SEBM033307

SHOP MANUAL

KOMATSU®

WA200-5
WA200PT-5

MACHINE MODEL	SERIAL NUMBER
WA200-5	**65001 and up**
WA200PT-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.

- WA200, 200PT-5 mounts the SAA6D102E-2-A engine.
  For details of the engine, see the 102 Series Engine Shop Manual.

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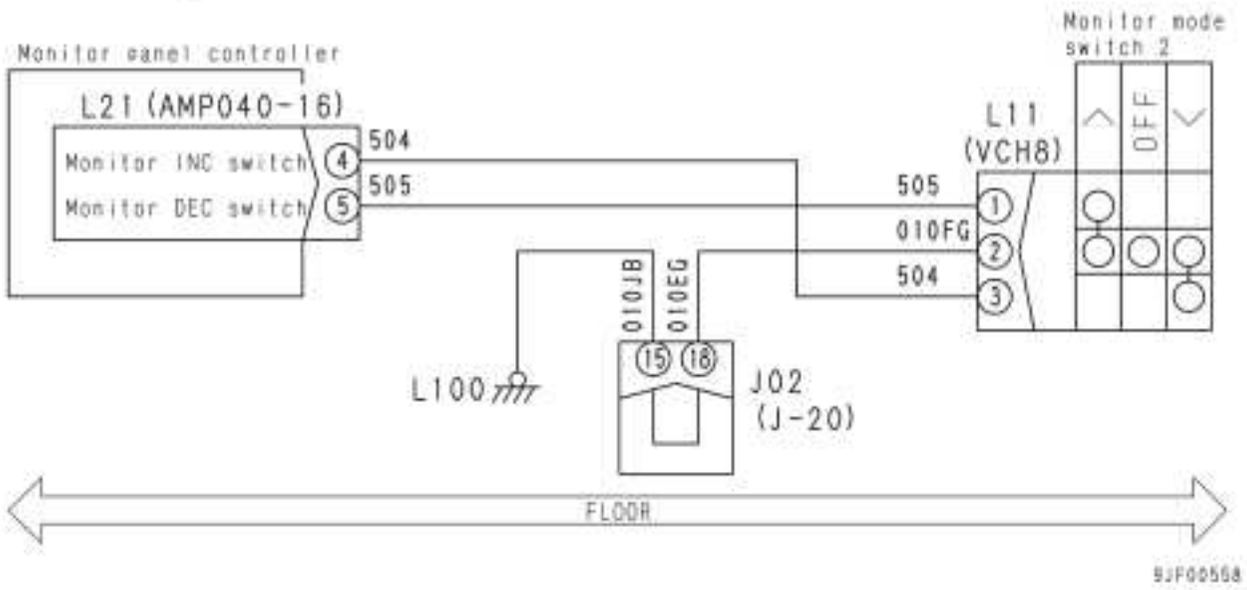
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[MON-11] (Input failure in monitor panel mode selector switch 2 [<] (Panel switch 3))

Action code	Failure code	Controller code	Trouble	Input failure in monitor panel mode selector switch 2 [<] (Panel switch 3)
Not set	Not set	Not set		
Contents of trouble	• The monitor panel mode selector switch 2 [<] (Panel switch 3) input circuit is always in the OPEN state.			
Action of monitor panel or controller	• Activates an alarm.			
Problem that appears on machine	• The monitor does not work.			
Related information				

