CRAWLER EXCAVATOR

SERVICE MANUAL

HX55A CR

HYUNDAI

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5. BUCKET SELECTION GUIDE



0.15 m³
SAE heaped bucket

Capacity		Width		Weight	Recommendation	
					2.8 m (9' 2") boom	
SAE heaped	CECE heaped	Without side cutter	With side cutter		1.4 m (4' 7") arm	1.65 m (5' 5") arm
0.15 m³ (0.20 yd³)	0.13 m³ (0.17 yd³)	490 mm (19.3")	610 mm (24.0")	137 kg (302 lb)	●	●

● Applicable for materials with density of 2100 kg/m³ (3500 lb/yd³) or less

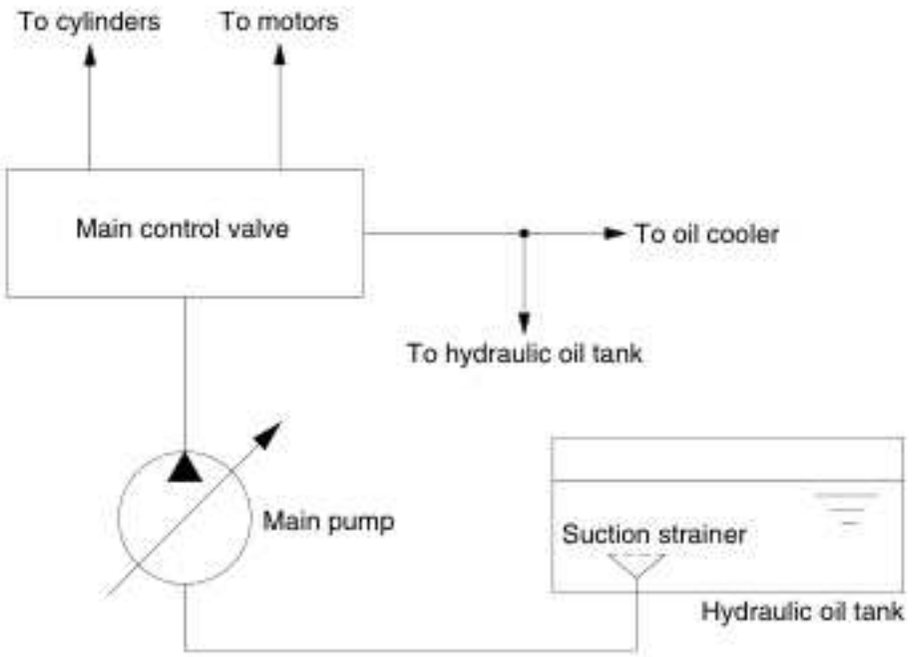
※ These recommendations are for general conditions and average use.
Work tools and ground conditions have effects on machine performance.
Select an optimum combination according to the working conditions and the type of work that is being done.
Consult with your local Hyundai dealer for information on selecting the correct boom-arm-bucket combination.

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GROUP 2 MAIN CIRCUIT

The main hydraulic circuit consists of suction circuit, delivery circuit, return circuit and drain circuit.
The hydraulic system consists of one main pump, one control valve, one swing motor, four cylinders and two travel motors.
The swash plate type variable displacement axial piston pump is used as the main pump and is driven by the engine at ratio 1.0 of engine speed.

