Last Modified: 12-04-2024	6.11:8.1.0	**Doc ID:** RM100000002BN8L
Model Year Start: 2023	**Model:** Prius Prime	**Prod Date Range:** [03/2023 -]
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: ELECTRONICALLY CONTROLLED BRAKE SYSTEM: C05262A; Steering Angle Sensor Module Signal Stuck In Range; 2023 - 2024 MY Prius Prius Prime [03/2023 -]		

DTC	**C05262A**	**Steering Angle Sensor Module Signal Stuck In Range**

DESCRIPTION

The No. 2 skid control ECU (brake actuator assembly) receives signals from the steering angle sensor via CAN communication.

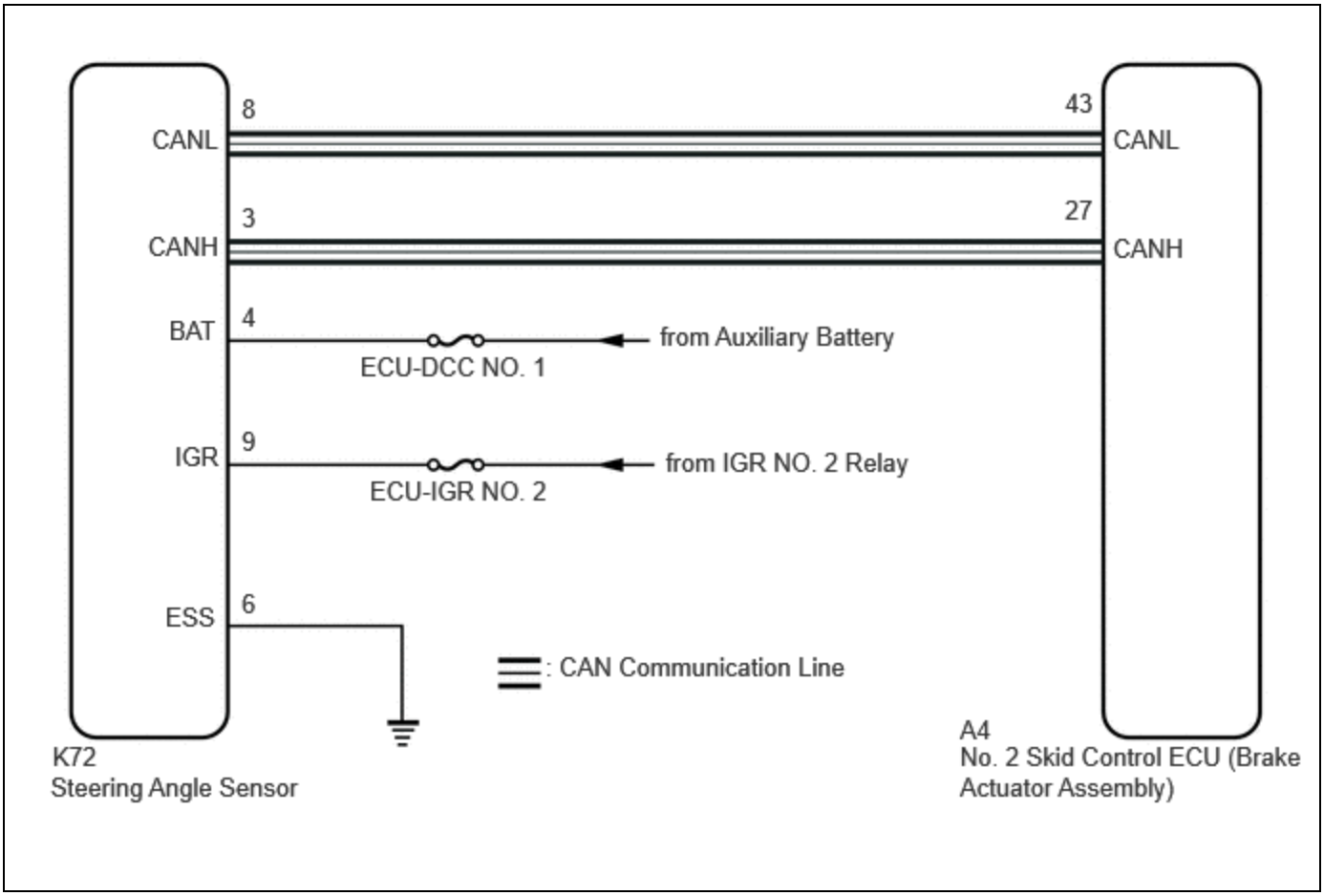
HINT:

When a malfunction occurs in the communication line to the steering angle sensor, U012687 is output.

