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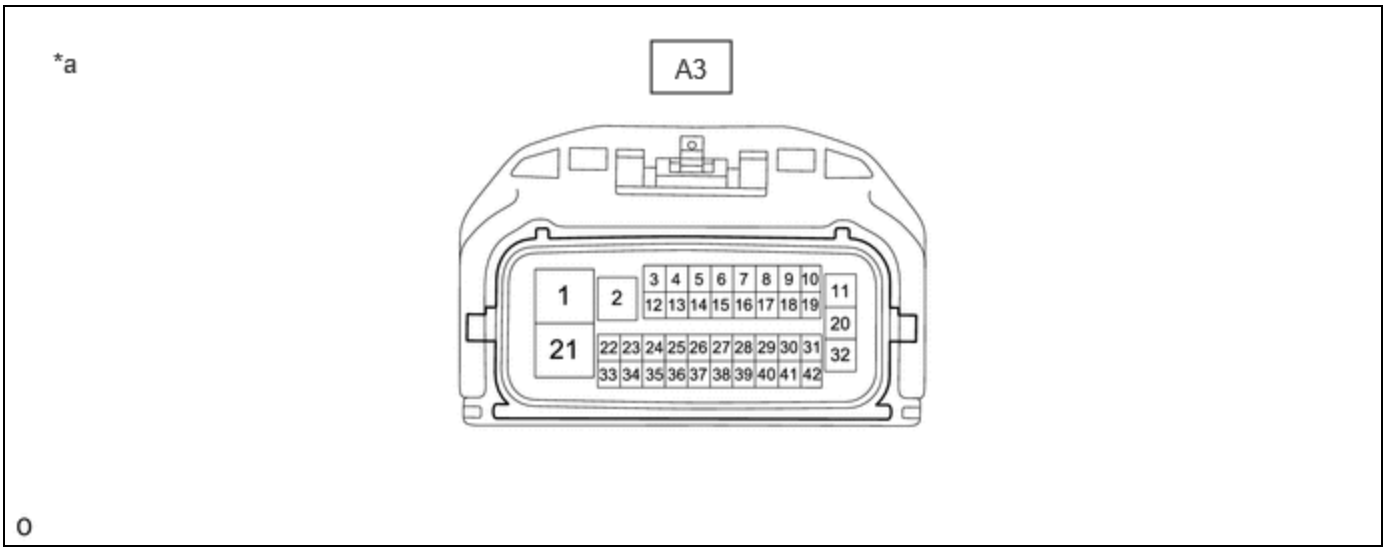
| **Model Year Start:** 2023 | **Model:** Prius Prime | **Prod Date Range:** [12/2022 - ] |
| **Title:** BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: ELECTRONICALLY CONTROLLED BRAKE SYSTEM: TERMINALS OF ECU; 2023 - 2024 MY Prius Prius Prime [12/2022 - ] | | |

# TERMINALS OF ECU

### CHECK BRAKE BOOSTER WITH MASTER CYLINDER ASSEMBLY

(a) Disconnect the A3 No. 1 skid control ECU (brake booster with master cylinder assembly) connector and measure the voltage or resistance on the wire harness side.




| | | | |
|---|---|---|---|
| *a | Front view of wire harness connector (to No. 1 Skid Control ECU (Brake Booster with Master Cylinder Assembly)) | - | - |

**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.

**HINT:**

The voltage cannot be measured with the connector connected to the No. 1 skid control ECU (brake booster with master cylinder assembly) as the connector is watertight.

**Standard**

| TERMINAL NO. (SYMBOL) | TERMINAL DESCRIPTION | CONDITION | SPECIFIED CONDITION |
|---|---|---|---|
| A3-1 (BM) - Body ground | No. 1 skid control ECU (brake booster with master cylinder assembly) power supply input | Always | 11 to 14 V |

*1: Differs depending on the vehicle model

*2: Refer to Sub Battery System

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| TERMINAL NO. (SYMBOL) | TERMINAL DESCRIPTION | CONDITION | SPECIFIED CONDITION |
|---|---|---|---|
| A3-2 (CBKP) | No. 1 skid control ECU (brake booster with master cylinder assembly) backup power supply input | *2 | *2 |
| A3-3 (CSW2) | No. 2 skid control ECU (brake actuator assembly) operation signal output | - | - |
| A3-4 (CA2H) | CAN communication line 2 (H) | - | - |
| A3-5 | - | - | - |
| A3-6 | - | - | - |
| A3-7 | - | - | - |
| A3-8 | - | - | - |
| A3-9 | - | - | - |
| A3-10 | - | - | - |
| A3-11 (BS) - Body ground | Solenoid power supply input | Always | 11 to 14 V |
| A3-12 | - | - | - |
| A3-13 (CA2L) | CAN communication line 2 (L) | - | - |
| A3-14 | - | - | - |
| A3-15 | - | - | - |
| A3-16 | - | - | - |
| A3-17 | - | - | - |
| A3-18 | - | - | - |
| A3-19 | - | - | - |
| A3-20 | - | - | - |
| A3-21 (GND2) - Body ground | No. 1 skid control ECU (brake booster with master cylinder assembly) ground | 1 minute or more after disconnecting the cable from the negative (-) auxiliary battery terminal | Below 1 Ω |
| A3-22 (CTY) - Body ground | Front door lock with motor assembly input (for driver side) | Driver door closed → open | 11 to 14 V or pulse output (maximum 14 V)*1 → Below 1 V |
| A3-23 (LBL) | Brake fluid level warning switch input | - | - |

