CRAWLER EXCAVATOR

SERVICE MANUAL

R250LC-7A

HYUNDAI

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7) REMOTE CONTROL VALVE

Item		Specification
Type		Pressure reducing type
Operating pressure	Minimum	6.5kgf/cm²(92psi)
	Maximum	26kgf/cm²(370psi)
Single operation stroke	Lever	61mm(2.4in)
	Pedal	123mm(4.84in)

8) CYLINDER

Item		Specification
Boom cylinder	Bore dia × Rod dia × Stroke	ø140 × ø95 × 1345mm
	Cushion	Extend only
Arm cylinder	Bore dia × Rod dia × Stroke	ø150 × ø100 × 1620mm
	Cushion	Extend and retract
Bucket cylinder	Bore dia × Rod dia × Stroke	ø135 × ø90 × 1185mm
	Cushion	Extend only

※ Discoloration of cylinder rod can occur when the friction reduction additive of lubrication oil spreads on the rod surface.

※ Discoloration does not cause any harmful effect on the cylinder performance.

9) SHOE

Item		Width	Ground pressure	Link quantity	Overall width
R250LC-7A	Standard	600mm(24")	0.51kgf/cm²(7.25psi)	51	3180mm(10' 5")
	Option	700mm(28")	0.44kgf/cm²(6.26psi)	51	3280mm(10' 9")
		800mm(32")	0.39kgf/cm²(5.55psi)	51	3380mm(11' 1")
		900mm(36")	0.35kgf/cm²(4.98psi)	51	3480mm(11' 5")
R250NLC-7A	Standard	600mm(24")	0.51kgf/cm²(7.25psi)	51	2980mm(9' 9")
R250LC-7A HIGH WALKER	Standard	600mm(24")	0.53kgf/cm²(7.54psi)	48	3180mm(10' 5")
	Option	700mm(28")	0.46kgf/cm²(6.54psi)	48	3280mm(10' 9")
		800mm(32")	0.41kgf/cm²(5.83psi)	48	3380mm(11' 1")
		★710mm(28")	0.46kgf/cm²(6.54psi)	48	3290mm(10' 10")

