SHOP MANUAL

KOMATSU®

PC09-1

MACHINE MODEL	SERIAL NUMBER
PC09-1	**10001 and up**

- This shop manual may contain attachiments 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.

- PC09-1 mount the 2D68E-N3C and 2D70E-5SBA engine.
  For details of the engine, see the 68E-88E Series and 70E, 76E-5 Series Engine Shop Manual.

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SPECIFICATIONS

Serial No.: 10001 – 12000

Machine model				PC09-1
				Variable gauge type (Standard)
Serial number				10001 – 12000
Bucket capacity			m^3	0.022
Operating weight			kg	890
Performance	Working ranges	Max. digging depth	mm	1,465
		Max. vertical wall depth	mm	1,135
		Max. digging reach	mm	2,840
		Max. reach at ground level	mm	2,750
		Max. digging height	mm	2,825
		Max. dumping height	mm	2,025
		Bucket offset	mm	430 (L.H.) / 390 (R.H.)
		Max. blade lifting amount	mm	180
		Max. blade lowering amount	mm	115
	Max. digging force		kN {kg}	10.5 {1,075}
	Swing speed		rpm	8.3
	Swing max. slope angle		deg.	28
	Travel speed (Hi/Lo)		km/h	3.0/1.5
	Gradeability		deg.	30
	Ground pressure (standard shoe width: 180 mm)		kPa {kg/cm^2}	27.5 {0.28}
Dimensions	Overall length (for transport)		mm	2,810
	Overall width		mm	Min. 700 / Max. 850
	Overall height (for transport)		mm	2,100
	Ground clearance of counterweight		mm	395
	Min. ground clearance		mm	170
	Tail swing radius		mm	790
	Min. swing radius of work equipment (at boom swing)		mm	890
	Height of work equipment at min. swing radius		mm	2,190
	Length of track on ground		mm	900
	Track gauge		mm	Min. 520/ Max. 670
	Blade width x height		mm	Min. 700/ Max. 850 x 200

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TOOLS FOR TESTING, ADJUSTING, AND TROUBLESHOOTING

Measurement item	Symbol		Part No.	Part Name	Q'ty	Remarks
Engine speed	A		799-205-1600	Tachometer KIT	1	For 2D68E
			799-205-1100		1	For 2D70E
Exhaust color	B	1	799-201-9000	Handy smoke checker	1	Discoloration 0 – 70 % (with standard color) (Discoloration ×1/10 ≒ Bosch index)
		2	Commercially available	Smoke meter	1	
Valve clearance	C		Commercially available	Thickness gauge	1	
Compression pressure	D	1	795-502-1590	Compression gauge	1	0 – 6.9 MPa {0 – 70 kg/cm^2}
		2	795-111-1120	Adapter	1	For 2D68E, 2D70E (YC-2)
		3	795-101-1571	Joint	1	For 2D68E, 2D70E
Engine oil pressure	E	1	799-101-5002	Oil pressure gauge KIT (Analog)	1	Pressure gauge: 2.5, 5.9, 39.2, 58.8 MPa {25, 60, 400, 600 kg/cm^2}
			790-261-1203	Oil pressure gauge KIT (Digital)	1	Pressure gauge: 58.8 MPa {600 kg/cm^2}
		2	799-401-2320	Oil pressure gauge	1	Pressure gauge: 0.98 MPa {10 kg/cm^2}
Work equipment, swing, travel circuit oil pressure	F		799-101-5002	Oil pressure gauge KIT (Analog)	1	Pressure gauge: 2.5, 5.9, 39.2, 58.8 MPa {25, 60, 400, 600 kg/cm^2}
			790-261-1203	Oil pressure gauge KIT (Digital)	1	Pressure gauge: 58.8 MPa {600 kg/cm^2}
Oil leakage inside hydraulic cylinder	G		Commercially available	Cylinder	1	
Operating effort	H		79A-264-0021	Push-pull scale	1	0 – 294 N {0 – 30 kg}
			79A-264-0091	Push-pull scale	1	0 – 490 N {0 – 50 kg}
Stroke, hydraulic drift	J		Commercially available	Scale	1	
Work equipment speed	K		Commercially available	Stopwatch	1	
Voltage resistance	L		Commercially available	Tester	1	
Sensor, wiring harness	M		799-601-7400	T-adapter KIT	1	

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BLEEDING AIR FROM FUEL CIRCUIT

★ When removing and installing parts and components in the fuel circuit, or when the engine runs short of fuel, carry out air bleeding from the fuel circuit in the following manner.

