SEN01983-17

Shop Manual

HYDRAULIC
EXCAVATOR

PC300 -8
PC300LC-8
PC350 -8
PC350LC-8

SERIAL NUMBERS

PC300- 60001
PC300LC- 60001
PC350- 60001
PC350LC- 60001

and up

ecot3

KOMATSU®

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Specifications

PC300-8, PC300LC-8

Machine model				PC300-8	PC300LC-8
Serial number				60001 and up	
Bucket capacity			m^3	1.4	1.4
Operating weight			kg	31,100	31,600
Performance	Working range	Max. digging depth	mm	7,380	7,380
		Max. vertical wall digging depth	mm	6,400	6,400
		Max. digging radius	mm	11,100	11,100
		Max. reach at ground level	mm	10,920	10,920
		Max. digging height	mm	10,100	10,100
		Max. dumping height	mm	7,050	7,050
	Max. digging force (When power max. function is turned on)		kN {kg}	211.8 {21,600} (226.5 {23,100})	211.8 {21,600} (226.5 {23,100})
	Swing speed		rpm	9.5	9.5
	Swing operation max. slope angle		deg.	21	21
	Travel speed		km/h	Lo: 3.2 Mi: 4.5 Hi: 5.5	Lo: 3.2 Mi: 4.5 Hi: 5.5
	Gradeability		deg.	35	35
	Ground pressure		kPa{kg/cm^2}	62.9 {0.64}	59.0 {0.60}
Dimensions	Overall length		mm	11,140	11,140
	Overall width		mm	3,190	3,190
	Overall crawler width		mm	3,190	3,190
	Overall height (During transportation)		mm	3,250	3,250
	Machine body overall height		mm	3,110	3,110
	Ground clearance of upper structure bottom		mm	1,185	1,185
	Min. ground clearance		mm	498	498
	Tail swing radius		mm	3,450	3,450
	Work equipment minimum swing radius		mm	4,310	4,310
	Top height at minimum swing radius of work equipment		mm	8,520	8,520
	Length of track on ground		mm	3,700	4,030
	Track gauge		mm	2,590	2,590
	Cab height		mm	3,110	3,110
	Width of standard shoe		mm	600	600

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Failure code [DHPAMA] F Pump Press Sensor Abnormality

Action code	Failure code	Trouble	F pump press sensor abnormality (Pump controller system)
—	**DHPAMA**		
Contents of trouble	• Signal voltage from F pump pressure sensor is below 0.3 V or above 4.42 V.		
Action of controller	• Fixes F pump pressure at 0 MPa {0 kg/cm²} and continues control. • If cause of failure disappears, system resets itself.		
Problem that appears on machine	• No automatic gear shifting		
Related information	★ If 5V circuit (3) and ground circuit (1) of pressure sensor are connected inversely, pressure sensor will be broken. Accordingly, take extreme care when checking. • Input from F pump pressure sensor (pressure) can be checked with monitoring function. (Code 01112: F pump pressure		

	Cause		Standard value in normal state/Remarks on troubleshooting		
Possible causes and standard value in normal state	1	Defective sensor power supply system	If failure code [**DA25KP**] is also displayed, carry out troubleshooting for it first.		
	2	Defective F pump pressure sensor (Internal defect)	★ Prepare with starting switch OFF, then start engine and carry out troubleshooting.		
			P25	Voltage	
			Between (3) – (1)	4.5 – 5.5 V	
			Between (2) – (1)	0.5 – 4.5 V	
			★ If the power supply voltage is normal and the signal voltage is not normal, perform troubleshooting as follows. 1) Turn starting switch to OFF position. 2) Replace connector P25 with connector P26 of R pump pressure sensor. 3) Turn starting switch to ON position and display the electrical failure history screen of the machine monitor. 4) If E mark is not lighted in failure code column, F pump pressure sensor is defective. ★ After the troubleshooting, restore the connector.		
	3	Disconnection in wiring harness (Disconnection in wiring or defective contact in connector)	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.		
			Wiring harness between CP01 (female) (9) – P25 (female) (3)	Resistance	Max. 1 Ω
			Wiring harness between CP01 (female) (18) – P25 (female) (1)	Resistance	Max. 1 Ω
			Wiring harness between CP01 (female) (49) – P25 (female) (2)	Resistance	Max. 1 Ω
	4	Ground fault in wiring harness (Short circuit with GND circuit)	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.		
			Wiring harness between CP01 (female) (49) – P25 (female) (2) and chassis ground	Resistance	Min. 1 MΩ
	5	Hot short (Short circuit with 24V circuit) in wiring harness	★ Prepare with starting switch OFF, then turn starting switch ON and carry out troubleshooting.		
			Wiring harness between CP01 (female) (9) – P25 (female) (3) and chassis ground	Voltage	Max. 1 V
			Wiring harness between CP01 (female) (49) – P25 (female) (2) and chassis ground	Voltage	Max. 1 V

