

## DIAGNOSTIC TROUBLE CODE CHART

### NOTICE:

When removing the part, turn the ignition switch OFF.

### HINT:

- Using SST 09843 –18020, connect the terminals Tc and E<sub>1</sub> of check connector.
- If any abnormality is not found when inspecting parts, inspect the ECU.
- If a malfunction code is displayed during the DTC check, check the circuit listed that code. For details of each code, turn to the page referred to under the "See page" for respective "DTC No." in the DTC chart.

### DTC chart of ABS:

DTC No. (See Page)	Detection Item	Trouble Area
C0278 / 11 (DI-35)	Open or short circuit in ABS solenoid relay circuit	<ul style="list-style-type: none"> <li>• ABS solenoid relay</li> <li>• ABS solenoid relay circuit</li> </ul>
C0279 / 12 (DI-35)	B+ short circuit in ABS solenoid relay circuit	
C0226/21 (DI-32)	Open or short circuit in hydraulic brake booster solenoid circuit (SFR circuit)	<ul style="list-style-type: none"> <li>• Hydraulic brake booster</li> <li>• SFR or SFRH circuit</li> </ul>
C0236/22 (DI-32)	Open or short circuit in hydraulic brake booster solenoid circuit (SFL circuit)	<ul style="list-style-type: none"> <li>• Hydraulic brake booster</li> <li>• SFL or SFLH circuit</li> </ul>
C0246/23 (DI-32)	Open or short circuit in hydraulic brake booster solenoid circuit (SRR circuit)	<ul style="list-style-type: none"> <li>• Hydraulic brake booster</li> <li>• SRR or SRRH circuit</li> </ul>
C0256/24 (DI-32)	Open or short circuit in hydraulic brake booster solenoid circuit (SRL circuit)	<ul style="list-style-type: none"> <li>• Hydraulic brake booster</li> <li>• SRL or SRLH circuit</li> </ul>
C1225/25 (DI-54)	Open or short circuit in hydraulic brake booster solenoid circuit (SA1 circuit)	<ul style="list-style-type: none"> <li>• Hydraulic brake booster</li> <li>• SA1 circuit</li> </ul>
C1226/26 (DI-54)	Open or short circuit in hydraulic brake booster solenoid circuit (SA2 circuit)	<ul style="list-style-type: none"> <li>• Hydraulic brake booster</li> <li>• SA2 circuit</li> </ul>
C1227/27 (DI-54)	Open or short circuit in hydraulic brake booster solenoid circuit (SA3 circuit)	<ul style="list-style-type: none"> <li>• Hydraulic brake booster</li> <li>• SA3 circuit</li> </ul>
C1228/28 (DI-54)	Open or short circuit in hydraulic brake booster solenoid circuit (STR circuit)	<ul style="list-style-type: none"> <li>• Hydraulic brake booster</li> <li>• STR circuit</li> </ul>
C0200/31* (DI-25)	Right front wheel speed sensor signal malfunction	<ul style="list-style-type: none"> <li>• Right front, left front, right rear and left rear speed sensor</li> <li>• Each speed sensor circuit</li> <li>• Sensor rotor</li> </ul>
C0205/32* (DI-25)	Left front wheel speed sensor signal malfunction	
C0210/33* (DI-25)	Right rear wheel speed sensor signal malfunction	
C0215/34* (DI-25)	Left rear wheel speed sensor signal malfunction	
C1237 / 37 (DI-66)	Some tire is different size from the other tires	Tire size
C1241 / 41 (DI-67)	Low battery voltage or abnormally high battery voltage	<ul style="list-style-type: none"> <li>• Battery</li> <li>• IC regulator</li> <li>• Power source circuit</li> </ul>
C1242/42* <sup>2</sup> (DI-71)	Open circuit in IG2 circuit	<ul style="list-style-type: none"> <li>• Battery</li> <li>• IC regulator</li> <li>• Power source circuit</li> </ul>
C1243 / 43 (DI-75)	Malfunction in deceleration sensor (constant output)	<ul style="list-style-type: none"> <li>• Deceleration sensor</li> <li>• Wire harness for deceleration sensor system</li> </ul>