1. SUCTION AND DELIVERY CIRCUIT

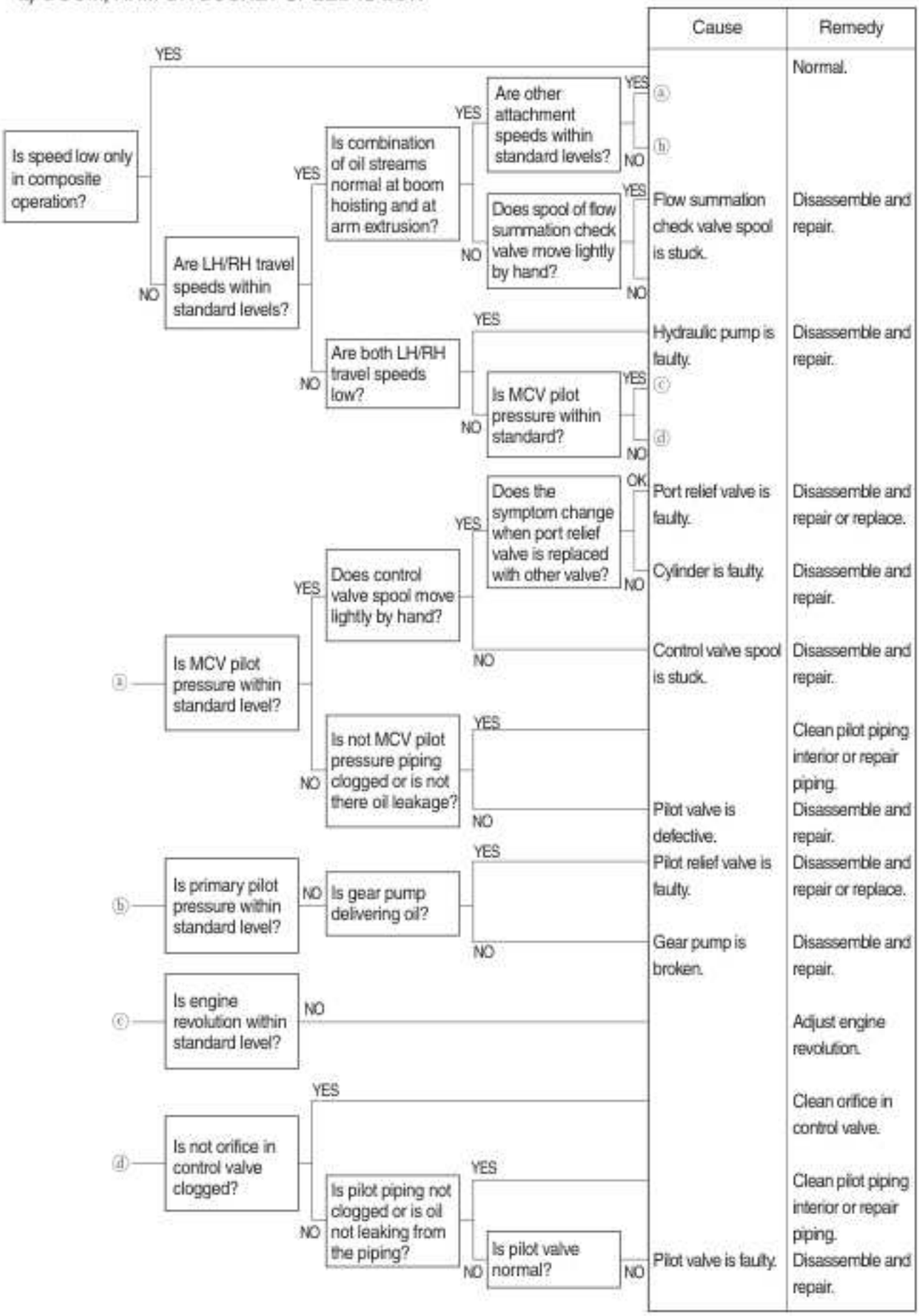


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The pumps receive oil from the hydraulic tank through a suction strainer. The discharged oil from the pump flows into the main control valve and goes out the tank ports.
The oil discharged from the main pump flows to the actuators through the main control valve.
The main control valve controls the hydraulic functions.
The return oil from the actuators flows to the hydraulic tank through the main control valve and the oil cooler.

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2) BOOM, ARM OR BUCKET SPEED IS LOW



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(4) Fit the O-ring (214) into the plug (221).



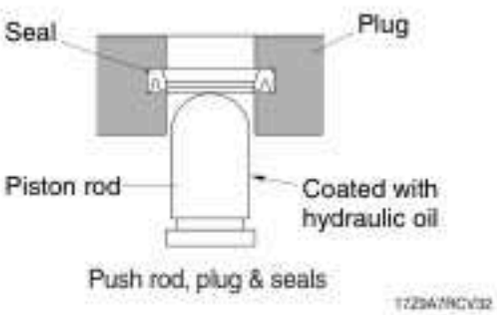
(5) Fit the oil seal (213) into the plug (211).

※ Fit the lip of the oil seal (213) as shown right.



(6) Fit the push-rod (212) into the plug (211).

※ Apply hydraulic oil to the surface of the push rod.



Push rod, plug & seals





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

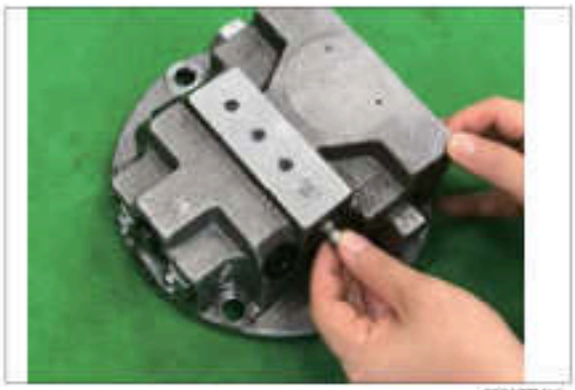
① Loosen the plug (302) and remove the restrictor (310).

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



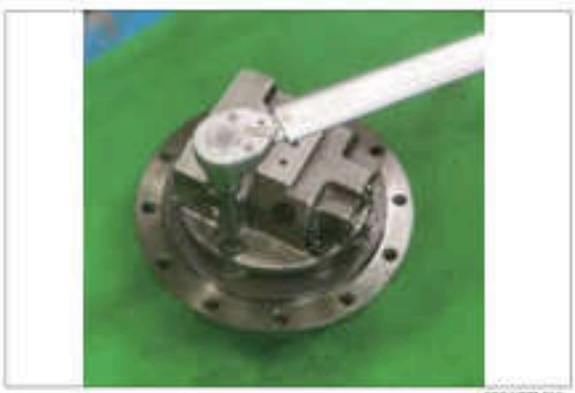
② Release plug (302) and disassemble in the following order: Seat casing (433) → steel ball (503) → seat (432).