If a DTC related to the CAN communication line is output, first troubleshoot the CAN communication line.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	MIL	DTC OUTPUT FROM	PRIORITY	NOTE
C05262A	Steering Angle Sensor Module Signal Stuck In Range	Normal communication between the No. 2 skid control ECU (brake actuator assembly) and the steering angle sensor and abnormal steering angle sensor zero point.	• Steering angle sensor • Wire harness and connector	Does not come on	Brake/EPB	B	Output ECU: No. 2 skid control ECU (brake actuator assembly)

WIRING DIAGRAM



CAUTION / NOTICE / HINT

NOTICE:

Inspect the fuses for circuits related to this system before performing the following procedure.

PROCEDURE

1.	**CHECK CAN COMMUNICATION SYSTEM**

(a) Check if CAN communication system DTCs are output.

HINT:

for HEV Model: Click here INFO

for PHEV Model: Click here INFO

RESULT	PROCEED TO
DTCs are not output.	A
DTCs are output.	B

B ▶ INSPECT CAN COMMUNICATION SYSTEM

for HEV Model: Click here INFO

for PHEV Model: Click here INFO

A

2.	**CLEAR DTC**

Pre-procedure1

(a) None

Procedure1

(b) Clear the DTCs.

Chassis > Brake Booster > Clear DTCs
Chassis > Brake/EPB > Clear DTCs

Post-procedure1

(c) Turn the ignition switch off.

NEXT

3.	**RECONFIRM DTC**

Pre-procedure1

(a) Turn the ignition switch to ON (READY).

(b) Drive the vehicle at a speed of 35 km/h (22 mph) and turn the steering wheel to the right and left.

Procedure1

(c) Check that no speed sensor and/or yaw rate sensor DTCs are output.

Chassis > Brake Booster > Trouble Codes
Chassis > Brake/EPB > Trouble Codes

HINT:

- If a speed sensor, or the yaw rate sensor is malfunctioning, DTCs for the steering angle sensor may be stored even though the steering angle sensor is normal.
- If speed sensor and yaw rate sensor DTCs are output simultaneously, repair these malfunctions and then inspect the steering angle sensor.

RESULT	PROCEED TO
DTC C05262A is output.	A
Speed sensor and/or yaw rate sensor DTCs are output.	B

Post-procedure1

(d) None

B ▶ **REPAIR CIRCUITS INDICATED BY OUTPUT DTCS**

A ▼

4.	**CHECK HARNESS AND CONNECTOR (IGR TERMINAL)**

Pre-procedure1

(a) Turn the ignition switch off.

Procedure1

(b) Make sure that there is no looseness at the locking part and the connecting part of the connectors.

OK:

The connector is securely connected.

Pre-procedure2

(c) Disconnect the K72 steering angle sensor connector.

Procedure2

(d) Check both the connector case and the terminals for deformation and corrosion.

OK:

No deformation or corrosion.

Pre-procedure3

(e) Turn the ignition switch to ON.

Procedure3

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

Standard Voltage:

EWD INFO

Click Location & Routing(K72)
Click Connector(K72)

TESTER CONNECTION	SWITCH CONDITION	SPECIFIED CONDITION	RESULT
K72-9 (IGR) - Body ground	Ignition switch ON	11 to 14 V	V

Post-procedure1

(g) None

NG ▶ **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK ▼

5.	CHECK HARNESS AND CONNECTOR (BAT TERMINAL)

Pre-procedure1

(a) Turn the ignition switch off.

Procedure1

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

Standard Voltage:

EWD INFO

Click Location & Routing(K72)
Click Connector(K72)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
K72-4 (BAT) - Body ground	Always	11 to 14 V	V

Post-procedure1

(c) None

NG ▶ **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK ▼

6.	CHECK HARNESS AND CONNECTOR (ESS TERMINAL)

(a) Measure the resistance according to the value(s) in the table below.

Standard Resistance:

EWD INFO

Click Location & Routing(K72)
Click Connector(K72)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
K72-6 (ESS) - Body ground	1 minute or more after disconnecting the cable from the negative (-) auxiliary battery terminal	Below 1 Ω	Ω

OK ▶ **REPLACE STEERING ANGLE SENSOR**

NG ▶ **REPAIR OR REPLACE HARNESS OR CONNECTOR**