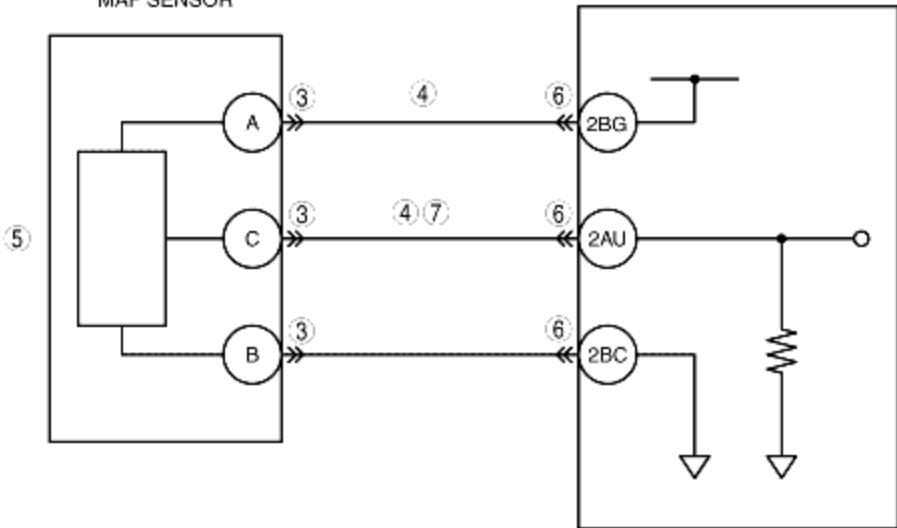
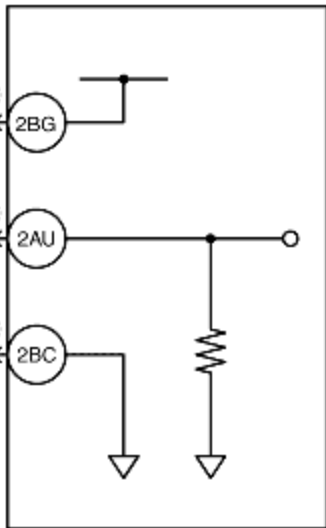
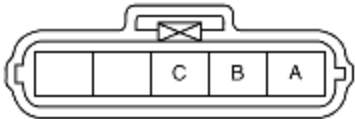

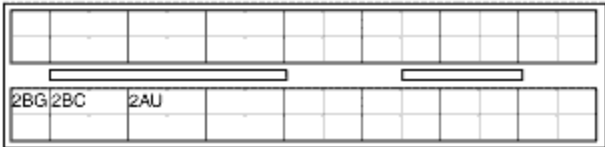



## DTC P0102 [ZJ, Z6]

B3E010200100W01

DTC P0102	MAF sensor circuit low input
<b>DETECTION CONDITION</b>	<ul style="list-style-type: none"> <li>The PCM monitors the input voltage from the MAF sensor when the engine is running. If the input voltage at PCM terminal 2AU is <b>less than 0.21 V</b>, the PCM determines that the MAF circuit has a malfunction.</li> <li><b>Diagnostic support note</b></li> <li>This is a continuous monitor (CCM).</li> <li>The MIL illuminates if the PCM detects the above malfunction condition in the first drive cycle.</li> <li>PENDING CODE is available if the PCM detects the above malfunction condition.</li> <li>FREEZE FRAME DATA is available.</li> <li>The DTC is stored in the PCM memory.</li> </ul>
<b>POSSIBLE CAUSE</b>	<ul style="list-style-type: none"> <li>MAF sensor malfunction</li> <li>Connector or terminal malfunction</li> <li>Short to ground in wiring harness between MAF/IAT sensor terminal A and PCM terminal 2BG</li> <li>Open circuit in wiring harness between MAF/IAT sensor terminal A and PCM terminal 2BG</li> <li>Short to ground in wiring harness between MAF/IAT sensor terminal C and PCM terminal 2AU</li> <li>Open circuit in wiring harness between MAF/IAT sensor terminal C and PCM terminal 2AU</li> <li>PCM malfunction</li> </ul>
<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>MAF SENSOR</p>  <p>⑤</p> </div> <div style="text-align: center;"> <p>PCM</p>  </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 20px;"> <div style="text-align: center;"> <p>MAF/IAT SENSOR WIRING HARNESS-SIDE CONNECTOR</p>   </div> <div style="text-align: center;"> <p>PCM WIRING HARNESS-SIDE CONNECTOR</p>   </div> </div>	

