SEN00889-19

Shop Manual

HYDRAULIC
EXCAVATOR

PC1250 -8
PC1250SP-8
PC1250LC -8

SERIAL NUMBERS

PC1250- 30001
PC1250SP- 30001
PC1250LC- 30001

and up

ecot3

KOMATSU®

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Composition of shop manual

The contents of this shop manual are shown together with Form No. in a list.

Note 1: Always keep the latest version of this manual in accordance with this list and utilize accordingly.
The marks shown to the right of Form No. denote the following:
○: New issue (to be filed additionally) ●: Revision (to be replaced for each Form No.)

Note 2: This shop manual can be supplied for each Form No.

Note 3: To file this shop manual in the special binder for management, handle it as follows:
- Place a divider on the top of each section in the file after matching the Tab No. with No. indicated next to each Section Name shown in the table below:
- File overview and other materials in sections in the order shown below and utilize them accordingly.

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PC1250LC-8 Serial number 30052 and up

Machine model				PC1250LC-8
Bucket capacity			m^3	5.0
Weight of machine			kg	121,600
Performance	Working range	Max. digging depth	mm	9,350
		Max. vertical wall depth	mm	7,610
		Max. digging reach	mm	15,350
		Max. reach at ground level	mm	15,000
		Max. digging height	mm	13,400
		Max. dumping height	mm	8,680
	Max. digging force		kN {kg}	479 {48,800}
	Swing speed		rpm	5.8
	Swing max. slope angle		deg.	12
	Travel speed		km/h	Lo: 2.7 Hi: 3.2
	Gradeability		deg.	35
	Ground pressure [standard double grouser shoe width: 1,000 mm]		kPa {kg/cm^2}	92 {0.94}
Dimensions	Overall length		mm	16,020
	Overall width		mm	5,355
	Overall width of track		mm	5,265
	Overall height (for transport)		mm	6,040
	Overall height to top of machine		mm	4,880
	Ground clearance of upper structure		mm	1,790
	Min. ground clearance		mm	990
	Tail swing radius		mm	4,870
	Min. swing radius of work equipment		mm	7,965
	Height of work equipment at min. swing radius		mm	11,390
	Length of track on ground		mm	5,970
	Track gauge		mm	3,900
	Height of machine cab		mm	3,985

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Failure code [CA351] Injectors Drive Circuit Error

Action code	Failure code	Trouble	Injectors Drive Circuit Error (Engine controller system)
E10	CA351		
Contents of trouble	• There is error in injector drive circuit.		
Action of controller	• Limits output and continues operation (limits common rail pressure).		
Problem that appears on machine	• Engine output lowers.		
Related information			

		Cause	Standard value in normal state/Remarks on troubleshooting		
Possible causes and standard value in normal state	1	Defect in related system	Check the code (injector system error code) that is displayed simultaneously. If another code is displayed, carry out troubleshooting for it.		
	2	Defective circuit breaker No.3 and No.9	Check circuit breaker directly for defect. (If circuit breaker is shut down, circuit probably has ground fault.)		
	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 CE03 (female) (3) – battery (+)	Resistance	Max. 1 Ω
			Wiring harness between CE03 (female) (1) – chassis ground	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 CE03 (female) (3) – battery (+) and chassis ground	Resistance	Min. 1 MΩ
			Wiring harness between CE03 (female) (1) – chassis ground	Resistance	Min. 1 MΩ
	5	Defective engine controller	★ Prepare with starting switch OFF, then turn starting switch ON and carry out troubleshooting.		
			CE03	Voltage	
			Between (3) – (1)	20 – 30 V	

