Last Modified: 12-04-2024	6.11:8.1.0	**Doc ID:** RM1000000029YIB
Model Year Start: 2023	**Model:** Prius Prime	**Prod Date Range:** [12/2022 -]
Title: POWER DISTRIBUTION: SUB BATTERY SYSTEM: B22CB19; Sub Battery System Output Power "A" Circuit Current Above Threshold; 2023 - 2024 MY Prius Prius Prime [12/2022 -]		

DTC	**B22CB19**	**Sub Battery System Output Power "A" Circuit Current Above Threshold**

DESCRIPTION

As a backup for when an auxiliary battery power source malfunction occurs, power is supplied to the shift control actuator assembly (shift actuator ECU) and transmission floor shift assembly (shift control ECU).

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	WARNING INDICATE	DTC OUTPUT FROM	PRIORITY
B22CB19	Sub Battery System Output Power "A" Circuit Current Above Threshold	The current flowing at the AECU and A2ECU terminals is being monitored and the current value is at the threshold or more for 1.2 seconds or more (1 trip detection logic)	• Integrated capacitor (integration control supply) • Shift control actuator assembly (shift actuator ECU) • Transmission floor shift assembly (shift control ECU) • Harness or connector	User informed: Yes	Sub Battery System	A

CHECK FOR DTCs

(a) Clear the DTCs (even if no DTCs are stored, perform the clear DTC procedure).

(b) Turn the ignition switch off and wait 6 minutes or more. (A)

(c) Turn the ignition switch to ON. (B)

(d) Turn the GTS on. (C)

(e) Wait for 10 seconds or more. (D)

(f) Read the DTCs. (E)

HINT:

- If a DTC is output, the system is malfunctioning.
- If a DTC is not output, perform the following procedure.

(g) Enter the following menus: Body Electrical / Sub Battery System / Utility / All Readiness. (F)

(h) Enter the DTC to be checked. (G)

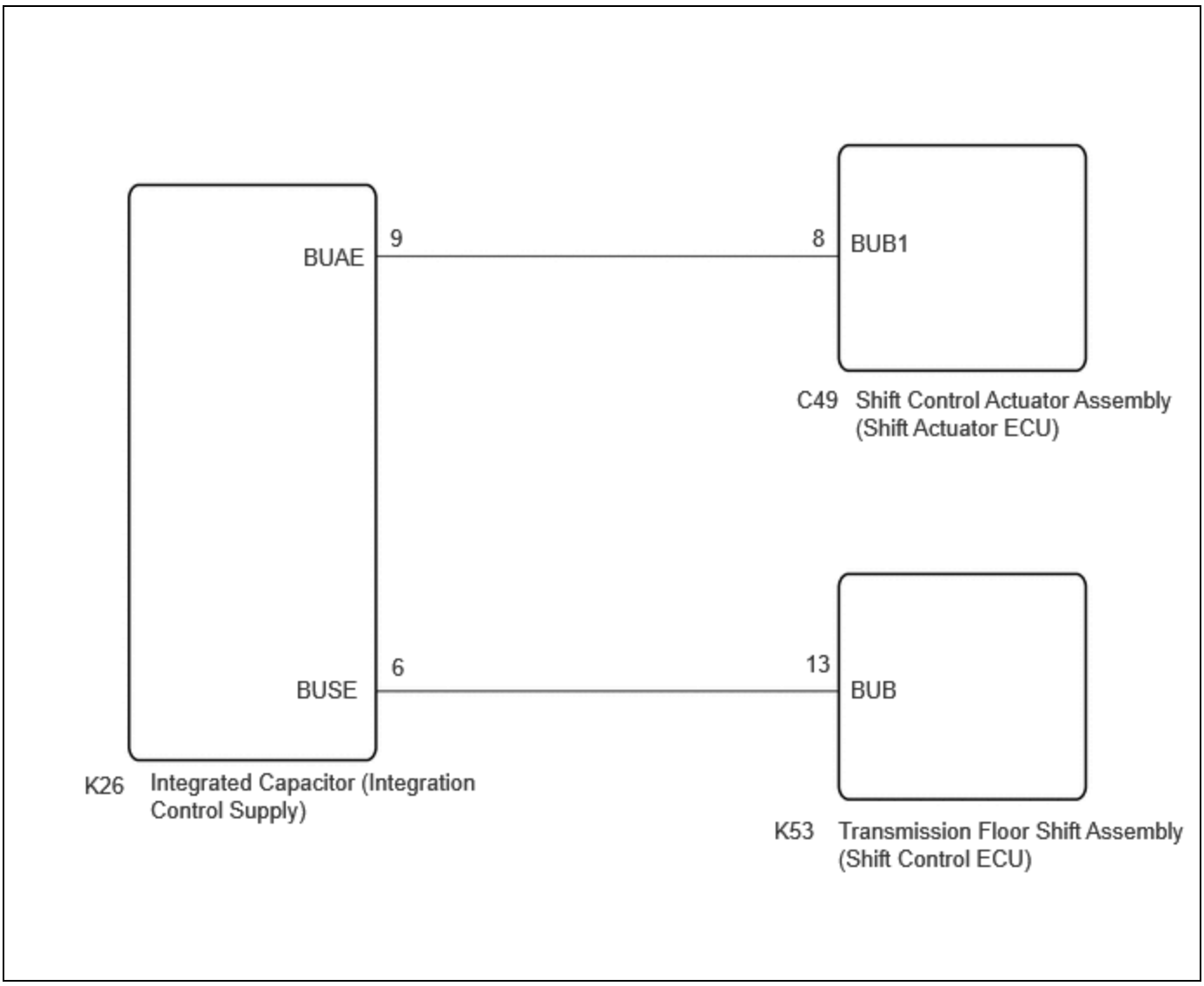
(i) Check the DTC judgment result. (H)

