PART NO. TT18L-E-00

HITACHI

Technical Manual

Troubleshooting

EX2500-6

Hydraulic Excavator

Service Manual consists of the following separate Part No.

Technical Manual (Operational Principle)	: Vol. No.TO18L-E
Technical Manual (Troubleshooting)	: Vol. No.TT18L-E
Workshop Manual	: Vol. No.W18L-E

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SECTION 4
OPERATIONAL PERFORMANCE TEST



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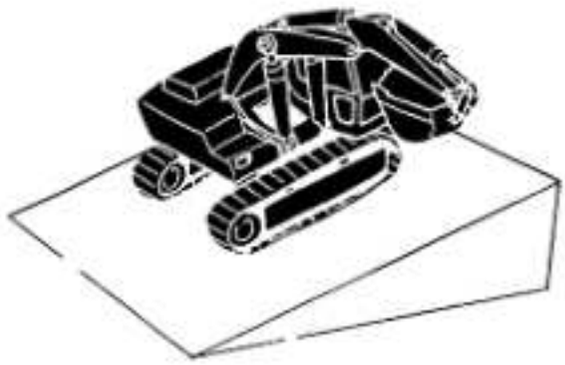
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SWING MOTOR LEAKAGE

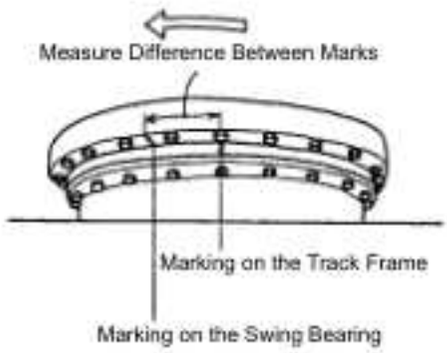
Summary:
Check for upperstructure drift while suspending a load on a slope.



T142-05-03-004

Preparation:
1. Check the lubrication of the swing gear and swing bearing.
2. Load bucket fully. In lieu of loading the bucket, weight (W) of the follwing specification can be used.
   W = 22500 kg (49600 lb)
3. Position the front attachment as described in the following.
   Loading shovel: With the arm cylinder fully extended and the bucket cylinders fully extended, position the arm top pin height flush with the boom foot pin height.
   Backhoe: With the arm cylinders fully retracted and the bucket cylinders fully extended, position the arm top pin height flush with the boom foot pin height.
4. Park the machine on a smooth slope with a gradient of 26.8 % (15°).
5. Swing the upperstructure to position it 90° to the slope. Make aligning marks on the swing bearing periphery and track frame using tape, as illustrated.
6. Maintain the hydraulic oil temperature at 50±5 °C (122±9 °F).

Measurement:
1. Stop the engine. After five minutes, measure the difference between the marks along the swing bearing periphery and the track frame.
2. Perform the measurement in both right and left swing directions.
3. Perform the measurement three times in each direction and calculate the average values.



T105-05-03-010

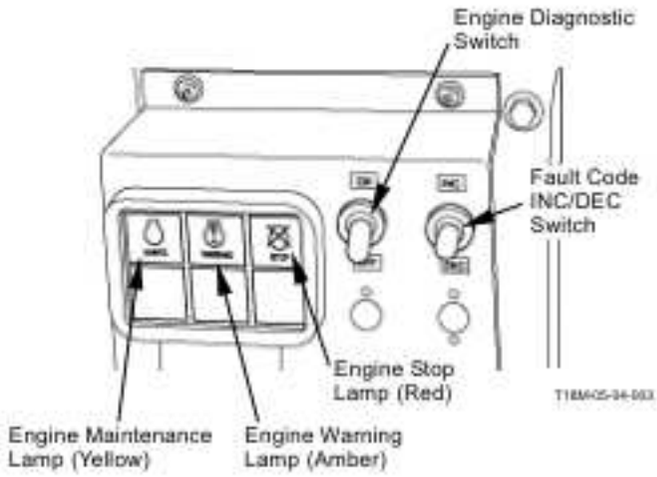
Evaluation:
Refer to T4-2 Operational Performance Standard Table.

Remedy:
Refer to T5-5 Troubleshooting B.

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HOW TO READ FAULT CODES

1. Stop the engine, and turn the key switch ON.
2. In case a fault code exists, the Engine Warning Lamp (Amber) alone is lit, but in case no fault code exists, none of the lamps are lit.
3. Turn the Engine Diagnostic Switch ON.
4. The Engine Warning Lamp (Amber) flickers once, and in a second, the Engine Stop Lamp (Red) indicates the fault code at stake twice consecutively, which is repeated.
5. A Fault code has four digits at the maximum. A numeral is indicated by the number of times of flickering of the Engine Stop Lamp (Red) for each digit, and remains unlit for 1 second between digit change.
6. When the key switch is turned off, indication of the fault code is finished.

