

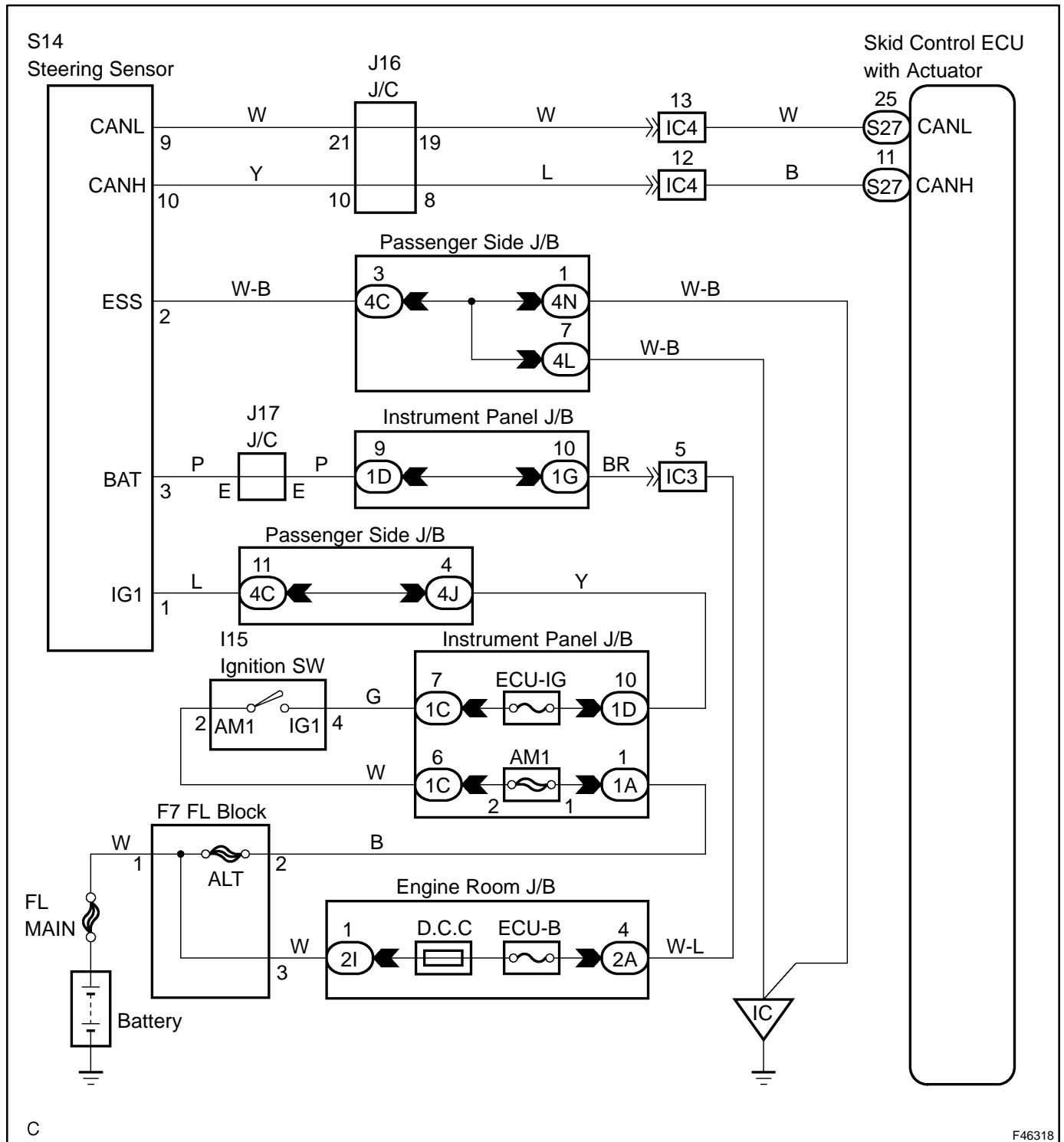
DTC	C1231/31	MALFUNCTION IN STEERING ANGLE SENSOR CIRCUIT
------------	-----------------	---

CIRCUIT DESCRIPTION

The steering angle sensor signal is sent to the skid control ECU through the CAN communication system. When there is a malfunction in the communication, it will be detected by the diagnosis function.

DTC No.	DTC Detecting Condition	Trouble Area
C1231/31	When ECU IG1 terminal voltage is 9.5 V or more, the steering angle sensor malfunction signal is received.	<ul style="list-style-type: none"> • Steering angle sensor • Steering angle sensor circuit • +B circuit • CAN communication system

WIRING DIAGRAM



F46318

INSPECTION PROCEDURE

HINT:

- When U0121/94, U0123/62, U0124/95 or U0126/63 are output together with C1231/31, inspect and repair the trouble areas indicated by U0121/94, U0123/62, U0124/95 or U0126/63 first.
- When the speed sensor or the yaw rate 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 sensor first, and then inspect and repair the steering angle sensor.
- Start the inspection from step 1 when using the hand-held tester and start from step 2 when not using the hand-held tester.

1 READ VALUE OF HAND-HELD TESTER(STEERING ANGLE SENSOR)

- Connect the hand-held tester to the DLC3.
- Start the engine.
- Select the DATA LIST mode on the hand-held tester.
- Check that the steering angle value of the steering angle sensor indicated on the hand-held tester, changes when the steering wheel is turned.

Item	Measurement Item / Range (Display)	Normal Condition
STEERING ANG	Steering sensor/ Min.: -1152 deg, Max.: 1150.875 deg	Min.: -128 deg/s Max.: 128 deg/s

OK:

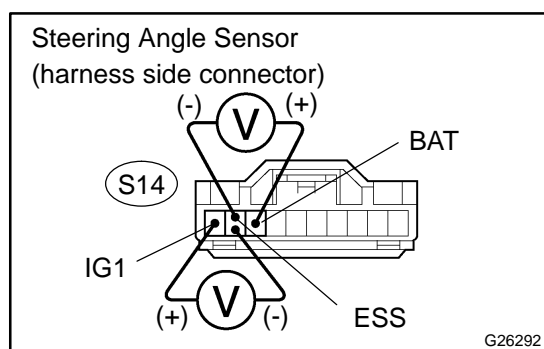
Steering angle value should change.

OK

**REPLACE ABS & TRACTION ACTUATOR ASSY
(SEE PAGE 32-37)**

NG

2 CHECK TERMINAL VOLTAGE(STEERING ANGLE SENSOR CONNECTOR)



- Remove the steering wheel and the column lower cover.
- Disconnect the steering angle sensor connector S14.
- Turn the ignition switch to the ON position.
- Measure the voltage according to the value(s) in the table below.

Standard:

Tester Connection	Specified Condition
S14-1 (IG1) - S14-2 (ESS)	10 to 14 V
S14-3 (BAT) - S14-2 (ESS)	10 to 14 V

NG

REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE STEERING ANGLE SENSOR