SEN01607-22

Shop Manual

HYDRAULIC
EXCAVATOR

PC2000-8

SERIAL NUMBERS 20001 and up

KOMATSU®

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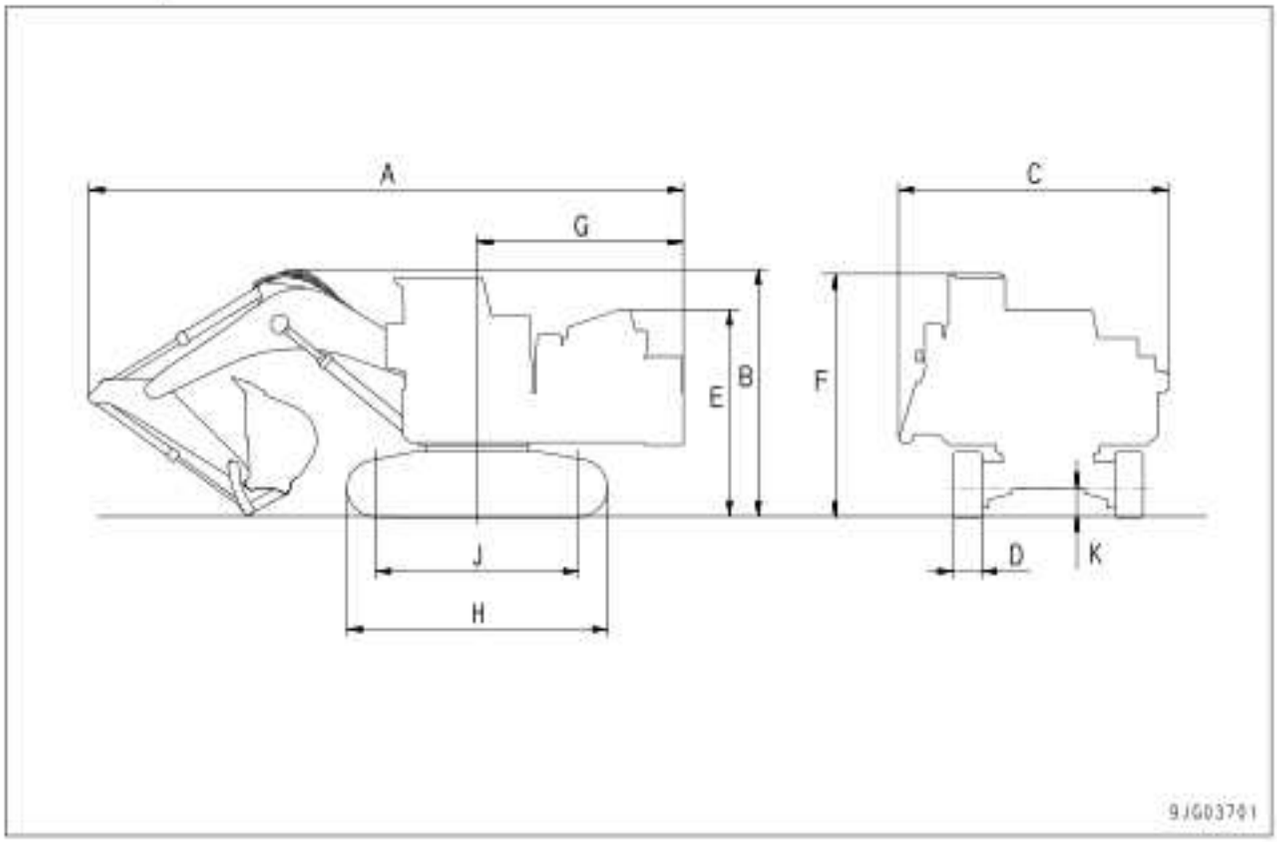
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Specification drawings

Backhoe specification



	Item	Unit	PC2000-8
A	Overall length	mm	17,030
B	Overall height	mm	7,135
C	Overall width	mm	7,490
D	Track shoe width	mm	810
E	Height of machine cab	mm	5,970
F	Height of operator's cab	mm	7,030
G	Tail swing radius	mm	5,980
H	Track overall length	mm	7,445
J	Length of track on ground	mm	5,780
K	Min. ground clearance	mm	825

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Failure code [DHE5KB] Blowby Pres. Sensor Failure (or change of VHMS-LED display from n3 to 32)

User code	Failure code	Trouble	Blowby Pres. Sensor Failure (VHMS controller system)
—	**DHE5KB**		
Contents of trouble	• The signal voltage of the blow-by pressure sensor is below 0.1 V.		
Action of controller	• None in particular.		
Problem that appears on machine	• The snap shot data downloaded to a personal computer are not displayed normally.		
Related information	• The error codes of the VHMS system are not recorded in the failure history of the machine monitor. • The 7-segment LED of the VHMS controller displays **n3→32** (displays the code 2 characters by 2). • The blow-by pressure can be checked by downloading the data to a personal computer after performing the snap shot operation.		

