SEBE61460114

Shop Manual

KOMATSU®

95 SERIES

DIESEL ENGINE

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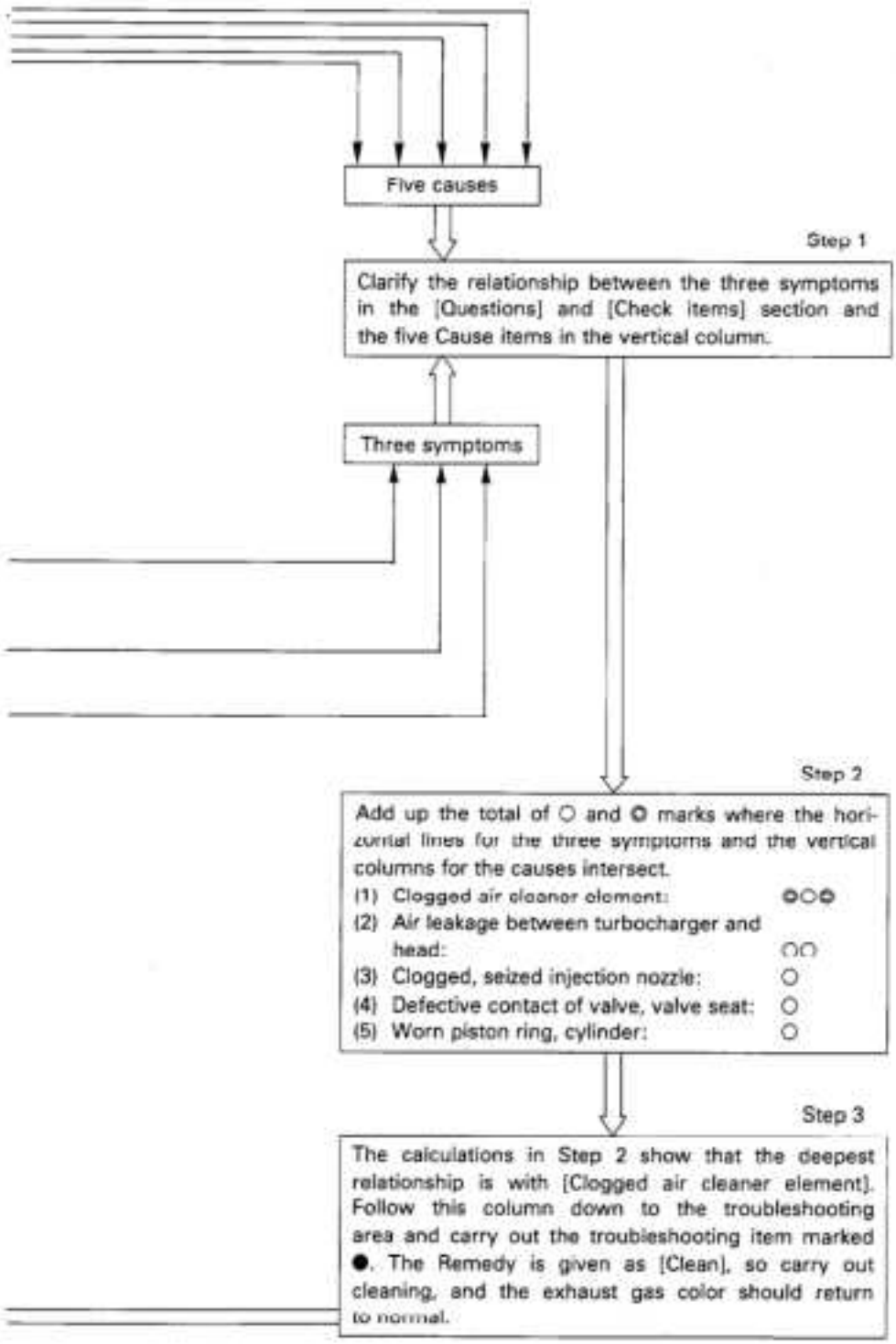
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Engine model			4D95L-1		
Applicable machine model			PC60, 60L-3 PC60U-3	PC60, 60L-5 PC60U-5	PC60, 60L-6 PC70-6
Number of cylinder – Bore x Stroke		(mm)	4 – 95 x 115		
Total piston displacement		(cc)	3,260		
Firing order			1 – 2 – 4 – 3		
Dimensions	Overall length	(mm)	797	768	931.0
	Overall width	(mm)	622	647	542 (excluding mount bracket)
	Overall height (Excluding exhaust pipe)	(mm)	750	771	—
	Overall height (Including exhaust pipe)	(mm)	—	—	1,047.1
Performance	Flywheel horsepower	(kW/HP/rpm)	44(59)/2,400	40.3(54)/2,100	40.3(54)/2,100
	Maximum torque	(Nm/kgm/rpm)	196(20)/1,500	200(20.4)/1,500	225.5(23)/1,500
	High idling speed	(rpm)	2,590 – 2,690	2,250 – 2,350	2,250 – 2,350
	Low idling speed	(rpm)	850 – 900	800 – 850	950 – 1,000
	Minimum fuel consumption ratio	(g/kWh/gHPh)	217(160)	217(160)	217(160)
Dry weight		(kg)	270	270	292 (excluding muffler)
Fuel pump			Bosch PES-A type		
Governor			Bosch RSV centrifugal, all speed type		
Lubricating oil capacity		(ℓ)	8	9	7
(Refill capacity)		(ℓ)	(7)	(7.5)	(6.5)
Coolant capacity		(ℓ)	9	9	10
Alternator			24 V, 25 A	24 V, 15 A	24 V, 15 A
Starting motor			24 V, 2.8 kW	24 V, 2.8 kW	24 V, 2.8 kW
Battery			12 V, 65 Ah x 2	12 V, 65 Ah x 2	12 V, 65 Ah x 2
Turbocharger			—	—	—
Air compressor			—	—	—
Others			—	—	—

