CEBM001601

Shop Manual

KOMATSU®

PC150-6K
PC150LC-6K

HYDRAULIC EXCAVATOR

SERIAL NUMBERS **PC150-6K - K30001** and up
PC150LC-6K - K30001

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CONTENTS

01 GENERAL 01-1

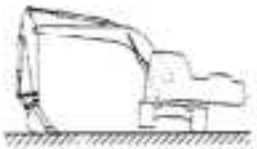
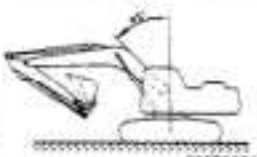
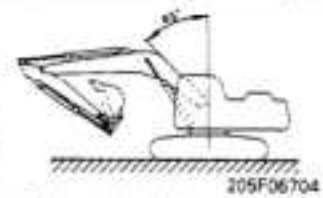
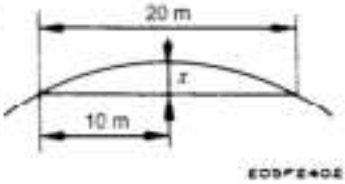
10 STRUCTURE AND FUNCTION 10-1

20 TESTING, ADJUSTING AND TROUBLESHOOTING 20-1

30 DISASSEMBLY AND ASSEMBLY 30-1

40 MAINTENANCE STANDARD 40-1

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Machine model					PC150LC-6k/PC150-6k			
Category	Item	Measurement conditions		Unit	Standard value		Permissible value	
					PC150LC	PC150	PC150LC	PC150
Travel	Travel speed (1)	 205F06703 • Engine at high idling • Hydraulic oil temperature: 45 - 55°C • In H/O mode • Raise track on one side at a time, rotate one turn, then measure time taken for next 5 turns with no load.	Lo	Sec	59 ± 6	53 ± 6	53 - 70	47 - 64
			Mi		36.5 ± 4	34 ± 4	32.5 - 44.5	30 - 42
			Hi		29.5 ± 3	27 ± 3	24.5 - 36	24 - 33.5
	Travel speed (2)	 205F06704 • Engine at high idling • Hydraulic oil temperature: 45 - 55°C • In H/O mode • Run up for at least 10 m, and measure time taken to travel next 20 m on flat ground.	Lo	Sec	26.7 ± 3.0		23.7 - 32.7	
			Mi		18 ± 2.0		16 - 22.0	
			Hi		13.3 ± 1.0		12.3 - 15.3	
	Travel deviation	 205F06704 • Engine at high idling • Hydraulic oil temperature: 45 - 55°C • Run up for at least 10 m, and measure deviation when traveling next 20 m on flat ground. ★ Use a hard horizontal surface.  EDDFE40E ★ Measure dimension		mm	Max. 200		300	

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METHOD OF USING TROUBLESHOOTING CHARTS

1. Category of troubleshooting code number

Troubleshooting Code No.	Component	Service code
N-○○	Troubleshooting of communication abnormality system	E218 group
E-○○	Troubleshooting of electrical system for governor, pump controller (governor control system)	E3-○○ group
S-○○	Troubleshooting of engine related parts	-
C-○○	Troubleshooting of electrical system for governor, pump controller (pump control system)	E2- ○○ group
F-○○	Troubleshooting of governor, pump controller (input signal system)	-
H-○○	Troubleshooting of hydraulic, mechanical system	-
M-○○	Troubleshooting of machine monitor	E1-○○ group

2. Method of using troubleshooting table for each troubleshooting mode

1) Troubleshooting code number and problem
The title of the troubleshooting chart gives the troubleshooting code, service code, and failure mode (problem with the machine). (See Example (1))

2) Distinguishing conditions
Even with the same failure mode (problem), the method of troubleshooting may differ according to the model, component, or problem. In such cases, the failure mode (problem) is futher divided into sections marked with small letters (for example, a), so go to the appropriate section to carry out troubleshooting. (See Example (2)) If the troubleshooting table is not divided into sections, start troubleshooting form the first check item in the failure mode.

3) Method of following troubleshooting chart
- Check or measure the item inside ▭ and according to the answer follow either the YES line or the NO line to go to the next ▭. (Note: The number written at the top right corner of the ▭ is an index number; it does not idicate the order to follow.)
- Following the Yes or NO lines according to the results of the check or measrument will lead finally to the Cause column. Check the cause and take the action given in the Remedy column on the right. (See Example (3))
- Below the ▭ there are the methods for inspection or measurement, and the judgement values. If the judgement values below the ▭ are correct or the answer to the question inside the ▭ is YES, follow the YES line; if the judgement value is not correct, or the answer to the question is NO, follow the NO line.
- Below the ▭ is given the preparatory work needed for inspection and measurement, and the judgement values. If this preparatory work is neglected, or the method of operation or handling is mistaken, there is danger that it may cause mistaken judgement, or the quipment may be damaged. Therefore, before starting inspection or measurement, always read the instructions carefully, and start the work in order from Item 1).

4) General precautions
When carrying out troubleshooting for the failure mode (problem), precautions that apply to all items are given at the top of the page and marked with ★ (See Example (4)).
The precautions marked ★ are not given in the ▭, but must always be followed when carrying out the check inside the ▭.

