

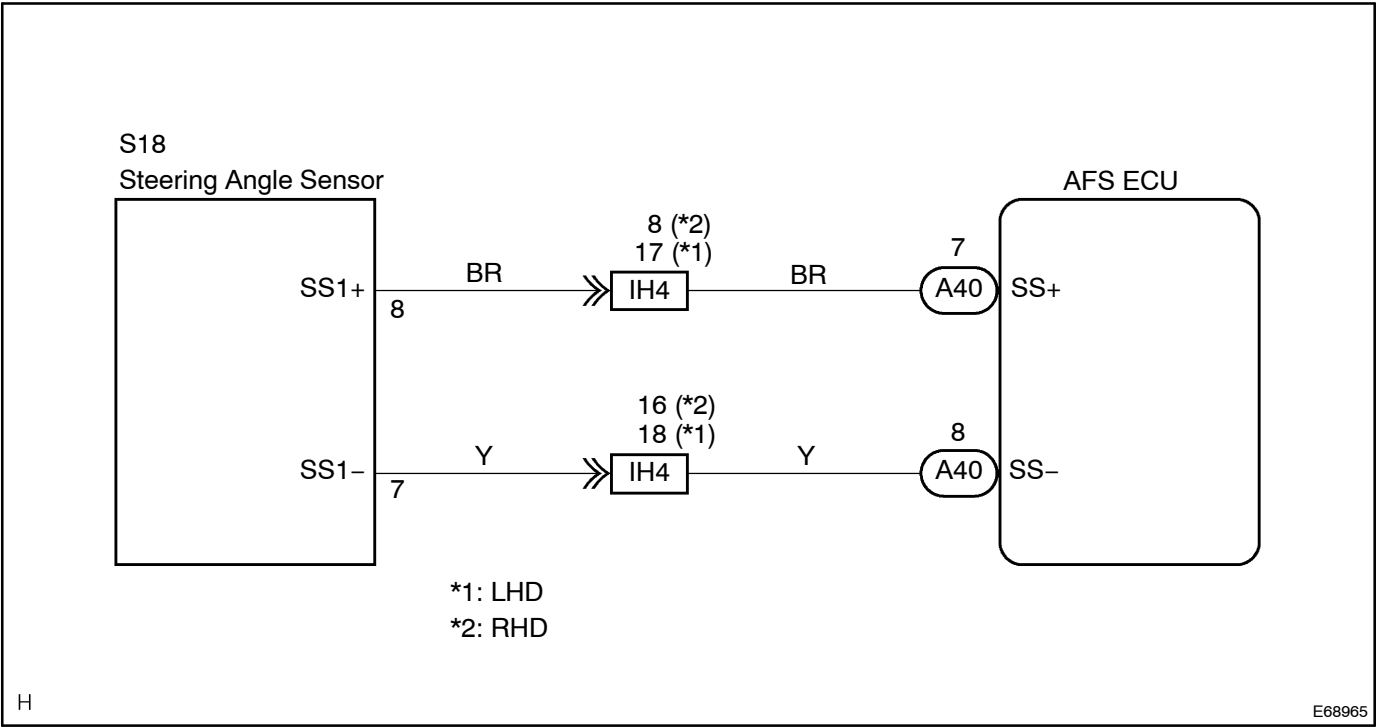
DTC	B2414	STEERING POSITION SENSOR MALFUNCTION
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CIRCUIT DESCRIPTION

The AFS ECU receives signals regarding the swerve-angle from the steering sensor in the steering wheel.

DTC No.	DTC Detecting Condition	Trouble Area
B2414	<ul style="list-style-type: none">• Malfunction in steering sensor• Open or short in steering sensor circuit	<ul style="list-style-type: none">• Steering sensor• Wire harness or connector• AFS ECU

WIRING DIAGRAM



INSPECTION PROCEDURE

1 READ VALUE OF INTELLIGENT TESTER

- (a) Connect the Intelligent Tester II to the DLC3.
 (b) Turn the Ignition switch to the ON position and turn the Intelligent Tester II main switch on.
 (c) Select the items below in the DATA LIST, and read the displays on the Intelligent Tester II.

AFS (AFS ECU):

Item	Measurement Item/ Display (Range)	Normal Condition	Diagnostic Note
Steering Sens Signal Val	Steering sensor signal value/ -384° to 382.5°	Approx. 0° (When steering wheel is straight)	-

OK: Condition sign can be displayed.

Result:

OK (When checking from PROBLEM SYMPTOMS TABLE)	A
OK (When checking from DIAGNOSTIC TROUBLE CODE CHART)	B
NG	C

B

REPLACE AFS ECU (SEE PAGE 65-28 OR 65-29)

C

Go to step 2

A

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE (SEE PAGE 05-1369)

2 CHECK DTC (ABS WITH EBD & BA & TRC & VSC SYSTEM)

- (a) Check the DTC of the ABS with EBD & BA & TRC & VSC systems (see page 05-400).

OK: Normal system code is output.

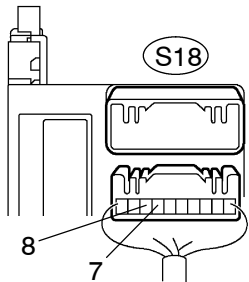
NG

GO TO FLOW CHART (SEE PAGE 05-409)

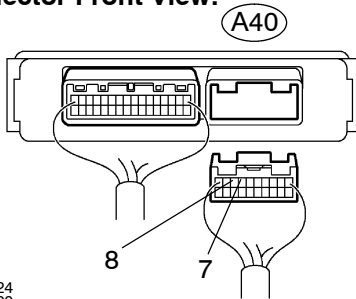
OK

3 CHECK HARNESS AND CONNECTOR(STEERING SENSOR - AFS ECU)

Steering Sensor
Connector Front View:



AFS ECU
Connector Front View:



H E69124
E69120

E69256

- (a) Disconnect the steering sensor connector and A40 connector from the AFS ECU.
- (b) Measure the resistance according to the value(s) in the table below.

Standard:

Tester Connection	Condition	Specified Condition
S18-7 (SS1-) – A40-8 (SS-)	Always	Below 1 Ω
S18-8 (SS1+) – A40-7 (SS+)	Always	Below 1 Ω
A40-8 (SS-) – Body ground	Always	10 kΩ or higher
A40-7 (SS+) – Body ground	Always	10 kΩ or higher

NG

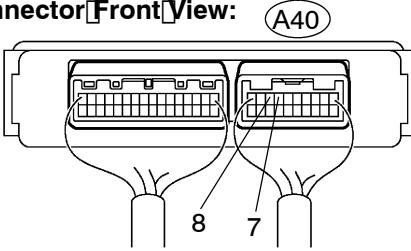
REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

4 INSPECT AFS ECU

AFS ECU

Connector Front View:



- (a) Reconnect the steering sensor connector and A40 connector to the AFS ECU.
- (b) Measure the voltage according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified Voltage
A40-7(SS+) - A40-8(SS-)	Ignition switch ON	0 to 5 V (Pulse generation)

Result:

OK (When checking from the DIAGNOSTIC TROUBLE CODE CHART)	A
OK (When checking from the PROBLEM SYMPTOMS TABLE)	B
NG	C

B

PROCEED TO NEXT CIRCUIT INSPECTION
SHOWN IN PROBLEM SYMPTOMS TABLE
(SEE PAGE 05-1369)

C

REPLACE STEERING SENSOR
(SEE PAGE 32-65)

A

REPLACE AFS ECU (SEE PAGE 65-28 OR 65-29)