PART NO. TTDDK90-EN-00

HITACHI

Reliable solutions

# Technical Manual
## Troubleshooting

# ZX
# 330-5A
# 330LC-5A
# 350H-5A
# 350LCH-5A
# 350K-5A
# 350LCK-5A
# Hydraulic Excavator

Service Manual consists of the following separate Part No.

| | |
|---|---|
| Technical Manual (Operational Principle) | : Vol. No.TODDK90-EN |
| Technical Manual (Troubleshooting) | : Vol. No.TTDDK90-EN |
| Workshop Manual | : Vol. No.WDDK90-EN |
| Engine Manual | : Vol. No.ETDDK-EN, EWDDK-EN |

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# SECTION 4

# OPERATIONAL PERFORMANCE TEST

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## MC Fault Codes 11008, 11010

## Monitor Controller (Monitor) Fault Codes 13004, 13006, 13007

### Preparation

- Check the wiring connections first.
- Check the CAN1 harness between the controllers. (Refer to CAN1 Harness Check on T5-6-54 to 56.)

| Fault Code | Trouble | Inspection Method | Cause |
|---|---|---|---|
| 11008-2 | (MC) IC Communication Error 2 | Continuity check (open circuit) | Open circuit in wire harness |
| | | Discontinuity check (shorted circuit) | Shorted circuit in wire harness |
| 11010-2 | (MC) Monitor Controller Communication Error 2 | Continuity check (open circuit) | Open circuit in wire harness |
| | | Discontinuity check (shorted circuit) | Shorted circuit in wire harness |
| 13004-2 | (Monitor Controller) Main Controller Communication Error 2 | Continuity check (open circuit) | Open circuit in wire harness |
| | | Discontinuity check (shorted circuit) | Shorted circuit in wire harness |
| 13006-2 | (Monitor Controller) ICF Communication Error 2 | Continuity check (open circuit) | Open circuit in wire harness |
| | | Discontinuity check (shorted circuit) | Shorted circuit in wire harness |
| 13007-2 | (Monitor Controller) Body Controller Communication Error | Continuity check (open circuit) | Open circuit in wire harness |
| | | Discontinuity check (shorted circuit) | Shorted circuit in wire harness |



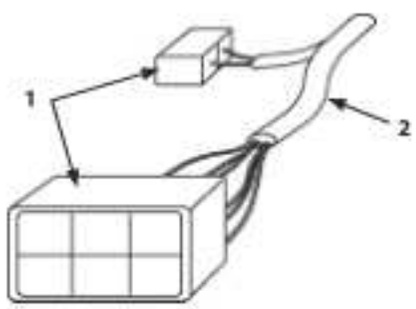
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## Troubleshooting B (Machine Diagnosis by Using Troubleshooting Symptom) Procedure

Refer to troubleshooting B procedures for diagnosis by using trouble symptom when no fault codes are displayed.

- Diagnosis Procedure
  - The diagnosis procedures for the displayed fault codes are explained in this group.
  - Perform diagnosis by using MPDr. or the service menu of monitor first.
  - In case any fault code has not been displayed by diagnosis, perform inspection according to the procedures when diagnosing.
  - When the fault code is displayed, refer to the troubleshooting A group and diagnose.
  - On the front section pages of this group, there are the tables indicating the relationship between machine trouble symptoms and related parts which may cause such trouble if failed. Start the troubleshooting with more probable causes selected by referring to these tables.

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




T6L4-05-03-001

1- Wire Harness End Connector 2- Wire Harness



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## Swing System Troubleshooting

### S-1 Swing is slow or is not operated.

| | Specification | Remark |
|---|---|---|
| Swing Speed (sec/3 rev) | 17.3±1.0 | The bucket should be empty |

**Preparation**

- Check whether the pilot system is faulty or the main circuit is faulty.
- If other functions (front attachment and travel) are operated normally, the pilot pump (primary pilot pressure) is considered to be normal. If the pilot system is faulty, the cause of trouble may exist in the circuit downstream of the pilot valve.
- In case travel (left) is also slow, also refer to A-3.

| Procedure | Inspection Method | Condition | Evaluation | Cause |
|---|---|---|---|---|
| 1 | Monitor Swing Pilot Pressure. | Fully swing | The measured values are not within the specification. (Specification: 3.4-4.0 MPa) | Faulty pilot valve |
| 2 | Monitor Pump 2 Control Pressure. | Fully swing | The measured values are not within the specification. (Specification: 2.9-3.9 MPa) | Stuck pump 2 flow rate control valve in signal control valve |
| 3 | Monitor Front ATT Pilot Pressure. | When relieving arm | The measured values are not within the specification. (Specification: 3.5-5.0 MPa) | Faulty swing parking brake release spool in signal control valve |
| 4 | Disassemble and inspect the parking brake release valve in the swing motor. | - | There is abnormality. | Faulty swing parking brake release valve |
| 5 | Monitor Pump 2 Delivery Pressure. | When relieving swing | The measured values are not within the specification. (Specification: 32.8-35.6 MPa) | Faulty swing relief valve |
| 6 | Measure the swing motor drainage. | With constant speed | The measured values are not within the specification. (Specification: 0.2-0.5 L/min) | Faulty swing motor |
| 7 | - | - | The check mentioned above is normal. | Faulty swing reduction gear |



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