CEBM025304

Shop Manual

KOMATSU®

PC490LC-10

HYDRAULIC EXCAVATOR

SERIAL NUMBERS **PC490LC-10 A40001 and up**

ENGINE **6D125E-6**

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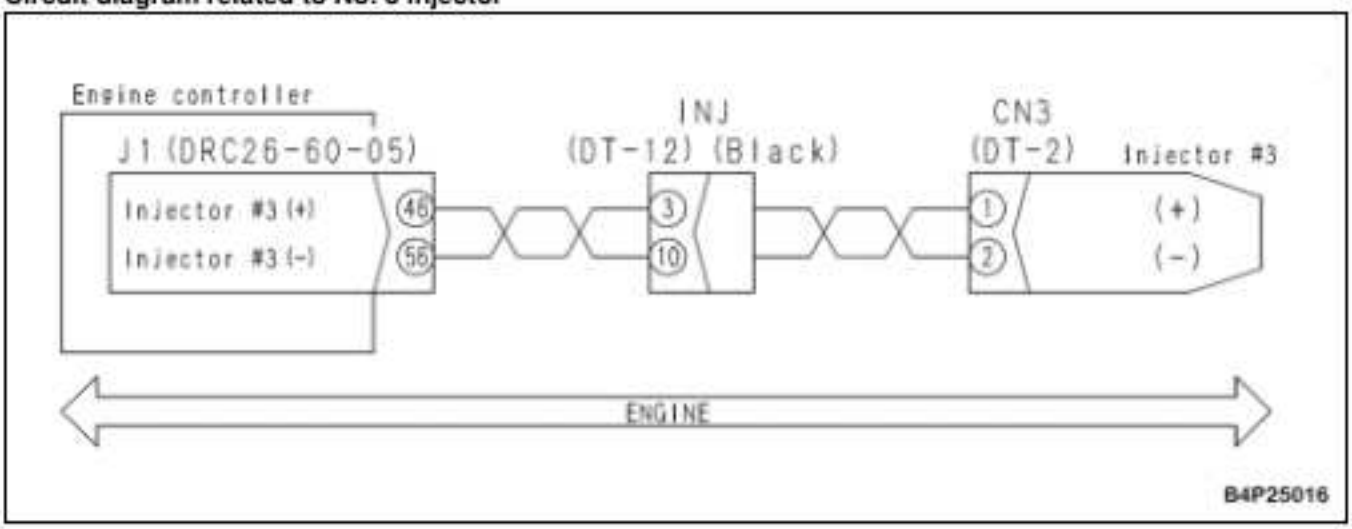
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6	Short circuit in wiring harness	1. Turn starting switch to OFF position. 2. Disconnect connectors J1 and CN3, and connect T-adapters female side of J1. ★ Check by using multi meter in continuity mode.		
		Continuity	Between J1 (female) (46) and each pin other than (46)	No continuity (no sound is heard.)
			Between J1 (female) (56) and each pin other than (56)	No continuity (no sound is heard.)
7	Defective other cylinder injectors or wiring harness	If failure code for other injector is also displayed, perform troubleshooting for them, too.		
8	Defective engine controller	If no failure is found by above checks, engine controller is defective. (Since this is an internal defect, troubleshooting cannot be performed.)		

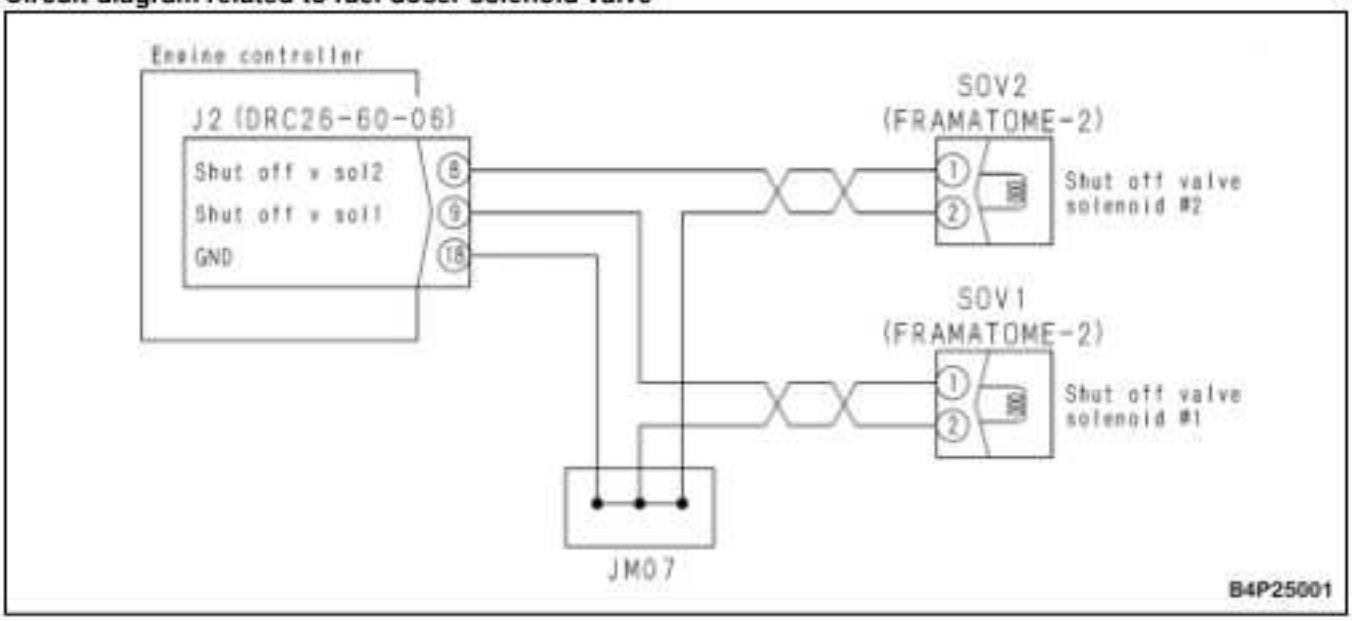
Circuit diagram related to No. 3 injector



