SHOP MANUAL

KOMATSU®

PC750-7
PC800-7

MACHINE MODEL	SERIAL NUMBER
PC750-7	**20001 and up**
PC750SE-7	**20001 and up**
PC750LC-7	**20001 and up**
PC800-7	**40001 and up**
PC800SE-7	**40001 and up**

- This shop manual may contain attachments and optional equipment that are not available in your area. Please consult your local Komatsu distributor for those items you may require. Materials and specifications are subject to change without notice.

- PC750, 800-7 mounts the SAA6D140E-3 engine.
  For details of the engine, see the 6D140-3 Series Engine Shop Manual.

MidWestTech | Komatsu PC750-7, PC750SE-7, PC750LC-7, PC800-7, PC800SE-7 Hydraulic Excavator Service Manual | Publication SEBM031312
Order the manual at mid-west-tech.com >

CONTENTS

No. of page

01 GENERAL 01-1

10 STRUCTURE, FUNCTION AND MAINTENANCE STANDARD 10-1

20 TESTING AND ADJUSTING 20-1

30 DISASSEMBLY AND ASSEMBLY 30-1

90 OTHERS 90-1

MidWestTech | Komatsu PC750-7, PC750SE-7, PC750LC-7, PC800-7, PC800SE-7 Hy... Order the manual at mid-west-tech.com >

Machine model			PC750LC-7	
Serial Number			20001 and up	
Bucket capacity		m^3	3.1	
Weight of machine		kg	78,100	
Performance	Working ranges: Max. digging depth	mm	8,600	
	Working ranges: Max. vertical wall depth	mm	5,575	
	Working ranges: Max. digging reach	mm	13,740	
	Working ranges: Max. reach at ground level	mm	13,460	
	Working ranges: Max. digging height	mm	11,840	
	Working ranges: Max. dumping height	mm	8,145	
	Max. digging force	kN {kg}	333.4 {34,000}	
	Swing speed	rpm	6.8	
	Swing max. slope angle	deg.	16	
	Travel speed	km/h	Low speed: 2.8 High speed: 4.2	
	Gradeability	deg.	35	
	Ground pressure (standard double grouser shoe width: 810 mm)	kPa {kg/cm^2}	86.3 {0.882}	
Dimensions	Overall length	mm	14,305	
	Overall width	mm	4,455	
	Overall width of track (when extended)	mm	4,310	
	Overall height	mm	4,660	
	Overall height to top of machine	mm	4,000	
	Ground clearance of upper structure	mm	1,560	
	Min. ground clearance	mm	840	
	Tail swing radius	mm	4,300	
	Min. swing radius of work equipment	mm	6,060	
	Height of work equipment at min. swing radius	mm	10,855	
	Length of track on ground	mm	5,020	
	Track gauge (when extended)	mm	3,500	
	Height of machine cab	mm	3,560	

MidWestTech | Komatsu PC750-7, PC750SE-7, PC750LC-7, PC800-7, PC800SE-7 Hy... Order the manual at mid-west-tech.com >

Error Code in Electrical System E216 (Travel Speed Sol. Disc.)

User Code	Error Code	Failure Code	Failure phenomenon	Travel Speed Sol. Disc. (Pump controller system)
—	**E216**	**DW43KA**		
Failure content	• No current flows to the travel speed solenoid circuit, when power is supplied to the circuit.			
Response from controller	• None in particular (The solenoid does not function as there is no current flowing to it) • When the failure cause disappears of itself, the machine operation returns to normalcy.			
Phenomenon occurring on machine	• The travel speed does not shift to Hi. (The swash plate angle of the travel motor is not minimized.)			
Relative information	• The travel speed shifting solenoid is not turned ON when the engine speed is below 1,200 rpm. • Operation of the travel speed solenoid (ON or OFF) can be checked in the monitoring function. (Code No. 02300: Solenoid 1) • Since the controller detects disconnection while the solenoid output is turned ON, be sure to turn the solenoid output ON when checking the solenoid again after repairing it. (For how to turn power ON or OFF, refer to the troubleshooting under Error Code [E206].)			

