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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: BRAKE ACTUATOR: RESET MEMORY / CALIBRATION; 2023 - 2024 MY Prius Prius Prime [12/2022 -     ]		

## RESET MEMORY / CALIBRATION

### CAUTION / NOTICE / HINT

#### NOTICE:

- When replacing the brake pedal stroke sensor assembly, brake pedal, No. 1 skid control ECU (brake booster with master cylinder assembly), No. 2 skid control ECU (brake actuator assembly) or yaw rate and acceleration sensor (airbag sensor assembly), perform "Calibration".
- When "Bleeding" is performed after replacing the No. 1 skid control ECU (brake booster with master cylinder assembly) or No. 2 skid control ECU (brake actuator assembly), "Calibration" will be performed automatically.
- When reinstalling the yaw rate and acceleration sensor (airbag sensor assembly), perform "Calibration".
- Make sure to perform the yaw rate and acceleration sensor zero point calibration on a flat surface (gradient of 0.2° or less) and ensure that the doors are not opened or closed and the vehicle is not moved or shaken. Also, to avoid vibration due to engine idle, do not turn the ignition switch to ON (READY).
- When performing the yaw rate and acceleration sensor zero point calibration, make sure that tire pressure is as specified and the vehicle is in full contact with the ground (not completely or partially lifted up).

## PROCEDURE

### 1. CONFIRMATION BEFORE CALIBRATION

(a) To ensure that calibration completes correctly, confirm the following items before performing "Calibration":

- (1) The auxiliary battery voltage is 11 to 15.5 V when the ignition switch is turned to ON (READY).
- (2) The brake booster with master cylinder assembly and brake actuator assembly are not hot.

#### HINT:

If the temperature of the brake booster with master cylinder assembly or brake actuator assembly is excessively high, wait until it cools down before performing "Calibration".

### 2. RESET MEMORY

- Turn the ignition switch off.
- Check that the steering wheel is centered.
- Check that park (P) is selected.
- Connect the GTS to the DLC3.
- Turn the ignition switch to ON.
- Turn the GTS on.
- Using the GTS, perform "Reset Memory". Enter the following menus: Chassis / Brake/EPB / Utility / Reset Memory.

**Chassis > Brake/EPB > Utility**



#### NOTICE:

When performing "Reset Memory", each warning light or indicator light illuminates or flashes, and a DTC indicating that learning is incomplete and/or vehicle control history (RoB) is stored.

(h) Turn the ignition switch off.

#### NOTICE:

If the ignition switch is turned to ON for more than 15 seconds with park (P) selected after the zero point of the yaw rate and acceleration sensor has been cleared, only the zero point of the yaw rate sensor will be stored. If the vehicle is driven under these conditions, the No. 2 skid control ECU (brake actuator assembly) will store the zero point calibration for the acceleration sensor as not being completed. The No. 2 skid control ECU (brake actuator assembly) will then also indicate this as a malfunction of the VSC system using the indicator light.

### 3. CALIBRATION

#### NOTICE:

This procedure can be performed only once per trip. For that reason, if it is necessary to perform learning again, turn the ignition switch off for 4 minutes or more before turning the ignition switch to ON again.

#### HINT:

- When Dealer Mode (Calibration) is entered, linear solenoid valve offset learning, brake pedal stroke sensor assembly zero point calibration, system information memorization, and yaw rate and acceleration sensor zero point calibration will be performed automatically.
- If linear solenoid valve offset learning has not been performed, DTC is stored.
- If brake pedal stroke sensor assembly zero point calibration has not been performed, DTC is stored.
- If system information memorization has not been performed, DTC is stored.
- If yaw rate sensor zero point calibration has not been performed, RoB is stored.
- If acceleration sensor zero point calibration has not been performed, DTC is stored.

(a) Turn the ignition switch off.

(b) Check that the steering wheel is centered.

(c) Check that park (P) is selected.

(d) Connect the GTS to the DLC3.

(e) Turn the ignition switch to ON.

(f) Check that the parking brake is released.

#### NOTICE:

- If the parking brake is not released, linear solenoid valve offset learning cannot be performed.
- If the parking brake is engaged during linear solenoid valve offset learning, learning will be suspended.

In this case, learning will resume when the parking brake is released.

- After replacing the brake actuator assembly, the parking brake indicator light (red) blinks when the ignition switch is turned to ON for the first time. To turn off the parking brake indicator light (red) after replacing the brake actuator assembly, operate the electric parking brake switch (electric parking brake switch assembly) to the lock side then to the release side.

(g) Turn the GTS on.

(h) Switch the skid control ECUs to Dealer Mode (Calibration) using the GTS. Enter the following menus: Chassis / Brake/EPB / Utility / Calibration.

#### Chassis > Brake/EPB > Utility



(i) Wait for approximately 2 minutes with the vehicle stopped without depressing the brake pedal and confirm that the ABS warning light, brake system warning light (yellow indicator) and slip indicator light flash the

Dealer Mode pattern (blinks at 0.25 seconds intervals).

**NOTICE:**

- Do not depress the brake pedal when performing "Calibration".
- If Dealer Mode is entered when the shift position is in a position other than P, DTC is stored.

**HINT:**

- An auxiliary battery voltage of 10 V or more is required during learning. If the auxiliary battery voltage drops below 10 V, learning may be canceled. The time required for learning changes depending on the auxiliary battery voltage.
- If linear solenoid valve offset learning does not complete, DTC will be stored. In this case, perform learning again after clearing the DTC and turning the ignition switch off.
- After "Calibration" completes, the ABS warning light, brake system warning light (yellow indicator) and slip indicator light flash the Dealer Mode pattern (blinks at 0.25 seconds intervals).

(j) Check that "complete" is displayed for Dealer Mode (Signal Check) Inspection Item "Learning of Stroke Sensor Zero Point".

(k) Turn the ignition switch off.

(l) Disconnect the GTS.

