

ECT Communication Circuit

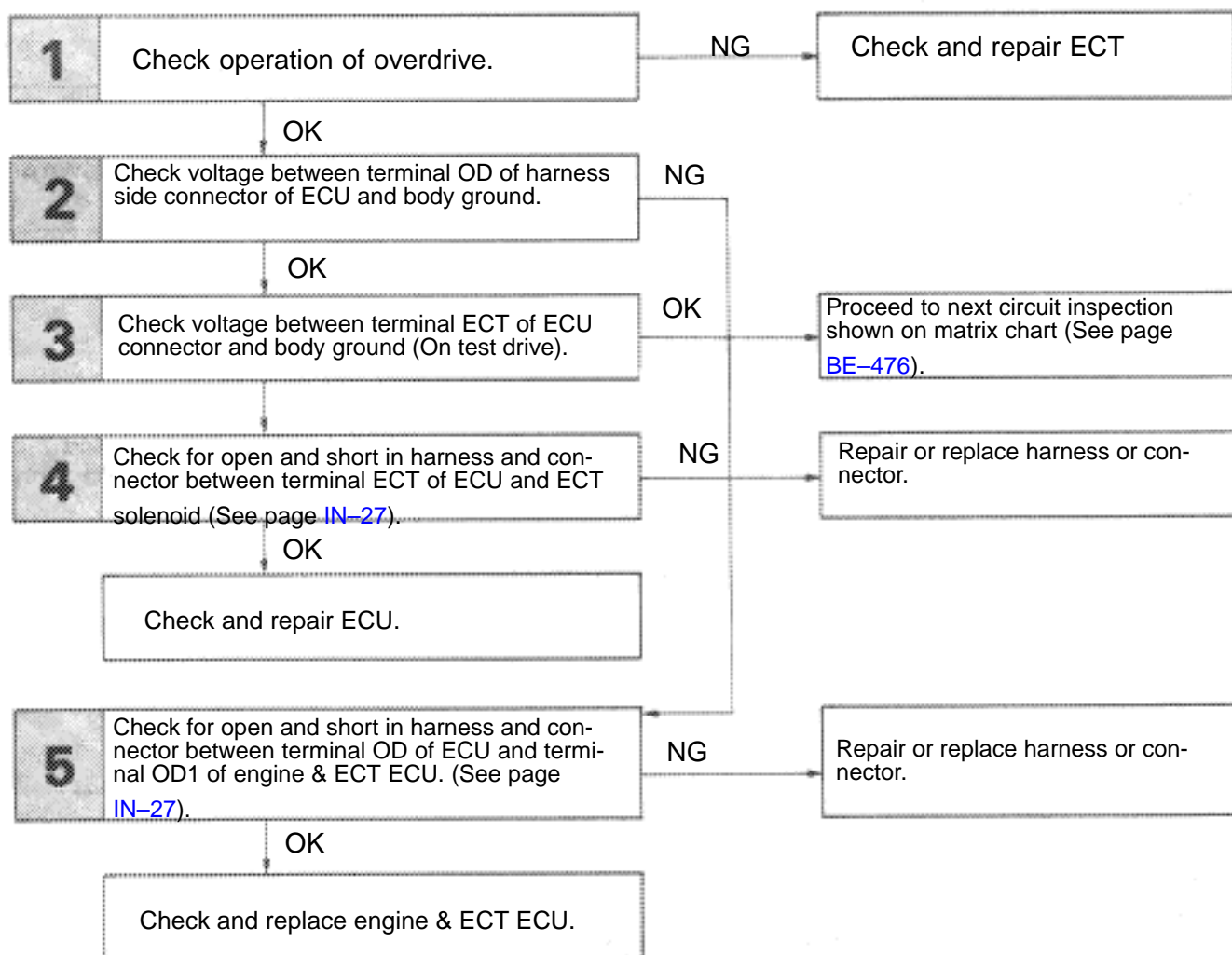
— CIRCUIT DESCRIPTION —

When driving uphill under cruise control, in order to reduce shifting due to ON-OFF overdrive operation and to provide smooth driving, when down shifting in the ECT occurs, a signal to prevent upshift until the end of the uphill slope is sent from the cruise control ECU to the engine & ECT ECU.

