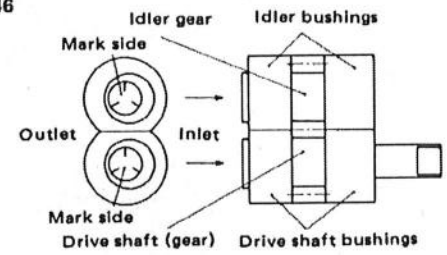
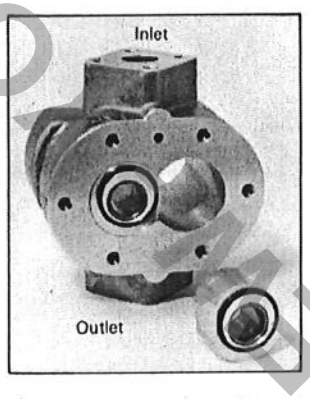
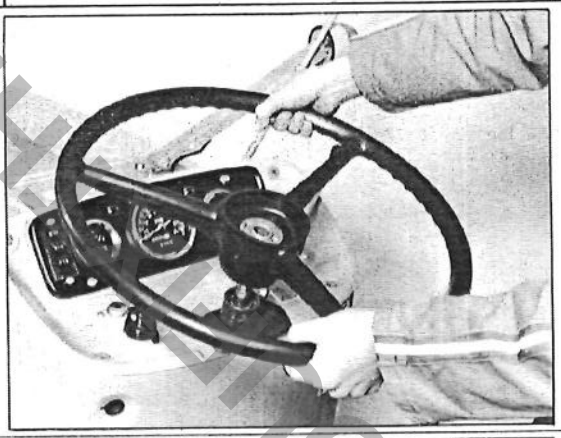
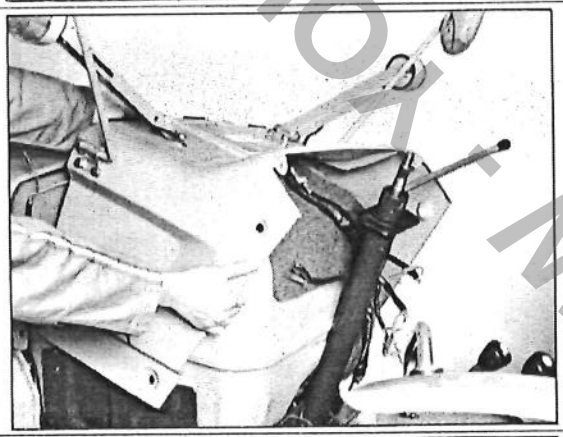
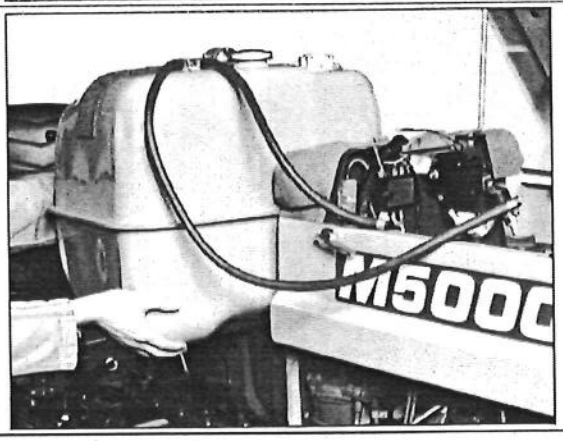
	Procedure	Remarks
	1) Remove the spacer. 2) Remove the cover. 3) Remove the bracket while taking care not to drop or damage the shim.	• Mark the cover, the case and the bracket to ensure that they will be correctly positioned during reassembly. (When reassembling) • Be careful not to damage the O-rings on the cover and the bracket.
	1) Pull out the bushings and gears from the housing case.	(When reassembling) • Be careful not to mistake the bushing on the drive shaft for the one on the idler shaft. Be sure to refit the idler gear in the correct direction. Fig. 46  

