

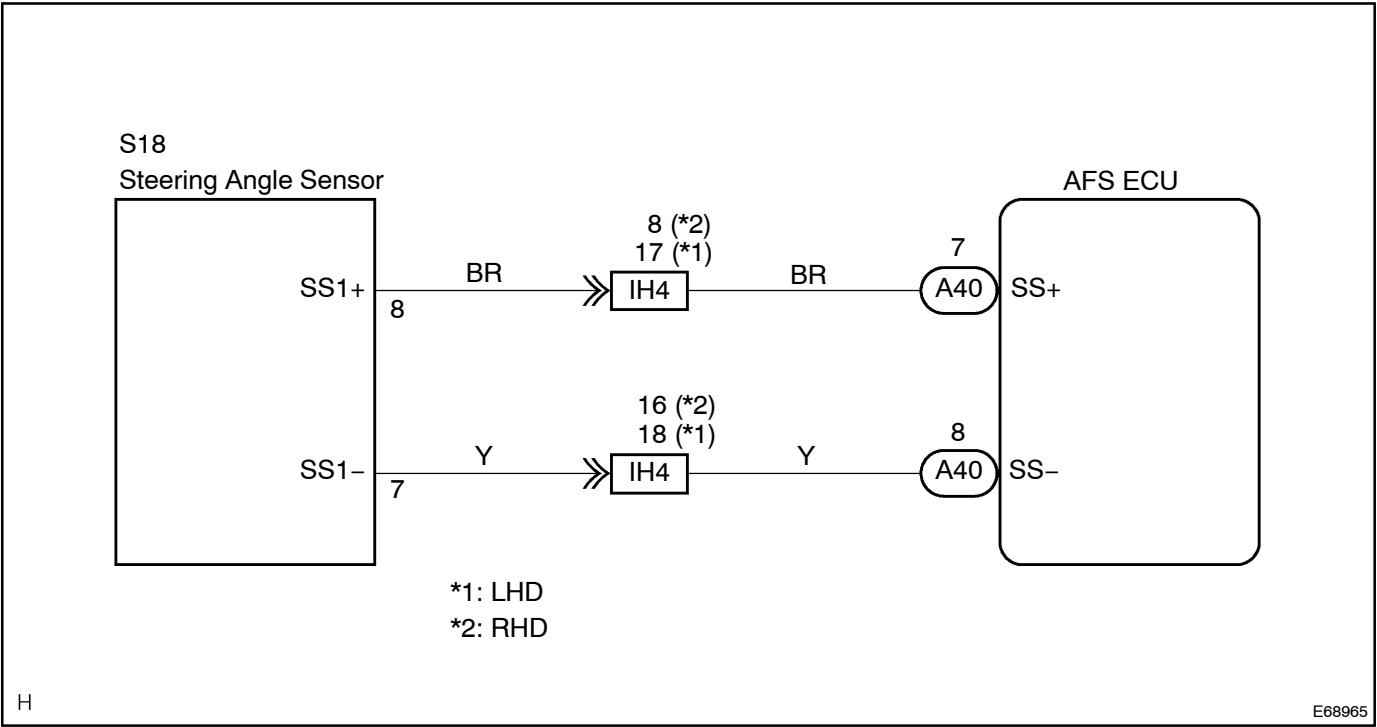
DTC	B2414	STEERING POSITION SENSOR MALFUNCTION
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CIRCUIT DESCRIPTION

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	• Malfunction in steering sensor • Open or short in steering sensor circuit	• Steering sensor • Wire harness or connector • AFS ECU

WIRING DIAGRAM



INSPECTION PROCEDURE

1 READ VALUE OF INTELLIGENT TESTER II

- (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.

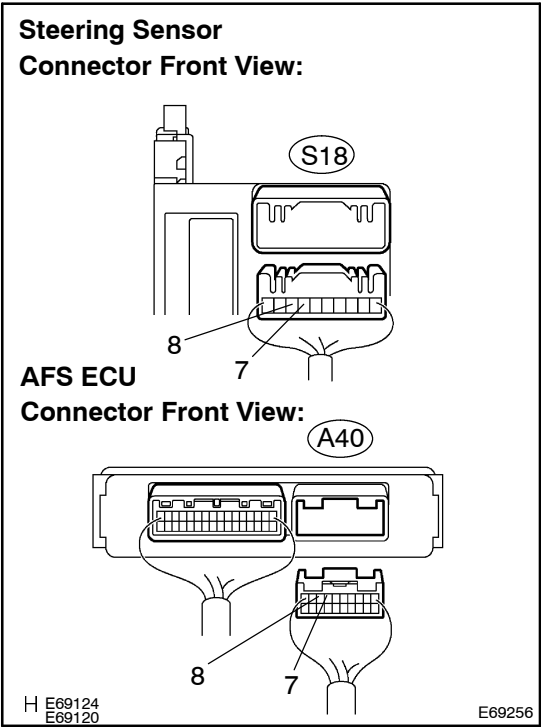
NG

GO TO FLOW CHART (SEE PAGE 05-409)

OK

3

CHECK HARNESS AND CONNECTOR(STEERING SENSOR - AFS ECU)



- (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
CONNECTOR

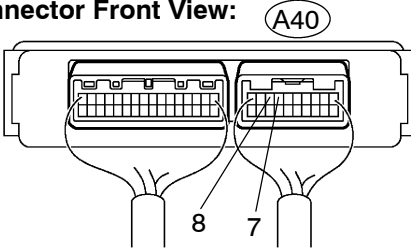
REPLACE HARNESS OR

OK

4 INSPECT AFS ECU

AFS ECU

Connector Front View:



H

E69130

- (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)