FORKLIFT

SERVICE MANUAL

250D-7E

HYUNDAI

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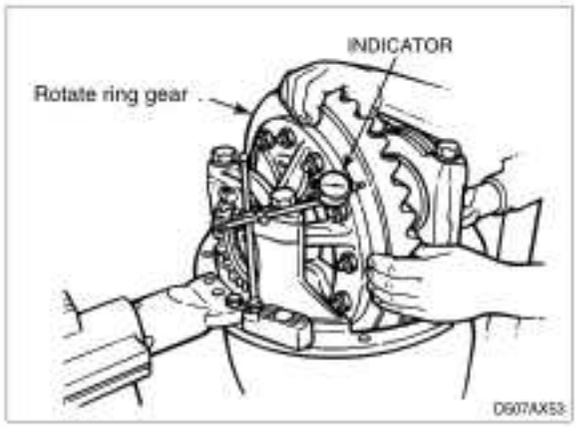
Fault code (Hex)	Meaning of the fault code possible reason for fault detection	Reaction of the TCU	Possible steps to repair
BB	**Slippage at converter lockup clutch** TCU calculates a differential speed at closed converter lockup clutch. If this calculated value is out of range, TCU interprets this as slipping clutch - Low pressure at converter lockup clutch - Low main pressure - Wrong signal at engine speed sensor - Wrong signal at turbine speed sensor - Wrong size of the sensor gap - Clutch is defective	-	· Check pressure at converter lockup clutch · Check main pressure in the system · Check sensor gap at engine speed sensor · Check sensor gap at turbine speed sensor · Check signal at engine speed sensor · Check signal at turbine speed sensor · Replace clutch
BD	**S.C. to ground at engine brake solenoid** TCU detected a wrong voltage at the output pin, that looks like a S.C. to vehicle ground - Cable is defective and is contacted to vehicle ground - Engine brake solenoid has an internal defect - Connector pin is contacted to vehicle ground	No reaction OP mode : Normal	· Check the cable from TCU to engine brake solenoid · Check the connectors from engine brake solenoid to TCU · Check the resistance* of engine brake solenoid * See page 3-36
BE	**S.C. to battery voltage at engine brake** TCU detected a wrong voltage at the output pin, that looks like a S.C. to battery voltage - Cable is defective and is contacted to battery voltage - Engine brake solenoid has an internal defect - Connector pin is contacted to battery voltage	No reaction OP mode : Normal	· Check the cable from TCU to the engine brake solenoid · Check the connectors from engine brake solenoid to TCU · Check the resistance* of engine brake solenoid * See page 3-36
BF	**O.C. at engine brake** TCU detected a wrong voltage at the output pin, that looks like a O.C. for this output pin - Cable is defective and has no connection to TCU - Engine brake solenoid has an internal defect - Connector has no connection to TCU	No reaction OP mode : Normal	· Check the cable from TCU to the engine brake solenoid · Check the connectors from engine brake solenoid to TCU · Check the resistance* of engine brake solenoid * See page 3-36

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GROUP 4 ADJUSTMENT

1. CHECKING THE RING GEAR BACKFACE RUNOUT

Runout specification : 0.20mm(0.008-inch) maximum



1) Attach a dial indicator on the mounting flange of the carrier.
2) Adjust the dial indicator so that the plunger or pointer is against the back surface of the ring gear.
3) Set the dial indicator to zero(0).
4) Rotate the ring gear and read the dial indicator. The runout must not exceed 0.20mm(0.008inch).

   If runout exceeds specification, remove the differential and ring gear assembly from the carrier. Refer to "Assembly of the differential".
5) Check the differential parts, including the carrier, for problems that may cause the ring gear runout to exceed specifications. Repair or replace parts.
6) Re-install the differential and ring gear into the carrier. Refer to "Assembling the differential case".
7) Repeat the preload adjustment of the differential bearings.

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2) OPERATION

(1) Purpose

The pressure switches are used to visually or audibly warn the driver of the pressure within the system.

(2) Make contact / circuit closer

The pressure switch can be fitted in the braking system or directly on one of its components.
The system pressure acts on an absorption area within the switch, making an electrical contact as the pressure on that area is increased. The resulting current is used to activate a warning facility, for instance.

(3) Break contact / circuit breaker

The pressure switch can be fitted in the braking system or directly on one of its components.
The system pressure acts on a absorption area within the switch, breaking an electrical contact as the pressure on that area is increased. The current is now broken, e.g. to deactivate a warning facility.

(4) Installation requirements

No special measures need to be taken.

(5) Maintenance of the pressure switch

No special maintenance beyond the legal requirements is necessary.
When using high-pressure cleaners on the vehicle, please make sure that the water jet is not directed at the pressure switch(Corrosion of contacts).

