WHEEL LOADER

SERVICE MANUAL

HL780-9A

HYUNDAI

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③ Determine dimension III (bearing width).

Dimension III e.g. ..... 63.60 mm

Calculation example A :

Dimension I	331.25 mm
Dimension II	- 265.00 mm
Dimension III	- 63.60 mm
Difference = shim	s = 2.60 mm



7B09AX127

Reassembly of input pinion

① Undercool the external bearing outer ring and insert it into the axle drive housing until contact is obtained.

Driver tool	5870 050 007
Handle	5870 260 004



7B09AX128

② Insert the determined shim e.g. s = 2.60 mm into the housing hole.



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③ Undercool the internal bearing outer ring and bring it into contact position in the housing hole by using the assembly fixture.

Assembly fixture	AA00 623 955



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2. TROUBLESHOOTING

※ Diagnose malfunction charts are arranged from most probable and simplest to verify, to least likely, more difficult to verify. Remember the following steps when troubleshooting a problem :

Step 1. Operational check out procedure (see group 3 in section 1)

Step 2. Operational checks (in this group)

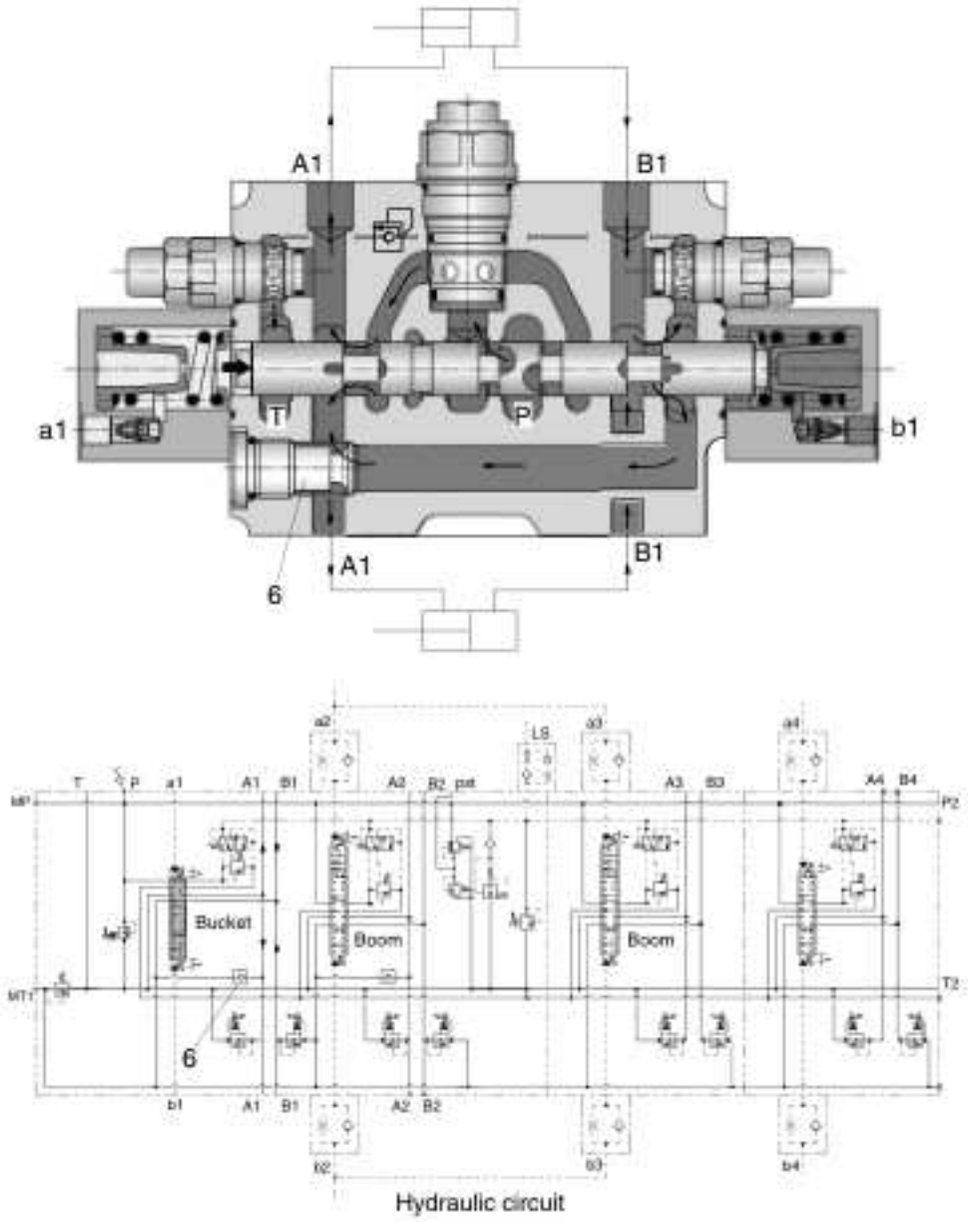
Step 3. Troubleshooting

Step 4. Tests and adjustments (see group 3)

Problem	Cause	Remedy
No steering	Low oil level.	Add recommended oil.
	Failed steering pump.	Remove and inspect return filter for metal pump particles.
	Failed main pump drive.	Do main pump flow test.
	Stuck priority valve spool.	Remove and inspect priority valve spool.
	Broken priority valve spring.	Remove and inspect spring.
	Relief valve in flow amplifier stuck open.	Do relief cartridge leakage test in group 3.
No hydraulic functions steering normal	Stuck open system relief valve.	Replace relief valve.
