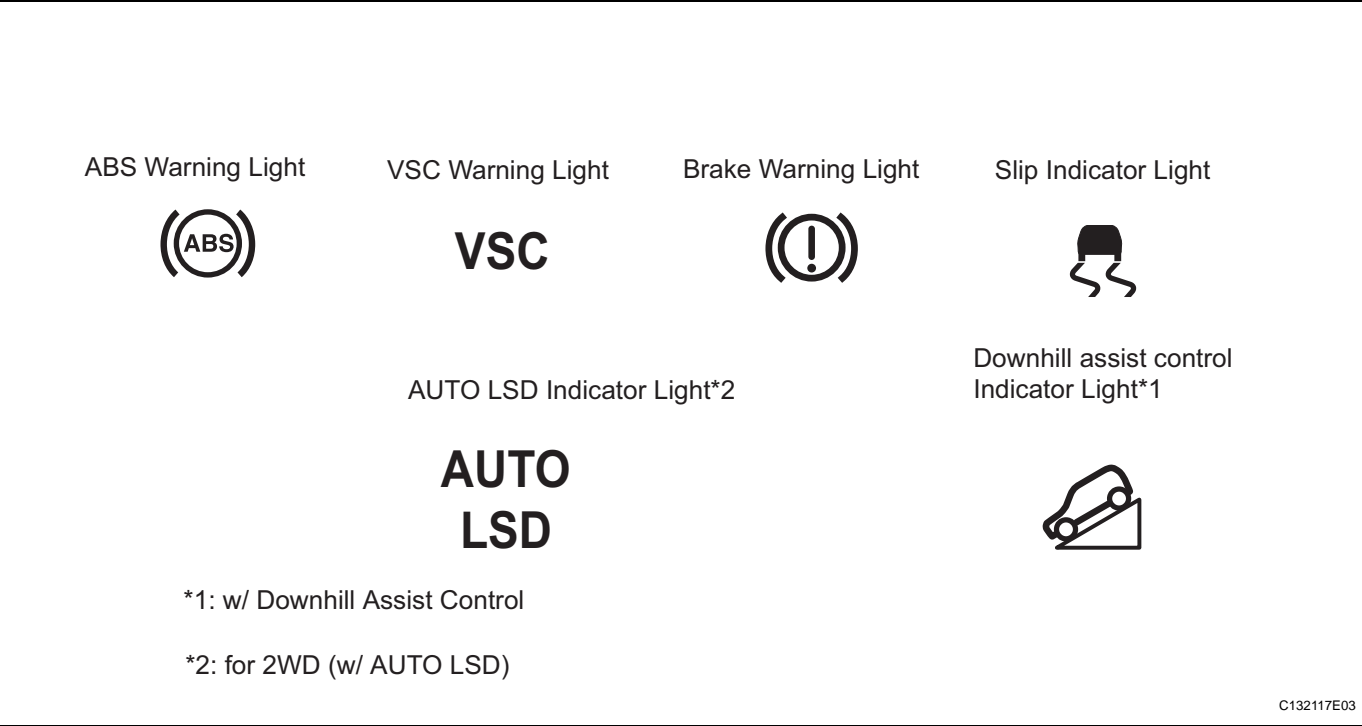


DIAGNOSIS SYSTEM

1. DIAGNOSIS

If the skid control ECU detects a malfunction, the ABS, VSC and brake warning lights and the slip, downhill assist control and AUTO LSD indicator lights come on in accordance with the trouble area to warn the driver. The table below indicates which lights come on when there are malfunctions in particular functions.



| Item / Trouble Area                       | ABS                                      | EBD                                      | BA (Brake Assist)                        | TRC                                      | VSC                                      | Downhill assist control*1                | Hill-start assist control*2              | AUTO LSD*3                               |
|---|--|--|--|--|--|--|--|--|
| ABS warning light                         | ○  | ○  | ○  | -  | -  | -  | -  | -  |
| Brake warning light                       | -  | ○  | ○*4                                      | -  | -  | -  | -  | -  |
| VSC warning light                         | ○  | ○  | ○  | ○  | ○  | ○  | ○  | ○  |
| Slip indicator light                      | ○  | ○  | ○  | ○  | ○  | ○  | ○  | ○  |
| Downhill assist control indicator light*1 | ●<br>(Downhill assist control switch ON) | ●<br>(Downhill assist control switch ON) | ●<br>(Downhill assist control switch ON) | ●<br>(Downhill assist control switch ON) | ●<br>(Downhill assist control switch ON) | ●<br>(Downhill assist control switch ON) | ●<br>(Downhill assist control switch ON) | ●<br>(Downhill assist control switch ON) |
| AUTO LSD indicator light*3                | -  | -  | -  | -  | -  | -  | -  | -  |