★: Double grouser

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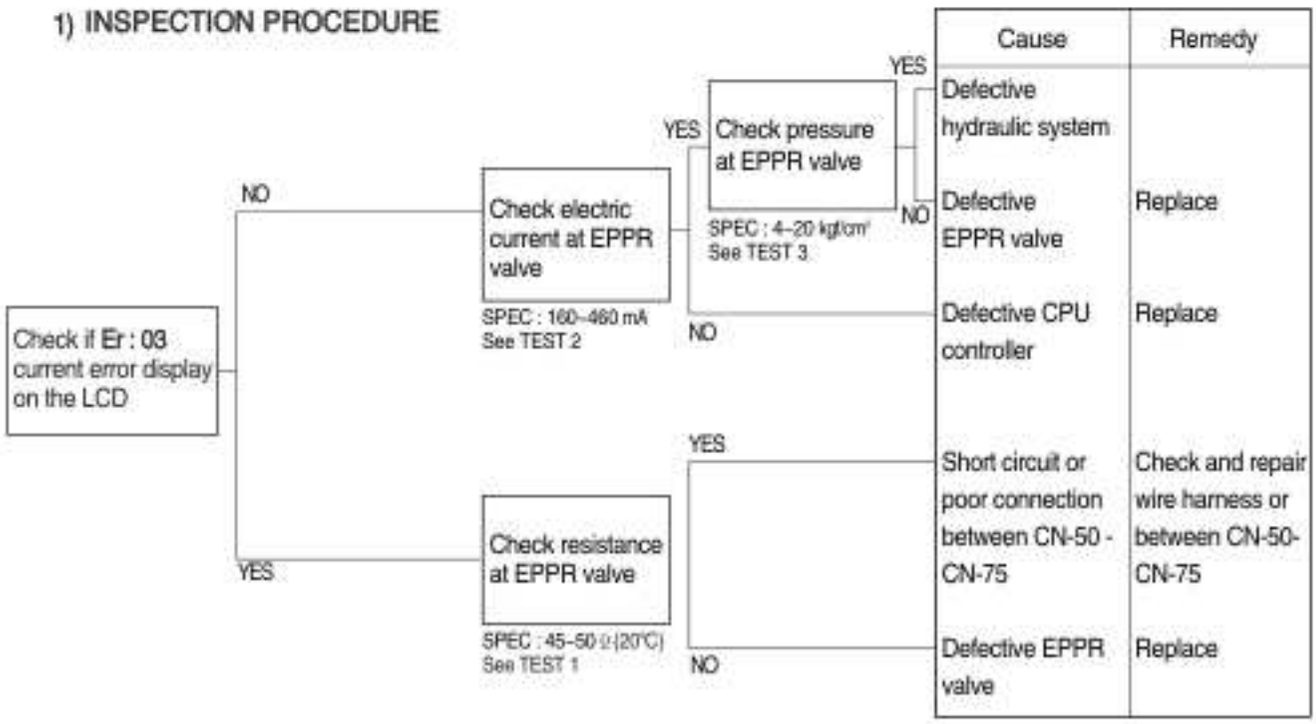
Fault code No.	Reason	Effect (only when fault code is active)
287	SAE J1939 multiplexed accelerator pedal or lever sensor system - received network data In error. The OEM vehicle electronic control unit (VECU) detected a fault with its accelerator pedal.	Engine may only idle or engine will not accelerate to full speed.
288	SAE J1939 Multiplexing Remote Accelerator Pedal or Lever Position Sensor Circuit - Received Network Data In Error. The OEM vehicle electronic control unit (VECU) detected a fault with the remote accelerator.	The engine will not respond to the remote throttle. Engine may only idle. The primary or cab accelerator may be able to be used.
292	Auxiliary temperature Sensor Input 1 - Special instructions.	Possible engine power derate.
293	Auxiliary temperature sensor input 1 circuit - Voltage above normal, or shorted to high source. High signal voltage or open circuit detected at the OEM auxiliary temperature circuit.	None on performance.
294	Auxiliary temperature sensor input 1 circuit - Voltage below normal, or shorted to low source. Low signal voltage detected at the OEM auxiliary temperature circuit.	None on performance.
296	Auxiliary pressure sensor input 1 - Special instructions.	Possible engine power derate.
297	Auxiliary pressure sensor input 1 circuit - Voltage above normal, or shorted to high source. High signal voltage detected at the OEM pressure circuit.	None on performance.
298	Auxiliary pressure sensor input 1 circuit - Voltage below normal, or shorted to low source. Low signal voltage or open circuit detected at the OEM pressure circuit.	None on performance.
319	Real time clock power interrupt - Data erratic, intermittent, or incorrect. Real time clock lost power.	None on performance. Data in the ECM will not have accurate time and date information.
322	Injector solenoid driver cylinder 1 circuit - Current below normal, or open circuit. High resistance detected on injector number 1 circuit or no current detected at number 1 injector driver or return pin when the voltage supply at the harness is on.	Engine can possibly misfire or run rough.
323	Injector solenoid driver cylinder 5 circuit - Current below normal, or open circuit. High resistance detected on injector number 5 circuit or no current detected at number 5 injector driver or return pin when the voltage supply at the harness is on.	Engine can possibly misfire or run rough.
324	Injector solenoid driver cylinder 3 circuit - Current below normal, or open circuit. High resistance detected on injector number 3 circuit or no current detected at number 3 injector driver or return pin when the voltage supply at the harness is on.	Engine can possibly misfire or run rough.
325	Injector solenoid driver cylinder 6 circuit - Current below normal, or open circuit. High resistance detected on injector number 6 circuit or no current detected at number 6 injector driver or return pin when the voltage supply at the harness is on.	Engine can possibly misfire or run rough.