(6) Repair work

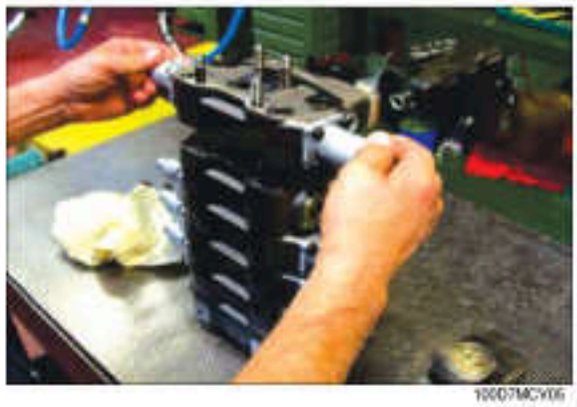
△ **When working on the braking system, always make sure that there is absolutely no pressure in the system. Even when the engine is switched off there will be some residual pressure in the system.**

※ When doing repair work, make sure your environment is very clean.
Immediately close all open ports on the components and on pipes using plugs.

※ For safety reasons the pressure switch needs to be replaced as a whole if damaged.

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Locate new or repaired working section in right position according to the order of functions.

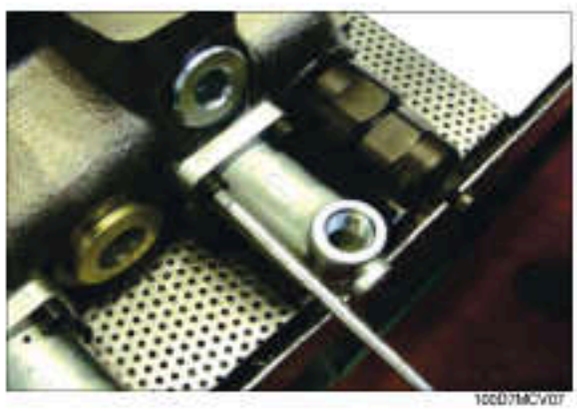


Tighten four nuts (M17) in a crisscross pattern with proper assembling torque of 4.3kgf · m(31lbf · ft).

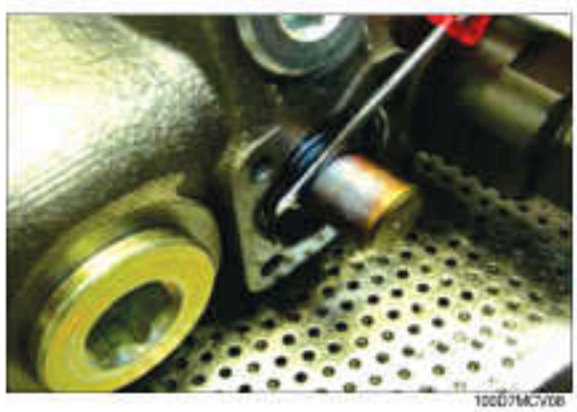


(2) **Replacing spool & control kit**

Loosen 4 screws holding aluminum kits to the body with 5mm wrench.

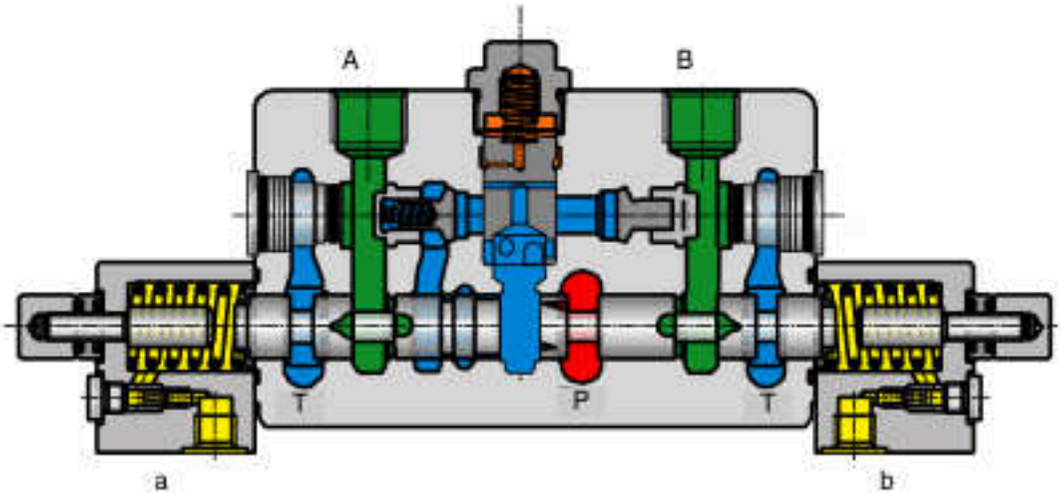


Take off all components and O-ring, valve inside, with attention not to give any damage to it.
Don't use anything with sharp edge.



