SEBM033808

SHOP MANUAL

KOMATSU®

WA150-5

MACHINE MODEL	SERIAL NUMBER
WA150-5	**65001 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.

- WA150-5 mounts the SAA4D102E-2 engine.
  For details of the engine, see the 102 Series Engine Shop Manual.

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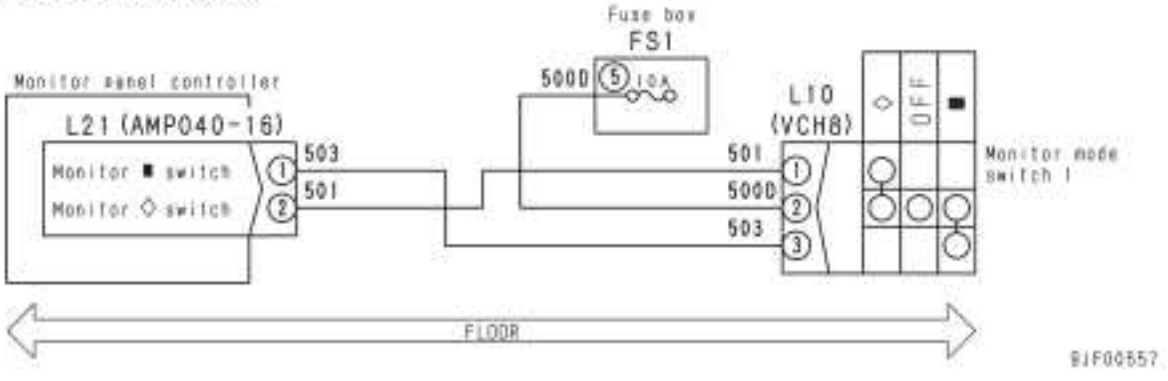
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Troubleshooting Code [MON-10] (Input failure in monitor panel mode selector switch 1 [◇] (Panel switch 2))

Action Code	Error Code	Controller Code	Trouble	Input failure in monitor panel mode selector switch 1 [◇] (Panel switch 2)
-	-	-		
Description of Trouble	• The monitor panel mode selector switch 1 [◇] (Panel switch 2) input circuit is always in the OPEN state.			
Machine monitor or controller Reaction	• Activates an alarm.			
Effect on Machine	• The monitor does not work.			
Related Information				

	Causes		Standard Value in Normal State and Remarks on Troubleshooting			
Possible Causes and Standard Values	1	Defective monitor panel mode selector switch 1 [◇]	1) Turn starting switch OFF. 2) Disconnect connector L10. 3) Connect T-adapter.			
			Between L10 (Female) (2) and (1)	When monitor panel mode selector switch 1 [◇] is turned ON.	Resistance	Max. 1Ω
				Other than above.	Resistance	Min. 1MΩ
	2	Wiring harness discontinuity (Disconnection or defective contact)	1) Turn starting switch OFF. 2) Disconnect Connectors L21, L10, fuse FS1 (5). 3) Connect T-adapter.			
			Wiring harness between L21 (Female) (2) and L10 (Female) (1)		Resistance	Max. 1Ω
			Wiring harness between L10 (Female) (2) and fuse FS1 (5)		Resistance	Max. 1Ω
	3	Wiring harness ground fault	1) Turn starting switch OFF. 2) Disconnect Connectors L21, L10, fuse FS1 (5). 3) Connect T-adapter.			
			Wiring harness between L21 (Female) (2) and L10 (Female) (1)	Resistance between L21 (Female) (2), L10 (Female) (1) and chassis ground		Min. 1MΩ
			Wiring harness between L10 (Female) (2) and fuse FS1 (5)	Resistance between L10 (Female) (2), fuse FS1 (5) and chassis ground		Min. 1MΩ
			★ In the above case, the fuse is blown.			
	4	Defective machine monitor	1) Turn starting switch OFF. 2) Disconnect connector L21. 3) Insert T-adapter. 4) Connect connector. 5) Turn starting switch ON.			
			Between L21 (Female) (2) and chassis ground	When monitor panel mode selector switch 1 [◇] is turned ON.	Voltage	20 - 30V
				Other than above.	Voltage	Max. 1V