1. Check that there is enough fuel remaining in the fuel tank.

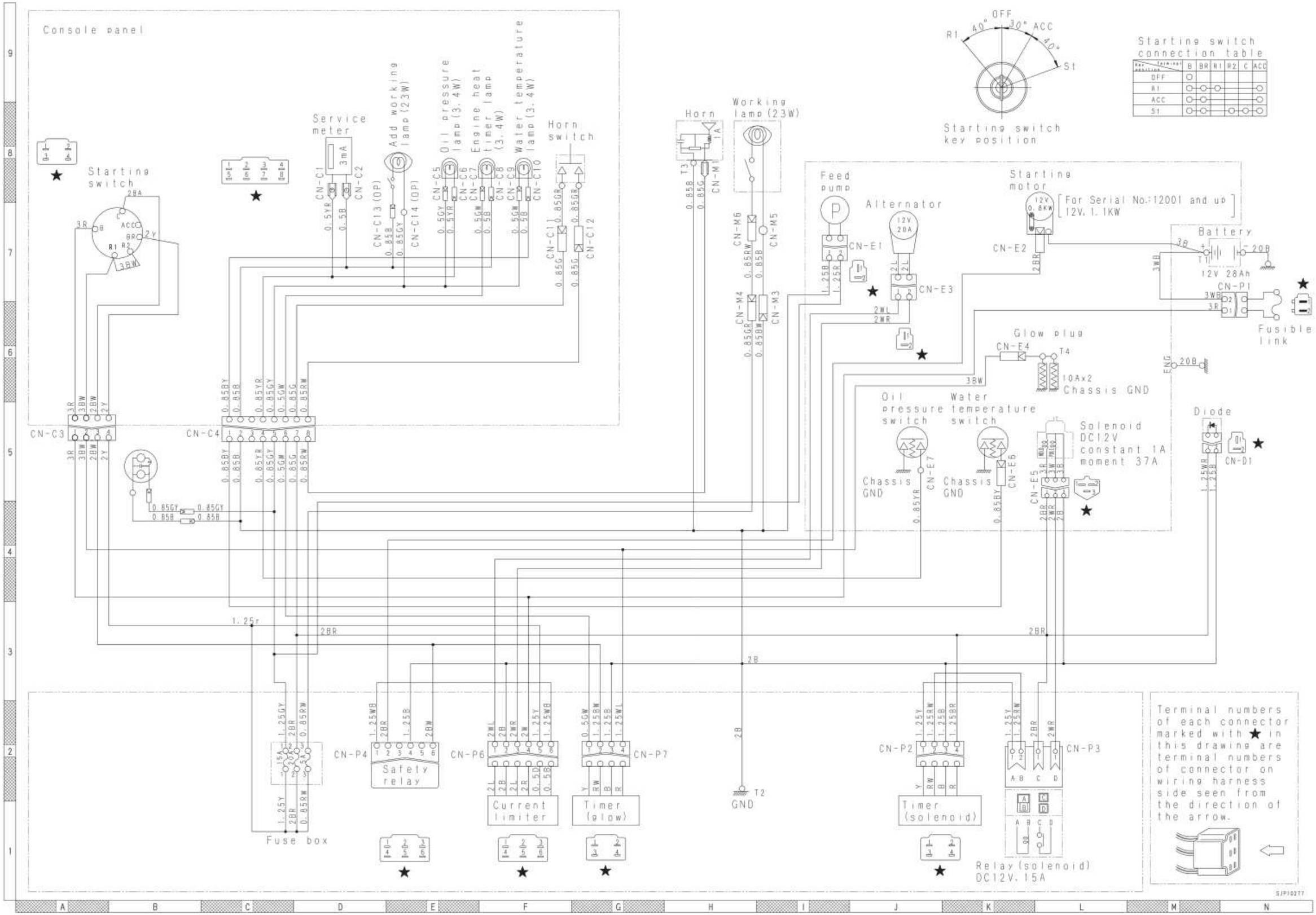
2. Turn the engine starting switch to the ON position and hold it in that position for 10 to 20 seconds.
   - The fuel feed pump is actuated and air is bled from the fuel circuit automatically.

3. Turn the engine starting switch to the START position and check that the engine starts running.
   - If the engine does not start up, repeat the step 2 above.

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ELECTRICAL CIRCUIT DIAGRAM

STANDERD SPECIFICATION



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