CRAWLER EXCAVATOR

SERVICE MANUAL

R55-9A

HYUNDAI

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3) GEAR PUMP

Item	Specification
Type	Fixed displacement gear pump single stage
Capacity	18.3 + 4.5 cc/rev
Maximum pressure	220/30 kgf/cm² (3130/430 psi)
Rated oil flow	38.4/9.5 ℓ/min (10.1/2.5 U.S. gpm / 8.4/2.1 U.K. gpm)

4) MAIN CONTROL VALVE

Item	Specification
Type	Sectional, 9 spools
Operating method	Hydraulic pilot system
Main relief valve pressure	220 kgf/cm² (3130 psi)
Overload relief valve pressure	240 kgf/cm² (3410 psi)

5) SWING MOTOR

Item	Specification
Type	Fixed displacement axial piston motor
Capacity	32.3 cc/rev
Relief pressure	220 kgf/cm² (3130 psi)
Braking system	Automatic, spring applied hydraulic released
Braking torque	14 kgf · m (101 lbf · ft)
Brake release pressure	20–40 kgf/cm² (284–570 psi)
Reduction gear type	2 - stage planetary

6) TRAVEL MOTOR

Item	Specification
Type	Variable displacement axial piston motor
Relief pressure	220 kgf/cm² (3130 psi)
Reduction gear type	2-stage planetary
Braking system	Automatic, spring applied hydraulic released
Brake release pressure	9 kgf/cm² (128 psi)
Braking torque	8.4 kgf · m (61 lbf · ft)

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GROUP 5 CONNECTORS

1. CONNECTOR DESTINATION

Connector number	Type	No. of pin	Destination	Connector part No.	
				Female	Male
CN-4	AMP	36	Cabin room harness - Main harness	1743059-2	1743062-2
CN-5	AMP	20	Cabin room harness - Main harness	936777-2	936780-2
CN-6	KET	8	Cabin harness - Cabin room lamp harness	S810-008002	S810-108002
CN-7	DEUTSCH	8	Cabin room harness - Aircon harness	DT06-8S-EP06	DT04-8P-E005
CN-12	AMP	2	Main harness - Boom lamp harness	S816-002002	S816-102002
CN-20	DEUTSCH	2	Horn	DT06-2S-EP06	-
CN-21	AMP	4	Wiper harness	180900-0	-
CN-22	KET	2	Washer tank	MG640605	-
CN-23	MOLEX	2	Speaker LH	MG610070	-
CN-24	MOLEX	2	Speaker RH	MG610070	-
CN-25	DEUTSCH	2	Horn	DT06-2S-EP06	-
CN-26	AMP	1	Air conditioner compressor	S810-001202	-
CN-27	KUM	16	Radio and USB player	PK145-16017	-
CN-28	AMP	1	Air-con compressor	S810-001202	-
CN-29	KET	2	Receiver dryer	MG640795	-
CN-36	-	-	Fuse box	21L7-00250	-
CN-45	TERM	2	Starter	ST710246-2	S820-408000
CN-48	TERM	4	Hour meter	180900-0	-
CN-51	AMP	70	MCU	1-968879-1	-
CN-55	AMP	2	Travel alarm PS	S816-002002	S816-102002
CN-56	AMP	10	Cluster	-	S816-110002
CN-60	YAZAKI	2	Fusible link	-	7122-4125-50
CN-61	TERM	1	Fuel filler pump	S822-014000	S822-114000
CN-66	DEUTSCH	2	Breaker solenoid	DT06-2S-EP06	-
CN-68	DEUTSCH	2	Safety solenoid	DT06-2S-EP06	-
CN-70	DEUTSCH	2	Travel HI-LO solenoid	DT06-2S-EP06	-
CN-74	KET	2	Alternator	MG640188-5	-
CN-80	YAZAKI	1	Pre heater	7233-3010	-
CN-81	DEUTSCH	2	Travel buzzer	DT06-2S-EP06	DT04-2P-E005
CN-83	AMP	2	Air-con fan	MG640188-5	-
CN-92	KET	1	Anti-restart relay	S814-001100	-
CN-93A	AMP	94	ECU	3-1355136-3	-
CN-93B	AMP	60	ECU	1897635-2	-
CN-95	YAZAKI	2	Fusible link	-	S813-130201
CN-113	AMP	2	Buzzer	S810-002202	-

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SECTION 5 TROUBLESHOOTING

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(8) The following operations should be carried out if necessary.

① Loosen the ROH plug (302) and remove the restrictor (310).

※ If there is no problem with the 1st / 2nd speed switching, no special disassembly is required.



② Release ROH plug (302) and disassemble in the following order: Seat casing (433) → steel ball (503) → seat (432).

※ If there is no problem with the 1st / 2nd speed switching, no special disassembly is required. Please be careful about the loss of the steel ball. Please be careful not to damage the inner diameter of the seat casing and seat.



(9) Loosen socket bolt (301) and remove valve casing (201) from casing (202).

※ (Due to the force of the brake spring E (117), when the socket bolt (301) is unscrewed, the valve casing (201) is raised from the casing (202). Further, remove the valve plate (108) from the valve casing (201).



Carefully work so that the valve plate does not fall off the valve casing.

※ In some cases, the valve plate is attached to the cylinder block.
Be careful not to scratch the sliding surface and mating surface when you disassemble the mating surface with a screwdriver or the like.