Presumed cause and standard value in normalcy		Cause	Standard value in normalcy and references for troubleshooting		
	1	Travel speed solenoid defective (Internal disconnection)	★ Turn the engine starting switch OFF for the preparations, and hold it in the OFF position during the troubleshooting.		
			V06 (male)	Resistance value	
			Between (1) and (2)	20 – 60 Ω	
	2	Disconnection of wiring harness (Disconnection or defective contact with connector)	★ Turn the engine starting switch OFF for the preparations, and hold it in the OFF position during the troubleshooting.		
			Wiring harness from C03 (female) (27) to J06 and V06 (female) (2)	Resistance value	Max. 1 Ω
			Wiring harness between V06 (female) (1) to J15 and grounding	Resistance value	Max. 1 Ω
	3	Short-circuiting of wiring harness (Contact with 24 V circuit)	★ Turn the engine starting switch OFF for the preparations, and hold it in the ON position during the troubleshooting.		
			Between wiring harness between C03 (female) (27), J06, and V06 (female) (2) or between C03 (female) (27) and D04 (female) (2) and grounding	Voltage	Max. 1 V
	4	Pump controller defective	★ Turn the engine starting switch OFF for the preparations, and hold it in the OFF position during the troubleshooting.		
			C03 (female)	Resistance value	
			Between (27) and grounding	20 – 60 Ω	

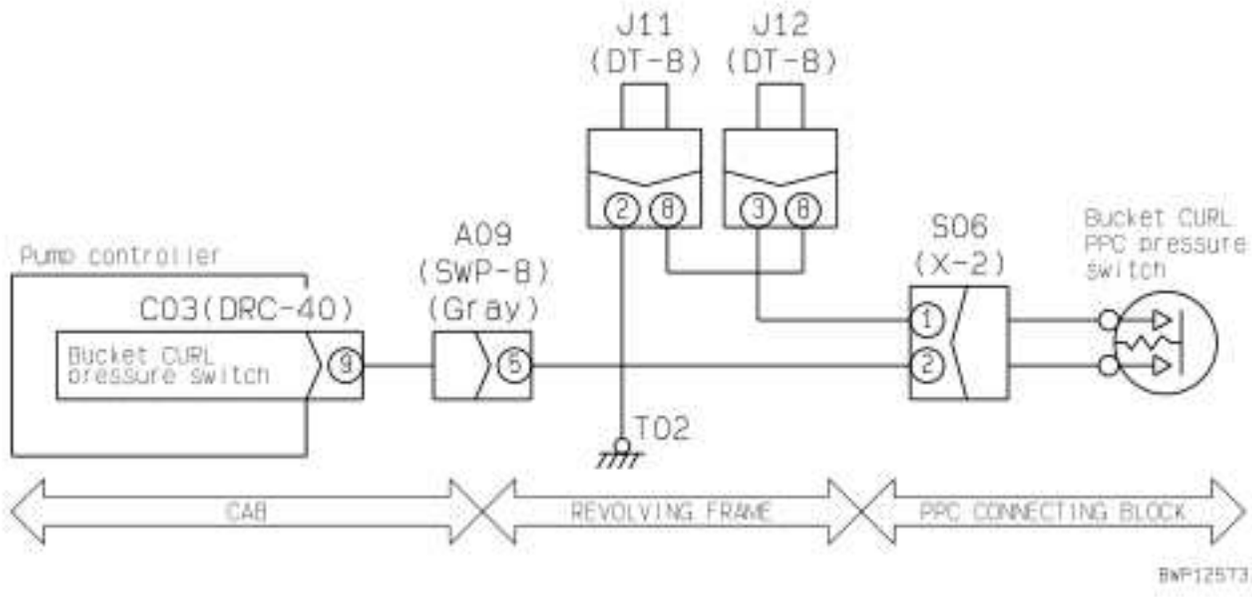
MidWestTech | Komatsu PC750-7, PC750SE-7, PC750LC-7, PC800-7, PC800SE-7 Hy... Order the manual at mid-west-tech.com >

E-23 "Bucket CURL" is not correctly displayed in monitor function

Failure information	• "Bucket CURL" is not correctly displayed in monitor function	"Bucket CURL" is not correctly displayed in the monitor function (special function) on the monitor panel.
Relative information	—	