	Locked safety valve.	Unlock safety valve.
	Plugged pilot line filter.	Inspect and replace.
	Failed hydraulic pump.	Remove and inspect the pump.
	Low secondary pressure of RCV.	Check the pressure and replace if necessary.

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(3) Bucket dump



Hydraulic circuit

When the pilot pressure is led to the port a1, the bucket spool moved to dump position.
Oil from the pump flows to the cylinder port A1, through the load holding valve and oil from the cylinder flows into the tank passage through the cylinder port B1.
When the dumping speed of bucket is faster, the return oil from the large chamber of bucket cylinder combines with the oil from the pump through regeneration check valve (6), and flows into the small chamber of the cylinder. This prevents cylinder cavitation by the negative pressure when the pump flow cannot match the bucket dump speed.

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5) DISASSEMBLY AND ASSEMBLY

(1) Spool

① Loosen the bolt (2EA).

- Tool : Wrench 5 mm
- Tightening torque : 0.85 kgf · m (6.1 lbf · ft)



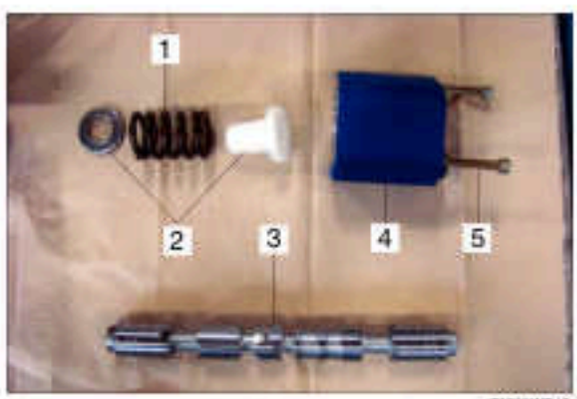
T6096WE40

② Remove the cover, spring retainer, spring and spool.



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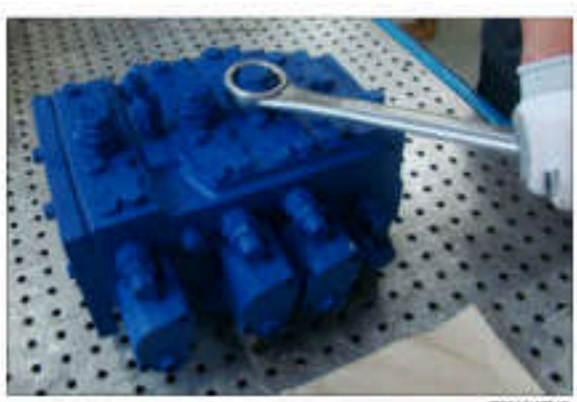
1 Spring
2 Spring ratainer
3 Spool
4 Cover
5 Bolt



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(2) Compensator valve

- Tool : Spanner 42 mm



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⑤ Rear camera



- Reverse mode
  - If transmission engages the reverse gear (R1~R3), the camera mode is displayed automatically in main display.
- Active camera
  - Three cameras can be installed on the machine.
- Display order
  - Set the channel sequence of each camera.

