SEN05622-05

Shop Manual

HYDRAULIC
EXCAVATOR

PC490LC-10

SERIAL NUMBERS 80001 and up

KOMATSU®

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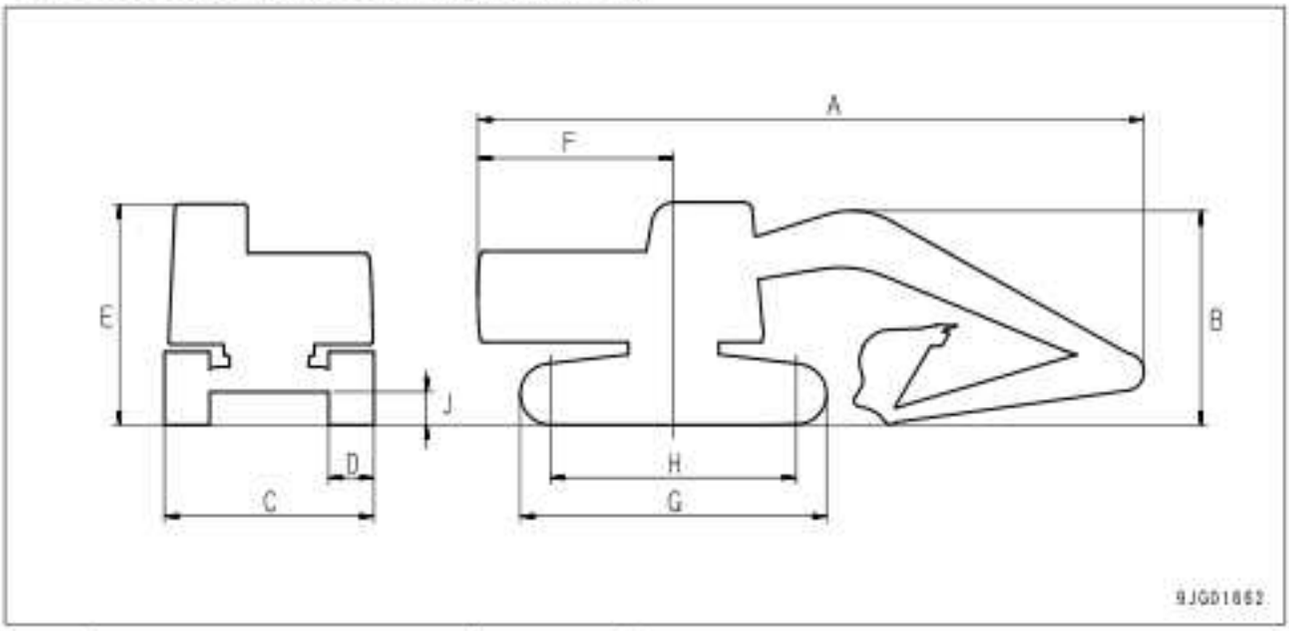
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Specifications (ALL-2111-001-A-00-A)

Specification drawing (PC400_10-2110-931-A-00-A)



	Item	Unit	PC490LC-10
	Machine weight	kg	46,660
	Bucket capacity	m^3	1.9
	Engine model	–	Komatsu SAA6D125E-6 diesel engine
	Engine flywheel horsepower • Net [ISO 9249/SAE J1349] • Gross [SAE J1995]	kW {HP}/ min^{-1} (rpm)	 268 {359}/1,900 {1,900} 270 {362}/1,900 {1,900}
A	Overall length	mm	11,930
B	Overall height (including head guard)	mm	3,635
C	Overall width	mm	3,590
D	Shoe width	mm	700
E	Height of machine cab	mm	3,350
F	Tail swing radius	mm	3,645
G	Overall crawler length	mm	5,385
H	Distance between tumbler centers	mm	4,350
J	Min. ground clearance	mm	700
	Traveling speed (Lo/Mi/Hi)	km/h	3.0/4.2/5.5
	Continuous swing speed	min^{-1} (rpm)	9.1 {9.1}

★ The engine rated output is indicated in the net value and gross value. Gross denotes the rated output measured of an independent engine. While, net denotes the value measured of an engine under the condition essentially the same as that when it is installed on machine.

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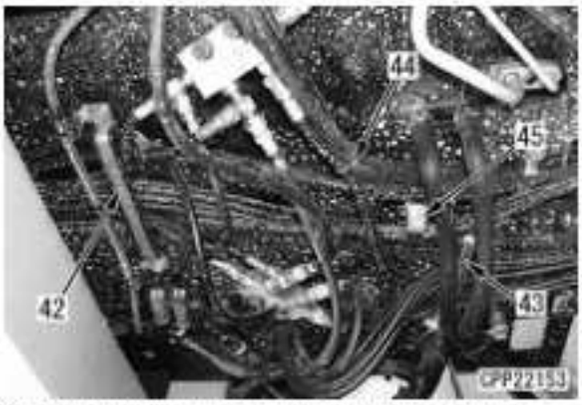
Failure code [CA2881] Dosing Fuel Pressure Low Error 1 (PC400-CA2881-400-A-Z0-A)

