CRAWLER EXCAVATOR

SERVICE MANUAL

RB140LC-9S

HYUNDAI

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CONTENTS

SECTION 1 GENERAL

Group 1 Safety Hints 1-1
Group 2 Specifications 1-10

SECTION 2 STRUCTURE AND FUNCTION

Group 1 Pump Device 2-1
Group 2 Main Control Valve 2-19
Group 3 Swing Device 2-46
Group 4 Travel Device 2-58
Group 5 RCV Lever 2-83
Group 6 RCV Pedal 2-90

SECTION 3 HYDRAULIC SYSTEM

Group 1 Hydraulic Circuit 3-1
Group 2 Main Circuit 3-2
Group 3 Pilot Circuit 3-5
Group 4 Single Operation 3-13
Group 5 Combined Operation 3-25

SECTION 4 ELECTRICAL SYSTEM

Group 1 Component Location 4-1
Group 2 Electrical Circuit 4-3
Group 3 Electrical Component Specification 4-21
Group 4 Connectors 4-29

SECTION 5 MECHATRONICS SYSTEM

Group 1 Outline 5-1
Group 2 Mode selection System 5-3
Group 3 Automatic Deceleration System 5-6
Group 4 Power Boost System 5-7
Group 5 Travel Speed Control System 5-8
Group 6 Automatic Warming Up Function 5-9
Group 7 Engine Overheat Prevention Function 5-10
Group 8 Variable Power Control System 5-11

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Group 9 Attachment Flow Control System 5-12
Group 10 Anti-Restart System 5-13
Group 11 Self-Diagnostic System 5-14
Group 12 Engine Control System 5-18
Group 13 EPPR Valve 5-19
Group 14 Monitoring System 5-24
Group 15 Fuel Warmer System 5-47

SECTION 6 TROUBLESHOOTING

Group 1 Before trobleshooting 6-1
Group 2 Hydraulic and Mechanical System 6-4
Group 3 Electrical System 6-24
Group 4 Mechatronics System 6-40

SECTION 7 MAINTENANCE STANDARD

Group 1 Operational Performance Test 7-1
Group 2 Major Components 7-21
Group 3 Track and Work Equipment 7-32

SECTION 8 DISASSEMBLY AND ASSEMBLY

Group 1 Precaution 8-1
Group 2 Tightening Torque 8-4
Group 3 Pump Device 8-7
Group 4 Main Control Valve 8-29
Group 5 Swing Device 8-43
Group 6 Travel Device 8-64
Group 7 RCV Lever 8-119
Group 8 Turning Joint 8-133
Group 9 Boom, Arm and Bucket Cylinder 8-138
Group 10 Undercarriage 8-156
Group 11 Work Equipment 8-168

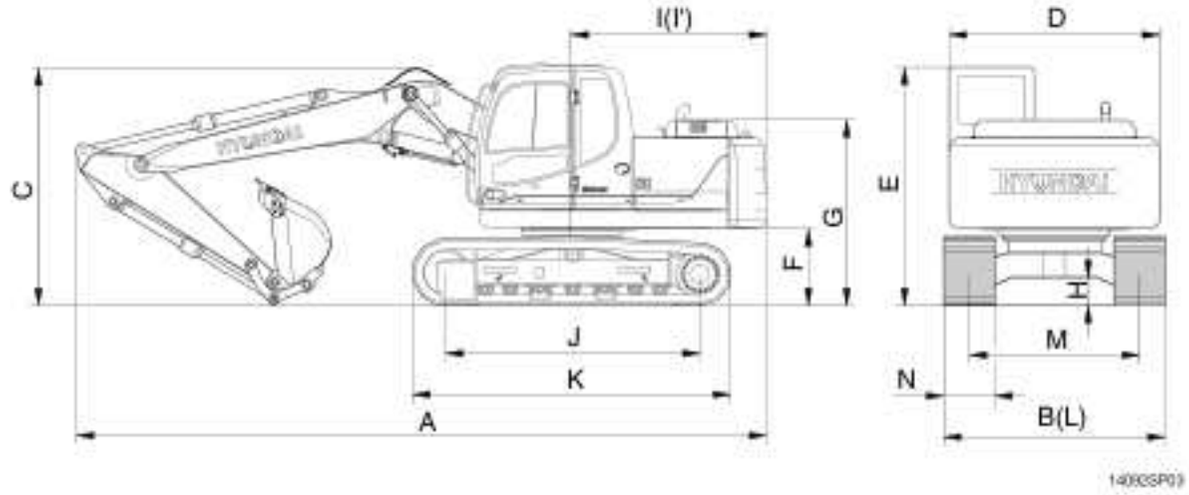
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SECTION 9 COMPONENT MOUNTING TORQUE

