DTC	C1231/31	MALFUNCTION IN STEERING ANGLE
		SENSOR CIRCUIT

CIRCUIT DESCRIPTION

The skid control ECU inputs the steering sensor signal through the CAN communication. When a malfunction occurs in the communication line with the steering sensor, DTC U0126/63 (malfunction in communication with steering angle sensor) is output.

DTC No.	DTC Detecting Condition	Trouble Area	
C1231/31	 Steering angle sensor malfunction signal is received when data transmission is valid (internal malfunction is detected at sensor self-check). A signal of +B open in steering angle sensor is received when communication with sensor is valid. 	Steering angle sensor Skid control ECU	

WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:

- When U0126 is output together with C1231/31, inspect and repair the trouble areas indicated by U0126/63 first.
- When the speed sensor or the yaw rate (deceleration) sensor has trouble, DTCs for the steering angle sensor may be output even when the steering angle sensor is normal. When DTCs for the speed sensor or yaw rate sensor are output together with other DTCs for the steering angle sensor, inspect and repair the speed sensor and yaw rate (deceleration) sensor first, and then inspect and repair the steering angle sensor.

1 CHECK HARNESS AND CONNECTOR(MOMENTARY INTERRUPTION)

(a) Using the hand-held tester, check for any momentary interruption in the wire harness and connectors between the skid control ECU and steering angle sensor (see page 05–956).

ltem	Measurement Item / Range (Display)	Normal Condition	
YAWRATE SEN	Yaw rate sensor open detection	NORMAL : Normal condition	

OK:

There are no momentary interruptions.



```
OK
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2 READ VALUE OF HAND-HELD TESTER

(a) Connect the hand-held tester to the DLC3.

(b) Turn the power switch ON (READY).

(c) Select the DATA LIST mode on the hand-held tester.

ltem	Measurement Item / Range (Display)	Normal Condition
STEERING ANG	Steering sensor/ Min.: –1152 deg, Max.: 1150.875 deg	Left turn: Increase Right turn: Decrease

(d) Check that the steering angle sensor value of the steering angle sensor observed in the hand-held tester changes when the steering wheel is moved.
 OK:

Steering angle value should change.

NG > Go to step 3

OK

REPLACE SKID CONTROL ECU ASSY (SEE PAGE 32-68)

NOTICE:

When replacing the skid control ECU assy, perform initialization of linear solenoid valve and calibration (see page 05–958).

3 CHECK TERMINAL VOLTAGE(STEERING ANGLE SENSOR CONNECTOR)



- (a) Remove the steering wheel and the column lower cover.
- (b) Disconnect the steering angle sensor connector.
- (c) Turn the power switch ON (READY).
- (d) Measure the voltage according to the value(s) in the table below.

Standard:

Tester Connection	Specified Condition	
S13–1 (IG) – S13–2 (ESS)	10 to 14 V	

(e) Measure the voltage according to the value(s) in the table below.

Standard:

Tester Connection		Specified Condition		
S13–3 (BAT) – S13–2 (ESS)		10 to 14 V		
NG REPAIR OR CONNECTOR	RE	PLACE	HARNESS	OR

ΟΚ

REPLACE STEERING ANGLE SENSOR (SEE PAGE 32-71)