PART NO. TTDBF-EN-00

HITACHI

Reliable solutions

Technical Manual

Troubleshooting

ZX
180LC-5B
180LCN-5B

Hydraulic Excavator

Service Manual consists of the following separate Part No.

Technical Manual (Operational Principle)	: Vol. No.TODBF-EN
Technical Manual (Troubleshooting)	: Vol. No.TTDBF-EN
Workshop Manual	: Vol. No.WDBF-EN
Engine Manual	: Vol. No.EDBE-EN

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SECTION 4

OPERATIONAL PERFORMANCE TEST

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Fault Code	Trouble	Cause	Remedy
20100-2	Overheat Alarm	Coolant temperature is high while the engine runs.	Check the harness. Replace the overheat switch.
20101-2	Engine Trouble Alarm	Faulty engine system	Refer to Engine Troubleshooting Manual.
20102-2	Engine Oil Pressure Alarm	Engine oil pressure is reduced.	Check the harness. Replace the engine oil pressure sensor.
20105-2	Hydraulic Oil Filter Restriction Alarm	Clogged hydraulic oil filter. Open circuit in harness.	Check the harness. Replace the hydraulic oil filter restriction switch.
20106-2	Air Cleaner Restriction Alarm	Clogged air cleaner.	Check the harness. Replace the air cleaner restriction switch.
20107-2	Water Separator Alarm	The water separator is full.	Check the harness. Replace the water separator alarm switch.
20109-2	Pilot Control Shut-Off Lever Alarm	Faulty pilot shut-off switch.	Check the harness. Replace the pilot shut-off switch.
20110-2	Fuel Filter Restriction Alarm	Supply pump inlet pressure is reduced.	Check the harness. Replace the fuel filter.
20114-2	Overheat Alarm	Coolant temperature is high within ten seconds after the engine starts.	Check the harness. Replace the overheat switch.
20133-2	Crane Function Alarm	Faulty crane related components.	Check the harness.
20137-2	Muffler Filter Alarm (brinking) (red)	Faulty muffler filter.	Check the harness. Replace the muffler filter differential pressure sensor.
20141-2	Exhaust Temperature Alarm	Exhaust temperature around the muffler is high.	Check the harness. Replace the exhaust temperature sensor.
20142-2	Intake Air Temperature Alarm	Intake air temperature increases.	Check the harness. Replace the intake-air temperature sensor.
20145-2	Boost Temperature Increase Alarm	Boost temperature increases.	Check the harness. Replace the boost temperature sensor.
20146-2	Fuel Temperature Increase Alarm	Fuel temperature increases.	Check the harness. Replace the fuel temperature sensor.
20149-2	EGR Gas Temperature Alarm	EGR gas temperature increases.	Check the harness. Replace the intake manifold temperature sensor.

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Monitor Controller (Information) Fault Codes 20109 to 20149

Fault Code	Trouble	Inspection Method	Evaluation	Cause
20109-2	Pilot Control Shut-Off Lever Alarm	Check of the pilot shut-off switch	Correct	Faulty harness.
			Incorrect	Faulty pilot shut-off switch.
20110-2	Fuel Filter Restriction Alarm	Diagnose on fault codes of ECM.	-	-
20113-2	System Failure Alarm	Check of CAN Harness	-	Faulty CAN harness.
20133-2	Crane Function Alarm			
20137-2	Muffler Filter Alarm (blinking) (red)	Diagnose on fault codes of ECM.	-	-
20141-2	Exhaust Temperature Alarm	Diagnose on fault codes of ECM.	-	-
20142-2	Intake Air Temperature Alarm	Diagnose on fault codes of ECM.	-	-
20145-2	Boost Temperature Alarm	Diagnose on fault codes of ECM.	-	-
20146-2	Fuel Temperature Alarm	Diagnose on fault codes of ECM.	-	-
20149-2	EGR Temperature Alarm	Diagnose on fault codes of ECM.	-	-

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Travel System Troubleshooting

T-1 Both right and left tracks do not rotate or rotate slowly.

