BACKHOE LOADER

SERVICE MANUAL

HB100

HYUNDAI

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⑥ Determine dimension II, between the mounting face of the axle housing (part II) and the contact face of the bearing outer ring.

Dimension II e.g. ····· 8.80 mm

Calculation example C :

Dimension I ·····	9.50 mm
Dimension II ·····	- 8.80 mm
Difference =	0.70 mm
Required bearing preload e.g.	+ 0.10 mm
Leads to shim s =	0.80 mm



⑦ Insert the determined shim e.g. s = 0.80 into the bearing hole and adjust the bearing outer ring until contact is obtained.



⑧ Mount the axle housing (part II) with the lifting device.

※ Provisionally mount the axle housing without O-ring.



⑨ Check the gap between the two axle housings with a feeler gauge.

※ If the shim (according to calculation example C, s = 0.80 mm) has been determined correctly, the gap width is approx. 0.10 mm.

⚠ Take several measuring points to find the average value.



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Problem	Cause	Remedy
Slow steering wheel movement will not cause any frame movement	Leakage in steering unit gerotor.	Do steering system leakage check.
	Worn steering unit gerotor.	Do steering leakage check.
Steering wheel can be turned against steering stop	Leakage in steering system.	Do steering system leakage check.
Steering wheel turns with no resistance	Broken steering column or splined coupling.	Remove and inspect.
	Lack of oil in steering unit.	Start engine and check steering operation.
	Leakage in steering system.	Do steering system leakage test in group 3.
Erratic steering	Air in oil.	Check for foamy oil.
	Low oil level.	Add recommended oil.
	Sticking priority valve spool.	Remove and inspect spool.
	Loose cylinder piston.	Remove rod to inspect piston.
	Damaged steering unit.	Remove and inspect.
Spongy or soft steering	Air in oil.	Check for foamy oil.
	Low oil level.	Add recommended oil.
Free play at steering wheel	Loose steering wheel nut.	Tighten.
	Worn or damaged splines on steering column or unit.	Inspect.
Steering unit binding or steering wheel does not immediately return to neutral when released	Binding in steering column or misalignment of column.	Inspect.
	High return pressure.	Check for a pinched or damaged return line.
	Contamination in steering unit.	Inspect hydraulic filter for contamination. Repair cause of contamination. Flush hydraulic system.
	Large particles of contamination in steering unit.	Inspect hydraulic filter for contamination. Repair cause of contamination. Flush hydraulic system.

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6. PREHEATING CIRCUIT

Combustion chamber glow plugs are used in order to give satisfactory starting of low ambient temperatures.

1) OPERATING FLOW

Fuse box [Grid control] → Grid controller [CN-54 (7)]
→ (6) → Heater relay [CR-24 (2)] → Pre-heater ON
→ (1) → Warning lamp ON [CL-50 (7)]

2) CHECK POINT

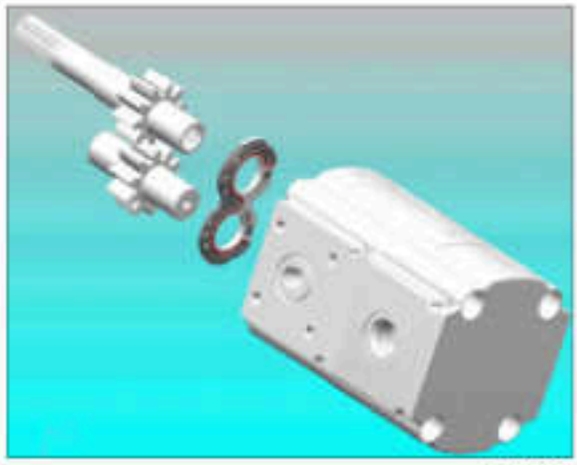
Engine	Key switch	Check point	Voltage
STOP	HEAT	① - GND (battery B^+) ② - GND (fuse box) ③ - GND (heater relay)	12V

※ GND : Ground

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② Pull out driving gear & driven gear keeping gears as straight as possible.

③ Remove other pressure plate on rear side with same way for front side.

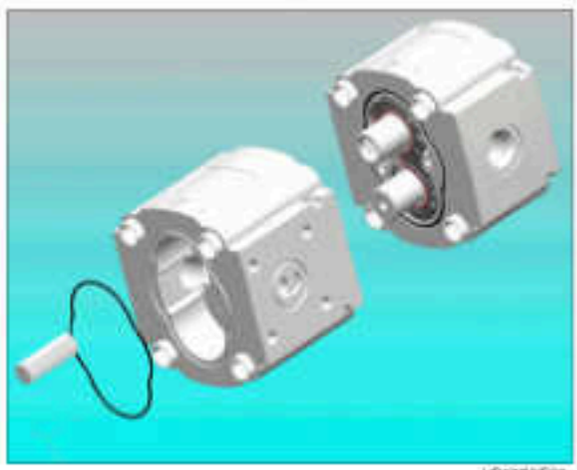


HB100WE57

④ Remove square O-ring on the groove of body.

