SHOP MANUAL

KOMATSU®

WD900-3

MACHINE MODEL	SERIAL NUMBER
WD900-3	**50001 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.

- WD900-3 mount the SA12V140-1 engine.
  For details of the engine, see the 12V140 Series Engine Shop Manual.

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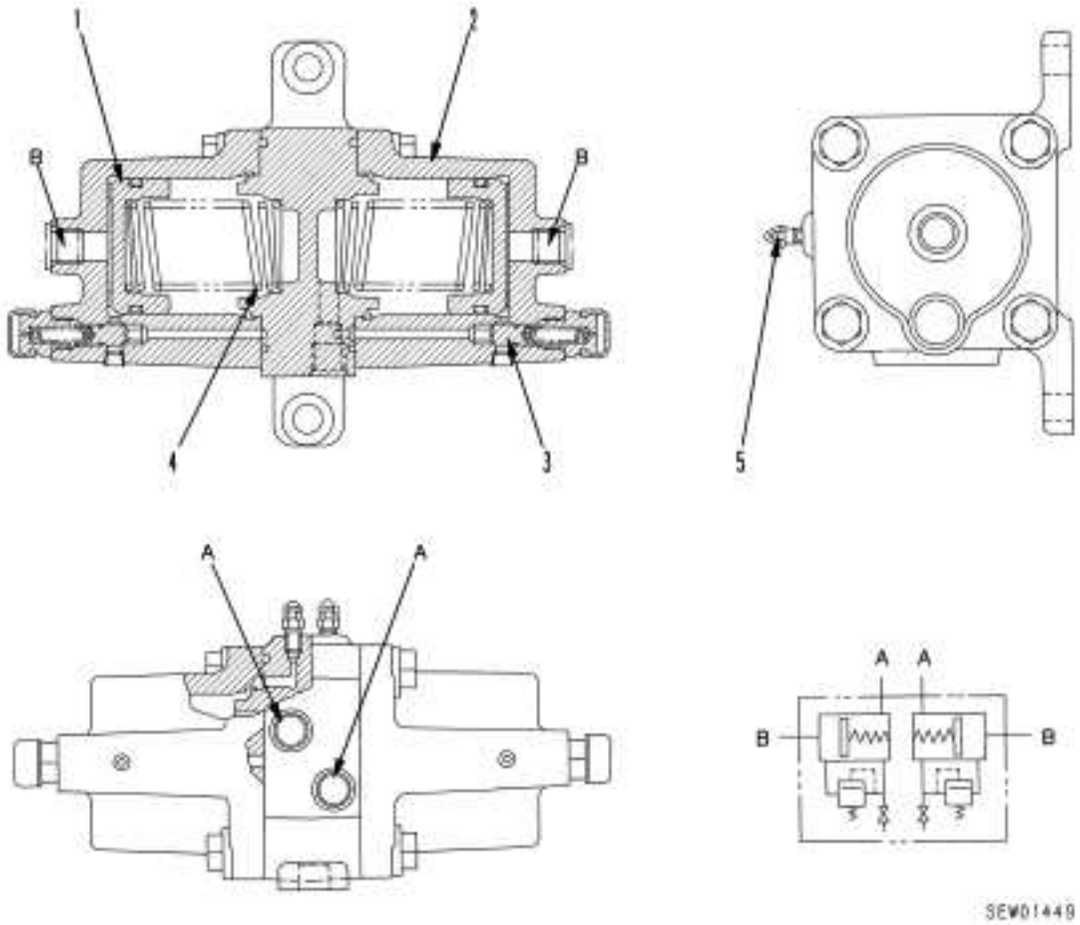
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SLACK ADJUSTER



1. Piston
2. Cylinder
3. Check valve
4. Spring
5. Bleeder

A. Inlet port (from brake valve)
B. Outlet port (to brake)

SPECIFICATIONS

Maximum available pressure: 5.9 MPa {60 kg/cm²}
(Safety valve set pressure: 0.97 MPa {9.9 kg/cm²})

Normal pressure: 4.6 MPa {47 kg/cm²}
(Governor set pressure: 0.81 MPa {8.3 kg/cm²})

Check valve cracking pressure: 1.1 ± 0.05 MPa {11.1 ± 0.5 kg/cm²}

FUNCTION

- The slack adjuster is installed in the brake oil line from the brake valve to the brake piston. It acts to keep the clearance between the brake piston and discs constant even when the brake discs are worn. In this way it acts to keep a constant time lag when the brake is operated.

