SEBM030604

SHOP MANUAL

KOMATSU®

PC78MR-6

MACHINE MODEL	SERIAL NUMBER
PC78MR-6	**1001 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.
- PC78MR-6 mounts the S4D95LE-3-A engine.
  For details of the engine, see the 95-3 Series Engine Shop Manual.

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TVC VALVE CURRENT ADJUSTMENT TABLE

Adjustment code (Left 2 positions of display unit)	Set value (Right 1 position of display unit)	Initial value	Contents	Exhaust gas color
20	0		Increase pump absorption torque by +2.0 kgm (-100 mA).	
	1		Increase pump absorption torque by +1.5 kgm (-75 mA).	
	2		Increase pump absorption torque by +1.0 kgm (-50 mA).	
	3		Increase pump absorption torque by +0.5 kgm (-25 mA).	
	4	○	Initial value	
	5		Decrease pump absorption torque by -0.5 kgm (+25 mA)	
	6		Decrease pump absorption torque by -1.0 kgm (+50 mA)	
	7		Decrease pump absorption torque by -1.5 kgm (+75 mA)	
	8		Decrease pump absorption torque by -2.0 kgm (+100 mA)	

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WEIGHT TABLE

⚠ This mass list is for reference in handling or transporting these components.

Unit: kg

Machine model	PC78MR-6
Serial Number	1001 and up
Engine assembly (without water and oil)	403
• Engine (without water and oil)	300
• Engine mount	30
• PTO	7
• Hydraulic pump	66
Cooling assembly (without coolant and oil)	29
• Radiator (without coolant)	6.3
• Oil cooler (without oil)	5.2
Revolving frame	1,220
Operator's cab	260
Operator's seat	18
Fuel tank (without fuel)	(*1) 11 (*2) 17
Hydraulic tank (without hydraulic oil)	70
Control valve	62
Counterweight	950
Additional counterweight	220
Swing motor (Including brake valve)	22
Swing circle	104
Swing machinery	47
Center swivel joint	16
Track frame assembly (without track shoe)	1,067 [1,048]
• Track frame	704
• Idler assembly	54 x 2
• Recoil spring assembly	40 x 2
• Carrier roller	3.4 x 2
• Track roller	(*1) 13 x 10 (*2) 12.4 x 10
• Travel motor (with reduction gears)	81 x 2
• Sprocket	19 x 2

