PART NO. TTPTC50-EN-00

HITACHI

Reliable solutions

Technical Manual
Troubleshooting

ZW

150-6
Wheel Loader

Service Manual consists of the following separate Part No.

Technical Manual (Operational Principle)	: Vol. No.TOPTC50-EN
Technical Manual (Troubleshooting)	: Vol. No.TTPTC50-EN
Workshop Manual	: Vol. No.WPTC50-EN

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SECTION 4

OPERATIONAL PERFORMANCE TEST

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MC Fault Code 111422

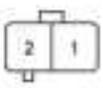
Preparation

- Check the wiring connections first.

Fault Code	Trouble	Procedure	Inspection Method	Evaluation	Cause
111422-2	Ride Control (Bottom) P/S Valve Abnormal FB	1	Measure resistance between solenoid valve #1 and #2.	0/∞ Ω (Specification: 22±0.4 Ω)	YES: Faulty solenoid valve (SZ)
					NO: Go to Procedure No. 2
		2	Measure voltage between solenoid valve harness end #1 and the body.	0 V	YES: Open circuit in wire harness #1
					NO: Go to Procedure No. 3
		3	Monitor Ride Control (Bottom) P/S FB.	0 mA	YES: Open circuit in wire harness #2
					NO: Short circuit in wire harness between #1 and #2
111422-3	Ride Control (Bottom) P/S Valve FB High Current	1	Measure resistance between solenoid valve #1 and #2.	0 Ω (Specification: 22±0.4 Ω)	YES: Faulty solenoid valve
					NO: Short circuit in wire harness between #1 and #2
111422-4	Ride Control (Bottom) P/S Valve FB Low Current	1	Measure resistance between solenoid valve #1 and #2.	∞ Ω (Specification: 22±0.4 Ω)	YES: Faulty solenoid valve
					NO: Go to Procedure No. 2
		2	Measure voltage between solenoid valve harness end #1 and the body.	0 V	YES: Open circuit in wire harness #1
					NO: Open circuit in wire harness #2

Connector (Wire harness end)

- Solenoid Valve Connector



TNED-05-05-020

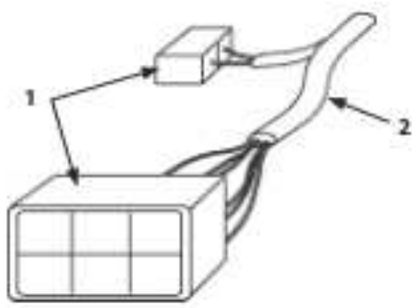
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Troubleshooting B (Machine Diagnosis by Using Trouble Symptom) Procedure

Refer to troubleshooting B procedures for diagnosis by using trouble symptom when no fault codes are displayed.

- Troubleshooting Procedure
  - This chapter describes the procedures for troubleshooting based on trouble symptom.
  - Perform diagnosis by using MPDr. or the service menu of monitor first.
  - In case any fault code has not been displayed by diagnosis, perform the inspection according to the procedures when diagnosing.
  - When the fault code is displayed, refer to the troubleshooting A group and diagnose.
  - On the front section pages of this group, there are the tables indicating the relationship between machine problem symptoms and related parts that may cause such problem if failed. Start the troubleshooting with more probable causes selected by referring to these tables.

NOTE: All connector images in this section are viewed from the open end side of wire harness end.



T6L4-05-03-001

1- Wire Harness End Connector 2- Wire Harness

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Steering System Troubleshooting

S-1 Steering operation power is weak.

Main Relief Pressure	Specification (MPa)	Remark
Steering relief operation	$19.6^{+1.9}_{0}$	

Preparation

- If operating speeds are extremely slow, pump control may be faulty.

Procedure	Inspection Method	Condition	Evaluation	Cause
1	Monitor Pump Delivery Pressure	Steering relief operation	The measured value is out of the specification.	YES: Faulty steering relief valve (readjust)
				NO: Find out cause of trouble by tracing other trouble symptoms

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