C1244 / 44 (DI-77)	Open or short circuit in deceleration sensor circuit	<ul style="list-style-type: none"> <li>• Deceleration sensor</li> <li>• Deceleration sensor circuit</li> </ul>
C1245 / 45 (DI-75)	Malfunction in deceleration sensor	<ul style="list-style-type: none"> <li>• Deceleration sensor</li> <li>• Wire harness for deceleration sensor system</li> </ul>
C1246 / 46 (DI-79)	Malfunction in master cylinder pressure sensor	<ul style="list-style-type: none"> <li>• Master cylinder pressure sensor</li> <li>• Master cylinder pressure sensor circuit</li> </ul>
C1249 / 49 (DI-82)	Open circuit in stop light switch circuit	Stop light switch circuit
C1251/51* <sup>2</sup> (DI-87)	Pump motor is locked Open circuit in pump motor ground	Hydraulic brake booster pump motor
C1252/52* <sup>2</sup> (DI-90)	Hydraulic brake booster pump motor malfunction	<ul style="list-style-type: none"> <li>• Hydraulic brake booster pump motor</li> <li>• Hydraulic brake booster pump motor circuit</li> <li>• Pressure switch (PH or PL)</li> </ul>
C1253/53* <sup>2</sup> (DI-96)	Hydraulic brake booster pump motor relay malfunction	<ul style="list-style-type: none"> <li>• ABS motor 1 or ABS motor 2 relay <ul style="list-style-type: none"> <li>• ABS motor 1 or ABS motor 2 relay circuit</li> </ul> </li> <li>• Hydraulic brake booster pump motor circuit</li> </ul>
C1254/54* <sup>2</sup> (DI-101)	Pressure switch malfunction	<ul style="list-style-type: none"> <li>• Pressure switch (PH or PL)</li> <li>• Pressure switch circuit</li> </ul>
C1256/56* <sup>2</sup> (DI-104)	Accumulator low pressure malfunction	<ul style="list-style-type: none"> <li>• Accumulator</li> <li>• Pressure switch (PH or PL)</li> <li>• Hydraulic brake booster pump motor</li> </ul>
C1257/57* <sup>2</sup> (DI-110)	Power supply drive circuit malfunction	<ul style="list-style-type: none"> <li>• Battery</li> <li>• Power source circuit</li> <li>• ABS &amp; BA &amp; TRC &amp; VSC ECU</li> </ul>
C1268 / 68 (DI-114)	Transfer L4 position signal transmission failure	<ul style="list-style-type: none"> <li>• Transfer L4 position switch</li> <li>• Transfer L4 position switch circuit</li> </ul>
C1269 / 69 (DI-117)	Malfunction in neutral start switch circuit (R range)	<ul style="list-style-type: none"> <li>• Neutral start switch</li> <li>• Neutral start switch circuit (R range)</li> </ul>
Always ON (DI-126)	Malfunction in ABS & BA & TRC & VSC ECU	<ul style="list-style-type: none"> <li>• Battery</li> <li>• IC regulator</li> <li>• Power source circuit</li> <li>• ABS &amp; BA &amp; TRC &amp; VSC ECU</li> </ul>

\*<sup>1</sup> : As the DTC cannot be erased by replacing parts alone do either of the following operations.

- (1) Clear DTC (See page DI-4).
- (2) At the vehicle speed of 20 km/h (12 mph), drive the vehicle for 30 sec. or more.

\*<sup>2</sup>: Using the following table, troubled parts can be specified.

