CRAWLER EXCAVATOR

SERVICE MANUAL

R225LVS (China)

HYUNDAI

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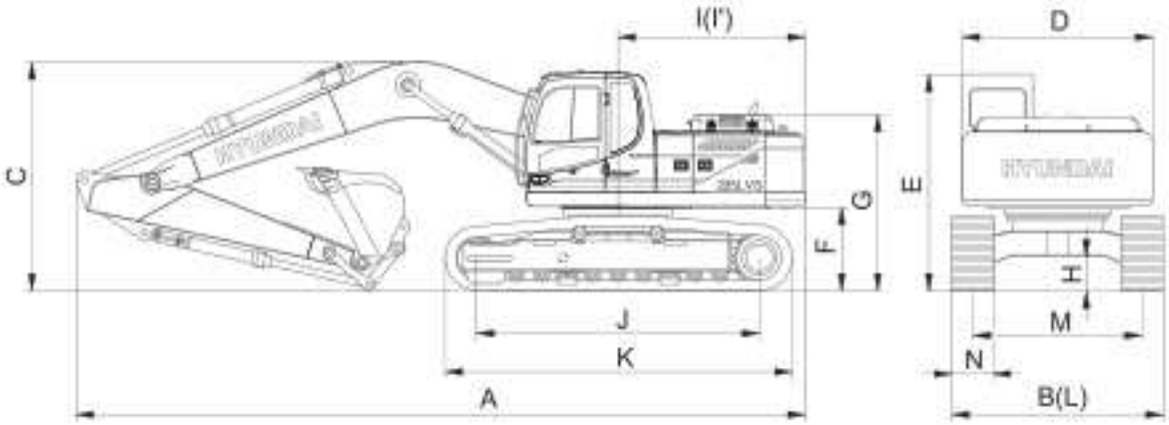
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2. SPECIFICATIONS