Related circuit diagram



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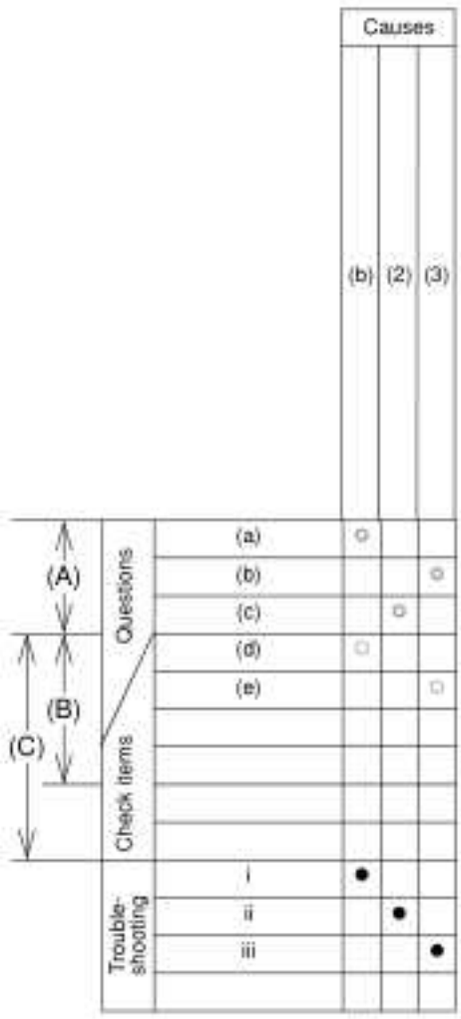
METHOD OF USING TROUBLESHOOTING CHARTS

This troubleshooting chart is divided into three sections: **questions**, **check items**, and **troubleshooting**. The questions and check items are used to pinpoint high probability causes that can be located from the failure symptoms or simple inspection without using troubleshooting tools.
Next, troubleshooting tools or direct inspection are used to check the high probability causes to make final confirmation.

[Questions]
Sections (A) + (B) in the chart on the right corresponds to the items where answers can be obtained from the user. The items in B are items that can be obtained from the user, depending on the user's level.

[Check items]
The serviceman carries out simple inspection to narrow down the causes. The items under (C) in the chart on the right correspond to this.
The serviceman narrows down the causes from information (A) that he has obtained from the user and the results of (C) that he has obtained from his own inspection.

[Troubleshooting]
Troubleshooting is carried out in the order of probability, starting with the causes that have been marked as having the highest probability from information gained from **[Questions]** and **[Check items]**.

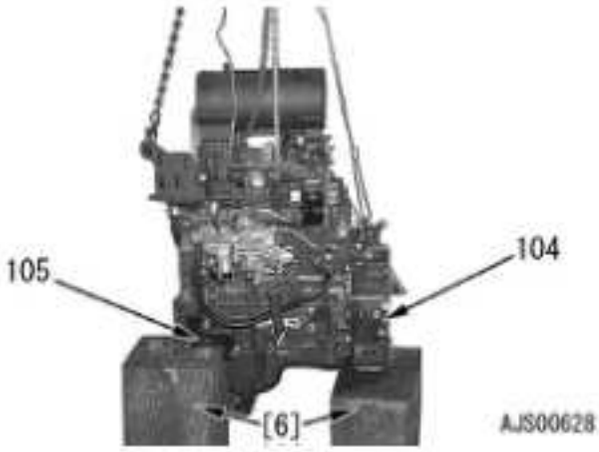


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32. Remove engine assembly (103) by gradually pulling it up.
    - ★ Ensure that all the wiring and piping are disconnected.
    - ★ Carefully remove the radiator, aftercooler, and hydraulic oil cooler so that none of them is damaged.

    Engine assembly: **480 kg**

33. Install engine mounting brackets (104) and (105) at each side and place the assembly on blocks [6].



INSTALLATION

- Carry out installation in the reverse order to removal.

[*1]

Pre-cleaner clamp:
8.8 ± 0.5 Nm {90 ± 5 kgcm}

[*2]

Aftercooler hose clamp, air tube clamp:
10.5 ± 0.5 Nm {107 ± 5 kgcm}

[*3]

Air conditioner compressor ground terminal:
59 – 74 Nm {6 – 7.5 kgm}

[*4]

★ Adjust the tension for the air conditioner compressor belt. For details, see TESTING AND ADJUSTING, Testing and adjusting air conditioner compressor belt tension.

[*5]

Radiator hose mating face:
Gasket sealant (ThreeBond 1208E or equivalent)

Radiator hose clamp:
8.8 ± 0.5 Nm {90 ± 5 kgcm}

[*6]

Fuel control cable mounting nut:
11.8 – 14.7 Nm {1.2 – 1.5 kgm}

★ Adjust the fuel control cable. For details, see TESTING AND ADJUSTING, Measuring, testing operating force of accelerator pedal.

[*7]

Engine earth terminal:
98 – 123 Nm {10 – 12.5 kgm}

[*8]

Engine stop solenoid terminal:
0.98 – 1.27 Nm {0.1 – 0.13 kgm}

★ Set the cap in lateral direction to prevent water from accumulating.