Possible causes and standard value in normal state		Causes	Standard Value in Normal State and Remarks on Troubleshooting			
	1	Defective monitor panel mode selector switch 2 [<]	1) Turn starting switch OFF. 2) Disconnect connector L11. 3) Connect T-adapter.			
			Between L11 (Female) (2) and (3)	When monitor panel mode selector switch 2 [<] is turned ON.	Resistance	Max. 1Ω
				Other than above.	Resistance	Min. 1MΩ
	2	Disconnection in wiring harness (Disconnection in wiring or defective contact in connector)	1) Turn starting switch OFF. 2) Disconnect Connectors L21, L11. 3) Connect T-adapter.			
			Wiring harness between L21 (Female) (4) and L11 (Female) (3)		Resistance	Max. 1Ω
			Wiring harness between L11 (Female) (2) and chassis ground		Resistance	Max. 1Ω
	3	Hot short in wiring harness	1) Turn starting switch OFF. 2) Disconnect Connectors L21, L11. 3) Connect T-adapter. 4) Turn starting switch ON.			
			Wiring harness between L21 (Female) (4) and L11 (Female) (3)	Voltage between L21 (Female) (4), L11 (Female) (3) and chassis ground		Max. 1V
	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) (4) and chassis ground	When monitor panel mode selector switch 2 [<] is turned ON.	Voltage	Max. 1V
				Other than above.	Voltage	20 - 30V

Related circuit diagram



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METHOD OF USING TROUBLESHOOTING CHART

This troubleshooting chart, like the other troubleshooting charts (YES/NO type), determines the location from the problem of occurring on the machine and categorizes the problem under one of the main components, such as the steering system or work equipment hydraulic system. Use the following procedure to carry out accurate troubleshooting swiftly.

Step 1. Ask operator questions

The questions to ask the operator are given under the problem. If the answer to the question matches the content given, the cause given after the arrow is the probable cause.
Keeping the content of the questions in mind, read the matrix and proceed with Step 2 and Step 3 to pinpoint the correct cause.

Example: Steering wheel will not turn
Ask the operator and check the following points.

- Did the problem suddenly start?

→ Broken part in steering equipment

- Was the steering wheel heavy before?

→ Internal wear, defective seal in steering related equipment

Step 2. Checks before troubleshooting

Before measuring the oil pressure or starting the troubleshooting, confirm the checks before starting items, check for leakage of oil, or for loose bolts.
This will prevent wasting time when troubleshooting.
The items given under Checks before troubleshooting are checks that are particularly important to make about the condition of the machine before starting the actual troubleshooting.

Example: Checks before starting troubleshooting

- Is oil level and type of oil in hydraulic tank correct?
- Is there any oil leakage from steering valve or demand valve?
- Is steering linkage adjusted properly?

Step 3. Method of reading matrix

1) Operate the machine when carrying out troubleshooting of the items in the Troubleshooting column. If any problems occur as the result of the troubleshooting, put a check against the item.
   ★ When carrying out the troubleshooting, check the easier items first. It is not necessary to follow the number order.

2) Find the matching cause in the Causes column.
   If a problem is found, the ○ marks on the same line as the troubleshooting are the causes. (In Troubleshooting item 2 in the same diagram on the right the cause is c or e.)
   When there is one ○ mark
   Carry out troubleshooting for the other items marked with ○ in the same Causes column to check if the problem occurs, then make repairs.
   When there are two ○ marks
   Go to Step 3) to narrow down the cause.

1. Steering wheel does not turn ← Problem (example)

Ask the operator the following questions. • Did the problem suddenly start? Yes = Equipment related to steering broken • Was there previously any symptom, such as heaviness of the steering wheel? Yes = Wear of equipment related to steering, defective seal

Checks before troubleshooting (example)

• Is the oil level in the hydraulic tank correct? Is the type of oil correct? • Is there any leakage of oil from the steering valve or Orbitroll? • Has the safety bar been removed from the frame?

<Example 1>

No.	Problems / Remedy
1	Steering wheel does not turn in either direction (left and right)
2	In item 1, movement of work equipment is abnormal
3	Steering wheel turns only in one direction (left or right)
4	Steering wheel is heavy and does not turn