- : Light ON
- : Light ON (Blinking)
- : Light OFF
- HINT:
- \*1: w/ Downhill assist control
  - \*2: w/ Hill-start assist control
  - \*3: for 2WD w/ AUTO LSD

- \*4: w/ 16-inch disc
- The DTCs can be read by connecting SST (09843-18040) between the TC and CG terminals of the DLC3 and observing the blinking pattern of the ABS and VSC warning lights, or by using an intelligent tester (see page [BC-47](#)).
- This system has a sensor signal check function (see page [BC-28](#)).

## 2. CHECK WARNING LIGHT AND INDICATOR LIGHT

- (a) Release the parking brake lever.

### NOTICE:

**Before releasing the parking brake lever, set chocks to hold the vehicle for safety.**

### HINT:

When the parking brake is applied or the brake fluid level is low, the brake warning light comes on.

- (b) When the ignition switch is turned ON, check that the ABS, VSC and brake warning lights and the slip, downhill assist control and AUTO LSD indicator lights come on and go off in about 3 seconds.

ABS Warning Light



VSC Warning Light

**VSC**

Brake Warning Light



Slip Indicator Light



AUTO LSD Indicator Light\*2

**AUTO  
LSD**

Downhill assist control  
Indicator Light\*1



\*1: w/ Downhill Assist Control

\*2: for 2WD (w/ AUTO LSD)

C132117E03

### HINT:

If the warning lights do not illuminate, confirm whether the bulbs have burned out, and also check for CAN communication system DTCs, since the skid control ECU and combination meter are connected by the CAN communication line.

If the warning light remains on, perform relevant troubleshooting procedures. The relevant troubleshooting procedures are in the sections listed in the table below.

| Section Title                | See procedure          |
|------------------------------|------------------------|
| ABS Warning Light Remains ON | <a href="#">BC-134</a> |

| Section Title                                      | See procedure          |
|--|------------------------|
| VSC Warning Light Remains ON                       | <a href="#">BC-139</a> |
| Brake Warning Light Remains ON                     | <a href="#">BC-144</a> |
| Slip Indicator Light Remains ON                    | <a href="#">BC-152</a> |
| Downhill assist control Indicator Light Remains ON | <a href="#">BC-156</a> |
| AUTO LSD Indicator Light Remains ON                | <a href="#">BC-164</a> |

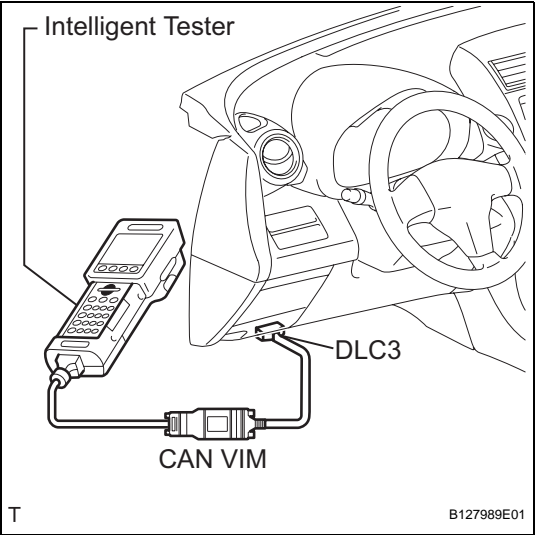
DTC CHECK / CLEAR

1. CHECK DTC (When Using Intelligent Tester)

- (a) Connect the intelligent tester (with CAN VIM) to the DLC3.
- (b) Turn the ignition switch ON.
- (c) Turn the tester on.
- (d) Read the DTCs by following the prompts on the tester screen.