※ 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.



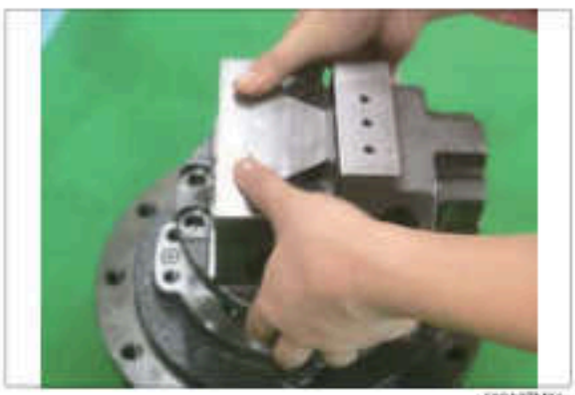
(9) Loosen screw (301) and remove valve casing (201) from casing (202).

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



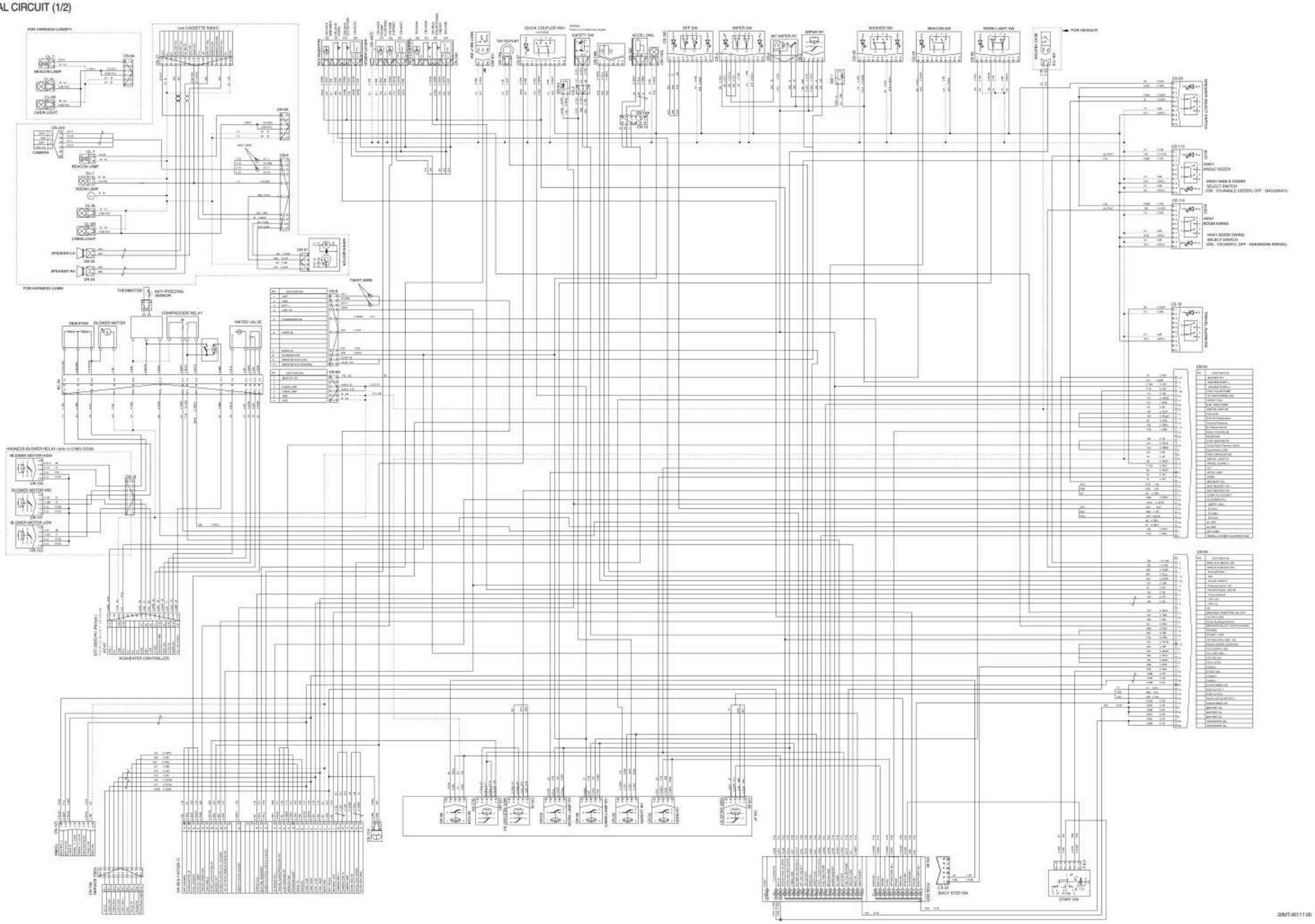
Carefully work so that the valve plate does not fall off the valve casing.

※ 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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· ELECTRICAL CIRCUIT (1/2)



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