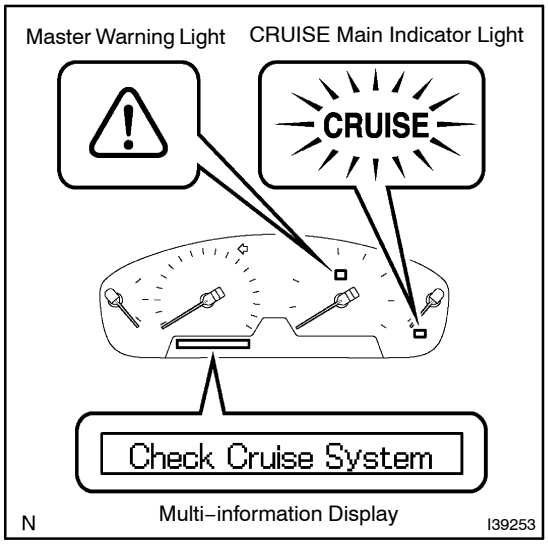
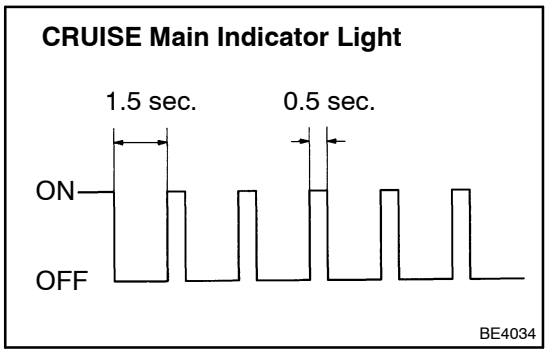
05H0U–01

DIAGNOSIS SYSTEM





1. DIAGNOSIS FUNCTION

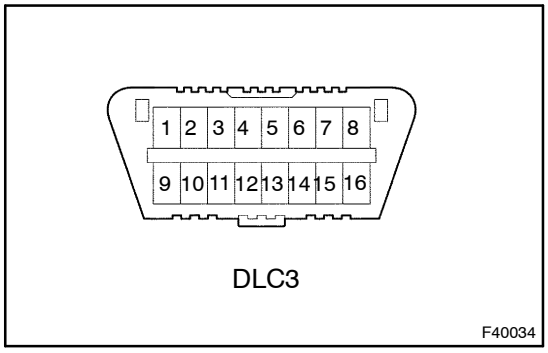
(a) The diagnosis function makes the master warning light and the multi–information display come on, and the CRUISE main indicator light blinks as shown in the illustration. When a malfunction occurs in the dynamic laser cruise control system, the DTCs are stored in the ECM.

NOTICE:

- **The master warning light goes off if the system returns to normal condition.**
- **Since the stored data in the ECM is erased by disconnecting the EFI No.1 fuse or the battery terminal, do not disconnect them until the inspection has been completed.**

2. DESCRIPTION

(a) The ECM controls the dynamic laser cruise control system of the vehicle. The data and DTCs relating to the dynamic laser cruise control system can be read from the DLC3 of the vehicle. If either DTC or CRUISE OK is not displayed in the multi–information display on the combination meter when checking for DTCs, there may be a problem with the combination meter or the CAN communication and multiplex communication system.
Use the intelligent tester II to check and solve the problem.



3. CHECK THE DLC3

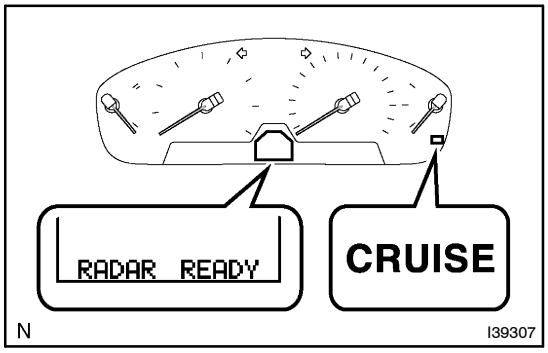
(a) The vehicle's ECM uses ISO 9141–2 (Eure–OBD)/ISO 14230(M–OBD)for communication. The terminal arrangement of the DLC3 complies with ISO 15031–03 and matches the ISO 9141–2/ ISO 14230 format.

Symbols (Terminals No.)	Terminal Description	Condition	Specified Condition
SIL(7) – SG(5)	Bus "+" line	During transmission	Pulse generation
CG(4) – Body ground	Chassis ground	Always	Below 1 Ω
SG(5) – Body ground	Signal ground	Always	Below 1 Ω
BAT(16) – Body ground	Battery positive	Always	11 to 14 V
CANH(6) – CANL(14)	HIGH–level CAN bus line	IG switch OFF	54 to 67 Ω
CANH(6) – Battery positive	HIGH–level CAN bus line	IG switch OFF	1 MΩ or higher
CANH(6) – CG(4)	HIGH–level CAN bus line	IG switch OFF	3 kΩ or higher
CANL(14) – Battery positive	LOW–level CAN bus line	IG switch OFF	1 MΩ or higher
CANL(14) – CG(4)	LOW–level CAN bus line	IG switch OFF	3 kΩ or higher

HINT:

If the display shows "UNABLE TO CONNECT TO VEHICLE" when you have connected the intelligent tester II to the DLC3, turned the ignition switch to the ON position and operated the tester, there is a problem on either the vehicle side or the tool side.

- If communication is normal when the tool is connected to another vehicle, inspect the DLC3 on the original vehicle.
- If communication is still impossible when the tool is connected to another vehicle, the problem is probably in the tool itself, so consult the Service Department listed in the tool's instruction manual.



4. CHECK THE INDICATOR

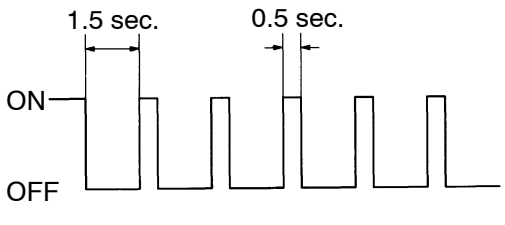
(a) Turn the ignition switch to the ON position.

(b) Check that the CRUISE main indicator light and RADAR READY indicator come on when the 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 the indicator check result shows a problem, proceed to troubleshooting (see page 05–3691) for the combination meter section.

CRUISE Main Indicator Light



HINT:

If a malfunction occurs in the vehicle speed sensors, the stop lamp switch, or other related parts during cruise control driving, the ECU actuates AUTO CANCEL of the cruise control and blinks the CRUISE main indicator light. This indicator light informs the driver of the malfunction. At the same time, the malfunction is stored as a diagnostic trouble code.