

<b>Last Modified:</b> 7-13-2007		1.6 S
<b>Service Category:</b> Brake	<b>Section:</b> Brake Control/Dynamic Control System	
<b>Model Year:</b> 2008	<b>Model:</b> ES350	<b>Doc ID:</b> RM000000XHU01AX
<b>Title:</b> BRAKE CONTROL: VEHICLE STABILITY CONTROL SYSTEM: DIAGNOSTIC TROUBLE CODE CHART (2008 ES350)		

## DIAGNOSTIC TROUBLE CODE CHART

- If a trouble code is displayed during the DTC check, check the circuit indicated by the DTC. For details of each code, refer to the page for the respective "DTC Code" in the DTC chart.
- Inspect the fuse and relay before investigating the trouble areas as shown in the table below.

### DTC chart of ABS:

DTC CODE	DETECTION ITEM	TROUBLE AREA	SEE PAGE
C0200/31 (*1)	Front Speed Sensor RH Circuit	<ol style="list-style-type: none"> <li>1. Front speed sensor RH</li> <li>2. Speed sensor circuit</li> <li>3. Speed sensor rotor</li> <li>4. Sensor installation</li> <li>5. Brake actuator assembly (Skid control ECU)</li> </ol>	<a href="#">INFO</a>
C0205/32 (*1)	Front Speed Sensor LH Circuit	<ol style="list-style-type: none"> <li>1. Front speed sensor LH</li> <li>2. Speed sensor circuit</li> <li>3. Speed sensor rotor</li> <li>4. Sensor installation</li> <li>5. Brake actuator assembly (Skid control ECU)</li> </ol>	<a href="#">INFO</a>
C0210/33 (*1)	Rear Speed Sensor RH Circuit	<ol style="list-style-type: none"> <li>1. Rear speed sensor RH</li> <li>2. Speed sensor circuit</li> <li>3. Speed sensor rotor</li> <li>4. Sensor installation</li> <li>5. Brake actuator assembly (Skid control ECU)</li> </ol>	<a href="#">INFO</a>
C0215/34 (*1)	Rear Speed Sensor LH Circuit	<ol style="list-style-type: none"> <li>1. Rear speed sensor LH</li> <li>2. Speed sensor circuit</li> <li>3. Speed sensor rotor</li> <li>4. Sensor installation</li> <li>5. Brake actuator assembly (Skid control ECU)</li> </ol>	<a href="#">INFO</a>
C0226/21	SFR Solenoid Circuit	<ol style="list-style-type: none"> <li>1. Brake actuator assembly</li> <li>2. SFRH or SFRR circuit</li> </ol>	<a href="#">INFO</a>
C0236/22	SFL Solenoid Circuit	<ol style="list-style-type: none"> <li>1. Brake actuator assembly</li> <li>2. SFLH or SFLR circuit</li> </ol>	<a href="#">INFO</a>
C0246/23	SRR Solenoid Circuit	<ol style="list-style-type: none"> <li>1. Brake actuator assembly</li> <li>2. SRRH or SRRR circuit</li> </ol>	<a href="#">INFO</a>
C0256/24	SRL Solenoid Circuit	<ol style="list-style-type: none"> <li>1. Brake actuator assembly</li> <li>2. SRLH or SRLR circuit</li> </ol>	<a href="#">INFO</a>
C0273/13 (*1)	Open in ABS Motor Relay Circuit	<ol style="list-style-type: none"> <li>1. ABS NO. 1 fuse</li> <li>2. VSC NO. 2 relay</li> <li>3. VSC NO. 2 relay circuit</li> <li>4. Brake actuator assembly</li> </ol>	<a href="#">INFO</a>
C0274/14	Short to B+ in ABS Motor Relay Circuit	<ol style="list-style-type: none"> <li>1. ABS NO. 1 fuse</li> <li>2. VSC NO. 2 relay</li> <li>3. VSC NO. 2 relay circuit</li> <li>4. Brake actuator assembly</li> </ol>	<a href="#">INFO</a>

