

1A



## DTC P1750-H / P1750-L (C13)

### DTC Detecting Condition and Trouble Area

DTC detecting condition	Trouble area
<b>P1750-H: IAP Sensor #2 Circuit High Voltage</b> The sensor output voltage is higher than the specified value.	<ul style="list-style-type: none"> <li>• Vacuum passage between throttle body and IAP sensor #2</li> <li>• IAP sensor #2</li> <li>• IAP sensor circuit #2</li> <li>• ECM</li> </ul>
<b>P1750-L: IAP Sensor #2 Circuit Low Voltage</b> The sensor output voltage is lower than the specified value.	
<b>C13: IAP Sensor #2 Circuit Malfunction</b> The sensor output voltage is not within 0.50 – 4.85 V.	


### Wiring Diagram

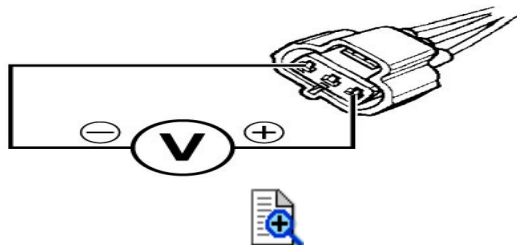
Refer to [FI System Wiring Diagram](#).



1. IAP sensor	2. ECM
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### Troubleshooting

Step	Action	Yes	No
<b>1</b>	<b>IAP sensor power supply circuit check</b> 1) Turn the ignition switch OFF. 2) Disconnect the IAP sensor #2 coupler.  3) Check for proper terminal connection to the IAP sensor #2 coupler. 4) If connections are OK, turn the ignition switch ON. 5) Measure the voltage between the R wire and B/Br wire.	Go to Step 3.	Go to Step 2.

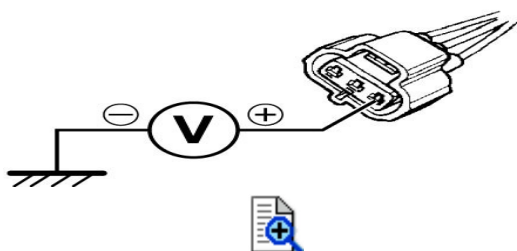


*Is voltage 4.5 – 5.5 V?*

**2**

### IAP sensor ground circuit check

- 1) Measure the voltage between the R wire and ground.

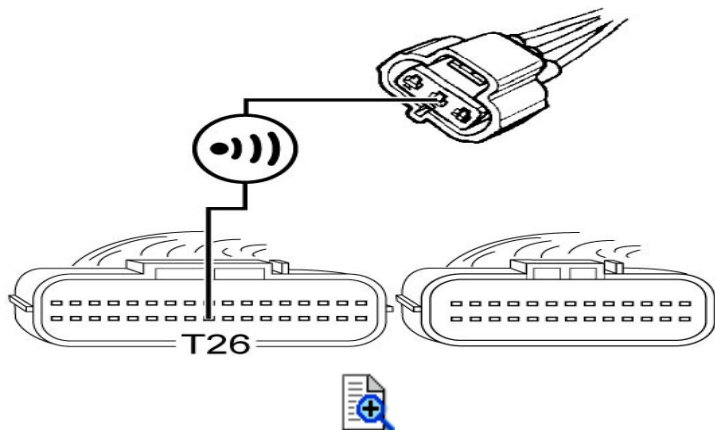


*Is voltage 4.5 – 5.5 V?*

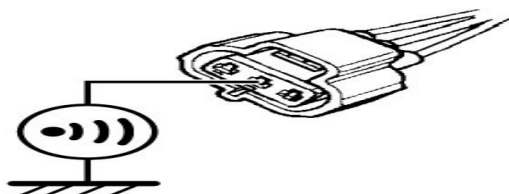
**3**

### IAP sensor signal circuit check

- 1) Turn the ignition switch OFF.
- 2) Disconnect the ECM couplers.
- 3) Check for proper terminal connection to the ECM couplers.
- 4) If connections are OK, check the following points.
  - Resistance
    - G/Y wire: less than 1  $\Omega$



- Between G/Y wire and ground: infinity



Repair or  
replace the  
B/Br wire.

Repair or  
replace the R  
wire.

Go to Step 4.