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(2) Cylinder block

① Disassemble set plate (17), piston assembly (18) from cylinder block assembly (11).



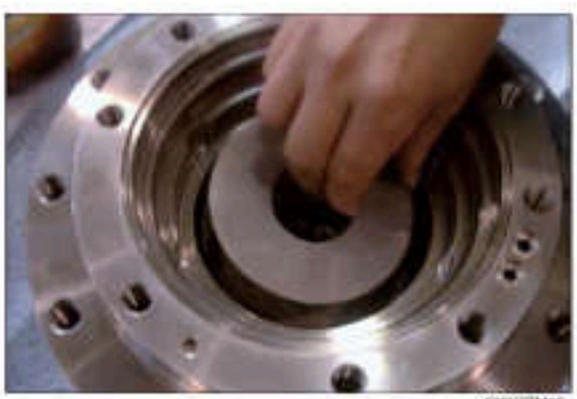
② Disassemble cylinder block (11), ball guide (16) and pin (15) in that order.



③ Put the cylinder block (11) on the air assembling jig and dissemble snap ring (14) by using a plier.
Dissemble spring seat (12), spring (13) and spring seat (12) in that order.



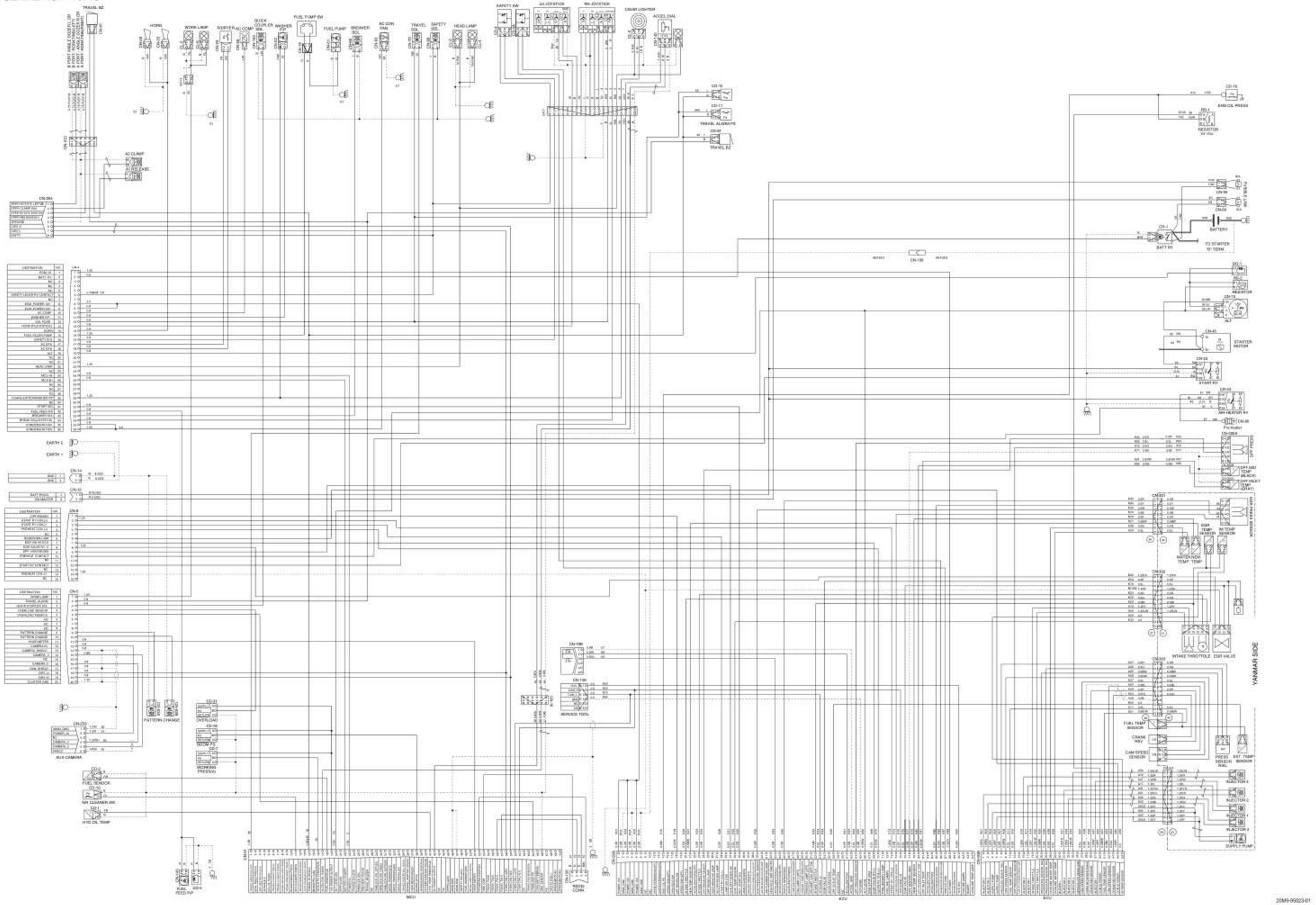
④ Disassemble shoe plate (10) from shaft casing (1).



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· ELECTRICAL CIRCUIT (1/3)

- MACHINE SERIAL NO. : -#0719



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