SEN00084-20

Shop Manual

HYDRAULIC
EXCAVATOR

PC200 -8
PC200LC-8
PC220 -8
PC220LC-8

SERIAL NUMBERS

PC200- 300001
PC200LC- 300001
PC220- 70001
PC220LC- 70001

and up

ecot3

KOMATSU®

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Unit: mm

No.	Item		Criteria					Remedy
11	Connected part of boom and arm		305.5	0 -0.5	310	+0.5 0	4.5 – 5.5	Adjust with shims so that the clearance is 1.0 mm or below
		(*2) 500 hours greasing maintenance specification	L11: Insert the shim 2.0 mm (1) R11: Adjust with either shim 2.0 mm (1) or 2.5 mm (1) or 3.0 mm (1)					
		(*3) 100 hours greasing maintenance specification	L11: Insert the shim 1.5 mm (1) R11: Adjust with combination of shims 0.8 mm (1) and 1.5 mm (2)					
12	Connected part of arm cylinder and arm		106	±1.2	109.3	+1.5 0	2.1 – 6.0	Replacement of shim
		(*2) 500 hours greasing maintenance specification	L12: Insert the shim 1.0 mm (1) R12: Insert the shim 1.0 mm (1)					
		(*3) 100 hours greasing maintenance specification	L12: Insert the shim 1.5 mm (1) R12: –					
13	Connected part of arm and bucket cylinder		96	±1.2	99.3	+1.5 0	2.1 – 6.0	Adjust with shims so that the clearance is 1.5 mm or below
		(*2) 500 hours greasing maintenance specification	L13: Insert the shim 1.0 mm (1) R13: Adjust with combination of shims 1.0 mm (1) and 2.0 mm (2)					
		(*3) 100 hours greasing maintenance specification	L13: Insert the shim 1.5 mm (1) R13: Adjust with combination of shims 0.8 mm (1) and 1.5 mm (2)					
14	Connected part of link and bucket		325	±0.5	326.5	±1	0 – 3.0	–
		(*3) 100 hours greasing maintenance specification	L14: – R14: –					

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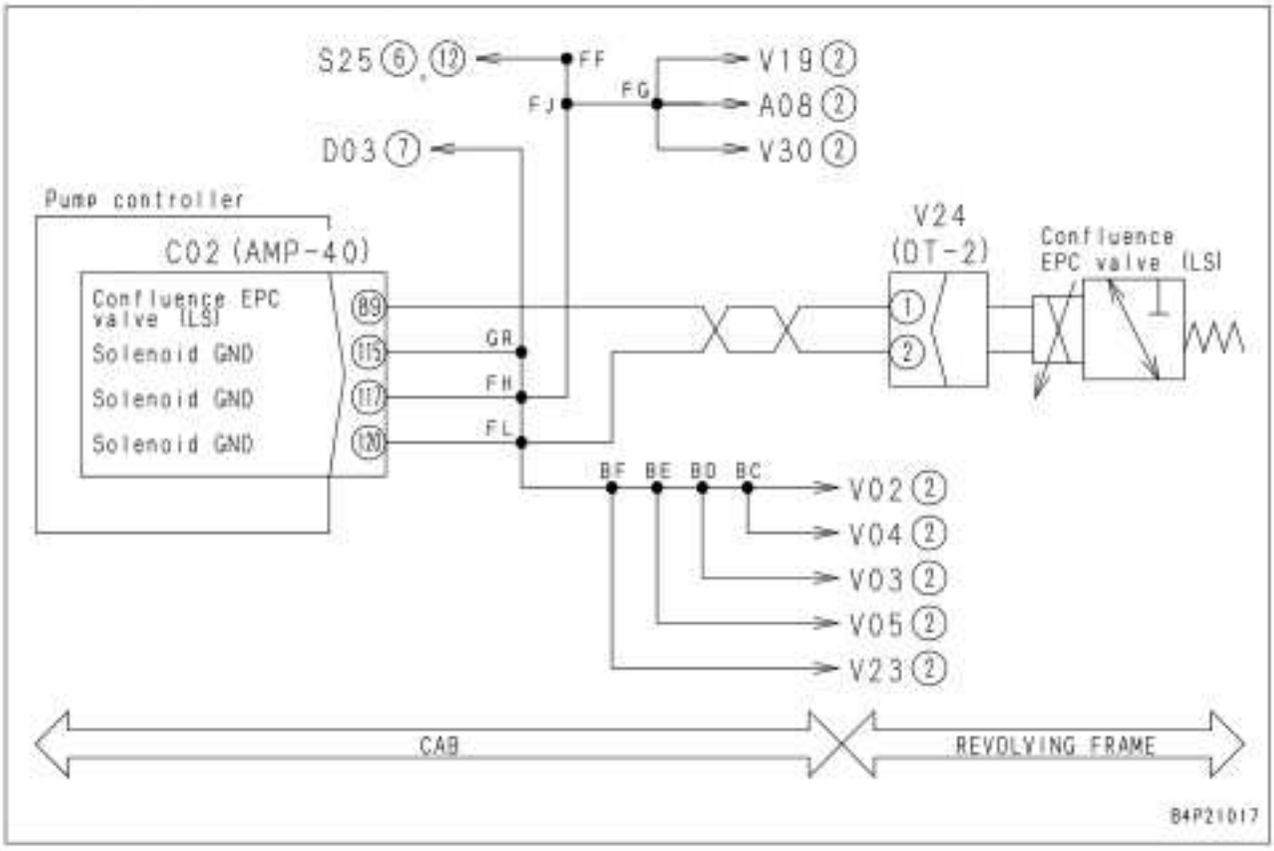
Failure code [DHSAMA] Swing RH PPC Press Sensor Abnormality