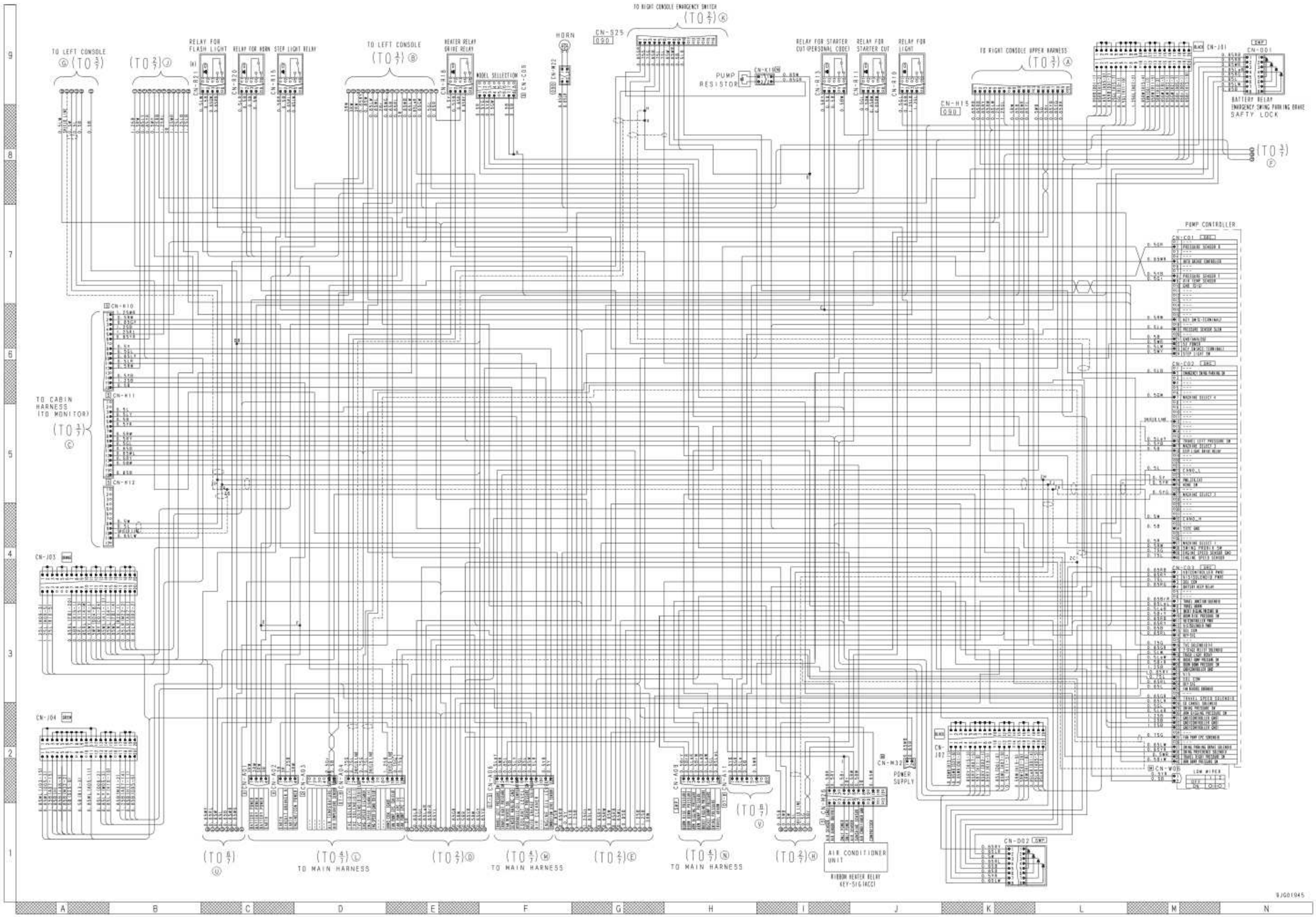
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Failure code [F@HCMA] Swing Pump Pres. Sen. Abnormality

Action code	Failure code	Trouble	Swing Pump Pres. Sen. Abnormality (Pump controller system)
—	F@HCMA		
Contents of trouble	• The signal voltage from the swing pump pressure sensor is below 0.3 V or above 4.42 V.		
Action of controller	• The swing pump pressure is set to 0 MPa {0 kg/cm²} (This does not affect the control of the machine). • If the cause of the failure disappears, the system resets itself.		
Problem that appears on machine	• The swing pump pressure cannot be monitored (Special function of machine monitor).		
Related information	★ If the 5-V circuit (B) and grounding (GND) circuit (A) of the pressure sensor are connected inversely, the pressure sensor will be broken. Take extreme care when checking. • Input (pressure) from the swing pump pressure sensor can be checked in the monitoring function (Code 09000: Swing pump pressure).		

	Cause		Standard value in normal state/Remarks on troubleshooting			
Possible causes and standard value in normal state	1	Sensor power supply system defective	★ If failure code [DA25KP] is displayed, perform troubleshooting for it first.			
	2	Swing pump pressure sensor defective (Internal short-circuiting)	★ Turn the engine starting switch OFF for the preparations, and hold it in the ON position or run the engine during the troubleshooting.			
			VH04		Voltage	
			Between (C) and (A)	Power supply	4.5 – 5.5 V	
			Between (B) and (A)	Signal	0.5 – 4.5 V	
			The voltage of the pressure sensor is measured with the wiring harness connected. Accordingly, if the voltage is abnormal, check the wiring harness and controller for another cause of the trouble, and then judge.			
	3	Disconnection of wiring harness (Disconnection or defective contact with connector)	★ Turn the engine starting switch OFF for the preparations, and hold it in the OFF position during the troubleshooting.			
			Wiring harness between C01 (female) (22), JC22, and VH04 (female) (C)		Resistance value	Max. 1 Ω
			Wiring harness between C01 (female) (21), JC22, and VH04 (female) (A)		Resistance value	Max. 1 Ω
			Wiring harness between C01 (female) (19) and VH04 (female) (B)		Resistance value	Max. 1 Ω
	4	Grounding fault of wiring harness (Contact with grounding (GND) circuit)	★ Turn the engine starting switch OFF for the preparations, and hold it in the OFF position during the troubleshooting.			
			Between wiring harness between C01 (female) (19) and VH04 (female) (B) and grounding		Resistance value	Min. 1 MΩ
	5	Hot short circuit in wiring harness (Contact with 24-V circuit)	★ Turn the engine starting switch OFF for the preparations, and hold it in the ON position during the troubleshooting.			
			Between wiring harness between C01 (female) (22), JC22, and VH04 (female) (C) and grounding		Voltage	Max. 1 V
			Between wiring harness between C01 (female) (19) and VH04 (female) (B) and grounding		Voltage	Max. 1 V
	6	Pump controller defective	★ Turn the engine starting switch OFF for the preparations, and hold it in the ON position or run the engine during the troubleshooting.			
			C01		Voltage	
			Between (22) and (21)		4.5 – 5.5 V	
			Between (19) and (21)		0.5 – 4.5 V	

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