C0278/11	Open in ABS Solenoid Relay Circuit	<ol style="list-style-type: none"> <li>1. ABS NO. 2 fuse</li> <li>2. ABS solenoid relay</li> <li>3. ABS solenoid relay circuit</li> <li>4. Brake actuator assembly</li> </ol>	<a href="#">INFO</a>
C0279/12	Short to B+ in ABS Solenoid Relay Circuit	Brake actuator assembly	<a href="#">INFO</a>
C1225/25	SM Solenoid Circuit	<ol style="list-style-type: none"> <li>1. Brake actuator assembly</li> <li>2. SM1 or SM2 circuit</li> </ol>	<a href="#">INFO</a>
C1235/35	Foreign Object is Attached on Tip of Front Speed Sensor RH	<ol style="list-style-type: none"> <li>1. Front speed sensor RH</li> <li>2. Speed sensor rotor</li> <li>3. Sensor installation</li> <li>4. Brake actuator assembly (Skid control ECU)</li> </ol>	<a href="#">INFO</a>
C1236/36	Foreign Object is Attached on Tip of Front Speed Sensor LH	<ol style="list-style-type: none"> <li>1. Front speed sensor LH</li> <li>2. Speed sensor rotor</li> <li>3. Sensor installation</li> <li>4. Brake actuator assembly (Skid control ECU)</li> </ol>	<a href="#">INFO</a>
C1238/38	Foreign Object is Attached on Tip of Rear Speed Sensor RH	<ol style="list-style-type: none"> <li>1. Rear speed sensor RH</li> <li>2. Speed sensor rotor</li> <li>3. Sensor installation</li> <li>4. Brake actuator assembly (Skid control ECU)</li> </ol>	<a href="#">INFO</a>
C1239/39	Foreign Object is Attached on Tip of Rear Speed Sensor LH	<ol style="list-style-type: none"> <li>1. Rear speed sensor LH</li> <li>2. Speed sensor rotor</li> <li>3. Sensor installation</li> <li>4. Brake actuator assembly (Skid control ECU)</li> </ol>	<a href="#">INFO</a>
C1241/41	Low Battery Positive Voltage	<ol style="list-style-type: none"> <li>1. ECU-IG NO. 2 fuse</li> <li>2. Battery</li> <li>3. Charging system</li> <li>4. Power source circuit</li> <li>5. Internal power supply circuit of the skid control ECU</li> </ol>	<a href="#">INFO</a>
C1243/43 (*1)	Acceleration Sensor Stuck Malfunction	<ol style="list-style-type: none"> <li>1. Yaw rate and acceleration sensor</li> <li>2. Yaw rate and acceleration sensor circuit</li> </ol>	<a href="#">INFO</a>
C1244/44	Open or Short in Acceleration Sensor Circuit	<ol style="list-style-type: none"> <li>1. Yaw rate and acceleration sensor</li> <li>2. Yaw rate and acceleration sensor circuit</li> </ol>	<a href="#">INFO</a>
C1245/45 (*1)	Acceleration Sensor Output Malfunction	<ol style="list-style-type: none"> <li>1. Yaw rate and acceleration sensor</li> <li>2. Yaw rate and acceleration sensor circuit</li> </ol>	<a href="#">INFO</a>
C1246/46 (*2)	Master Cylinder Pressure Sensor Malfunction	<ol style="list-style-type: none"> <li>1. Master cylinder pressure sensor</li> <li>2. Master cylinder pressure sensor circuit</li> <li>3. Stop light switch circuit</li> <li>4. Brake actuator assembly</li> </ol>	<a href="#">INFO</a>
C1249/49	Open in Stop Light Switch Circuit	<ol style="list-style-type: none"> <li>1. STOP fuse</li> <li>2. Stop light switch</li> <li>3. Stop light switch circuit</li> <li>4. Stop light control relay (*3)</li> <li>5. Stop light control relay circuit (*3)</li> <li>6. Brake actuator assembly (Skid control ECU)</li> </ol>	<a href="#">INFO</a>
C1251/51 (*1)	Open in Pump Motor Circuit	<ol style="list-style-type: none"> <li>1. Brake actuator assembly (GND circuit)</li> <li>2. Brake actuator assembly (Motor circuit)</li> </ol>	<a href="#">INFO</a>
C1361/91	Short Circuit in ABS Motor Fail Safe Relay Circuit	<ol style="list-style-type: none"> <li>1. ABS NO. 1 fuse</li> <li>2. VSC NO. 1 (fail safe) relay</li> <li>3. VSC NO. 1 (fail safe) relay circuit</li> </ol>	<a href="#">INFO</a>

		4. Brake actuator assembly	
C1381/97	Yaw Rate and / or Acceleration Sensor Power Supply Voltage Malfunction	1. Yaw rate and acceleration sensor 2. Yaw rate and acceleration sensor power source circuit	<a href="#">INFO</a>
U0073/94	Control Module Communication Bus OFF	CAN communication system	<a href="#">INFO</a>
U0124/95	Lost Communication with Lateral Acceleration Sensor Module	CAN communication system (Skid control ECU to yaw rate and acceleration sensor)	<a href="#">INFO</a>

(\*1, \*2):

Even after the trouble areas are repaired, the ABS warning light will not go off unless the following operations are performed:

- (\*1):
  - a. Drive the vehicle at 20 km/h (12 mph) for 30 seconds or more and check that the ABS warning light goes off.
  - b. Clear the DTC.
- (\*2):
  - a. Keep the vehicle stationary for 5 seconds or more and depress the brake pedal lightly 2 or 3 times.
  - b. Drive the vehicle at the vehicle speed of 50 km/h (31 mph) and keep depressing the brake pedal strongly for approximately 3 seconds.
  - c. Repeat the above operation 3 times or more and check that the ABS warning light goes off.
  - d. Clear the DTC.

### HINT:

In some cases, Techstream cannot be used when the ABS warning light remains on.

