

**Step 3: DTC Check**

Recheck DTC referring to "DTC Check: ".

**Step 4: ABS Check**

According to ABS Check for the DTC confirmation in Step 3, locate the cause of the trouble, namely in a sensor, switch, wire harness, connector, actuator assembly or other part and repair or replace faulty parts.

**Step 5: Brakes Diagnosis**

Check the parts or system suspected as a possible cause referring to "Brakes Symptom Diagnosis: in Section 4A" and based on symptoms appearing on the vehicle (symptom obtained through Steps 1 and 2 and repair or replace faulty parts, if any).

**Step 6: Check for Intermittent Problem**

Check parts where an intermittent trouble is easy to occur (e.g., wire harness, connector, etc.), referring to "Intermittent and Poor Connection Inspection: in Section 00" and related circuit of trouble code recorded in Step 1 to 3.

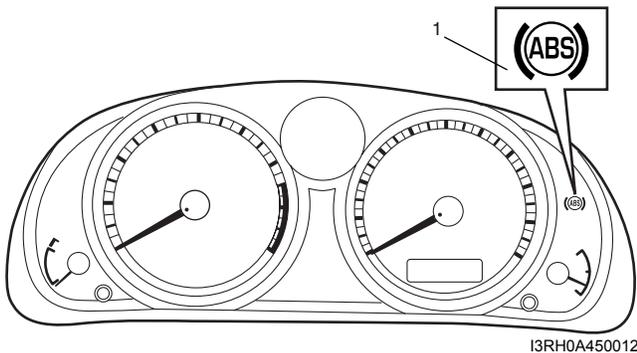
**Step 7: Final Confirmation Test**

Confirm that the problem symptom has gone and the ABS is free from any abnormal conditions. If what has been repaired is related to the malfunction DTC, clear the DTC once and perform test driving and confirm that no DTC is indicated.

**ABS Warning Lamp Check**

S3RH0A4504002

- 1) Turn ignition switch ON.
- 2) Check that ABS warning lamp (1) comes ON for about 2 seconds and then goes off.  
If any faulty condition is found, advance to "ABS Warning Lamp Does Not Come ON at Ignition Switch ON:", "ABS Warning Lamp Comes ON Steady:" or "ABS Warning Lamp Flashes Continuously while Ignition Switch Is ON:".

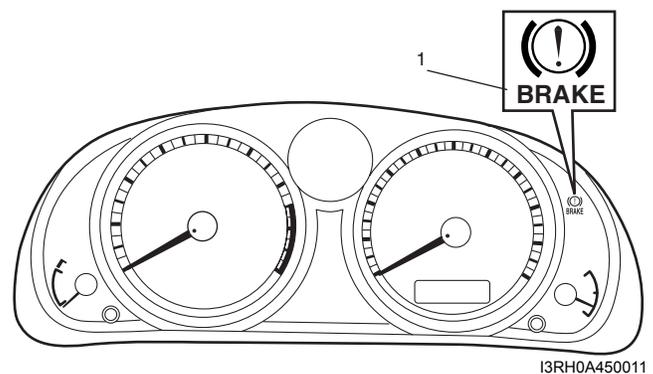
**EBD Warning Lamp (Brake Warning Lamp) Check**

S3RH0A4504003

**NOTE:**

**Perform this check on a level place.**

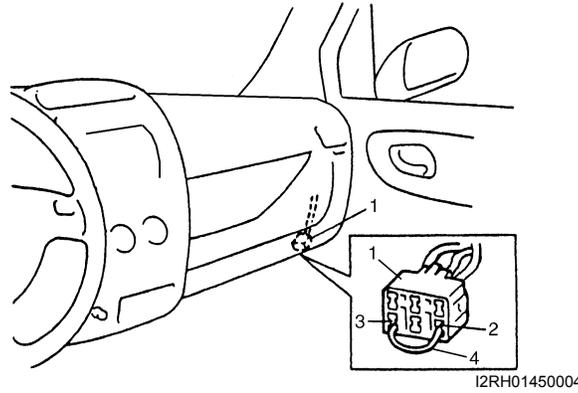
- 1) Turn ignition switch ON with parking brake applied.
- 2) Check that EBD warning lamp (brake warning lamp) (1) is turned ON.
- 3) Release parking brake with ignition switch ON and check that EBD warning lamp (brake warning lamp) goes off.  
If it doesn't go off, go to "EBD Warning Lamp (Brake Warning Lamp) Comes ON Steady:".



