SEBM036901

# 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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# TESTING AND ADJUSTING TORQUE CONVERTER AND TRANSMISSION OIL PRESSURE

## Measurement conditions

- Coolant temperature: Inside operating range
- Torque converter oil temperature: 60 to 80°C

⚠ Apply the parking brake and block the tires.

## Measuring procedure

★ The following preparatory work is necessary before measuring any oil pressure.
  - Remove cover on upper side of the transmission.
  - Turn transmission cut-off selector switch (2) to OFF and use the left brake. (Check that the pilot lamp is OFF).
  - Remove the plug (P5) (PT 1/8) from the measuring port of the transmission valve.
  - Install nipple **C2** and hydraulic tester **C1** (2.5 MPa {25 kg/cm²})to the measuring port, pull the gauge to the operator's compartment, then start the engine and measure the pressure.

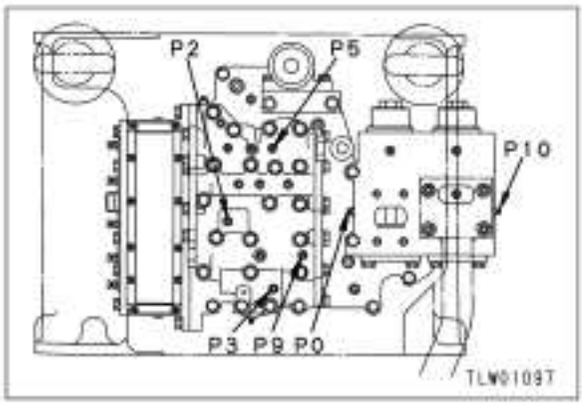
★ Check that there is no leakage of oil from any joints.

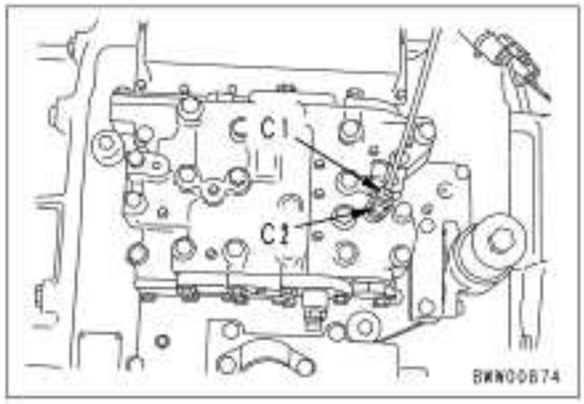
**1. Transmission main relief valve pressure**

1) Remove plug (P0) (PT 1/8), and install nipple **C2** and hydraulic tester **C1** (5.9 MPa {60 kg/cm²}).
2) Start the engine and measure the pressure at 2000 rpm.

**2. Measuring pilot reducing pressure**

1) Remove plug (P5) (PT 1/8), and install nipple **C2** and hydraulic tester **C1** (2.5 MPa {25 kg/cm²}).
2) Run the engine at engine full and put the directional lever in neutral, and measure the pressure when the speed control lever is operated.




**3. Measuring modulating pressure**

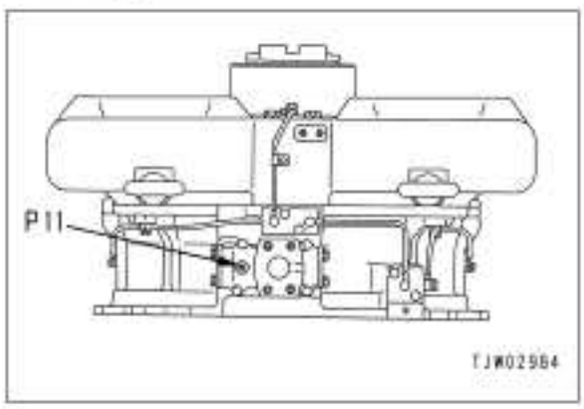
1) Remove plug (P2) (PT 1/8), and install nipple **C2** and hydraulic tester **C1** (5.9 MPa {60 kg/cm²}).
2) Run the engine at engine full and put the directional lever in neutral, and measure the pressure when the speed control lever is operated.
   ★ Measure pressure except F3 and R3.

