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Model Year Start: 2023	**Model:** Prius Prime	**Prod Date Range:** [12/2022 -]
Title: PARKING BRAKE: ELECTRIC PARKING BRAKE SYSTEM: DATA LIST / ACTIVE TEST; 2023 - 2024 MY Prius Prius Prime [12/2022 -]		

DATA LIST / ACTIVE TEST

READ DATA LIST

NOTICE:

In the table below, the values listed under "Normal Condition" are reference values. Do not depend solely on these reference values when deciding whether a part is faulty or not.

HINT:

Using the GTS to read the Data List allows the values or states of switches, sensors, actuators and other items to be read without removing any parts. This non-intrusive inspection can be very useful because intermittent conditions or signals may be discovered before parts or wiring is disturbed. Reading the Data List information early in troubleshooting is one way to save diagnostic time.

(a) Turn the ignition switch off.

(b) Connect the GTS to the DLC3.

(c) Turn the ignition switch to ON.

(d) Turn the GTS on.

(e) Enter the following menus: Chassis / Brake/EPB / Data List.

(f) Read the Data List according to the display on the GTS.

Chassis > Brake/EPB > Data List

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
FR Wheel Speed	Front wheel speed sensor RH reading	Min.: 0.0 km/h (0 mph) Max.: 6553.5 km/h (4072 mph)	Vehicle stopped: 0.0 km/h (0 mph)	When driving at constant speed: No large fluctuations
FL Wheel Speed	Front wheel speed sensor LH reading	Min.: 0.0 km/h (0 mph) Max.: 6553.5 km/h (4072 mph)	Vehicle stopped: 0.0 km/h (0 mph)	When driving at constant speed: No large fluctuations
RR Wheel Speed	Rear wheel speed sensor RH reading	Min.: 0.0 km/h (0 mph) Max.: 6553.5 km/h (4072 mph)	Vehicle stopped: 0.0 km/h (0 mph)	When driving at constant speed: No large fluctuations

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
RL Wheel Speed	Rear wheel speed sensor LH reading	Min.: 0.0 km/h (0 mph) Max.: 6553.5 km/h (4072 mph)	Vehicle stopped: 0.0 km/h (0 mph)	When driving at constant speed: No large fluctuations
FR Wheel Acceleration	Front wheel RH acceleration	Min.: -200.840 m/s^2 Max.: 199.271 m/s^2	Vehicle stopped: 0.000 m/s^2 During deceleration: -200.840 to 0.000 m/s^2 During acceleration: 0.000 to 199.271 m/s^2	During deceleration/acceleration: Changes continuously
FL Wheel Acceleration	Front wheel LH acceleration	Min.: -200.840 m/s^2 Max.: 199.271 m/s^2	Vehicle stopped: 0.000 m/s^2 During deceleration: -200.840 to 0.000 m/s^2 During acceleration: 0.000 to 199.271 m/s^2	During deceleration/acceleration: Changes continuously
RR Wheel Acceleration	Rear wheel RH acceleration	Min.: -200.840 m/s^2 Max.: 199.271 m/s^2	Vehicle stopped: 0.000 m/s^2 During deceleration: -200.840 to 0.000 m/s^2 During acceleration: 0.000 to 199.271 m/s^2	During deceleration/acceleration: Changes continuously
RL Wheel Acceleration	Rear wheel LH acceleration	Min.: -200.840 m/s^2 Max.: 199.271 m/s^2	Vehicle stopped: 0.000 m/s^2 During deceleration: -200.840 to 0.000 m/s^2 During acceleration: 0.000 to 199.271 m/s^2	During deceleration/acceleration: Changes continuously

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Forward and Rearward G	Forward and rearward G	Min.: -25.105 m/s^2 Max.: 24.908 m/s^2	During deceleration: -25.105 to 0.000 m/s^2 During acceleration: 0.000 to 24.908 m/s^2	During acceleration/deceleration: Changes in proportion with acceleration
Zero Point of Decele	Memorized zero point value of forward and rearward G	Min.: -25.105 m/s^2 Max.: 24.908 m/s^2	-	-
Vehicle Speed	Vehicle speed (Vehicle speed signal output to combination meter assembly)	Min.: 0.0 km/h (0 mph) Max.: 6553.5 km/h (4072 mph)	Vehicle stopped: 0.0 km/h (0 mph)	When driving at constant speed: No large fluctuations
Accelerator Opening Angle %	Percentage of accelerator pedal opening angle	Min.: 0.0% Max.: 127.5%	Accelerator pedal released: 0.0%	During accelerator pedal operation: Changes in proportion with the pedal movement
Shift Lever Position	Shift lever position information	fail / 1st / 2nd / 3rd / 4th / 5th / 6th / B / D/M / N / P / R / No input	Actual shift lever position	-
Brake Hold Control Mode	Brake hold control mode	Out of control mode / Pressure hold mode / Pressure release mode / EPB lock mode	Out of control mode: Brake hold control system is off or brake hold control system is stand-by mode (brake hold standby indicator light is illuminated) Pressure hold mode: Brake hold control is operating (brake hold operated indicator light is illuminated) Pressure release mode: Brake hold control is released	**HINT:** • EPB: Electric Parking Brake System • If the brake pedal is not depressed for 3 minutes or more after entering pressure hold mode, the system automatically changes to EPB lock mode