**DTC Check**

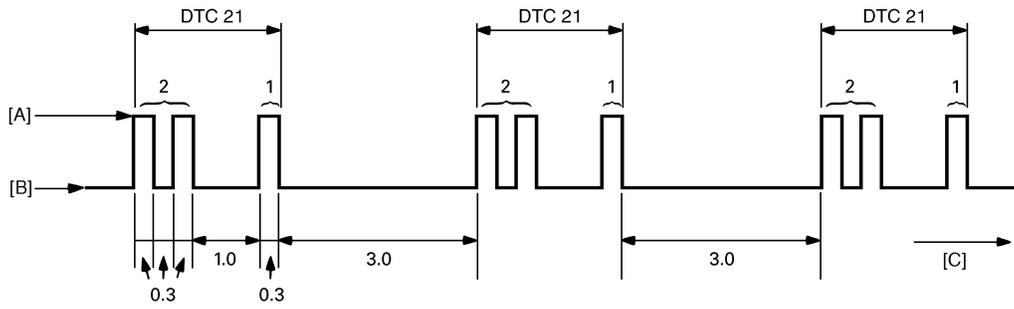
**Using ABS Warning Lamp**

- 1) Perform "ABS Warning Lamp Check: ".
- 2) Using service wire (4), connect diagnosis switch terminal (2) of monitor connector (blue) (1) to ground (3).



- 3) Turn ignition switch to ON position.
- 4) Read flashing of ABS warning lamp which represents DTC as shown in the following example and write it down. When more than 2 DTCs are stored in memory, flashing for each DTC is repeated three times starting with the smallest DTC number in increasing order. For details of DTC, refer to "DTC Table: ". If DTC is not indicated at ABS warning lamp, go to "Code (DTC) Is Not Outputted Even with Diagnosis Switch Terminal Connected to Ground: ".

**Example: When right-front wheel speed sensor circuit opens (DTC 21)**



[A]:	ABS warning lamp turned ON
[B]:	ABS warning lamp turned OFF
[C]:	Unit (Seconds)

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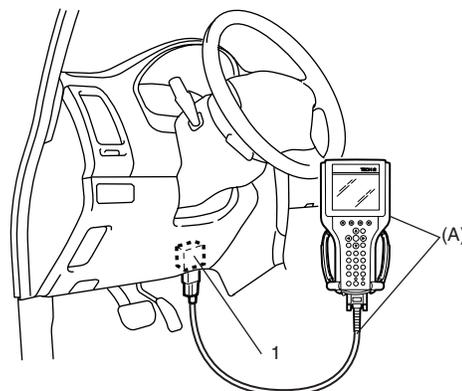
- 5) After completing the check, turn ignition switch off, disconnect service wire from monitor coupler.

**Using SUZUKI Scan Tool**

- 1) Turn ignition switch to OFF position.
- 2) Connect SUZUKI scan tool to data link connector (1).

**Special tool**

**(A): SUZUKI scan tool**



I3RH0A450013

- 3) Turn ignition switch to ON position.
- 4) Read DTC according to instructions displayed on SUZUKI scan tool and print it or write it down. Refer to SUZUKI scan tool operator's manual for further details.

**NOTE:**

If SUZUKI scan tool can not communicate ABS hydraulic unit / control module, perform "Serial Data Link Circuit Check: ".

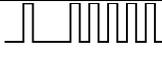
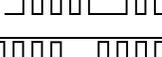
- 5) After completing the check, turn ignition switch off and disconnect SUZUKI scan tool from DLC.

**DTC Table**

S3RH0A4504005

**CAUTION:**

Be sure to perform "ABS Check: " before starting diagnosis.

DTC (displayed on SUZUKI scan tool)	DTC (indicated by ABS warning lamp)	ABS warning lamp flashing pattern	Diagnostic Items
NO DTC	12	 MCODE00012-0	Normal
C1015	15	 MCODE00015-0	G sensor circuit
C1021	21	 MCODE00021-0	RF
C1025	25	 MCODE00025-0	LF
C1031	31	 MCODE00031-0	RR
C1035	35	 MCODE00035-0	LR
C1022	22	 MCODE00022-0	RF
C1026	26	 MCODE00026-0	LF
C1032	32	 MCODE00032-0	RR
C1036	36	 MCODE00036-0	LR
C1041	41	 MCODE00041-0	RF
C1042	42	 MCODE00042-0	RF
C1045	45	 MCODE00045-0	LF
C1046	46	 MCODE00046-0	LF
C1051	51	 MCODE00051-0	RR
C1052	52	 MCODE00052-0	RR
C1055	55	 MCODE00055-0	LR
C1056	56	 MCODE00056-0	LR
C1057	57	 MCODE00057-0	Power source
C1061	61	 MCODE00061-0	ABS pump motor and/or motor relay circuit

