

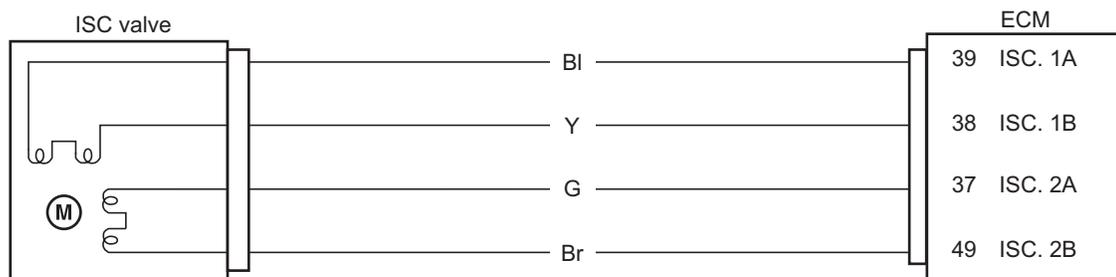
**DTC “C40” (P0505 / P0506 / P0507): ISC Valve Circuit Malfunction**

B838H21104024

**Detected Condition and Possible Cause**

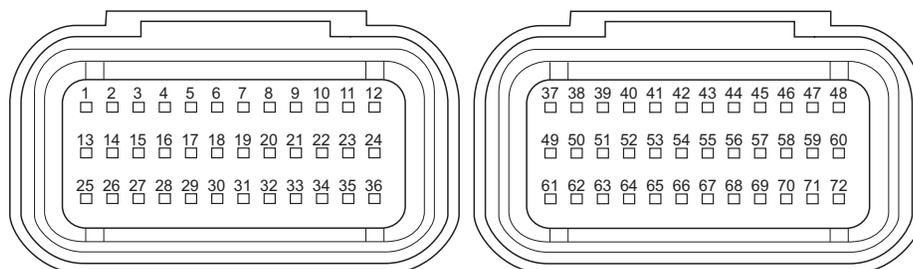
Detected Condition		Possible Cause
C40/P0505	The circuit voltage of motor drive is unusual.	<ul style="list-style-type: none"> <li>ISC valve circuit open or shorted to ground.</li> </ul>
C40/P0506	Idle speed is lower than the desired idle speed.	<ul style="list-style-type: none"> <li>Air passage clogged.</li> <li>ISC valve is fixed.</li> <li>ISC valve preset position is incorrect.</li> </ul>
C40/P0507	Idle speed is higher than the desired idle speed.	<ul style="list-style-type: none"> <li>Disconnected ISC valve hose.</li> <li>ISC valve is fixed.</li> <li>ISC valve preset position is incorrect.</li> </ul>

**Wiring Diagram**



I837H1110079-01

**ECM coupler (Harness side)**



I837H1110007-02

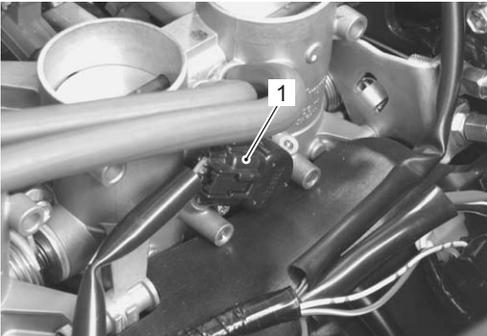
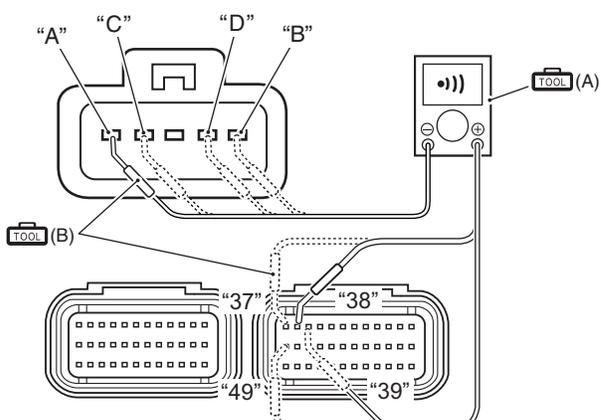
**Troubleshooting**