**4. Measuring torque converter inlet pressure**

1) Remove plug (P10) (PT 1/8), and install nipple **C2** and hydraulic tester **C1** (2.5 MPa {25 kg/cm²}).
2) Start the engine and measure the pressure at engine full.

**5. Measuring torque converter outlet pressure**

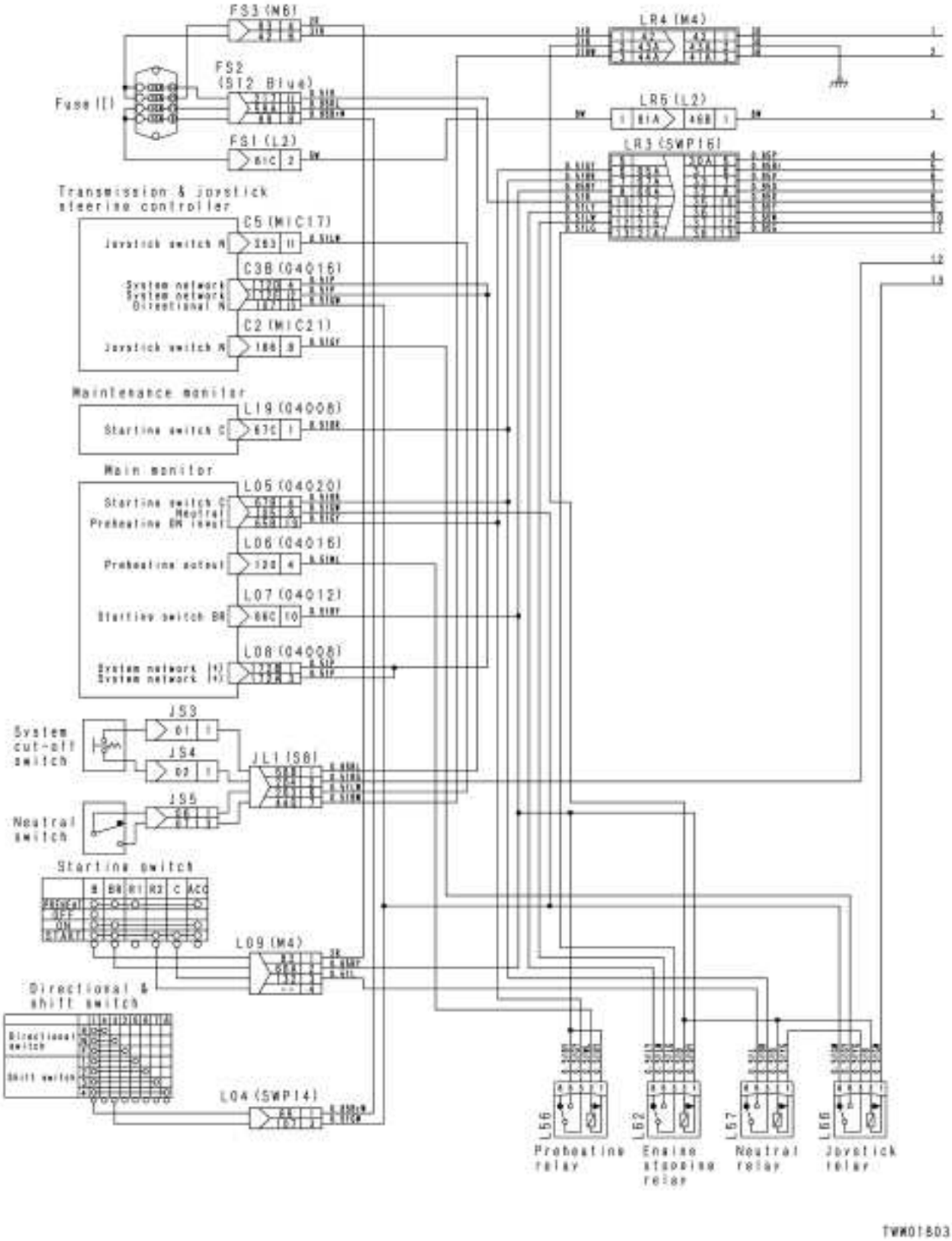
1) Remove plug (P11) (PT 1/8), and install nipple **C2** and hydraulic tester **C1** (2.5 MPa {25 kg/cm²}).
2) Start the engine and measure the pressure at engine full.