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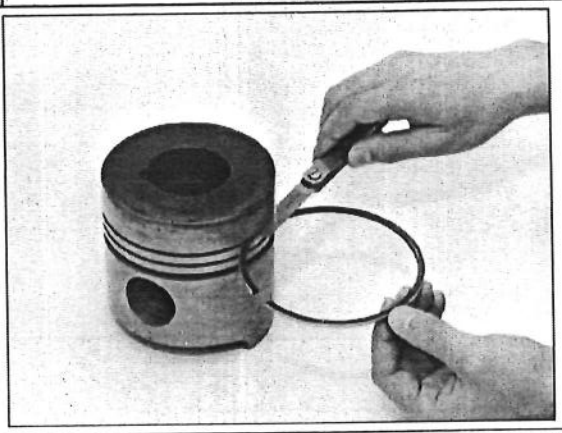
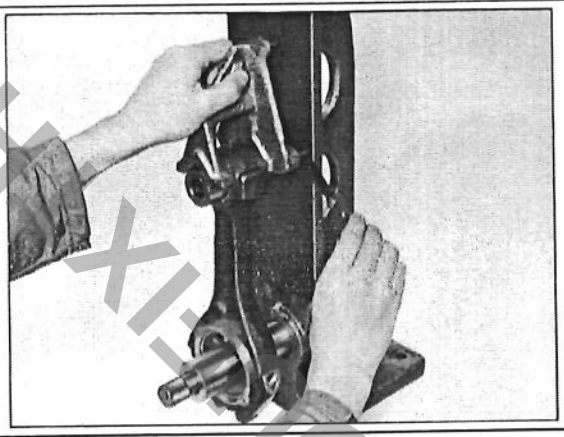
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Item	Location	Reference value
Servicing (4) Side clearance of ring in groove		S2200, S2600 Reference value Second ring: 0.093 to 0.120mm / 0.0037 to 0.0047in. Oil ring: 0.020 to 0.052mm / 0.0008 to 0.0020in. D3000, V4000L, V4000 Reference value Top ring: 0.088 to 0.125mm / 0.0035 to 0.0049in. Second ring: 0.050 to 0.082mm / 0.0020 to 0.0032in. Oil ring: 0.040 to 0.072mm / 0.0016 to 0.0028in.
Servicing (5) Connecting rod alignment		• **Reference value** 0.02mm 0.0008in. • **Allowable limit** 0.05mm 0.0020in.

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■GLOW PLUG

1. CONSTRUCTION AND NAME OF PARTS

One glow plug is provided in each auxiliary chamber of the diesel engine such as the precombustion and swirl chambers. Glow plugs have two kinds of configuration: the coil-type for series connection and the bar-type for parallel connection. In a Kubota Diesel Engine, bar-type glow plugs (sheathed-type) are used.

Fig. 106 Bar-type glow plug

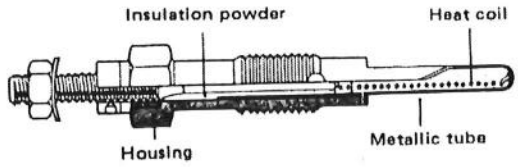
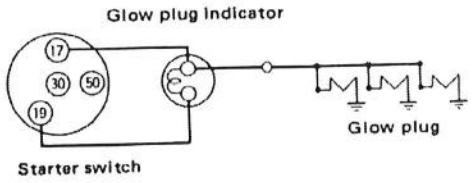
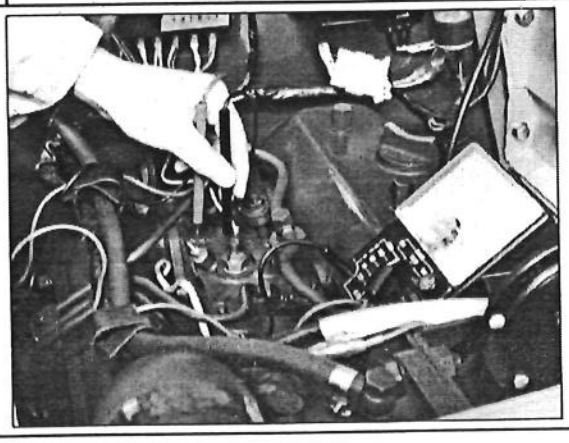


