CRAWLER EXCAVATOR

SERVICE MANUAL

R80 (India)

HYUNDAI

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GROUP 4 CONNECTORS

1. CONNECTOR DESTINATION

Connectorn umber	Type	No. of pin	Destination	Connector part No.	
				Female	Male
CN-2	AMP	15	Engine harness	2-85262-1	368301-1
CN-4	AMP	8	LH console wire harness	S816-008002	S816-108002
CN-5	AMP	15	RH side harness	2-85262-1	368301-1
CN-6	AMP	12	RH side harness	S816-012002	S816-112002
CN-7	AMP	15	RH console wire harness	2-85262-1	368301-1
CN-8	AMP	12	RH console wire harness	S816-012002	S816-112002
CN-9	AMP	8	RH console wire harness	S816-008002	S816-108002
CN-10	DEUTSCH	12	Cab harness	DT06-12S	DT04-12P
CN-11	DEUTSCH	8	LH console wire harness	DT06-8S	-
CN-12	KET	2	Work lamp harness	MG640188-4	-
CN-17	DEUTSCH	8	Wipe harness	DT06-8S	DT04-8P
CN-20	MOLEX	2	Horn	36825-0211	-
CN-21	AMP	6	Wiper motor	925276-0	-
CN-22	-	2	Washer tank	MG640605	-
CN-23	KET	2	LH speaker	MG610070	7322-1520
CN-24	KET	2	RH speaker	MG610070	7322-1520
CN-25	MOLEX	2	Horn	36825-0211	-
CN-27	AMP	14	Cassette radio	173852	AMP14P
CN-28	-	1	Air-con comp	MWP-01F-B	-
CN-29	KET	2	Receiver dryer	MG640795	-
CN-36	-	3	Fuse box	S813-030200	S813-130200
CN-37	-	6	Fuse box	S816-006002	S816-106002
CN-38	AMP	15	Fuse box	2-85262-1	368301-1
CN-45	RING TERM	1	Starter	S820-308000	-
CN-48	-	2	Hour meter	S810-002202	-
CN-50	AMP	36	CPU	3441111-1	-
CN-51	AMP	36	CPU	3441111-1	-
CN-55	AMP	2	Travel alarm pressure switch	S816-002002	S816-102002
CN-56	DEUTSCH	4	Cluster	-	DT04-4P
CN-60	-	2	Fusible link	-	7122-4125-50
CN-61	DEUTSCH	2	Fuel filler pump	DT06-2S-EP06	DT01-2P-P012
CN-66	DEUTSCH	2	Breaker solenoid valve	DT06-2S-EP06	DT04-2P-E005
CN-68	DEUTSCH	2	Safety solenoid valve	DT06-2S-EP06	-
CN-70	DEUTSCH	2	Travel speed solenoid valve	DT06-2S-EP06	-
CN-74	KET	2	Alternator	MG640188-4	-
CN-76	DEUTSCH	6	Accel actuator	DT06-6S-EP06	-
CN-79	RING TERM	1	Fuel cut-off solenoid	S813-060300	-
CN-81	DEUTSCH	2	Travel buzzer	DT06-2S-EP06	DP04-2P-E005

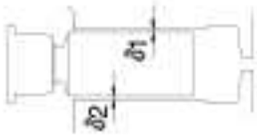
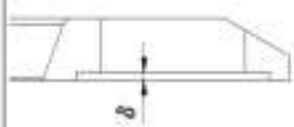
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2) DESCRIPTION OF MONITORING DISPLAY

