CEBM012503

Shop Manual

KOMATSU®

PC400LC-7L

HYDRAULIC EXCAVATOR

SERIAL NUMBERS PC400LC-7L A86001 and up

ENGINE SAA6D125E-3

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WEIGHT TABLE

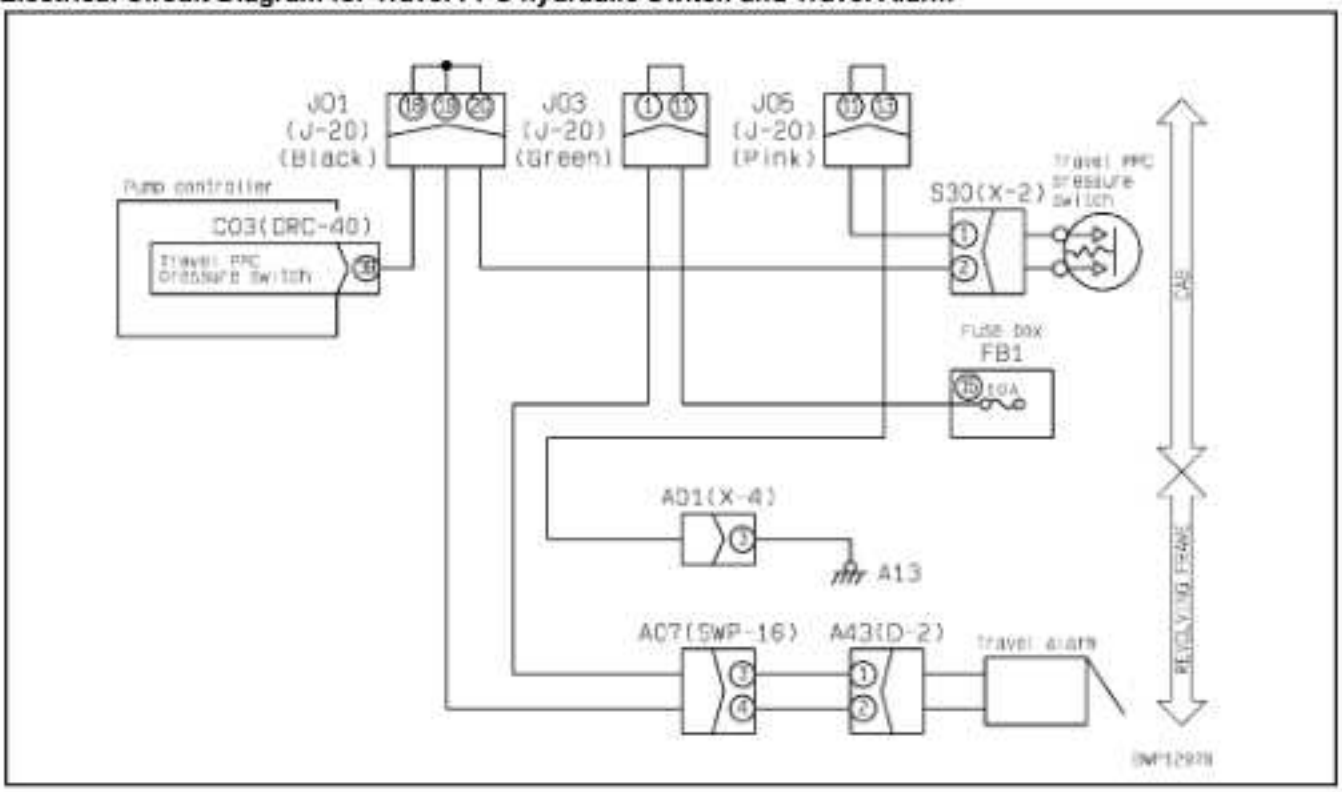
WARNING! This weight table is for use when handling components or when transporting the machine

Unit: kg (lb)

Engine assembly ● Engine ● Damper ● Hydraulic pump	1,500 (3,307) 1,150 (2,535) 14.7 (32) 210 (463)	
Radiator, oil cooler assembly	195 (430)	
Hydraulic tank, filter assembly (excluding hydraulic oil)	198 (437)	
Fuel tank (excluding fuel)	251 (554)	
Revolving frame	3,297 (7,269)	
Operator's cab	279 (616)	
Operator's seat	35 (78)	
Counterweight	9,500 (20,944)	
Swing machinery (including swing motor)	526 (1,160)	
Control valve (with service valve0	257 (567)	
Swing motor	105 (232)	
Travel motor	208 (459) x 2	
Center swivel joint	40 (89)	
	Fixed gauge specification	Variable gauge specification
Track frame assembly Track frame ● Center frame ● Crawler frame	10,965 (24,174) 6,077 (13,398) --- ---	11,934 (26,310) 7,096 (15,644) 3,229 (7,119) 1,921 (4,235) x 2
Swing circle Idler Idler cushion Carrier roller Track roller Final drive (including travel motor)	605 (1,334) x 2 230 (507) x 2 338 (745) x 2 32 (71) x 4 72 (159) x 16 722 (1,592) x 2	
Track shoe assembly ● Standard triple grouser shoe (600 mm) ● Standard triple grouser shoe (700 mm) ● Wide triple grouser shoe (800 mm) ● Wide triple grouser shoe (900 mm)	 4,760 (10,494) 5,210 (11,486) 5,670 (12,500) 6,130 (13,515)	
Boom assembly	3,290 (7,254)	
Arm assembly	1,374 (3,030)	
Bucket assembly	1,366 (3,012)	
Boom cylinder assembly	355 (783) x 2	
Arm cylinder assembly	510 (1,125)	