Action level	Failure code	Failure	Dosing Fuel Pressure Low Error 1 (Engine controller system)
L03	CA2881		
Detail of failure	Pressure detected by dosing fuel pressure sensor during dosing is below the threshold value (the fuel pressure is low).		
Action of controller	• Stops KDPF regeneration control. • You can cancel above measure by "turning starting switch to OFF position once, then turning starting switch to ON position" after failure code is generated.		
Problem on machine	• Automatic regeneration is disabled. • Manual stationary regeneration is disabled.		
Related information	⚠ **Since exhaust connector and KDPF are heated to 500°C or above, take care not to get burn injury.** • Signal voltage from dosing fuel pressure sensor can be checked with monitoring function. (Code: 47600 (V)) • Pressure detected by dosing fuel pressure sensor can be checked with monitoring function. (Code: 47601 (kPa)) • Ambient pressure sensed by ambient pressure sensor can be checked with monitoring function. (Code: 37400 (kPa)) • Engine controller stops approximately 30 seconds after starting switch is turned to OFF position. So when you restart engine, wait 1 minute and more before turning starting switch to ON position again.		
Machine operation for clearing failure code	• When this failure code appears, perform troubleshooting according to the following work flow. A. Identification of cause and repair ↓ B. Machine operation for clearing failure code ★ This failure code does not disappear by simply turning starting switch to ON position from OFF position after repair. You must perform machine operation for clearing failure code after repair.		

A. Identification of cause and repair

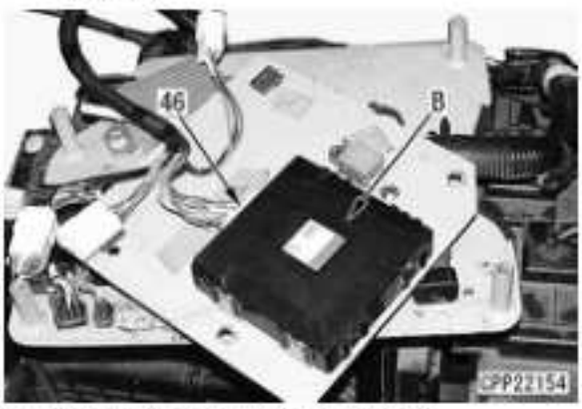
No.	Cause	Procedure, measuring location, criteria, and remarks
1	Defective wiring harness connector	1. See descriptions of wiring harness and connectors in "c: Electrical equipment" in "Checks before troubleshooting" of "Related information on troubleshooting", and check it. 2. Turn starting switch to ON position.
		If this failure code is not displayed, wiring harness connector is defective. ★ If this failure code is displayed, perform following checks.
2	Defective dosing fuel solenoid valve 1 (shut-off valve)	If failure code [CA1923] or [CA1924] or [CA1925] is also displayed, perform troubleshooting for [CA1923] or [CA1924] or [CA1925] first.
3	Defective dosing fuel solenoid valve 2 (drain valve)	If failure code [CA2732] is also displayed, perform troubleshooting for [CA2732] first.
4	Defective dosing fuel pressure sensor	If failure code [CA1927] or [CA1928] is also displayed, perform troubleshooting for [CA1927] or [CA1928] first.
5	Defective fuel supply pump	If failure code [CA559] is also displayed, perform troubleshooting for [CA559] first.
6	Defective fuel feed pump	If failure code [CA2265] or [CA2266] is also displayed, perform troubleshooting for [CA2265] or [CA2266] first.
		1. Turn starting switch to OFF position. 2. Loosen the joint bolt (JB) of fuel tube. 3. Tilt the switch for the fuel feed pump to ON position while starting switch is in OFF position. (Be careful since fuel may spurt out.)

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28.Disconnect connector (46) and remove air conditioner controller (**B**) from the main harness.

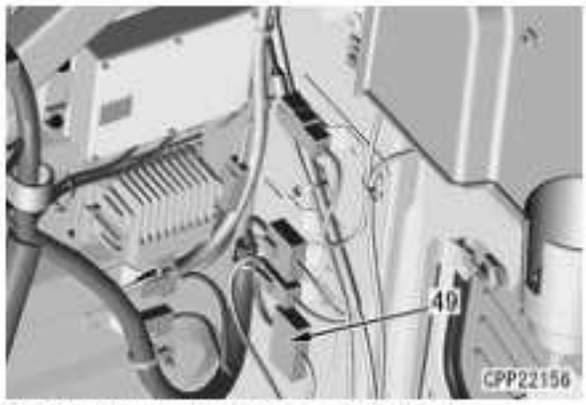
- Connector (46): Machine main harness (AC04)



29.Disconnect connectors (47) to (49).