Group	Display	Name	Description
Group 0	2200 rpm	Engine speed	It displays current engine speed detected by engine speed sensor from 500 to 3000rpm. Range : 500–3000rpm by 10rpm
	TIME 12 : 30	Time	It displays current time(12 is hour and 30 is minute) Range : Hour(1–12), minute(00–59)
	08 : C1.0	Model and CPU program version	It shows that machine model(R80-7) and the program version of the CPU controller is 1.0. Version display range : 0.0–9.9 by 0.1
Group 1	b24 : 8V	Battery voltage	It shows that battery power of 24.8V is supplied into CPU controller. Range : 00.0–48.0V by 0.1V
	Po : 2.5V	Potentiometer voltage	It shows that potentiometer signal voltage is 2.5V. Range : 0.0–5.0V by 0.1V
	dL : 3.8V	Accel dial voltage	It shows that accel dial signal voltage is 3.8V. Range : 0.0–5.0V by 0.1V
	Hd : 50°C	Hydraulic oil temperature	It shows that hydraulic oil temperature detected by temperature sensor is 50°C. Range : 0–150°C by 1°C
	Ct : 85°C	Coolant temperature	It shows that coolant oil temperature detected by temperature sensor is 50°C. Range : 0–150°C by 1°C
Group 2	CHECK Er : 01	Current error	It shows that current error of 01(Short circuit in accel actuator motor system) is diagnosed by self diagnosis system in the CPU controller. If more than 2 errors, when pressing ▼ or ▲ switch, other error codes show. Range : 00–58
	TIME Er : 03	Recorded error	It shows recorded error code of 03 which is diagnosed before. If more than 2 error codes, when pressing ▼ or ▲ switch, other error codes show. Range : 00–58
	TIME Er : 00	Recorded error deletion	It shows all recorded error codes are removed in the CPU controller memory.

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4. TRAVEL DEVICE

Part name	Check point	Standard dimension	Maximum allowable value (Criteria)	Remedy
Piston assy(7) 	Play between piston and slipper	δ = 0.1mm	δ < 0.5mm	Replace 9 sets of piston assy
Piston assy(7) and cylinder barrel (3) 	Clearance/diameter between piston diameter and cylinder bore (ϕ 1 + δ 2)	0.03mm	< 0.07mm	Replace the set of 1 cylinder barrel and 9 piston assys
Slipper(7-2) 	Height of the plate	Height H 5mm	Height H < 4.6mm	Replace 9 sets of piston assy
Retainer(5) 	Wear		Wear depth δ < 0.2mm	Replace
Cam(6)	Condition of sliding surface	Roughness < Ra 0.2㎛	Roughness < Ra 1.6㎛	Replace

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⑤ Disassembling steel ball(7) from shaft casing(1).



(3) Rear cover

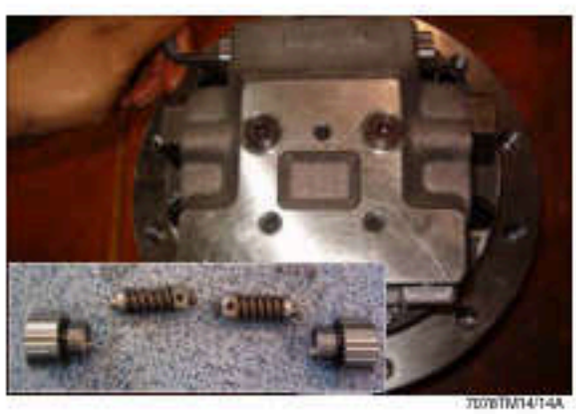
① Disassembling valve plate(13) from rear cover(22).



② Using plier jig, disassembling in order snap ring(27), stopper(26), spring(25), spool(24) from rear cover(22) and then disassembling snap ring(32), seat(30), spring(29), check(28) same procedure.



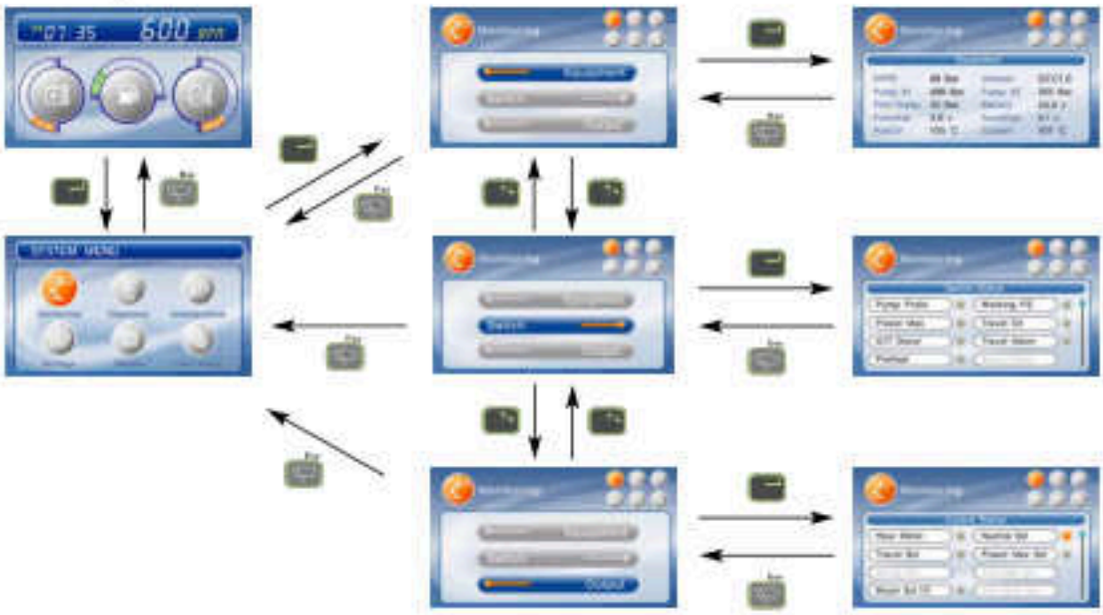
③ Using L-wrench, disassembling plug(45) from rear cover(22) and then relief valve assembly(43) (left, right is symmetry).