*1: Differs depending on the vehicle model

*2: Refer to Sub Battery System

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| TERMINAL NO. (SYMBOL) | TERMINAL DESCRIPTION | CONDITION | SPECIFIED CONDITION |
|---|---|---|---|
| A3-24 (CWKP) - Body ground | Integration control supply operation signal output | *2 | *2 |
| A3-25 | - | - | - |
| A3-26 | - | - | - |
| A3-27 (SKG1) | Brake pedal stroke sensor 1 ground | - | - |
| A3-28 (VSK1) | Brake pedal stroke sensor 1 power supply output | - | - |
| A3-29 (SKS1) | Brake pedal stroke sensor 1 signal input | - | - |
| A3-30 (IGR) - Body ground | IGR power source input | Ignition switch ON | 11 to 14 V |
| A3-31 (STP) - Body ground | Stop light switch assembly input | Stop light switch assembly on → off (Brake pedal depressed → released) | 11 to 14 V → Below 1.5 V |
| A3-32 | - | - | - |
| A3-33 | - | - | - |
| A3-34 (DC1H) | Daisy chain communication line (H) | - | - |
| A3-35 (DC1L) | Daisy chain communication line (L) | - | - |
| A3-36 (CA1H) | CAN communication line 1 (H) | - | - |
| A3-37 (CA1L) | CAN communication line 1 (L) | - | - |
| A3-38 | - | - | - |
| A3-39 | - | - | - |
| A3-40 | - | - | - |
| A3-41 | - | - | - |
| A3-42 | - | - | - |

*1: Differs depending on the vehicle model

*2: Refer to Sub Battery System

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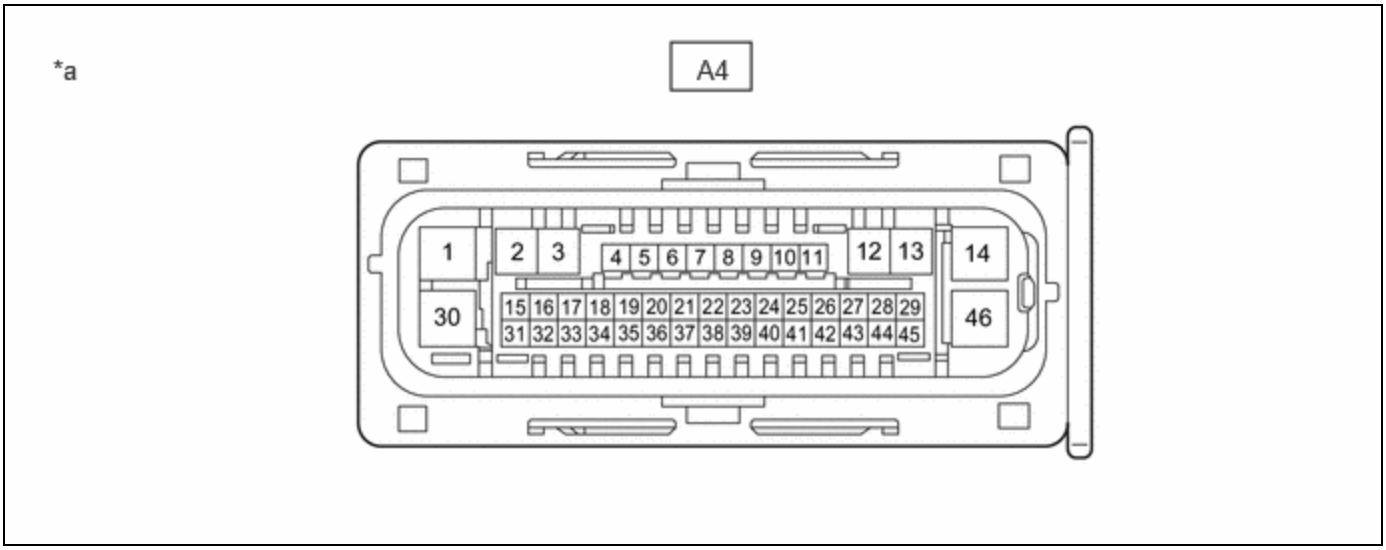
### CHECK BRAKE ACTUATOR ASSEMBLY

(a) Disconnect the A4 No. 2 skid control ECU (brake actuator assembly) connector and measure the voltage or resistance on the wire harness side.




| | | | |
|---|---|---|---|
| *a | Front view of wire harness connector (to No. 2 Skid Control ECU (brake actuator assembly)) | - | - |

**HINT:**

The voltage cannot be measured with the connector connected to the No. 2 skid control ECU (brake actuator assembly) as the connector is watertight.

