SEBM010404

SHOP MANUAL

KOMATSU®

PC120-6 EXCEL

MACHINE MODEL	SERIAL NUMBER
PC120-6 EXCEL	**57499 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.

- PC120-6 EXCEL mount the S4D102-1 engine.
  For details of the engine, see the 102 Series Engine Shop Manual.

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SPECIFICATIONS

Machine model				PC120-6 EXCEL
Serial Number				57499 and up
	Bucket capacity (SAE)		m^3	0.50
	Operating weight		kg	11,700
Performance	Working ranges	Max. digging depth	mm	5,520
		Max. vertical wall depth	mm	4,940
		Max. digging reach	mm	8,290
		Max. reach at ground level	mm	8,170
		Max. digging height	mm	8,610
		Max. dumping height	mm	6,170
	Max. digging force		kN {kg}	76.44 {7,800}
	Swing speed		rpm	12
	Swing max. slope angle		deg.	20
	Travel speed		km/h	3.4
	Gradeability		deg.	35
	Ground pressure (standard shoe width: 500 mm)		kPa {kg/cm^2}	38.25 {0.39}
Dimensions	Overall length (for transport)		mm	7,595
	Overall width		mm	2,490
	Overall width of track		mm	2,460
	Overall height (for transport)		mm	2,715
	Overall height to top of cab		mm	2,715
	Ground clearance of counterweight		mm	855
	Min. ground clearance		mm	400
	Tail swing radius		mm	2,130
	Min. swing radius of work equipment		mm	2,330
	Height of work equipment at min. swing radius		mm	6,440
	Length of track on ground		mm	2,750
	Track gauge		mm	1,960
	Height of machine cab		mm	1,805

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Machine model				PC120-6 EXCEL		
Serial Number				57499 and up		
Engine		Model		S4D102-1		
		Type		4-cycle, water-cooled, in-line, vertical, direct injection, with turbocharger		
		No. of cylinders-bore x stroke	mm	4–102 × 120		
		Piston displacement	ℓ {cc}	3.92 {3,920}		
	Performance	Flywheel horsepower	kW/rpm {HP/rpm}	62/2,000 {84/2,000}		
		Maximum torque	Nm/rpm {kgm/rpm}	328.5/1,300 {33.5/1,300}		
		High idling speed	rpm	2,200		
		Low idling speed	rpm	900		
		Min. fuel consumption ratio	g/kWh {g/HPh}	224 {165}		
	Starting motor			24V, 4.5 kW		
	Alternator			24V, 25A		
	Battery			12V, 80Ah × 2		
	Radiator type			CF19-4		
Undercarriage	Carrier roller			1 on each side		
	Track roller			7 on each side		
	Track shoe			Assembly-type triple grouser, 42 on each side		
Hydraulic system	Hydraulic pump	Type × no.		HPV95 + BAR020 Variable displacement piston type × 1 + gear type × 1		
		Delivery	ℓ/min	206 + 35.5		
		Set pressure	MPa {kg/cm²}	Piston type: 31.85 {325}, gear type: 2.94 {30}		
	Control valve	Type × no.		7-spool type × 1		
		Control method		Hydraulic type		
	Hydraulic motor	Travel motor		GM18VL Variable displacement piston type (with brake valve,parking brake) × 2		
		Swing motor		KMF40AB-3 Fixed displacement piston type (with safety valve,parking brake) × 1		
	Hydraulic cylinder			Boom cylinder	Arm cylinder	Bucket cylinder
		Type		Reciprocating piston	Reciprocating piston	Reciprocating piston
		Inside diameter of cylinder	mm	105	115	95
		Diameter of piston rod	mm	70	75	65
		Stroke	mm	990	1,175	885
		Max. distance between pins	mm	2,490	2,877	2,263
		Min. distance between pins	mm	1,500	1,702	1,378
	Hydraulic tank			Box-shaped, open		
	Hydraulic oil filter			Tank return side		
	Hydraulic oil cooler			Air cooled (3A-CS)		

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WEIGHT TABLE

⚠ This weight table is a guide for use when transporting or handling component.