HINT:

- If the judgment result is NORMAL, the system is normal.

- If the judgment result is ABNORMAL, the system is malfunctioning.
- If the judgment result is INCOMPLETE, perform steps (A) through (H) again.

WIRING DIAGRAM



CAUTION / NOTICE / HINT

NOTICE:

- When removing/installing the transmission floor shift assembly (shift control ECU)/shift control actuator assembly (shift actuator ECU) or disconnecting/connecting connectors, make sure there is no power* supplied.

  *: Auxiliary battery, sub battery, integrated capacitor (integration control supply), etc.
- Before removing and installing the integrated capacitor (integration control supply), make sure the cable is disconnected from the negative (-) auxiliary battery terminal after 5 minutes or more has elapsed since the ignition switched was turned off.
- Before performing troubleshooting, check the state of fuses and connecters of this circuit, and contact voltage of respective terminals.

PROCEDURE

1.	**CHECK FOR DTC**

(a) Check for DTCs.

Body Electrical > Sub Battery System > Trouble Codes

RESULT	PROCEED TO
B22CB19 is output	A
B22CB19 is not output	B

B ▶ **USE SIMULATION METHOD TO CHECK**

A ▼

2.	**CHECK HARNESS AND CONNECTOR (INTEGRATION CONTROL SUPPLY - SHIFT CONTROL ACTUATOR ASSEMBLY AND TRANSMISSION FLOOR SHIFT ASSEMBLY)**

(a) Disconnect the cable from the negative (-) auxiliary battery terminal.

(b) Disconnect the K26 integrated capacitor (integration control supply) connector.

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

Standard Resistance:

EWD INFO

Click Location & Routing(K26)
Click Connector(K26)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
K26-9 (BUAE) - Body ground	Ignition switch off	10 kΩ or higher
K26-6 (BUSE) - Body ground	Ignition switch off	10 kΩ or higher

RESULT	PROCEED TO
OK	A
NG (K26-9 (BUAE) - Body ground)	B
NG (K26-6 (BUSE) - Body ground)	C

A ▶ **REPLACE INTEGRATED CAPACITOR (INTEGRATION CONTROL SUPPLY)** INFO

C ▶ **GO TO STEP 4**

B ▼

3.	**CHECK HARNESS AND CONNECTOR (INTEGRATED CAPACITOR (INTEGRATION CONTROL SUPPLY) - SHIFT CONTROL ACTUATOR ASSEMBLY (SHIFT ACTUATOR ECU))**

Pre-procedure1

(a) Disconnect the C49 shift control actuator assembly (shift actuator ECU) connector.

Procedure1

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

Standard Resistance:

EWD INFO

Click Location & Routing(K26,C49)
Click Connector(K26)
Click Connector(C49)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
K26-9 (BUAE) or C49-8 (BUB1) - Body ground	Ignition switch off	10 kΩ or higher	kΩ

Post-procedure1

(c) None

OK ▶ **REPLACE SHIFT CONTROL ACTUATOR ASSEMBLY (SHIFT ACTUATOR ECU)**

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

4.	**CHECK HARNESS AND CONNECTOR (INTEGRATED CAPACITOR (INTEGRATION CONTROL SUPPLY) - TRANSMISSION FLOOR SHIFT ASSEMBLY (SHIFT CONTROL ECU))**

Pre-procedure1

(a) Disconnect the K53 transmission floor shift assembly (shift control ECU) connector.

Procedure1

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

Standard Resistance:

EWD INFO

Click Location & Routing(K26,K53)
Click Connector(K26)
Click Connector(K53)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
K26-6 (BUSE) or K53-13 (BUB) - Body ground	Ignition switch off	10 kΩ or higher	kΩ

Post-procedure1

(c) None

OK ▶ **REPLACE TRANSMISSION FLOOR SHIFT ASSEMBLY (SHIFT CONTROL ECU)**

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