

5. Subaru Select Monitor

A: OPERATION

1. GENERAL DESCRIPTION

The on-board diagnosis function of the cruise control system uses Subaru Select Monitor.

The on-board diagnosis function operates in two categories, which are used depending on the type of problems;

1) Cruise Control Cancel Conditions Diagnosis:

(1) This category of diagnosis requires actual vehicle driving in order to determine the cause, as when cruise speed is cancelled during driving although cruise cancel condition is not entered.

(2) Cruise control memory in ECM stores the cancel condition (Code No.) which occurred during driving. When there are multiple cancel conditions (Code No.), they are shown on the Subaru Select Monitor.

CAUTION:

- The cruise control memory stores not only the cruise "cancel" which occurred (although "cancel" operation is not entered by the driver), but also the "cancel" condition input by the driver.
- The latest memory content (latest code) is cleared when ignition switch is turned to OFF. However, the memory content by the diagnosis of faulty switches relating to the system and cruise control is retained as the fault history (memory code), after the ignition switch is turned to OFF.

2) Real-time Diagnosis:

Real-time diagnosis function is used to determine whether or not the input signal system is in good order, according to signal emitted from switches, sensors, etc.

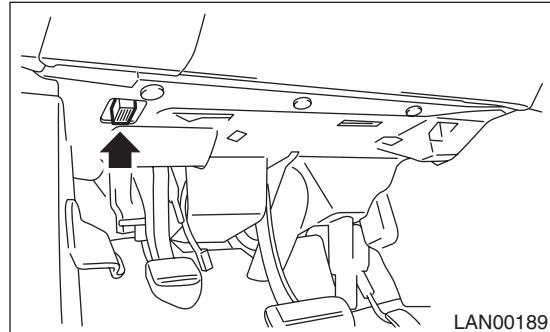
(1) Vehicle cannot be driven at cruise speed when the problem occurs in the cruise control system or relevant circuits.

(2) Monitor the signal conditions from switches and sensors.

2. CRUISE CONTROL CANCEL CONDITIONS DIAGNOSIS

- 1) Prepare the Subaru Select Monitor kit.
- 2) Connect the diagnosis cable to Subaru Select Monitor.
- 3) Connect the Subaru Select Monitor to data link connector.

(1) Data link connector is located in the lower portion of the instrument panel (on the driver's side).



(2) Connect the diagnosis cable to data link connector.

- 4) Start the engine and turn the cruise control main switch to ON.
- 5) Run the Subaru Select Monitor.
- 6) On the «Main Menu» display screen, select the {2. Each System Check}.
On the system selection display screen, select the {Engine Control System}. Select the [OK] after the information of engine type is displayed.
- 7) Drive vehicle at least 40 km/h (25 MPH) and set the cruise control.

CAUTION:

- When performing diagnosis, observe the legal speed limit on the road.
- DTC will be also displayed when cruise control is cancelled by the driver's operation. Do not confuse them.
- Be sure to get an assistant to support the diagnosis while driving, and have him/her operate the select monitor.

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CRUISE CONTROL SYSTEM (DIAGNOSTICS)

8) When the set speed is canceled by itself (without any cancel operations) or when the cruise control cannot be set after the set operation, DTC will be displayed on the screen after selecting the {Check Cancel Code} on the engine malfunction diagnosis screen.

NOTE:

There are the {Latest Code} and the {Memory Code} in DTC. The latest code recognized during current test drive is displayed in the {Latest Code}, while the codes in past test drive are displayed in the {Memory Code}. DTCs by the diagnosis of faulty switches relating to the system and cruise control are also displayed in the {Memory Code}.

9) Perform Engine DTC Clear Memory operation.
<Ref. to EN(H6DO)(diag)-56, OPERATION, Clear Memory Mode.>

DTCs of switches relating to the system and cruise control are deleted by clearing memory on the engine side.

NOTE:

DTC will be cleared by turning ignition switch to OFF.

3. REAL-TIME DIAGNOSIS

- 1) Connect the Subaru Select Monitor.
- 2) Turn the ignition switch and cruise control main switch to ON.
- 3) Run the Subaru Select Monitor.
- 4) On the «Main Menu» display screen, select the {2. Each System Check}.
- 5) On the «System Selection » screen, select the {Engine Control System}.
- 6) Select the [OK] after the information of engine type is displayed.
- 7) On the «Cruise Control Diagnosis» display screen, select the {Current Data Display & Save}.
- 8) Make sure that normal display is shown when operated as follows:
 - Depress and release the brake pedal. (Stop light switch and brake switch turn ON.)
 - Turn the main switch to ON.
 - Turn the «CANCEL» switch to ON.
 - Turn the «SET/COAST» switch to ON.
 - Turn the «RESUME/ACCEL» switch to ON.
 - Depress or release the clutch pedal.
 - Place the shift lever in any position other than neutral.

NOTE:

- For details concerning operation procedure, refer to the "SUBARU SELECT MONITOR OPERATION MANUAL".
- Refer to "List of Diagnostic Trouble Code (DTC)" for DTC. <Ref. to CC(diag)-11, List of Diagnostic Trouble Code (DTC).>