HINT:

Refer to the intelligent tester operator's manual for further details.

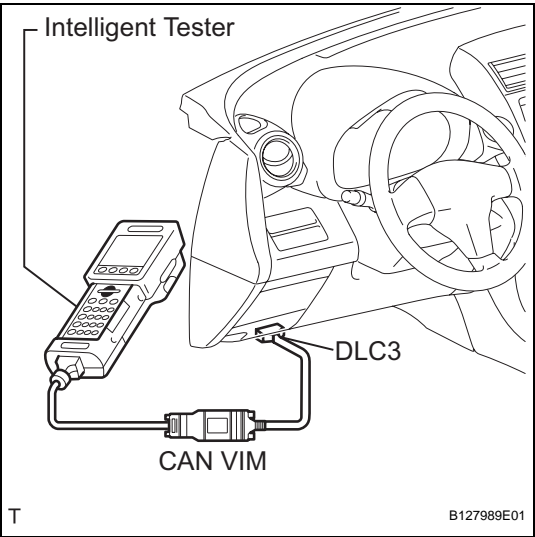


2. CLEAR DTC (When Using Intelligent Tester)

- (a) Connect the intelligent tester (with CAN VIM) to the DLC3.
- (b) Turn the ignition switch ON.
- (c) Turn the tester on.
- (d) Operate the intelligent tester to clear the codes.

HINT:

Refer to the intelligent tester operator's manual for further details.



3. CHECK DTC (When not Using Intelligent Tester)

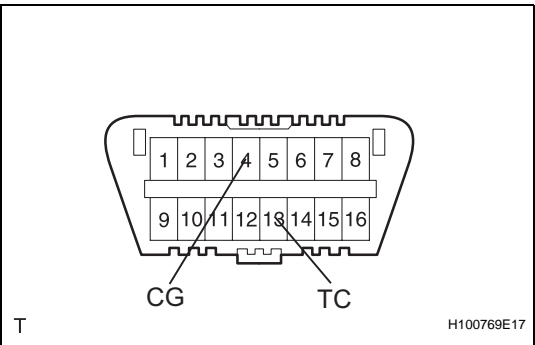
- (a) Using SST, connect terminals 13 (TC) and 4 (CG) of the DLC3.

SST 09843-18040

- (b) Turn the ignition switch ON.
- (c) Read DTCs from the ABS warning light on the combination meter.

HINT:

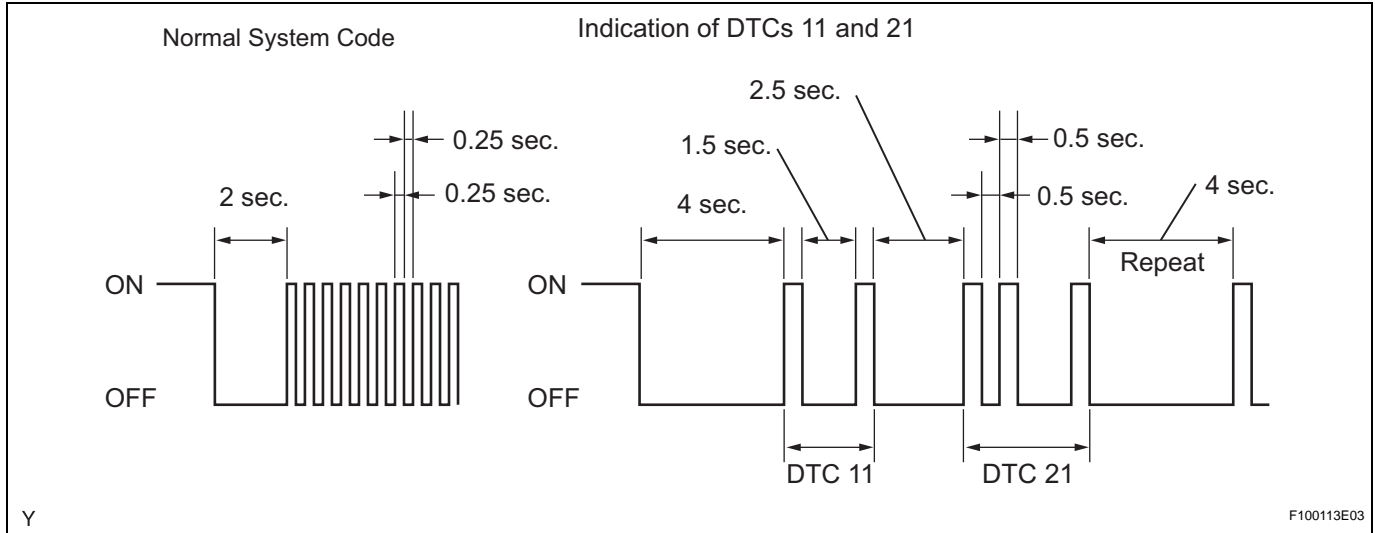
- If the ABS warning light does not blink, perform relevant troubleshooting procedures. The relevant troubleshooting procedures are in the sections listed in the table below.



