Last Modified: 12-04-2024	6.11:8.1.0	**Doc ID:** RM1000000028X3Z
Model Year Start: 2023	**Model:** Prius Prime	**Prod Date Range:** [12/2022 -]
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: ELECTRONICALLY CONTROLLED BRAKE SYSTEM: C124A05; Braking System information System Programming Failure; 2023 - 2024 MY Prius Prius Prime [12/2022 -]		

DTC	**C124A05**	**Braking System information System Programming Failure**

DESCRIPTION

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	MIL	DTC OUTPUT FROM	PRIORITY	NOTE
C124A05	Braking System information System Programming Failure	When the vehicle speed is 40 km/h (25 mph) or more, one of the following conditions is met: • The engine type, powertrain variation and destination information sent from the hybrid vehicle control ECU do not match the information stored in the No. 2 skid control ECU (brake actuator assembly). • No system information stored in the No. 2 skid control ECU (brake actuator assembly).	• Incorrect hybrid vehicle control ECU installed • No. 2 skid control ECU (brake actuator assembly)	Comes on	Brake/EPB	A	• SAE Code: C124A • Output ECU: No. 2 skid control ECU (brake actuator assembly)

MONITOR DESCRIPTION

When one of the following conditions is met at a certain vehicle speed or more, the No. 2 skid control ECU (brake actuator assembly) judges that there is a learning malfunction, the MIL is illuminated and a DTC is stored.

- The engine type, powertrain variation and destination information sent from the ECM do not match the information stored in the No. 2 skid control ECU (brake actuator assembly).
- No system information stored in the No. 2 skid control ECU (brake actuator assembly).

MONITOR STRATEGY

Related DTCs	C124A: Identification signal
Required Sensors/Components(Main)	No. 2 skid control ECU (brake actuator assembly) ECM
Required Sensors/Components(Related)	Speed sensor No. 2 skid control ECU (brake actuator assembly)
Frequency of Operation	Continuous
Duration	-
MIL Operation	Immediately
Sequence of Operation	None

TYPICAL ENABLING CONDITIONS

Monitor runs whenever the following DTCs are not stored	None
Both of the following conditions are met	-
DFLASH reading	Complete
Vehicle speed	40 km/h (24.85 mph) or more

TYPICAL MALFUNCTION THRESHOLDS

Either of the following conditions is met	-
Grade info	Undetermined or different from a storage memory
Car spec info	Undetermined
Powertrain info	Undetermined or different from a storage memory

COMPONENT OPERATING RANGE

All of the following conditions are met	-
DFLASH reading	Complete
Grade info	Determined
Car spec info	Determined
Powertrain info	Determined

CONFIRMATION DRIVING PATTERN

NOTICE:

When performing the normal judgment procedure, make sure that the driver door is closed and is not opened at any time during the procedure.

HINT:

- After repair has been completed, clear the DTC and then check that the vehicle has returned to normal by performing the following All Readiness check procedure.
- When clearing the permanent DTCs, refer to the "CLEAR PERMANENT DTC" procedure.

1. Connect the GTS to the DLC3.
2. Turn the ignition switch to ON and turn the GTS on.
3. Clear the DTCs (even if no DTCs are stored, perform the clear DTC procedure).
4. Turn the ignition switch off.
5. Turn the ignition switch to ON (READY) and turn the GTS on.
6. Drive the vehicle at a speed of 40 km/h (25 mph) or more for 1 second or more. [*]

HINT:

[*]: Normal judgment procedure.

The normal judgment procedure is used to complete DTC judgment and also used when clearing permanent DTCs.

7. Enter the following menus: Chassis / Brake/EPB* / Utility / All Readiness.

*: Electric Parking Brake System

8. Check the DTC judgment result.

HINT:

- If the judgment result shows NORMAL, the system is normal.
- If the judgment result shows ABNORMAL, the system has a malfunction.
- If the judgment result shows INCOMPLETE, perform driving pattern again.

PROCEDURE

1.	**CHECK PART NUMBER (HYBRID VEHICLE CONTROL ECU)**

(a) Check that the proper hybrid vehicle control ECU is installed.

OK:

Proper hybrid vehicle control ECU is installed.

NG ▶ **REPLACE HYBRID VEHICLE CONTROL ECU** INFO

OK ▼

2.	**CHECK PART NUMBER (BRAKE ACTUATOR ASSEMBLY)**

(a) Check that the proper brake actuator assembly is installed.

OK:

Proper brake actuator assembly is installed.

NG ▶ **REPLACE BRAKE ACTUATOR ASSEMBLY** INFO

OK

3.	**CLEAR SYSTEM INFORMATION**

(a) Clear system information.

HINT:

Click here INFO

Chassis > Brake/EPB > Utility

TESTER DISPLAY
Reset Memory

NEXT

4.	**SYSTEM INFORMATION MEMORIZATION**

(a) Perform system information memorization.

HINT:

Click here INFO

Chassis > Brake/EPB > Utility

TESTER DISPLAY
Calibration

HINT:

After performing "Reset Memory" using the GTS to clear the memorized value of the No. 2 skid control ECU (brake actuator assembly), DTC C124A05 will be stored until system information memorization is performed.

NEXT

5.	**CLEAR DTC**

Pre-procedure1

(a) None

Procedure1

(b) Clear the DTCs.

Chassis > Brake/EPB > Clear DTCs

Post-procedure1

(c) Turn the ignition switch off.

NEXT

6.	**RECONFIRM DTC**

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/EPB > Trouble Codes

RESULT	PROCEED TO
C124A05 is not output	A
C124A05 is output	B

Post-procedure1

(c) None

A **END**

B **REPLACE BRAKE ACTUATOR ASSEMBLY** INFO