

ENGINE (DIAGNOSTICS)(STI) > Diagnostic Procedure with Diagnostic Trouble Code (DTC)

DTC P0107 MANIFOLD ABSOLUTE PRESSURE/BAROMETRIC PRESSURE SENSOR CIRCUIT LOW




DTC DETECTING CONDITION:

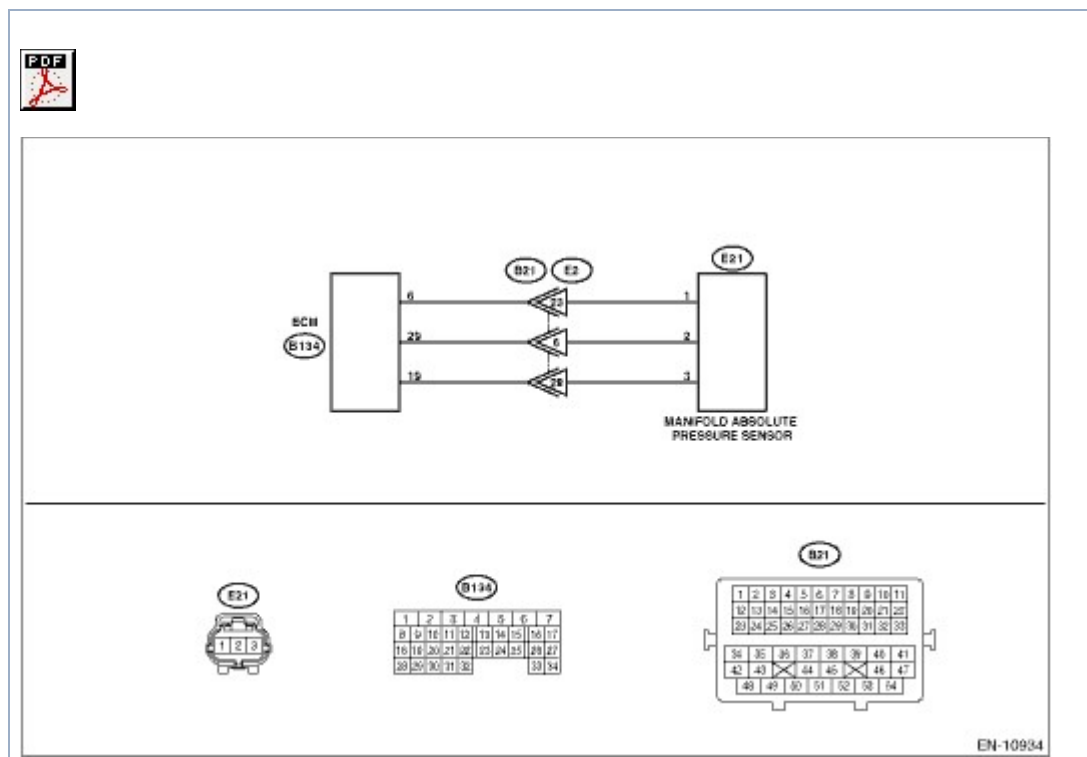
Immediately at fault recognition


CAUTION:





After servicing or replacing faulty parts, perform Clear Memory Mode , and Inspection Mode .


WIRING DIAGRAM:

- Engine Electrical System LHD MODEL (ENGINE TYPE EJ WITHOUT PUSH BUTTON START) 
- Engine Electrical System LHD MODEL (ENGINE TYPE EJ WITH PUSH BUTTON START) 
- Engine Electrical System RHD MODEL 



| STEP | CHECK | YES | NO |
|---|---|--|--|
| 1.CHECK CURRENT DATA. 1) Start the engine. 2) Read the value of «Mani. Absolute Pressure» using the Subaru Select Monitor or a general scan tool. NOTE: • Subaru Select Monitor For detailed operation procedures, refer to "Current Data" | Is the value of «Mani. Absolute Pressure» less than 13.3 kPa (100 mmHg, 3.94 inHg)? | Go to Step 2.  | Even if DTC is detected, the circuit has returned to a normal condition at this time. Reproduce the failure, and then perform the diagnosis again. NOTE: In this case, temporary poor contact of connector, temporary open or short circuit of harness may be the cause. |

