HINO DIESEL ENGINE WORKSHOP MANUAL

J08E-TM



(Shovel)

SMTK-E040

2005.11

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1 GENERAL

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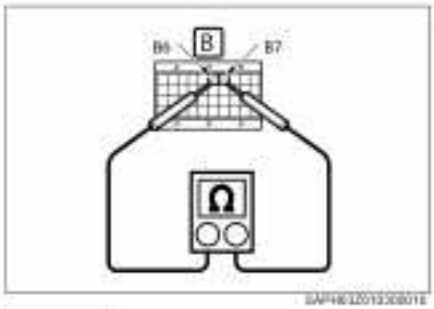
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4. How to read troubleshooting for each diagnosis monitor code

(1) "Diagnosis code table" and "Troubleshooting for each code" are described for each system that gives output of the diagnosis monitor code. When the diagnosis monitor code is known, troubleshooting can be started from the code list.

Failure of main speed sensor (DTC code P0335/diagnosis monitor code 13)

1	Measurement of resistance between terminals



1. Set the starter key to "LOCK" and connect the signal check harness.
2. Remove the ECU side connector of the signal check harness and meausre the resistance between terminal B6 and terminal B7.

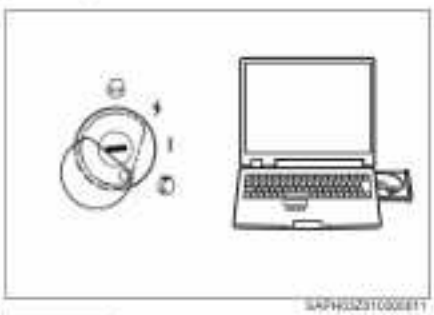
Details of work

Standard value : Approx. 125.5 17 (20 dC)

NG → [3] Go to measurement of resistance between sensor terminals

OK

2	Check of diagnosis code



1. Connect the ECU side connector of the signal check harness. After deleting the past failure, output the diagnosis code again.

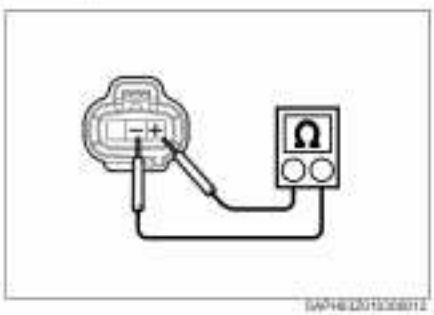
Standard : Normal

NG → Contact failure of ECU connector, ECU failure, short-circuit of harness

OK

Normal

3	Measurement of resistance between terminals



1. Remove the connector of the main engine speed sensor and measure the resistance between No. 1 and No. 2 terminals at the sensor.

Standard value : Approx. 125.5 17 (20 dC)

NG → Failure of main engine speed sensor

Indicates replacement of the main engine revolution sensor.

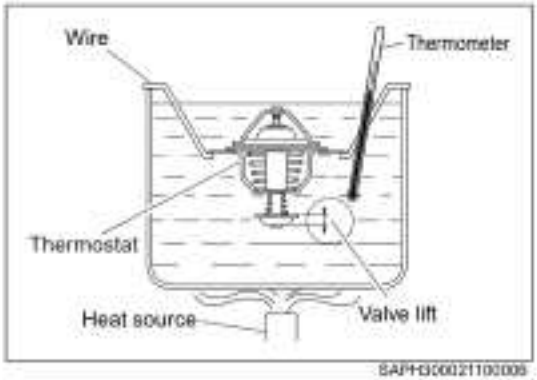
OK

Check the harness of the relevant circuit and repair the faulty area.

Harness disconnection or connector failure

Inspection of thermostat

JP3000021107030001



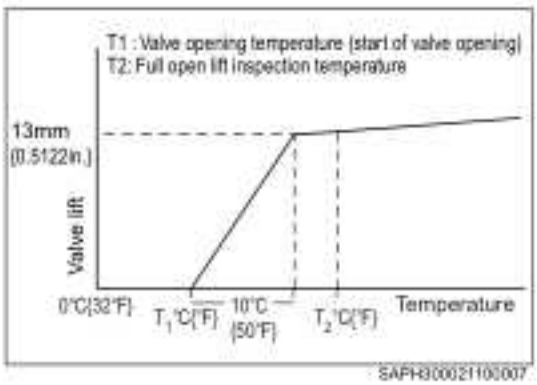
SAPH3000021100006

1. Individual inspection of thermostat

(1) Put the thermostat in water as shown in the figure and heat it.

