

CRUISE MAIN INDICATOR LAMP CIRCUIT

CIRCUIT DESCRIPTION

When the cruise control main switch is ON, CRUISE main indicator lamp and READY indicator lamp turn on. This indicates the control condition (presence or absence of a vehicle in front, vehicle-to-vehicle distance, and set vehicle speed) and fail-safe state through the multiplex communication system and CAN communication system.

The master warning lamp and CRUISE main indicator lamp turn on and vehicle-to-vehicle distance information is displayed on the combination meter as the alarm buzzer sounds.

When the ECM detect signals from each sensor and actuator, it sends the signals to the combination meter via the CAN and BEAN. Then, items such as "Clean Radar Sensor", "Cruise not Available", "Check Cruise System" and "Radar Cruise Ready" are displayed in the combination meter's multi-information display.

HINT:

If the vehicle in front in the same lane significantly decreases vehicle speed or another vehicle moves in front of your own vehicle, adequate deceleration cannot be applied and the vehicle-to-vehicle distance will shorten. At this time, the system sounds the buzzer and the master warning lamp blinks to warn the driver.

Each indicator in the dynamic radar cruise control uses CAN and BEAN for communication. Therefore if there are any malfunctions in this circuit, check for DTCs in the CAN communication and multiplex communication systems.

INSPECTION PROCEDURE

1 PERFORM ACTIVE TEST (INDICATOR LAMP)

- (a) Select the Active Test, use the intelligent tester II to generate a control command, and then check that the combination meter indicator lamp turns on according to the table.

Combination meter assy (Combination meter ECU):

Item	Normal Condition	Diagnostic Note
Indicat. Lamp Cruise	"CRUISE" indicator is ON/OFF	–
Indicat. Rada Cruise Display	Graphic area is ON/OFF	*
Indicat. Lamp L–Cruise Check	"CHECK CRUISE SYSTEM" indicator is ON/OFF	–
Indicat. Lamp L–Cruise Ready	"RADAR READY" indicator is ON/OFF	–

HINT:

*: The entire graphic area in the combination meter will light up.

OK: Indicator lamp turns on.

NG

**Go to COMBINATION METER SYSTEM
(See Pub. No. RM1049E, page 05-2148)**

OK

2 READ DATA LIST (CRUISE CONTROL MAIN SWITCH)

- (a) Check the Data List for proper function of the cruise control main switch.

ECM (Cruise control):

Item	Measurement Item / Display (Range)	Normal Condition	Diagnostic Note
CCS Ready M–CPU	Cruise control system standby condition (Main CPU)/ ON or OFF	ON to OFF: Change ON/OFF each time Main switch is pushed	A
CCS Ready S–CPU	Cruise control system standby condition (Sub CPU)/ ON or OFF	ON to OFF: Change ON/OFF each time Main switch is pushed	A
CCS Indicator M–CPU	Cruise indicator signal (Main CPU)/ ON or OFF	ON: "CCS READY" ON OFF: "CCS READY" OFF	B
CCS Indicator S–CPU	Cruise indicator signal (Sub CPU)/ ON or OFF	ON: "CCS READY" ON OFF: "CCS READY" OFF	B

OK: When the cruise control main switch operation is performed, ON will be display.

HINT:

A is OK, but B is NG → DTC output or ECM failure

NG

**REPLACE ECM (CRUISE CONTROL)
(See Pub. No. RM1049E, page 10-21)**

OK

**PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE
(See page 05-20)**