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Information contained in troubleshooting table

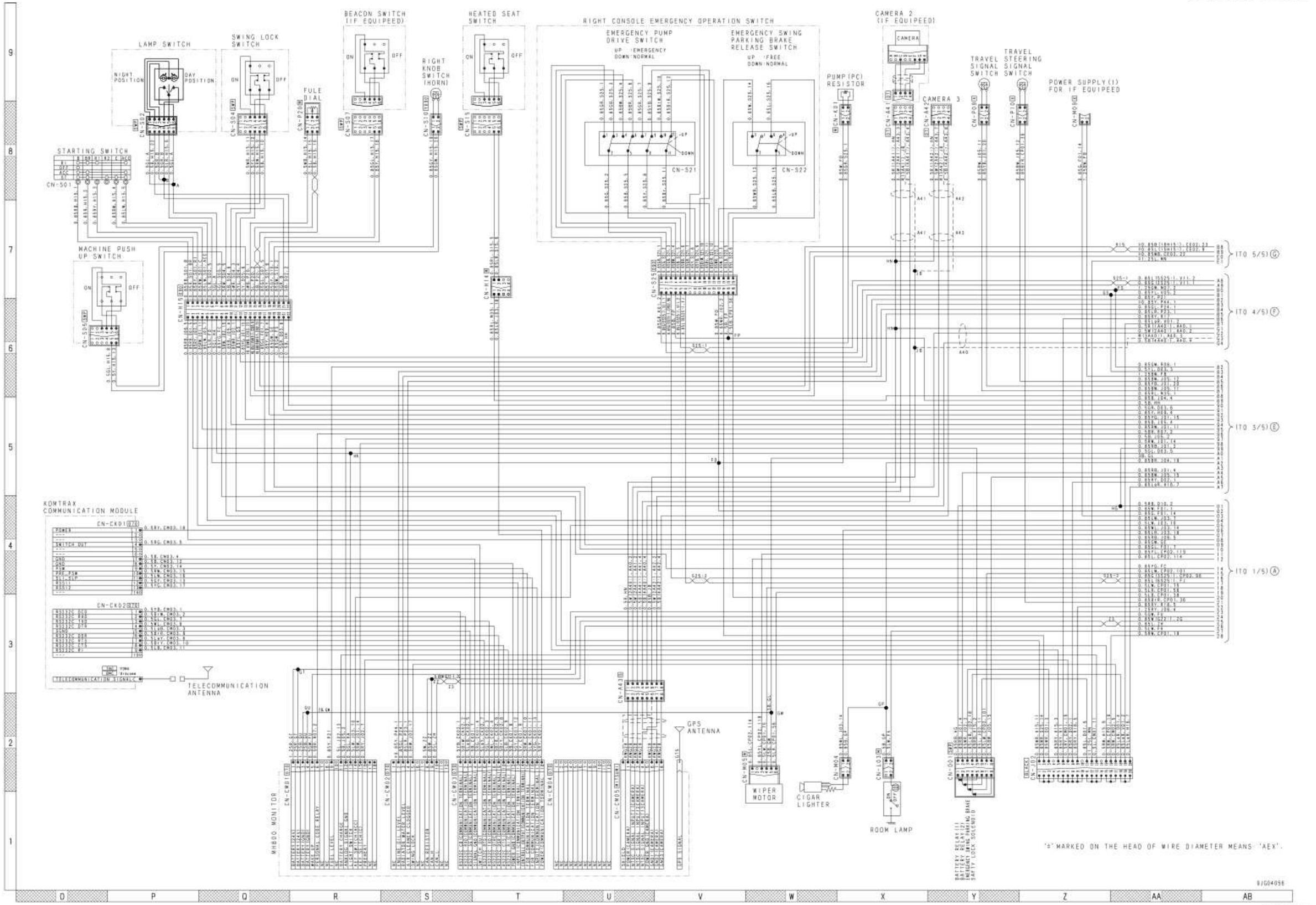
★ Troubleshooting table and related circuit diagram collectively carry the following information. Carry out troubleshooting work after fully grasping their contents.

Failure phenomenon	**Phenomenon occurring on machine**
Relative information	**Information on the failure occurred as well as the troubleshooting**

	Cause		Standard value in normalcy and references for troubleshooting
Presumed cause and standard value in normalcy	1	**Cause for presumed failure (The attached No. is for filing and reference purpose only. It does not stand for any priority.)**	**[Contents]** • **The standard values in normalcy by which to judge "Good" or "No Good" about presumed causes.** • **References for making judgement of "good" or "No Good"**
	2		
	3		
	4		
	5		

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Electrical circuit diagram (2/5)



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