- Connector (47): R.H. console intermediate harness (H14)
- Connector (48): R.H. console intermediate harness (H15)
- Connector (49): L.H. console intermediate harness (H16)

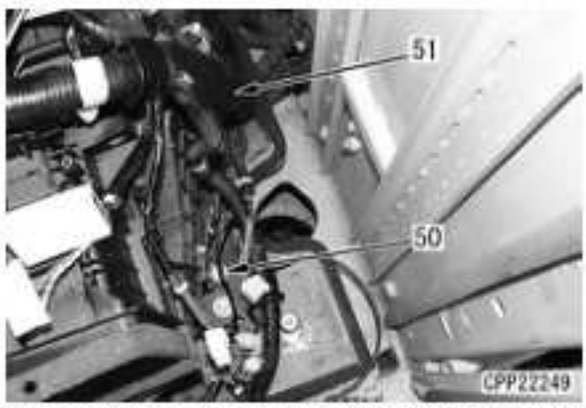




30.Disconnect ground cable (T01) (50).

31.Disconnect all clamps that fasten main harness (51) to the floor frame.

★ Separate the pump controller assembly and main harness from the floor frame and move them toward the boom.



32.Open engine hood (52) and remove cover (52a).



33.Remove clamps (53) to (55) fastening the hoses.

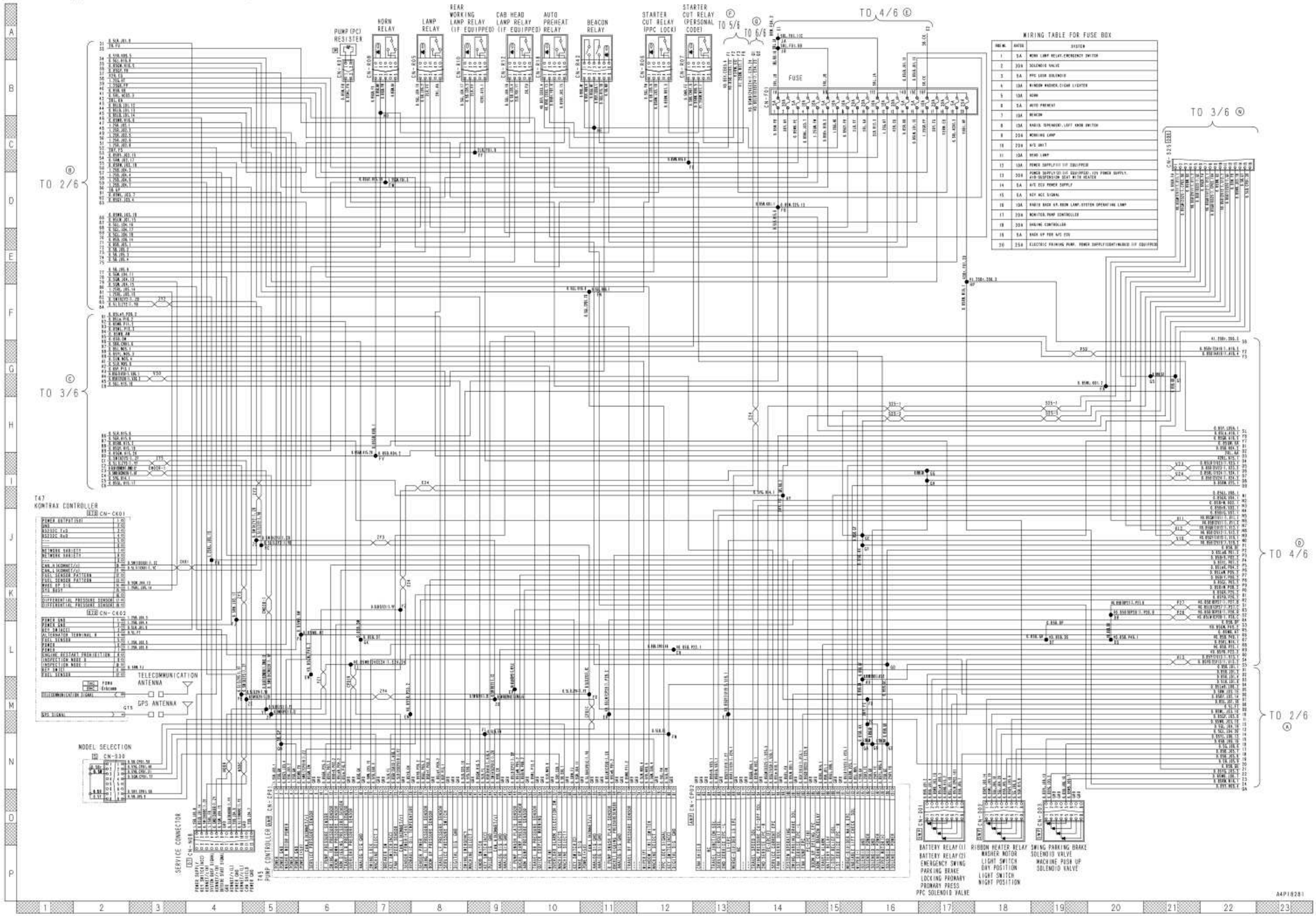
★ Move the hoses toward the control valve to allow disconnecting the work equipment PPC valve hoses from the relay block.

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Electrical circuit diagram (1/6)

PC490-10, PC490LC-10

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



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