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Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [12/2022 -]
Title: POWER DISTRIBUTION: SUB BATTERY SYSTEM: B22A311; Sub Battery Control Module Wake Up Circuit Short to Ground; 2023 - 2024 MY Prius Prius Prime [12/2022 -]		

DTC	B22A311	Sub Battery Control Module Wake Up Circuit Short to Ground
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DESCRIPTION

In order to avoid brake booster with master cylinder assembly malfunction false positives, the integrated capacitor (integration control supply) is started when brake booster with master cylinder assembly is started by means other than the ignition switch.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	WARNING INDICATE	DTC OUTPUT FROM	PRIORITY
B22A311	Sub Battery Control Module Wake Up Circuit Short to Ground	When the WU1 terminal is being monitored while the ignition switch is ON, Lo status continues for 10 seconds or more	<ul style="list-style-type: none"> Integrated capacitor (integration control supply) Brake booster with master cylinder assembly Harness or connector 	User informed: Yes	Sub Battery System	A

CHECK FOR DTCs

- Clear the DTCs (even if no DTCs are stored, perform the clear DTC procedure).
- Turn the ignition switch off and wait 6 minutes or more. (A)
- Turn the ignition switch to ON. (B)
- Turn the GTS on. (C)
- Wait for 10 seconds or more. (D)
- Read the DTCs. (E)

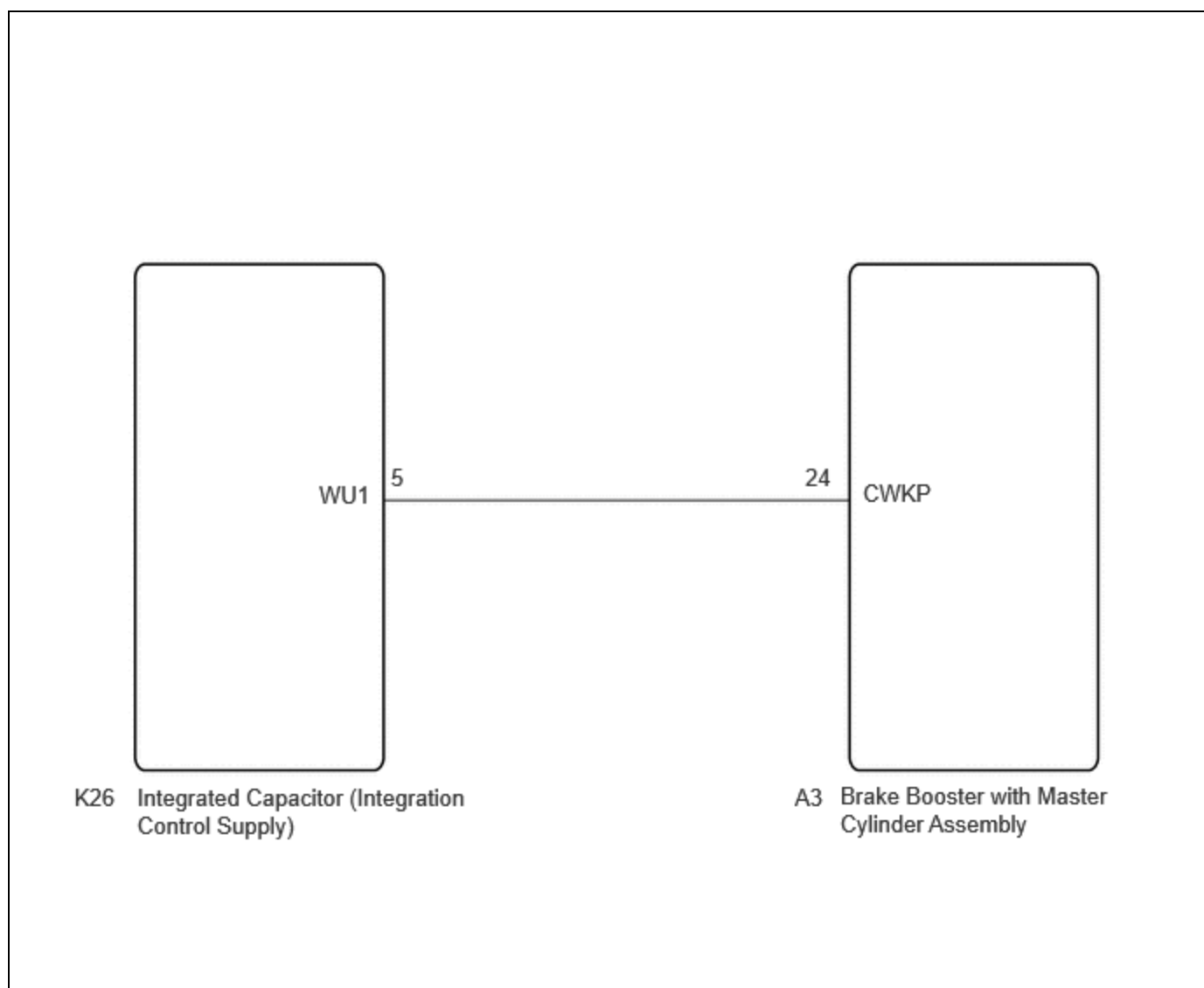
HINT:

- If a DTC is output, the system is malfunctioning.
 - If a DTC is not output, perform the following procedure.
- Enter the following menus: Body Electrical / Sub Battery System / Utility / All Readiness. (F)
 - Enter the DTC to be checked. (G)
 - 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 connectors of this circuit, and contact voltage of respective terminals.

PROCEDURE

1.	CHECK FOR DTC
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(a) Check for DTCs.

Body Electrical > Sub Battery System > Trouble Codes

RESULT	PROCEED TO
B22A311 is output	A
B22A311 is not output	B

B ► **USE SIMULATION METHOD TO CHECK**

A
▼

2.	CHECK HARNESS AND CONNECTOR (INTEGRATED CAPACITOR (INTEGRATION CONTROL SUPPLY) - BRAKE BOOSTER WITH MASTER CYLINDER ASSEMBLY)
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Pre-procedure1

- (a) Disconnect the cable from the negative (-) auxiliary battery terminal.
- (b) Disconnect the K26 integrated capacitor (integration control supply) and A3 brake booster with master cylinder assembly connectors.

Procedure1

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

Standard Resistance:



[Click Location & Routing\(K26\).](#)
[Click Connector\(K26\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
K26-5 (WU1) - Body ground	Ignition switch off	10 kΩ or higher	kΩ

Post-procedure1

- (d) None

NG ► **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK
▼

3.

CHECK HARNESS AND CONNECTOR (BRAKE BOOSTER WITH MASTER CYLINDER ASSEMBLY - INTEGRATED CAPACITOR (INTEGRATION CONTROL SUPPLY))

Pre-procedure1

(a) Reconnect the A3 brake booster with master cylinder assembly connector.

Procedure1

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

Standard Resistance:


[Click Location & Routing\(K26\)](#)
[Click Connector\(K26\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
K26-5 (WU1) - Body ground	Ignition switch off	10 kΩ or higher	kΩ

Post-procedure1

(c) None

OK ▶ **REPLACE INTEGRATED CAPACITOR (INTEGRATION CONTROL SUPPLY)**

Click here [INFO](#)

NG ▶ **REPLACE BRAKE BOOSTER WITH MASTER CYLINDER ASSEMBLY**

Click here [INFO](#)