PART NO. TTDFX50-EN-00

HITACHI

Reliable solutions

Technical Manual
Troubleshooting

ZH
210-6
210LC-6
Hybrid Excavator

Service Manual consists of the following separate Part No.

Technical Manual (Operational Principle)	: Vol. No.TODFX50-EN
Technical Manual (Troubleshooting)	: Vol. No.TTDFX50-EN
Workshop Manual	: Vol. No.WDFX50-EN
Engine Manual	: Vol. No.EDFX50-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) T4-2-10
Main Pump P-Q Diagram (P3) T4-2-11
Sensor Activating Range T4-2-13
Monitor Indicating Values T4-2-14

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
5-Spool Solenoid Valve Set Pressure T4-5-4
3-Spool Solenoid Valve Set Pressure T4-5-5
2-Spool Solenoid Valve (for Swing Relief Control) Set Pressure T4-5-6
Main Pump Delivery Pressure T4-5-8
Main Relief Set Pressure T4-5-9
Relief pressure (when relieving swing) T4-5-13
RELIEF PRESSURE (Relief operation of Travel) T4-5-14
Overload Relief Valve Set Pressure T4-5-16
Main Pump Flow Rate Measurement T4-5-18
Swing Motor Drainage T4-5-28
Travel Motor Drainage T4-5-30

Group 6 Adjustment
Pump Learning T4-6-1
No-Load-Max Differential Pressure Measuring Method T4-6-2

Group 7 Hybrid Component Performance Test
Relief Pressure (When Relieving Swing) T4-7-1

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SECTION 5

TROUBLESHOOTING

CONTENTS

Group 1 Diagnosing Procedure

Introduction T5-1-1
Diagnosis Procedure T5-1-2
Electrical System Inspection T5-1-5
Precautions for Inspection and Maintenance T5-1-6
Instructions for Disconnecting Connectors T5-1-8
Fuse Inspection T5-1-10
Fusible Link Inspection T5-1-13
Battery Voltage Check T5-1-14
Check the alternator. T5-1-15
Continuity check T5-1-16
Voltage and Current Measurement T5-1-18
Check by False Signal T5-1-26
Test Wire Harness T5-1-27
Hybrid Component Inspection T5-1-29
Precautions for Inspection and Maintenance T5-1-30
Voltage Detection T5-1-34
Appearance Check T5-1-35
Ground check T5-1-36
Removal and installation of lithium-ion battery disconnect switch T5-1-37
How to Connect/Disconnect of Power Connector T5-1-41
How to Disconnect Control Connector T5-1-43
How to Use Inspection Equipment T5-1-44

Group 2 Monitor

Outline T5-2-1
Operating Procedures of Service Menu T5-2-2
Setting Menu T5-2-43
Inspection of Engine Oil Level, Coolant Level, Hour Meter, and Fuel Gauge T5-2-48
Fuel Gauge, Coolant Temperature Gauge T5-2-49

Group 3 e-Service

Outline T5-3-1
List of Operation Data T5-3-2
Communication System T5-3-4

Group 4 Component Layout

Main Component T5-4-1
Electrical System (Overview) T5-4-5
Electrical System (Rear Tray) T5-4-6
Electrical System (Switch Panel) T5-4-7
Components Related with Air Cleaner T5-4-8
Components Related with Battery T5-4-9
Engine T5-4-10
Lithium-ion Battery Unit T5-4-11
Muffler Filter T5-4-12
Pump Device T5-4-13
Components Related with Pump Device T5-4-14
Control Valve T5-4-15
Signal Control Valve T5-4-16
Swing Device T5-4-17
Travel Device T5-4-17
5-Spool Solenoid Valve Unit T5-4-18
Swing Control Solenoid Valve Unit/3-Spool Solenoid Valve Unit T5-4-18
Layout of Attachment Spec. Parts T5-4-19
Components Related with Breaker T5-4-21
Components in Control Valve T5-4-24
Pilot Port T5-4-44