Presumed cause and standard value in normalcy		Cause	Standard value in normalcy and references for troubleshooting			
	1	Bucket CURL PPC hydraulic switch fault (Internal disconnection and short-circuiting)	★ Turn the engine starting switch OFF for the preparations, and keep the engine running during the troubleshooting.			
			S06 (male)	R.H. work equipment control lever	Resistance value	
			Between (1) and (2)	NEUTRAL	Above 1 MΩ	
				Bucket CURL	Below 1 Ω	
	2	Disconnection of wiring harness (Disconnection or defective contact with connector)	★ Turn the engine starting switch OFF for the preparations, and hold it in the OFF position during the troubleshooting.			
			Wiring harness between C03 (female) (9) and S06 (female) (2)		Resistance value	Below 1 Ω
			Wiring harness between S06 (female) (1) to J12 to J11 and grounding		Resistance value	Below 1 Ω
	3	Grounding fault of wiring harness (Contact with grounding (GND) circuit)	★ Turn the engine starting switch OFF for the preparations, and hold it in the OFF position during the troubleshooting.			
			Between wiring harness between C03 (female) (9) and S06 (female) (2) and grounding		Resistance value	Above 1 MΩ
	4	Short-circuiting of wiring harness (Contact with 24 V circuit)	★ Turn the engine starting switch OFF for the preparations, and hold it in the ON position during the troubleshooting.			
			Between wiring harness between C03 (female) (9) and S06 (female) (2) and grounding		Voltage	Below 1 V
	5	Pump controller defective	★ Turn the engine starting switch OFF for the preparations, and start the engine during the troubleshooting.			
			C03	R.H. work equipment control lever	Voltage	
			Between (9) and grounding	NEUTRAL	20 – 30 V	
				Bucket CURL	Below 1 V	

Electrical Circuit Diagram for Bucket CURL PPC hydraulic Switch



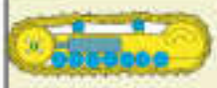
MidWestTech | Komatsu PC750-7, PC750SE-7, PC750LC-7, PC800-7, PC800SE-7 Hy... Order the manual at mid-west-tech.com >

UNDERCARRIAGE INSPECTION

(Program form No.: **********)

KUC

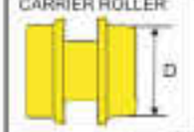
Komatsu Undercarriage Inspection



Customer name:

Address:

Model	PC750-7	Serial#	Equip#	Work Order No	
Location		SMR		Wet, AR, HD or Dry	DRY
Soil condition		Dealer		Shoe width (mm)	
Working condition		Inspector		Shoe type	DOUBLE
		Insp.Date(yyyy/mm/dd)		Wear type	NORMAL

