WHEEL LOADER

SERVICE MANUAL

SL733S

HYUNDAI

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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 4)

Problem	Cause	Remedy
No steering	Low oil level.	Add recommended oil.
	Restricted suction line.	Check.
	Failed hydraulic pump.	Remove and inspect return filter for metal pump particles.
	Stuck steering valve spool.	Remove and inspect steering valve spool.
	Relief valve in steering unit stuck open.	Do relief cartridge leakage test.
	Failed hydraulic lines.	Check.
Slow or hard steering	Too much friction in the mechanical parts of the machine.	Lubricate bearings and joints of frame or cylinders or repair if necessary. Check steering column installation.
	Cold oil.	Warm the hydraulic oil.
	Worn hydraulic pump.	Do hydraulic pump performance check.
	Low system relief valve setting.	Test and adjust if necessary.
	Low overload relief valves setting.	Test and adjust if necessary.

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6. HYDRAULIC SYSTEM RESTRICTION TEST

- SPECIFICATION

  Oil temperature 45±5°C(113±9°F)
  Engine speed High idle
  Maximum pressure
  3 MPa (30 bar, 43 psi) at steering unit
  Maximum pressure at main control valve
  1 MPa (10 bar, 145 psi)

- GAUGE AND TOOL

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

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

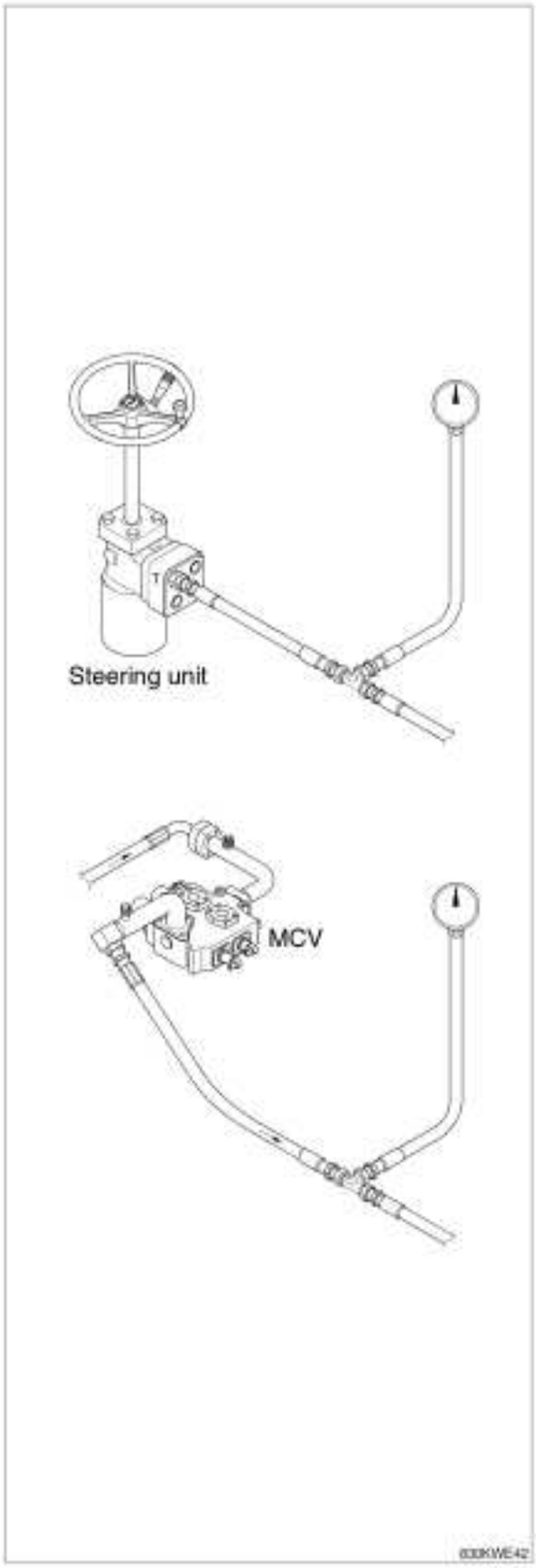
1) Install temperature reader.
   (see temperature reader installation procedure in this group)
2) Heat hydraulic oil to specifications.
   (see hydraulic oil warm up procedure in this group)
3) Connect fitting and gauge to steering valve.
4) Connect fitting and gauge to main control valve.

