

Last Modified: 12-04-2024	6.11:8.1.0	Doc ID: RM10000002C3BR
Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [03/2023 -]
Title: LIGHTING (EXT): LIGHTING SYSTEM: DATA LIST / ACTIVE TEST; 2023 - 2024 MY Prius Prius Prime [03/2023 -]		

DATA LIST / ACTIVE TEST

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

Body Electrical > Main Body > Data List

TESTER DISPLAY	MEASUREMENT ITEM	NORMAL CONDITION	REFERENCE VALUE	DIAGNOSTIC NOTE
Auto High Beam Main Switch	Auto high beam switch signal	OFF or ON	OFF: Auto high beam switch not pressed ON: Auto high beam switch pressed	-
Light Control Switch (HEAD)	Light control switch head position signal	OFF or ON	OFF: Light control switch not in head position ON: Light control switch in head position	-
Insolation Amount of Solar Sensor RH	Automatic light control sensor RH condition	0 to 51100 or SensorFail	Condition can be displayed	-
Insolation Amount of Solar Sensor LH	Automatic light control sensor LH condition	0 to 51100 or SensorFail	Condition can be displayed	-
Light Sensor Illuminance	Automatic light control sensor illuminance	0 to 8191 lx or SensorFail	Value is output according to ambient light level	The displayed value is "0" when no light is detected.

TESTER DISPLAY	MEASUREMENT ITEM	NORMAL CONDITION	REFERENCE VALUE	DIAGNOSTIC NOTE
AHS Function	Adaptive high beam system control function	Not Available or Available	Not Available: Adaptive high beam system control unavailable Available: Adaptive high beam system control valid	Although the item is displayed on the GTS, it is not applicable to this vehicle.
High Beam Headlights (By AHS ECU)	Adaptive high beam system high beam operation status	Light OFF or Light ON	Light OFF: Adaptive high beam system high beam off Light ON: Adaptive high beam system high beam on	Although the item is displayed on the GTS, it is not applicable to this vehicle.
Light Sensor Connection History	Automatic light control sensor connection status	Without or With	Without: Automatic light control sensor has not been connected With: Automatic light control sensor connected or has been connected	-
Headlight ECU Function	ECU which controls the lighting system	Not Available or Available	Not Available: Headlight ECU control unavailable Available: Headlight ECU control valid	Although the item is displayed on the GTS, it is not applicable to this vehicle.
LDM ECU Function	ECU which controls the lighting system	Not Available or Available	Not Available: Light control LED ECU control unavailable Available: Light control LED ECU control valid	-

TESTER DISPLAY	MEASUREMENT ITEM	NORMAL CONDITION	REFERENCE VALUE	DIAGNOSTIC NOTE
Automatic High Beam Headlights Sensor Detection Status	Automatic high beam sensor current state	Undetected, N/A, No sens, Headlight, Taillight, Speed, Daytime, Village, Other sens, Change, Out of aim, SAE Mod, Aim adjust or LIN Err	Condition can be displayed*	If the value of this item is not as specified, the automatic high beam sensor system may be malfunctioning.
Communication Power Integration No.1	Connection status between semiconductor power integration ECU and main body ECU (multiplex network body ECU)	STOP or OK	STOP: No connection OK: Connection	Although the item is displayed on the GTS, it is not applicable to this vehicle.
Communication Power Integration No.2	Connection status between No. 2 semiconductor power integration ECU and main body ECU (multiplex network body ECU)	STOP or OK	STOP: No connection OK: Connection	Although the item is displayed on the GTS, it is not applicable to this vehicle.
Communication Power Integration No.3	Connection status between No. 3 semiconductor power integration ECU and main body ECU (multiplex network body ECU)	STOP or OK	STOP: No connection OK: Connection	Although the item is displayed on the GTS, it is not applicable to this vehicle.
Communication Power Distribution Box	Connection status between power distribution box assembly and main body ECU (multiplex network body ECU)	STOP or OK	STOP: No connection OK: Connection	When there is a malfunction, a DTC is stored
Communication LDM LH	Connection status between light control LED ECU LH and main body ECU (multiplex network body ECU)	STOP or OK	STOP: No connection OK: Connection	Although the item is displayed on the GTS, it is not applicable to this vehicle.
Communication LDM RH	Connection status between light control LED ECU RH and main	STOP or OK	STOP: No connection	Although the item is displayed on the GTS,

