CRAWLER EXCAVATOR

SERVICE MANUAL

R145CR-9

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 2-20
Group 3 Swing Device 2-47
Group 4 Travel Device 2-59
Group 5 RCV Lever 2-69
Group 6 RCV Pedal 2-76

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 4-28

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 5-20
Group 13 EPPR Valve 5-21
Group 14 Monitoring System 5-26
Group 15 Fuel Warmer System 5-49

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 7-29

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 8-32
Group 5 Swing Device 8-46
Group 6 Travel Device 8-67
Group 7 RCV Lever 8-95
Group 8 Turning Joint 8-109
Group 9 Boom, Arm and Bucket Cylinder 8-114
Group 10 Undercarriage 8-132
Group 11 Work Equipment 8-144

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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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7) CYLINDER

Item		Specification
Boom cylinder	Bore dia × Rod dia × Stroke	ø 105 × ø 75 × 1105 mm
	Cushion	Extend only
Arm cylinder	Bore dia × Rod dia × Stroke	ø 115 × ø 80 × 1138 mm
	Cushion	Extend and retract
Bucket cylinder	Bore dia × Rod dia × Stroke	ø 100 × ø 70 × 840 mm
	Cushion	Extend only
Dozer cylinder (option)	Bore dia × Rod dia × Stroke	ø 100 × ø 70 × 250 mm
	Cushion	-

※ 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.

8) SHOE

Item		Width	Ground pressure	Link quantity	Overall width
R145CR-9	Standard	500 mm (20")	0.46 kgf/cm² (6.54 psi)	45	2500 mm (8' 2")
	Option	600 mm (24")	0.39 kgf/cm² (5.55 psi)	45	2600 mm (8' 6")
		700 mm (28")	0.34 kgf/cm² (4.83 psi)	45	2700 mm (8' 10")
R145CRD-9	Standard	500 mm (20")	0.49 kgf/cm² (6.97 psi)	45	2500 mm (8' 2")
	Option	600 mm (24")	0.41 kgf/cm² (5.81 psi)	45	2600 mm (8' 6")
		700 mm (28")	0.36 kgf/cm² (5.12 psi)	45	2700 mm (8' 10")
R145LCR-9	Standard	500 mm (20")	0.47 kgf/cm² (6.68 psi)	46	2500 mm (8' 2")
	Option	600 mm (24")	0.39 kgf/cm² (5.55 psi)	46	2600 mm (8' 6")
		700 mm (28")	0.34 kgf/cm² (4.83 psi)	46	2700 mm (8' 10")

