SEBM033012

SHOP MANUAL

KOMATSU®

PC400, 400LC-7
PC450, 450LC-7

MACHINE MODEL	SERIAL No.
PC400-7	**50001 and up**
PC400LC-7	**50001 and up**
PC450-7	**20001 and up**
PC450LC-7	**20001 and up**

- This shop manual may contain attachments and optional equipment that are not available in your area. Please consult your local Komatsu distributor for those items you may require. Materials and specifications are subject to change without notice.

- PC400, 400LC, PC450, 450LC-7 mount the SAA6D125E-3 engine.
  For details of the engine, see the 125-3 Series Engine Shop Manual.

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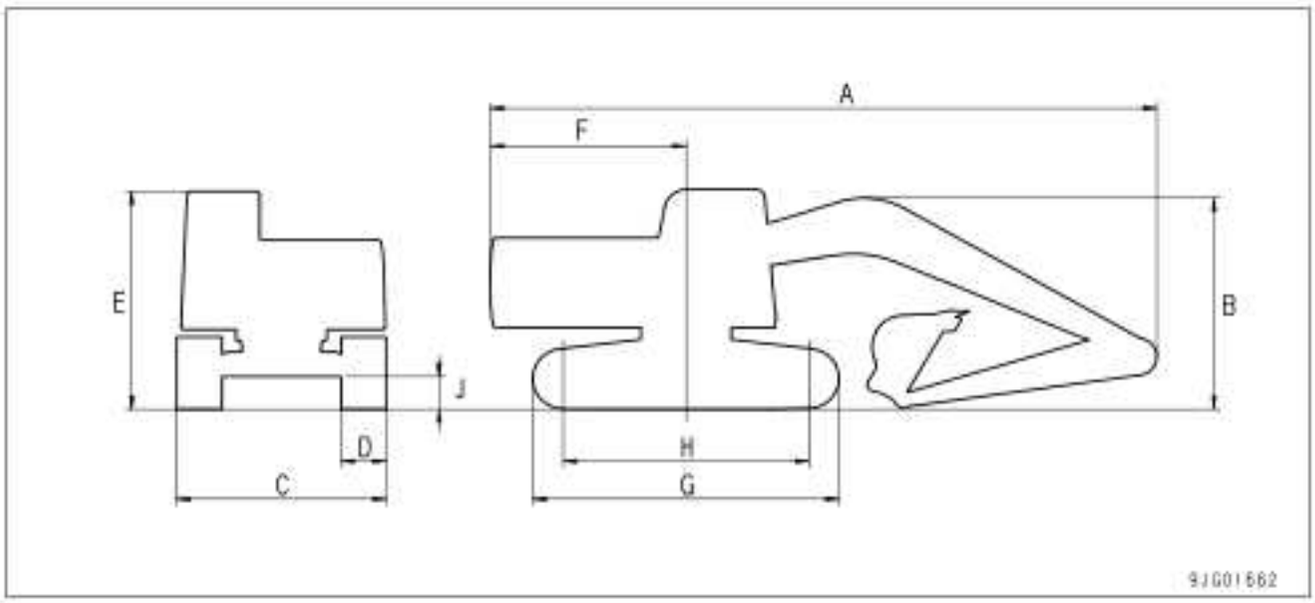
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SPECIFICATION DRAWINGS

BACKHOE SPECIFICATION

DIMENSIONS



Fixed gauge specification

	Item	Unit	PC400-7	PC400LC-7	PC450-7	PC450LC-7
A	Overall length	mm	11,940	11,940	12,040	12,040
B	Overall height	mm	3,635	3,635	3,660	3,660
C	Overall width	mm	3,340	3,440	3,340	3,340
D	Track shoe width	mm	600	700	600	600
E	Height of machine cab	mm	3,265	3,265	3,265	3,265
F	Tail swing radius	mm	3,605	3,605	3,605	3,605
G	Track overall length	mm	5,055	5,355	5,055	5,355
H	Length of track on ground	mm	4,020	4,350	4,020	4,350
J	Min. ground clearance	mm	555	550	555	550

