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Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [03/2023 -]
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: ELECTRONICALLY CONTROLLED BRAKE SYSTEM: Brake Hold Standby Indicator Light Circuit; 2023 - 2024 MY Prius Prius Prime [03/2023 -]		

Brake Hold Standby Indicator Light Circuit

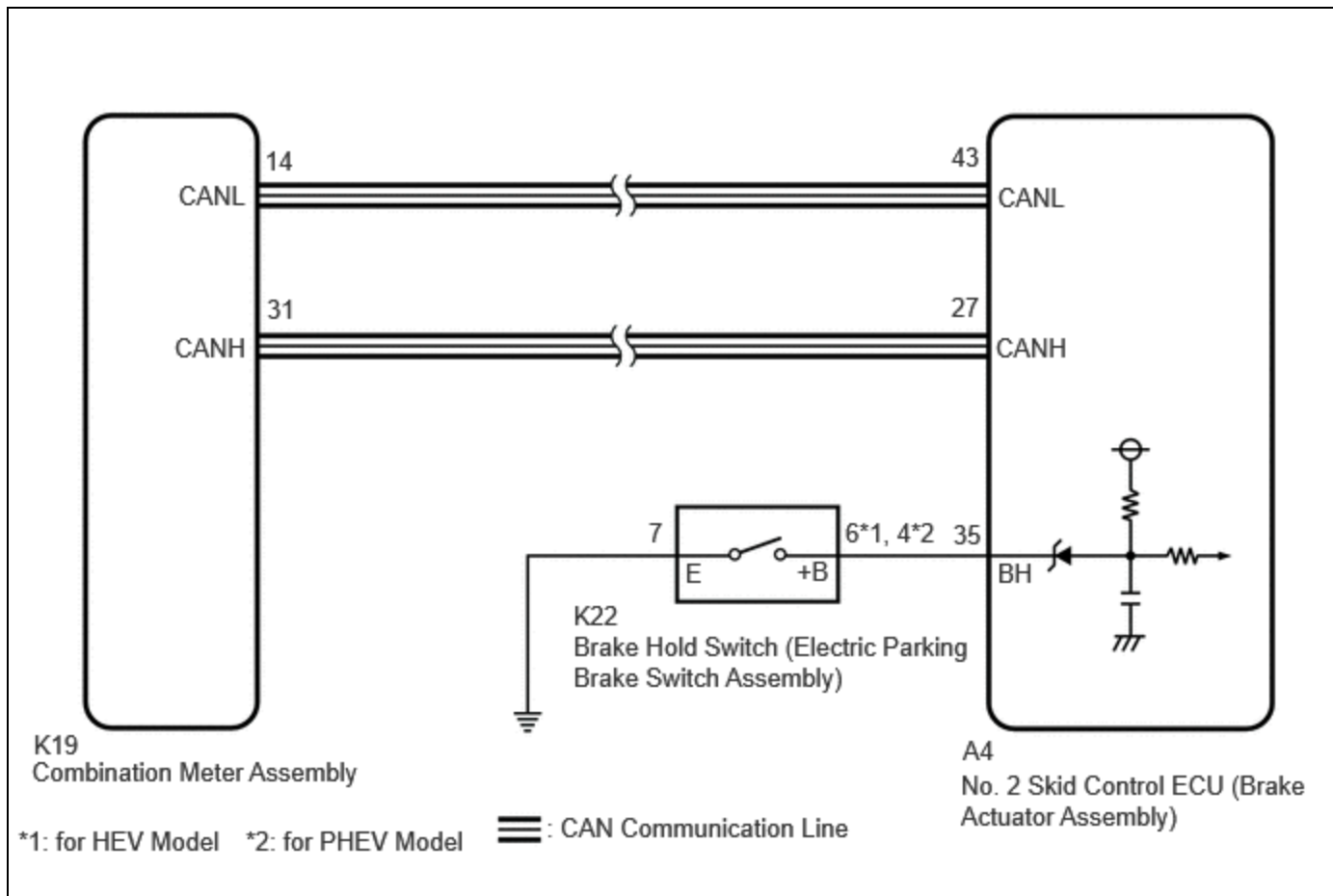
DESCRIPTION

The brake hold standby indicator light turns on if brake hold control is possible when the following conditions required for operation standby are met and the brake hold switch (electric parking brake switch assembly) is pressed while the ignition switch is turned to ON.