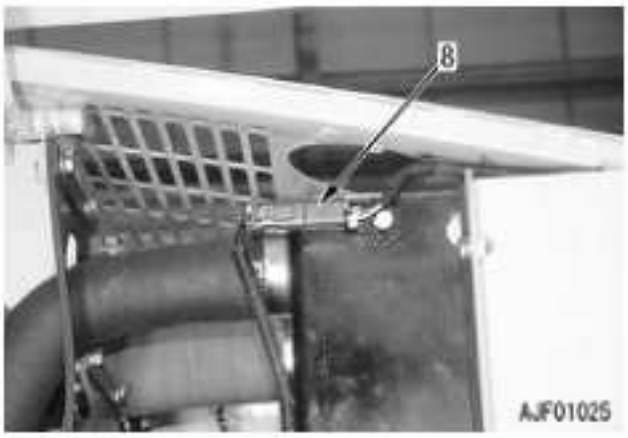
<Example 2>

Problems \ Remedy	Cause a	b	c	d	e
1	○	○	○	○	○
2	—	—	—	—	—
3		○		○	
4	○			○	
5		○			○

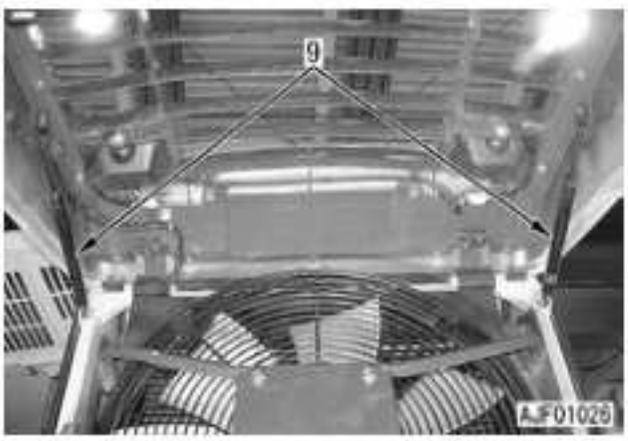
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5. Open the grille and sling it temporarily.

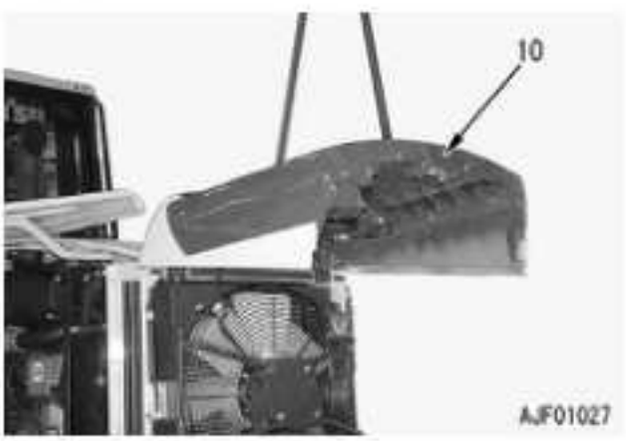
6. Open the engine left side cover and disconnect wiring connector BR1 (8).



7. Disconnect both damper gas cylinders (9).

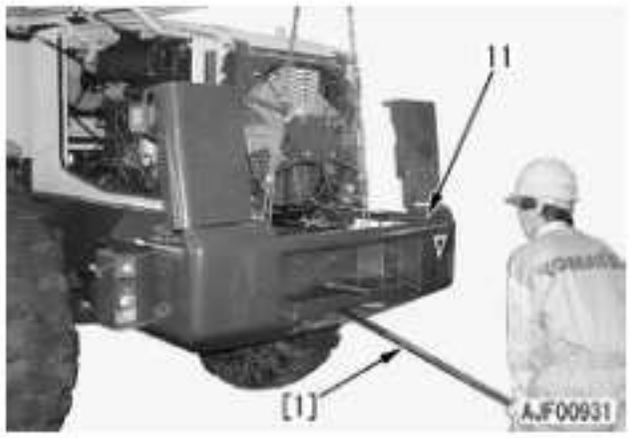


8. Remove the 4 mounting bolts and lift off grille (10).



9. Sling counterweight (11) temporarily and remove the mounting bolt, and then remove the counterweight.
[*1]
★ When removing the counterweight, insert bar [1] in its rear part to balance it.

