

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 code which occurred during driving. When there are multiple cancel code, 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, memory contents set by the diagnosis of faulty switches related to the system and cruise control will remain as trouble history (memory code) after the ignition switch is turned to OFF.

2) Real-time Diagnosis:

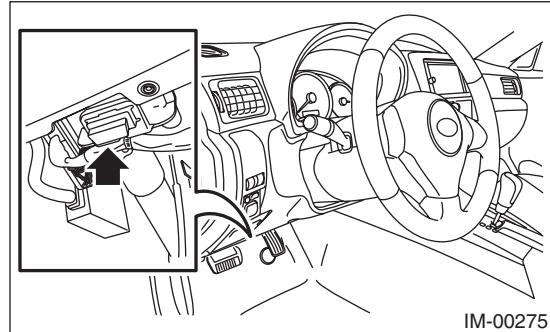
Real-time diagnosis function is used to determine whether or not the input signal system is in good order, according to signal emitted from switches, sensors, etc.

- (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 «Main Menu» display, select {Each System Check}.

On «System Selection Menu» display, select {Engine Control System} and select the [OK]. Select [OK] after the engine type information is displayed.

- 7) Drive vehicle at 40 km/h (25 MPH) or more and set the cruise control.

CAUTION:

- When performing diagnosis, observe the legal speed limit on the road.
- The cancel code will be also appear 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.

Subaru Select Monitor

CRUISE CONTROL SYSTEM (DIAGNOSTICS)

8) When the set speed is cancelled by itself (without any cancel operations such as applying brake) or when the cruise control could not be set by performing the setting operation, selecting the {Cancel Code(s) Display} on the engine malfunction diagnosis screen will display the cancel code on the select monitor display.

NOTE:

The {Latest Diagnostic Code(s)} and {Memorized Diagnostic Code(s)} are contained in the cancel code. The latest code recognized during current test drive is displayed in {Latest Diagnostic Code(s)}. Cancel codes resulting from fault diagnosis of switches relating to the system and cruise control are also displayed in {Memorized Diagnostic Code(s)}.

9) Perform Engine DTC Clear Memory operation. Cancel codes for switches relating to the system and cruise control are deleted by clearing memory on the engine side.

NOTE:

The latest code 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 «Main Menu» display, select {Each System Check}.
- 5) On «System Selection Menu» display, select {Engine Control System}.
- 6) Select [OK] after engine type information is displayed.
- 7) On «Cruise Control Diagnosis» display, select {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 are turned 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 the operation procedure, refer to “PC application help for Subaru Select Monitor”.
- For detailed concerning cancel codes, refer to the “List of Cancel Codes”. <Ref. to CC(diag)-11, List of Cancel Code.>