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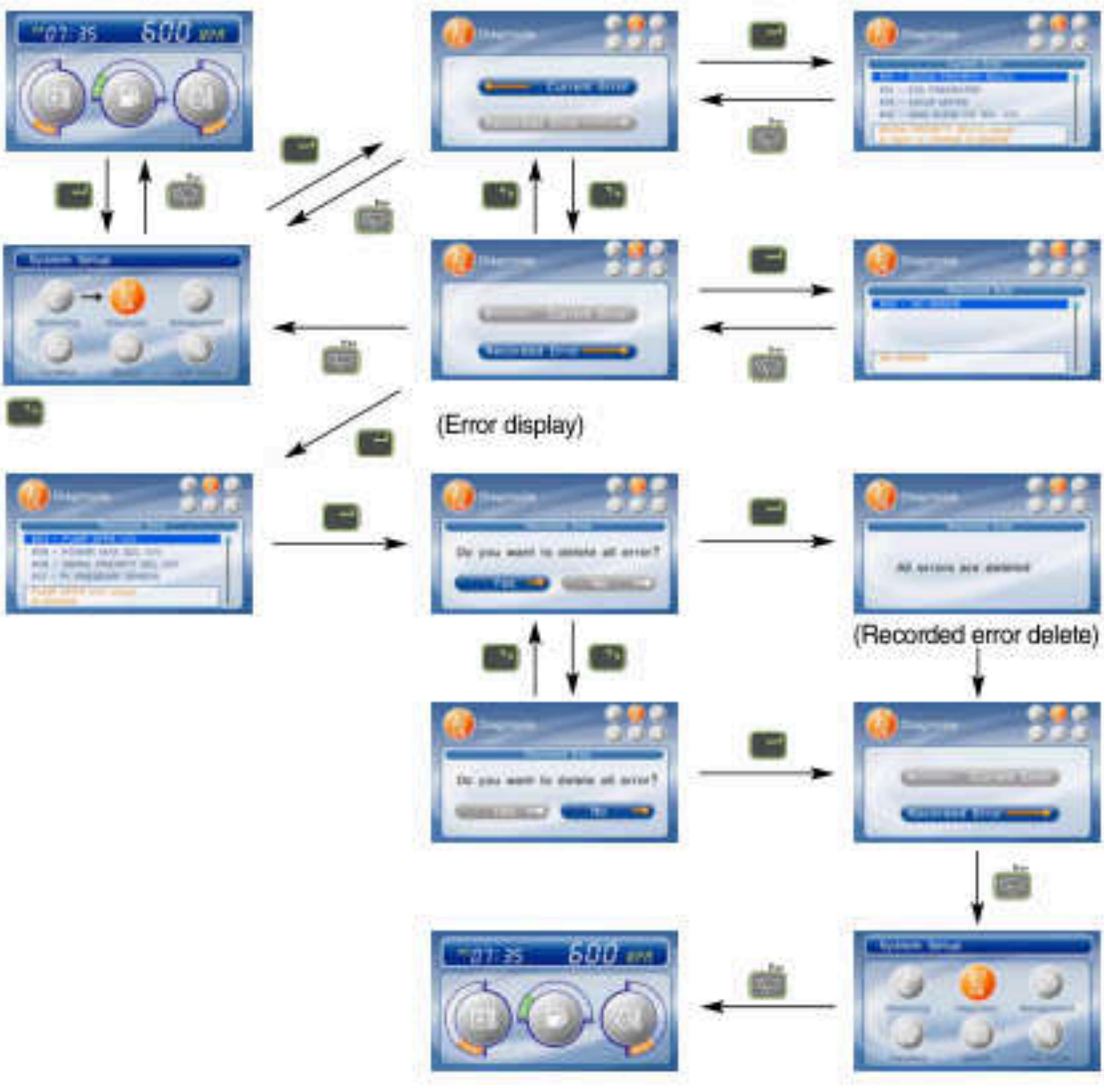
(2) Display map