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
			(brake hold operated indicator light not illuminated) EPB lock mode: Parking brake is engaged during brake hold control	
Parking Brake SW	Parking brake status	OFF / ON	OFF: Parking brake released ON: Parking brake applied	-
Deceleration Open	Acceleration sensor open detection	Normal / Under intermittent	Normal: Momentary interruption not detected Under intermittent: Momentary interruption detected	-
A/C ECU Communication Open	Air conditioning amplifier assembly communication open detection	Normal / Under intermittent	Normal: Momentary interruption not detected Under intermittent: Momentary interruption detected	-
HV Communication Open	Hybrid vehicle control ECU communication open detection	Normal / Under intermittent	Normal: Momentary interruption not detected Under intermittent: Momentary interruption detected	-
Body ECU Communication Open	Body ECU communication open detection	Normal / Under intermittent	-	-
ECU +B1 Voltage	No. 2 skid control ECU (brake actuator assembly) +B1 voltage	Min.: 0.0 V Max.: 25.5 V	11.0 to 14.0 V	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
RH Actuator Motor Input Voltage	Parking brake motor RH (parking brake actuator assembly RH) input voltage	Min.: 0.0 V Max.: 25.5 V	-	-
LH Actuator Motor Input Voltage	Parking brake motor LH (parking brake actuator assembly LH) input voltage	Min.: 0.0 V Max.: 25.5 V	-	-
RH Actuator Motor +Terminal Voltage	Parking brake motor RH (parking brake actuator assembly RH) positive (+) terminal side voltage	Min.: 0.0 V Max.: 25.5 V	-	-
LH Actuator Motor +Terminal Voltage	Parking brake motor LH (parking brake actuator assembly LH) positive (+) terminal side voltage	Min.: 0.0 V Max.: 25.5 V	-	-
RH Actuator Motor -Terminal Voltage	Parking brake motor RH (parking brake actuator assembly RH) negative (-) terminal side voltage	Min.: 0.0 V Max.: 25.5 V	-	-
LH Actuator Motor -Terminal Voltage	Parking brake motor LH (parking brake actuator assembly LH) negative (-) terminal side voltage	Min.: 0.0 V Max.: 25.5 V	-	-
Ambient Temperature	Ambient temperature	Min.: -48 °C (-54.4 °F) Max.: 207 °C (404.6 °F)	-	When displayed value differs from actual ambient temperature, air conditioning system and CAN communication system may be malfunctioning
EPB Switch	Electric parking brake switch	Neutral / Apply / Release /	Neutral: Lock switch and release switch	When not normal, electric parking brake switch (electric

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
	(electric parking brake switch assembly) input	Unknown	are off Apply: Lock switch on Release: Release switch on	parking brake switch assembly) release side system may be malfunctioning **HINT:** EPB stands for electric parking brake.
Parking Brake Light	Parking brake indicator light output signal	OFF / Light / Blink	OFF: Parking brake indicator light turns off Light: Parking brake indicator light illuminates Blink: Parking brake indicator light flashes	-
RH Actuator Motor Actual Current	Parking brake motor RH (parking brake actuator assembly RH) current value	Min.: -5.0362 A Max.: 50.5004 A	-	-
LH Actuator Motor Actual Current	Parking brake motor LH (parking brake actuator assembly LH) current value	Min.: -5.0362 A Max.: 50.5004 A	-	-
RH Actuator Motor Adjustment Current	Parking brake motor RH (parking brake actuator assembly RH) current calibration value	Min.: -6.9693 A Max.: 6.9148 A	-	-
LH Actuator Motor Adjustment Current	Parking brake motor LH (parking brake actuator assembly LH) current calibration value	Min.: -6.9693 A Max.: 6.9148 A	-	-
RH Actuator Motor Current Differential	Differences in parking brake motor RH (parking brake actuator assembly RH) monitoring current	Min.: -1.008 A Max.: 0.945 A	-	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
LH Actuator Motor Current Differential	Differences in parking brake motor LH (parking brake actuator assembly LH) monitoring current	Min.: -1.008 A Max.: 0.945 A	-	-
Vehicle Speed (Control Value)	Vehicle speed (control value)	Min.: 0.0 km/h (0 mph) Max.: 6553.5 km/h (4072 mph)	-	-
EPB Control Cancel History	Number of times EPB control was suspended	Min.: 0 Max.: 255	-	**HINT:** EPB stands for electric parking brake.
Counter of IG ON After EPB Control Cancel	Number of times the ignition switch was turned to ON after EPB control was canceled	Min.: 0 Times Max.: 255 Times	-	**HINT:** EPB stands for electric parking brake.
RH Actuator Status	Parking brake actuator assembly RH condition	Park Applied / Hold Applied / Released / Applying / Releasing / Completely Released / Unknown	-	-
LH Actuator Status	Parking brake actuator assembly LH condition	Park Applied / Hold Applied / Released / Applying / Releasing / Completely Released / Unknown	-	-
EPB Warning Light	Brake system warning light (yellow indicator) output signal	OFF / ON	OFF: Brake system warning light (yellow indicator) turns off ON: Brake system warning light (yellow	**HINT:** EPB stands for electric parking brake.