| STEP | CHECK | YES | NO |
|---|----------------------------------|---|---|
| Display For Engine".  • General scan tool For detailed operation procedures, refer to the general scan tool operation manual. | | | |
| 2.CHECK POWER SUPPLY OF MANIFOLD ABSOLUTE PRESSURE SENSOR. 1) Turn the ignition switch to OFF. 2) Disconnect the connector from manifold absolute pressure sensor. 3) Turn the ignition switch to ON. 4) Measure the voltage between manifold absolute pressure sensor connector and engine ground. Connector & terminal (E21) No. 3 (+) — Engine ground (—): | Is the voltage 4.5 V or more? | Go to Step 3.  | Repair the harness and connector. NOTE: In this case, repair the following item: • Open circuit of harness between ECM connector and manifold absolute pressure sensor connector • Poor contact of ECM connector • Poor contact of coupling connector |
| 3.CHECK HARNESS BETWEEN ECM AND MANIFOLD ABSOLUTE PRESSURE SENSOR CONNECTOR. 1) Turn the ignition switch to OFF. 2) Disconnect the connector from ECM. 3) Measure the resistance of harness between ECM connector and manifold absolute pressure sensor connector. Connector & terminal (B134) No. 6 — (E21) No. 1: | Is the resistance less than 1 Ω? | Go to Step 4.  | Repair the harness and connector. NOTE: In this case, repair the following item: • Open circuit of harness between ECM connector and manifold absolute pressure sensor connector • Poor contact of coupling connector |
| 4.CHECK HARNESS BETWEEN ECM AND MANIFOLD ABSOLUTE PRESSURE SENSOR CONNECTOR. Measure the resistance between ECM connector and chassis ground. Connector & terminal (B134) No. 6 — Chassis ground: | Is the resistance 1 MΩ or more? | Go to Step 5.  | Repair short circuit to ground in harness between ECM connector and manifold absolute pressure sensor connector. |

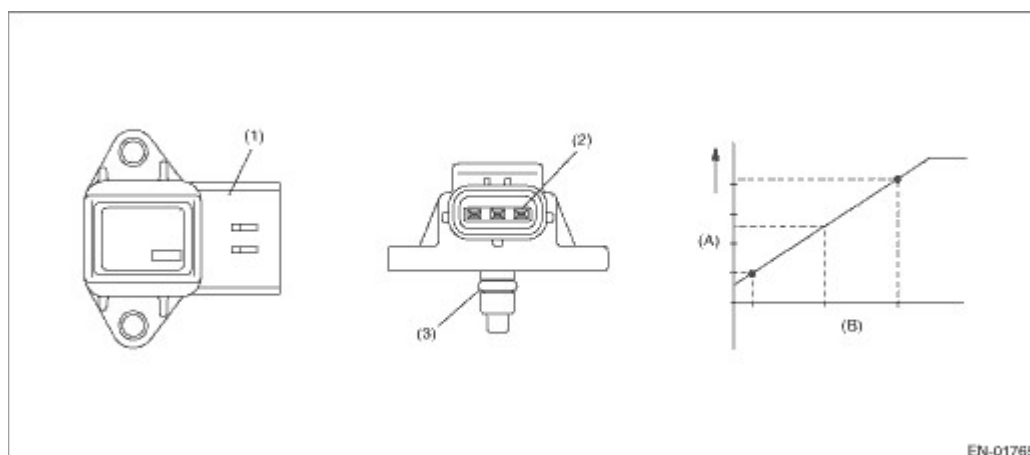
| STEP | CHECK | YES | NO |
|--|--|--|---|
| 5.CHECK FOR POOR CONTACT. Check for poor contact of ECM and manifold absolute pressure sensor connector. | Is there poor contact of ECM or manifold absolute pressure sensor connector? | Repair the poor contact of ECM or manifold absolute pressure sensor connector. | Replace the manifold absolute pressure sensor.  |

1. OUTLINE OF DIAGNOSIS

Detect the open or short circuit of intake manifold pressure sensor.

Judge as NG if out of specification.

2. COMPONENT DESCRIPTION



(A) Output voltage (B) Absolute pressure

(1) Connector

(2) Terminals

(3) O-ring

3. EXECUTION CONDITION

| Secondary Parameters | Execution condition |
|----------------------|---------------------|
| None | |

4. GENERAL DRIVING CYCLE

Always perform the diagnosis continuously.

5. DIAGNOSTIC METHOD

If the duration of time while the following conditions are met is longer than the time indicated, judge as NG.

Judgment Value

| Malfunction Criteria | Threshold Value |
|----------------------|-----------------|
| Output voltage | < 0.573 V |

Time Needed for Diagnosis: 2000 ms

Malfunction Indicator Light Illumination: Illuminates as soon as a malfunction occurs.