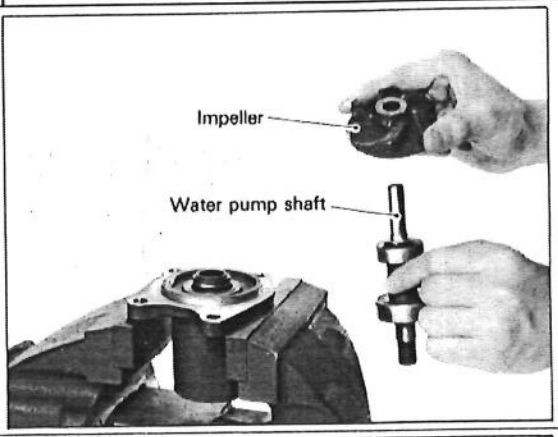
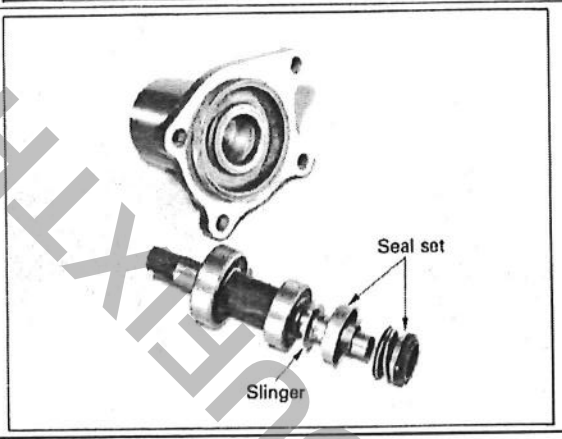
Fig. 107 Glow plug circuit



2. CHECK

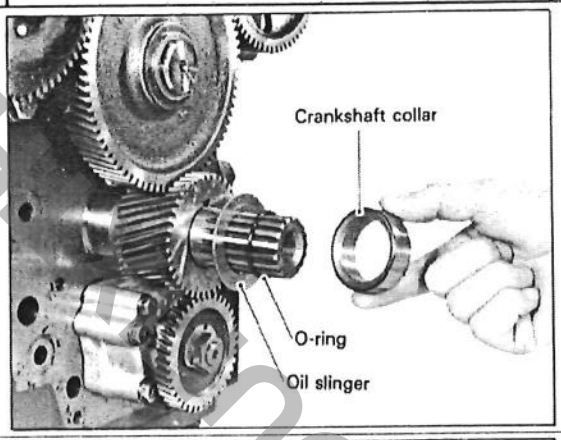
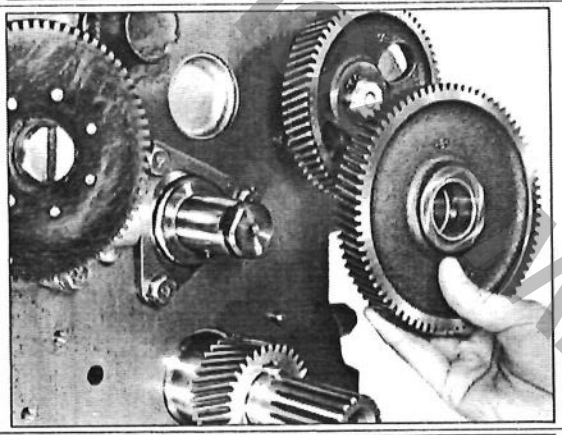
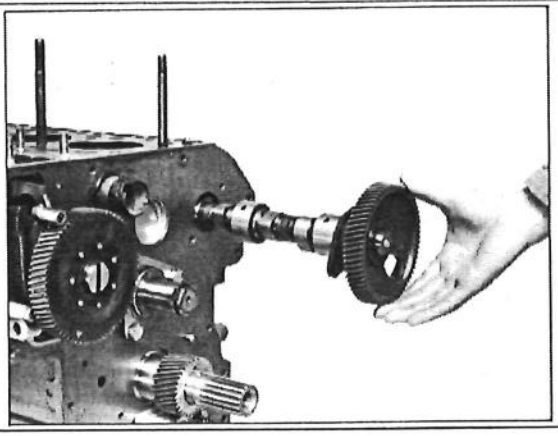
Item	Location	Reference value
Check (1) Glow plug broken or short-circuited		• **Reference value** Approx. 1.6Ω