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6	Defective engine controller	1. Start the engine and run at low idle for one minute. ★ If another failure code appears, perform troubleshooting for it.	
		If this failure code appears and no failure is found by above checks, engine controller is defective. (Since this is an internal defect, troubleshooting cannot be performed.)	

Circuit diagram related to fuel doser solenoid valve



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No.	Check Item	Criteria					Remedy
		Standard size			Repair limit		
		Free length x Outside diameter	Installed length	Installation load	Free length	Installation load	
1	Spool return spring	54.5 x 34.8 mm (2.146 x 1.370 in)	53.5 mm (2.106 in)	120.6 N (12.3 kg) {27.1 lbf}	---	326 N (33.2 kg) {73.3 lbf}	If damaged or deformed, replace spring
2	Spool return spring	54.6 x 34.8 mm (2.149 x 1.370 in)	53.5 mm (2.016 in)	139.3 N (14.2 kg) {31.3 lbf}	---	315 N (32.1 kg) {70.8 lbf}	
3	Spool return spring	54.2 x 34.8 mm (2.134 x 1.370 in)	53.5 mm (2.016 in)	94.1 N (9.6 kg) {21.2 lbf}	---	300 N (30.6 kg) {67 lbf}	
4	Spool return spring	54.9 x 24.2 mm (2.161 x 0.953 in)	54.5 mm (2.146 in)	33.4 N (3.4 kg) {7.5 lbf}	---	336 N (34.3 kg) {67.4 lbf}	
5	Spool return spring	57.2 x 32.8 mm (2.252 x 1.291 in)	53.5 mm (2.106 in)	362 N (36.9 kg) {81.4 lbf}	--		

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Counterweight Assembly

Special Tools

Symbol	Part number	Part name	Necessity	Q'ty	N/R	Sketch	Work content
—	Commercially available	Impact wrench	●	1			Removal and installation of counterweight assembly
	Commercially available	Socket wrench (width across flats: 65 mm)	●	1			

★ Use the impact wrench and socket wrench with the torque capacities enough for tightening the counterweight mounting bolts.

Counterweight mounting bolt (width across flats 65 mm): 3,430 - 4,212 N•m {350 - 430 kgm}

WARNING! Park the machine on a level ground, lower the work equipment to the ground, and stop the engine.

WARNING! Set the lock lever in the LOCK position.

WARNING! Turn the battery disconnect switch to the OFF position and remove the key.

Removal

1. Disconnect rear working lamp connector CNA15 (1) and camera connector CN-A40 (2).



★ Install oil stopper plugs to the disconnected hoses.
★ Before disconnecting each hose, put a tag on it to indicate its connected position.
★ Install a plug in the disconnected hoses.

