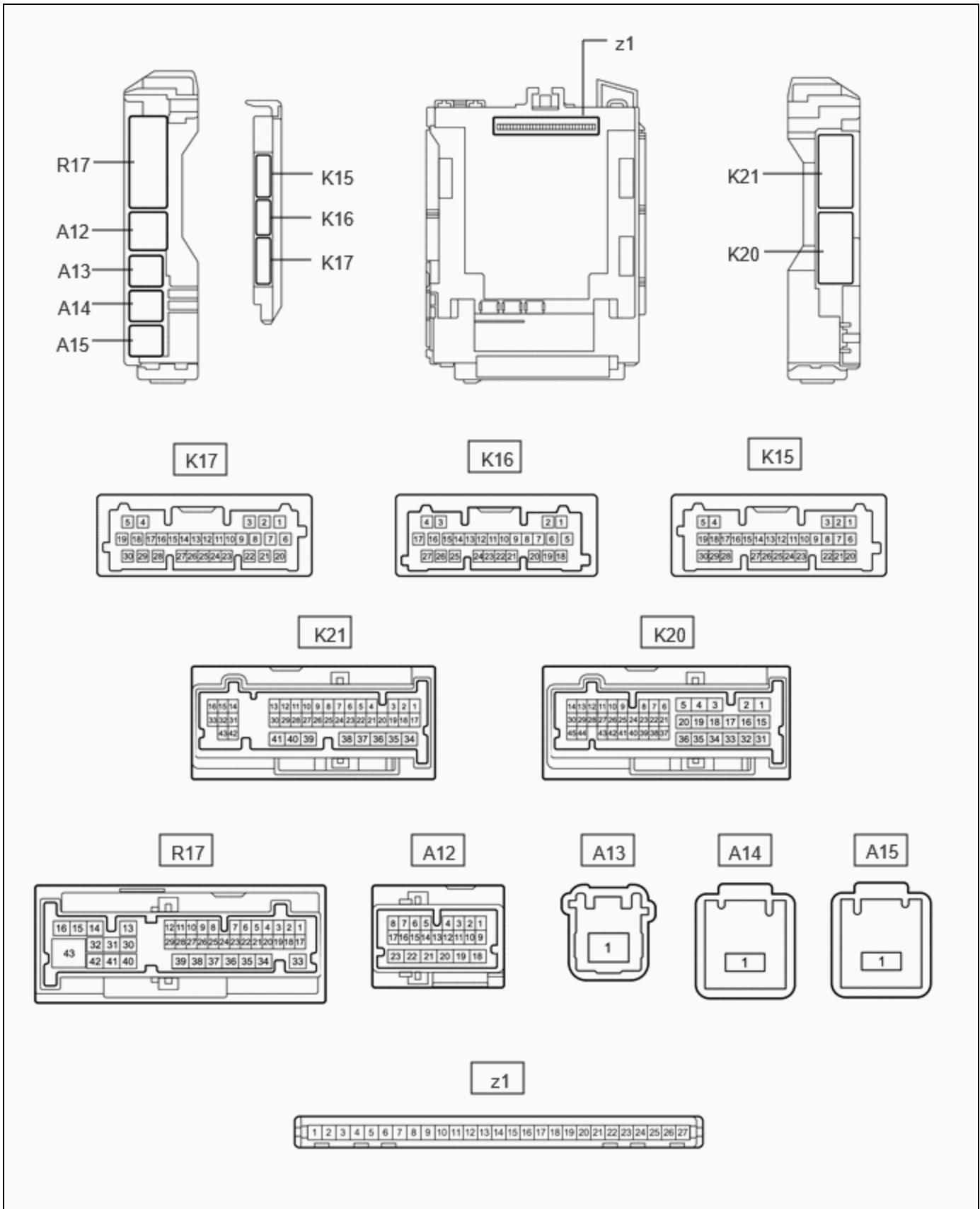


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Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [03/2023 -]
Title: LIGHTING (EXT): LIGHTING SYSTEM: TERMINALS OF ECU; 2023 - 2024 MY Prius Prius Prime [03/2023 -]		

TERMINALS OF ECU



CHECK MAIN BODY ECU (MULTIPLEX NETWORK BODY ECU) AND POWER DISTRIBUTION BOX ASSEMBLY

- (a) Disconnect the power distribution box assembly and main body ECU (multiplex network body ECU) connectors.

(b) Measure the voltage and resistance according to the value(s) in the table below.