	Cause		Standard value in normal state/Remarks on troubleshooting			
Possible causes and standard value in normal state	1	Sensor 5-V power supply defective	If error code [**DBB5KP**] is displayed, perform troubleshooting for it first.			
	2	Blow-by pressure sensor defective (Internal defect)	★ Prepare with starting switch OFF, then turn starting switch ON and carry out troubleshooting.			
			VH08	Voltage		
			Between (B) and (A)	4.5 – 5.5 V		
			Between (C) and (A)	0.3 – 0.7 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	Blow-by pressure sensor defective (External defect)	Referring to TESTING AND ADJUSTING, check the sensor for sticking oil, dust, water, etc. and clean it.			
	4	Blow-by pressure sensor defective (Installation defective)	Referring to TESTING AND ADJUSTING, check the sensor for defective installation and repair it.			
	5	Disconnection of wiring harness (Disconnection or defective contact with connector)	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.			
			Wiring harness between CV01 (female) (5) and P43 (female) (B)	Resistance value	Max. 1 Ω	
			Wiring harness between CV02A (female) (18) and P43 (female) (C)	Resistance value	Max. 1 Ω	
	6	Grounding fault of wiring harness (Contact with grounding (GND) circuit)	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.			
			Between wiring harness between CV02A (female) (18) and P43 (female) (C)	Resistance value	Min. 1 MΩ	
	7	VHMS controller defective	★ Prepare with starting switch OFF, then turn starting switch ON and carry out troubleshooting.			
			CV02A	Voltage		
			Between (18) and (13)	0.3 – 0.7 V		

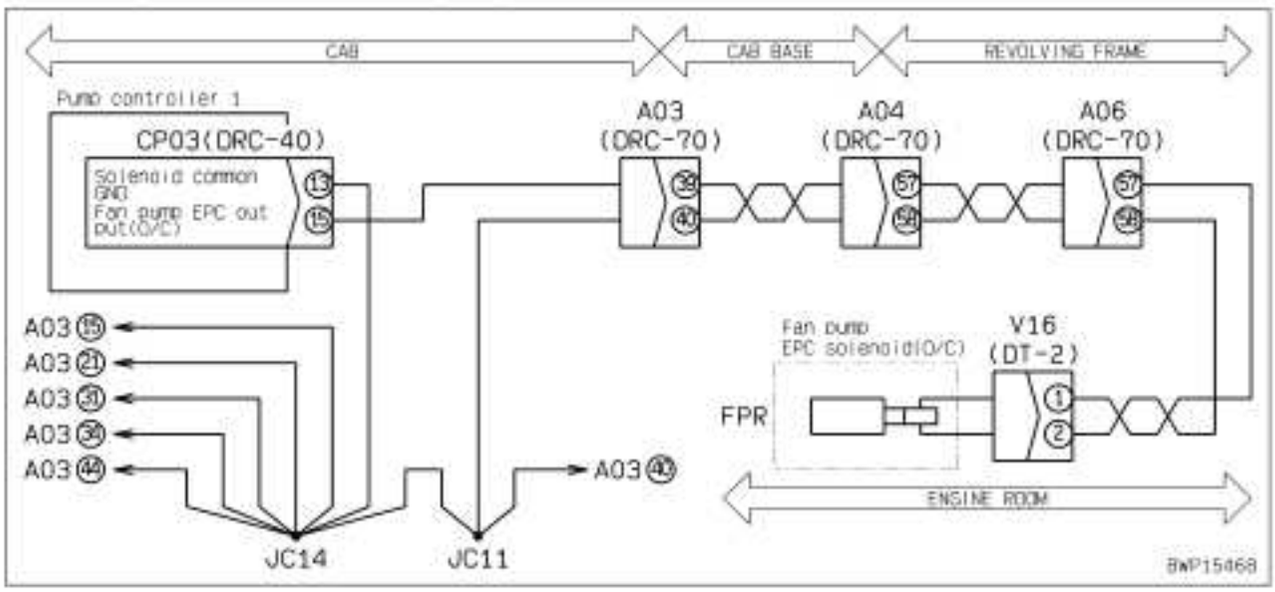
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Failure code [DWNCKB] Fan(O/C) Pump EPC Sol Short Circuit

User code	Failure code	Trouble	Fan(O/C) Pump EPC Sol Short Circuit (Pump controller 1 system)
E11	**DWNCKB**		
Contents of trouble	• Abnormal current flowed in O/C fan pump EPC solenoid circuit.		
Action of controller	• When the short circuit is detected and power is OFF, fan pump becomes max. swash plate angle.		
Problem that appears on machine	• Fan motor speed cannot be controlled.		
Related information	• Output (Current) to O/C fan pump EPC solenoid can be checked with monitoring function. (Code **31623**: O/C fan pump EPC solenoid current)		