- If the camera was not equipped, this menu is not useful.
- In main display, if the ▣/ESC button is pushed, the first ordered display camera will be viewed.

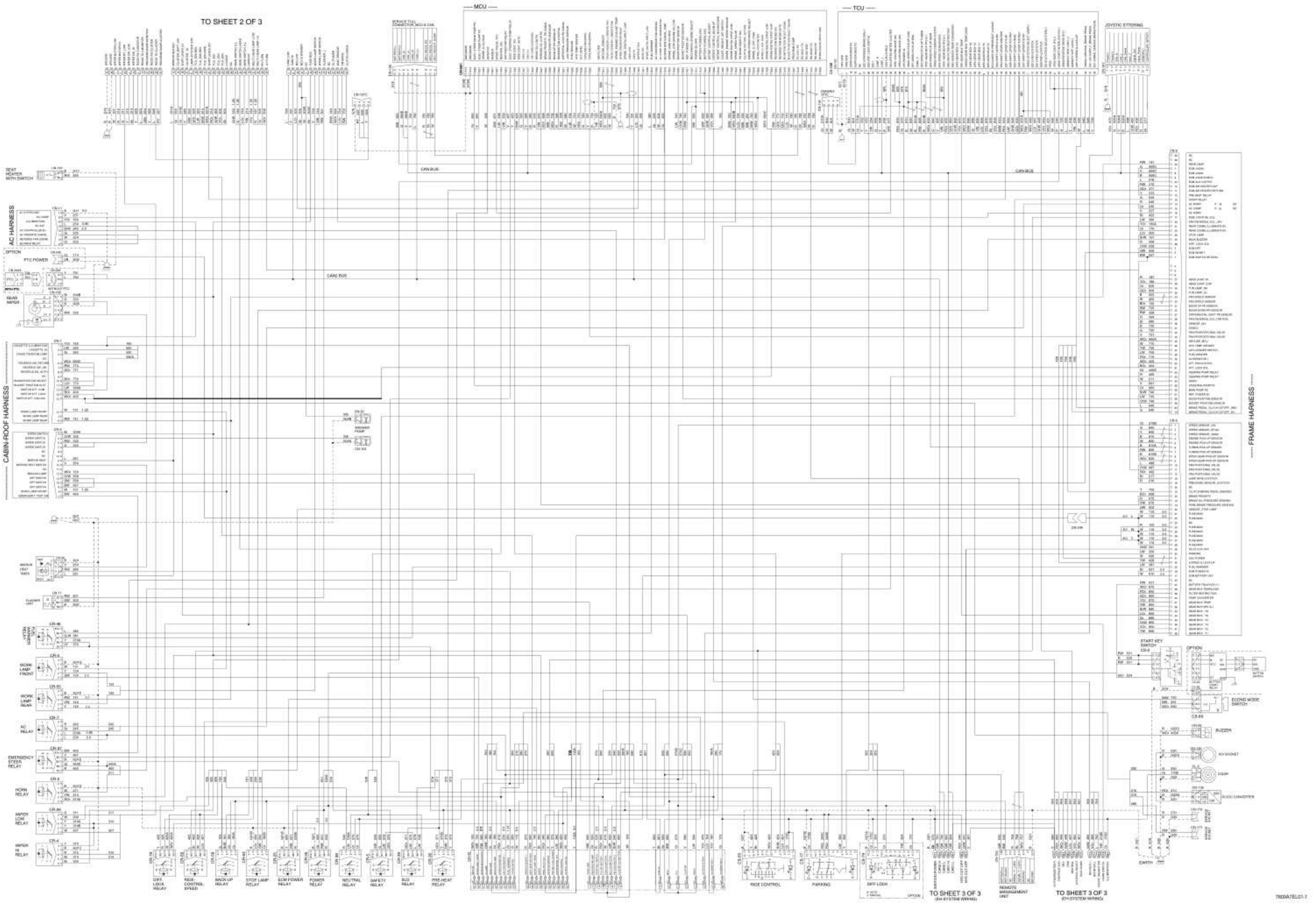
⑥ Language



- User can select preferable language and all display are changed the selected language.
- 12 multi-language available.

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- ELECTRICAL CIRCUIT (1/3)



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