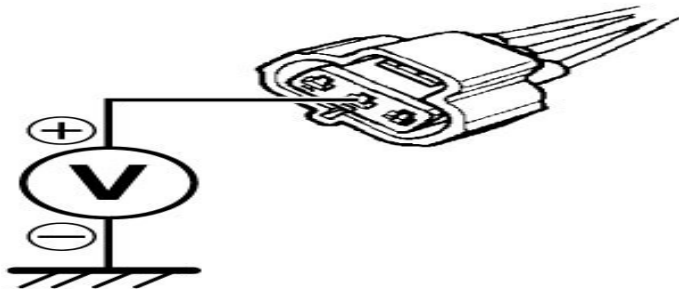
Repair or  
replace the  
G/Y wire.



- G/Y wire terminal and other terminal at IAP sensor coupler: infinity



- Voltage
  - Turn the ignition switch ON.
  - G/Y wire: approx. 0 V




*Is check result OK?*

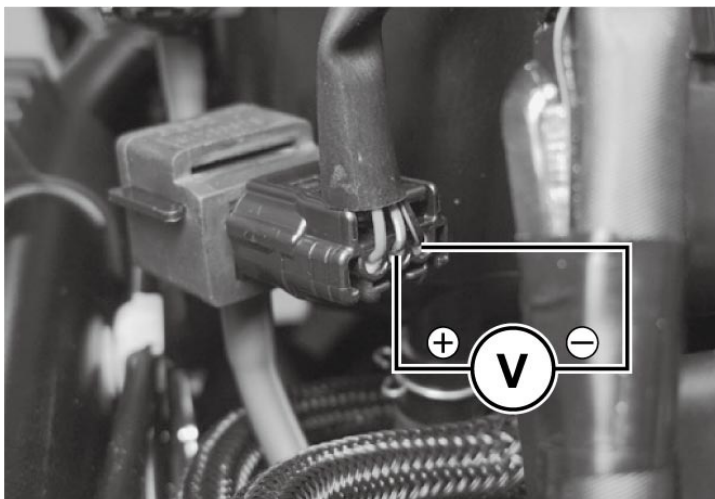
**4**

#### **IAP sensor output voltage at idle speed check**

- 1) Turn the ignition switch OFF.
- 2) Connect the ECM couplers and IAP sensor #2 coupler.
- 3) Run the engine at idle speed (atmospheric pressure: approx. 100 kPa (760 mmHg)) and measure the IAP sensor voltage between the G/Y wire and B/Br wire.

Go to Step 5.

Check the vacuum hoses for crack or damage. If vacuum hoses are OK, replace the IAP sensor #2 with a new one. 



*Is voltage approx. 2.5 V?*

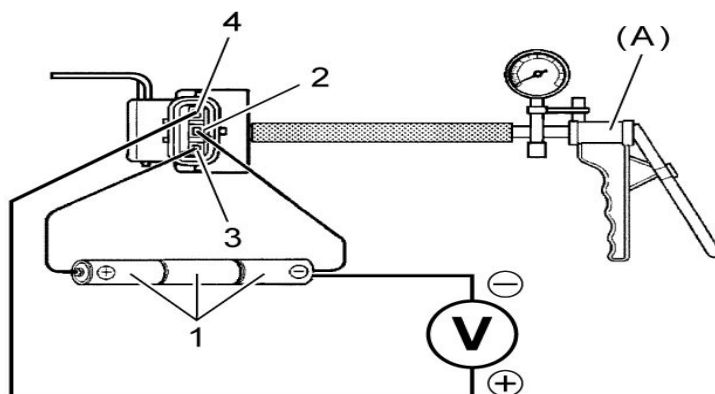
**5**

### IAP sensor output voltage check

- 1) Turn the ignition switch OFF.
- 2) Remove the IAP sensor #2.
- 3) Connect the vacuum pump gauge to the vacuum port of the IAP sensor.
- 4) Arrange 3 new 1.5 V batteries (1) in series (check that total voltage is 4.5 – 5.0 V) and connect (–) terminal to the ground terminal (2) and (+) terminal to the terminal (3).
- 5) Check the voltage between terminal (4) and ground. Also, check if voltage reduces when vacuum is applied using the vacuum pump gauge.

#### Special Tool

(A): 09917-47011



ALTITUDE (Reference)		ATOMOSPHERIC PRESSURE		OUTPUT VOLTAGE
m	ft	kPa	mmHg	
0 – 610	0 – 2000	100 – 94	760 – 707	3.1 – 3.6
611 – 1524	2001 – 5000	94 – 85	707 – 634	2.8 – 3.4
1525 – 2438	5001 – 8000	85 – 76	634 – 567	2.6 – 3.1
2439 – 3048	8001 – 10000	76 – 70	567 – 526	2.4 – 2.9

Replace the ECM with a known good one, and inspect it again.

Replace the IAP sensor #2 with a new one.



***Is check result OK?***