TESTER DISPLAY	MEASUREMENT ITEM	NORMAL CONDITION	REFERENCE VALUE	DIAGNOSTIC NOTE
	body ECU (multiplex network body ECU)		OK: Connection	it is not applicable to this vehicle.
Tail Remind Buzzer Function	Setting of the tail remind buzzer function on/off	Disable or Enable	Customize setting displayed	-
Headlight ON in Conjunction with Wiper Function	Wiper-linked low beam headlight control	Disable or Enable	Customize setting displayed	w/ Wiper-linked Low Beam Headlight Control System
Brightness Level Adjust (Lowering)	Ambient brightness level required to dim display lights (combination meter, navigation display, etc.)	Normal, Dark2, Dark1, Light1 or Light2	Customize setting displayed	-
Brightness Level Adjust (Canceling)	Ambient brightness level required to cancel dimming display lights (combination meter, navigation display, etc.)	Normal, Dark2, Dark1, Light1 or Light2	Customize setting displayed	-
Sensitivity Adjust	Sensitivity of the automatic light control system	Normal, Dark2, Dark1, Light1 or Light2	Customize setting displayed	w/ Automatic Light Control
DRL Function	Setting of the DRL function on/off	Disable or Enable	Customize setting displayed	-
Light Auto OFF Delay Setting	Light auto OFF delay	OFF, 30sec, 60sec or 90sec	Customize setting displayed	w/ Delay Function
Sensitivity Adjust	Sensitivity of the automatic light control system (Driver 1)	Normal, Dark2, Dark1, Light1 or Light2	Customize setting displayed	w/ Automatic Light Control
DRL Function	Setting of the DRL function on/off (Driver 1)	OFF or ON	Customize setting displayed	for vehicles with customize setting "DRL Function"
Light Auto OFF Delay Setting	Light auto OFF delay (Driver 1)	OFF, 30sec, 60sec or 90sec	Customize setting displayed	w/ Delay Function

TESTER DISPLAY	MEASUREMENT ITEM	NORMAL CONDITION	REFERENCE VALUE	DIAGNOSTIC NOTE
Sensitivity Adjust	Sensitivity of the automatic light control system (Driver 2)	Normal, Dark2, Dark1, Light1 or Light2	Customize setting displayed	w/ Automatic Light Control
DRL Function	Setting of the DRL function on/off (Driver 2)	OFF or ON	Customize setting displayed	for vehicles with customize setting "DRL Function"
Light Auto OFF Delay Setting	Light auto OFF delay (Driver 2)	OFF, 30sec, 60sec or 90sec	Customize setting displayed	w/ Delay Function
Sensitivity Adjust	Sensitivity of the automatic light control system (Driver 3)	Normal, Dark2, Dark1, Light1 or Light2	Customize setting displayed	w/ Automatic Light Control
DRL Function	Setting of the DRL function on/off (Driver 3)	OFF or ON	Customize setting displayed	for vehicles with customize setting "DRL Function"
Light Auto OFF Delay Setting	Light auto OFF delay (Driver 3)	OFF, 30sec, 60sec or 90sec	Customize setting displayed	w/ Delay Function

HINT:

*: The details of each value of the Range are as follows:

DISPLAY VALUE	CONDITION	CONTROL CONDITION	DIAGNOSTIC NOTE
Undetected	Automatic high beam sensor being initialized	Control suspended (low beam headlights illuminated)	-
N/A	Automatic high beam sensor temporarily disabled due to high temperature, unclear image (due to dirt, fog, etc.), etc.	Control suspended (previous beam setting maintained)	-
No sens	No lights detected	High beam headlights illuminated	Only when vehicle speed within operation speed range
Headlight	Headlights of oncoming vehicle, etc. detected	Low beam headlights illuminated	Only when vehicle speed within operation speed range
Taillight	Taillights preceding vehicle, etc. detected	Low beam headlights illuminated	Only when vehicle speed within operation speed range
Speed	No lights detected and vehicle speed below operation speed	Low beam headlights illuminated	-