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Item	Location	Bolts and nuts	Tools
Disassembly (2) Water pump shaft		 1	
Disassembly (3) Seal set			

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4. TIMING GEARS, CAMSHAFT AND OIL PUMP

Item	Location	Bolts and nuts	Tools
Disassembly (1) Crankshaft collar, Oil slinger			
Disassembly (2) Oil pump drive gears, Idle gear		 1	
Disassembly (3) Camshaft		M8×10 ..... 2 1	13

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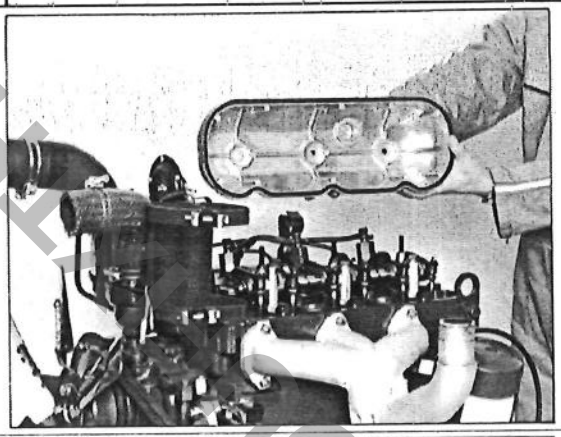
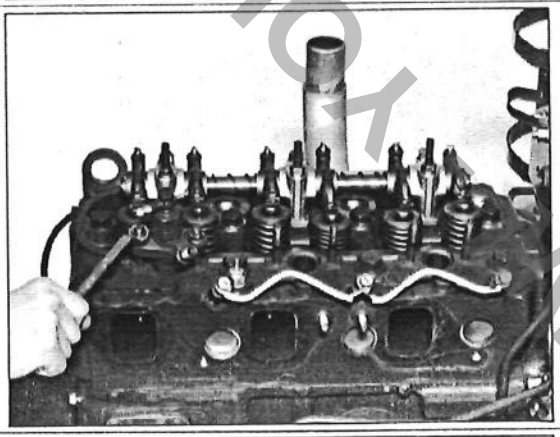
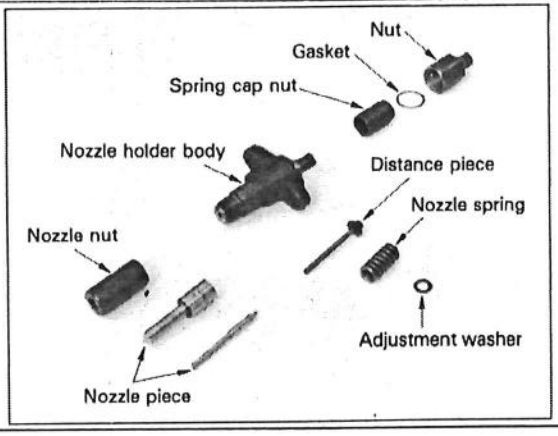
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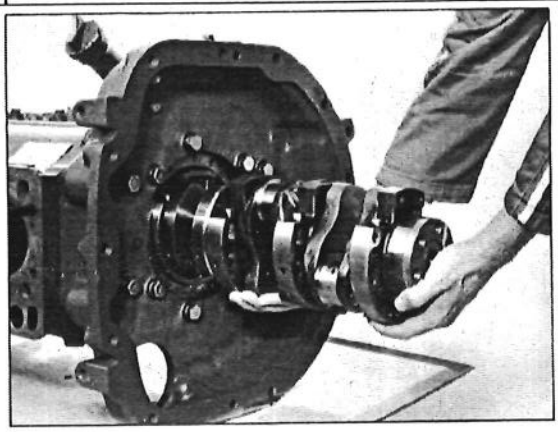
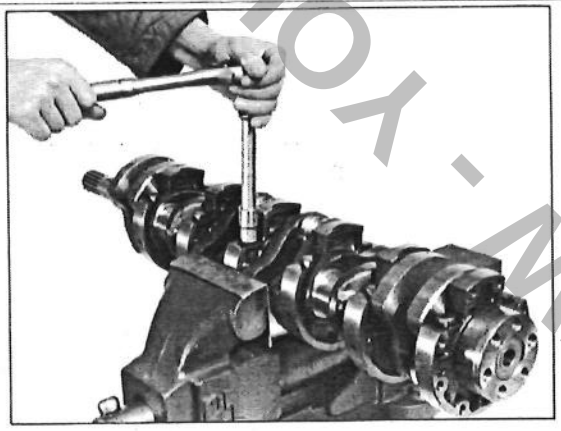
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DISASSEMBLY (D3000, V4000L, V4000)