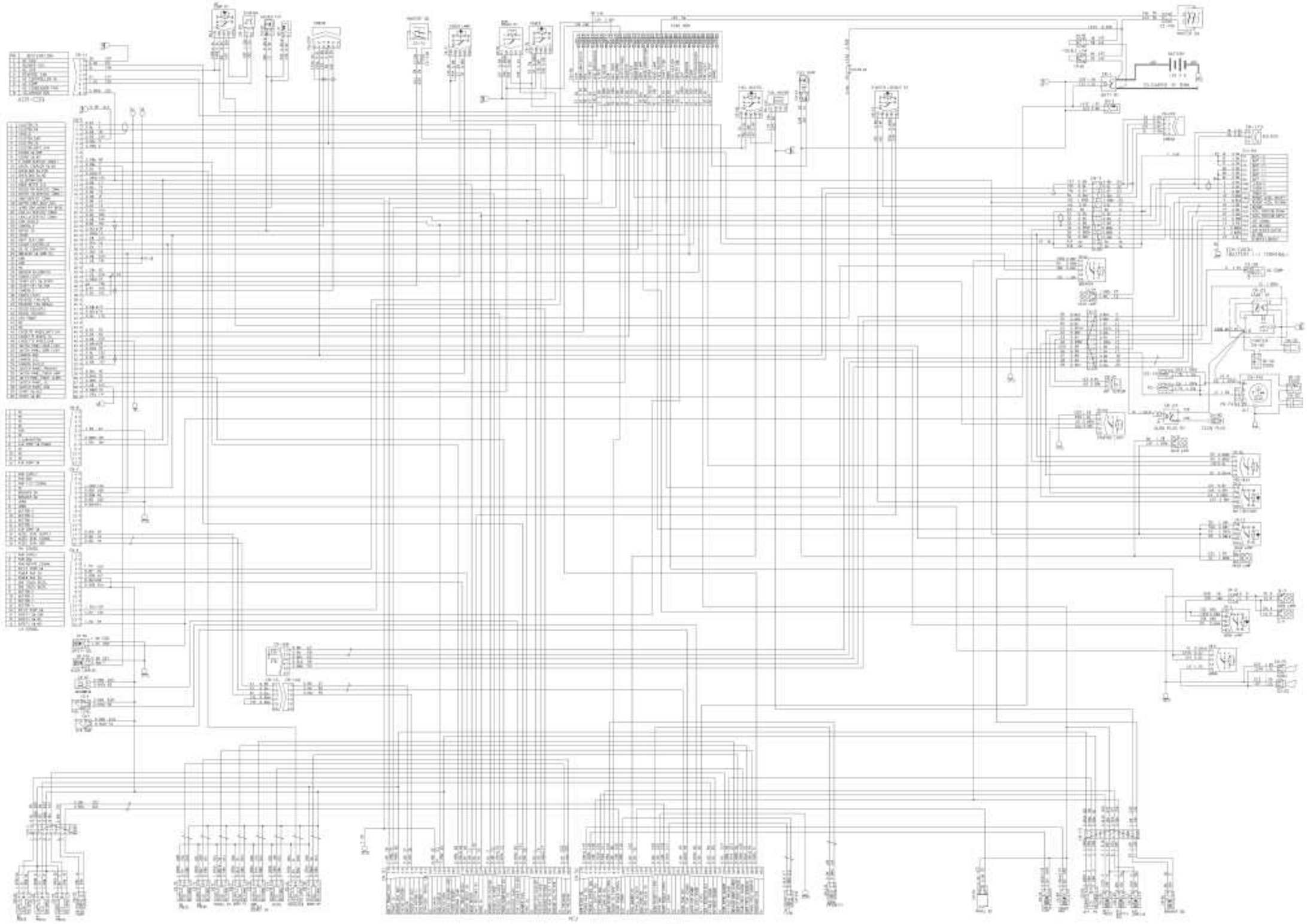
1) R225LVS

· 5.68 m (18' 8") BOOM and 2.92 m (9' 7") ARM



Description			Unit	Specification
Operating weight			kg (lb)	22570 (49760)
Bucket capacity (SAE heaped)	light(OPT)		m^3 (yd^3)	1.20 (1.57)
	narrow			1.05 (1.37)
Overall length		A	mm (ft-in)	9550 (31' 4")
Overall width	with 700 mm shoe (OPT)	B		3090 (10' 2")
	with 600 mm shoe			2990 (9' 10")
Overall height		C		3080 (10' 1")
Superstructure width		D		2740 (9' 0")
Overall height of cab		E		2920 (9' 7")
Ground clearance of counterweight		F		1060 (3' 6")
Engine cover height		G		2320 (7' 7")
Minimum ground clearance		H		480 (1' 7")
Rear-end distance		I		2770 (9' 1")
Rear-end swing radius		I'		2840 (9' 4")
Distance between tumblers		J		3650 (12' 1")
Undercarriage length		K		4440 (14' 7")
Undercarriage width		L		2990 (9' 10")
Track gauge		M		2390 (7' 10")
Track shoe width, standard		N		600 (24")
Travel speed (low/high)			km/hr (mph)	3.4/5.5 (2.1/3.4)
Swing speed			rpm	11
Gradeability			Degree (%)	35 (70)
Ground pressure	with 700 mm shoe (OPT)		kgf/cm^2 (psi)	0.42 (5.97)
	with 600 mm shoe			0.48 (6.83)
Max traction force			kg (lb)	20200 (44533)