Counterweight assembly (2): 9,011 kg



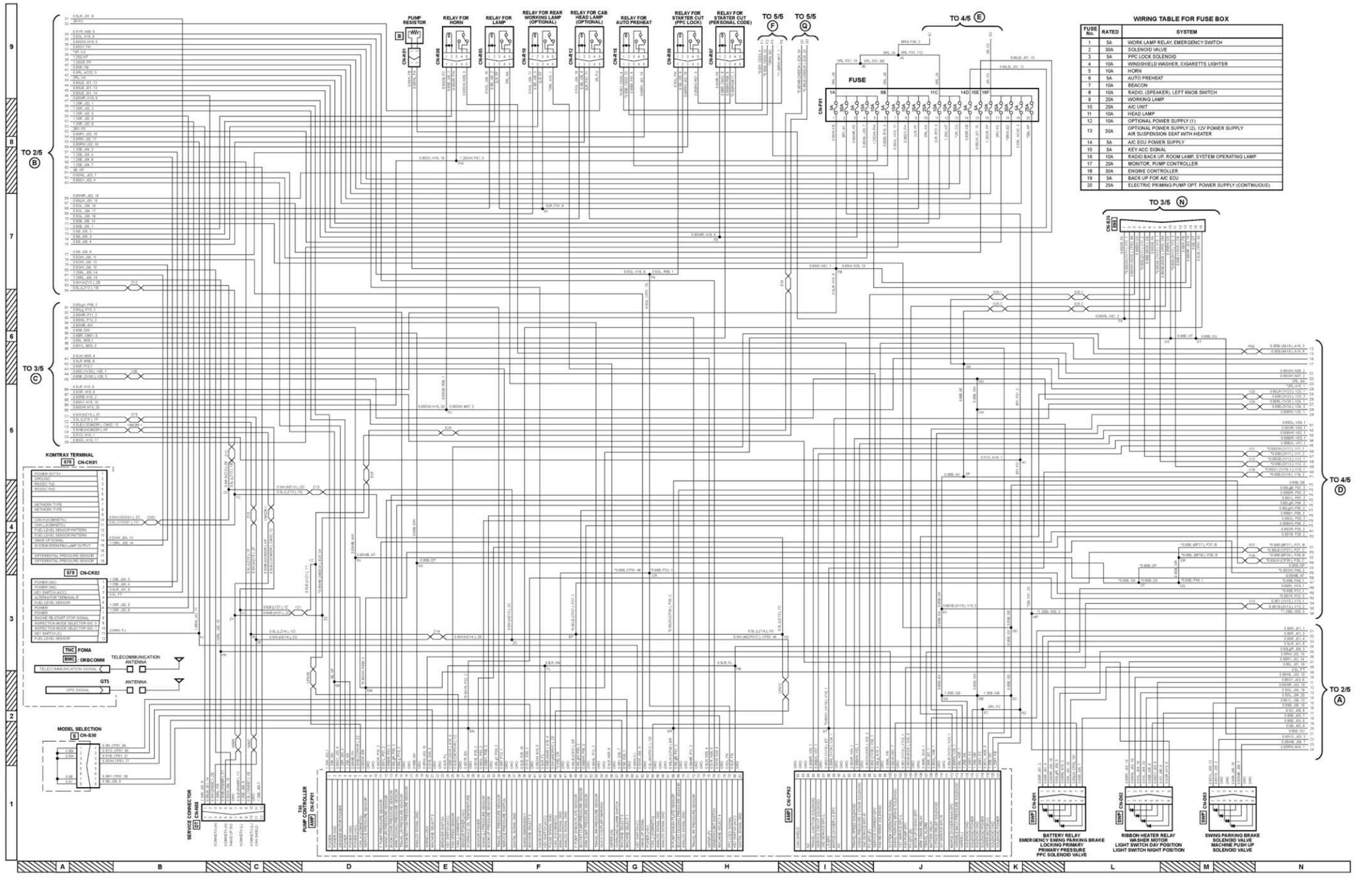
2. Remove the mounting bolts and lower counterweight (2). [*1]
   ★ Width across flats: 65 mm

WARNING! Loosen the cap of the hydraulic tank gradually to release the internal pressure.

3. Remove pin (1) and disconnect counterweight (2).

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Electrical Circuit Diagram (1/5)
*** This figure covers the equipment and devices that are unavailable as optional items in some areas.**



WIRING TABLE FOR FUSE BOX

FUSE No.	RATED	SYSTEM
1	5A	WORK LAMP RELAY, EMERGENCY SWITCH
2	30A	SOLENOID VALVE
3	5A	PPC LOCK SOLENOID
4	10A	WINDSHIELD WASHER, CIGARETTE LIGHTER
5	10A	HORN
6	5A	AUTO PREHEAT
7	10A	BEACON
8	10A	RADIO, (SPEAKER), LEFT KNOB SWITCH
9	20A	WORKING LAMP
10	20A	A/C UNIT
11	10A	HEAD LAMP
12	10A	OPTIONAL POWER SUPPLY (1)
13	30A	OPTIONAL POWER SUPPLY (2), 12V POWER SUPPLY AIR SUSPENSION SEAT WITH HEATER
14	5A	A/C ECU POWER SUPPLY
15	5A	KEY ACC SIGNAL
16	10A	RADIO BACK UP, ROOM LAMP, SYSTEM OPERATING LAMP
17	20A	MONITOR, PUMP CONTROLLER
18	30A	ENGINE CONTROLLER
19	5A	BACK UP FOR A/C ECU
20	25A	ELECTRIC PRIMING PUMP OPT. POWER SUPPLY (CONTINUOUS)

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