Group 5 Troubleshooting A

Troubleshooting A (Base Machine Diagnosis By Using Fault Codes) Procedure T5-5-1
Abnormality Control List T5-5-3
MC Fault Code List T5-5-5
ECU Fault Code List T5-5-23
Monitor Controller (Monitor) Fault Code List T5-5-26
Monitor Controller (Information) Fault Code List T5-5-27
Air Conditioner Controller Fault Code List T5-5-30
Communication Terminal Fault Code List T5-5-31
MC Fault Codes 11000 to 11002 ..... T5-5-32
MC Fault Code 11003 ..... T5-5-34
MC Fault Codes 11006, 11007, 11009, 11486 ..... T5-5-36
Monitor Controller (Monitor) Fault Codes 13002, 13003, 13005 ..... T5-5-36
CAN0 Harness Check T5-5-37
MC Fault Codes 11008, 11010 ..... T5-5-40
Monitor Controller (Monitor) Fault Codes 13004, 13006, 13007 ..... T5-5-40
CAN1 Harness Check T5-5-41
MC Fault Code 11100 ..... T5-5-44
MC Fault Code 11101 ..... T5-5-45
MC Fault Codes 11200 to 11202 ..... T5-5-46
MC Fault Code 11203 ..... T5-5-47
MC Fault Codes 11206 to 11208 ..... T5-5-48
MC Fault Codes 11302 to 11303 ..... T5-5-49
MC Fault Codes 11304, 11307, 11325 ..... T5-5-50
MC Fault Codes 11995, 11997, 11998 ..... T5-5-51
MC Fault Code 11400 ..... T5-5-52

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MC Fault Code 11401 ..... T5-5-53
MC Fault Code 11402 ..... T5-5-54
MC Fault Code 11403 ..... T5-5-55
MC Fault Code 11406 ..... T5-5-56
MC Fault Code 11407 ..... T5-5-57
MC Fault Code 11410 ..... T5-5-58
MC Fault Code 11411 ..... T5-5-59
MC Fault Code 11427 ..... T5-5-60
MC Fault Code 11428 ..... T5-5-61
MC Fault Codes 11434, 11435 ..... T5-5-62
MC Fault Code 11436 ..... T5-5-63
MC Fault Codes 11458, 11459 ..... T5-5-64
MC Fault Codes 11802, 11470 ..... T5-5-65
MC Fault Codes 11471 to 11472 ..... T5-5-66
MC Fault Codes 11473 to 11474 ..... T5-5-67
MC Fault Code 11475 ..... T5-5-68
MC Fault Code 11477 ..... T5-5-69
MC Fault Code 11478 ..... T5-5-70
MC Fault Code 11479 ..... T5-5-71
MC Fault Code 11480 ..... T5-5-72
MC Fault Code 11481 ..... T5-5-73
MC Fault Code 11483 ..... T5-5-74
MC Fault Code 11484 ..... T5-5-76
MC Fault Code 11485 ..... T5-5-78
MC Fault Code 11901 ..... T5-5-79
Monitor Controller (Information) Fault Codes 13304, 13310 ..... T5-5-80
Monitor Controller (Information) Fault Code 13311 ..... T5-5-81
Monitor Controller (Information) Fault Codes 20100 to 20114 ..... T5-5-82
Monitor Controller (Information) Fault Codes 20109 to 20149 ..... T5-5-83
Air Conditioner Controller Fault Codes 11 to 22 ..... T5-5-84
Air Conditioner Controller Fault Codes 43 to 92 ..... T5-5-85

Group 6 Troubleshooting B

Troubleshooting B (Machine Diagnosis by Using Troubleshooting Symptom) Procedure T5-6-1
Relationship between Machine Trouble symptoms and Related Parts T5-6-3
Correlation between Trouble Symptoms and Part Failures T5-6-29
Engine System Troubleshooting T5-6-46
All Actuator System Troubleshooting T5-6-54
Front Attachment System Troubleshooting T5-6-62
Swing System Troubleshooting T5-6-77
Travel System Troubleshooting T5-6-78
Other System Troubleshooting T5-6-84
Exchange Inspection T5-6-89
How to Lower Boom When Emergency and When Engine Stops without Hose Rupture Valve T5-6-94
How to Lower Boom When Emergency and When Engine Stops with Hose Rupture Valve T5-6-95
Attachment Circuit Pressure Release Procedure T5-6-96

Group 7 Air Conditioner

Outline T5-7-1
Functions of Main Parts T5-7-4
Troubleshooting T5-7-9
Air Conditioner Controller Fault Code List T5-7-10
Air Conditioner Controller Fault Codes 11 to 22 ..... T5-7-11
Air Conditioner Controller Fault Codes 43 to 92 ..... T5-7-12
Work after Replacing Components T5-7-34
Refill Compressor Oil T5-7-35
Charge Air Conditioner with Refrigerant T5-7-36
Hose and Pipe Tightening Torque T5-7-44