① Monitoring

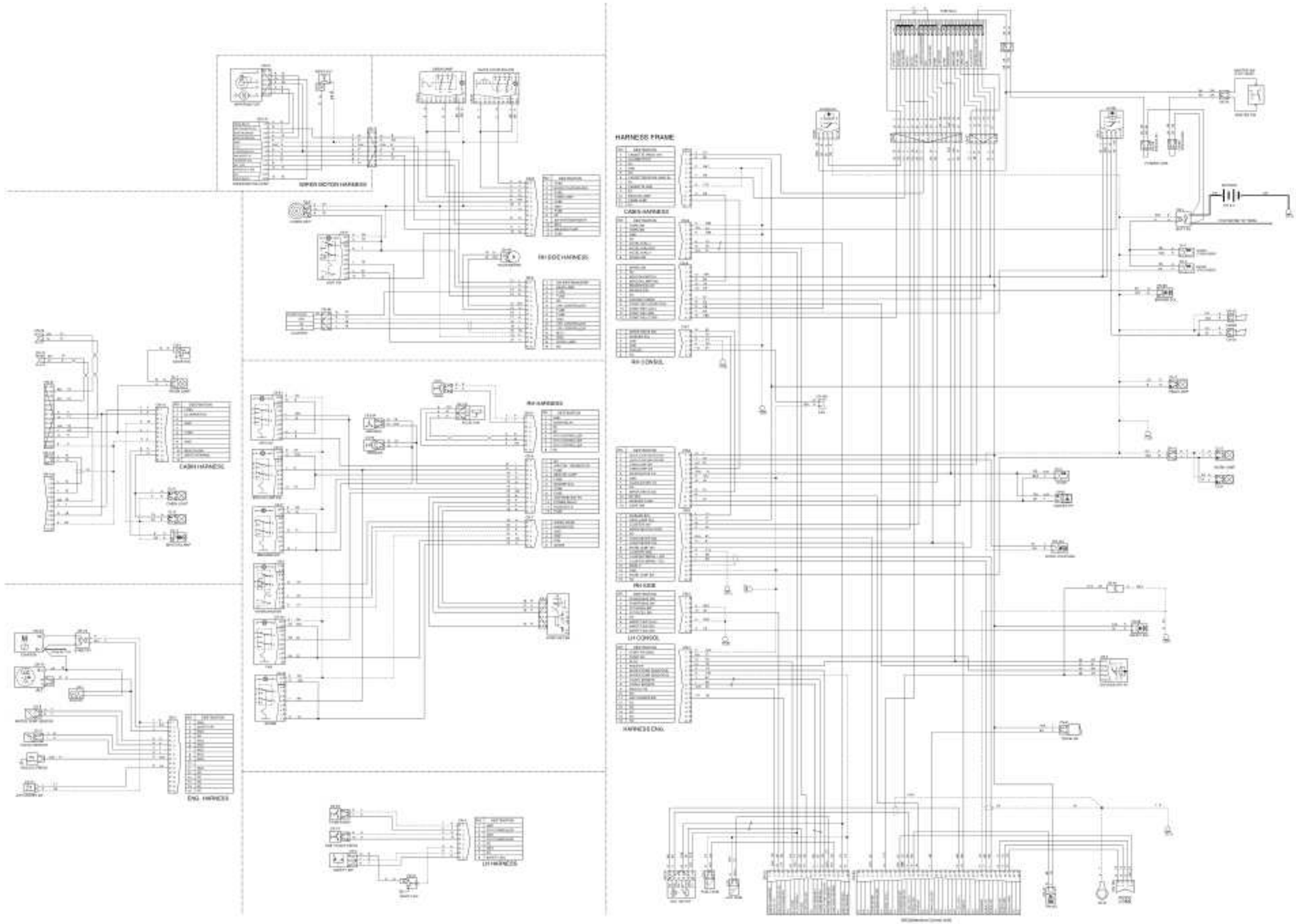


② Diagnosis

a. Protocol type 1



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