## 4E-14 ABS:

DTC (displayed on SUZUKI scan tool)	DTC (indicated by ABS warning lamp)	ABS warning lamp flashing pattern	Diagnostic Items
C1063	63		Fail-safe relay
C1071	71		ABS control module

### DTC Clearance

S3RH0A4504006

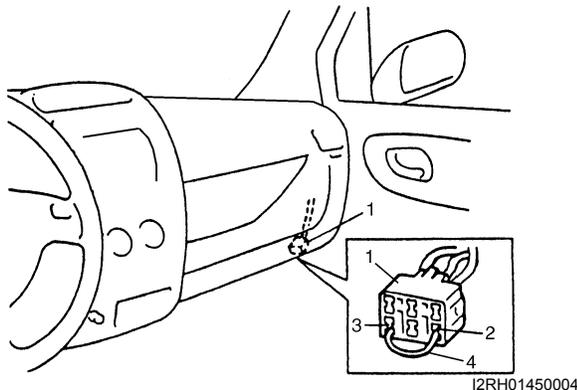
#### WARNING:

**When performing a driving test, select a safe place where there is neither any traffic nor any traffic accident possibility and be very careful during testing to avoid occurrence of an accident.**

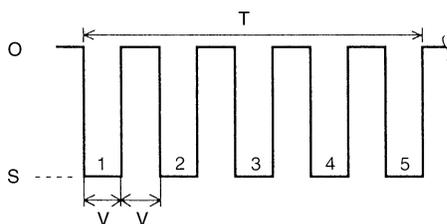
After repair or replace malfunction part(s), clear all DTCs by performing the following procedure or using SUZUKI scan tool.

#### Not Using SUZUKI Scan Tool

- 1) Turn ignition switch OFF.
- 2) Using service wire (4), connect diagnosis switch terminal (2) of monitor connector (blue) (1) to ground terminal (3).



- 3) With connection described in Step 2) maintained, turn ignition switch ON.
- 4) Repeat disconnecting and reconnecting of service wire between diagnosis and ground terminals 5 times or more at about 1 sec. interval within 10 seconds.



I3RH0A450003

O: Open	T: About 10 seconds
S: Short	V: About 1 seconds

- 5) Turn ignition switch OFF and disconnect service wire from monitor coupler.
- 6) Perform "Driving Test" (Step 2 of "ABS Check: ") and "DTC Check: " and confirm that normal DTC (DTC 12) is displayed not malfunction DTC.

#### Using SUZUKI Scan Tool

- 1) Connect SUZUKI scan tool to data link connector in the same manner as when making this connection for DTC check.
- 2) Turn ignition switch to ON position.
- 3) Erase DTC according to instructions displayed on scan tool. Refer to scan tool operator's manual for further details.
- 4) After completing the clearance, turn ignition switch OFF and disconnect scan tool from data link connector.
- 5) Perform "Driving Test" (Step 2 of "ABS Check: ") and "DTC Check: " and confirm that NO DTC is displayed on scan tool.

#### Scan Tool Data

S3RH0A4504007

The parameter data below are values measured with the scan tool when the normally operating vehicle is under the following conditions. When taking measurements for comparison by using the scan tool, be sure to check that the vehicle is under the following conditions.

- Apply parking brake and block wheels.
- Ignition switch ON.
- Turn OFF air conditioner (if equipped).
- Apply no load to power steering (if equipped). (Don't turn it)
- Turn OFF all electric loads (except ignition).
- No DTC.
- ABS is not operated. (Normal braking operation)

Scan Tool Data	Standards	Condition
Battery Voltage	10.0 – 16.0 V	—
Pump Motor Relay	0.0 V	—
RF Wheel Speed	0 km/h, 0.0 MPH	Vehicle stop
LF Wheel Speed	0 km/h, 0.0 MPH	Vehicle stop
RR Wheel Speed	0 km/h, 0.0 MPH	Vehicle stop