SEN04329-13

Shop Manual

HYDRAULIC
EXCAVATOR

PC88MR-8

SERIAL NUMBERS 5001 and up

ecot3

KOMATSU®

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Composition of shop manual

The contents of this shop manual are shown together with Form No. in a list.

Note 1: Always keep the latest version of this manual in accordance with this list and utilize accordingly.
The marks shown to the right of Form No. denote the following:
○: New issue (to be filed additionally) ●: Revision (to be replaced for each Form No.)

Note 2: This shop manual can be supplied for each Form No.

Note 3: To file this shop manual in the special binder for management, handle it as follows:
- Place a divider on the top of each section in the file after matching the Tab No. with No. indicated next to each Section Name shown in the table below:
- File overview and other materials in sections in the order shown below and utilize them accordingly.

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Shop Manual, contents binder, binder label and tabs	SEN04329-13	
00 Index and foreword	SEN04330-13	
100 Index	SEN04338-13	●
200 Foreword and general information	SEN04339-02	
01 Specification	SEN04331-01	
100 Specification and technical data	SEN04340-01	
10 Structure, function and maintenance standard	SEN04332-08	
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Machine model				PC88MR-8	
				1,650 mm arm	2,100 mm arm
Serial No.				5001 and up	
Engine	Model			SAA4D95LE-5	
	Type			4-cycle, water-cooled, in-line vertical, direct injection type, with turbocharger and air-cooled aftercooler	
	No. of cylinders – bore x stroke		mm	4 – 95 x 115	
	Total piston displacement		ℓ {cc}	3.260 {3,260}	
	Performance	Rated output • Net [ISO 9249/SAE J1349] • Gross [SAE J1995]	kW{HP}/rpm	48.5 {65}/1,950 50.7 {68}/1,950	
		Max. torque	Nm{kgm}/rpm	266 {27.1}/1,600	
		Fuel consumption rate, at rated speed	g/kWh{g/HPh}	227 {169}	
		High idle speed	rpm	2,050	
		Low idle speed	rpm	1,150	
	Starting motor			24 V, 4.5 kW	
	Alternator • Standard specification • EU specification			 24 V, 35 A 24 V, 60 A	
	Battery (*1)			12 V, 55 Ah x 2	
	Radiator core type			4-array aluminum mesh core	
	Aftercooler core type			Aluminum mesh core	
Undercarriage	Carrier roller			1 on each side	
	Track roller			5 on each side	
	Track shoe • Steel shoe • Road liner • Rubber crawler			 Assembly-type triple grouser shoe, 39 on each side Assembly-type road liner, 39 on each side Unit-type rubber crawler	
Hydraulic system	Hydraulic pump	Type x No.		Variable displacement swash plate piston type x 1, Gear type x 2	
		Capacity	cm³/rev	44 x 2 + 36.6 + 7.0	
		Set pressure • Work equipment, travel • Swing, blade • Pilot	MPa{kg/cm²}	 26.5 {270} 21.1 {215} 3.14 {32}	
	Control valve	Type x No.		9-spool type x 1	
		Control method		Hydraulically assisted	
	Hydraulic motor	Travel motor		Variable displacement swash plate piston type (with brake valve and parking brake) x 2	
		Swing motor		Fixed displacement swash plate piston type (with safety valve and holding brake) x 1	
	Hydraulic tank			Box-shaped, open	
	Hydraulic oil filter			Tank return side	
	Oil cooler			Air-cooled (CF40)	

*1. Battery capacity (Ah) is based on 5-hour rate.
★ 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 [CA449] Rail press. very high error

User code	Failure code	Trouble	Rail press. very high error (Engine controller system)
E11	**CA449**		
Contents of trouble	• Common rail pressure sensor circuit detected abnormally high pressure (level 2).		
Action of controller	• Limits output and continues operation.		
Problem that appears on machine	• Output drops.		
Related information	• Common rail pressure can be checked with monitoring function. (Code: **36400** Common rail pressure) • Method of reproducing failure code: Start engine.		

