Last Modified: 12-04-2024	6.11:8.1.0	Doc ID: RM100000002BHW5
Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [03/2023 -]
Title: HYBRID / BATTERY CONTROL:	HYBRID BATTERY SYSTEM	(for PHEV Model): FREEZE FRAME DATA; 2023 -
2024 MY Prius Prime [03/2023 -]	

FREEZE FRAME DATA

FREEZE FRAME DATA

HINT:

The battery ECU assembly records vehicle and driving condition information as freeze frame data the moment a DTC is stored. It can be used for estimating or duplicating the vehicle conditions that were present when the malfunction occurred. To confirm the details of the hybrid battery system, check the detailed information for the DTC information code in the Data List (INF code).

- (a) Select a DTC in order to display its freeze frame data.
- (b) Check the freeze frame information recorded with the DTC.

Powertrain > HV Battery

TESTER DISPLAY
Vehicle Speed
Target Engine Power
Engine Speed
Calculate Load
Coolant Temperature
Engine Run Time
Accelerator Position
Throttle Position Sensor No.1 Voltage %
Shift Position
Atmospheric Pressure
Ambient Temperature
BATT Voltage

TESTER DISPLAY
Smoothed Value of BATT Voltage
Warmup Cycle Cleared DTC
Distance from DTC Cleared
Time after DTC Cleared
Running Time from MIL ON
Total Distance Traveled
Total Distance Traveled - Unit
MIL ON Run Distance
IGB Signal Status
IG2 Signal Status
Ready Signal
Ready ON Prevention Status
IG OFF Time of Last Trip
HV/EV Activate Condition
SMRG Control Status
SMRB Control Status
SMRP Control Status
WIN Control Limit Power
WOUT Control Limit Power

TESTER DISPLAY
A/C Consumption Power
A/C System Status
Stop Light Switch
Airbag Status (Collision)
Airbag Status (Safing)
Airbag Status (Normal)
Generator Revolution
Target Generator Torque
Motor Revolution
Target Motor Torque
Request Motor Regenerative Brake Torque
Motor Regenerate Brake Execution Torque
Generator Carrier Frequency
Motor Carrier Frequency
Boosting Converter Carrier Frequency
VL-Voltage before Boosting
VH-Voltage after Boosting
Boost Ratio
Hybrid/EV Battery SOC

TESTER DISPLAY
Delta SOC
Hybrid/EV Battery SOC just after IG-ON
Hybrid/EV Battery Maximum SOC
Hybrid/EV Battery Minimum SOC
Hybrid/EV Battery Voltage
Hybrid/EV Battery Current
Hybrid/EV Battery Current for Hybrid/EV Battery Control
Hybrid/EV Battery Current for Hybrid/EV Battery Control (Sub)
Hybrid/EV Battery Current for Driving Control
Hybrid/EV Battery Current (IBL)
Hybrid/EV Battery Current Sensor Voltage for Hybrid/EV Battery Control
Hybrid/EV Battery Current Sensor Voltage for Hybrid/EV Battery Control (Sub)
Hybrid/EV Battery Current Sensor Voltage (IBL)
Hybrid/EV Battery Control Mode
Hybrid/EV Battery Current Sensor Power Supply Voltage
Hybrid/EV Battery Current Sensor Offset Learning Value
Hybrid/EV Battery Current Sensor Offset
Hybrid/EV Battery Current Sensor Offset Learning Value (Sub)
Hybrid/EV Battery Current Sensor Offset (Sub)

TESTER DISPLAY

Hybrid/EV Battery Current Sensor Offset Learning Value (IBL)

Hybrid/EV Battery Current Sensor Offset (IBL)

Short Wave Highest Value

Hybrid/EV Battery Cell Circuit Open Information for Monitoring IC 1

Hybrid/EV Battery Cell Circuit Open Information for Monitoring IC 2

Hybrid/EV Battery Cell Circuit Open Information for Monitoring IC 3

Lost Communication with Hybrid/EV Battery Monitoring IC

Hybrid/EV Battery Monitoring IC 1 Internal Malfunction (Determinable)

Hybrid/EV Battery Monitoring IC 2 Internal Malfunction (Determinable)

Hybrid/EV Battery Monitoring IC 3 Internal Malfunction (Determinable)

Hybrid/EV Battery Monitoring IC Internal Malfunction (Unidentifiable)