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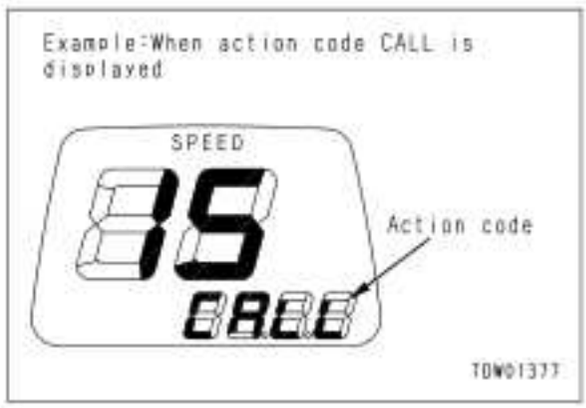
METHOD OF DISPLAYING ACTION CODE AND FAILURE CODE

1. Outline

The speedometer display on the main monitor is used to display the troubleshooting for each control system. The nature of the troubleshooting is displayed as the failure action code, failure code, and the time elapsed since failure.
The signals between the main monitor and each controller are transmitted in serial through the network circuit. (Only the engine controller uses a special parallel signal.)

2. Display of failure action code

This code informs the operator directly of the abnormality, and takes action, such as stopping the machine immediately.
There are three types of action code: E00, E01 + CALL (E01 and CALL are displayed alternately), and CALL. If a failure occurs suddenly, one of these codes is shown on the speedometer display.



3. Failure code and time elapsed since failure

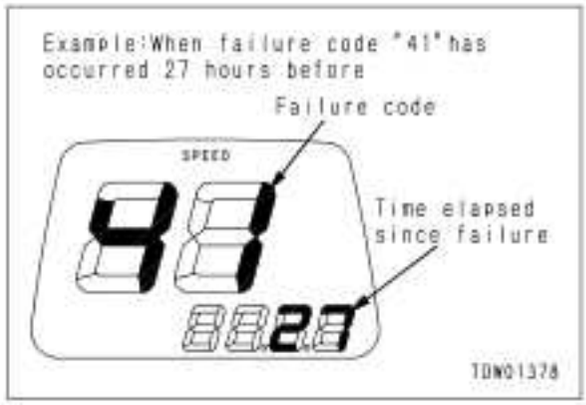
The failures detected by each controller are changed to a code and displayed. It is possible to tell from this code which system in which controller has failed, so carry out troubleshooting for the applicable controller.

4. Saving failure code

The transmission and joystick steering controller writes the failure codes to memory.

1) A total of 9 failure codes can be saved in memory.
2) The data that is saved to memory is as follows: (1)Failure code
   (2)Time elapsed since failure
   (up to 1000 hours)
3) The failures are saved in the order that they occur. If a failure code already exists in the memory, the repeat failure code is not saved.
4) If there are already 9 items in memory, and a 10th failure occurs, the oldest item is deleted and the new item is saved.

★ It is possible to display the failure code and time elapsed since failure for items saved in memory by operating the main monitor set switch.



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ACTION TAKEN BY CONTROLLER WHEN ABNORMALITY OCCURS AND PROBLEMS ON MACHINE