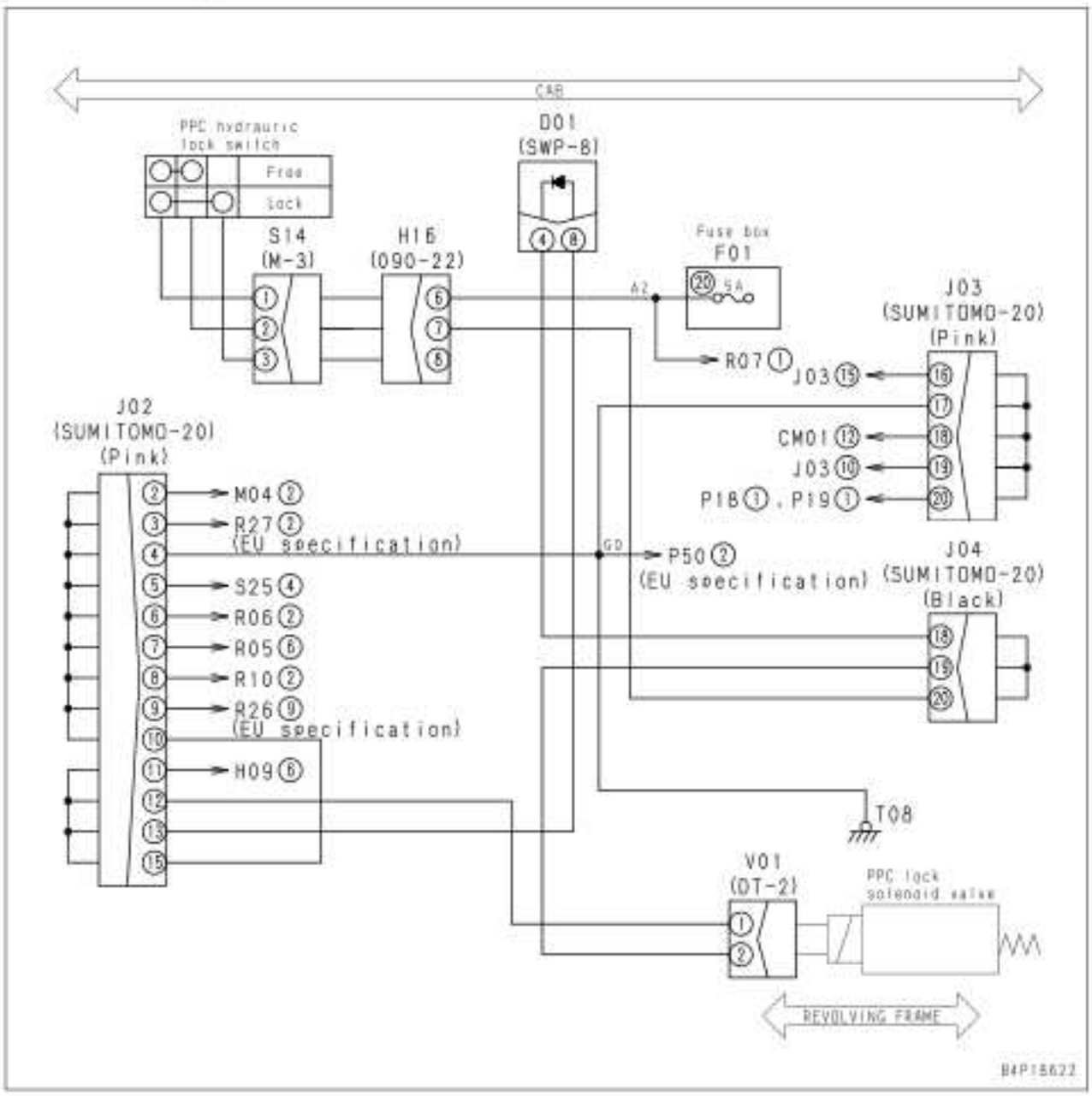
Possible causes and standard value in normal state	Causes	Standard value in normal state/Remarks on troubleshooting
	Carry out troubleshooting for failure code [**CA553**].	