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SYSTEM RELATED ELECTRIC CIRCUIT DIAGRAM

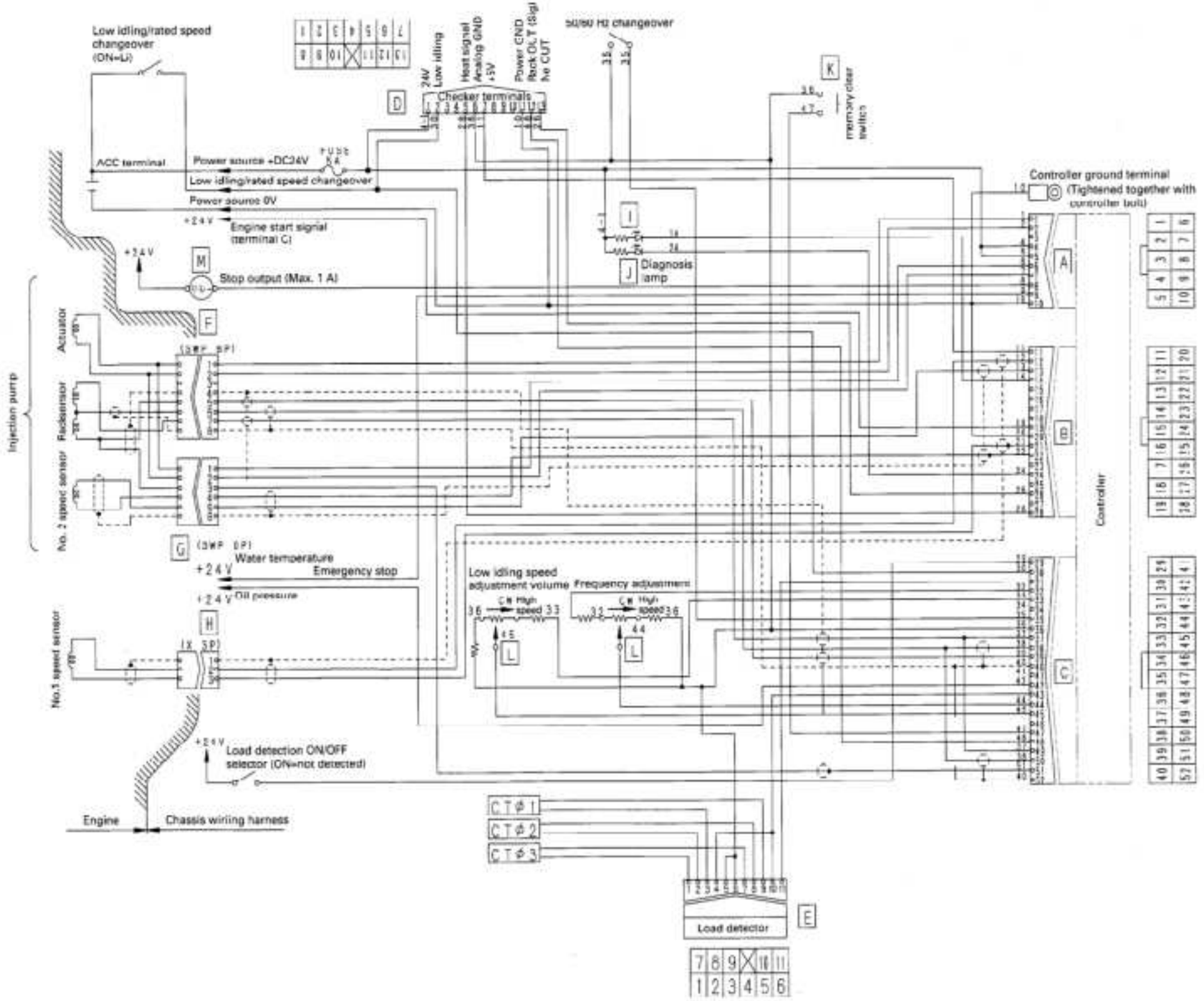


Table of terminals and signals

NO	Name of signal	NO	Name of signal	NO	Name of signal
1	ACT1 (+)	20	PWR GND	39	Rack (GND)
2	ACT1 (-)	21	TDC (GND)	40	Rack (SLD)
3		22	BTDC (GND)	41	
4	VB (+)	23		42	Oil pressure switch
5	VB (+)	24	DIAG (green)	43	
6	ACT2 (+)	25		44	Frequency adjustment (5Hz)
7	ACT2 (-)	26	NE (OUT)	45	Low idling speed adjustment (5Hz)
8	Stop output	27	DGS 2	46	
9	Water temperature emergency stop switch	28	Heat signal	47	Memory clear
10	PWR GND	29	Load detector ON/OFF selector	48	Rack (OUT)
11	+5V	30	Low idling/rated speed changeover	49	Rack 2(OSC)
12	TDC (SIG)	31		50	Rack 2(MDL)
13	BTDC (SIG)	32	Frequency adjustment (+5V)	51	Rack 2(GND)
14	DIAG (red)	33	Low idling speed adjustment (-5V)	52	Rack 2(SLD)
15		34			
16		35	50/60 Hz changeover		
17		36	ANALOG (GND)		
18		37	Rack (OSC)		
19	START	38	Rack (MDL)		