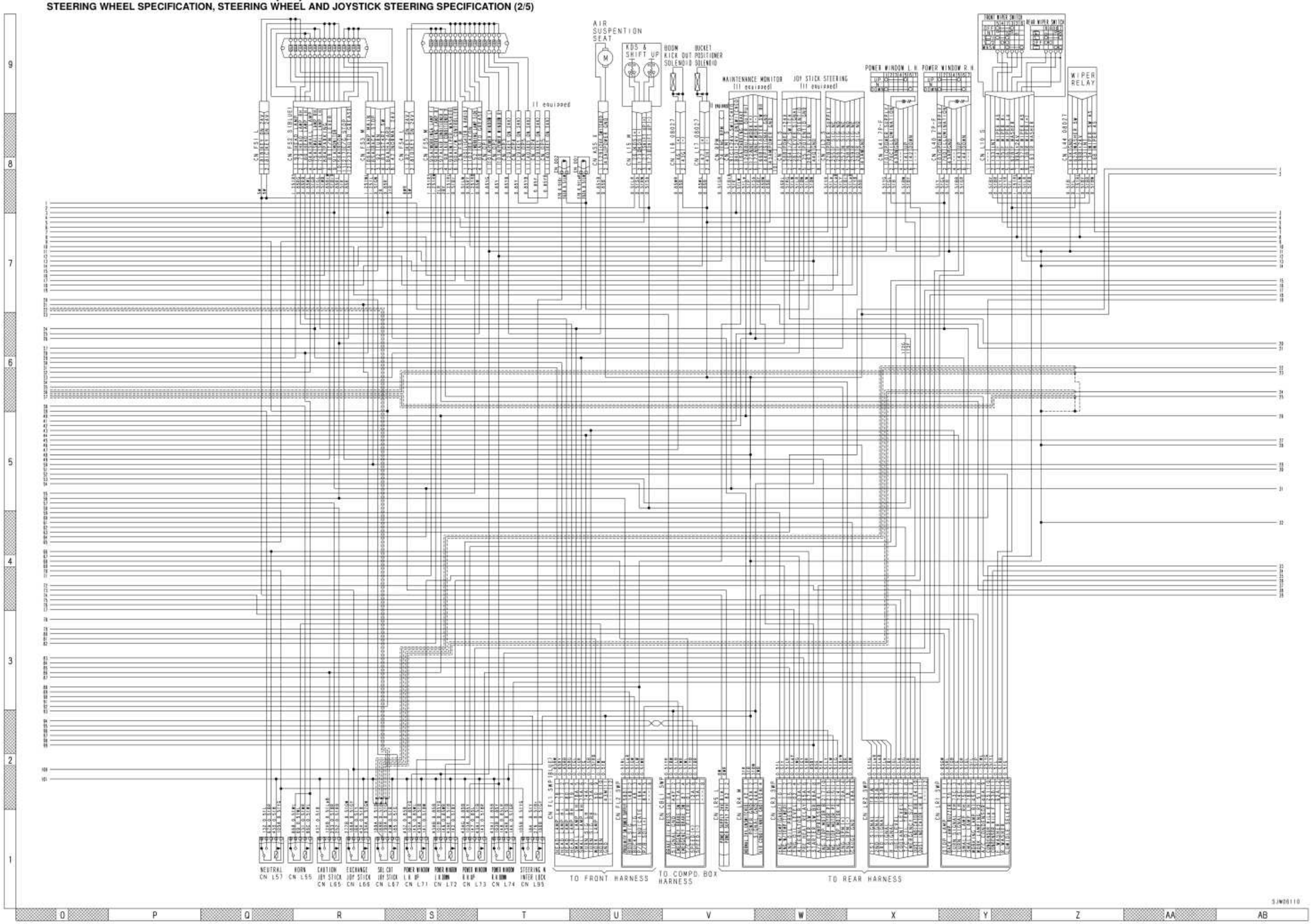
JOYSTICK CONTROL SYSTEM

Failure code	Abnormal system	Nature of abnormality
56	Joystick caution relay	1) Defective caution relay 2) Short circuit with ground, defective contact, or disconnection in wiring harness between C2 (female) (9) – L65 (1) 3) Short circuit with ground, defective contact, or disconnection in wiring harness between C2 (female) (19) – L65 (2) – chassis ground 4) Defective transmission & joystick steering controller
57	Steering right solenoid	1) Defective steering right solenoid 2) Defective steering solenoid cut relay 3) Short circuit in wiring harness between C2 (female) (2) – (13) Short circuit with ground, defective contact, or disconnection in the following wiring harness 4) Wiring harness between C2 (female) (2) – L27 (2) 5) Wiring harness between C2 (female) (13) – L67 (3) 6) Wiring harness between L67 (female) (5) – L27 (1) 7) Defective transmission & joystick steering controller
58	Steering left solenoid	1) Defective steering left solenoid 2) Defective steering solenoid cut relay 3) Short circuit in wiring harness between C2 (female) (3) – (14) Short circuit with ground, defective contact, or disconnection in the following wiring harness 4) Wiring harness between C2 (female) (3) – L26 (14) 5) Wiring harness between C2 (female) (14) – L67 (3) 6) Wiring harness between L67 (female) (5) – L26 (1) 7) Defective transmission & joystick controller
59	Short circuit with power source in steering right solenoid circuit	1) Defective steering right solenoid 2) Short circuit with power source in wiring harness between C2 (female) (2) – L27 (2) 3) Defective transmission & joystick steering controller
60	Short circuit with power source in steering left solenoid circuit	1) Defective steering left solenoid 2) Short circuit with power source in wiring harness between C2 (female) (3) – L26 (2) 3) Defective transmission & joystick steering controller

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ELECTRICAL CIRCUIT DIAGRAM (2/7)

STEERING WHEEL SPECIFICATION, STEERING WHEEL AND JOYSTICK STEERING SPECIFICATION (2/5)



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