Unit : kg

Machine model	PC120-6 EXCEL
Serial Number	57499 and up
Engine assembly (excl. water, oil)	385
Coupling assembly (PTO)	3.3
Radiator • oil cooler assembly	62.5
Revolving frame assembly	1,000
Operator's cab	287
Operator's seat	29.3
Fuel tank (excl. fuel)	96.8
Hydraulic tank (excl. hydraulic oil)	102.4
Counterweight	2,305
Hydraulic pump assembly	86
Control valve	96
Swing circle assembly	153
Swing machinery assembly	72.2
Swing motor	25.5
Center swivel joint	29.2
Track frame assembly	
• Track frame	1,240
• Idler	79 × 2
• Idler cushion	72 × 2
• Carrier roller	11 × 2
• Track roller	21.8 × 14
• Travel motor • final drive assembly	136.5 × 2
• Sprocket	33.7 × 2

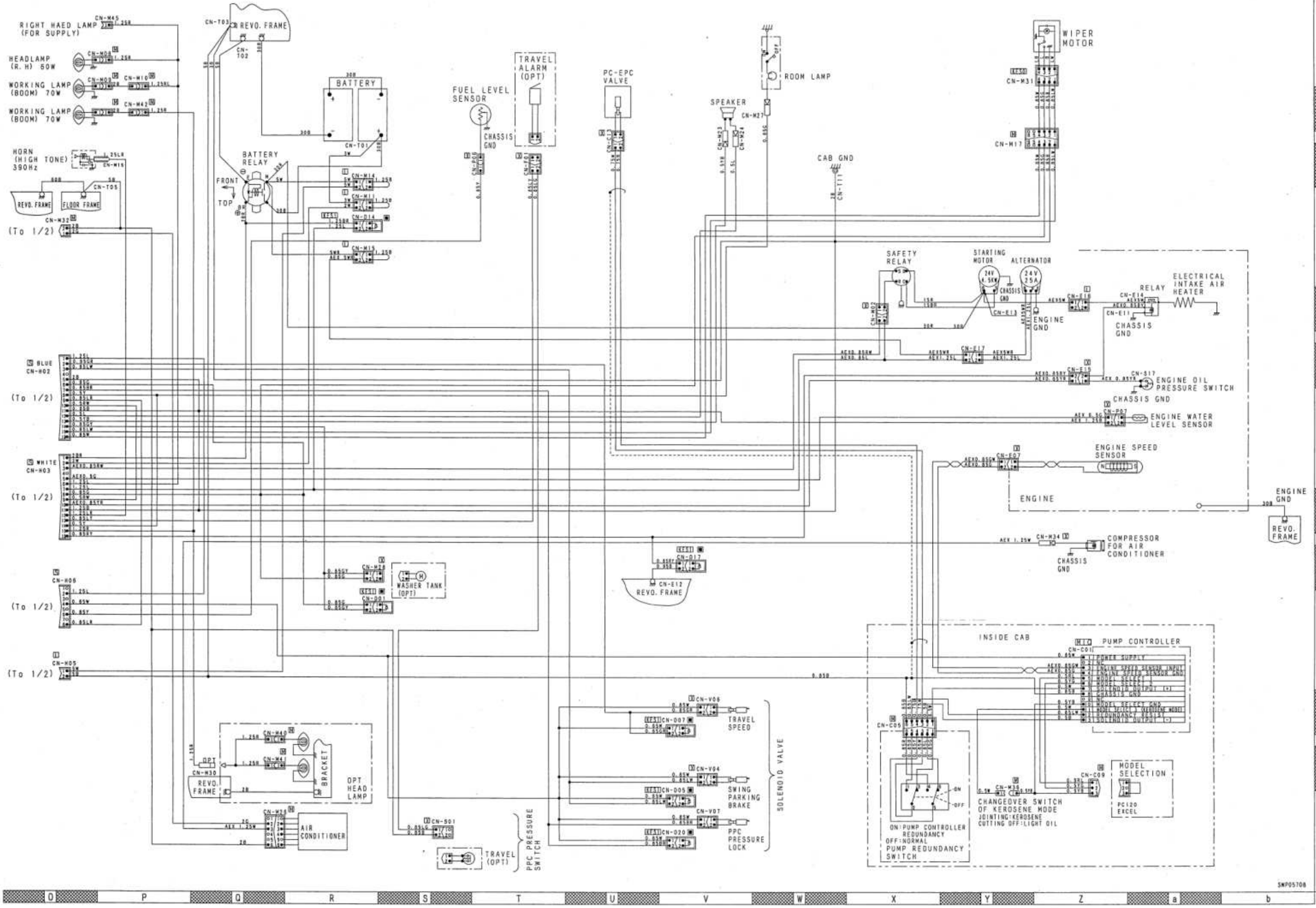
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ELECTRICAL CIRCUIT DIAGRAM

CHASSIS ELECTRICAL CIRCUIT DIAGRAM (2/2)

PC120-6 EXCEL Serial No. 60968 and up



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