Hybrid/EV Battery Monitoring IC 1 Power Supply Malfunction

Hybrid/EV Battery Monitoring IC 2 Power Supply Malfunction

Hybrid/EV Battery Monitoring IC 3 Power Supply Malfunction

Hybrid/EV Battery Monitoring IC 1 Cell Voltage Detection Malfunction

Hybrid/EV Battery Monitoring IC 2 Cell Voltage Detection Malfunction

Hybrid/EV Battery Monitoring IC 3 Cell Voltage Detection Malfunction

Hybrid/EV Battery Stack 1 Cell Average Voltage

Hybrid/EV Battery Stack 2 Cell Average Voltage

TESTER DISPLAY
Hybrid/EV Battery Stack 3 Cell Average Voltage
Hybrid/EV Battery Block 1 Cell Average Voltage
Hybrid/EV Battery Block 2 Cell Average Voltage
Hybrid/EV Battery Block 3 Cell Average Voltage
Hybrid/EV Battery Cell Maximum Voltage Up to 1 trip before
Hybrid/EV Battery Cell Minimum Voltage Up to 1 trip before
Hybrid/EV Battery Cell 1 Voltage
Hybrid/EV Battery Cell 2 Voltage
Hybrid/EV Battery Cell 3 Voltage
Hybrid/EV Battery Cell 4 Voltage
Hybrid/EV Battery Cell 5 Voltage
Hybrid/EV Battery Cell 6 Voltage
Hybrid/EV Battery Cell 7 Voltage
Hybrid/EV Battery Cell 8 Voltage
Hybrid/EV Battery Cell 9 Voltage
Hybrid/EV Battery Cell 10 Voltage
Hybrid/EV Battery Cell 11 Voltage
Hybrid/EV Battery Cell 12 Voltage
Hybrid/EV Battery Cell 13 Voltage

TESTER DISPLAY
Hybrid/EV Battery Cell 14 Voltage
Hybrid/EV Battery Cell 15 Voltage
Hybrid/EV Battery Cell 16 Voltage
Hybrid/EV Battery Cell 17 Voltage
Hybrid/EV Battery Cell 18 Voltage
Hybrid/EV Battery Cell 19 Voltage
Hybrid/EV Battery Cell 20 Voltage
Hybrid/EV Battery Cell 21 Voltage
Hybrid/EV Battery Cell 22 Voltage
Hybrid/EV Battery Cell 23 Voltage
Hybrid/EV Battery Cell 24 Voltage
Hybrid/EV Battery Cell 25 Voltage
Hybrid/EV Battery Cell 26 Voltage
Hybrid/EV Battery Cell 27 Voltage
Hybrid/EV Battery Cell 28 Voltage
Hybrid/EV Battery Cell 29 Voltage
Hybrid/EV Battery Cell 30 Voltage
Hybrid/EV Battery Cell 31 Voltage
Hybrid/EV Battery Cell 32 Voltage

TESTER DISPLAY
Hybrid/EV Battery Cell 33 Voltage
Hybrid/EV Battery Cell 34 Voltage
Hybrid/EV Battery Cell 35 Voltage
Hybrid/EV Battery Cell 36 Voltage
Hybrid/EV Battery Cell 37 Voltage
Hybrid/EV Battery Cell 38 Voltage
Hybrid/EV Battery Cell 39 Voltage
Hybrid/EV Battery Cell 40 Voltage
Hybrid/EV Battery Cell 41 Voltage
Hybrid/EV Battery Cell 42 Voltage
Hybrid/EV Battery Cell 43 Voltage
Hybrid/EV Battery Cell 44 Voltage
Hybrid/EV Battery Cell 45 Voltage
Hybrid/EV Battery Cell 46 Voltage
Hybrid/EV Battery Cell 47 Voltage
Hybrid/EV Battery Cell 48 Voltage
Hybrid/EV Battery Cell 49 Voltage
Hybrid/EV Battery Cell 50 Voltage
Hybrid/EV Battery Cell 51 Voltage

TESTER DISPLAY
Hybrid/EV Battery Cell 52 Voltage
Hybrid/EV Battery Cell 53 Voltage
Hybrid/EV Battery Cell 54 Voltage
Hybrid/EV Battery Cell 55 Voltage
Hybrid/EV Battery Cell 56 Voltage
Hybrid/EV Battery Cell 57 Voltage
Hybrid/EV Battery Cell 58 Voltage
Hybrid/EV Battery Cell 59 Voltage
Hybrid/EV Battery Cell 60 Voltage
Hybrid/EV Battery Cell 61 Voltage
Hybrid/EV Battery Cell 62 Voltage
Hybrid/EV Battery Cell 63 Voltage
Hybrid/EV Battery Cell 64 Voltage
Hybrid/EV Battery Cell 65 Voltage
Hybrid/EV Battery Cell 66 Voltage
Hybrid/EV Battery Cell 67 Voltage
Hybrid/EV Battery Cell 68 Voltage
Hybrid/EV Battery Cell 69 Voltage
Hybrid/EV Battery Cell 70 Voltage