[*9]

Intake heater terminal:
2.45 – 2.94 Nm {0.25 – 0.3 kgm}

[*10]

Alternator terminal E11:
5.9 – 9.80 Nm {0.6 – 1.0 kgm}

[*11]

Starting motor (+) terminal (tighten together):
17.7 – 24.5 Nm {1.8 – 2.5 kgm}

[*12]

Damper cover mating face :
Gasket sealant (LG-6)

Damper cover mounting bolt:
58.8 – 73.5 Nm {6 – 7.5 kgm}

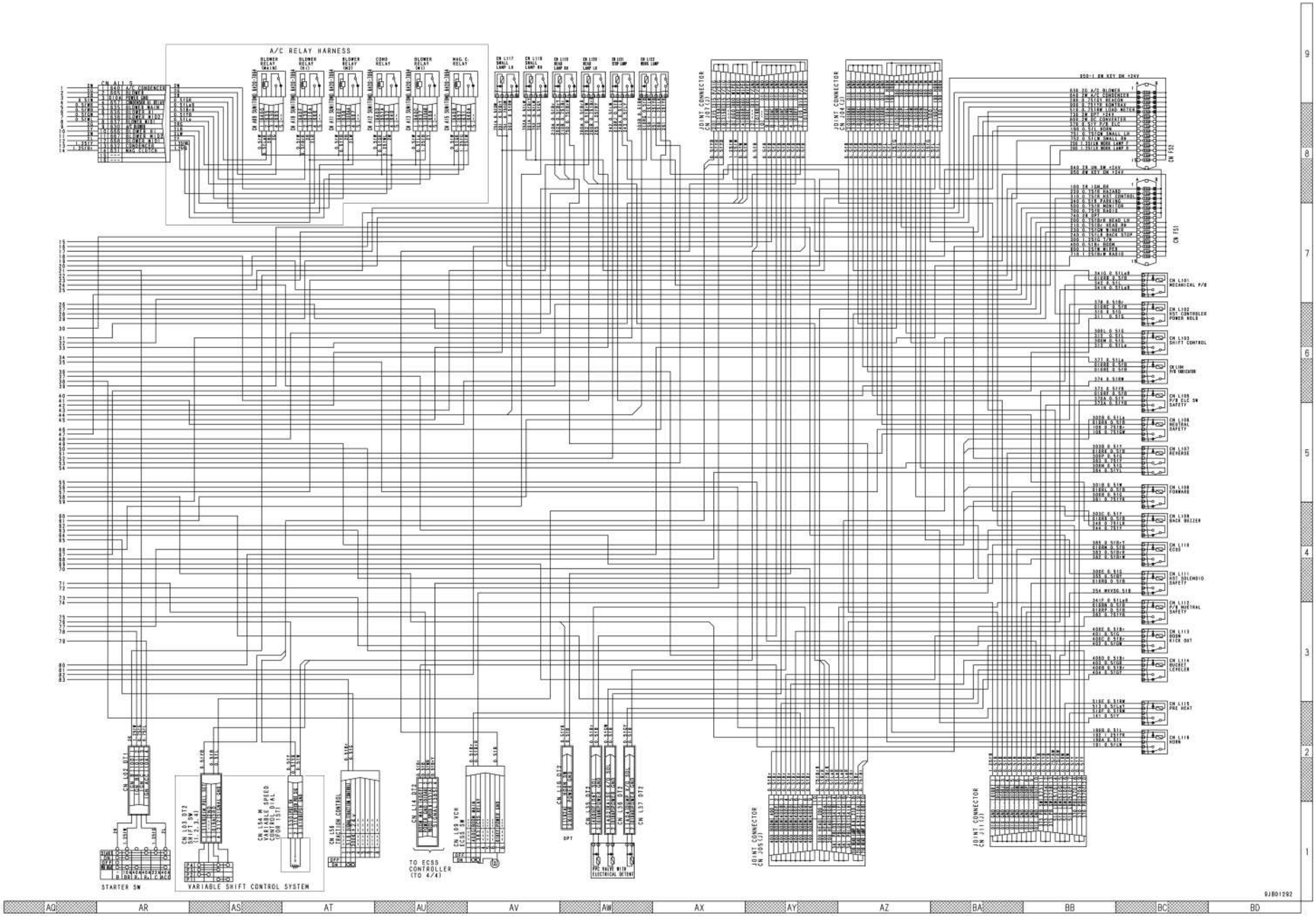
[*13]

Engine mounting bolt:
Front: 235 – 285 Nm {23 – 29.5 kgm)
Rear : 59 – 74 Nm {6 – 7.5 kgm}

Mounting bolt: **Adhesive (LT-2)**

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ELECTRICAL CIRCUIT DIAGRAM 1/4 (4/4)
(Machines equipped with ROPS cab)



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