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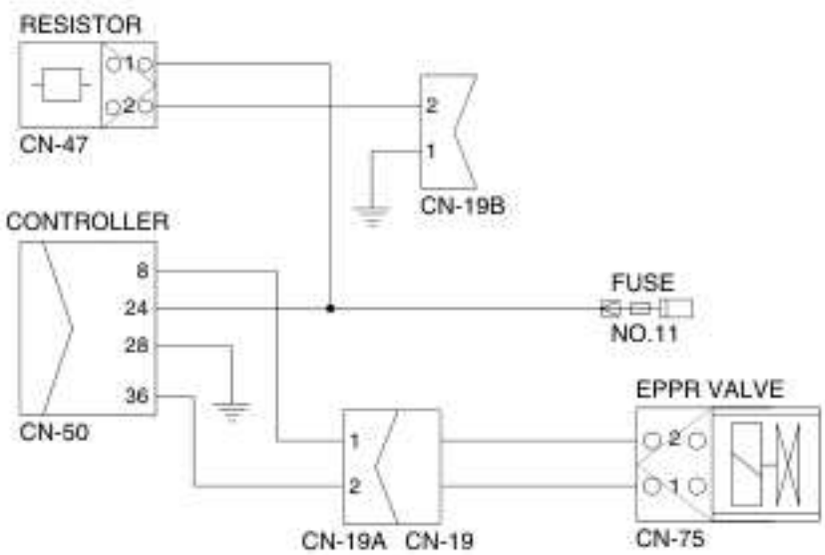
1. ALL ACTUATORS SPEED ARE SLOW

※ Boom, Arm, Bucket, Swing and travel speed are slow, but engine speed is good.
※ Spec : M-mode 1950± 50rpm H-mode 1850 ± 50rpm S-mode 1750 ± 50rpm
※ Before carrying out below procedure, check all the related connectors are properly inserted.

1) INSPECTION PROCEDURE



Wiring diagram



2307A6M501

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⑤ Install pinion gear(25).
Be careful to check right direction of pinion gear when installing.



⑥ Put lock plate(26) and lock washer(27), matching tap holes and tighten hex bolt (28).
· Tightening torque : 24kgf · m(173lbf · ft)

※ When installing hex bolt(28), be sure to spread loctite 262.



⑦ To lock the bolts(28), bend the lock washer(27) to cover over the bolt head using jig.



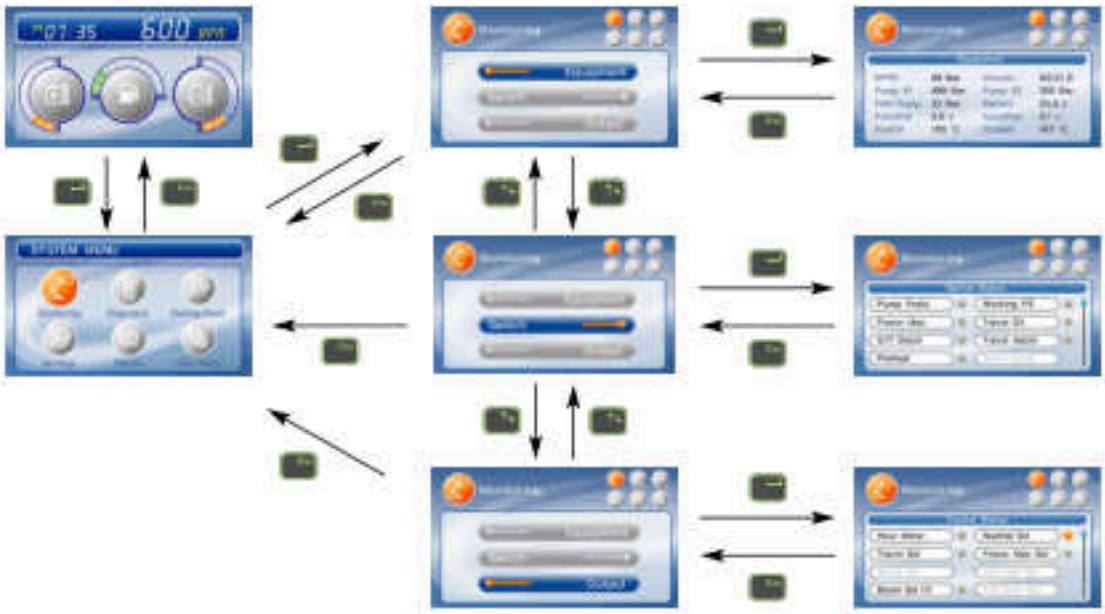
⑧ Reverse case(1) and press to insert oil seal(7) by using jig after spreading grease oil on the outside ring of the seal.
Coat grease oil slightly on the lip surface of the oil seal to prevent any scratch when installing.