Group 1 Introduction guide 9-1
Group 2 Engine system 9-2
Group 3 Electric system 9-4
Group 4 Hydraulic system 9-6
Group 5 Undercarriage 9-9
Group 6 Structure 9-10
Group 7 Work equipment 9-14

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2) R140LC-9S, 4.90 m (16' 1") HYDRAULIC ADJUSTABLE BOOM and 2.50 m (8' 2") ARM



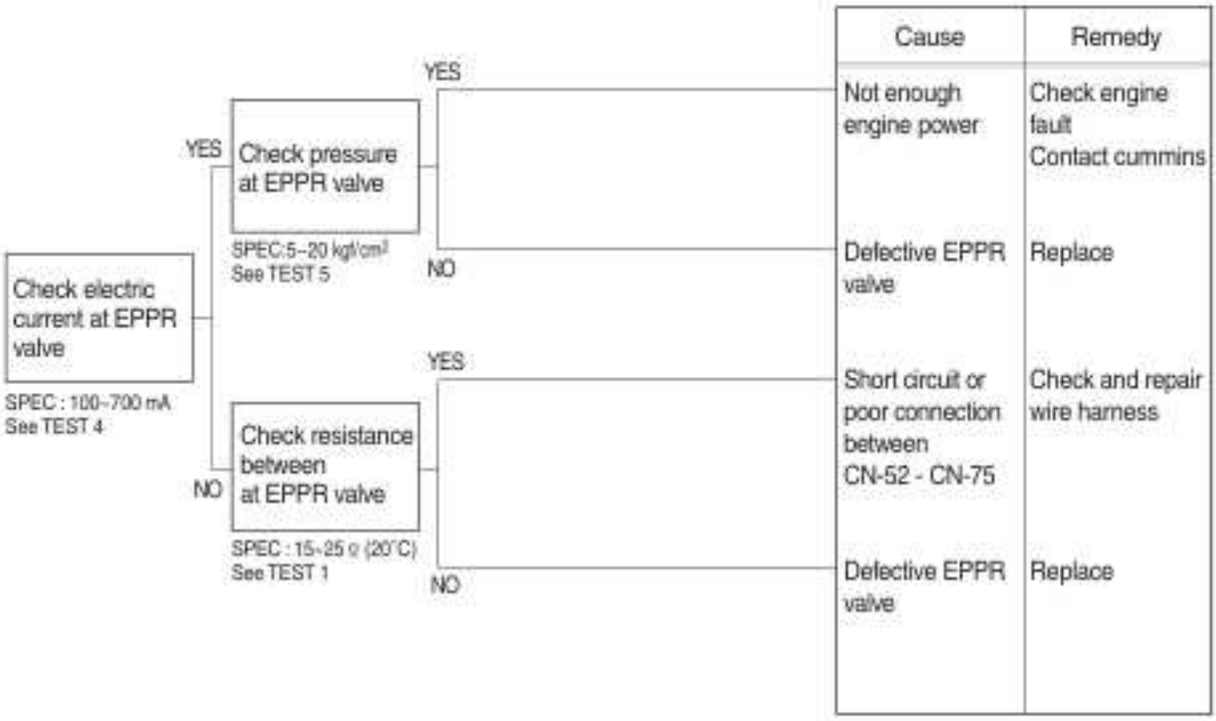
Description		Unit	Specification
Operating weight		kg (lb)	13980 (30860)
Bucket capacity (SAE heaped), standard		m^3 (yd^3)	0.58 (0.76)
Overall length	A	mm (ft-in)	8170 (26' 8")
Overall width, with 600 mm shoe	B		2600 (8' 6")
Overall height	C		2940 (9' 8")
Superstructure width	D		2500 (8' 2")
Overall height of cab	E		2860 (9' 4")
Ground clearance of counterweight	F		935 (3' 1")
Engine cover height	G		2050 (6' 7")
Minimum ground clearance	H		440 (1' 5")
Rear-end distance	I		2280 (7' 6")
Rear-end swing radius	I'		2310 (7' 7")
Distance between tumblers	J		3000 (9' 10")
Undercarriage length	K		3750 (12' 4")
Undercarriage width	L		2600 (8' 6")
Track gauge	M		2000 (6' 7")
Track shoe width, standard	N		600 (24")
Travel speed (low / high)		km/hr (mph)	3.2/5.5 (2.0/3.4)
Swing speed		rpm	12.0
Gradeability		Degree (%)	35 (70)
Ground pressure (600 mm shoe)		kgf/cm^2 (psi)	0.36 (5.12)
Max traction force		kgf (lbf)	13300 (29320)