DTC		42		51		52		53		54		56		57	
BRAKE warning light and buzzer		Light	Buzzer	Light	Buzzer	Light	Buzzer	Light	Buzzer	Light	Buzzer	Light	Buzzer	Light	Buzzer
Pressure switch	PH					<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		
	PL					<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		
Pump motor circuit	Pump motor			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		
	MTT wire harness														
	MT+ wire harness			<input type="checkbox"/>											
	MT- wire harness			<input type="checkbox"/>											
Accumulator malfunction												<input type="checkbox"/>	<input type="checkbox"/>		
Motor relay circuit	MR1 open circuit							<input type="checkbox"/>							
	MR2 open circuit							<input type="checkbox"/>							
	MR1 welded contact					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
	MR2 welded contact					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
Hydraulic brake booster	Pressure leaks					<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		
Power source*	IG2 open circuit	<input type="checkbox"/>													
ECU	Power supply circuit													<input type="checkbox"/>	

\*: When IG1 circuit is open, ABS warning light and BRAKE warning light come on.

**DTC chart of VSC:**

DTC No. (See Page)	Detection Item	Trouble Area
C1231 / 31 (DI-56)	Malfunction in steering angle sensor	<ul style="list-style-type: none"> <li>Steering angle sensor</li> <li>Steering angle sensor circuit</li> </ul>
C1232 / 32 (DI-60)	Malfunction in deceleration sensor	<ul style="list-style-type: none"> <li>Deceleration sensor</li> <li>Deceleration sensor circuit</li> </ul>
C1233 / 33 (DI-62)	Open or short circuit in yaw rate sensor circuit	<ul style="list-style-type: none"> <li>Yaw rate sensor</li> <li>Yaw rate sensor circuit</li> </ul>
C1234 / 34 (DI-62)	Malfunction in yaw rate sensor	<ul style="list-style-type: none"> <li>Yaw rate sensor</li> <li>Yaw rate sensor circuit</li> </ul>
C1210 / 36 (DI-120)	Zero point calibration of yaw rate sensor undone	<ul style="list-style-type: none"> <li>Yaw rate sensor</li> <li>Yaw rate sensor circuit</li> <li>Neutral start switch circuit (P range)</li> </ul>
C1207 / 37 (DI-44)	Malfunction in neutral start switch (P/R range)	<ul style="list-style-type: none"> <li>Neutral start switch</li> <li>Neutral start switch circuit (P/R range)</li> </ul>
C1336 / 39 (DI-120)	Zero point calibration of deceleration sensor	<ul style="list-style-type: none"> <li>Deceleration sensor</li> <li>Deceleration sensor circuit</li> <li>Neutral start switch (P range) circuit</li> </ul>
C1223 / 43 (DI-50)	Malfunction in ABS control system	ABS control system
C1224 / 44 (DI-51)	Open or short circuit in NE signal circuit	<ul style="list-style-type: none"> <li>NEO circuit</li> <li>Engine and ECT ECU</li> <li>ABS &amp; BA &amp; TRC &amp; VSC ECU</li> </ul>
C1340 / 47 (DI-123)	Open circuit in center differential lock signal	<ul style="list-style-type: none"> <li>Center differential lock system</li> <li>Center differential lock circuit</li> </ul>
C1201 / 51 (DI-41)	Engine and ECT ECU system malfunction	Engine control system
C1203 / 53 (DI-42)	Engine and ECT ECU communication circuit malfunction	<ul style="list-style-type: none"> <li>TRC+ or TRC – circuit <ul style="list-style-type: none"> <li>ENG+ or ENG – circuit</li> </ul> </li> <li>Engine and ECT ECU</li> </ul>
Always ON (DI-130)	Malfunction in ABS & BA & TRC & VSC ECU Open circuit in VSC TRC warning light circuit	<ul style="list-style-type: none"> <li>Power source circuit</li> <li>VSC TRC warning light circuit</li> </ul>

**HINT:**

There is a case that hand –held tester cannot be used when VSC TRC warning light is always on.