Table of wiring harness connectors and equipment

	Part name	Manufacturer's part number	Applicable wire size	Type
A	Housing	172315-1	0.5f ~1.25f	Nihon AMP pulse rock 10 pin
	Contact	172372-2 (Female)		
B	Housing	172316-1	0.5f ~0.5f	Nihon AMP pulse rock 18 pin
	Contact	172371-2 (Female)		
C	Housing	172317-1	0.5f ~0.5f	Nihon AMP pulse rock 24 pin
	Contact	172771-2 (Female)		
D	Housing	172347-1	0.5f ~2f	Nihon AMP pulse rock 13 pin
	Contact	170225-4 (Male)		
E	Housing	172024-1	0.5f ~2f	Nihon AMP pulse rock 11 pin
	Contact	170269-1 (Female)		
F	Housing	(Male)	0.5f ~0.85f 1.25f	Yazaki Buhin SWP 8 pin
	Contact	(Male)		
G	Housing	(Male)	0.5f ~0.85f 1.25f	Yazaki Buhin SWP 6 pin
	Contact	(Male)		
H	Housing	(Female)	0.5f ~1.25f	Yazaki Buhin X 3 pin
	Contact	(Female)		
I	Lamp	RL.UP8-B7-R LED-R R:3KΩ1W	—	Izumi Denki
J	Lamp	GL.UP8-B7-G LED-G R:2KΩ1W	—	Izumi Denki
K	Switch	PB.SS-221N/G 1P.AC125V3A	—	Nihon kaiheiki

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