⑤ Remove through shaft and front body.

※ Tap around marked points with rubber mallet all around to break away first body from second.
Do not wedge between the bodies, it may give serious damage on the surface.



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(4) 2nd working section

① Remove all components inside of second body with same way for 1st section.

② Remove the square O-ring if necessary.



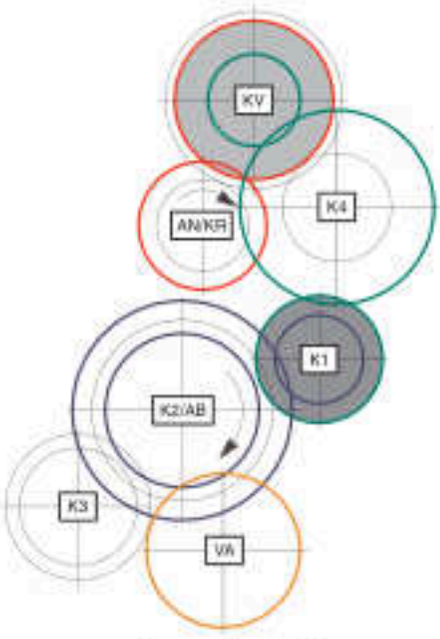
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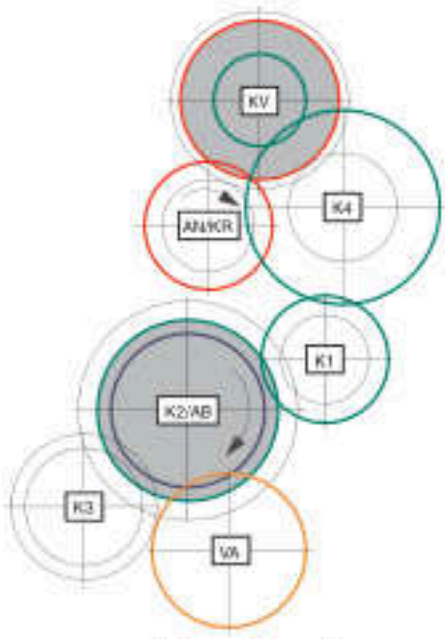
② Forward

In forward, forward clutch and K1, K2, K3, K4 clutch are engaged.

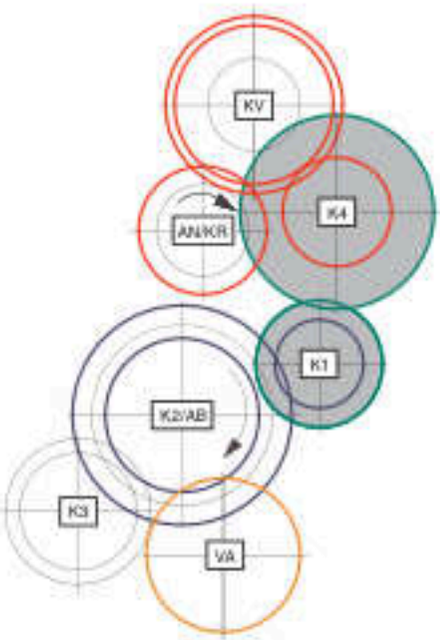
Forward clutch and K1, K2, K3, K4 clutch are actuated by the hydraulic pressure applied to the clutch piston.