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Electrical Circuit Diagram for Travel PPC hydraulic Switch and Travel Alarm



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MACHINE CANNOT BE EASILY STEERED OR LACKS POWER

Failure information	The machine cannot be easily steered.
Relative information	Set the working mode at A mode for the troubleshooting.

		Cause	Standard value in normalcy and references for troubleshooting	
Presumed cause and standard value in normalcy	1	Malfunctioning of travel PPC valve (steering spool)	★ Stop engine for preparations. Start troubleshooting at engine high idling.	
			Travel control lever	PPC valve output pressure (steering)
			NEUTRAL on both sides	0 MPa {0 kgf/cm^2} (0 psi)
			Operating one side only	Above 2.75 MPa {Above 28 kgf/cm^2} (Above 398 psi)
	2	Malfunctioning of travel interlocking solenoid valve	★ Stop engine for preparations. Start troubleshooting at engine high idling.	
			Travel control lever	Solenoid valve output pressure
			NEUTRAL	0 MPa {0 kgf/cm^2} (0 psi)
			Operating one side only	2.84 - 3.43 MPa {29 - 35 kgf/cm^2} (412 - 497 psi)
	3	Malfunctioning of travel interlocking valve	The travel interlocking valve of control valve is presumed to malfunction. Check the valve itself.	
	4	Malfunctioning of merge/ divide solenoid valve	★ Stop engine for preparations. Start troubleshooting at engine high idling.	
			Travel control lever	Solenoid valve output pressure
			NEUTRAL	0 MPa {0 kgf/cm^2} (0 psi)
			OPERATED	2.84 - 3.43 MPa {29 - 35 kgf/cm^2} (412 - 497 psi)
	5	Malfunctioning of merge/ divide valve	The merge/divide valve of control valve is presumed to malfunction. Check the valve itself.	
	6	Malfunction of travel control valve (spool)	The spool in the travel control valve is presumed to malfunction. Check the spool itself.	
	7	Malfunctioning of travel control valve (pressure compensation valve)	The pressure compensation valve in the travel control valve is presumed to malfunction. Check the valve itself.	
	8	Malfunctioning of travel control valve (suction valve)	The suction valve in the travel control valve is presumed to malfunction. Check the valve itself.	
	9	Malfunctioning of LS shuttle valve (bucket)	The LS shuttle valve in the bucket control valve is presumed to malfunction. Check the valve itself.	
	10	Check valve seal defective at LS oil pressure pick-up port	The seal in the check valve of LS oil pressure pick-up port is suspected to be defective. Check the seal itself.	
	11	Malfunctioning of travel motor (safety valve)	The seal in the check valve of the travel motor is suspected to be defective. Check the seal itself. (Whether the seal is defective or not may well be determined by swapping the motors between forward and reverse, or right and left.)	
	12	Malfunctioning of travel motor (check valve)	The seal in the check valve of the travel motor is suspected of defect. Check the seal itself. (Whether the seal is defective or not may well be determined by swapping the motors between forward and reverse, or right and left.)	

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UNDERCARRIAGE INSPECTION

(Program form No.: SELA195001)

Komatsu
Undercarriage Inspection

KUC

Customer name:
Address:

Model	PC400/450-7	Serial#	Equip#	Work Order No	
Location		SMR		Wet,AR,HD or Dry	DRY
Soil condition		Dealer		Shoe width (mm)	
Working condition		Inspector		Shoe type	TRIPLE
Insp.Date(yyyy/mm/dd)				Wear type	NORMAL