BUCKET

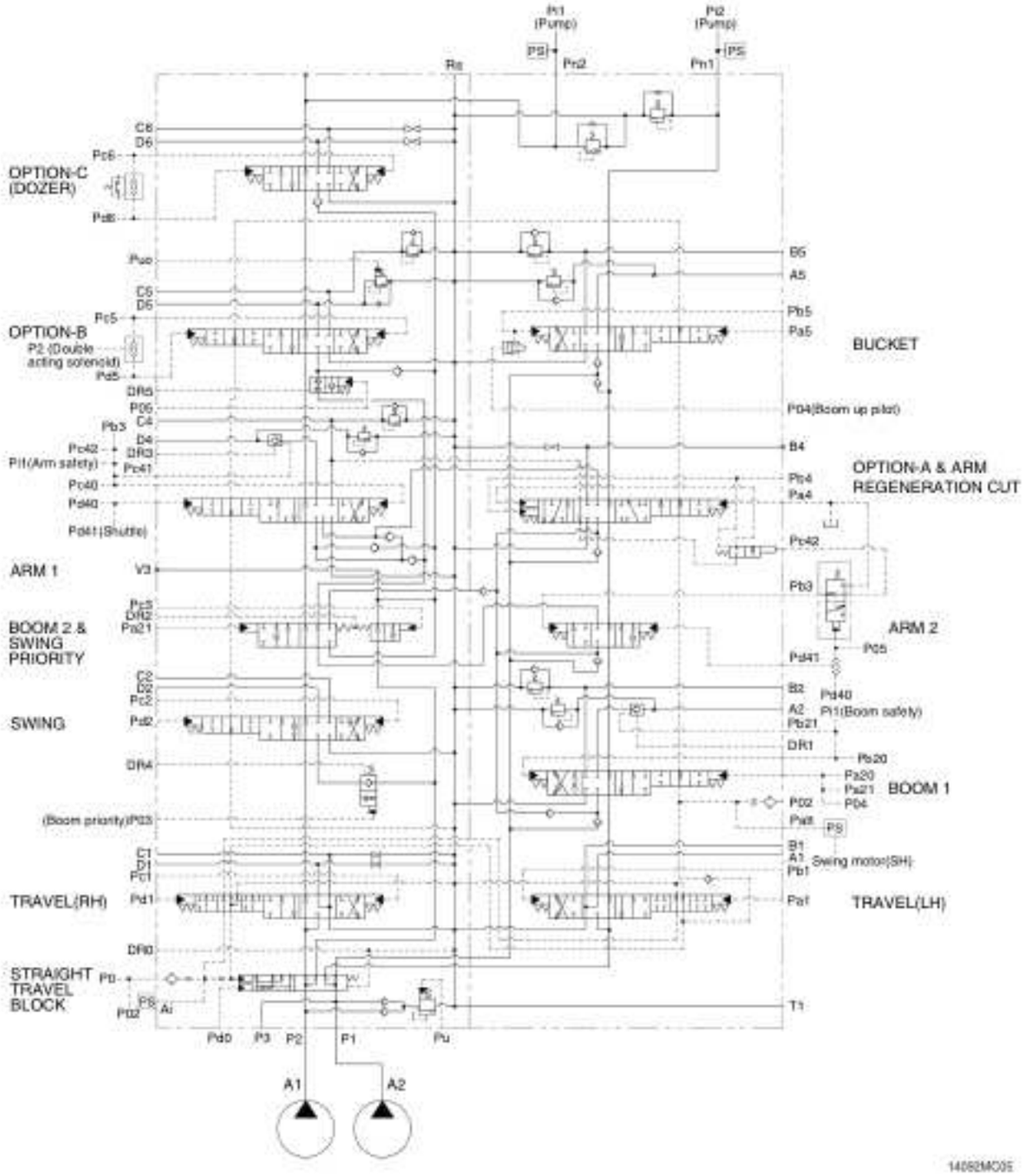
Item	Capacity		Tooth quantity	Width	
	SAE heaped	CECE heaped		Without side cutter	With side cutter
R145CR-9	0.52 m³ (0.68 yd³)	0.45 m³ (0.59 yd³)	5	915 mm (36.0")	1015 mm (40.0")
	0.23 m³ (0.30 yd³)	0.20 m³ (0.26 yd³)	3	520 mm (20.5")	620 mm (24.4")
	0.40 m³ (0.52 yd³)	0.35 m³ (0.46 yd³)	4	750 mm (29.5")	850 mm (33.5")
	0.46 m³ (0.60 yd³)	0.40 m³ (0.52 yd³)	4	840 mm (33.1")	940 mm (37.0")
	0.58 m³ (0.76 yd³)	0.50 m³ (0.65 yd³)	5	1000 mm (39.4")	1100 mm (43.3")
	0.65 m³ (0.85 yd³)	0.55 m³ (0.72 yd³)	5	1105 mm (43.5")	1205 mm (47.4")
	0.71 m³ (0.93 yd³)	0.60 m³ (0.78 yd³)	5	1190 mm (46.9")	1290 mm (50.8")
	★0.45 m³ (0.59 yd³)	0.40 m³ (0.52 yd³)	-	1520 mm (59.8")	-
	⊙0.55 m³ (0.72 yd³)	0.45 m³ (0.59 yd³)	-	1800 mm (70.9")	-