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

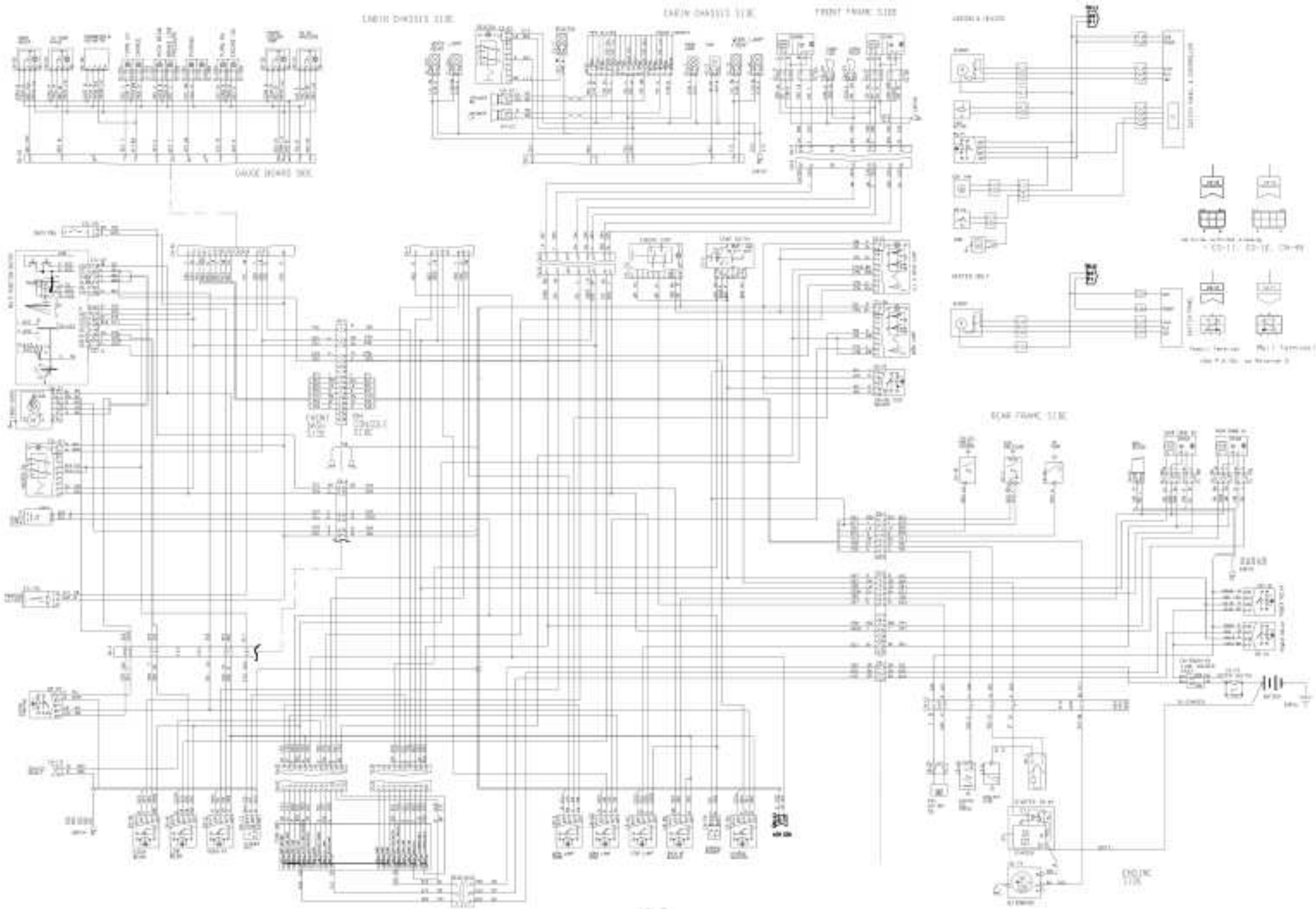
5) Run engine at specification and read pressure gauges.

   If pressure is more than specification at the loader control valve, check for a kinked, dented or obstructed hydraulic line. Check loader control valve for a binding spool.

   If pressure is more than specification at the steering unit, inspect neutral condition of the steering unit and priority valve for a stuck spool. Make sure orifice plugs are installed in ends of priority valve spool.
   Check for plugged orifice in priority valve LS port and dynamic signal orifice on the spool of priority valve.



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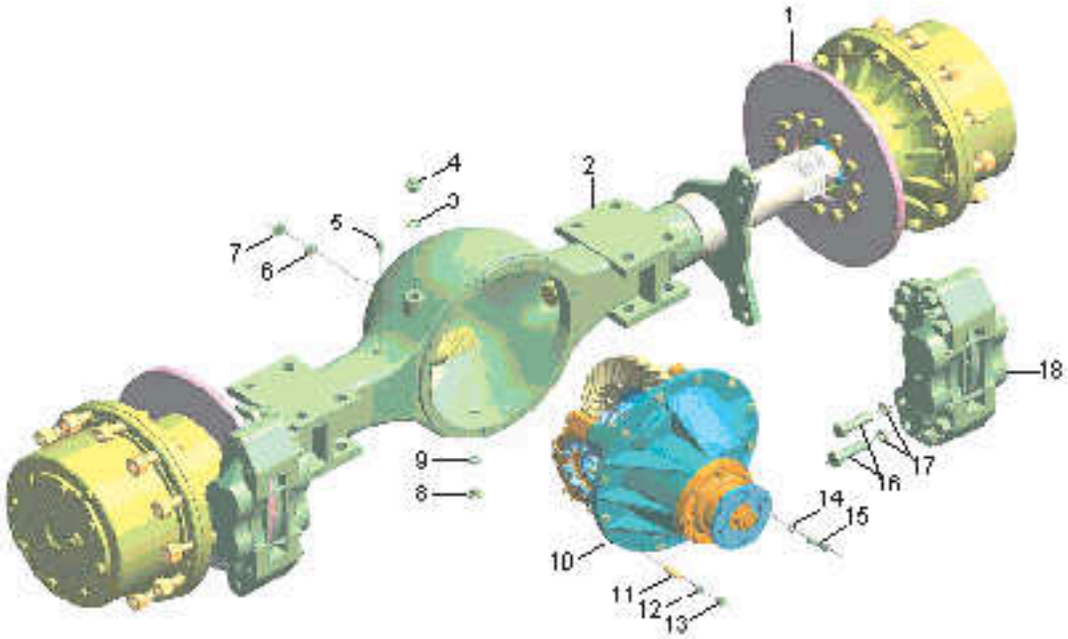


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8) STRUCTURE

(1) Drive axle assembly



1	Wheel-end reductor	7	Screw plug	13	Nut
2	Axle housing assy	8	Screw plug	14	Washer
3	O-ring	9	O-ring	15	Bolt
4	Screw plug	10	Final drive assy	16	Bolt
5	Exhaust plug	11	Double end studs	17	Washer
6	O-ring	12	Washer	18	Disc brake assy

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