User code	Failure code	Trouble	Swing right PPC pressure sensor abnormality (Pump controller system)
—	**DHSAMA**		
Contents of trouble	• Signal voltage of swing right PPC pressure sensor circuit is below 0.3 V or above 4.5 V.		
Action of controller	• Fixes swing right PPC pressure at 0 MPa {0 kg/cm^2} and continues control. • If cause of failure disappears, system resets itself.		
Problem that appears on machine	• Automatic decelerator and swing holding brake cannot be reset. • Swing right performance lowers.		
Related information	★ If 5V circuit (3) and ground circuit (1) of pressure sensor are connected inversely, pressure sensor will be broken. Accordingly, take extreme care when checking. • Swing RH PPC pressure can be checked with monitoring function. (Code: 09002 Swing right PPC pressure) • Method of reproducing failure code: Turn starting switch ON or start engine.		

	Cause		Standard value in normal state/Remarks on troubleshooting			
Possible Cause and standard value in normal state	1	Defective 5V sensor power supply 1 system	If failure code [**DA25KP**] is also displayed, carry out troubleshooting for it first.			
	2	Defective swing right PPC pressure sensor (Internal defect)	★ Prepare with starting switch OFF, then turn starting switch ON or start engine and carry out troubleshooting in each case.			
			P07		Voltage	
			Between (3) – (1)	Power supply	4.5 – 5.5 V	
			Between (2) – (1)	Signal	0.3 – 4.5 V	
			If voltage is abnormal, replace swing right PPC pressure sensor with another PPC pressure sensor and check failure code. (If "E" of failure code goes off at this time, swing right PPC pressure sensor is defective.)			
	3	Disconnection in wiring harness (Disconnection in wiring or defective contact in connector)	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.			
			Wiring harness between C01 (female) (18) – P07 (female) (1)		Resistance	Max. 1 Ω
			Wiring harness between C01 (female) (72) – P07 (female) (2)		Resistance	Max. 1 Ω
			Wiring harness between C01 (female) (9) – J06 – P07 (female) (3)		Resistance	Max. 1 Ω
	4	Ground fault in wiring harness (Short circuit with GND circuit)	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.			
			Wiring harness between C01 (female) (72) – P07 (female) (2) and chassis ground		Resistance	Min. 1 MΩ
	5	Hot short (Short circuit with 5 V/24 V circuit) in wiring harness	★ Prepare with starting switch OFF, then turn starting switch ON and carry out troubleshooting.			
			Wiring harness between C01 (female) (72) – P07 (female) (2)		Voltage	Max. 1 V
	6	Defective pump controller	If Cause 1 – 5 are not detected, pump controller may be defective. (Since trouble is in system, troubleshooting cannot be carried out.)			