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
			indicator) illuminates	
Auto Mode Request	Auto mode request status	Manual mode request / Auto mode request	-	-
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)	-
EPB Lock Request	Lock demand status	Not requested / requested	-	**HINT:** EPB stands for electric parking brake.
Auto Mode	AUTO (shift-linked) mode permission status	OFF / ON	OFF: Manual mode ON: AUTO (shift-linked) mode	-
Dynamic PKB Mode	Dynamic parking brake operation status	OFF / ON	OFF: Dynamic parking brake is not operating ON: Dynamic parking brake is operating	-
RH Actuator Motor Relay1	Parking brake motor relay 1 RH condition	OFF / ON	-	-
RH Actuator Motor Relay2	Parking brake motor relay 2 RH condition	OFF / ON	-	-
RH Actuator Motor Relay3	Parking brake motor relay 3 RH condition	OFF / ON	-	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
RH Actuator Motor Relay4	Parking brake motor relay 4 RH condition	OFF / ON	-	-
LH Actuator Motor Relay1	Parking brake motor relay 1 LH condition	OFF / ON	-	-
LH Actuator Motor Relay2	Parking brake motor relay 2 LH condition	OFF / ON	-	-
LH Actuator Motor Relay3	Parking brake motor relay 3 LH condition	OFF / ON	-	-
LH Actuator Motor Relay4	Parking brake motor relay 4 LH condition	OFF / ON	-	-
FR Speed Signal Status	Front wheel RH speed signal status	Normal / Fixed	Normal: Wheel speed signal not stuck Fixed: Wheel speed signal stuck	-
FL Speed Signal Status	Front wheel LH speed signal status	Normal / Fixed	Normal: Wheel speed signal not stuck Fixed: Wheel speed signal stuck	-
RR Speed Signal Status	Rear wheel RH speed signal status	Normal / Fixed	Normal: Wheel speed signal not stuck Fixed: Wheel speed signal stuck	-
RL Speed Signal Status	Rear wheel LH speed signal status	Normal / Fixed	Normal: Wheel speed signal not stuck Fixed: Wheel speed signal stuck	-
RH Actuator Current Status	Parking brake actuator assembly RH monitoring current condition	Normal / Invalid	Normal	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
LH Actuator Current Status	Parking brake actuator assembly LH monitoring current condition	Normal / Invalid	Normal	-
Permission of Interlocking Shift	AUTO (shift-linked) mode permission status	Available / Not available	-	-
Permission of Interlocking Brake	Brake-linked permission status	Available / Not available	-	-
Permission of RH Interlocking PKB Lock	Parking brake actuator assembly RH parking brake lock control permission status	Available / Not available	-	-
Permission of RH Interlocking PKB Release	Parking brake actuator assembly RH parking brake release control permission status	Available / Not available	-	-
Permission of RH Interlocking Dynamic PKB	Parking brake actuator assembly RH dynamic parking control permission status	Available / Not available	-	-
Permission of RH Interlocking PKB Full Release	Parking brake actuator assembly RH parking brake full release permission status	Available / Not available	-	-
Permission of LH Interlocking PKB Lock	Parking brake actuator assembly LH parking brake lock control permission status	Available / Not available	-	-
Permission of LH Interlocking PKB	Parking brake actuator assembly	Available / Not available	-	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Release	LH parking brake release control permission status			
Permission of LH Interlocking Dynamic PKB	Parking brake actuator assembly LH dynamic parking control permission status	Available / Not available	-	-
Permission of LH Interlocking PKB Full Release	Parking brake actuator assembly LH parking brake full release permission status	Available / Not available	-	-
Fade Status	Fade status	OFF / ON	-	-
RH Actuator Motor Current High	Parking brake motor RH (parking brake actuator assembly RH) overcurrent status	OFF / ON	-	-
RH Actuator Motor Driver Operation Status	Parking brake motor RH (parking brake actuator assembly RH) driver status	OFF / ON	-	-
LH Actuator Motor Current High	Parking brake motor LH (parking brake actuator assembly LH) overcurrent status	OFF / ON	-	-
LH Actuator Motor Driver Operation Status	Parking brake motor LH (parking brake actuator assembly LH) driver status	OFF / ON	-	-
IGR Voltage	IG1 voltage value	Min.: 0.0 V Max.: 25.5 V	-	Changes in proportion to auxiliary battery voltage
+BS Voltage	+BS voltage value	Min.: 0.0 V Max.: 25.5 V	-	Changes in proportion to auxiliary battery voltage