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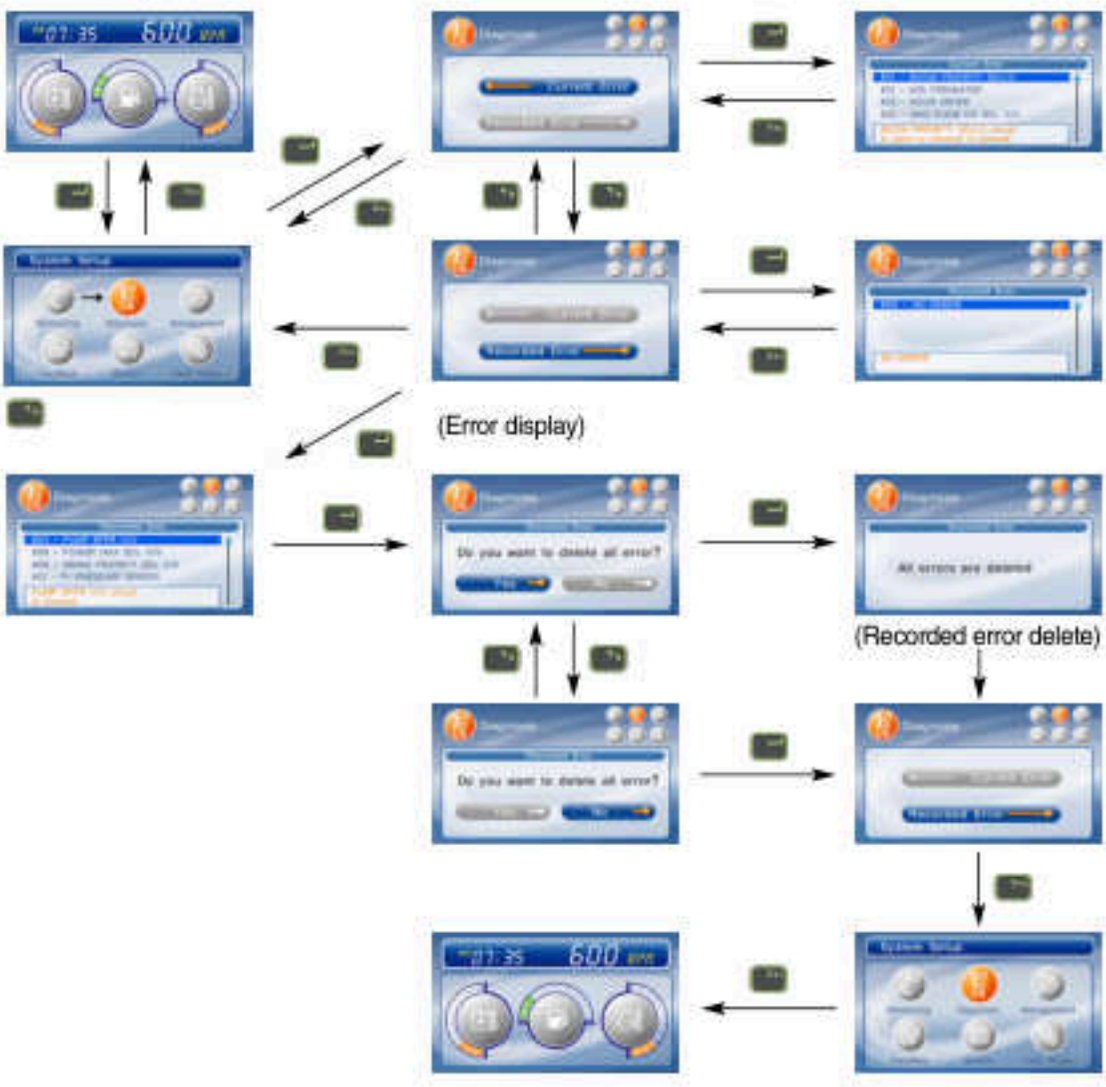
(2) Display map