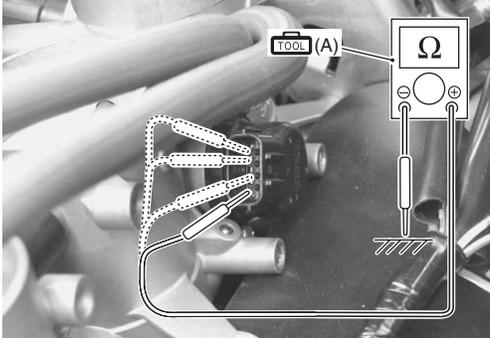
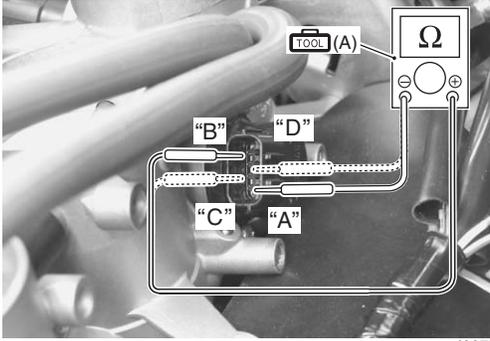
**⚠ CAUTION**

- Be careful not to disconnect the ISC valve coupler at least 5 seconds after ignition switch is turned to OFF.  
If the ECM coupler is disconnected within 5 seconds after ignition switch is turned to OFF, there is a possibility of an unusual value being written in the ECM and causing an error of ISC valve operation.
- When using the multi-circuit tester, do not strongly touch the terminal of the ECM coupler with a needle pointed tester probe to prevent terminal damage.

**NOTE**

After repairing the trouble, clear the DTC using SDS tool. Refer to “Use of SDS Diagnosis Reset Procedures (Page 1A-15)”.

Step	Action	Yes	No
1	<p>1) Turn the ignition switch OFF.</p> <p>2) Remove the air cleaner box. Refer to "Air Cleaner Box Removal and Installation in Section 1D (Page 1D-7)".</p> <p>3) Check the ISC valve coupler (1) for loose or poor contacts. If OK, then check the ISC valve lead wire continuity.</p>  <p style="text-align: right; font-size: small;">I837H1110138-01</p> <p>4) Disconnect the ISC valve coupler and ECM coupler. Refer to "ECM Removal and Installation in Section 1C (Page 1C-1)".</p> <p>5) Check the continuity between terminal "A" and terminal "38", terminal "B" and terminal "37", terminal "C" and terminal "39", terminal "D" and terminal "49".</p> <p><b>Special tool</b>  <b>TOOL (A): 09900-25008 (Multi-circuit tester set)</b>  <b>TOOL (B): 09900-25009 (Needle pointed probe set)</b></p> <p><b>Tester knob indication</b>  <b>Continuity test (••))</b></p> <p style="text-align: center;"><b>ECM couplers (Harness side)</b></p>  <p style="text-align: right; font-size: small;">I837H1110080-02</p> <p><i>Is the continuity OK?</i></p>	Go to Step 2.	Bl, Y, G or Br wire open.

Step	Action	Yes	No
2	<p>1) Check the continuity between each ISC valve terminal and ground.</p> <p><b>Special tool</b>   (A): 09900-25008 (Multi-circuit tester set)</p> <p><b>Tester knob indication</b>  <b>Resistance (<math>\Omega</math>)</b></p> <p><b>ISC valve continuity</b>  <math>\infty \Omega</math> (Infinity)  <b>(Terminal – Ground)</b></p>  <p style="text-align: right; font-size: small;">I837H1110139-01</p> <p>2) If OK, then measure the resistance (between the BI wire terminal “A” and Y wire terminal “B”) and (between the G wire terminal “C” and Br wire terminal “D”).</p> <p><b>ISC valve resistance</b>  <b>Approx. 80 <math>\Omega</math> at 20 °C (68 °F)</b>  <b>(Terminal: “A” – Terminal: “B”, Terminal: “C” – Terminal: “D”)</b></p>  <p style="text-align: right; font-size: small;">I837H1110140-01</p> <p><i>Is the resistance OK?</i></p>	<p>If wire is OK, intermittent trouble or faulty ECM.</p>	<p>Replace the ISC valve with a new one. Refer to “Throttle Body Removal and Installation in Section 1D (Page 1D-10)”.</p>