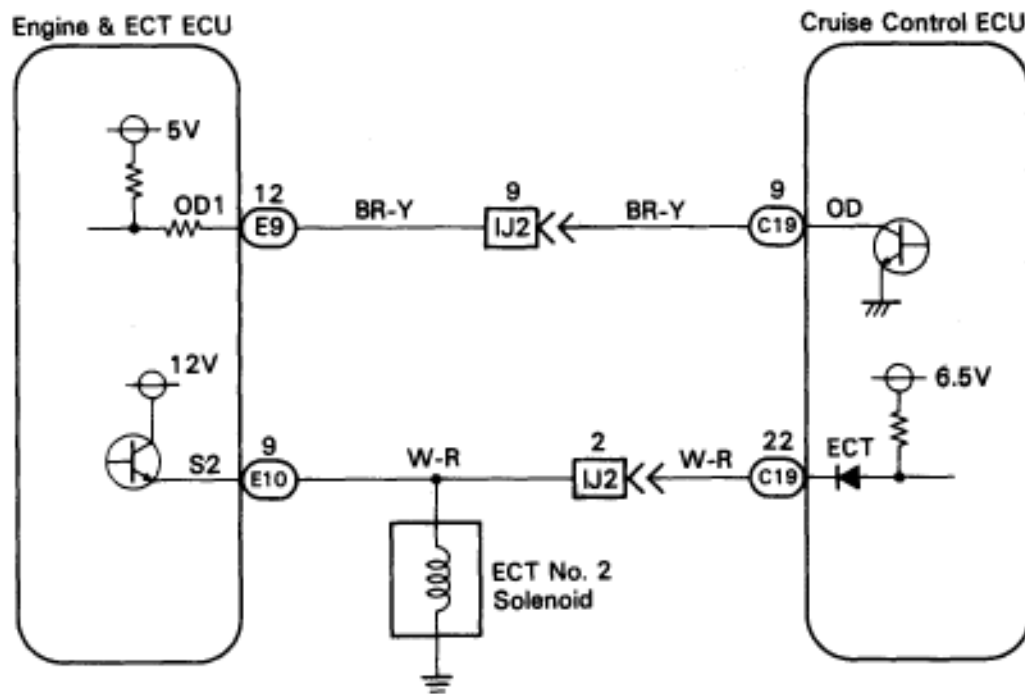
Terminal ECT of the cruise control ECU detects the shift change signal (output to ECT No. 2 solenoid) from the engine & ECT ECU.

If vehicle speed down, also when terminal ECT of the cruise control ECU receives down shifting signal, it sends a signal from terminal OD to engine & ECT ECU to cut overdrive the gear shifts are reduced and gear shift points in the ECT are changed.

— DIAGNOSTIC CHART —



WIRING DIAGRAM



BE5506

INSPECTION PROCEDURE

1 Check operation of overdrive.

P Test drive after engine warm up.

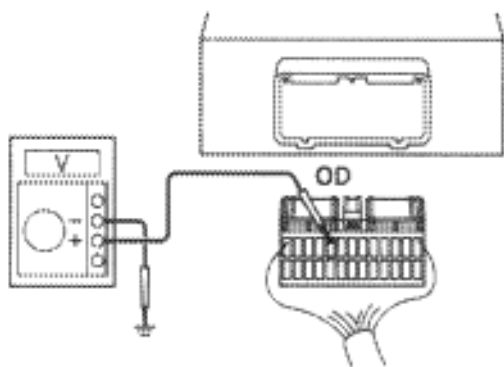
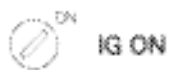
C Check that overdrive ON ↔ OFF occurs with operation of OD switch ON–OFF.

OK

NG

Check and Repair ECT (See page [AT-66](#)).

2 Check voltage between terminal OD of harness side connector of ECU and body ground.



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P Remove ECU with connector still connected.

C

OK

- (1) Disconnect ECU connector.
- (2) Turn ignition switch ON.
- (3) Measure voltage between terminal OD of harness side connector of ECU and body ground.

Voltage: 4 – 6 V

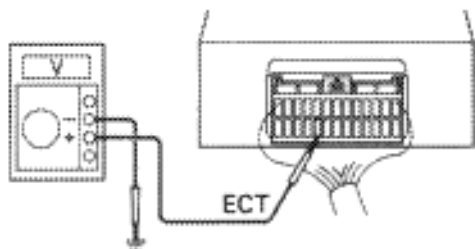
Hint

OK

NG

Go to step [5](#).

Go to step [3](#).

3 Check voltage between terminal ECT of ECU connector and body ground (On test drive).

DE6518

- P** (1) Connect ECU connector.
(2) Test drive after engine warm up.

- C** Check voltage between terminal ECT of ECU connector and body ground when OD switch is on and off.

OK

Gear Position	Voltage
O/D	Below 1 V
3rd	10 – 14 V

NG**OK**

Proceed to next circuit inspection shown on matrix chart
(See page [BE-476](#)).

4 Check for open and short harness and connector between terminal ECT of ECU and terminal OD1 of engine & ECT ECU (See page [IN-27](#)).**OK****NG**

Repair or replace harness or connector.

Check and repair ECU.

5 Check for open and short in harness and connector between terminal OD of ECU and terminal OD1 of engine & ECT ECU (See page [IN-27](#)).**OK****NG**

Repair or replace harness or connector.

Check and replace engine & ECT ECU.