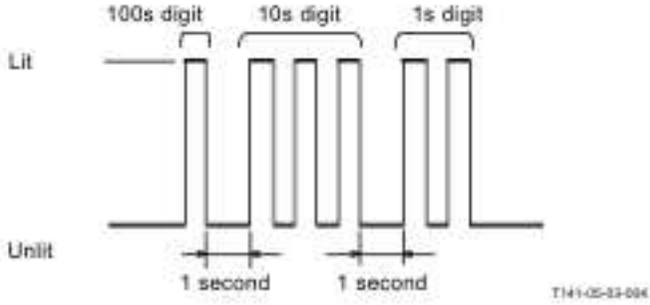


NOTE: In case a plural number of fault codes are in existence, the Engine Warning Lamp (Amber) flickers once each time indication of a fault code is over, and a second later, the Engine Stop Lamp (Red) indicates the next fault code twice, which is repeated.

NOTE: When indication of all the fault codes is over, the Engine Warning Lamp (Amber) flickers once, and a second later, the Engine Stop Lamp (Red) repeats indication of the fault codes from the first one.

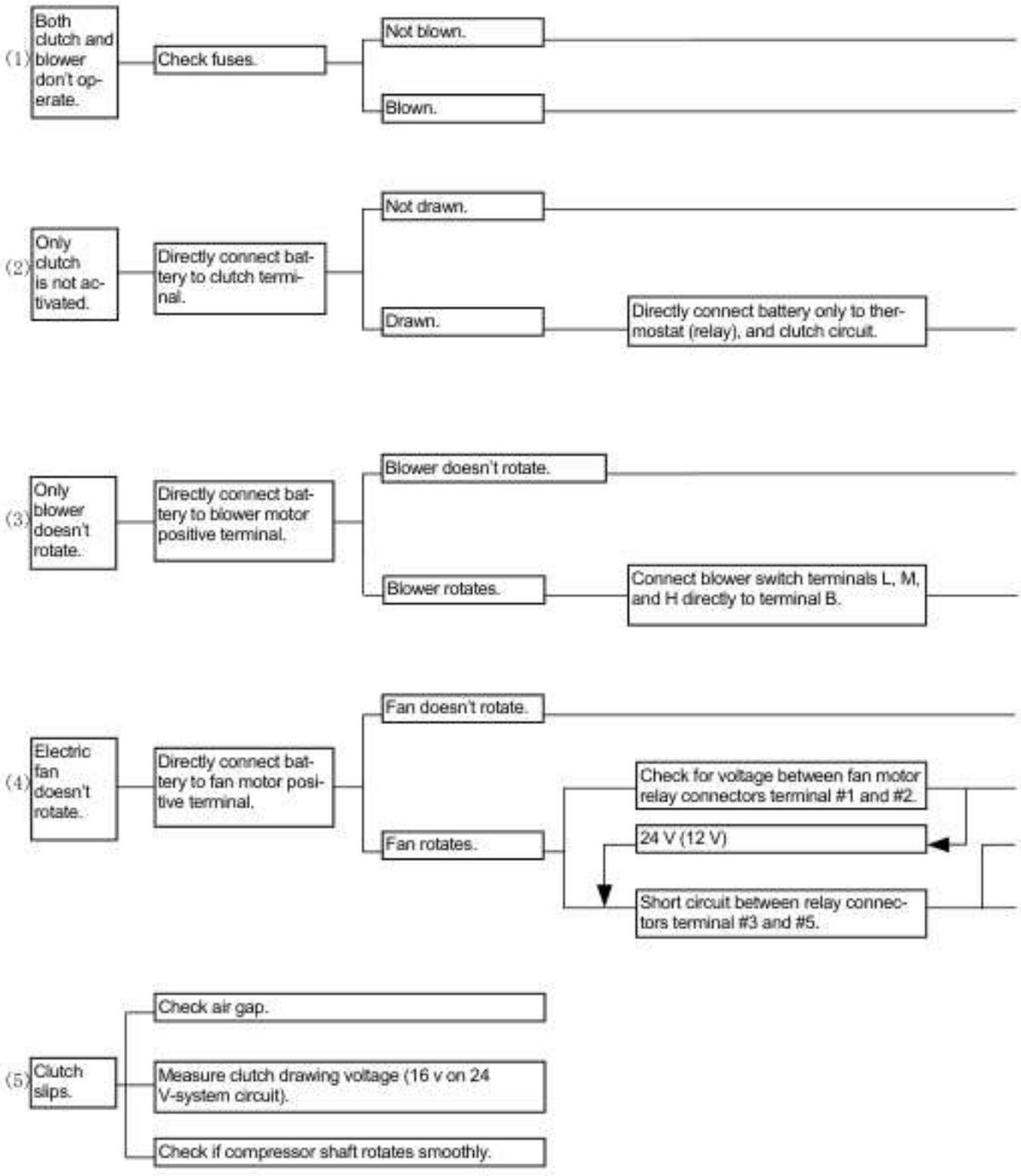
NOTE: IN case the Fault Code INC/DEC Switch is moved toward INC once, indication of the next fault code begins. In case the Fault Code INC/DEC Switch is moved toward DEC once, indication is changed to the previous fault code.

Example: Flickering of Engine Stop Lamp (Red) in case of Fault Code 132



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Electrical Circuit



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