

## DTC P0505 [LF]

B3E010201087W02

DTC P0505	IAC system problem
<b>DETECTION CONDITION</b>	<ul style="list-style-type: none"> <li>The PCM cannot control idle speed toward target idle speed while KOER self test.</li> </ul>
<b>POSSIBLE CAUSE</b>	<ul style="list-style-type: none"> <li>IAC valve circuit malfunction</li> <li>Air cleaner element clogged</li> <li>Air intake passage clogged</li> <li>A/C relay control circuit malfunction</li> <li>Generator control circuit malfunction</li> <li>Low engine compression (Over capacity of blow-by gas)</li> <li>PCM malfunction</li> </ul>

### Diagnostic procedure

STEP	INSPECTION	ACTION
1	<b>VERIFY RELATED REPAIR INFORMATION AVAILABILITY</b> <ul style="list-style-type: none"> <li>Verify related service repair information availability.</li> <li>Is any related repair information available?</li> </ul>	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.
2	<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 the WDS or equivalent.</li> <li>Does DTC P0511, P2502, P2503 or P2504 present?</li> </ul>	Yes Perform the applicable DTC troubleshooting. (See <a href="#">DTC TABLE [LF]</a> .)
		No Go to the next step.
3	<b>INSPECT IAC VALVE MALFUNCTION</b> <ul style="list-style-type: none"> <li>Start engine.</li> <li>Disconnect IAC valve connector.</li> <li>Is engine speed decreased?</li> </ul>	Yes Go to the next step.
		No Repair IAC valve, then go to Step 9.
4	<b>INSPECT A/C MAGNETIC CLUTCH OPERATION</b>  <b>Note</b> <ul style="list-style-type: none"> <li>The following test should be performed for the A/C. Go to the next step for vehicles without A/C</li> </ul> <ul style="list-style-type: none"> <li>Turn the fan switch off.</li> <li>Is the magnetic clutch still on?</li> </ul>	Yes Go to "A/C ALWAYS ON / A/C COMPRESSOR RUNS CONTINUOUSLY." of ENGINE SYMPTOM TROUBLESHOOTING then go to step 9. (See <a href="#">ENGINE SYMPTOM TROUBLESHOOTING [LF]</a> .)
		No Go to the next step.
5	<b>INSPECT GENERATOR CONTROL CIRCUIT MALFUNCTION</b> <ul style="list-style-type: none"> <li>Apply electrical load.</li> <li>Is engine speed increased?</li> </ul>	Yes Go to the next step.
		No Repair short to power supply in generator control circuit, then go to Step 9.
6	<b>INSPECT AIR CLEANER ELEMENT</b> <ul style="list-style-type: none"> <li>Remove air cleaner element with the engine running.</li> <li>Is the engine speed increased?</li> </ul>	Yes Clean or replace the air cleaner element, then go to Step 9.
		No Go to the next step.

7	<b>INSPECT THROTTLE BODY PASSAGE</b> • Is throttle body clogged?	Yes	Clean or replace the throttle body passage, then go to Step 9.
		No	Go to the next step.
8	<b>INSPECT ENGINE COMPRESSION</b> • Inspect engine compression. (See <a href="#">COMPRESSION INSPECTION [LF]</a> .) • Is engine compression normal?	Yes	Go to the next step.
		No	Overhaul the engine, then go to the next step.
9	<b>VERIFY TROUBLESHOOTING OF DTC P0505 COMPLETED</b> • Make sure to reconnect all disconnected connectors. • Clear the DTC using the WDS or equivalent. • Perform the KOER Self-Test. • Is the same DTC present?	Yes	Replace the PCM, then go to the next step. (See <a href="#">PCM REMOVAL/INSTALLATION [LF]</a> .)
		No	Go to the next step.
10	<b>VERIFY AFTER REPAIR PROCEDURE</b> • Perform the "After Repair Procedure". (See <a href="#">AFTER REPAIR PROCEDURE [LF]</a> .) • Are any DTC present?	Yes	Go to the applicable DTC troubleshooting. (See <a href="#">DTC TABLE [LF]</a> .)
		No	Troubleshooting completed.