PART NO. TTDDW90-EN-00

HITACHI

Reliable solutions

Technical Manual
Troubleshooting

ZX
300-5A
300LC-5A
300LCH-5A

Hydraulic Excavator

Service Manual consists of the following separate Part No.

Technical Manual (Operational Principle)	: Vol. No.TODDW90-EN
Technical Manual (Troubleshooting)	: Vol. No.TTDDW90-EN
Workshop Manual	: Vol. No.WDDW90-EN
Engine Manual	: Vol. No.EDDK-EN

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SECTION 4

OPERATIONAL PERFORMANCE TEST

CONTENTS

Group 1 Introduction
Operational Performance Tests T4-1-1
Preparation for Performance Tests T4-1-2

Group 2 Standard
Operational Performance Standard Table T4-2-1
Main Pump P-Q Diagram (P1, P2) T4-2-9
Sensor Activating Range T4-2-11
MPDr. Monitor Indicating Values T4-2-12

Group 3 Engine Test
Engine Speed T4-3-1
Lubricant Consumption T4-3-4

Group 4 Machine Performance Test
Travel Speed T4-4-1
Track Revolution Speed T4-4-2
Mistrack Check T4-4-3
Travel Parking Leakage T4-4-4
Swing Speed T4-4-5
Swing Function Drift Check T4-4-6
Swing Motor Leakage T4-4-8
Maximum Swingable Slant Angle T4-4-10
Swing Bearing Play T4-4-12
Hydraulic Cylinder Cycle Time T4-4-14
Dig Function Drift Check T4-4-16
Control Lever Operating Force T4-4-19
Control Lever Stroke T4-4-20
Combined Operation of Boom Raise and Swing Function Check T4-4-21
Combined Operation of Boom Raise and Arm Roll-In Function Check T4-4-22
Clearance of Front Attachment Connecting Part T4-4-23

Group 5 Component Test
Primary Pilot Pressure T4-5-1
Secondary Pilot Pressure T4-5-3
3-Spool Solenoid Valve Set Pressure T4-5-4
Main Pump Delivery Pressure T4-5-6
Main Relief Set Pressure T4-5-8
Relief Pressure (when relieving swing) T4-5-12
Overload Relief Valve Set Pressure T4-5-14
Main Pump Flow Rate Measurement T4-5-16
Swing Motor Drainage T4-5-24
Travel Motor Drainage T4-5-26

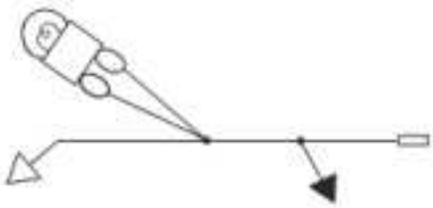
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Test Wire Harness

Parts Number 4283594 (ST 7126)

Install a test wire harness between connectors. Check the circuit condition depending on whether the test wire harness lamp lights or extinguishes during operation.

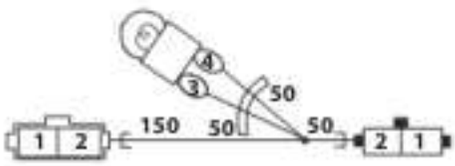
- Parts Number 4283594 (ST 7126)
Use in order to check a single-line (open circuit and/or voltage).
  - During Operation: Light is ON.



T107-07-05-012

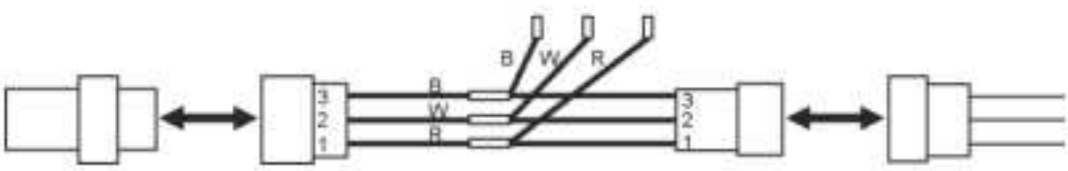
Parts Number (ST 7226)

- Parts Number (ST 7226)
Use in order to check the solenoid valve unit circuits.
  - When the corresponding control lever or switch is operated: Light is ON.



T107-07-06-015

Connect a test wire harness to the wire harness end connector of pressure sensor. Check the state of pressure sensor circuit.
- ST 6701 for high-pressure sensor
- ST 6703 for low-pressure sensor



TDAA-05-06-003

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List of Frequency Distribution Data

Item	Details
Pump Load	Frequency distribution of average pump delivery pressure of pumps 1 and 2
Average Pump Delivery Pressure in Digging Operation	Frequency distribution of average delivery pressure from pumps during digging operation
Average Pump Delivery Pressure in Travel Operation	Frequency distribution of average delivery pressure from pumps during travel operation
Radiator Coolant Temperature (79 °C or less)	Total hours when coolant temperature is less than 80 °C during a day.
Radiator Coolant Temperature (80 to 93 °C)	Total hours when coolant temperature is 80 °C or more and less than 94 °C during a day.
Radiator Coolant Temperature (94 to 104 °C)	Total hours when coolant temperature is 94 °C or more and less than 105 °C during a day.
Radiator Coolant Temperature (105 °C or more)	Total hours when coolant temperature is 105 °C or more during a day.
Hydraulic Oil Temperature (49 °C or less)	Total hours when hydraulic oil temperature is less than 50 °C during a day.
Hydraulic Oil Temperature (50 to 89 °C)	Total hours when hydraulic oil temperature is 50 °C or more and less than 90 °C during a day.
Hydraulic Oil Temperature (90 to 99 °C)	Total hours when hydraulic oil temperature is 90 °C or more and less than 100 °C during a day.
Hydraulic Oil Temperature (100 °C or more)	Total hours when hydraulic oil temperature is 100 °C or more during a day.

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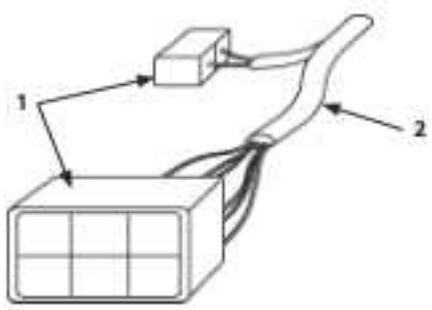
Troubleshooting A (Base Machine Diagnosis By Using Fault Codes) Procedure

Refer to troubleshooting A procedure in case any fault codes are displayed after diagnosing by using MPDr. or the service menu of the monitor.

- Diagnosis Procedure
  - The diagnosis procedures for the displayed fault codes are explained in this group.
  - In case more than one fault code are displayed at the same time, MC may be faulty or the power/ground of the sensor system may be faulty.
  - When the MC fault code is displayed with other fault code, replace MC.
  - When fault code 11003-3 (Abnormal Sensor Voltage) is displayed with other fault code, diagnose for fault code 11003-3 first.
  - In case more than one fault code other than those described above are displayed at the same time, diagnose for each fault code.
  - It may be required that the machine is operated or the test harness is connected at inspection. Check the items of preparation and perform inspection according to the procedures when diagnosing.

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

NOTE: The engine controller (ECM) judges that the engine is faulty. After repairing the engine, perform Fault Code Clear of the setting for the engine. Then, delete the fault code of engine controller (ECM) by diagnosing. (Refer to TROUBLESHOOTING / Monitor.)



T6L4-05-03-001

1- Wire Harness End Connector 2- Wire Harness

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