PART NO. TTNHE-EN-00

HITACHI

Reliable solutions

Technical Manual
Troubleshooting

ZW

370-5B
Wheel Loader

Service Manual consists of the following separate Part No.

Technical Manual (Operational Principle)	: Vol. No.TONHE-EN
Technical Manual (Troubleshooting)	: Vol. No.TTNHE-EN
Workshop Manual	: Vol. No.WNHE-EN
Engine Manual	: Vol. No.ENHE-EN

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SECTION 4

OPERATIONAL PERFORMANCE TEST

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Fault Code	Trouble or MP Dr. Message	Cause	Remedy
114010-2	(Information Controller) Engine Controller Communication Error	Faulty monitor controller Faulty CAN1 harness	Check the CAN1 harness. Replace the monitor controller.
114011-2	(Information Controller) Main Controller Communication Error 1	Faulty monitor controller Faulty CAN1 harness	Check the CAN1 harness. Replace the monitor controller.
114012-2	(Information Controller) Main Controller Communication Error 2	Faulty monitor controller Faulty CAN2 harness	Check the CAN2 harness. Replace the monitor controller.
114013-2	(Information Controller) Monitor Controller Communication Error 1	Faulty monitor controller	Replace the monitor controller.
114014-2	(Information Controller) Monitor Controller Communication Error 2	Faulty monitor controller	Replace the monitor controller.
114015-2	(Information Controller) Column Controller Communication Error	Faulty monitor controller Faulty CAN2 harness	Check the CAN2 harness. Check/replace the monitor controller.
114018-2	(Information Controller) Sub-Controller Communication Error 1	Faulty monitor controller Faulty CAN1 harness	Check the CAN1 harness. Replace the monitor controller.
114019-2	(Information Controller) Sub-Controller Communication Error 2	Faulty monitor controller Faulty CAN2 harness	Check the CAN2 harness. Replace the monitor controller.

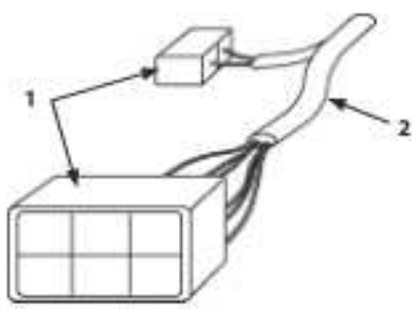
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Troubleshooting B (Machine Diagnosis by Using Troubleshooting Symptom) Procedure

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

- Diagnosis Procedure
  - The diagnosis procedures for the displayed fault codes are explained in this group.
  - Perform diagnosis by using MPDr. or the service menu of monitor first.
  - In case any fault code has not been displayed by diagnosis, perform 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 trouble symptoms and related parts which may cause such trouble if failed. Start the troubleshooting with more probable causes selected by referring to these tables.

NOTE: Harness end connector viewed from the open end side by the all connectors image shown in this section.



T6L4-05-03-001

1- Harness End Connector 2- Harness

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B-3 Service brake function lowers.

Wear amount of service brake	Specification mm mm (in)	Allowable Limit mm (in)
Brake Disc	6.2 (0.244)	5.3 (0.209)
Brake Ring	11.9 (0.469)	10.4 (0.409)
Brake Ring	6.5 (0.256)	6.0 (0.236)
Brake Ring	6.9 (0.272)	6.4 (0.252)

Preparation

- Check the wiring connections first.

Procedure	Inspection Method	Condition	Evaluation	Cause
1	Monitor Service Brake Primary Pressure	-	The measured values are out of normal range (Normal range: 6.9 ~ 11.8 MPa (1000 ~ 1711 psi))	Faulty brake charge valve
2	Monitor Service Brake Secondary Pressure	Brake pedal: Fully depressed	The measured values are not within the normal values (Normal value: 3.7 ~ 4.3 MPa (537 ~ 624 psi))	Faulty brake valve
3	Measure Service Brake Accumulator Pressure	Refer to page T4-5-20.	The measured values are not within the normal values (Normal value: 11.8 ± 0.5 MPa (1711 ± 73 psi))	Faulty brake accumulator
4	Check the wear amount of service brake	Refer to page T4-4-6.	-	The wear amount of brake disc is beyond the allowable limit

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