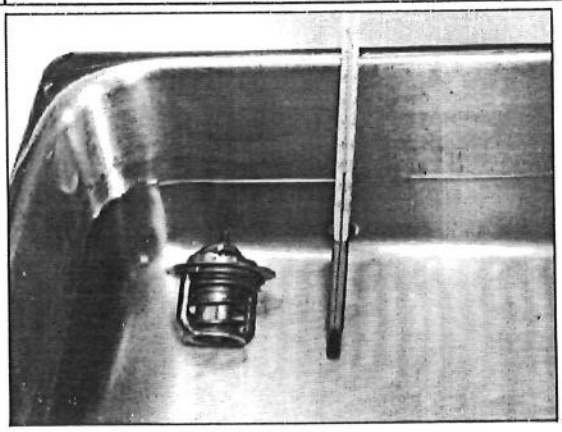
1. CYLINDER HEAD

Item	Location	Bolts and nuts	Tools
Disassembly (1) Cylinder head cover, Muffler		M8 ····· 3 M8 ····· 3 (Copper) M8x85 ····· 1 M8 ····· 1	13
Disassembly (2) Inlet manifold, Injection pipes, Nozzle holders		M8x22 ····· 2 M10x35 ····· 1 M8 ····· 8 Pipe clip ····· 4	13 17 13 17
Disassembly (3) Disassembling nozzle holder			20 (When reassembling)

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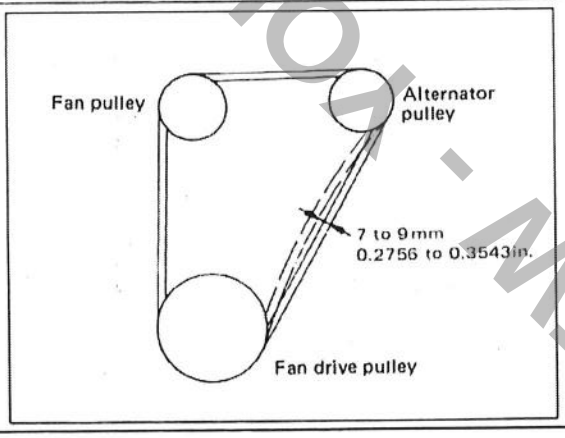
Item	Location	Bolts and nuts	Tools
Disassembly (5) Crankshaft		Bearing case bolt 2 ..... 5 Bearing case washer 3 ..... 5 Knock bolt ..... 5 ◯ ..... 5 (Copper)	17 13 (When reassembling)
Disassembly (6) Bearing cases		Bearing case bolt 1 ..... 12 Bearing case washer 12	13 (When reassembling)