(\*3): with dynamic radar cruise control

### DTC chart of VSC:

DTC CODE	DETECTION ITEM	TROUBLE AREA	SEE PAGE
43	ABS Control System Malfunction	ABS control system	<a href="#">INFO</a>
C1201/51	Engine Control System Malfunction	Engine control system	<a href="#">INFO</a>
C1203/53	ECM Communication Circuit Malfunction	ECM	<a href="#">INFO</a>
C1210/36	Zero Point Calibration of Yaw Rate Sensor Undone	1. Brake actuator assembly (Skid control ECU) 2. Yaw rate and acceleration sensor 3. Zero point calibration undone	<a href="#">INFO</a>
C1231/31	Steering Angle Sensor Circuit Malfunction	1. Steering angle sensor 2. Steering angle sensor circuit 3. Steering angle sensor power supply 4. Brake actuator assembly (Skid control ECU)	<a href="#">INFO</a>
C1232/32	Stuck in Acceleration Sensor	1. Yaw rate and acceleration sensor 2. Yaw rate and acceleration sensor circuit	<a href="#">INFO</a>
C1234/34	Yaw Rate Sensor Malfunction	1. Yaw rate and acceleration sensor 2. Yaw rate and acceleration sensor circuit	<a href="#">INFO</a>
		1. Yaw rate and acceleration sensor zero point calibration incomplete	

C1290/66	Steering Angle Sensor Zero Point Malfunction	2. Poor adjustment of the centered position of the steering wheel 3. Poor adjustment of front wheel alignment	<a href="#">INFO</a>
C1336/39	Zero Point Calibration of Acceleration Sensor Undone	1. Brake actuator assembly (Skid control ECU) 2. Yaw rate and acceleration sensor 3. Zero point calibration undone	<a href="#">INFO</a>
C1380/64 (*3)	Stop Light Control Relay Malfunction	1. STOP fuse 2. Stop light switch 3. Stop light switch circuit 4. Stop light control relay 5. Stop light control relay circuit 6. Brake actuator assembly (Skid control ECU)	<a href="#">INFO</a>
U0100/65	Lost Communication with ECM / PCM	CAN communication system (Skid control ECU to ECM)	<a href="#">INFO</a>
U0123/62	Lost Communication with Yaw Rate Sensor Module	CAN communication system (Skid control ECU to yaw rate and acceleration sensor)	<a href="#">INFO</a>
U0126/63	Lost Communication with Steering Angle Sensor Module	CAN communication system (Skid control ECU to steering angle sensor)	<a href="#">INFO</a>

**HINT:**

In some cases, Techstream cannot be used when the VSC warning (multi information display) remains on.

(\*3): with dynamic radar cruise control

**Test Mode DTC of ABS:**

DTC CODE	DETECTION ITEM	TROUBLE AREA	SEE PAGE
C1271/71	Low Output Signal of Front Speed Sensor RH (Test Mode DTC)	1. Front speed sensor RH 2. Sensor installation 3. Speed sensor rotor	<a href="#">INFO</a>
C1272/72	Low Output Signal of Front Speed Sensor LH (Test Mode DTC)	1. Front speed sensor LH 2. Sensor installation 3. Speed sensor rotor	<a href="#">INFO</a>
C1273/73	Low Output Signal of Rear Speed Sensor RH (Test Mode DTC)	1. Rear speed sensor RH 2. Sensor installation 3. Speed sensor rotor	<a href="#">INFO</a>
C1274/74	Low Output Signal of Rear Speed Sensor LH (Test Mode DTC)	1. Rear speed sensor LH 2. Sensor installation 3. Speed sensor rotor	<a href="#">INFO</a>
C1275/75	Abnormal Change in Output Signal of Front Speed Sensor RH (Test Mode DTC)	Speed sensor rotor	<a href="#">INFO</a>
C1276/76	Abnormal Change in Output Signal of Front Speed Sensor LH (Test Mode DTC)	Speed sensor rotor	<a href="#">INFO</a>
C1277/77	Abnormal Change in Output Signal of Rear Speed Sensor RH (Test Mode DTC)	Speed sensor rotor	<a href="#">INFO</a>
C1278/78	Abnormal Change in Output Signal of Rear Speed Sensor LH (Test Mode DTC)	Speed sensor rotor	<a href="#">INFO</a>
	Acceleration Sensor Output Voltage Malfunction (Test Mode	1. Yaw rate and acceleration	

C1279/79	DTC)	sensor 2. Sensor installation	<a href="#">INFO</a>
C1281/81	Master Cylinder Pressure Sensor Output Malfunction (Test Mode DTC)	1. Stop light switch 2. Master cylinder pressure sensor	<a href="#">INFO</a>

**Test Mode DTC of VSC:**

DTC CODE	DETECTION ITEM	TROUBLE AREA	SEE PAGE
C0371/71	Yaw Rate Sensor (Test Mode DTC)	Yaw rate and acceleration sensor	<a href="#">INFO</a>