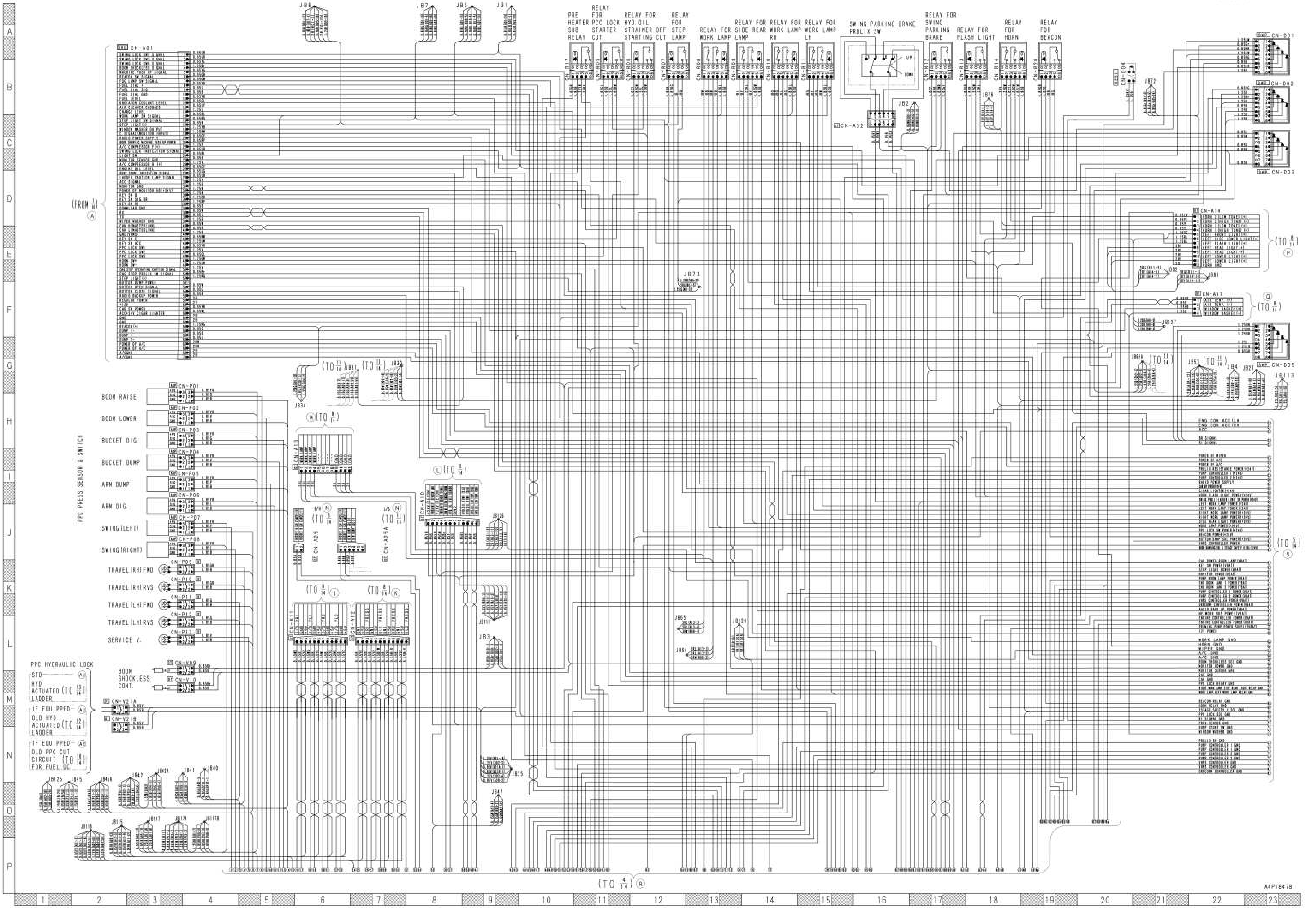
	Cause		Standard value in normal state/Remarks on troubleshooting		
Possible causes and standard value in normal state	1	Defective O/C fan pump EPC solenoid (Internal short-circuiting or grounding fault)	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.		
			V16 (male)	Resistance	
			Between (1) – (2)	7 – 14 Ω	
			Between (1) and grounding	Min. 1 MΩ	
	2	Grounding fault of wiring harness (Contact with grounding circuit)	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.		
			Between wiring harness between CP03 (female) (15) – V16 (female) (1) and grounding	Resistance	Min. 1 MΩ
	3	Pump controller 1 defective	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.		
			C03 (female)	Resistance	
			Between (15) – (13)	7 – 14 Ω	
			Between (15) and grounding	Min. 1 MΩ	

Circuit diagram related to O/C fan pump EPC solenoid



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Electrical circuit diagram (3/14)



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