

# DTC P0138 [LF]

B3E010201084W22

DTC P0138	Rear HO2S circuit high input
<b>DETECTION CONDITION</b>	<ul style="list-style-type: none"> <li>The PCM monitors input voltage from rear HO2S. If the input voltage from the rear HO2S sensor is <b>above 1.2 V</b> for <b>0.8 s</b>, the PCM determines that circuit input is high.</li> <li><b>Diagnostic support note</b></li> <li>This is a continuous monitor (HO2S).</li> <li>MIL illuminates if the PCM detects the above malfunction condition in two consecutive drive cycles or in one drive cycle while the DTC for the same malfunction has been stored in the PCM.</li> <li>PENDING CODE is available if the PCM detects the above malfunction condition during first drive cycle.</li> <li>FREEZE FRAME DATA is available.</li> <li>DTC is stored in the PCM memory.</li> </ul>
<b>POSSIBLE CAUSE</b>	<ul style="list-style-type: none"> <li>Rear HO2S malfunction</li> <li>Short to power supply in wiring harness between rear HO2S terminal A and PCM terminal 2AH</li> <li>Rear HO2S or PCM terminal shorted</li> <li>PCM malfunction</li> </ul>

## 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 repair order, then go to the next step.
2	<b>VERIFY RELATED REPAIR INFORMATION AVAILABILITY</b> • Verify related service repair information availability.	Yes Perform repair or diagnosis according to available repair information. • If vehicle is not repaired, go to the next step.

	• Is any related repair information available?	No	Go to the next step.
3	<b>VERIFY RELATED PENDING OR STORED DTC</b> <ul style="list-style-type: none"> <li>• Turn the ignition switch off, then to the ON position (Engine off).</li> <li>• Verify pending code or stored DTCs using WDS or equivalent.</li> <li>• Is other DTC present?</li> </ul>	Yes	Go to the appropriate DTC troubleshooting procedures. (See <a href="#">DTC TABLE [LF]</a> .)
		No	Go to the next step.
4	<b>IDENTIFY TRIGGER DTC FOR FREEZE FRAME DATA</b> <ul style="list-style-type: none"> <li>• Is DTC P0138 on FREEZE FRAME DATA?</li> </ul>	Yes	Go to the next step.
		No	Go to troubleshooting procedures for DTC on FREEZE FRAME DATA. (See <a href="#">DTC TABLE [LF]</a> .)
5	<b>INSPECT REAR HO2S SIGNAL CIRCUIT FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Turn the ignition switch off.</li> <li>• Disconnect rear HO2S connector.</li> <li>• Turn the ignition switch to the ON position (Engine off).</li> <li>• Measure the voltage between rear HO2S terminal A (wiring harness-side) and body ground.</li> <li>• Is any voltage reading?</li> </ul>	Yes	Replace short to power supply, then go to Step 7.
		No	Go to the next step.
6	<b>VERIFY CURRENT INPUT SIGNAL STATUS</b> <ul style="list-style-type: none"> <li>• Start engine.</li> <li>• Access O2S12 PID using WDS or equivalent.</li> <li>• Verify PID while racing engine at least <b>10 times</b> in PARK or NEUTRAL.</li> <li>• Does PID stay <b>above 0.55 V</b>?</li> </ul>	Yes	Repair or replace sensor, then go to the next step.
		No	Go to the next step.
7	<b>VERIFY TROUBLESHOOTING OF DTC P0138 COMPLETED</b> <ul style="list-style-type: none"> <li>• Make sure to reconnect all disconnected connectors.</li> <li>• Turn the ignition switch to the ON position (Engine off).</li> <li>• Clear the DTC from the memory using the WDS or equivalent.</li> <li>• Perform the HO2S heater, HO2S, and TWC Repair Verification Drive Mode. (See <a href="#">OBD DRIVE MODE [LF]</a>.)</li> <li>• Is the PENDING CODE for this DTC present?</li> </ul>	Yes	Replace the PCM, then go to the next step. (See <a href="#">PCM REMOVAL/INSTALLATION [LF]</a> .)
		No	Go to the next step.
8	<b>VERIFY AFTER REPAIR PROCEDURE</b> <ul style="list-style-type: none"> <li>• Perform the "After Repair Procedure". (See <a href="#">AFTER REPAIR PROCEDURE [LF]</a>.)</li> <li>• Are any DTC present?</li> </ul>	Yes	Go to the applicable DTC troubleshooting. (See <a href="#">DTC TABLE [LF]</a> .)
		No	Troubleshooting completed.