DISPLAY VALUE	CONDITION	CONTROL CONDITION	DIAGNOSTIC NOTE
Daytime	Bright light detected	Low beam headlights illuminated	-
Village	Streetlights, etc. detected	Low beam headlights illuminated	Only when vehicle speed within operation speed range
Change	Changing between low beams and high beams	Changing between low beams and high beams	Only when vehicle speed within operation speed range
Other sens	Not applicable	-	-
Out of aim			
SAE Mod			
Aim adjust			
LIN Err			

Chassis > Steering Angle Sensor > Data List

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Total Distance Traveled	Actual driven distance	0 to 16777215	Roughly the same as the actual driven distance	-
Total Distance Traveled - Unit	Actual driven distance unit	km or mile	Displays the current actual driven distance unit	-
Light OFF Switch	Light control switch DRL OFF*1 or off*2 position signal	OFF or ON	OFF: Light control switch not in DRL OFF*1 or off*2 position ON: Light control switch in DRL OFF*1 or off*2 position	*1, *2
Auto Light Switch	Light control switch AUTO*3 or DRL*4 position signal	OFF or ON	OFF: Light control switch not in AUTO*3 or DRL*4 position ON: Light control switch in AUTO*3 or DRL*4 position	-
Head Light Switch (Tail)	Light control switch tail position signal	OFF or ON	OFF: Light control switch in neither tail nor head position	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
			ON: Light control switch in tail or head position	
Head Light Switch (Head)	Light control switch head position signal	OFF or ON	OFF: Light control switch not in head position ON: Light control switch in head position	-
High Beam Main Switch	Dimmer switch high position signal	OFF or ON	OFF: Dimmer switch not in high position ON: Dimmer switch in high position	-
Passing Light Switch	Dimmer switch high flash position (pass) signal	OFF or ON	OFF: Dimmer switch not in high flash position ON: Dimmer switch in high flash position	-
Auto High Beam Main Switch	Auto high beam switch signal	OFF or ON	OFF: Auto high beam switch off ON: Auto high beam switch on	Although the item is displayed on the GTS, it is not applicable to this vehicle.
Turn Signal Switch (Right)	Turn signal switch (right turn position) signal	OFF or ON	OFF: Turn signal switch not in right turn position ON: Turn signal switch in right turn position	-
Turn Signal Switch (Left)	Turn signal switch (left turn position) signal	OFF or ON	OFF: Turn signal switch not in left turn position ON: Turn signal switch in left turn position	-
Cornering Light/Front Side Illuminate Light Switch	Turn signal switch (full turn) signal	OFF or ON	OFF: Turn signal switch not in left or right turn position ON: Turn signal switch in left or right full turn position	-
Front Fog Light Switch	Front fog light switch signal	OFF or ON	OFF: Front fog light switch off	Although the item is displayed on the GTS, it is

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
			ON: Front fog light switch on	not applicable to this vehicle.
Rear Fog Light/Bad Weather Switch	Rear fog light switch signal	OFF or ON	OFF: Rear fog light switch off ON: Rear fog light switch on	Although the item is displayed on the GTS, it is not applicable to this vehicle.
Automatic Light Equipped Info	Automatic light control system specification information	Unknown, With or Without	Unknown: Specification not stored With: Automatic light control system equipped Without: Automatic light control system not equipped	-
Bad Weather Mode Equipped Info	Bad weather specification information	Unknown, Without or With	Unknown: Specification not stored Without: Bad weather specification not equipped With: Bad weather specification equipped	Although the item is displayed on the GTS, it is not applicable to this vehicle.

*1: w/ DRL OFF Switch

*2: w/ OFF Switch

*3: w/ Automatic Light Control

*4: w/o Automatic Light Control

Body Electrical > Combination Meter > Data List

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Turn Signal Switch (Left)	Turn signal switch (left) signal	OFF or ON	OFF: Turn signal switch not in left turn position ON: Turn signal switch in left turn position	Although the item is displayed on the GTS, it is not applicable to this vehicle.
Turn Signal Switch (Right)	Turn signal switch (right) signal	OFF or ON	OFF: Turn signal switch not in right turn position ON: Turn signal switch in right turn position	Although the item is displayed on the GTS, it is not applicable to this vehicle.