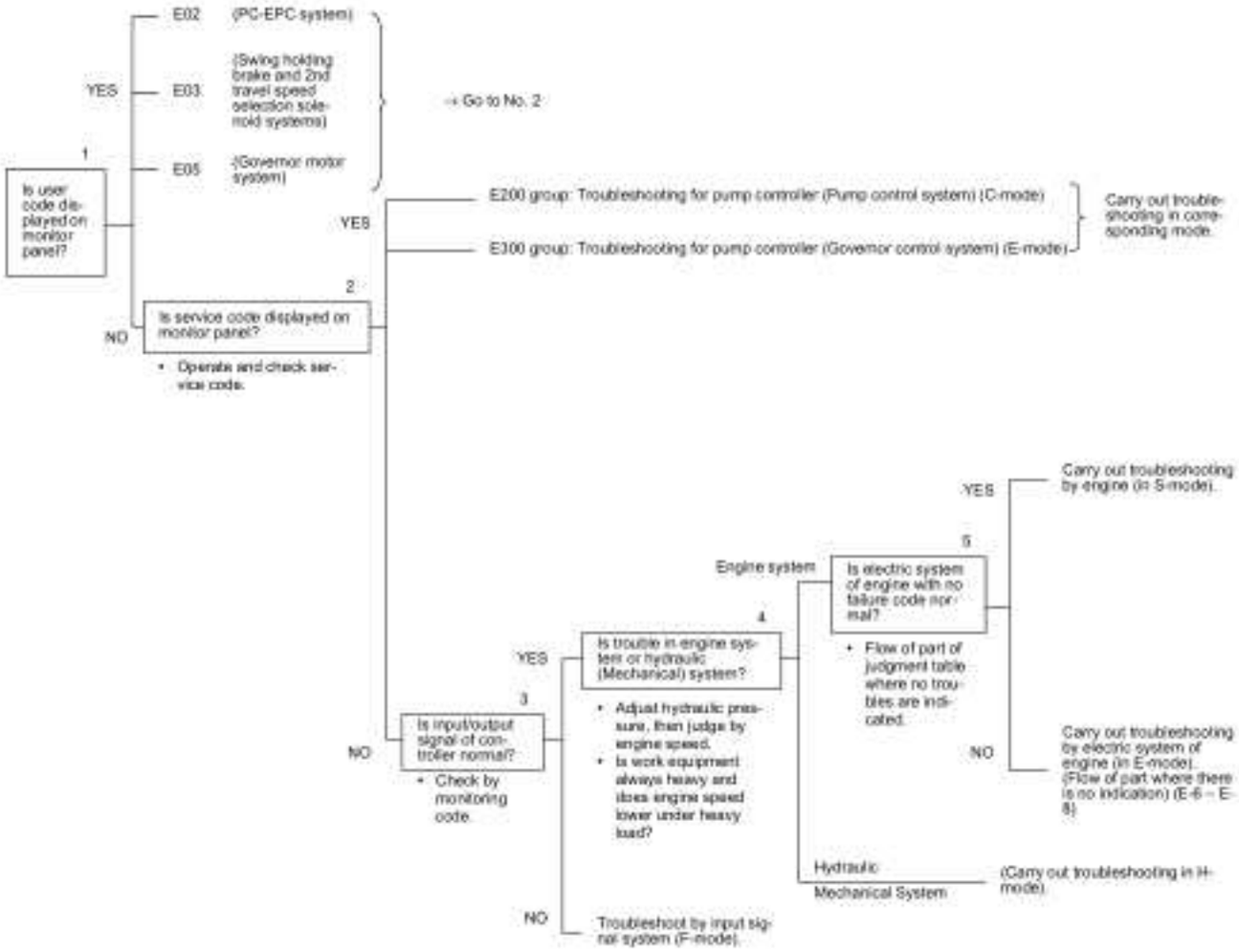
Figures (steel shoe specification) are common to the all specifications unless otherwise specified.
[ ] Figures in [ ]: Rubber shoe specification
*1. Serial No.: 1001 – 1173
*2. Serial No.: 1174 and up

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CONTENTS AND PROCEDURE OF TROUBLESHOOTING

If a trouble occurs, carry out troubleshooting according to the judgment table, controller (governor control system), and controller (pump control system). For the detailed contents and procedure of the troubleshooting, however, see the following flow.

Before starting the troubleshooting, ask the operator about the trouble as long as possible and check the following items in advance. (1) Connecting condition of the controller (Check with monitoring code 0001), (2) Breakage of the fuses, (3) Battery voltage, (4) Generating (charge input) voltage (Monitoring code 0043 "H-34").



★ Judge the details by judgment table for controllers (governor control system) (pump control system).
※ For the No. and contents of monitoring, see the monitoring codes table.

