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<b>Model Year Start:</b> 2023	<b>Model:</b> Prius Prime	<b>Prod Date Range:</b> [12/2022 - ]
<b>Title:</b> BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: ELECTRONICALLY CONTROLLED BRAKE SYSTEM: FAIL-SAFE CHART; 2023 - 2024 MY Prius Prius Prime [12/2022 - ]		

## FAIL-SAFE CHART

### FAIL-SAFE FUNCTION OF CONTROL SYSTEM

(a) When a malfunction is detected in the electronically controlled brake system, the skid control ECU turns the ABS warning light, brake system warning light (red indicator), brake system warning light (yellow indicator) and slip indicator light on, flashes the brake hold operated indicator light\*, as well as prohibits ABS, BA, TRAC, VSC, secondary collision brake and brake hold operation.

\*: The brake hold switch (electric parking brake switch assembly) is turned on under the following vehicle conditions.

Vehicle Conditions:

- i. The driver door is closed.
- ii. The driver seat belt is fastened.

#### HINT:

When a component of the electronically controlled brake system is in fail-safe mode, operation is prohibited. However, if the system enters fail-safe mode while braking is being controlled, control is gradually suspended to prevent sudden changes in vehicle behavior.

(b) If the skid control ECU detects that a system related to the hybrid control system is malfunctioning, it will prohibit operation of the TRAC and VSC systems in order to prevent further malfunctions and to protect the systems.

(c) If a malfunction in the electronically controlled brake system, electric parking brake system or hybrid control system is detected, control by the brake hold function is prohibited to prevent undesired operation and to protect the system.

#### HINT:

When control by the brake hold system is prohibited, the brake hold switch (electric parking brake switch assembly) is on and the following conditions are met, the brake hold operated indicator light will blink.

Vehicle conditions:

- o The driver door is closed.
- o The driver seat belt is fastened.

(d) If the skid control ECU detects that a system related to the airbag system is malfunctioning, it will prohibit operation of the secondary collision brake in order to prevent further malfunctions and to protect the systems.

ITEM	OPERATION
Malfunction in the ABS.	ABS, BA, TRAC and VSC control prohibited. Brake hold control prohibited.*1
Malfunction in the BA system.	ABS, BA, TRAC and VSC control prohibited. Brake hold control prohibited.*1
*1: Only during brake hold control	
*2: The systems for which control is prohibited differ depending on the status of the malfunction.	

ITEM	OPERATION
Malfunction in the EBD system.	ABS, EBD, BA, TRAC and VSC control prohibited. Brake hold control prohibited.*1
Malfunction in the TRAC system.	ABS, BA, TRAC and VSC control prohibited.*2 Brake hold control prohibited.*1
Malfunction in the VSC system.	ABS, BA, TRAC and VSC control prohibited.*2 Brake hold control prohibited.*1
*1: Only during brake hold control	
*2: The systems for which control is prohibited differ depending on the status of the malfunction.	

### FAIL-SAFE FUNCTION OF HYDRAULIC SYSTEM

(a) If a skid control ECU or brake fluid control component malfunctions or the brake fluid pressure supply stops, the system performs the following fail-safe operations:

ITEM	OPERATION
A function controlled by No. 1 skid control ECU (brake booster with master cylinder assembly) stops working.	No. 2 skid control ECU (brake actuator assembly) generates braking force.
A function controlled by No. 2 skid control ECU (brake actuator assembly) stops working.	No. 1 skid control ECU (brake booster with master cylinder assembly) generates braking force.
A brake fluid pressure control component inside the brake booster with master cylinder assembly or brake actuator assembly stops working.	Braking force solely generated by the driver.
The brake fluid pressure supply to the brake booster with master cylinder assembly and brake actuator assembly stops.	Braking force solely generated by the driver.

