PART NO. TTJBG-EN-00

HITACHI

Reliable solutions

Technical Manual
Troubleshooting

ZX
670LC-5A
690LCH-5A
Hydraulic Excavator

Service Manual consists of the following separate Part No.

Technical Manual (Operational Principle)	: Vol. No.TOJBG-EN
Technical Manual (Troubleshooting)	: Vol. No.TTJBG-EN
Workshop Manual	: Vol. No.WJBG-EN
Engine Manual	: Vol. No.ETJBG-EN, EWJBG-EN

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SECTION 4

OPERATIONAL PERFORMANCE TEST

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Communication Terminal Fault Code List

Fault Code	Trouble	Cause	Remedy
14100-2	Communication Terminal: Abnormal EEPROM	The internal memory of satellite communication terminal (optional) is abnormal.	Replace the controller (satellite communication terminal).
14101-2	Communication Terminal: Abnormal IB/OB Queue	The internal memory of satellite communication terminal (optional) is abnormal.	Replace the controller (satellite communication terminal).
14102-2	Communication Terminal: Abnormal Local Loop Back	The results of communication test with the satellite is abnormal.	Check the communication antenna for satellite.
14103-2	Communication Terminal: No Satellite Found	Satellite can not be caught.	Check the communication antenna for satellite.
14104-2	Communication Terminal: Remote Loop Back Error 1	The results of communication test with the satellite and base station are abnormal.	Replace the controller (satellite communication terminal).
14105-2	Communication Terminal: Remote Loop Back Error 2	The results of communication test with the satellite and base station are abnormal.	Replace the controller (satellite communication terminal).
14106-2	Communication Terminal: Transmission/Receiving Data Unmatched	Transmission/receiving data with the satellite is unmatched.	Replace the controller (satellite communication terminal).
14107-2	Communication Terminal: Abnormal GSM Module	Abnormal mobile communication equipment.	Replace the controller (mobile communication terminal).

NOTE: Fault codes 14100-2 to 14106-2 are for satellite communication terminal. Fault code 14107-2 is for mobile communication terminal.

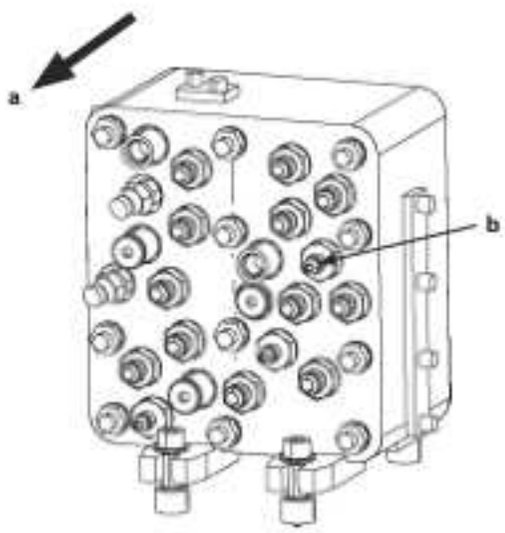
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S-3 Swing speed is slow when performing combined operation of swing and arm roll-in.

Preparation

- In case other trouble symptoms occur, perform troubleshooting of these troubles first.
- Refer to SYSTEM/Hydraulic System /Arm 1 Flow Rate Control Circuit.

Procedure	Inspection Method	Condition	Evaluation	Cause
1	Monitor Swing Pilot Pressure.	Fully swing.	The measured values are out of the specification. (Specification: 3.4-4.0 MPa)	Faulty pilot valve
2	Measure pressure at port SE of signal control Valve.	Fully swing.	The measured values are out of the specification. (Specification: 31.9 MPa)	Faulty arm flow rate control valve control spool in signal control valve
3	Disassemble and inspect the arm 1 flow rate control valve.	-	There is abnormality.	Faulty arm 1 flow rate control valve
4	-	-	The check mentioned above is normal.	Find out cause of trouble by tracing other trouble symptoms.



TJAA-05-07-002

a- Control Valve Side b- Port SE

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Others

- Faulty air vent switch

Fault code is un-displayed.	Disconnection of link	Set the link again.
Fault code 43 (Abnormal air vent damper servo motor)	Faulty wire harness, open circuit, disconnection of connector	Check the wire harness.
	Faulty servo motor	Replace
	Caught foreign matter	Remove foreign matter.

- Faulty fresh / re-circulated air selection

Fault code is un-displayed.	Disconnection of link	Set the link again.
	Faulty wire harness, open circuit, disconnection of connector	Check the wire harness.
	Faulty servo motor	Replace
	Caught foreign matter	Remove foreign matter.

- Ambient temperature is higher or lower than set temperature

Fault code 11 (Open circuit in re-circulated air temperature sensor)	Open circuit in wire harness, disconnection of connector	Check the wire harness.
	Open circuit in air circulation sensor	Replace
Fault code 12 (Short circuit in re-circulated air temperature sensor)	Short circuit in wire harness	Check the wire harness.
	Short circuit in air circulation sensor	Replace
Fault code is un-displayed. (Normal re-circulated air temperature sensor)	Faulty cooling, faulty heating	Check by referring to the items of faulty cooling and faulty heating.

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