WHEEL LOADER

# SERVICE MANUAL

## *HL757-9SB*

HYUNDAI

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## 2. TROUBLESHOOTING

### 1) TRANSMISSION

- 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

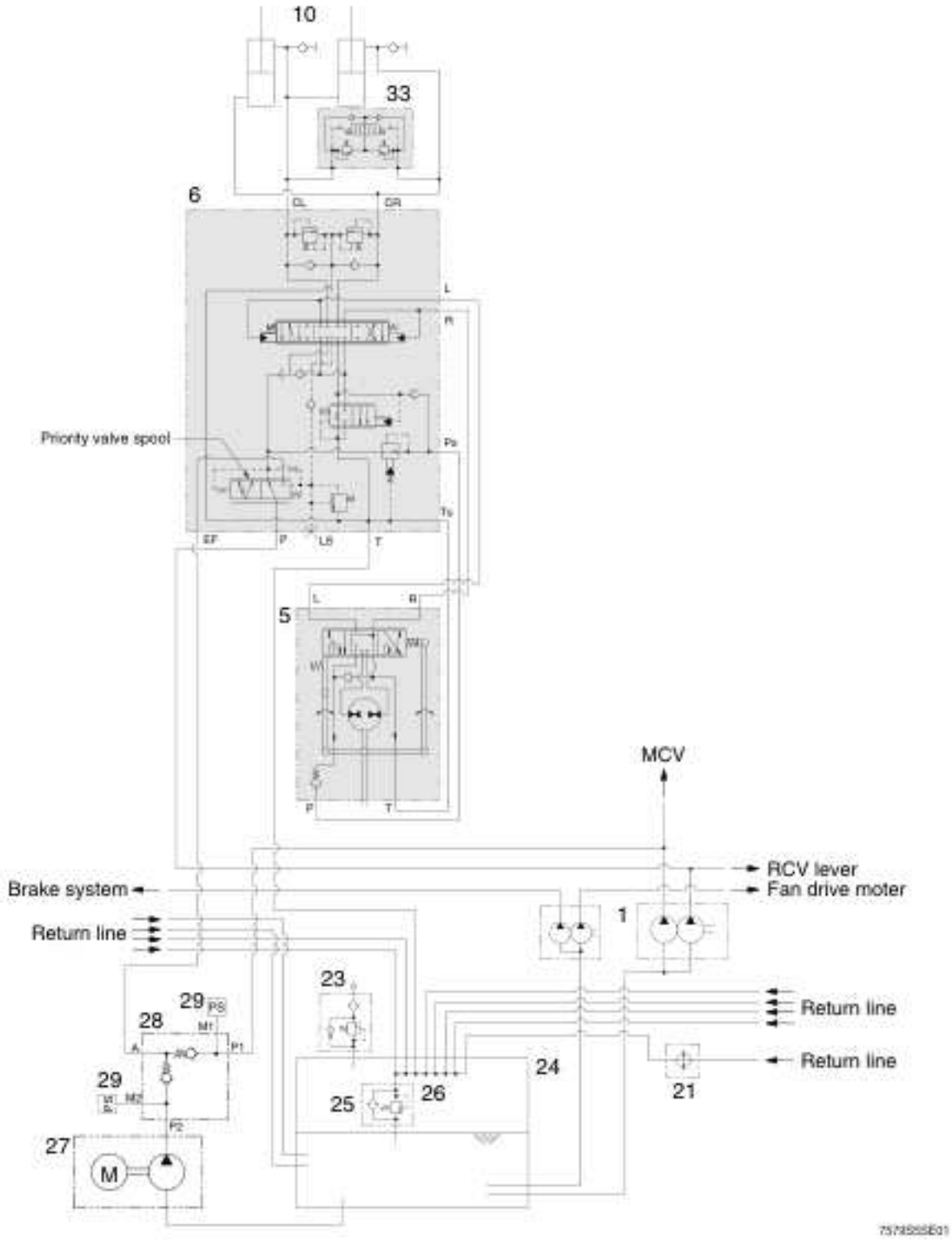
  Step 4. Tests and/or adjustments (See group 3.)

| Problem | Cause | Remedy |
|---|---|---|
| Transmission slippage | Low oil level. | Add oil. |
| | Wrong oil grade. | Change oil. |
| | Restricted transmission pump suction screen. | Remove and clean screen. |
| | Leak in transmission control valve or gasket. | Remove valve and inspect gaskets. |
| | Low transmission pump flow due to worn pump. | Do transmission pump flow test. |
| | Weak or broken pressure regulating valve spring. | Do transmission system pressure test. |
| Error code on display | Something wrong in transmission. | Go to transmission error code group at page 3-32~3-48. |



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## 2. HYDRAULIC CIRCUIT




| | | | | | |
|---|---|---|---|---|---|
| 1 | Main pump (steering) | 23 | Air breather | 28 | Check block (option) |
| 5 | Steering unit | 24 | Hydraulic tank | 29 | Pressure sensor (option) |
| 6 | Steering valve (EHPS) | 25 | Return filter | 33 | Cushion valve |
| 10 | Steering cylinder | 26 | Bypass valve | | |
| 21 | Oil cooler | 27 | Motor pump (option) | | |



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## 3. STEERING SYSTEM RESTRICTION TEST

- SPECIFICATION

  Oil temperature 45±5˚C (113±9˚F)
  Engine speed High idle
  Maximum pressure at steering valve (EHPS) 4.5MPa (45 bar, 640psi)

- GAUGE AND TOOL

  Gauge 0~7 MPa (0~70 bar, 0~1000 psi) 2EA

- This test will check for restrictions in the steering system which can cause overheating of hydraulic oil.