**Standard**

| TERMINAL NO. (SYMBOL) | TERMINAL DESCRIPTION | CONDITION | SPECIFIED CONDITION |
|---|---|---|---|
| A4-1 (GND1) - Body ground | No. 2 skid control ECU (brake actuator assembly) ground | 1 minute or more after disconnecting the cable from the negative (-) auxiliary battery terminal | Below 1 Ω |
| A4-2 | - | - | - |
| A4-3 | - | - | - |
| A4-4 (RL-) | Rear speed sensor LH (-) signal input | - | - |
| A4-5 (RL+) | Rear speed sensor LH (+) power supply output | - | - |
| A4-6 (FR-) | Front speed sensor RH (-) signal input | - | - |
| A4-7 (FR+) | Front speed sensor RH (+) power supply output | - | - |
| A4-8 | - | - | - |
| A4-9 (CSW) - Body ground | VSC OFF switch (electric parking brake switch assembly) input | VSC OFF switch (electric parking brake switch assembly) is pushed → released | Below 1 Ω → 10 kΩ or higher |
| A4-10 (SKS2) | Brake pedal stroke sensor 2 signal input | - | - |
| A4-11 (STP) - Body ground | Stop light switch assembly input | Stop light switch assembly on → off (Brake pedal depressed → released) | 11 to 14 V → Below 1.5 V |

| TERMINAL NO. (SYMBOL) | TERMINAL DESCRIPTION | CONDITION | SPECIFIED CONDITION |
|---|---|---|---|
| A4-12 | - | - | - |
| A4-13 | - | - | - |
| A4-14 (+BS) - Body ground | ABS solenoid relay power supply input | Always | 11 to 14 V |
| A4-15 (IG2) - Body ground | IG2 power source input | Ignition switch ON | 11 to 14 V |
| A4-16 (CA2H) | CAN communication line 2 (H) | - | - |
| A4-17 (CA2L) | CAN communication line 2 (L) | - | - |
| A4-18 (SP1) | Speed sensor signal output | - | - |
| A4-19 (RR-) | Rear speed sensor RH (-) signal input | - | - |
| A4-20 (RR+) | Rear speed sensor RH (+) power supply output | - | - |
| A4-21 (FL-) | Front speed sensor LH (-) signal input | - | - |
| A4-22 (FL+) | Front speed sensor LH (+) power supply output | - | - |
| A4-23 | - | - | - |
| A4-24 | - | - | - |
| A4-25 (VSK2) | Brake pedal stroke sensor 2 power supply output | - | - |
| A4-26 (SKG2) | Brake pedal stroke sensor 2 ground | - | - |
| A4-27 (CANH) | CAN communication line (H) | - | - |
| A4-28 | - | - | - |
| A4-29 (CTY) - Body ground | No. 2 Skid control ECU (brake actuator assembly) operation signal input | Ignition switch ON | 11 to 14 V |
| A4-30 (GND2) - Body ground | ABS motor ground | 1 minute or more after disconnecting the cable from the negative (-) auxiliary battery terminal | Below 1 Ω |
| A4-31 | - | - | - |
| A4-32 (STPO) - Body ground | Stop light control relay (stop light switch assembly) output | Always | 11 to 14 V |
| A4-33 | - | - | - |
| A4-34 | - | - | - |
| A4-35 (BH) - Body ground | Brake hold switch (electric parking brake switch assembly) input | Brake hold switch (electric parking brake switch assembly) is pushed → released | Below 1 Ω → 10 kΩ or higher |
| A4-36 | - | - | - |

| TERMINAL NO. (SYMBOL) | TERMINAL DESCRIPTION | CONDITION | SPECIFIED CONDITION |
|---|---|---|---|
| A4-37 (STP2) - Body ground | Stop light control relay (stop light switch assembly) input | Stop light switch assembly on → off (Brake pedal depressed → released) | 11 to 14 V → Below 1.5 V |
| A4-38 | - | - | - |
| A4-39 | - | - | - |
| A4-40 | - | - | - |
| A4-41 | - | - | - |
| A4-42 | - | - | - |
| A4-43 (CANL) | CAN communication line (L) | - | - |
| A4-44 | - | - | - |
| A4-45 (IG1) - Body ground | IG1 power source input | Ignition switch ON | 11 to 14 V |
| A4-46 (BM) - Body ground | ABS motor relay power supply input | Always | 11 to 14 V |