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Item	Location	Reference value
Servicing (3) Operating temperature of thermostat		

	Temperature at which thermostat should start to open	Temperature at which thermostat completely opens	Distance of lift
S2200	82 ± 1.5°C 176.9°F to 182.3°F	95°C 203°F	8mm 0.3150in.
S2600			
D3000	79 ± 1.5°C 171.5°F to 176.9°F		
V4000L			
V4000			

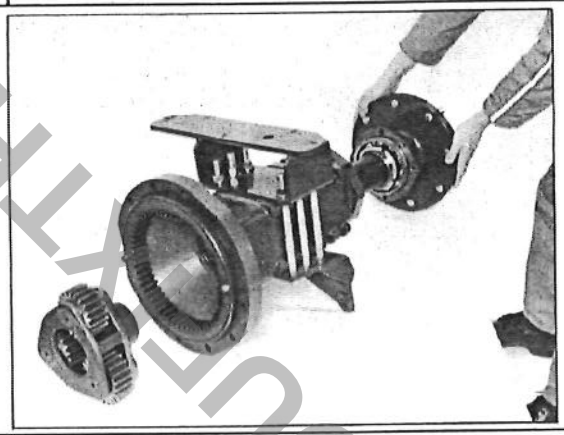
Servicing (4)
Fan belt tension



- **Reference value**
  7 to 9mm
  0.2756 to 0.3543in.

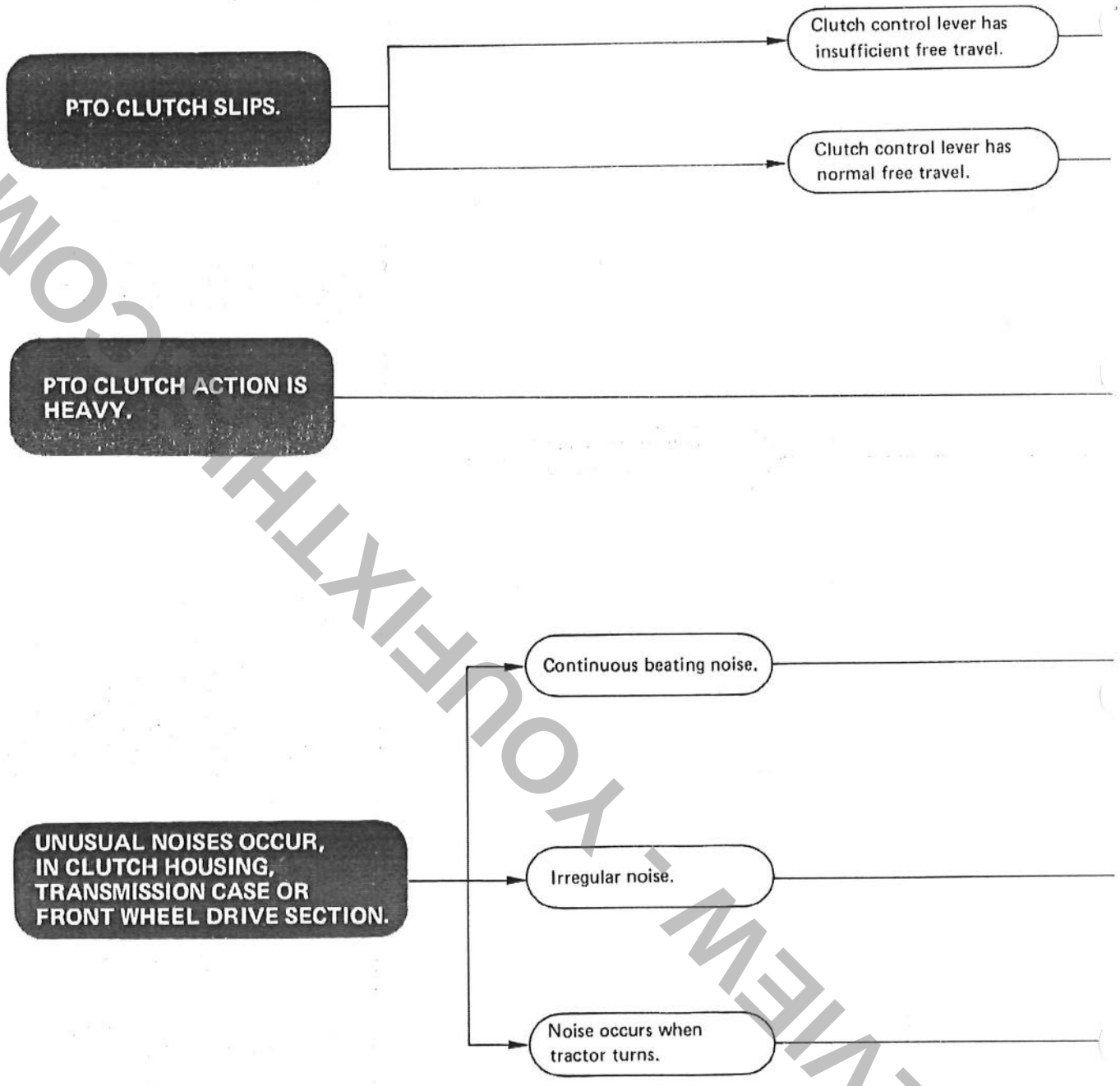
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9. REAR AXLE CASE