⚠ CAUTION

- **Support the thermostat in the center to prevent approach to the heat source.**
- **Stir the water well so that water temperature in the container may be uniform.**



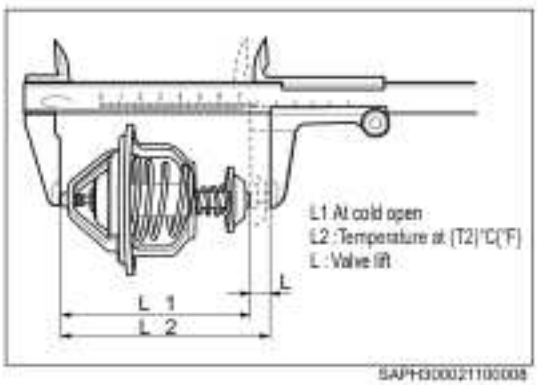
SAPH3000021100007

(2) Measure the temperature (valve opening temperature) that opens the thermostat valve.

Thermostat valve opening temperature standard value : T1(° C{° F})	**74.5 - 76.5 {166.1 - 173.3}**

NOTICE

- **The thermostat valve opening temperature (T1) is stamped on the thermostat seat.**



SAPH3000021100008

(3) Increase the water temperature to 95 ° C{203° F} and measure the lift of the thermostat valve.

Thermostat valve full open lift inspection temperature : T2 (° C{° F})	Valve lift : L (mm{in.})
95{203}	13{0.5118} or more

(4) Put the full open thermostat valve in water at normal temperature. Make sure that the thermostat valve closes completely within 5 minutes.

(5) If faulty item is found with the inspection above, replace the thermostat.

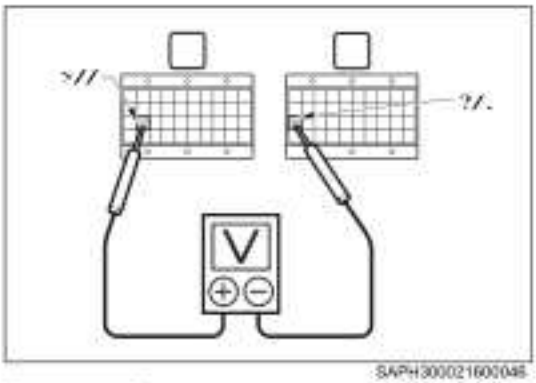
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Accelerator sensor 2 malfunction (DTC code P2127, P2128/diagnosis monitor code 22)

JP0000216060102O

DTC	P2127	Accelerator sensor circuit 2 low voltage
DTC	P2128	Accelerator sensor circuit 2 high voltage

1	Measurement of voltage between terminals



SAPH300021600046

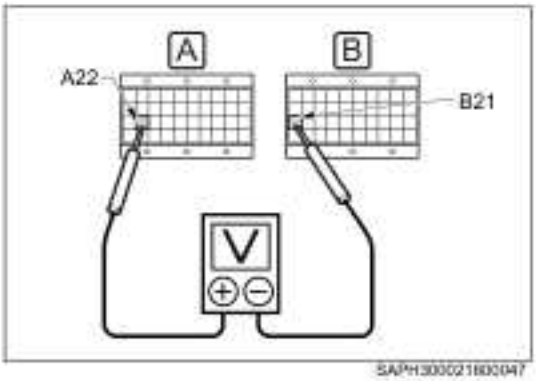
1. Set the starter key to "LOCK" and connect the signal check harness.
2. Set the starter key to "ON" and measure the voltage between terminal A22 and terminal B21 of the signal check harness.

Standard value : 0.7 V or less (idle status)

NG → Accelerator sensor failure

OK

2	Measurement of voltage between terminals



SAPH300021600047

1. While depressing the accelerator pedal, measure the voltage between terminal A22 and terminal B21 of the signal check harness.

Standard value
: Voltage must change in proportion to depression of the accelerator pedal at 1.0 V or more.

NG → Accelerator sensor failure

OK

Harness failure

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