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Turn Switch Signal (Full Turn)	Turn signal switch (full turn) signal	OFF or ON	OFF: Turn signal switch not in left or right turn position ON: Turn signal switch in left or right turn position	Although the item is displayed on the GTS, it is not applicable to this vehicle.
Hazard Flasher Switch	Hazard warning signal switch signal	OFF or ON	OFF: Hazard warning signal switch off ON: Hazard warning signal switch on	-
Lane Change Flashing Times Adjust	Condition of the lane change flashing times	OFF, 3, 4, 5, 6 or 7	Customize setting displayed	-

Body Electrical > Power Distribution Box > Data List

TESTER DISPLAY	MEASUREMENT ITEM	NORMAL CONDITION	REFERENCE VALUE	DIAGNOSTIC NOTE
Back-up Light Input Signal	Back-up light input	OFF or ON	OFF: Shift lever in any position other than R ON: Shift lever in R	-
Back-up Light Output Signal	Back-up light output	OFF or ON	OFF: Back-up light off ON: Back-up light on	-
Back-up Light Output Current	Back-up light circuit current	0.0 to 255.0 A	Below 5.3 A	Back-up light when output is on
Back-up Light Fuse Shut Off Status	Back-up light fuse shut off status	OFF or ON	OFF: Fuse has no shut off history ON: Fuse has shut off history	-
Back-up Light Fuse Shut Off Count	Back-up light fuse shut off history	0 to 255	0	-
Tail Light Internal Relay Input Signal	Taillight internal relay input	OFF or ON	OFF: Taillights off ON: Taillights on	-

TESTER DISPLAY	MEASUREMENT ITEM	NORMAL CONDITION	REFERENCE VALUE	DIAGNOSTIC NOTE
Tail Light Internal Relay Output Signal	Taillight internal relay output	OFF or ON	OFF: Taillights off ON: Taillights on	-

Powertrain > Plug-in Control > Data List

TESTER DISPLAY	MEASUREMENT ITEM	NORMAL CONDITION	REFERENCE VALUE	DIAGNOSTIC NOTE
Charging Lid Switch Status	EV Charging lid switch status	OFF or ON	ON: Charging port lid open (push lifter of EV charger lid switch assembly extended) OFF: Charging port lid close (push lifter of EV charger lid switch assembly pushed in)	for PHEV Model
Charging Lid Lamp Status	Charging lid light status	OFF / Fade Out / ON	OFF: Charging lid light assembly off Fade Out: Charging lid light assembly fading out ON: Charging lid light assembly on	for PHEV Model

ACTIVE TEST

HINT:

Using the GTS to perform Active Tests allows relays, VSVs, actuators and other items to be operated without removing any parts. This non-intrusive functional inspection can be very useful because intermittent operation may be discovered before parts or wiring is disturbed. Performing Active Tests early in troubleshooting is one way to save diagnostic time. Data List information can be displayed while performing Active Tests.

(a) Perform the Active Test according to the display on the GTS.

Body Electrical > Main Body > Active Test

TESTER DISPLAY	MEASUREMENT ITEM	CONTROL RANGE	DIAGNOSTIC NOTE
Headlight Relay / Light Power Supply Relay	Low beam headlights	OFF or ON	-
High Beam Headlight	High beam headlights	OFF or ON	-
Daytime Running Light	Daytime running lights	OFF or ON	-
Automatic High Beam Switch Light	Auto high beam switch indicator light	OFF or ON	-

TESTER DISPLAY	MEASUREMENT ITEM	CONTROL RANGE	DIAGNOSTIC NOTE
Dimmer Signal	Dimmer signal	OFF or ON	State where circumference illumination is bright.
Rear Fog Light	Rear fog lights	OFF or ON	Although the item is displayed on the GTS, it is not applicable to this vehicle.
Taillight / Clearance Light	Taillights/parking lights	OFF or ON	-