J: Excluding height of grouser (37 mm)

Variable gauge specification

	Item	Unit	PC400-7	PC400LC-7	PC450-7	PC450LC-7
A	Overall length	mm	11,940	11,940	12,040	12,040
B	Overall height	mm	3,635	3,635	3,660	3,660
C	Overall width	mm	3,490	3,490	3,490	3,490
D	Track shoe width	mm	600	600	600	600
E	Height of machine cab	mm	3,265	3,265	3,265	3,265
F	Tail swing radius	mm	3,605	3,605	3,605	3,605
G	Track overall length	mm	5,055	5,355	5,055	5,355
H	Length of track on ground	mm	4,020	4,350	4,020	4,350
J	Min. ground clearance	mm	685	685	685	685

J: Excluding height of grouser (37 mm)

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Error Code in Electrical System [E232] (Short-circuiting in PC-EPC Solenoid)

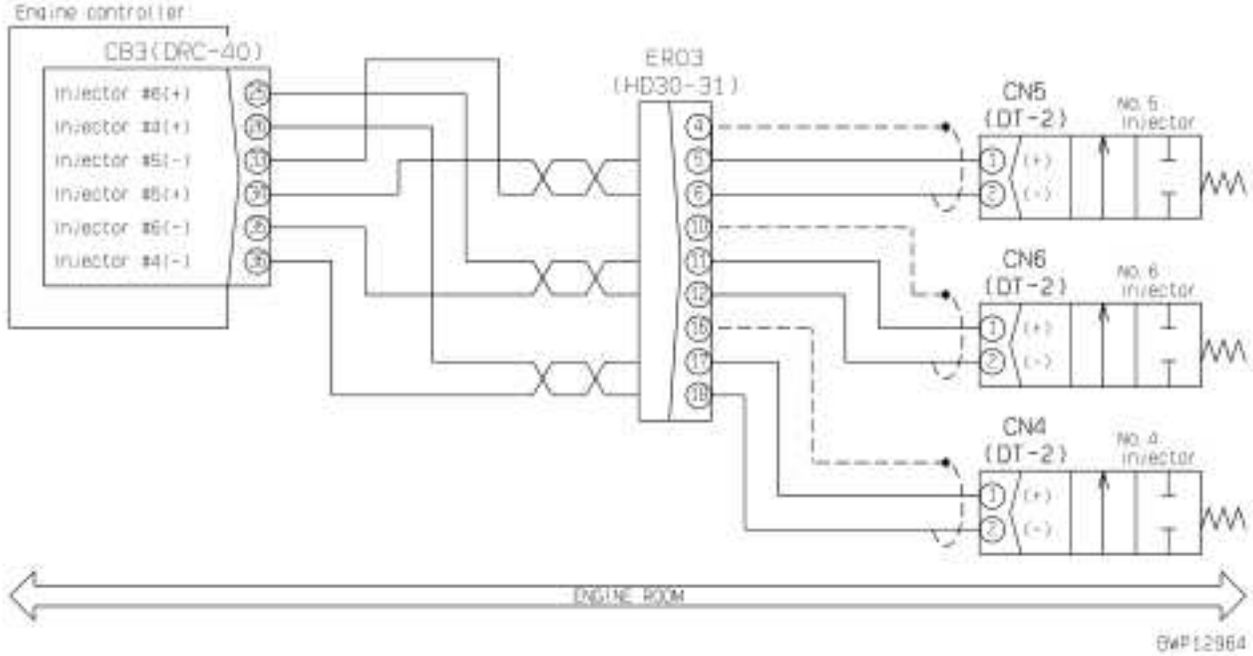
User Code	Error Code	Failure Code	Failure phenomenon	Disconnection in PC-EPC solenoid (Pump controller system)
E02	**E232**	**DXA0KB**		
Failure content	• Abnormal current flew to the PC-EPC solenoid circuit.			
Response from controller	• The controller reduces the output to the PC-EPC solenoid circuit to OFF. • Even if the failure cause disappears, the current does not return to normalcy, unless the engine starting switch is once turned OFF.			
Phenomenon occurring on machine	• As load to the pump increases, the engine rotation drops sharply and sometimes the engine stalls. (The pump absorption torque cannot be controlled.)			
Relative information	• Output to PC-EPC solenoid (ampere) can be confirmed in the monitor function. (Code No.: 01300 PC-EPC solenoid current) • If there is no abnormality with the solenoid or any of the wiring harnesses, the machine can be operated in a working mode equivalent to E mode by turning the emergency pump drive switch to the emergency position. (At that time the monitor panel continues to display Error Code No. [E233], but this is not abnormal) • Turn the emergency driving switch normal position during the troubleshooting.			