★ : Ditch cleaning bucket

⊙ : Slope finishing bucket

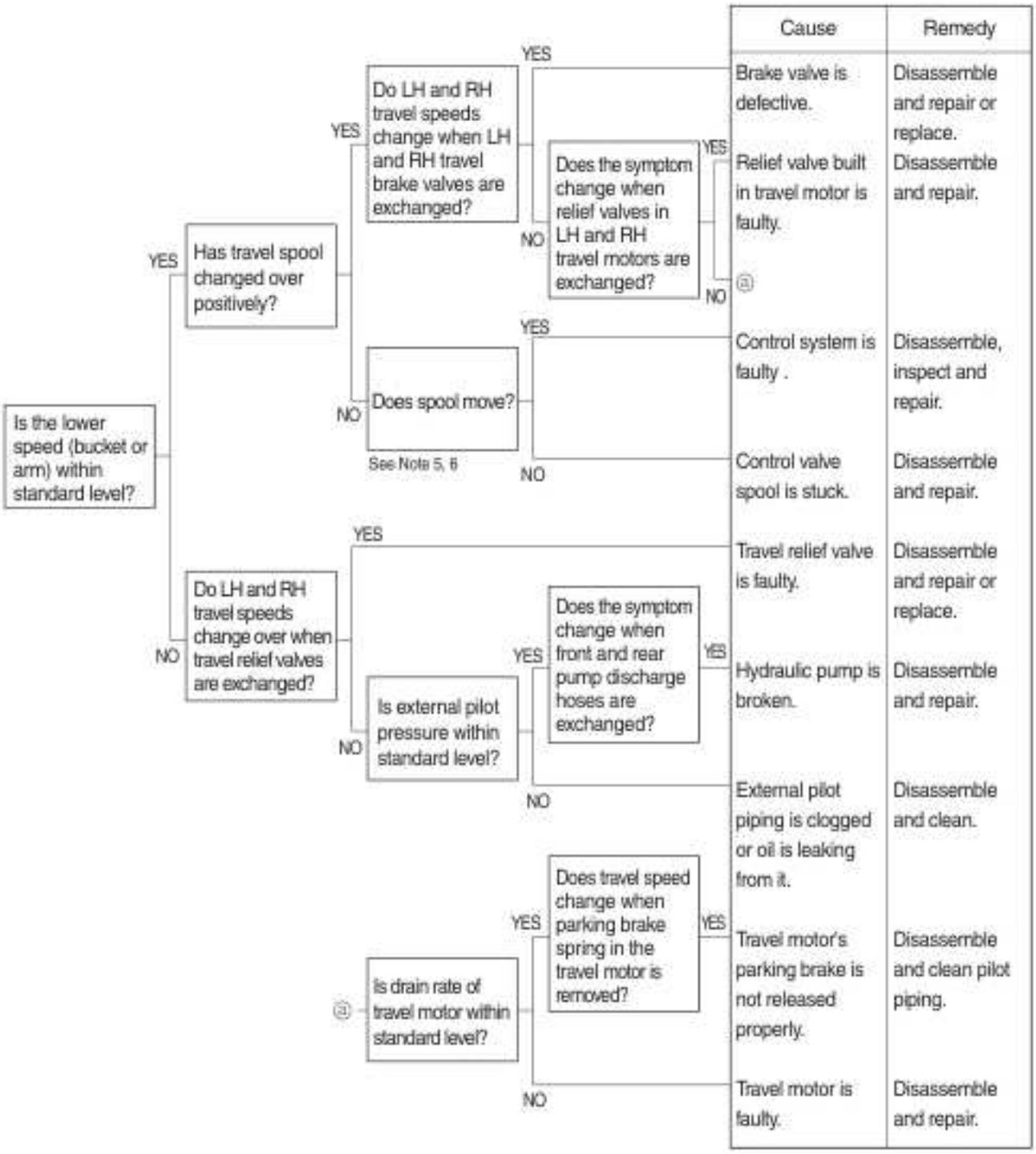
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2. HYDRAULIC CIRCUIT



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2) SPEED ON ONE SIDE FALLS AND THE MACHINE CURVES



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(3) Fit tilting bush (214) of swash plate (212) to tilting pin (531), and fit swash plate (212) with shoe plate (211) to swash plate support (251) correctly.

- Confirm with fingers of both hands that swash plate can be removed smoothly.
- Apply grease to sliding sections of swash plate (212) and swash plate support (251), and drive shaft (111, 113) can be fitted easily.
- Take care not to damage shoe plate (211) surface.



(4) To pump casing (271, 272), fit drive shaft (111, 113) set with bearing (123), bearing spacer (127) and stop ring (824).



(5) In assemble of front pump, assemble seal cover (F) (261) to pump casing (271) and fix it with hexagon socket head bolt (406).

- Apply grease lightly to oil seal in seal cover (F) (261).
- For assemble oil seal (774), taking full care not to damage it.



