

**DIAGNOSIS AND TESTING (Continued)**

**QUICK TEST: KEY ON, ENGINE RUNNING (KOER) SELF-TEST**

TEST STEP		RESULT	ACTION TO TAKE
<b>A1</b>	<b>CODE OUTPUT</b>		
	<ul style="list-style-type: none"> <li>Before running KOER Self-Test, start the engine and idle until the upper radiator hose is hot and pressurized, with the throttle off fast idle and the idle stabilized, then shut engine off. To activate the KOER self-test, do the following:</li> <li>Connect SUPER STAR II self-test and STI connectors.</li> <li>Start engine, turn on SUPER STAR II Tester by moving slide switch to ON position.</li> <li>Within 30 seconds of starting engine, press speed control ON switch.</li> <li>Within 15 seconds, press SUPER STAR II pushbutton.</li> <li>Observe code 10 on SUPER STAR II display (indicates IVSC test in progress).</li> <li>Observe and record all DTC's indicated. One of the following outputs will occur.</li> </ul> <p>NOTE: Do not depress throttle or brake pedal during the KOER Self-Test. This procedure must be followed exactly to obtain IVSC KOER Self-Test.</p> <p>NOTE: The engine may stall at test exit. Turn off the ignition to prevent entry into EEC-IV Key On, Engine Off Self-Test.</p>	<ul style="list-style-type: none"> <li>Code 111 displayed</li> <li>Any other code(s)</li> <li>No codes outputted</li> </ul>	<ul style="list-style-type: none"> <li>Engine Running Self-Test indicates a pass. If the drive symptom is currently present, GO to DIAGNOSTIC BY SYMPTOM. Otherwise testing is complete, IVSC system is OK.</li> <li>Engine Running Self-Test indicates a fault. GO to Step B.</li> <li>Repeat Self-Test and verify that no DTC's are present, then GO to Pinpoint Test Step G1.</li> </ul>

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**QUICK TEST: KEY ON, ENGINE RUNNING (KOER) SELF-TEST**

TEST STEP		RESULT	ACTION TO TAKE
<b>B1</b>	<b>RESULTS AND ACTION TO TAKE</b>		
	<ul style="list-style-type: none"> <li>Using the Engine Running DTC's from Step A, follow the instructions in the ACTION TO TAKE column in this step.</li> <li>When more than one DTC is received, always start service with the first code received.</li> <li>Whenever a service is made, REPEAT QUICK TEST.</li> </ul>	<p><b>ENGINE RUNNING DIAGNOSTIC TROUBLE CODES</b></p> <ul style="list-style-type: none"> <li>Code 453</li> <li>Code 454</li> <li>Code 455</li> <li>Code 456</li> </ul>	<ul style="list-style-type: none"> <li>GO to Pinpoint Test Step E1.</li> <li>GO to Pinpoint Test Step E5.</li> <li>GO to Pinpoint Test Step D1.</li> <li>GO to Pinpoint Test Step F1.</li> </ul>

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**Pinpoint Tests**

**Instructions for Using the Pinpoint Tests**

- Do not run any of the following Pinpoint Tests unless instructed by the Quick Test. Each Pinpoint Test assumes that a fault has been detected in the system with direction to enter a specific service routine. Performing any Pinpoint Test without direction from the Quick Test may produce incorrect results and cause replacement of undamaged components.
- Do not replace any parts unless the test result indicates that they should be replaced.

- When more than one DTC is received, always start service with the first code received.
- Do not measure voltage or resistance at the powertrain control module or connect any test lights to it, unless otherwise specified.
- Isolate both ends of a circuit, and turn the ignition switch to the OFF position whenever checking for shorts or continuity, unless otherwise specified.
- Disconnect solenoids and switches from the harness before measuring for continuity, resistance or energizing by way of 12-volt source, unless otherwise instructed.