Presumed cause and standard value in normalcy		Cause	Standard value in normalcy and references for troubleshooting			
	1	PC-EPC solenoid defective (Internal short-circuiting or grounding fault)	★ Turn the engine starting switch OFF for the preparations, and hold it in the OFF position during the troubleshooting.			
			V21 (male)	Resistance value		
			Between (1) and (2)	7 – 14 Ω		
			Between (1) and grounding	Above 1 MΩ		
	2	Emergency pump driving switch defective (Internal short-circuiting or grounding fault)	★ Turn the engine starting switch OFF for the preparations, and hold it in the OFF position during the troubleshooting.			
			S25 (male)	Emergency pump drive switch	Resistance value	
			Between (3) and (4)	Normal	Above 1 MΩ	
			Between (3) and grounding		Above 1 MΩ	
	3	Grounding fault of wiring harness (Contact with grounding circuit)	★ Turn the engine starting switch OFF for the preparations, and hold it in the OFF position during the troubleshooting.			
			Between wiring harness from C03 (female) (16) to S25 (female) (3) and grounding		Resistance value	Above 1 MΩ
			Between wiring harness from S25 (female) (2) to V21 (female) (1) and grounding		Resistance value	Above 1 MΩ
	4	Pump controller defective	★ Turn the engine starting switch OFF for the preparations, and hold it in the OFF position during the troubleshooting.			
			C03 (female)	Resistance value		
			Between (16) and (3) (13) (23)	7 – 14 Ω		
			Between (16) and grounding	Above 1 MΩ		