Counterweight and batteries (left/right) assembly: **1,250 kg**



INSTALLATION

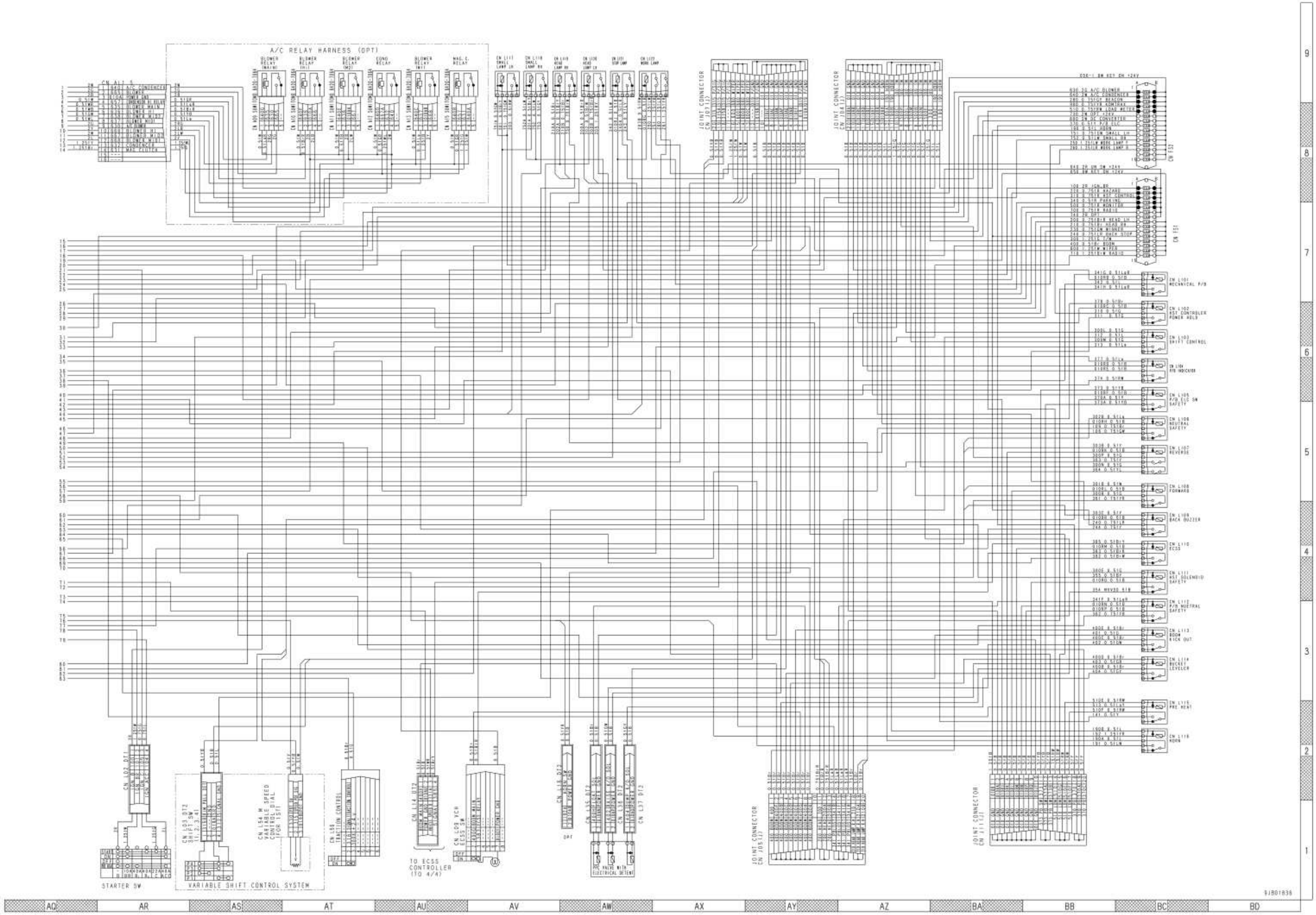
- Carry out installation in the reverse order to removal.

[*1]

Mounting bolt: **785 – 980 Nm {80 – 100 kgm}**

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



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