TESTER DISPLAY
Hybrid/EV Battery Cell 71 Voltage
Hybrid/EV Battery Cell 72 Voltage
Hybrid/EV Battery Temperature 1
Hybrid/EV Battery Temperature 2
Hybrid/EV Battery Temperature 3
Hybrid/EV Battery Temperature 4
Hybrid/EV Battery Temperature 5
Hybrid/EV Battery Temperature 6
Hybrid/EV Battery Temperature 7
Hybrid/EV Battery Temperature 8
Hybrid/EV Battery Temperature 9
Hybrid/EV Battery Temperature 10
Hybrid/EV Battery Temperature 11
Hybrid/EV Battery Temperature 12
Hybrid/EV Battery Temperature 13
Hybrid/EV Battery Temperature 14
Hybrid/EV Battery Temperature 15
Hybrid/EV Battery Temperature Sensor Voltage 1
Hybrid/EV Battery Temperature Sensor Voltage 2

TESTER DISPLAY
Hybrid/EV Battery Temperature Sensor Voltage 3
Hybrid/EV Battery Temperature Sensor Voltage 4
Hybrid/EV Battery Temperature Sensor Voltage 5
Hybrid/EV Battery Temperature Sensor Voltage 6
Hybrid/EV Battery Temperature Sensor Voltage 7
Hybrid/EV Battery Temperature Sensor Voltage 8
Hybrid/EV Battery Temperature Sensor Voltage 9
Hybrid/EV Battery Temperature Sensor Voltage 10
Hybrid/EV Battery Temperature Sensor Voltage 11
Hybrid/EV Battery Temperature Sensor Voltage 12
Hybrid/EV Battery Temperature Sensor Voltage 13
Hybrid/EV Battery Temperature Sensor Voltage 14
Hybrid/EV Battery Temperature Sensor Voltage 15
Hybrid/EV Battery Cooling Fan Low Speed Request
Hybrid/EV Battery Heater 1 Temperature
Hybrid/EV Battery Heater 2 Temperature
Hybrid/EV Battery Heater 1 Temperature Sensor Voltage
Hybrid/EV Battery Heater 2 Temperature Sensor Voltage
Hybrid/EV Battery Heater Relay

, 7:06 PM	HYBRID / BATTERY CONTROL: HYBRID BATTERY SYSTEM (for PHEV Mode
	TESTER DISPLAY
	Hybrid/EV Battery Cooling Request Level
	Hybrid/EV Battery Cooling Status (A/C)
	Hybrid/EV Battery Refrigerant Temperature (Duct Inlet 1)
ŀ	Hybrid/EV Battery Refrigerant Temperature (Duct Outlet 1)
Hybrid/	EV Battery Refrigerant Temperature Sensor Voltage (Duct Inlet 1)
Hybrid/E	V Battery Refrigerant Temperature Sensor Voltage (Duct Outlet 1)
	Hybrid/EV Battery Refrigerant Pressure 1
	Hybrid/EV Battery Refrigerant Pressure Sensor 1 Voltage
Target	Hybrid/EV Battery Refrigerant Cooling Expansion Valve 1 Position
Actual	Hybrid/EV Battery Refrigerant Cooling Expansion Valve 1 Position
Hybric	d/EV Battery Refrigerant Cooling Expansion Valve 1 Drive Status
Hybrid/	/EV Battery Refrigerant Cooling Expansion Valve 1 IC Malfunction
Hybrid	d/EV Battery Refrigerant Cooling Expansion Valve 1 Circuit Open
Hybrid	d/EV Battery Refrigerant Cooling Expansion Valve 1 Overcurrent
	AC Charging Negative Relay Drive Request
	AC Charging Positive Relay Drive Request
	AC Charging Precharge Relay Drive Request
	AC Charging Negative Relay Status
	AC Charging Positive Relay Status

TESTER DISPLAY	
AC Charging Precharge Relay Status	
AC Charging Relay Permission Signal Status	