Conditions required for operation standby:

- The driver door is closed.
- The driver seat belt is fastened.
- The system is normal.

WIRING DIAGRAM



PROCEDURE

1.	PRE-CHECK
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(a) If the brake hold standby indicator light does not illuminate even though the brake hold switch (electric parking brake switch assembly) is pushed, check that the brake hold function operation conditions are met.

1. The driver door is closed.
2. The driver seat belt is fastened.
3. The system is normal.

HINT:

If a malfunction occurs in one of the following systems, the brake hold operated indicator light will blink. If this occurs, perform troubleshooting on the malfunctioning system.

- Electronically controlled brake system
- Electric parking brake system
- Hybrid control system

NEXT



2.	READ VALUE USING GTS (BRAKE HOLD READY)
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(a) Check the brake hold standby indicator light and mode condition on the GTS changes according to brake hold switch (electric parking brake switch assembly) operation.

Chassis > Brake/EPB > Data List

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Brake Hold Ready	Brake hold control permission status	Not in stand-by mode / Stand-by mode	Not in stand-by mode: Brake hold function not operating (brake hold standby indicator light not illuminated) Stand-by mode: Brake hold function stand-by state (brake hold standby indicator light illuminated)	-

Chassis > Brake/EPB > Data List

TESTER DISPLAY
Brake Hold Ready

Standard:

BRAKE HOLD SWITCH (ELECTRIC PARKING BRAKE SWITCH ASSEMBLY) OPERATION	MODE CONDITION DISPLAY	BRAKE HOLD STANDBY INDICATOR LIGHT
Not pressed	Not in stand-by mode	Does not come on
Pressing the brake hold switch (electric parking brake switch assembly)	Stand-by mode	Comes on

RESULT	PROCEED TO
Indicator light and mode condition display do not change.	A
Mode condition display is normal, but indicator light does not change.	B
Indicator light and mode condition display are normal.	C

B ► **INSPECT METER / GAUGE SYSTEM**

C ► **USE SIMULATION METHOD TO CHECK**

A



3. INSPECT ELECTRIC PARKING BRAKE SWITCH ASSEMBLY

- (a) Turn the ignition switch off.
 (b) Inspect the brake hold switch (electric parking brake switch assembly).

Click here [INFO](#)

OK:

The brake hold switch (electric parking brake switch assembly) is normal.

NG ► **REPLACE ELECTRIC PARKING BRAKE SWITCH ASSEMBLY**

OK



4. CHECK HARNESS AND CONNECTOR (BRAKE ACTUATOR ASSEMBLY - ELECTRIC PARKING BRAKE SWITCH ASSEMBLY)

- (a) Make sure that there is no looseness at the locking part and the connecting part of the connector.

OK:

The connector is securely connected.

(b) Disconnect the A4 No. 2 skid control ECU (brake actuator assembly) connector.

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

OK:

No deformation or corrosion.

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

Standard Resistance:

for HEV Model



[Click Location & Routing\(A4,K22\).](#)

[Click Connector\(A4\).](#)

[Click Connector\(K22\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
A4-35 (BH) - K22-6 (+B)	Always	Below 1 Ω
A4-35 (BH) or K22-6 (+B) - Body ground	Always	10 k Ω or higher
K22-7 (E) - Body ground	1 minute or more after disconnecting the cable from the negative (-) auxiliary battery terminal	Below 1 Ω

for PHEV Model



[Click Location & Routing\(A4,K22\).](#)

[Click Connector\(A4\).](#)

[Click Connector\(K22\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
A4-35 (BH) - K22-4 (+B)	Always	Below 1 Ω
A4-35 (BH) or K22-4 (+B) - Body ground	Always	10 k Ω or higher
K22-7 (E) - Body ground	1 minute or more after disconnecting the cable from the negative (-) auxiliary battery terminal	Below 1 Ω

OK **REPLACE BRAKE ACTUATOR ASSEMBLY**

NG **REPAIR OR REPLACE HARNESS OR CONNECTOR**