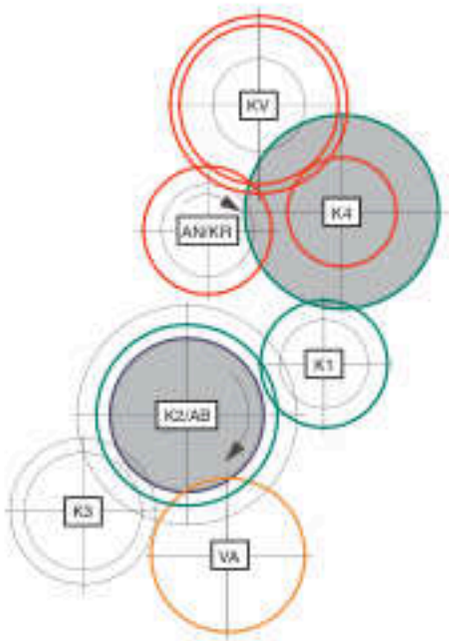
1st gear forward



2nd gear forward



3rd gear forward

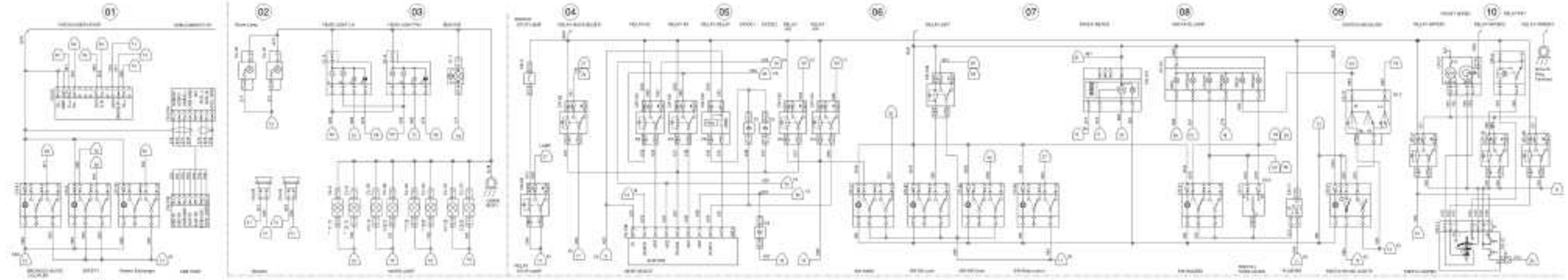


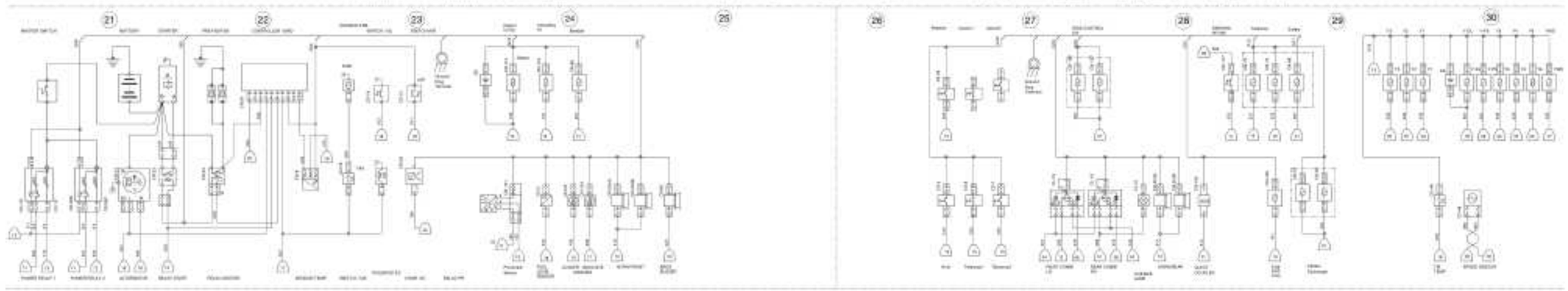
4th gear forward

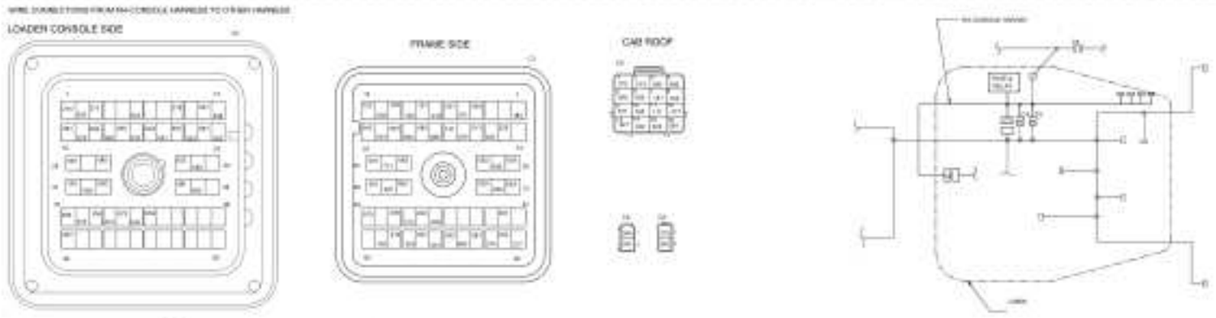
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KR/AN = Clutch reverse/input
KV = Clutch forward
K1 = Clutch 1st speed
K2/AB = Clutch 2nd speed/output
K3 = Clutch 3rd speed
K4 = Clutch 4th speed
VA = Front wheel drive

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※ Note : The number in ( ) indicates the number in ( ).

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