Item	Location	Bolts and nuts	Tools
Disassembly (1) Rear axle		M12x25 ····· 1 M10x40 ····· 4 M75··· 1 (Only M4000 M60)	17 14 (When reassembling)

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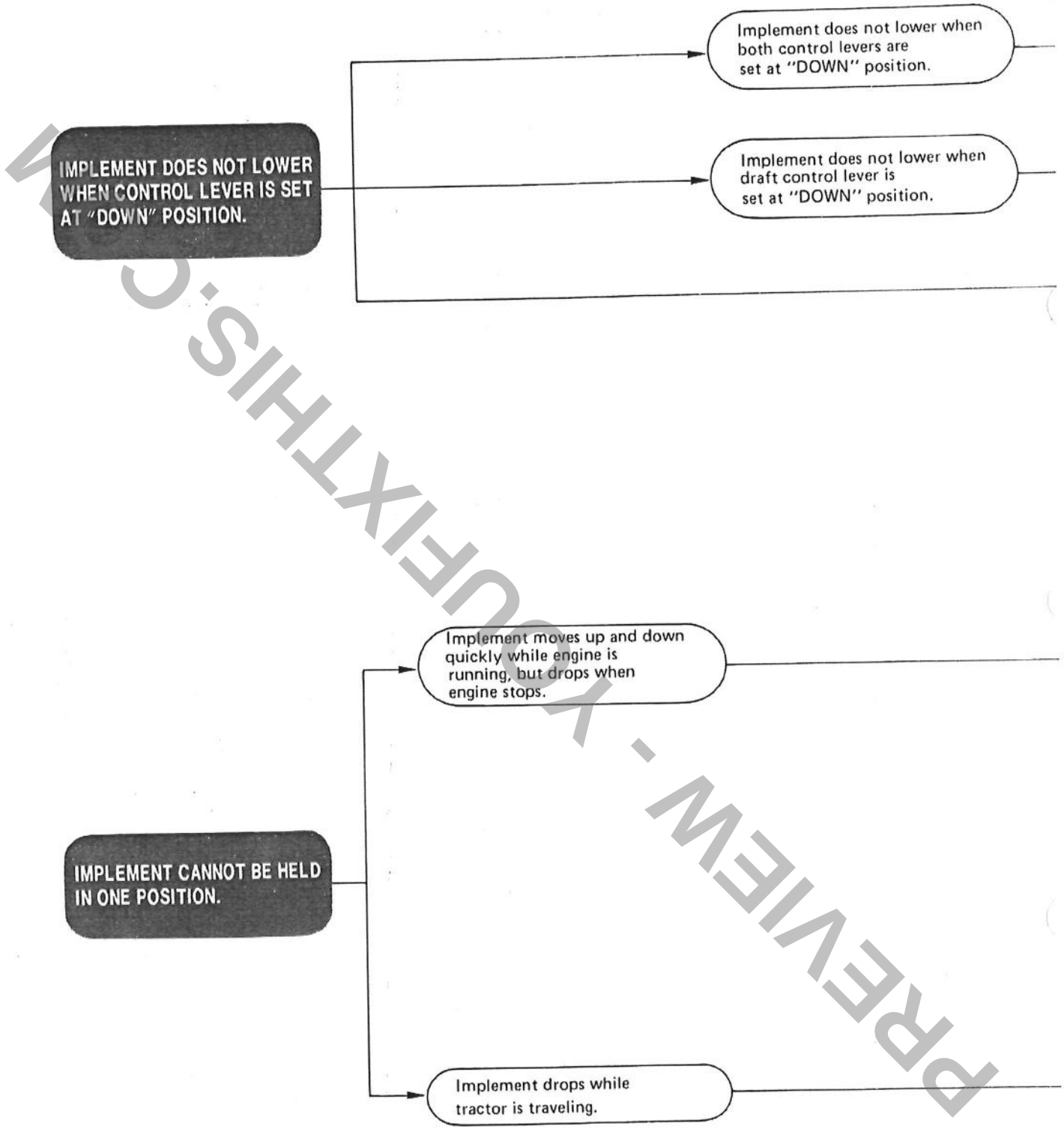


