

# DTC P0103: Mass Air Flow Circuit High Input

## Wiring Diagram

Refer to "DTC P0101: Mass Air Flow Circuit Range / Performance: ".

## DTC Detecting Condition and Trouble Area

DTC	Trouble area
DTC will be set when all of following conditions are detected for 0.5 seconds continuously. <ul style="list-style-type: none"> <li>• Engine is running</li> <li>• Voltage of MAF sensor output is more than specified value for specified time continuously. (1 driving cycle detection logic)</li> </ul>	<ul style="list-style-type: none"> <li>• Open or short in MAF sensor circuit</li> <li>• MAF sensor</li> <li>• ECM</li> </ul>

## DTC Confirmation Procedure

- 1) With ignition switch turned OFF, connect scan tool.
- 2) Turn ON ignition switch and clear DTC using scan tool.
- 3) Start engine and run it for 10 sec.
- 4) Check DTC and pending DTC.

## NOTE

Before this trouble shooting is performed, read the precautions for DTC troubleshooting referring to "Precautions For DTC Troubleshooting: ".

Step	Action	Yes	No
1	Was "Engine and Emission Control System Check" performed?	Go to Step 2	Go to "Engine and Emission Control System Check: ".

Step	Action	Yes	No
2	<p><b>MAF sensor and its circuit check</b></p> <p>1) Connect scan tool to DLC with ignition switch turned OFF.</p> <p>2) Start engine and check MAF value displayed on scan tool. (Refer to "Scan Tool Data: " for normal value.)</p> <p>Is normal value indicated?</p>	Intermittent trouble. Check for intermittent referring to "Intermittent and Poor Connection Inspection: in Section 00".	Go to Step 3.
3	<p><b>MAF sensor power supply voltage check</b></p> <p>1) Disconnect connector from MAF and IAT sensor with ignition switch tuned OFF.</p> <p>2) Turn ON ignition switch, measure voltage between engine ground and "BLU/BLK" wire terminal of MAF and IAT sensor connector.</p> <p>Is voltage 10 – 14 V?</p>	Go to Step 4.	"BLU/BLK" wire is open circuit.
4	<p><b>MAF sensor ground circuit check</b></p> <p>1) Turn OFF ignition switch, measure resistance between "BLU" wire terminal of MAF and IAT sensor connector and engine ground.</p> <p>Is resistance below 5 Ω?</p>	Go to Step 6.	Go to Step 5.
5	<p><b>Ground circuit check</b></p> <p>1) Remove ECM from its bracket with ECM connectors connected.</p> <p>2) Measure resistance between "C37-27" terminal of ECM connector and engine ground. Is resistance below 5 Ω?</p>	"BLU" wire is open or high resistance circuit.	ECM grounds "C37-58", "C37-48", "C37-30", "C37-29" and/or "C37-15" circuit are open or high resistance. If wires are OK, substitute a known-good ECM and recheck.

Step	Action	Yes	No
6	<p><b>MAF sensor signal circuit check</b></p> <p>1) Disconnect connectors from ECM with ignition switch turned OFF.</p> <p>2) Measure voltage between "RED" wire terminal of MAF and IAT sensor connector and engine ground.</p> <p>Is voltage 0 V?</p>	Go to Step 7.	"RED" wire is shorted to other circuit.
7	<p><b>MAF sensor output signal check</b></p> <p>1) Connect connector to MAF and IAT sensor and ECM with ignition switch turned OFF.</p> <p>2) Measure voltage between "C37-26" and "C37-27" terminal of ECM connector referring to "Mass Air Flow (MAF) and Intake Air Temperature (IAT) Sensor On-Vehicle Inspection: in Section 1C".</p> <p>Is each value within specified range?</p>	Substitute a known-good ECM and recheck.	Faulty MAF and IAT sensor.