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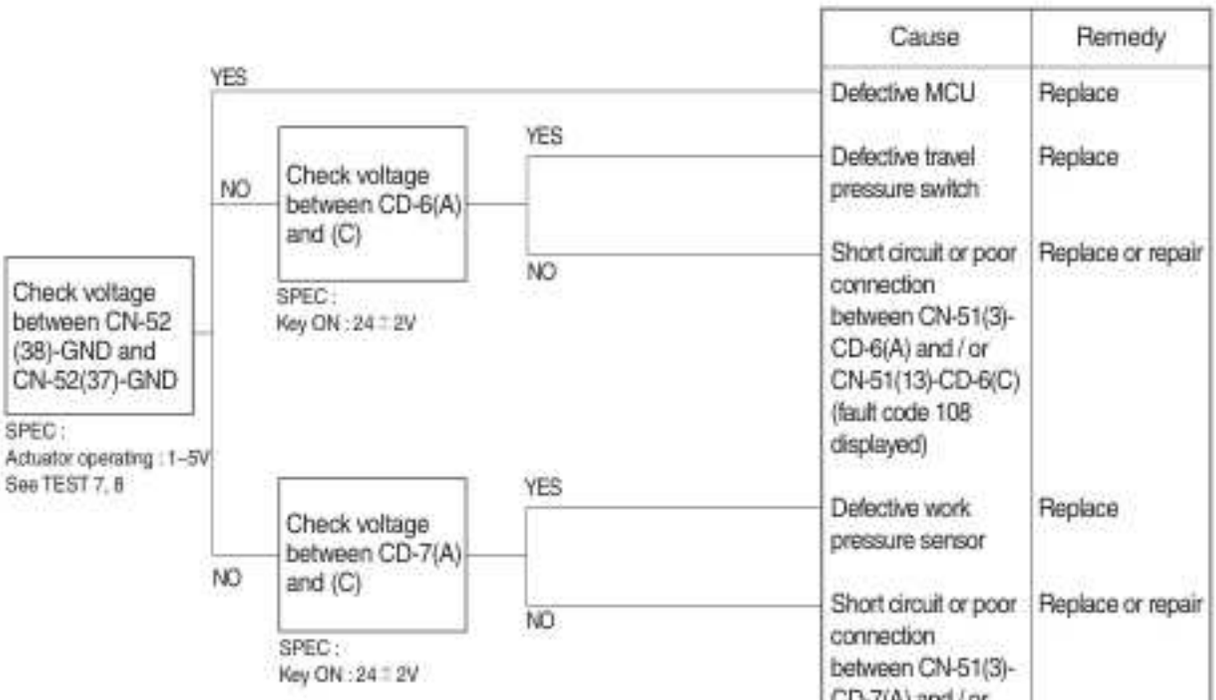
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5. AUTO DECEL SYSTEM DOES NOT WORK

- Fault code : HCESPN 105, FMI 0~4 (work pressure sensor)
  HCESPN 108, FMI 0~4 (travel oil pressure sensor)

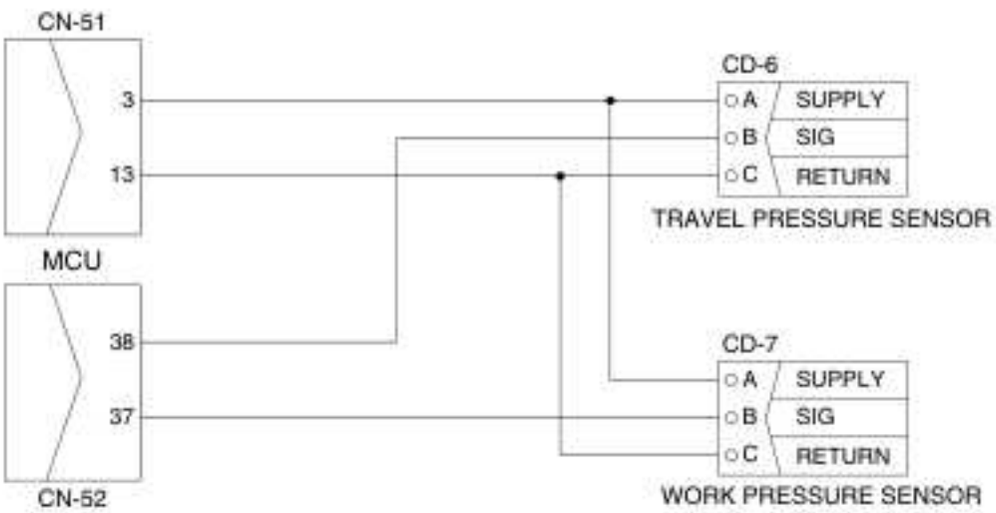
※ Before carrying out below procedure, check all the related connectors are properly inserted.

1) INSPECTION PROCEDURE



Cause	Remedy
Defective MCU	Replace
Defective travel pressure switch	Replace
Short circuit or poor connection between CN-51(3)-CD-6(A) and / or CN-51(13)-CD-6(C) (fault code 108 displayed)	Replace or repair
Defective work pressure sensor	Replace
Short circuit or poor connection between CN-51(3)-CD-7(A) and / or CN-51(13)-CD-7(C) (fault code 105 displayed)	Replace or repair

