PART NO. TTDEB-EN-00

HITACHI

Reliable solutions

Technical Manual
Troubleshooting

ZX
75US-5A
85US-5A
Hydraulic Excavator

Service Manual consists of the following separate Part No.

Technical Manual (Operational Principle)	: Vol. No.TODEB-EN
Technical Manual (Troubleshooting)	: Vol. No.TTDEB-EN
Workshop Manual	: Vol. No.WDEB-EN
Engine Manual	: Vol. No.ETADB-EN, EWADB-EN

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SECTION 4

OPERATIONAL PERFORMANCE TEST

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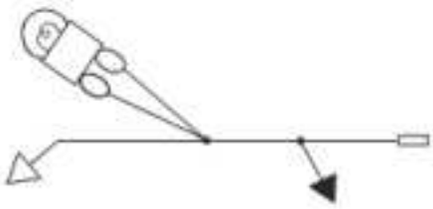
Test Harness

Parts Number 4283594 (ST 7126)

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

- Parts Number 4283594 (ST 7126)

Use in order to check a single-line (discontinuity and/or voltage).



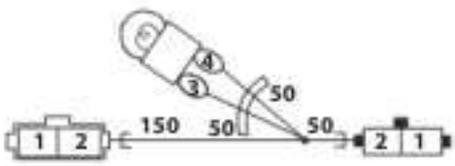
T107-07-05-012

- During Operation: Light is ON.

Parts Number (ST 7226)

- Parts Number (ST 7226)

Use in order to check the solenoid valve unit circuits.

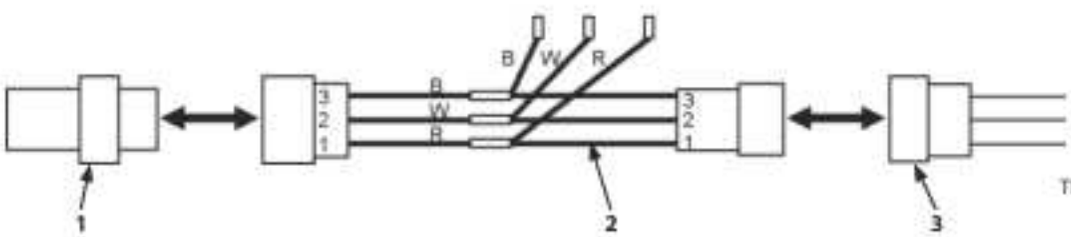


T107-07-06-015

- When the corresponding control lever or switch is operated: Light is ON.

Connect a test harness to the 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

1- Sensor 2- Test Harness 3- Harness End Connector

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Solenoid Valve Control Failure

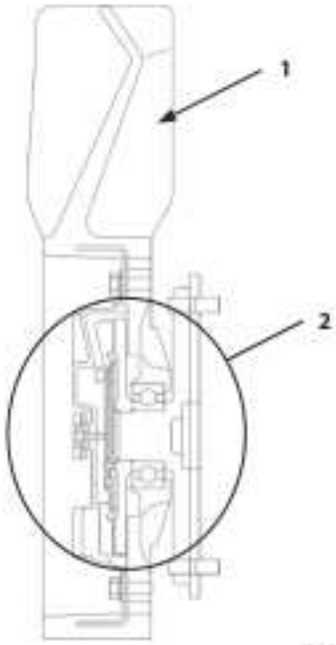
Fault Code	Trouble	Cause	Symptoms in Machine Operation When Trouble Occurs.	Remedy
11812-2	OPT Electric Lever 1 Center Signal Fault	When OPT Electric Lever 1, 2 solenoid valve output is lower than 0.5 MPa, OPT Electric Lever 1 monitoring pressure is higher than 1.2 MPa.	All solenoid valves stop output due to pilot cut-off.	Check the harness.
11813-2	OPT Electric Lever 1 Abnormal Operation	When OPT Electric Lever 1, 2 solenoid valve output is higher than 2.2 MPa, OPT Electric Lever 1 monitoring pressure is lower than 1.0 MPa.	OPT Electric Lever is operated with the 40 % reduced pressure.	Check the harness.
11814-2	OPT Electric Lever 2 Center Signal Fault	When OPT Electric Lever 3, 4 solenoid valve output is lower than 0.5 MPa, OPT Electric Lever 2 monitoring pressure is higher than 1.2 MPa.	All solenoid valves stop output due to pilot cut-off.	Check the harness.
11815-2	OPT Electric Lever 2 Abnormal Operation	When OPT Electric Lever 3, 4 solenoid valve output is higher than 2.2 MPa, OPT Electric Lever 2 monitoring pressure is lower than 1.0 MPa.	OPT Electric Lever is operated with the 40 % reduced pressure.	Check the harness.

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E-9 Engine overheats.

Related Fault Code: None

- The machine is equipped with the engine fan clutch. Troubleshooting of the engine fan clutch is explained here. As for troubleshooting of the engine, refer to Engine Manual.
- Refer to COMPONENT OPERATION / Others (Upperstructure) / Engine Fan Clutch.
- Previously clean the radiator and the fan clutch (particularly, the center of the fan) by air blowing.



T1CF-03-06-006

1- Fan 2- Fan Clutch Part

Procedure	Inspection Method	Condition	Evaluation	Cause
1	Inspect the fan belt	-	There is abnormality	Faulty fan belt
2	Inspect the radiator sub-tank cap	-	There is abnormality	Faulty radiator sub-tank cap
3	Inspect the water pump	-	There is abnormality	Faulty water pump
4	Inspect the cylinder head or cylinder sealing cup	-	There is abnormality	Faulty sealing cup
5	Inspect the thermostat	-	There is abnormality	Faulty thermostat
6	Inspect the cooling system	-	There is abnormality	Clogging with scale or contaminant
7	Inspect the engine fan clutch	-	There is abnormality	Faulty engine fan clutch
8	-	-	The check mentioned above is normal	Find out cause of trouble by tracing other trouble symptoms

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