| Trouble Area              | See Procedure                                    |
|---------------------------|--|
| ABS warning light circuit | <a href="#">BC-134</a> or <a href="#">BC-138</a> |

| Trouble Area               | See Procedure                                    |
|----------------------------|--|
| VSC warning light circuit  | <a href="#">BC-139</a> or <a href="#">BC-142</a> |
| TC and CG terminal circuit | <a href="#">BC-174</a>                           |

- As an example, the blinking patterns of the normal system code and DTCs 11 and 21 are shown below.



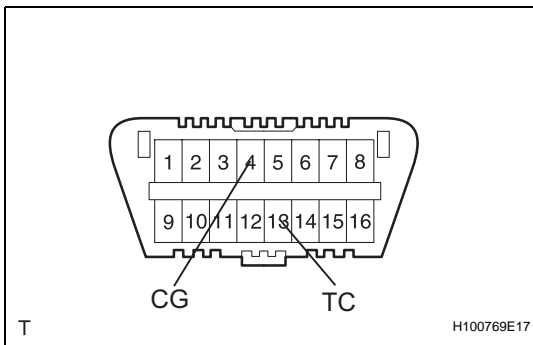
- DTCs are explained in the "DIAGNOSTIC TROUBLE CODE CHART" (see page [BC-57](#)).
- (d) After completing the check, disconnect SST from terminals 13 (TC) and 4 (CG) of the DLC3, and turn the ignition switch OFF.
- HINT:
- If 2 or more malfunctions are detected at the same time, the lowest numbered DTC is displayed first.

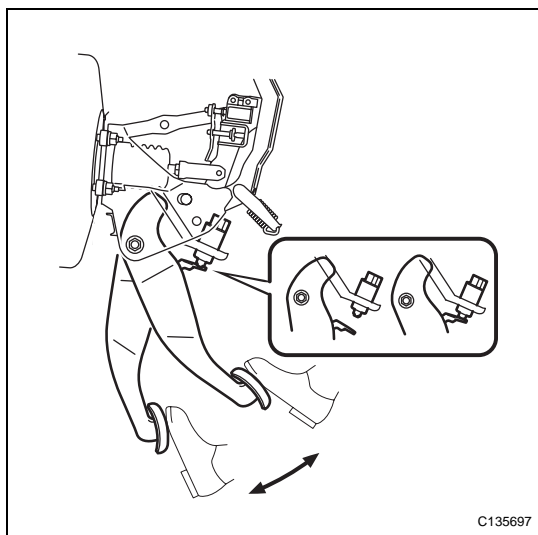
#### 4. CLEAR DTC (When not Using Intelligent Tester)

- (a) Using SST, connect terminals 13 (TC) and 4 (CG) of the DLC3.

**SST 09843-18040**

- (b) Turn the ignition switch ON.





- (c) Clear the DTCs stored in the skid control ECU by depressing the brake pedal 8 times or more within 5 seconds.
- (d) Check that the ABS and VSC warning lights come on.
- (e) Remove SST from the terminals of the DLC3.
- (f) Turn the ignition switch OFF.

**HINT:**

Clearing the DTCs cannot be performed by removing the cable from the negative (-) battery terminal or the ECU-IG1 fuse.

**5. END OF DTC CHECK/CLEAR**

- (a) Turn the ignition switch ON.
- (b) Check that the ABS and VSC warning lights go off within approximately 3 seconds.
- (c) Turn the ignition switch OFF.