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# ELECTRICAL CIRCUIT DIAGRAM FOR POWER SUPPLY, ENGINE STARTING, ENGINE STOPPING AND PREHEATING

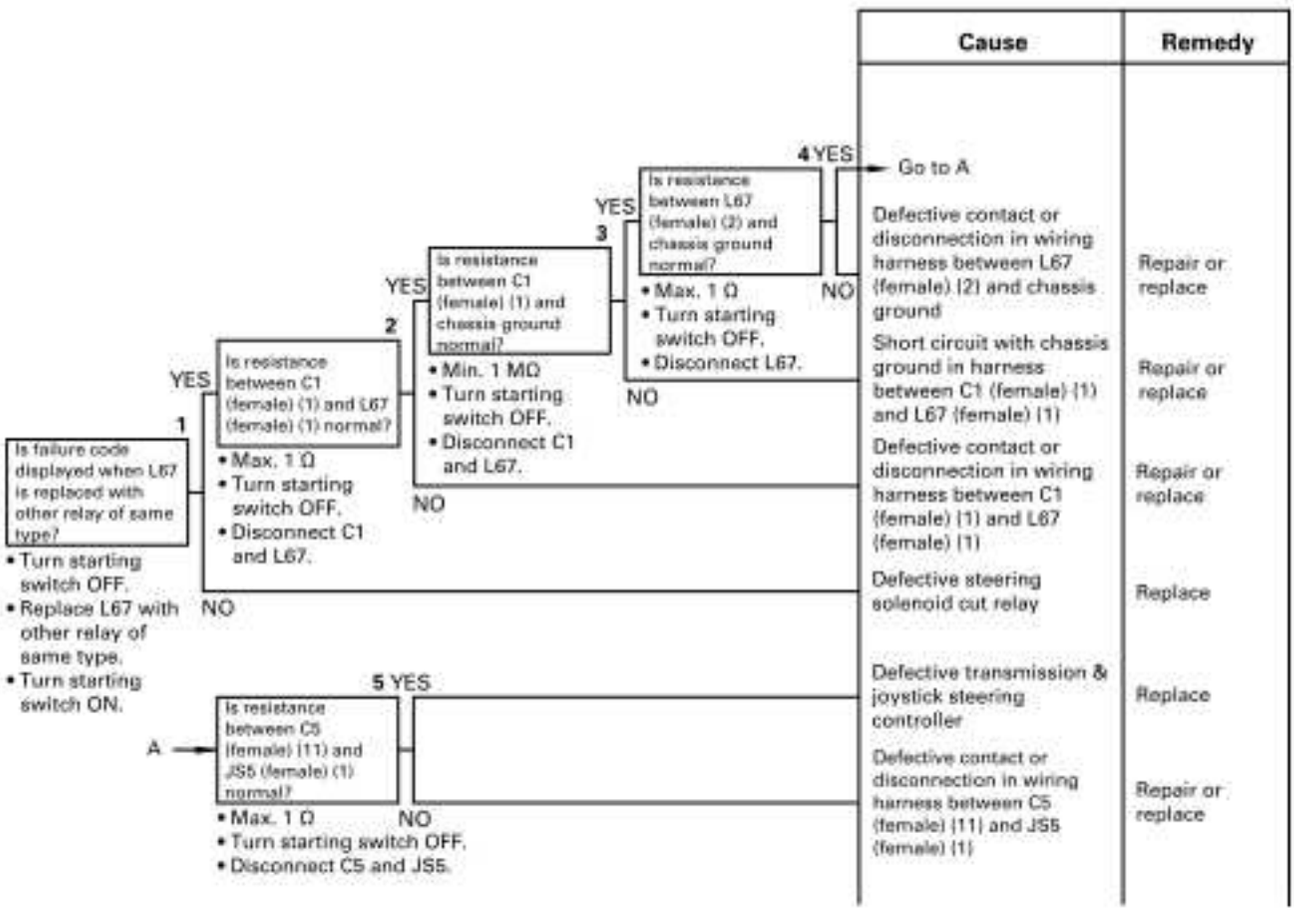





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## J-6 Failure code [61] (Short circuit, disconnection in steering solenoid cut relay output) is displayed

★ **This troubleshooting is carried out when there is still an abnormality, so when disconnecting the connector and inserting the T-adapter, or when removing the T-adapter and returning the connector to its original position, if the failure code is no longer displayed on the monitor display, the problem has been removed.**
★ Before carrying out troubleshooting, check that all the related connectors are properly inserted.
★ Always connect any disconnected connectors before going on to the next step.
★ When the joystick steering lever is not being used, leave it at the neutral position and turn the joystick steering selector switch ON.