① Monitoring

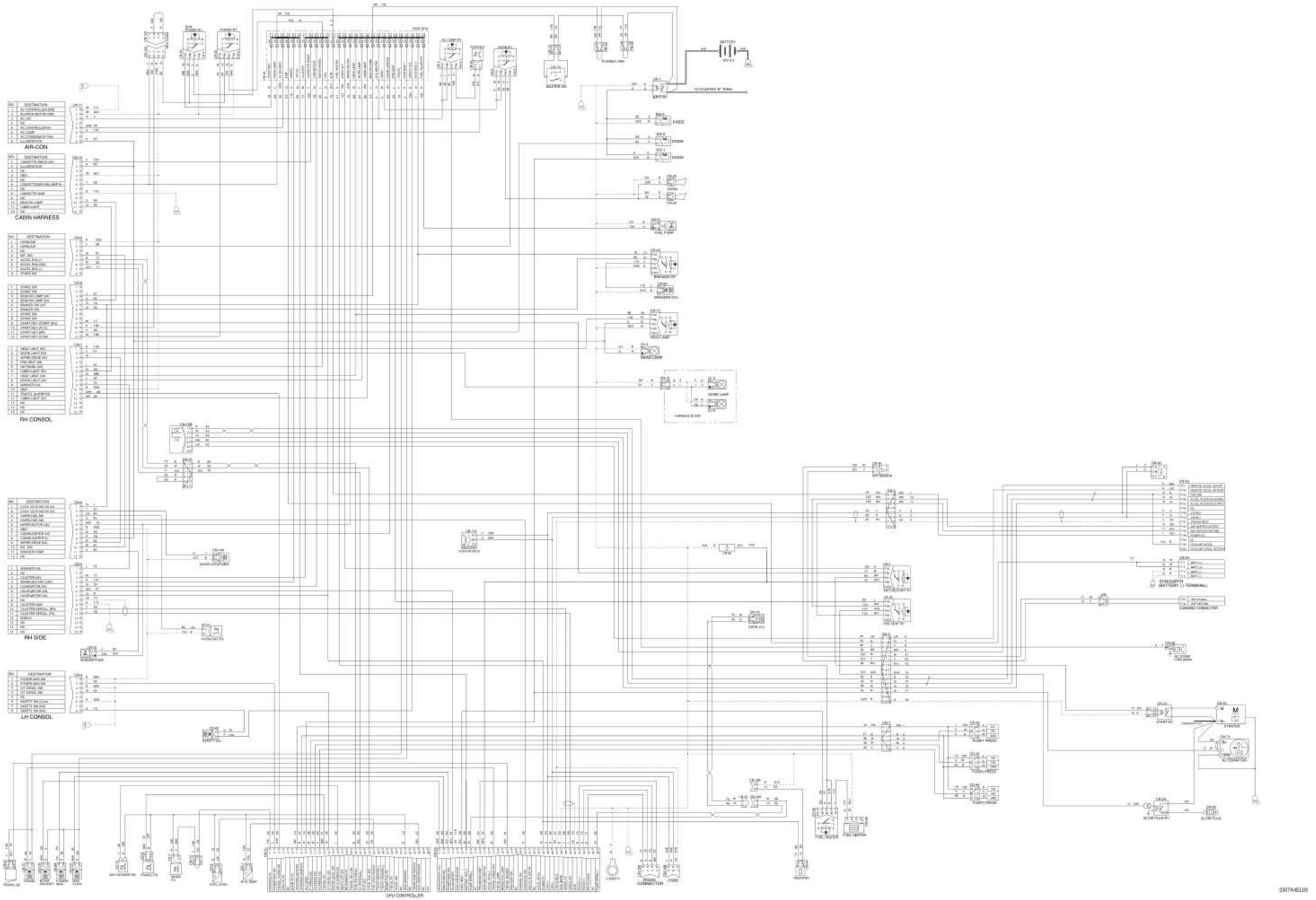


② Diagnosis

a. Protocol type 1



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