1) Install temperature reader.
   (see temperature reader installation procedure in this group).

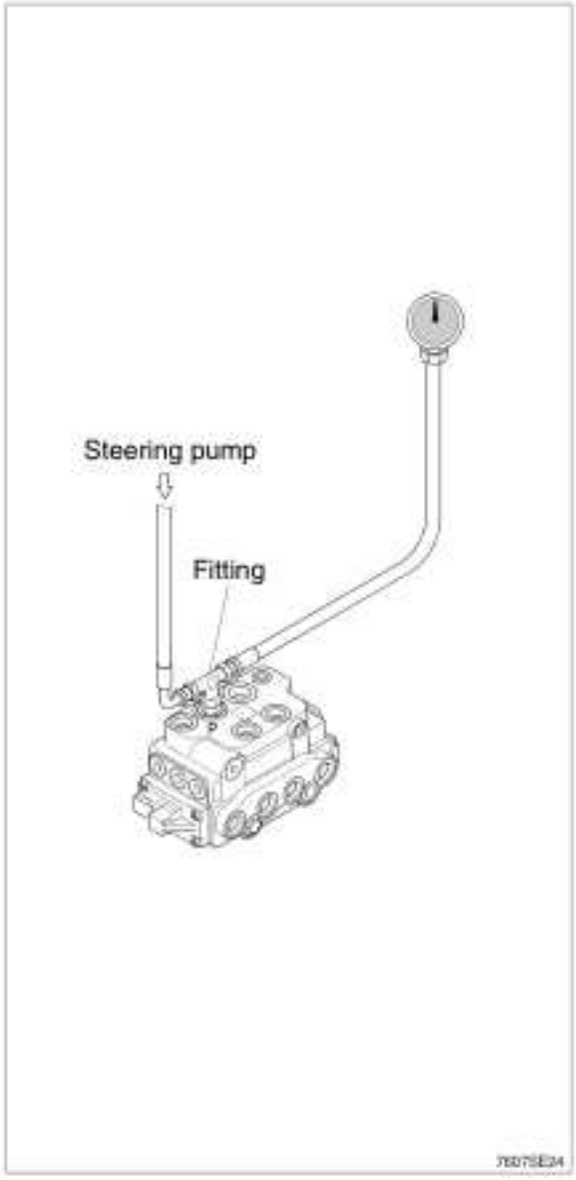
2) Heat hydraulic oil to specifications.
   (see hydraulic oil warm up procedure at page 6-48).

3) Connect fitting and install gauge.

⚠ **Do not operate steering or loader functions or test gauge may be damaged.**

4) Run engine at specification and read pressure gauges.

   If pressure is more than specification at the steering valve, inspect steering valve for a priority valve spool. Make sure orifice plugs installed in ends of priority valve spool.






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(14) Assembled nut (31).

- Tool : spanner 19 mm
- Tightening torque (M12) :
  40 ± 4 kgf · cm (28 ± 28.9 lbf · ft)



7607BRCV01

(15) Assemble the boots (32).



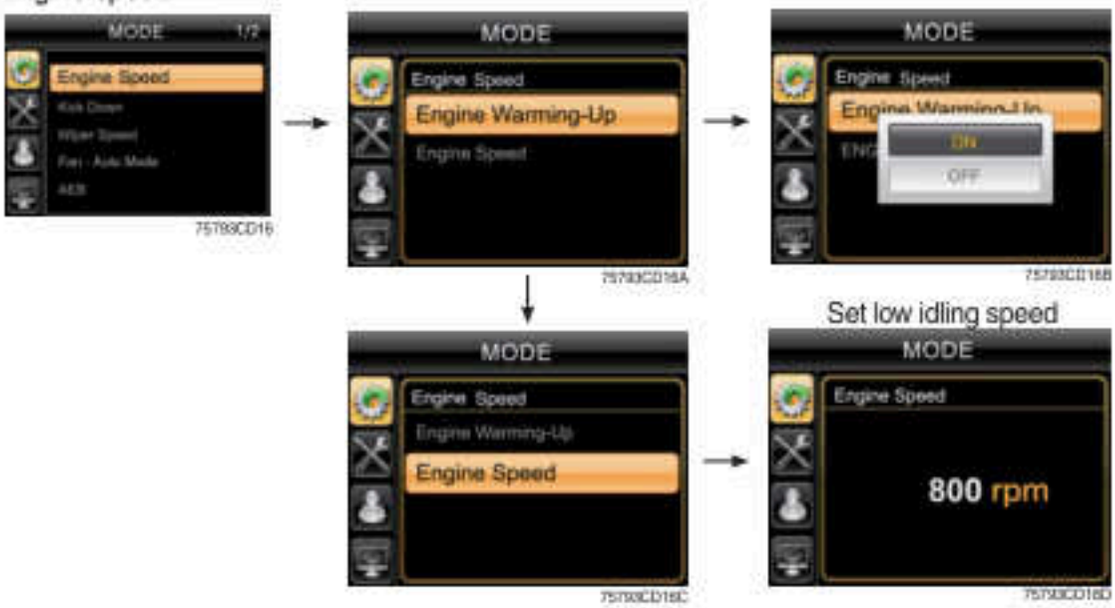
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(2) Mode

