5. Subaru Select Monitor

A: OPERATION

1. GENERAL DESCRIPTION

For the on-board diagnosis function of the cruise control system, use 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 content of memory is cleared when ignition switch or cruise control main switch is turned 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.

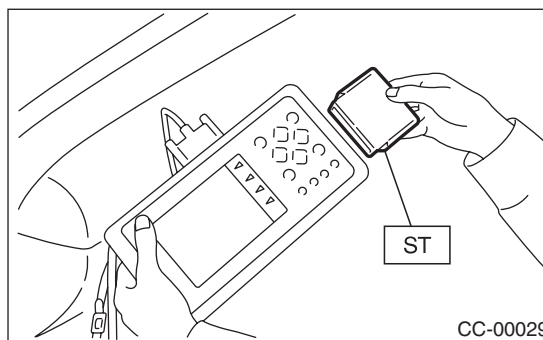(2) Monitor the signal conditions from switches and sensors.

2. CRUISE CONTROL CANCEL CONDITIONS DIAGNOSIS
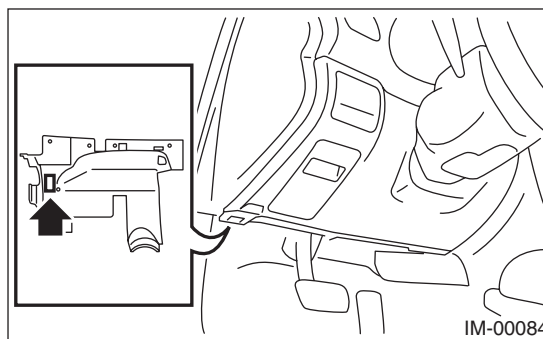
1) Prepare the Subaru Select Monitor kit.

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2) Connect the diagnosis cable to the Subaru Select Monitor.

3) Insert the cartridge to the Subaru Select Monitor. <Ref. to CC(diag)-4, SPECIAL TOOL, PREPARATION TOOL, General Description.>

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4) Connect the Subaru Select Monitor to the data link connector.

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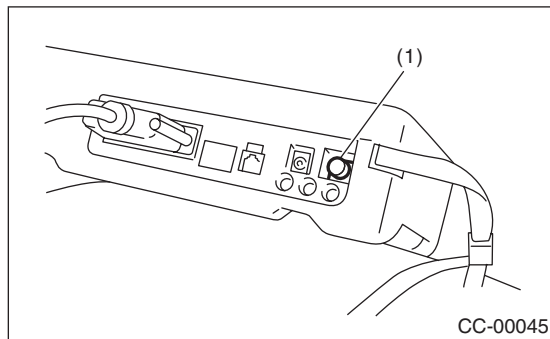

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(2) Connect the diagnosis cable to the data link connector.

5) Start the engine and turn the cruise control main switch to ON.

6) Turn the Subaru Select Monitor switch to ON.

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(1)   Power switch

7) On the «Main Menu» display screen, select the {2. Each System Check} and press the [YES] key. On the system selection display screen, select the {Engine Control System} and press the [YES] key. Press the [YES] key after the information of engine type is displayed.

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

9) When the cruise speed is canceled by itself (without any cancel operations), DTC will be displayed on the screen after selecting the {Check Cancel Code} and pressing the [YES] key on the engine malfunction diagnosis screen.

CAUTION:
• **When performing diagnosis, observe the legal speed limit on the road.**
• **DTC will be also displayed when cruise control is cancelled by driver. Do not confuse them.**
• **Get an assistant in the vehicle for help of diagnosis while driving.**

NOTE:
DTC will be cleared by turning ignition switch or cruise control main 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) Turn the Subaru Select Monitor switch to ON.
4) On the «Main Menu» display screen, select the {2. Each System Check} and press the [YES] key.
5) On the «System Selection» display screen, select the {Engine Control System} and press the [YES] key.
6) Press the [YES] key after the information of engine type is displayed.
7) On the «Cruise Control Diagnosis» display screen, select the {Current Data Display/Save}, and then press the [YES] key.
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 to 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 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).>