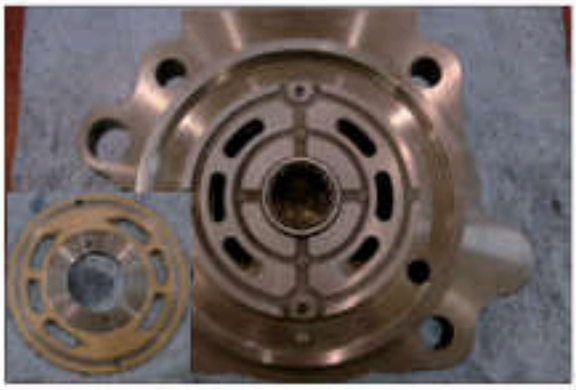
Wiring diagram



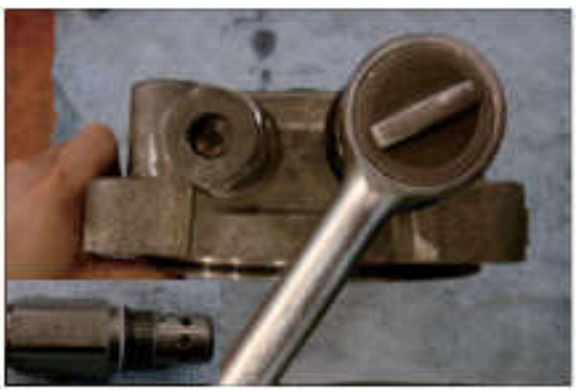
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(3) Disassemble rear cover assy sub

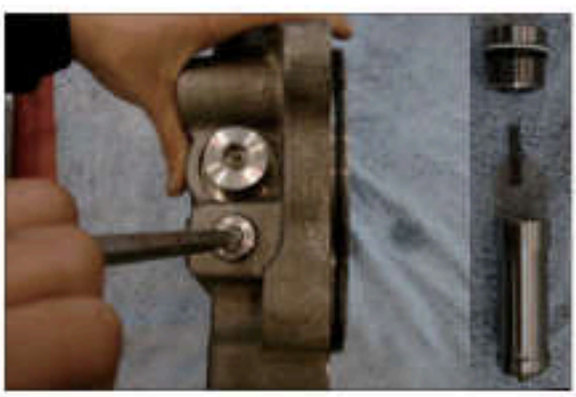
① Disassemble pin (8, 23), valve plate (24) from rear cover (21).



② Using a torque wrench, disassemble relief valve assy (33) 2 set from rear cover (21).



③ After disassembling plug with a L-wrench from rear cover (21), disassemble respectively back up ring, O-ring, O-ring, spring, anti-inversion valve assy (34)



④ Disassemble make up check valve assy with a torque wrench from rear cover (21).



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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.

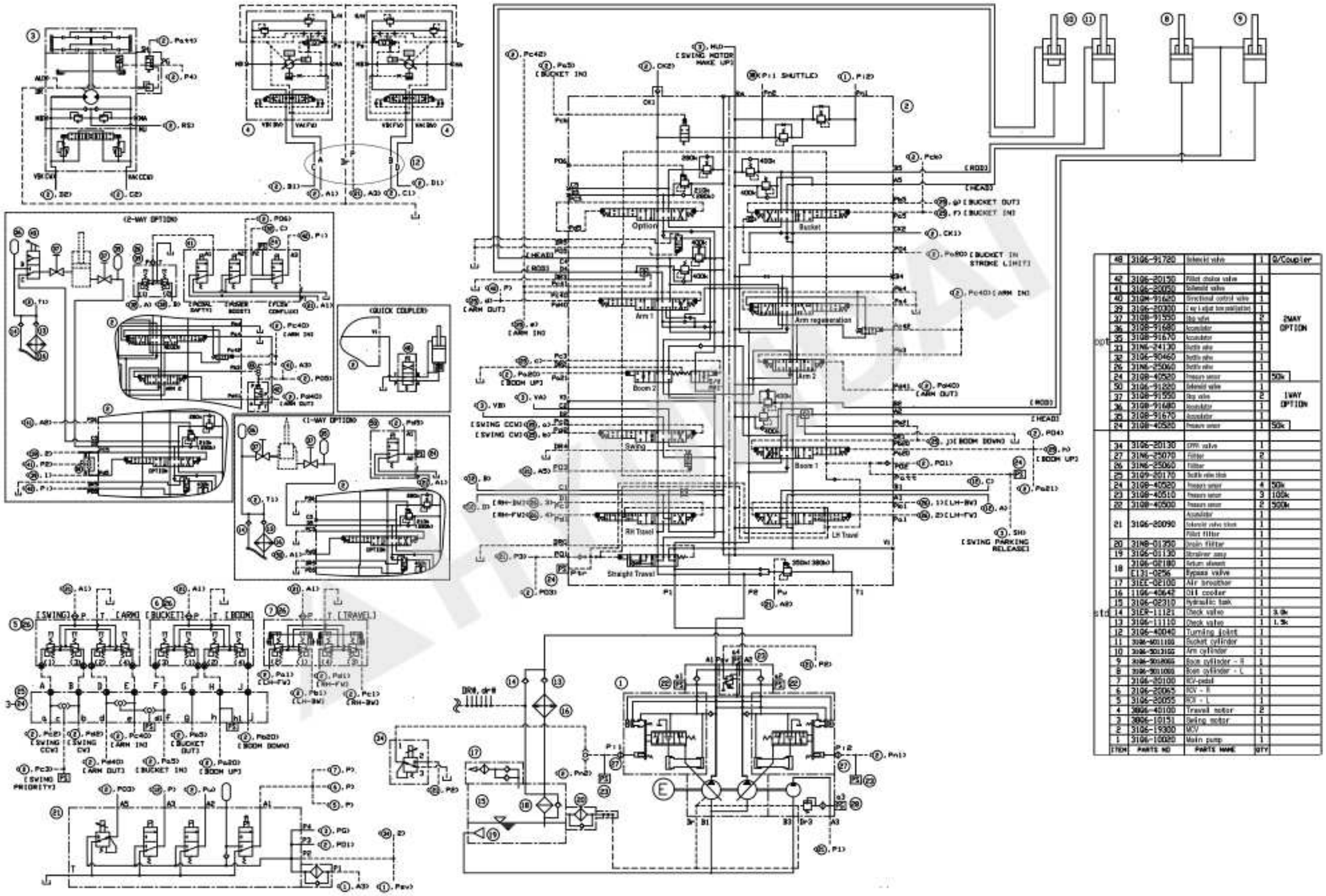
④ Monitoring(Analog)