Travel Speed (sec/10 m)	Specification	Remark
Fast Speed	6.8±0.6	
Slow Speed	(10.5±1.0)	

Preparation

- Both right and left pilot valves, travel motors, and/or control valve spools are unlikely to be faulty at the same time.
- If both travel systems are not operated, the pilot system, which is applied to both side travel motors, may be faulty. If the primary pilot pressure is lower than specification, the front attachment operating speed becomes slow as well. Refer to A-1.
- If the fast travel mode cannot be selected, refer to T-5.

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Rewrite of Muffler Filter Serial No.

When the muffler filter has been replaced, rewrite the serial No. of muffler filter and upload the data to e-Service.

1. Connect MPDr..
2. Set the key switch to the ON position.
3. Select Functions-Engine/Muffler Filter-Muffler Filter NO. with MPDr..
4. Input the following items of Oxidation Catalyst (DOC) and Filter (CSF).

- ASM
- SUB
- Serial No.

5. After inputting, select Setting.

IMPORTANT: After inputting Muffler Filter Serial No. is completed, upload the data to e-Service.

NOTE: When the input data is uploaded to e-Service, the M-Find product specification and history will be updated.



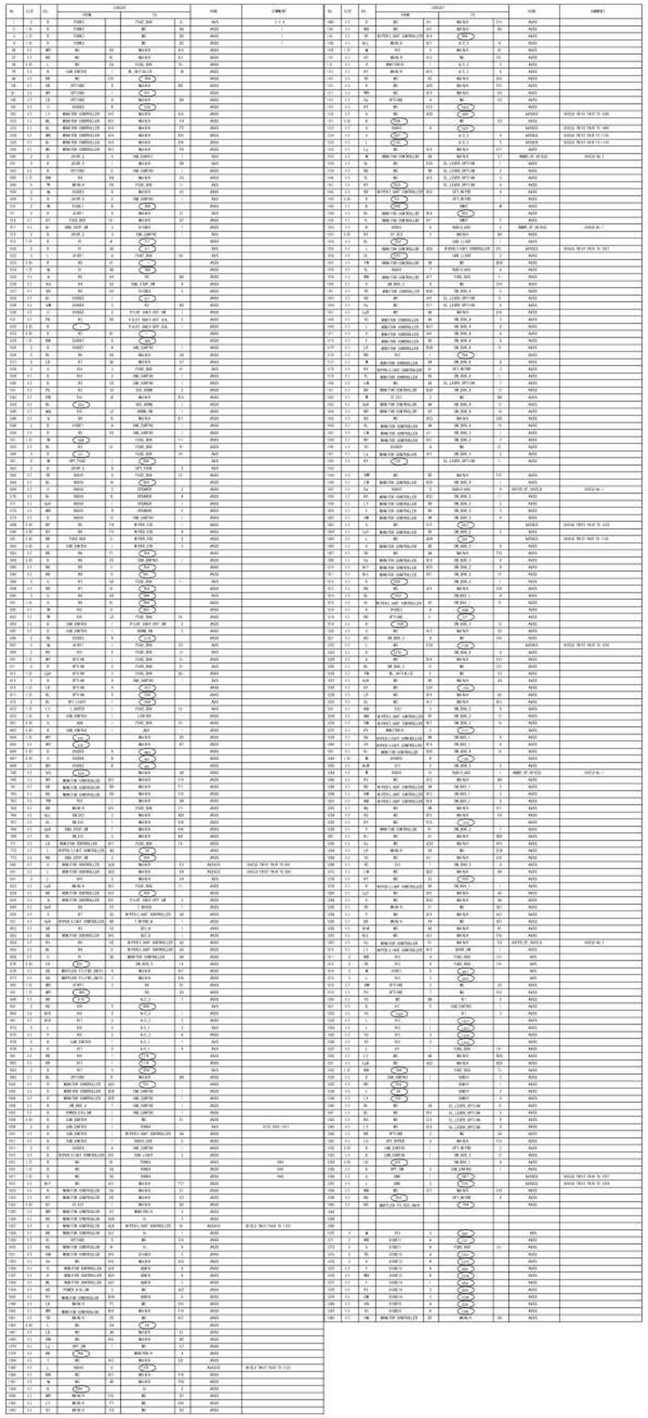
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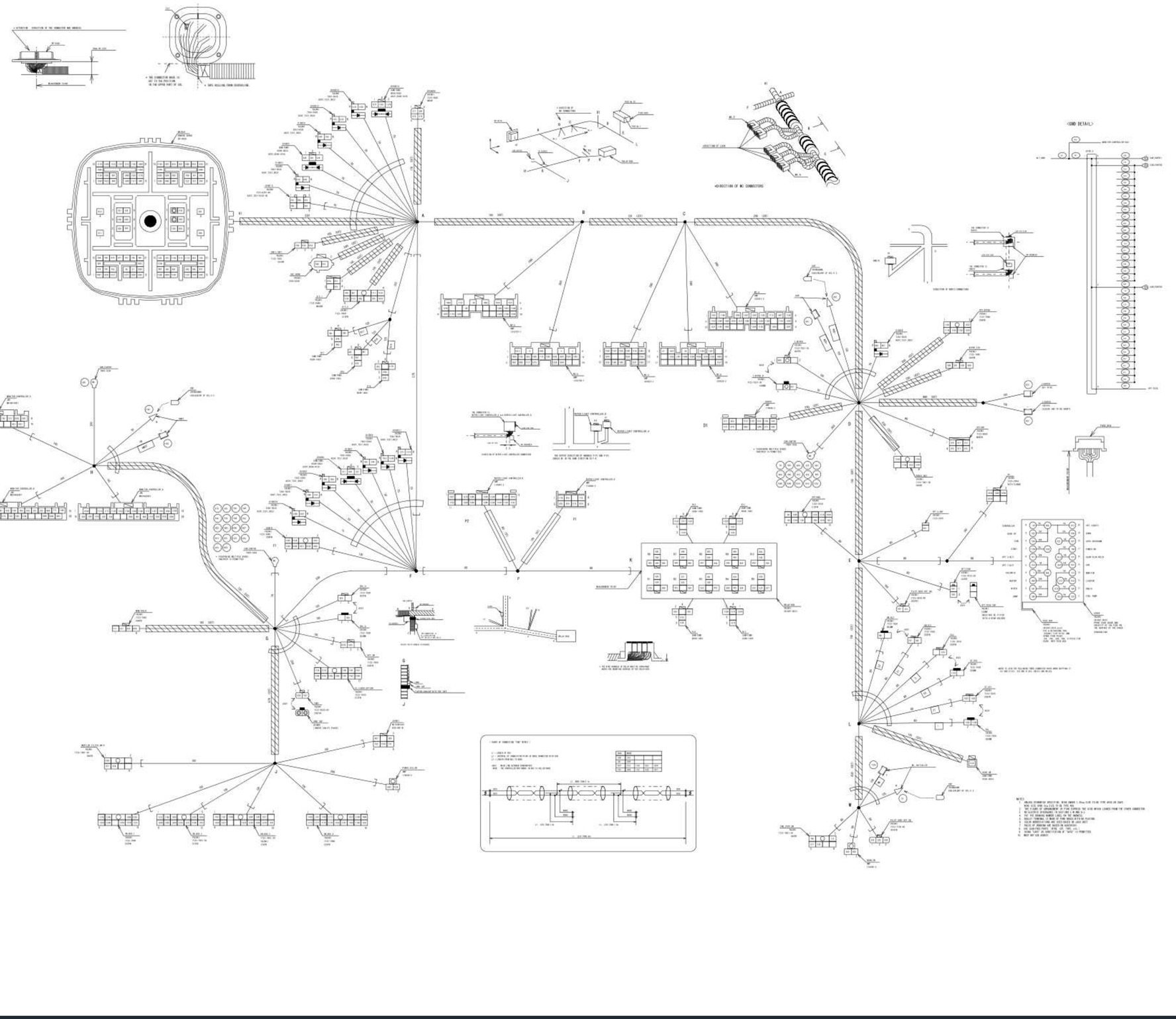
CAB HARNESS

Applicable Machine

Attach to vol. No.	Model
TTDAD-EN-00	ZX130-5B/ 130LCN-5B
TTDBE-EN-00	ZX160LC-5B
TTDBF-EN-00	ZX180LC-5B/ 180LCN-5B

CAUTION: Parts numbers on the drawing are provided only for reference purpose. To order parts on the drawing, be sure to consult the Parts Catalog.





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