Group 8 Hybrid Troubleshooting A

Troubleshooting A (Base Machine Diagnosis By Using Fault Codes) Procedure T5-8-1
Abnormality Control List T5-8-3
HCU Fault Code List T5-8-5
HCU Fault Codes 19500 to 19503 ..... T5-8-14
HCU Fault Code 19503-3 ..... T5-8-15
HCU Fault Codes 19504, 19505 ..... T5-8-17
HCU Fault Codes 19506, 19507 ..... T5-8-18
HCU Fault Code 19511 ..... T5-8-19
HCU Fault Code 19512 ..... T5-8-20
HCU Fault Code 19513 ..... T5-8-21
Check the HCU harness. T5-8-22
HCU Fault Codes 19550, 19552 to 19555, 19561 ..... T5-8-23
CAN0 Harness Check T5-8-24
INV-CAN Harness Check T5-8-27
HCU Fault Codes 19556 to 19560, and 19563 ..... T5-8-30
Check the wire harness between HCU and the lithium-ion battery unit T5-8-34
HCU Fault Code 19564 ..... T5-8-35
Check the wire harness between HCU or ECU and the engine stop switch. T5-8-36
HCU Fault Code 19565 ..... T5-8-37
HCU Fault Code 19568 ..... T5-8-38
Wire Harness Check between HCU and Water Cooling Pump T5-8-39
HCU Fault Codes 19569, 19570 ..... T5-8-40
Check the wire harness between PCU-A or PCU-S and the PCU-A cut relay or the PCU-S cut relay. T5-8-41
Check the wire harness between the pilot shut-off switch and the PCU-S cut relay T5-8-42
HCU Fault Code 19571 ..... T5-8-43
HCU Fault Code 15011 ..... T5-8-44
HCU Fault Codes 15016, 15017, 15019 ..... T5-8-45
HCU Fault Codes 15028, 15029 ..... T5-8-46
HCU Fault Code 19580 ..... T5-8-47
HCU Fault Code 19581 ..... T5-8-48
HCU Fault Code 19582 ..... T5-8-49
HCU Fault Code 19582 ..... T5-8-50
HCU Fault Codes 19586, 19587 ..... T5-8-51
HCU Fault Code 19584 ..... T5-8-52

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How to Lower Boom When Emergency and When Engine Stops with Hose Rupture Valve

CAUTION: Prevent personal injury. Confirm that no one is under the front attachment before starting the procedure below.

If the engine stalls and cannot be restarted, lower the boom to the ground referring to the following procedure.

CAUTION: Do not loosen screw (2) more than one and half turns.

1. Loosen locknut (1) of hose rupture valve (3). Loosen screw (2) 1/2 turn.

NOTE: The boom lowering speed can be somewhat adjusted by loosening screw (2) more.

2. After the boom is lowered, tighten screw (2) and tighten locknut (1) to the specifications below.

   Locknut (1)

   : 17 mm

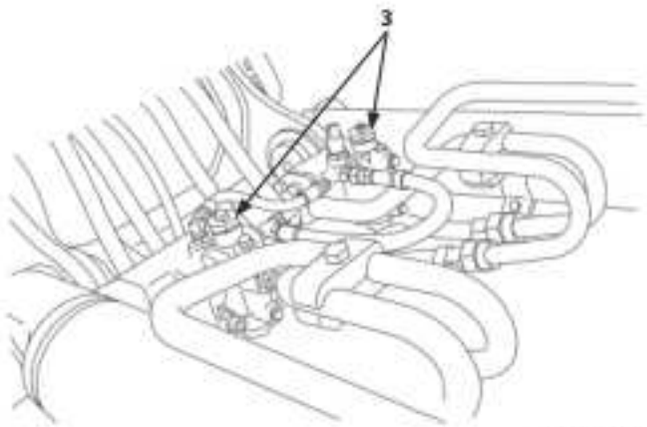
   : 30±2 N·m

   Screw (2)

   : 4 mm

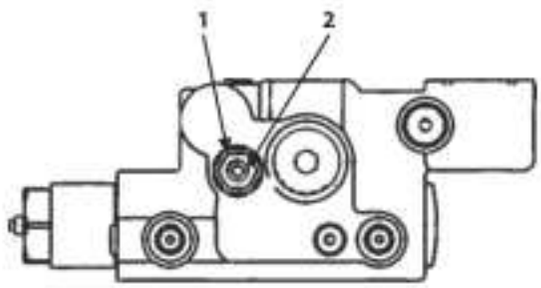
   : 7.0 N·m

NOTE: Excessive leakage may result if the screw and the locknut are tightened insufficiently. Retighten the screw and the locknut to specifications.



