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BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: ELECTRONICALLY CONTROLLED BRAKE SYSTEM: C125DA2,C125D...

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Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [12/2022 - ]
Title: BRAKE CONTROL / DYNAMIC	CONTROL SYSTEMS: ELEC	RONICALLY CONTROLLED BRAKE SYSTEM:
C125DA2,C125DA3; Electronic Brak	e Booster Control Module "	A" Backup Power Supply Voltage System Voltage
Low; 2023 - 2024 MY Prius Prius Pr	ime [12/2022 - ]	

DTC	C125DA2	Electronic Brake Booster Control Module "A" Backup Power Supply Voltage System Voltage Low
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DTC	C125D42	Electronic Brake Booster Control Module "A" Backup Power Supply Voltage
DIC	CIZSDAS	System Voltage High

## **DESCRIPTION**

Refer to DTC C125D13.

Click here

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DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	MIL	DTC OUTPUT FROM	PRIORITY	NOTE
C125DA2	Electronic Brake Booster Control Module "A" Backup Power Supply Voltage System Voltage Low	No. 1 skid control ECU (brake booster with master cylinder assembly) CBKP stuck Low for 3 seconds or more.	<ul> <li>No. 1 skid control ECU (brake booster with master cylinder assembly)</li> <li>Integration control supply</li> <li>Wire harness and connector</li> </ul>	Does not come on	Brake Booster	В	Output ECU: No. 1 skid control ECU (brake booster with master cylinder assembly)
C125DA3	Electronic Brake Booster Control Module "A" Backup Power Supply Voltage System Voltage High	No. 1 skid control ECU (brake booster with master cylinder assembly) CBKP stuck Hi for 3 seconds or more.	<ul> <li>No. 1 skid control ECU (brake booster with master cylinder assembly)</li> <li>Integration control supply</li> <li>Wire harness and connector</li> </ul>	Does not come on	Brake Booster	В	Output ECU: No. 1 skid control ECU (brake booster with master cylinder assembly)

## WIRING DIAGRAM



# **CAUTION / NOTICE / HINT**

## NOTICE:

- Make sure to wait 5 minutes or more with the ignition switch turned off before removing the integration control supply or disconnecting any supply power circuit from the integration control supply, in order for the voltage to be discharged and self-diagnosis to run.
- These DTCs can causes fuses to burn out, so check and replace fuses as necessary after completing inspection and repairs.

## **PROCEDURE**

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1.	CHECK SUB BATTERY SYSTEM
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(a) Check if sub battery system DTCs are output.

## Body Electrical > Sub Battery System > Trouble Codes

RESULT	PROCEED TO
DTCs are output	А
DTCs are not output	В

## A > INSPECT SUB BATTERY SYSTEM

Click here



# 2. CLEAR DTC Pre-procedure1 (a) None

Procedure1

(b) Clear the DTCs.

#### Chassis > Brake Booster > Clear DTCs

Post-procedure1

(c) Turn the ignition switch off.

## NEXT

**RECONFIRM DTC** 3.

Pre-procedure1

(a) Based on the Freeze Frame Data and interview with the customer, attempt to reproduce the conditions when the malfunction occurred.

Procedure1

(b) Check if the same DTC is output.

#### Chassis > Brake Booster > Trouble Codes

RESULT	PROCEED TO
C125DA2 and C125DA3 are not output	А
C125DA2 is output	В
C125DA3 is output	С

#### Post-procedure1

(c) None

**A** USE SIMULATION METHOD TO CHECK





# 4. CHECK HARNESS, CONNECTOR AND BRAKE BOOSTER WITH MASTER CYLINDER ASSEMBLY

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 K26 integration control supply connector.

Procedure2

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

No deformation or corrosion.

Procedure3

(e) 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	RESULT
K26-1 (BUA3) - Body ground	Ignition switch OFF	$1 \ k\Omega$ or higher	kΩ

Post-procedure1

(f) None

## **OK** REPLACE INTEGRATION CONTROL SUPPLY

Click here



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

Procedure1

5.

(a) 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-procedure1

(b) Disconnect the A3 No. 1 skid control ECU (brake booster with master cylinder assembly) connector.

Procedure2

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

OK:

No deformation or corrosion.

Procedure3

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

Standard Resistance:



## <u>Click Location & Routing(A3,K26)</u> <u>Click Connector(A3)</u> <u>Click Connector(K26)</u>

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
A3-2 (CBKP) - K26-1 (BUA3)	Ignition switch OFF	Below 1 Ω	Ω
A3-2 (CBKP) or K26-1 (BUA3) - Body ground	Ignition switch OFF	10 kΩ or higher	kΩ

Post-procedure1

(e) None





# 6. CHECK HARNESS, CONNECTOR AND BRAKE BOOSTER WITH MASTER CYLINDER ASSEMBLY

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 K26 integration control supply connector.

Procedure2

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

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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:



## <u>Click Location & Routing(K26)</u> <u>Click Connector(K26)</u>

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
K26-1 (BUA3) - Body ground	Ignition switch ON	7.5 V or less	V

Post-procedure1

(g) None

<b>OK</b> REPLACE INTEGRATION CONTROL SUPPL
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Click	here	INFO



# 7. CHECK HARNESS AND CONNECTOR (BRAKE BOOSTER WITH MASTER CYLINDER ASSEMBLY - INTEGRATION CONTROL SUPPLY)

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 A3 No. 1 skid control ECU (brake booster with master cylinder assembly) connector.

Procedure2

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

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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:



## <u>Click Location & Routing(K26)</u> <u>Click Connector(K26)</u>

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
K26-1 (BUA3) - Body ground	Ignition switch ON	1 V or less	V

Post-procedure1

(g) None

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