### Diagnostic procedure

STEP	INSPECTION		ACTION
1	<b>VERIFY FREEZE FRAME DATA HAS BEEN RECORDED</b> • Has FREEZE FRAME DATA been recorded?	Yes	Go to the next step.
		No	Record the FREEZE FRAME DATA on the repair order, then go to the next step.
2	<b>VERIFY RELATED REPAIR INFORMATION AVAILABILITY</b> • Verify related service repair information availability. • Is any related repair information available?	Yes	Perform repair or diagnosis according to the available repair information. • If the vehicle is not repaired, go to the next step.
		No	Go to the next step.
3	<b>INSPECT MAF/IAT SENSOR CONNECTOR FOR POOR CONNECTION</b> • Turn the ignition switch off. • Disconnect the MAF/IAT sensor connector. • Inspect for poor connection (such as damaged/pulled-out pins, corrosion). • Is there any malfunction?	Yes	Repair or replace the terminal, then go to Step 8.
		No	Go to the next step.
4	<b>INSPECT MAF SENSOR CIRCUIT FOR SHORT TO GND</b> • Turn the ignition switch off. • Inspect for continuity between the following terminals:  - MAF/IAT sensor terminal A (wiring harness-side) and body GND - MAF/IAT sensor terminal C (wiring harness-side) and body GND  • Is there continuity?	Yes	Repair or replace the wiring harness for a possible short to GND, then go to Step 8.
		No	Go to the next step.
5	<b>INSPECT MAF SENSOR</b> • Inspect the MAF sensor. (See <a href="#">MASS AIR FLOW (MAF) SENSOR INSPECTION [ZJ, Z6].</a> ) • Is there any malfunction?	Yes	Replace the MAF/IAT sensor, then go to Step 8. (See <a href="#">MASS AIR FLOW (MAF)/INTAKE AIR TEMPERATURE (IAT) SENSOR REMOVAL/INSTALLATION [ZJ, Z6].</a> )
		No	Go to the next step.
6	<b>INSPECT PCM CONNECTOR FOR POOR CONNECTION</b> • Turn the ignition switch off. • Disconnect the PCM connector. • Inspect for poor connection (such as damaged/pulled-out pins, corrosion). • Is there any malfunction?	Yes	Repair or replace the terminal, then go to Step 8.
		No	Go to the next step.
7	<b>INSPECT MAF SENSOR CIRCUIT FOR OPEN CIRCUIT</b> • Turn the ignition switch off. • Inspect for continuity between the following terminals:  - MAF/IAT sensor terminal A (wiring harness-side) and PCM terminal 2BG (wiring harness-side) - MAF/IAT sensor terminal C (wiring harness-side) and PCM terminal 2AU (wiring harness-side)  • Is there continuity?	Yes	Go to the next step.
		No	Repair or replace the wiring harness for a possible open circuit, then go to the next step.
8	<b>VERIFY TROUBLESHOOTING OF DTC P0102 COMPLETED</b> • Make sure to reconnect all disconnected connectors. • Clear the DTC from the PCM memory	Yes	Replace the PCM, then go to the next step. (See <a href="#">PCM REMOVAL/INSTALLATION [ZJ, Z6].</a> )

	using the WDS or equivalent. • Start the engine. • Is the same DTC present?	No	Go to the next step.
9	<b>VERIFY AFTER REPAIR PROCEDURE</b> • Perform the "AFTER REPAIR PROCEDURE". (See <a href="#">AFTER REPAIR PROCEDURE [ZJ, Z6]</a> .) • Are any DTCs present?	Yes	Go to the applicable DTC inspection. (See <a href="#">DTC TABLE [ZJ, Z6]</a> .)
		No	DTC troubleshooting completed.