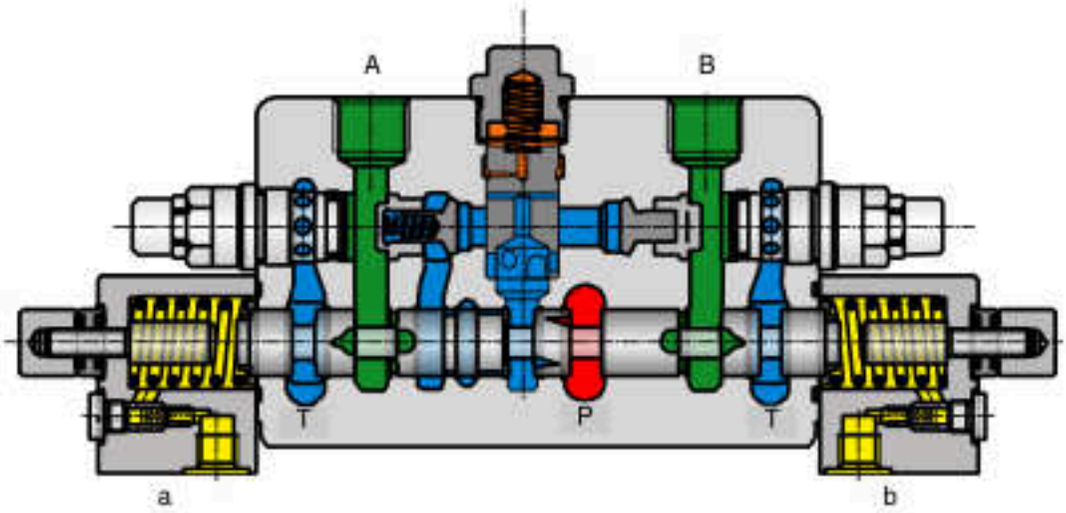
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2) LIFT & TILT SECTION



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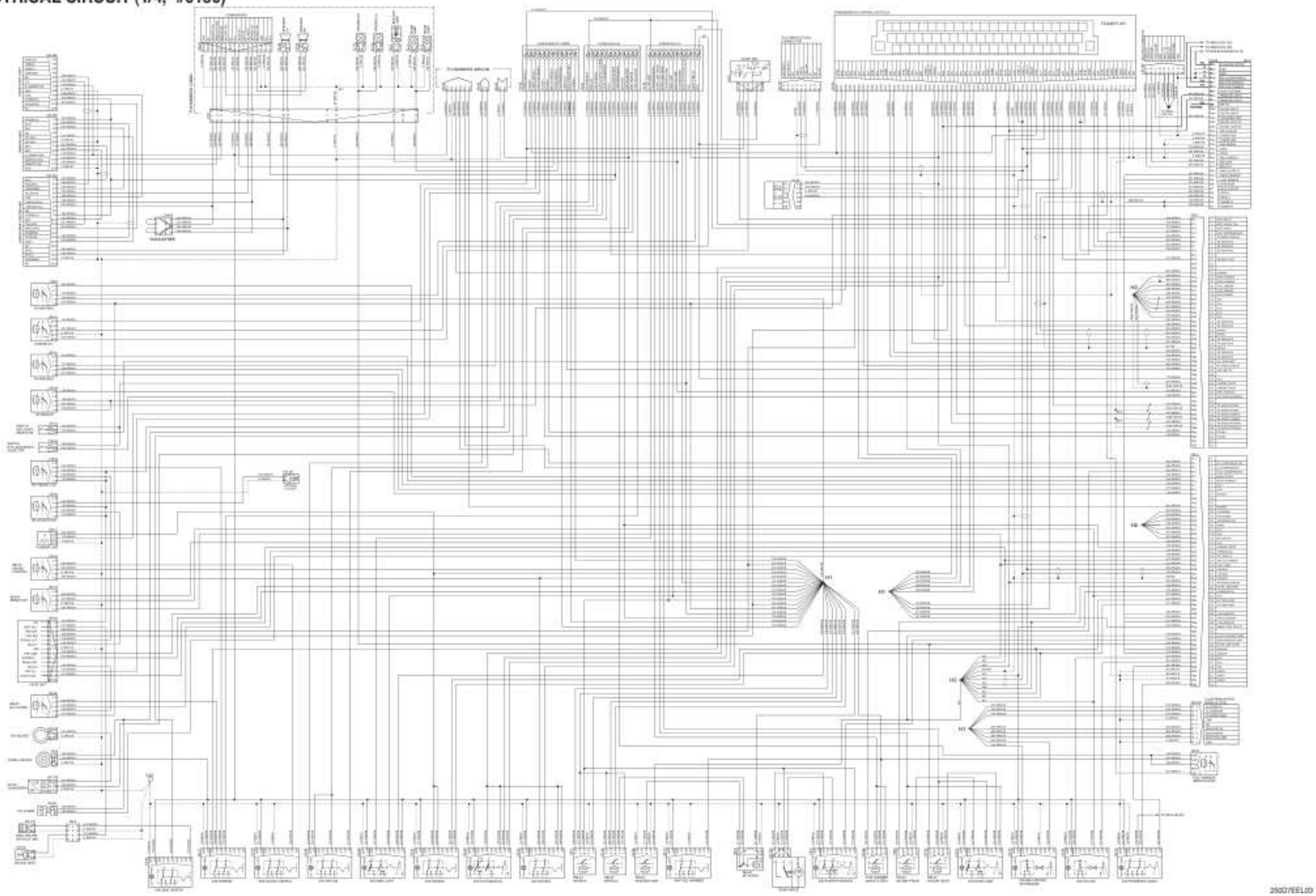
3) AUXILIARY SECTION



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· ELECTRICAL CIRCUIT (1/4, -#0150)



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