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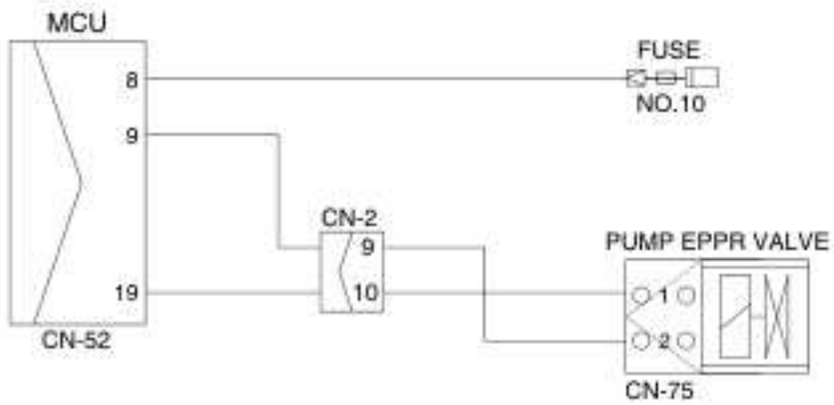
2. ENGINE STALL

※ Before carrying out below procedure, check all the related connectors are properly inserted.

1) INSPECTION PROCEDURE



Wiring diagram



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④ Shortage of rotating force at the standard value

Problem	Cause	Remedy
Brake is released, but the turning force is low	- Excavator main relief valve is not set correctly	- Resetting the main relief valve
	- Pressure down of motor relief valve	- Resetting the relief valve pressure - Exchange the relief valve
	- Malfunction of check valve	- Exchange the check valve
	- Scratch of valve plate	- Fix or exchange the abnormal parts

⑤ Many slip

Problem	Cause	Remedy
Brake is released, but the turning force is week	- Malfunction of relief valve	- Fix or exchange the abnormal parts
	- Check valve error	
	- Stick of counter balance spool	
	- Valve plate scratch / copper peeling phenomena	

⑥ It is not two speed changeover

Problem	Cause	Remedy
It is not variable speed (low/high 2- stage speed) changeover	- Pilot Line error	- Fix or exchange the abnormal parts
	- Two speed changeover spool stick	
	- Swash piston stick	

⑦ Oil leakage

Problem	Cause	Remedy
Leakage at oil seal	- Drain pressure is high	- Remove the abnormal substances after exchanging the damaged part
	- Seal error	- Check a drain line of an equip
Leakage on a assembled surface	- Damage of a O-ring	- Exchange O-ring
	- Bolt or plug is released	- Tighten the parts with fixed torque

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(11) Put spring (36), two speed control spool (35) into valve casing (25) in regular sequence and assemble plug (37) into valve casing (25) using a torque wrench.

· Tighten torque : 10 kgf-m (72.3 lbf-ft)



145Z9A8TM70



145Z9A8TM71

(12) Assemble check (30), spring (29), plug (27) into main spool (26) in regular sequence.



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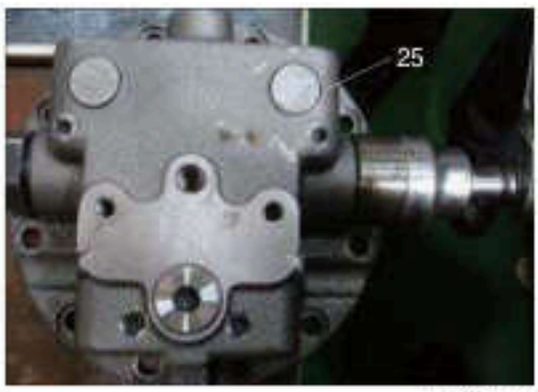
145Z9A8TM75

(13) Put the main spool (26) into valve casing (25) and assemble plate (31), spring (29) into it. Tighten main spool plug (32) using a torque wrench.

· Tighten torque : 45 kgf-m (325.5 lbf-ft)



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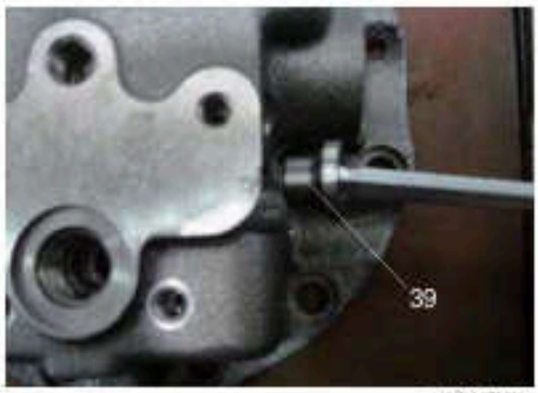
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(14) Put relief valve damping piston (38) into valve casing (25) and assemble plug (39) into valve casing (25).

