PART NO. TT4FK-E-00

HITACHI

Technical Manual
Troubleshooting

ZW
100-G
120-G
Wheel Loader

Service Manual consists of the following separate Part No.

Technical Manual (Operational Principle)	: Vol. No.TO4FK-E
Technical Manual (Troubleshooting)	: Vol. No.TT4FK-E
Workshop Manual	: Vol. No.W4FK-E

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SENSOR ACTIVATING RANGE

1. Checking Method
   - Hydraulic Oil Temperature: 50 ± 5 °C (122±9 °F)
   - Unless specified:

Accelerator Pedal	Forward / Reverse Lever	Parking Brake Switch
Fully Depressing	N Position	ON

- Monitor each sensor by using Dr. ZX.

2. Sensor Activating Range

Item	Operation	Specification
Parking Brake Pressure Sensor	Parking Brake Switch : ON	0 to 0.3 MPa (0 to 0.3 kgf/cm², 0 to 44 psi)
	Parking Brake Switch : OFF	3.4 to 4.2 MPa (35 to 43 kgf/cm², 493 to 609 psi)
Front Attachment Pressure Sensor	Front Attachment Control Lever : Neutral	1.0 to 2.5 MPa (10 to 25 kgf/cm², 145 to 363 psi)
	Front Attachment Control Lever : Relieved	20.1 to 21.8 MPa (205 to 222 kgf/cm², 2915 to 3162 psi)
HST Pressure Sensor	Forward / Reverse Lever : N Position	2.2 to 2.8 MPa (22 to 28 kgf/cm²,319 to 406 psi)
	Forward / Reverse Lever : HST Pressure Relieved Forward Position or Reverse Position	39.8 to 43.6 MPa (406 to 444 kgf/cm², 5773 to 6324 psi)

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TROUBLESHOOTING A PROCEDURE

Refer to troubleshooting A in case any fault codes are displayed after diagnosing by using Dr. ZX or the service mode of the monitor unit.

- How to Read Troubleshooting Flow Charts



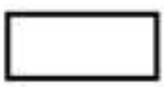
After completing the checking and/or measuring procedures in box (1), select YES (OK) or NO (NOT OK) and proceed to box (2) or (3).



Instructions, reference, and/or inspection methods and/or measurements are occasionally described under the box. If incorrectly checked or measured, not only will troubleshooting be unsuccessful but also damage to the components may result.

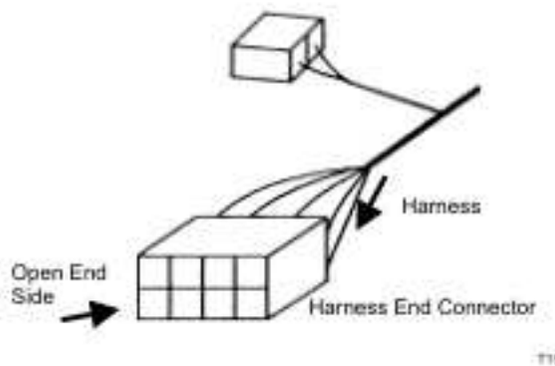


Use Dr. ZX for descriptions in the double-line box.



Causes of machine problems are stated in the thick-line box. Scanning quickly through the thick-line boxes allows you to estimate the possible causes before actually following the flow chart.

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



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- Monitor Unit

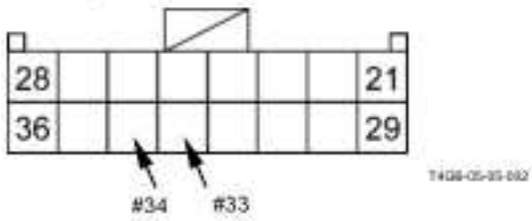
  Between CAN Circuit (High Side) and Power Circuit

  Check for continuity between terminal #33 of harness end of connector monitor-2B and terminal #1 of harness end of connector monitor-1A.

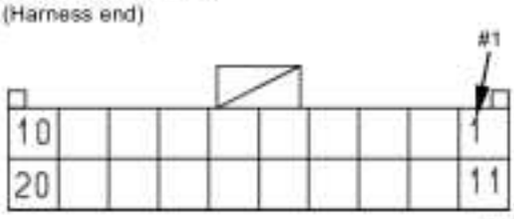
  Between CAN Circuit (Low Side) and Power Circuit

  Check for continuity between terminal #34 of harness end of connector monitor-2B and terminal #1 of harness end of connector monitor-1A.

Monitor Unit
Connector Monitor-2B
(Harness end)



Monitor Unit
Connector Monitor-1A
(Harness end)



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