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POWER STEERING BOOSTER

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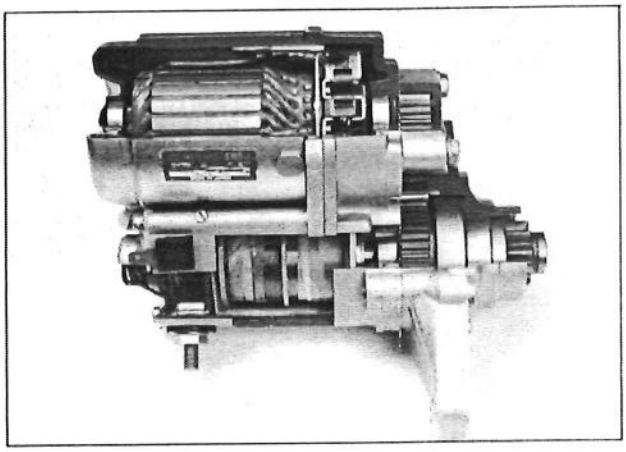


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■ REDUCTION STARTER

1. CONSTRUCTION AND NAME OF PARTS

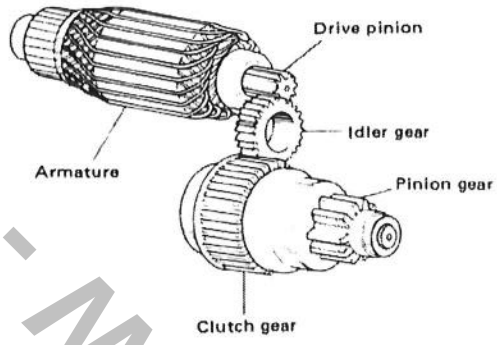
Unlike an ordinary starter whose armature drives the pinion gear without reducing speed, the reduction starter uses a small high-speed motor with 3 gears that reduce speed to 1/3 to drive the pinion gear.



• **Motor and Reduction Gear**

The motor consists of an armature, a stater and a brush. The drive pinion is splined to the end of the armature shaft. Since the drive pinion permanently engages with the idler gear and the clutch gear, the gear train reduces the rotational speed of the armature to about 1/3: drive pinion → idler gear → clutch gear. Finally power is transmitted to the pinion gear through the clutching mechanism.

Fig.84 Motor and reduction gear



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