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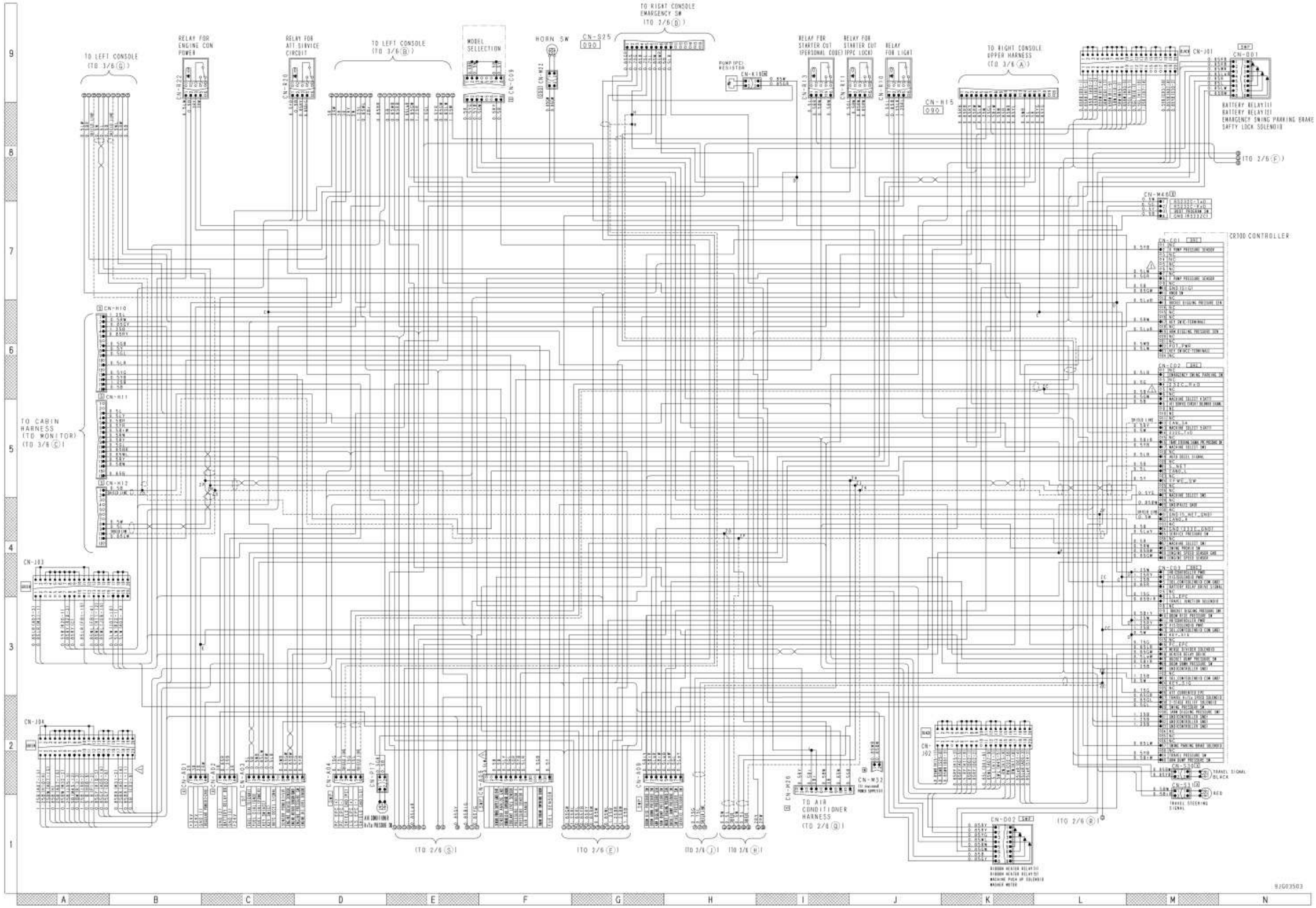
Presumed cause and standard value in normalcy		Cause	Standard value in normalcy and references for troubleshooting		
	5	Short-circuiting of wiring harness (Contact with 24 V circuit)	★ Turn the engine starting switch OFF for the preparations, and hold it in the ON position during the troubleshooting.		
			Between wiring harness between CB3 (female) (26) and CN4 (female) (1) and grounding	Voltage	Below 1 V
			Between wiring harness between CB3 (female) (36) and CN4 (female) (2) and grounding	Voltage	Below 1 V
			Between wiring harness between CB3 (female) (34) and CN5 (female) (1) and grounding	Voltage	Below 1 V
			Between wiring harness between CB3 (female) (33) and CN5 (female) (2) and grounding	Voltage	Below 1 V
			Between wiring harness between CB3 (female) (25) and CN6 (female) (1) and grounding	Voltage	Below 1 V
			Between wiring harness between CB3 (female) (35) and CN6 (female) (2) and grounding	Voltage	Below 1 V
	6	Engine controller defective	★ Turn the engine starting switch OFF for the preparations, and hold it in the OFF position during the troubleshooting.		
			CB3 (female)	Resistance value	
			Between (26) and (36)	0.4 – 1.1 Ω	
			Between (34) and (33)	0.4 – 1.1 Ω	
			Between (25) and (35)	0.4 – 1.1 Ω	
			Between (25), (26), (33), (34), (35), (36) and grounding	Above 1 MΩ	

Electrical circuit diagram related to fuel injectors 4, 5, and 6



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ELECTRICAL CIRCUIT DIAGRAM (1/6)



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