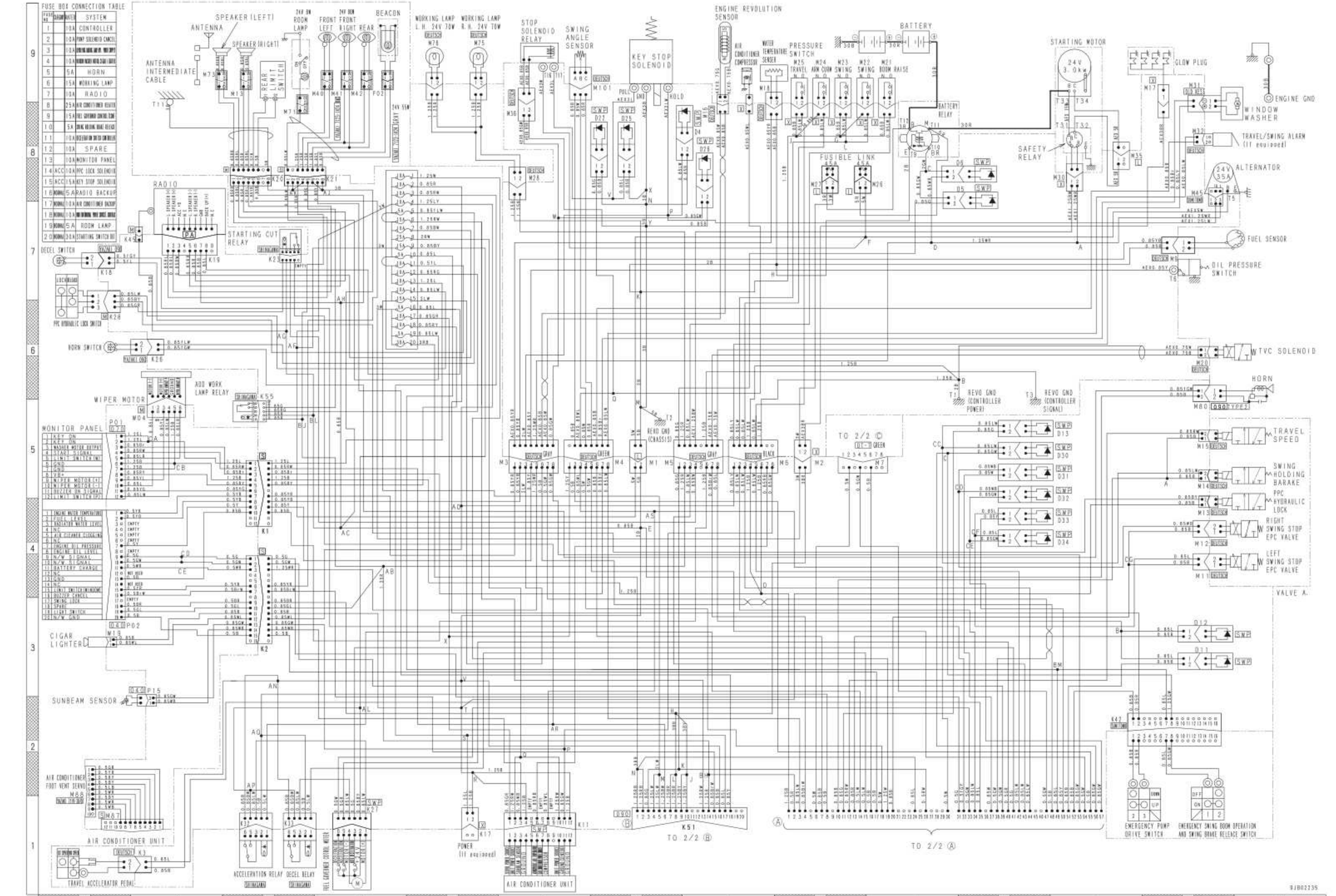
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User Code	Service Code	Troubled System	Contents of Trouble
—	(*1) E251	Trouble in boom bottom pressure sensor (overload sensor) system	1. Disconnection in wiring harness between M95 pin 22 – M92 pin B 2. Short circuit or disconnection in wiring harness between M95 pin 2 – M92 pin C 3. Disconnection in wiring harness between M95 pin 21 – M92 pin A
E40	E412	Disconnection on GND side of boom swing angle sensor	1. Disconnection in wiring harness between M95 pin 21 – M101 pin A
	E413	Disconnection on power supply side of boom swing angle sensor/Short circuit or disconnection of signal line	1. Disconnection in wiring harness between M95 pin 22 – M101 pin A 2. Short circuit in wiring harness between M95 pin 8 – M101 pin B 3. Disconnection in wiring harness between M95 pin 8 – M101 pin B 4. Defective M101 angle sensor (Internal short circuit)
E41	E451	Short circuit in boom swing LEFT EPC solenoid system	1. Short circuit in wiring harness between M97 pin 5 – M11 pin 2 2. Short circuit in EPC solenoid
	E452	Disconnection in boom swing LEFT EPC solenoid system	1. Disconnection in wiring harness between M97 pin 5 – M11 pin 2 2. Disconnection in EPC solenoid 3. Disconnection in wiring harness between M11 pin 1 – M97 pin 23
	E453	Short circuit in boom swing RIGHT EPC solenoid system	1. Short circuit in wiring harness between M97 pin 15 – M12 pin 2 2. Short circuit in EPC solenoid
	E454	Disconnection in boom swing RIGHT EPC solenoid system	1. Disconnection in wiring harness between M97 pin 15 – M12 pin 2 2. Disconnection in EPC solenoid 3. Disconnection in wiring harness between M12 pin 1 – M97 pin 23

*1. For EU spec. machine only.

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ELECTRICAL CIRCUIT DIAGRAM (FOR NORWAY SPEC.) (1/2)



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