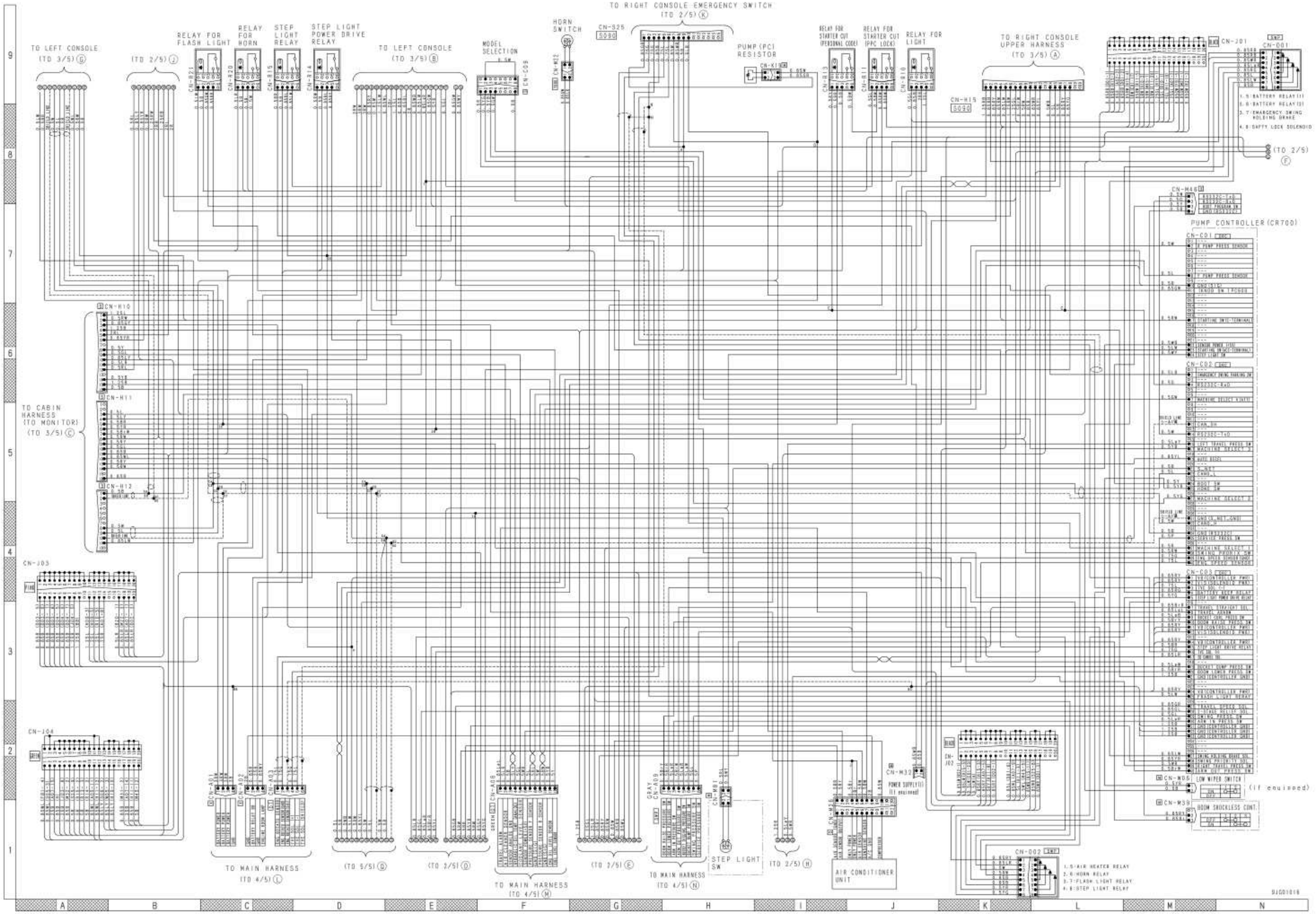
			New	100% Wear	Measured mm	Wear %	SMR New	SMR Rebuilt	Hours on Parts:	Comments/Observation
LINK PITCH 	R	LH	1042.4	1054.4						
		RH	1042.4	1054.4						
	M	LH	260.60	263.60						
		RH	260.60	263.60						
 LINK HEIGHT	H	LH	156.0	143.0						
		RH	156.0	143.0						
BUSHING 	D	LH	87.5	82.5			New	Turned		
		RH	87.5	82.5			New	Turned		
GROUSER HIGHT 	H	LH	50.0	25.0						
		RH	50.0	25.0						
CARRIER ROLLER 	Front	LH	175.0	155.0						
		RH	175.0	155.0						
	Rear	LH	175.0	155.0						
		RH	175.0	155.0						
IDLER 	Front	LH	22.5	28.5						
		RH	22.5	28.5						
	Rear	LH	22.5	28.5						
		RH	22.5	28.5						
TRACK ROLLER  D=2(h1- h2)	1	LH	255.0	243.0						
	2	LH	255.0	243.0						
	3	LH	255.0	243.0						
	4	LH	255.0	243.0						
	5	LH	255.0	243.0						
	6	LH	255.0	243.0						
	7	LH	255.0	243.0						
	8	LH	255.0	243.0						
	9	LH	255.0	243.0						
	10	LH	255.0	243.0						
	1	RH	255.0	243.0						
	2	RH	255.0	243.0						
	3	RH	255.0	243.0						
	4	RH	255.0	243.0						
	5	RH	255.0	243.0						
	6	RH	255.0	243.0						
	7	RH	255.0	243.0						
	8	RH	255.0	243.0						
	9	RH	255.0	243.0						
	10	RH	255.0	243.0						
SPROCKET 	H	LH	0.0	6.0						
		RH	0.0	6.0						

Remarks:

MidWestTech | Komatsu PC750-7, PC750SE-7, PC750LC-7, PC800-7, PC800SE-7 Hy... Order the manual at mid-west-tech.com >

ELECTRICAL CIRCUIT DIAGRAM (1/6)

PC750-7, PC750SE-7
PC800-7, PC800SE-7



MidWestTech | Komatsu PC750-7, PC750SE-7, PC750LC-7, PC800-7, PC800SE-7 Hydraulic Excavator Service Manual | Publication SEBM031312

Order the manual at mid-west-tech.com >