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Trouble	(2) All work equipment, swing, and travel mechanism cannot be locked.
Related information	

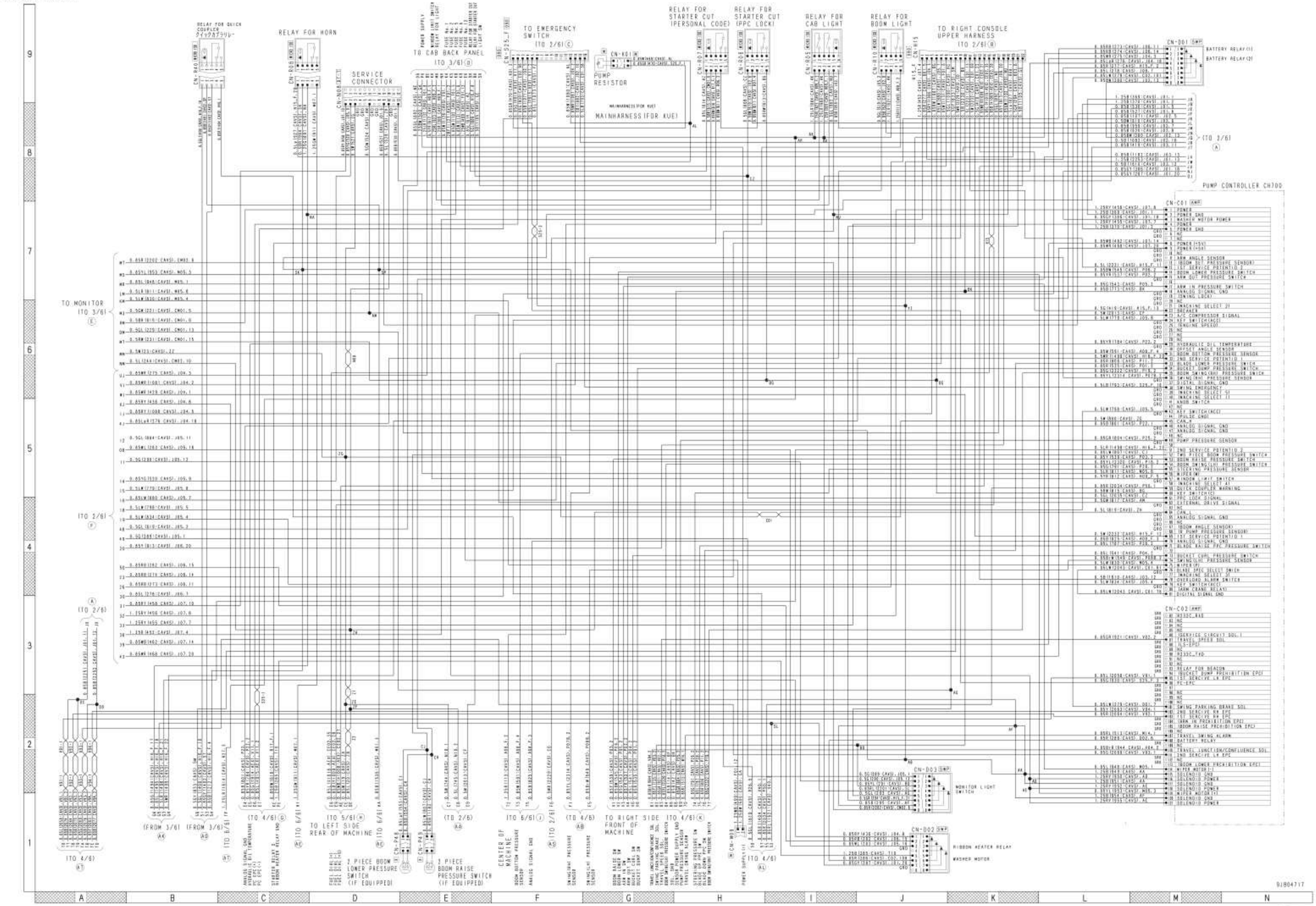
Possible causes and standard value in normal state		Cause	Standard value in normal state/Remarks on troubleshooting		
	1	Defective lock lever switch (Internal short circuit)	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.		
			S14 (female)	Lock lever	Resistance
			Between (1) – (2)	Lock	Min. 1 MΩ
				Free	Max. 1 Ω
	2	Hot short (Short circuit with 24 V circuit) in wiring harness	★ Prepare with starting switch OFF, then turn starting switch ON and carry out troubleshooting.		
			Wiring harness between S14 (male) (2) – V01 (female) (2), – D01 (female) (4)	Voltage	Max. 1 V

Related circuit diagram



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Electrical circuit diagram (1/6)
(EU specification)



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