn. Check disc for twist and bends, replace if badly twisted. Grind and lap pressure plate face if worn/uneven. Replace if cracked. Change retracting springs if weak or set. Check Diaphragm spring on a suitable jig. Replace if worn at strip tips, or if weak. Replace clutch pressure plate springs, cups, lever, pin if broken/worn. Replace release bearing if worn.		Finger adjustment are critical on certain engines. Adjustments must be done with proper tools.

CS

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Caustic soda

K

-Kerosene Oil