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

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GROUP 1 HYDRAULIC CIRCUIT



ITEM	PARTS NO	PARTS NAME	QTY	
48	3106-91720	Solenoid valve	1	Q/Coupler
42	3106-20150	Pilot choke valve	1	
41	3106-20050	Solenoid valve	1	
40	3106M-91620	Directional control valve	1	
39	3106-20300	2-way 1-adjust low pressure valve	1	
37	3106-91550	Stop valve	2	2WAY OPTION
36	3106-91680	Accumulator	1	
35	3106-91670	Accumulator	1	
33	31N6-24130	Shuttle valve	1	
32	3106-90460	Shuttle valve	1	
26	31N6-25060	Shuttle valve	1	
24	3106-40520	Pressure sensor	1	50k
50	3106-91220	Solenoid valve	1	
37	3106-91550	Stop valve	2	1WAY OPTION
36	3106-91680	Accumulator	1	
35	3106-91670	Accumulator	1	
24	3106-40520	Pressure sensor	1	50k
34	3106-20130	CBV valve	1	
27	31N6-25070	Filter	2	
26	31N6-25060	Filter	1	
25	3109-20170	Shuttle valve block	1	
24	3106-40520	Pressure sensor	4	50k
23	3106-40510	Pressure sensor	3	100k
22	3106-40500	Pressure sensor	2	500k
21	3106-20090	Accumulator	1	
		Solenoid valve block	1	
		Pilot filter	1	
20	31N8-01290	Drain filter	1	
19	3106-01130	Strainer assy	1	
18	3106-02180	Return element	1	
	E131-0256	Bypass valve	1	
17	31EE-02100	Air breather	1	
16	1106-43642	Oil cooler	1	
15	3106-02310	Hydraulic tank	1	
14	31EN-11121	Check valve	1	3.5k
13	3106-11110	Check valve	1	1.5k
12	3106-40040	Turning joint	1	
11	3106-M011100	Bucket cylinder	1	
10	3106-M013100	Arm cylinder	1	
9	3106-M013000	Boom cylinder - R	1	
8	3106-M011000	Boom cylinder - L	1	
7	3106-20100	RCV-pedal	1	
6	3106-20065	RCV - R	1	
5	3106-20055	RCV - L	1	
4	3806-40100	Travel motor	2	
3	3806-1015J	Swing motor	1	
2	3106-19300	MCV	1	
1	3106-10020	Main pump	1	

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