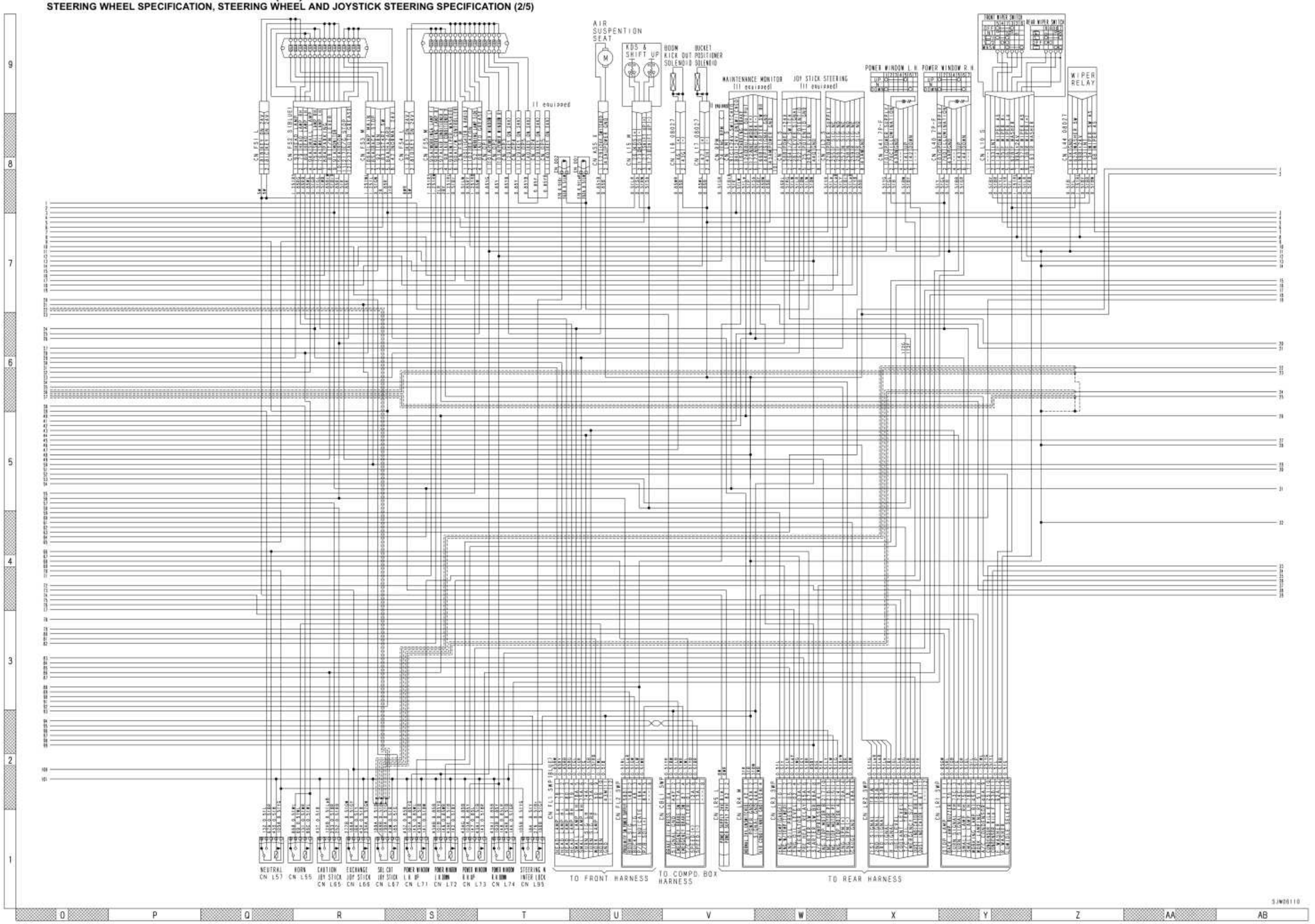





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## ELECTRICAL CIRCUIT DIAGRAM (2/7)

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




SJW06110



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