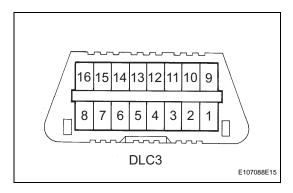
# **DIAGNOSIS SYSTEM**

## 1. DESCRIPTION

The ECM stores DTCs (Diagnostic Trouble Codes) when trouble occurs on the vehicle. The diagnosis system allows reading of DTCs stored in the ECM when a intelligent tester is connected to the DLC3 (Data Link Connector 3). If the CRUISE MAIN indicator light does not come on after a DTC check, it means that a malfunction has occurred in the cruise control system. Use a intelligent tester or SST to check for DTCs.



## 2. CHECK DLC3

(a) The ECM uses ISO 9141-2 for data communication. The terminal arrangement of the DLC3 complies with SAE J1962 and matches the ISO 9141-2 format.

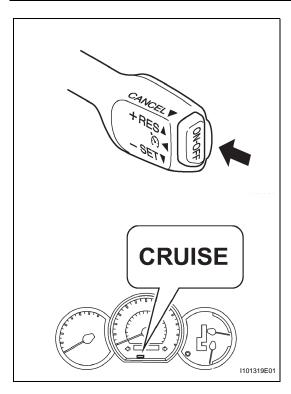
Terminal No.	Tester connection	Condition	Specification
4	Chassis ground - Body Ground	Always	Below 1 Ω
16	Battery positive - Body Ground	Always	9 to 14 V

#### HINT:

If the intelligent tester display shows "UNABLE TO CONNECT TO VEHICLE" after connecting the tester to the DLC3 and turning the ignition to the ON position, there is a problem in either the vehicle or the tester itself.

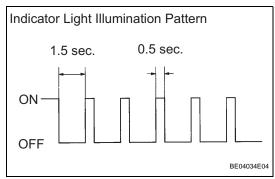
- If communication is normal when connecting the tester to another vehicle, inspect the DLC3 on the original vehicle.
- If communication is still not possible when connecting the tester to another vehicle, it suggests the problem exists in the tester. In this case, consult the Service Department listed in the tester's instruction manual.





## 3. CHECK INDICATOR

(a) Turn the ignition switch to the ON position.



Intelligent Tester

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(b) Check that the CRUISE MAIN indicator light comes on when the cruise control main switch ON-OFF button is pushed on, and that the indicator light goes off when the ON-OFF button is pushed off. HINT:

If there is a problem with the ON/OFF illumination of the indicator light, inspect the cruise main indicator light circuit (See page CC-28). HINT:

If a malfunction occurs in the vehicle speed sensor, stop light switch assembly or other related parts while cruise control driving, the ECM actuates AUTO CANCEL of the cruise control. Then the CRUISE MAIN indicator light starts to blink, to inform the driver of the malfunction. At the same time, data of the malfunction is stored as a diagnostic trouble code (DTC).



## 1. DTC CHECK/CLEAR

- (a) Check DTCs using the intelligent tester.
  - (1) Turn the ignition switch off.
  - (2) Connect the intelligent tester to the DLC3.
  - (3) Turn the ignition switch to the ON position.
  - (4) Read DTCs on the tester screen.
- (b) Clear the DTCs using the intelligent tester.
  - (1) Turn the ignition switch off.
  - (2) Turn the ignition switch to the ON position.
  - (3) Clear the DTCs by following the prompts on the tester screen.

HINT:

The intelligent tester has a "Snapshot" function which records the monitored data.



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