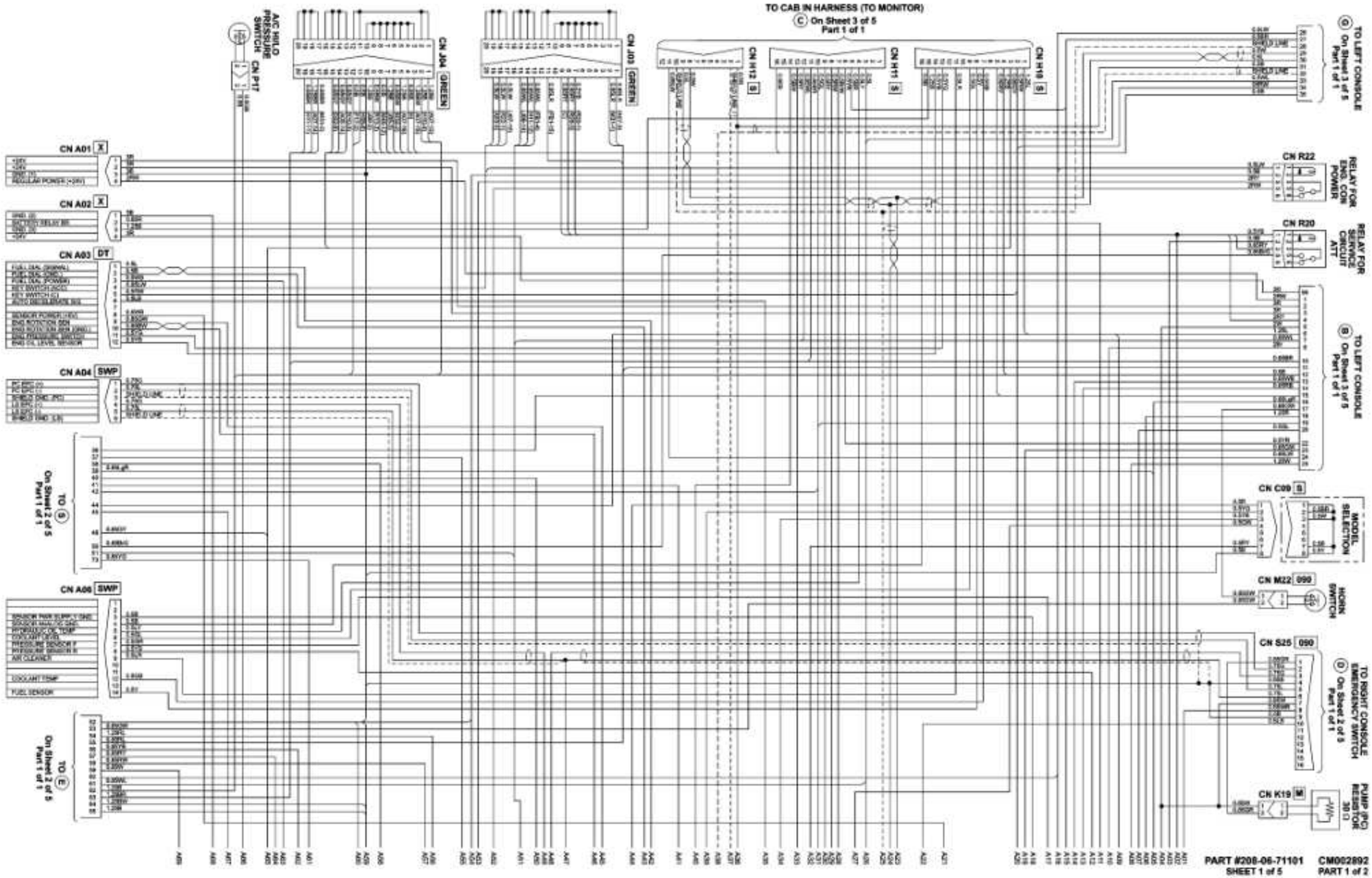
			New	100% Wear	Measured dim	Wear %	SMR New	SMR Rebuilt	Hours of Parts:	Comments/Observation
LINK PITCH	II	LH	916.6	927.6						
		RH	916.6	927.6						
	III	LH	228.90	231.90						
		RH	228.90	231.90						
LINK HEIGHT		LH	124.0	119.0						
		RH	129.0	119.0						
BUSHING		LH	71.5	66.5			New	Turned		
		RH	71.5	66.5			New	Turned		
GROUSER HIGHT		LH	37.0	22.0						
		RH	37.0	22.0						
CARRIER ROLLER	Front	LH	148.0	134.0						
		RH	148.0	134.0						
	Rear	LH	148.0	134.0						
		RH	148.0	134.0						
IDLER	Front	LH	22.0	28.0						
		RH	22.0	28.0						
	Rear	LH	22.0	28.0						
		RH	22.0	28.0						
TRACK ROLLER D=2(h1- h2)	1	LH	200.0	166.0						
	2	LH	200.0	166.0						
	3	LH	200.0	166.0						
	4	LH	200.0	166.0						
	5	LH	200.0	166.0						
	6	LH	200.0	166.0						
	7	LH	200.0	166.0						
	8	LH	200.0	166.0						
	9	LH	200.0	166.0						
	10	LH	200.0	166.0						
	1	RH	200.0	166.0						
	2	RH	200.0	166.0						
	3	RH	200.0	166.0						
	4	RH	200.0	166.0						
	5	RH	200.0	166.0						
	6	RH	200.0	166.0						
	7	RH	200.0	166.0						
	8	RH	200.0	166.0						
	9	RH	200.0	166.0						
	10	RH	200.0	166.0						
SPROCKET		LH	0.0	0.0						
		RH	0.0	0.0						

Remarks:

CM002881

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ELECTRICAL
ELECTRICAL DIAGRAM SHEET 1/5 (PART 1 OF 2) FOLDOUT 9



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