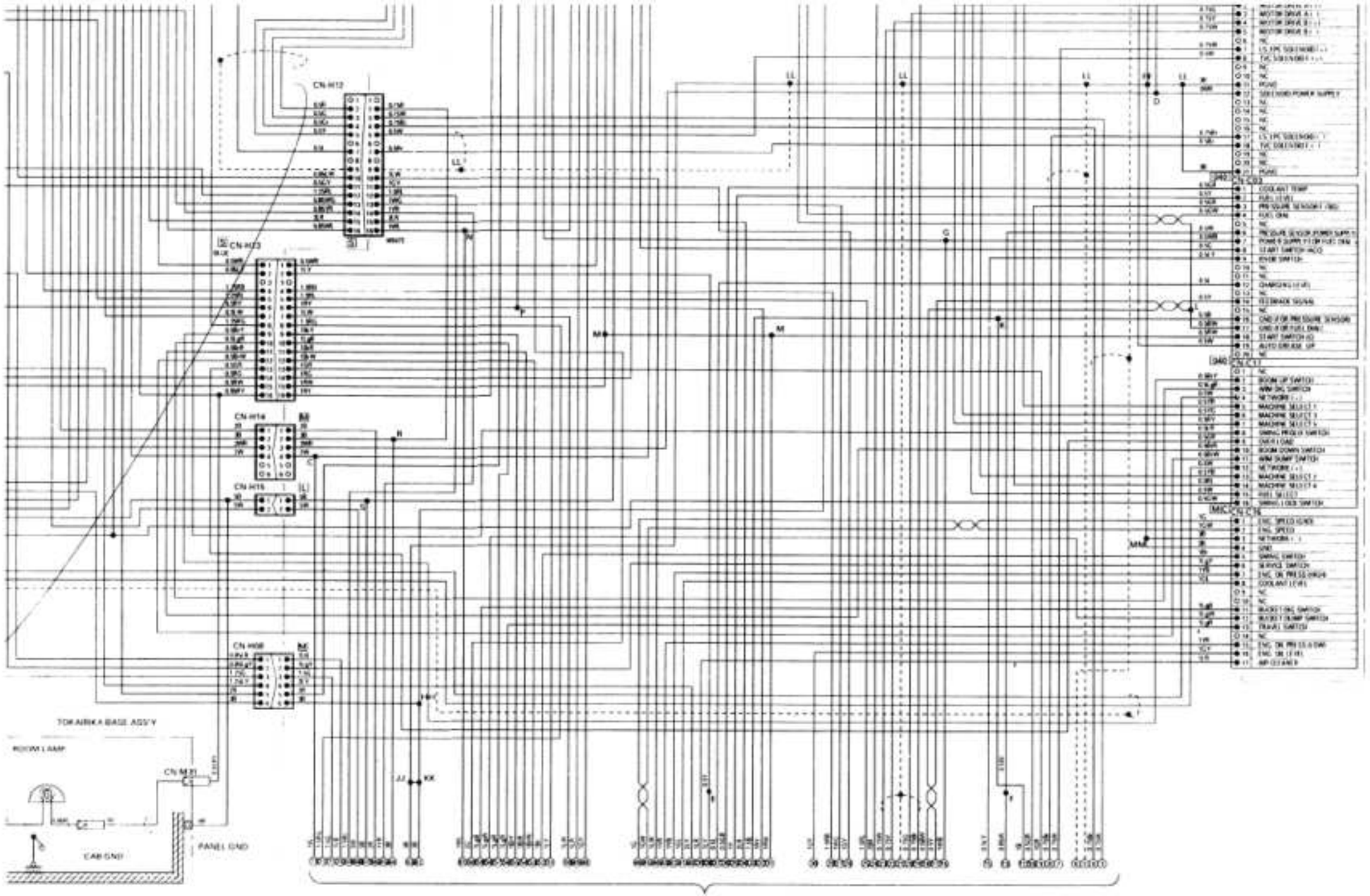
5) Troubleshooting tools
When carrying out the troubleshooting, prepare the necessary troubleshooting tools. for details, see TOOLS FOR TESTING, ADJUSTING, AND TROUBLESHOOTING.

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ACTION TAKEN BY CONTROLLER WHEN ABNORMALITY OCCURS AND PROBLEMS ON MACHINE

User code	Service code	Abnormal system	Nature of abnormality
E02	E232	Short circuit in pump TVC solenoid system	1. Short circuit with ground, short circuit inside pump TVC solenoid 2. Short circuit with power source, short circuit with ground in wiring harness between controller C02 (8) and TVC solenoid C13 (1) ((+) side) 3. Short circuit with power source in wiring harness between controller C02 (18) and TVC solenoid C13 (2) ((-) side) 4. Defective governor, pump controller
	E233	Disconnection in pump TVC solenoid sytem	1. Disconnection, defective contact inside pump TVC solenoid 2. Disconnection, defective contact in wiring harness between controller C02 (8) and TVC solenoid C13 (1) ((+) side) 3. Disconnection, defective contact, short circuit with ground in wiring harness between controllerC02 (18) and TVC solenoidC13 (2) ((-) side) 4. Defective governor, pump controller
E03	E203	Short circuit in swing holding brake solenoid system	1. Short circuit with ground, short circuit inside swing holding brake solenoid 2. Short circuit with ground in wiring harness between controller C01 (3) and solenoid V06 (2) ((+) side) 3. Defective governor, pump controller
	E213	Disconnection in swing holding brake solenoid system	1. Disconnection, defective contact inside swing holding brake solenoid 2. Disconnection, defective contact, short circuit with power source in wiring harness between controller C01 (3) and solenoid V06 (2) ((+) side) 3. Disconnection, defective contact in wiring harness between solenoid V06 (1) and chassis ground ((-) side) 4. Defective governor, pump controller

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(TO 2/3)

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