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3- Hose Rupture Valve



TDAA-03-07-011

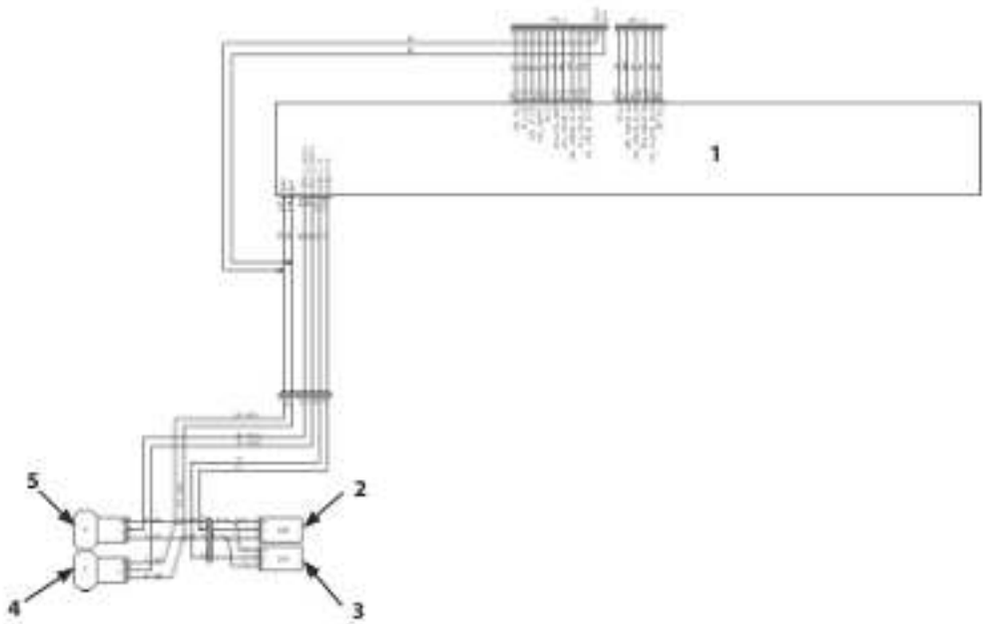
1- Locknut 2- Screw

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HCU Fault Code 19503-3

IMPORTANT: When fault code 19503-3 (Sensor power failure) is displayed with other fault code, diagnose fault code 19503-3 first.

Fault Code	Trouble	Procedure	Inspection Method	Evaluation	Cause
19503-3	Sensor power failure	1	Disconnect the connectors from the swing pilot pressure sensor and the swing main pressure sensor, and retry by using MPDr.	Fault code 19503-3 is not displayed.	YES: Faulty sensor
					NO: Go to Procedure No. 2
		2	Check short circuits in the wire harness between sensor harness ends #1 and #3.	0 Ω	YES: Short circuits in wire harnesses #1 and #3.
					NO: Faulty HCU



TDFX-05-08-001

1- HCU
2- Swing Pilot Pressure Sensor (Right)
3- Swing Pilot Pressure Sensor (Left)
4- Swing Main Pressure Sensor (Right)
5- Swing Main Pressure Sensor (Left)

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Check Item	Wire Harness	Swing Electric Motor Side	Resistance Value (Ω)
Discontinuity check for wire harness between swing electric motor (resolver) and PCU-S (checking continuity with ground circuit)	RF-Body	#5-Body	-
	RFG-Body	#4-Body	-
	SN-Body	#10-Body	-
	SNG-Body	#9-Body	-
	CS-Body	#7-Body	-
	CSG-Body	#8-Body	-
Measure the resistance value of the swing electric motor (resolver).	RF-RFG	#1-#5	5-15
	SN-SNG	#3-#7	13-27
	CS-CSG	#2-#6	14-28
Discontinuity check for swing electric motor (resolver)	RF-SN	#1-#3	-
	RF-SNG	#1-#7	-
	RF-CS	#1-#2	-
	RF-CSG	#1-#6	-
	RFG-SN	#5-#3	-
	RFG-SNG	#5-#7	-
	RFG-CS	#5-#2	-
	RFG-CSG	#5-#6	-
	SN-CS	#3-#2	-
	SN-CSG	#3-#6	-
	SNG-CS	#7-#2	-
	SNG-CSG	#7-#6	-
Discontinuity check for swing electric motor (resolver) and motor body	RF-Body	#1-Body	-
	RFG-Body	#5-Body	-
	SN-Body	#3-Body	-
	SNG-Body	#7-Body	-
	CS-Body	#2-Body	-
	CSG-Body	#6-Body	-

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