· Tighten torque : 6 kgf-m (43.4 lbf-ft)



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(3) Monitoring

① Active fault



- The active faults of the MCU can be checked by this menu.

② Logged fault



- The logged faults of the MCU can be checked by this menu.

③ Delete logged fault



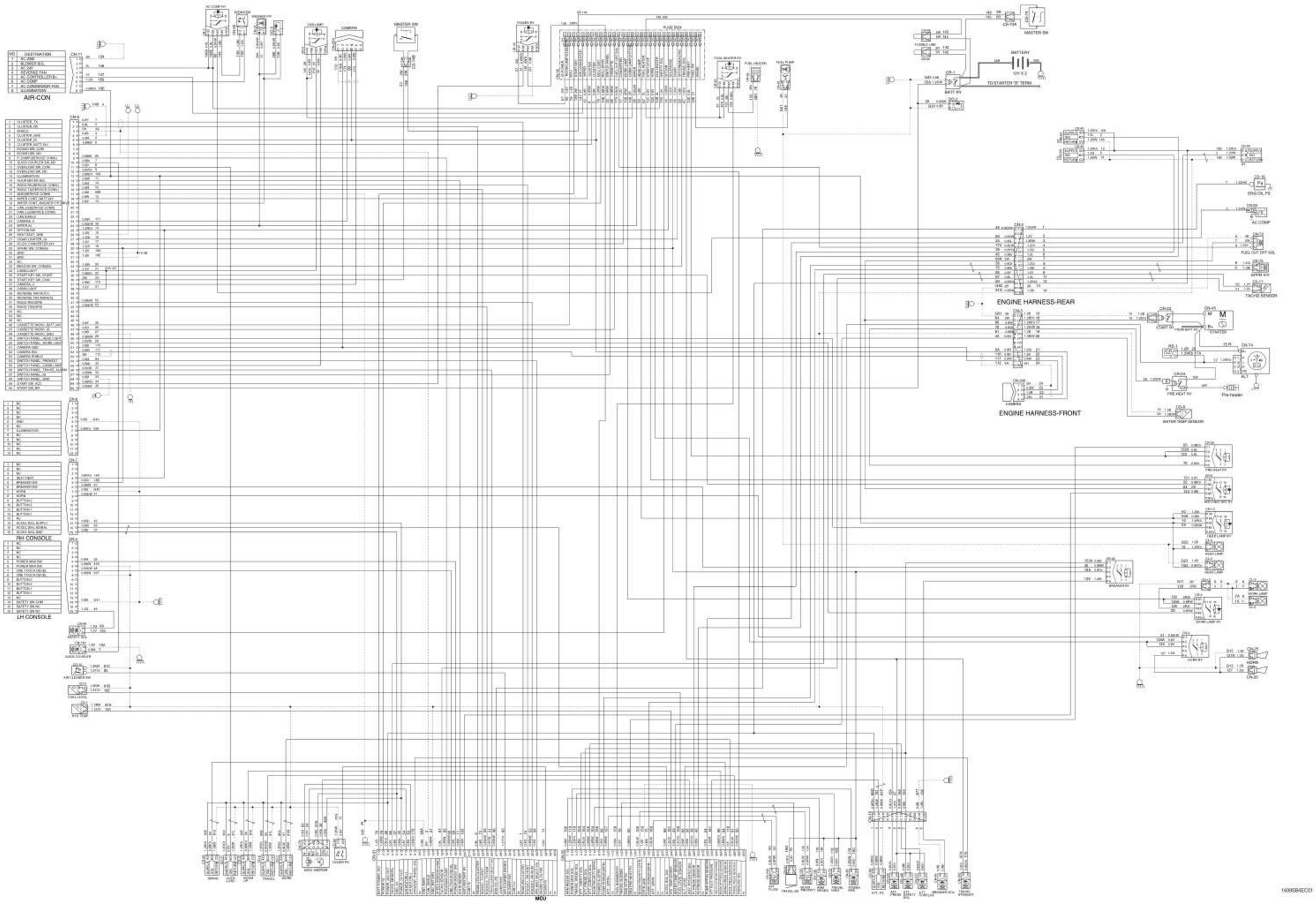
- The logged faults of the MCU can be deleted by this menu.

④ Monitoring (analog)



- The machine status such as the engine rpm, oil temperature, voltage and pressure etc. can be checked by this menu.

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