① Engine speed




② Kick down




- Mode 1 (down/up) : Press kick down button once, shift down and press button again, shift up.
- Mode 2 (down only) : Press kick down button every time, shift to lower gear respectively.

※ Refer to page 7-46.

③ Wiper speed




- Setting wipe speed 1 to 4.

④ Fan-auto mode




- Select reverse interval or reverse time.
- Set reverse interval (30~300 min) or reverse time (30~300 sec).

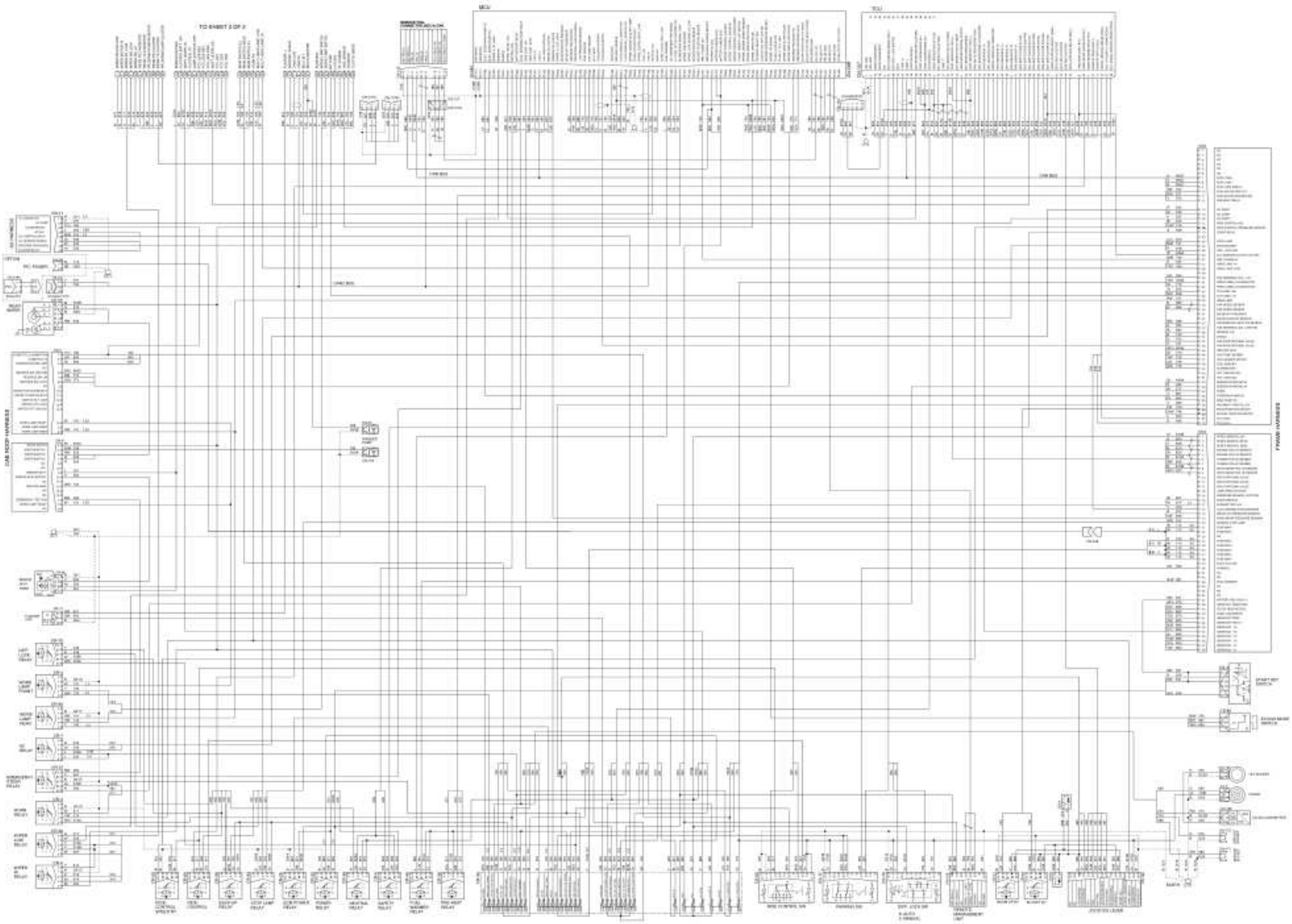
※ Default : Interval (60 min), time (120 sec)

※ Refer to page 7-44, fan control switch.



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· ELECTRICAL CIRCUIT (1/2) :





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