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Circuit diagram related to merge-divider LS EPC solenoid

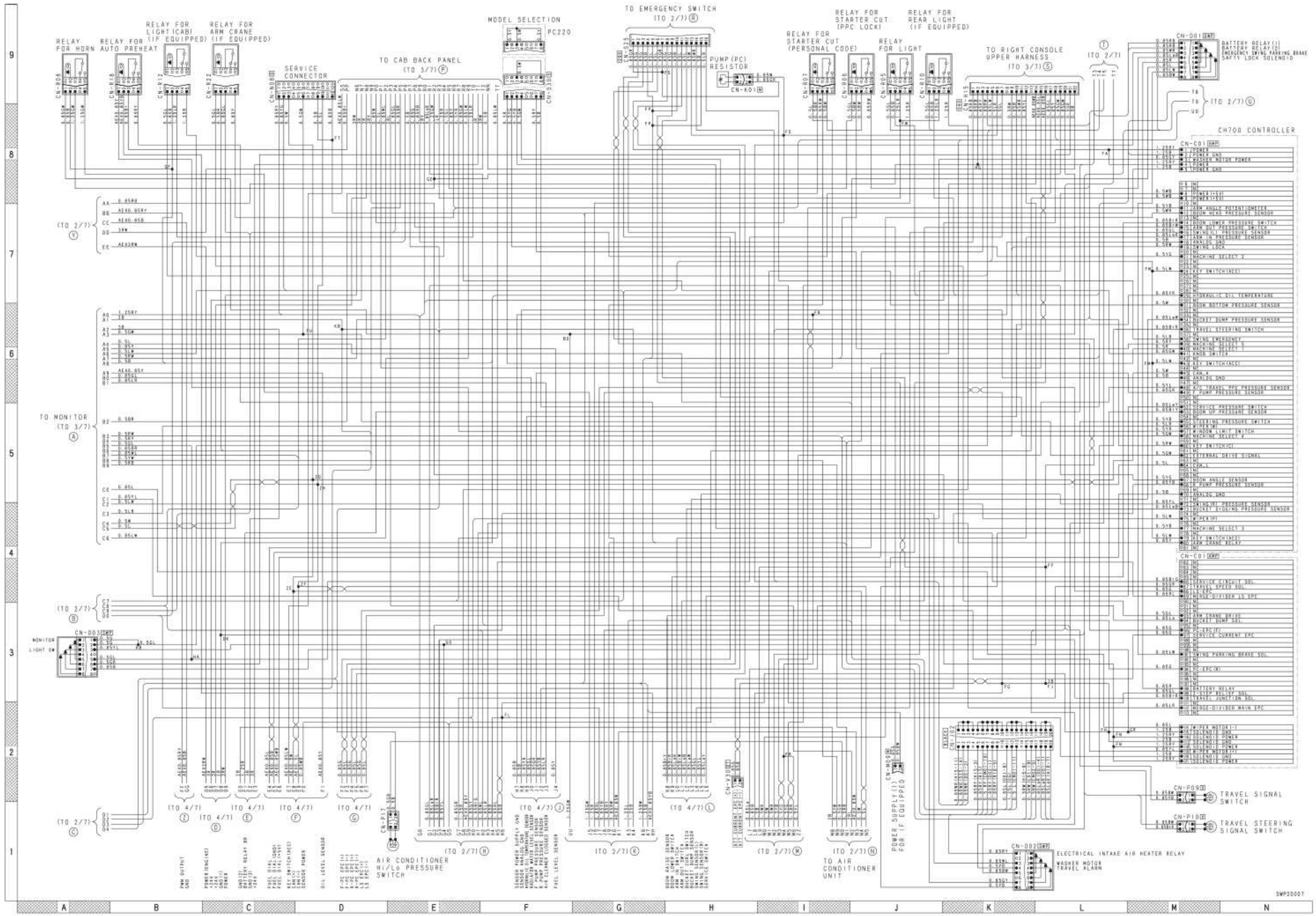


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Electrical circuit diagram (1/6)

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★ This figure covers the equipment and devices that are unavailable as optional items in some areas.



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