(6) Assemble piston cylinder subassembly [cylinder (141), piston subassembly (151, 152), set plate (153), spherical bush (156) and cylinder spring (157)]. Fitting spline phases of cylinder, spherical bush (156) and drive shaft (111, 113), insert piston cylinder subassembly into pump casing (271, 272).



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(3) Monitoring

① Active fault



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

② Logged fault



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

③ Delete logged fault



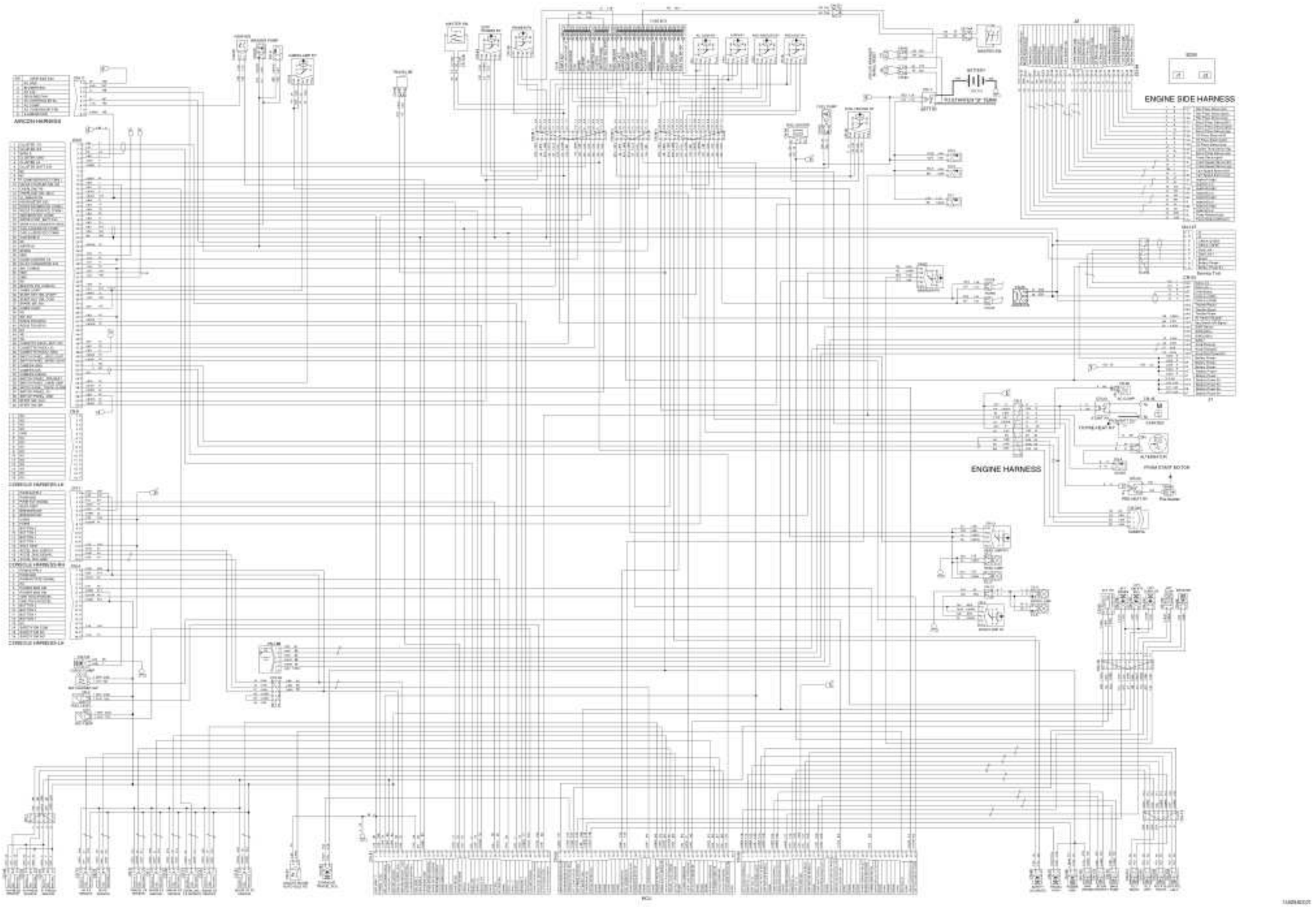
- The logged faults of the MCU or engine ECM can be deleted by this menu.

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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