TERMINAL NO. (SYMBOL)	TERMINAL DESCRIPTION	CONDITION	SPECIFIED CONDITION
z1-13 (GND1) - Body ground	Ground	Always	Below 1 Ω
z1-14 (GND2) - Body ground	Ground	Always	Below 1 Ω
z1-26 (BECU) - Body ground	Auxiliary battery power supply	Ignition switch off	11 to 14 V
z1-27 (IGR) - Body ground	Ignition power supply (IG signal)	Ignition switch ON	11 to 14 V
		Ignition switch off	Below 1 V

(c) Connect the power distribution box assembly and main body ECU (multiplex network body ECU) connectors.

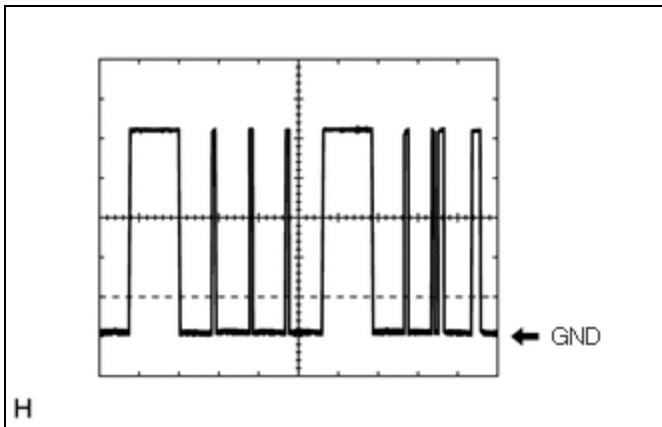
(d) Measure the voltage and check for pulses according to the value(s) in the table below.

TERMINAL NO. (SYMBOL)	TERMINAL DESCRIPTION	CONDITION	SPECIFIED CONDITION
K20-30 - Body ground	R shift position switch signal	Ignition switch off, reverse (R) not selected	Below 1 V
		Ignition switch ON, reverse (R) selected	11 to 14 V
A12-5 - Body ground	CXPI communication line	Ignition switch off	Below 1 V
		Ignition switch ON	Pulse generation
A12-6 - Body ground	H-LP LH relay drive output	<ul style="list-style-type: none"> 15 seconds or more after ignition switch turned off Taillights off 	9.5 to 14 V
		<ul style="list-style-type: none"> Ignition switch ON or within 15 seconds after ignition switch turned off Taillights on 	Below 1 V
A12-10 - Body ground	H-LP RH relay drive output	<ul style="list-style-type: none"> 15 seconds or more after ignition switch turned off Taillights off 	9.5 to 14 V
		<ul style="list-style-type: none"> Ignition switch ON or within 15 seconds after ignition switch turned off Taillights on 	Below 1 V
A12-18 - Body ground*1, *2	Taillights drive output	Taillights off	Below 1 V
		Taillights on	11 to 14 V
R17-30 - Body ground	Taillights drive output	Taillights off	Below 1 V
		Taillights on	11 to 14 V
R17-38 - Body ground	Back-up lights drive output	Ignition switch off, reverse (R) not selected	Below 1 V
		Ignition switch ON, reverse (R) selected	11 to 14 V

TERMINAL NO. (SYMBOL)	TERMINAL DESCRIPTION	CONDITION	SPECIFIED CONDITION
K17-8 (CLTB) - K17-21 (CLTE)	Automatic light control sensor power supply output	Ignition switch ON	11 to 14 V
K17-14 (AHBI) - Body ground	Auto high beam switch signal input	Auto high beam switch off	11 to 14 V
		Auto high beam switch on	Below 1 V
K17-15 (AHID) - Body ground	Automatic light control sensor signal input	Ignition switch off	Below 1 V
		Ignition switch ON	Pulse generation (See waveform 1)
K17-20 (CLTS) - Body ground	Automatic light control sensor signal input	Ignition switch off	Below 1 V
		Ignition switch ON	Pulse generation (See waveform 1)
K17-26 (HEAD) - Body ground	Light control switch head position input	Light control switch not in head position	11 to 14 V
		Light control switch in head position	Below 1 V

- *1: w/ Accessory Light
- *2: w/ Front Side Marker Light

(1) Waveform 1



ITEM	CONTENT
Tester Connection	K17-20 (CLTS) - Body ground
Tool setting	2 V/DIV., 10 ms./DIV.
Condition	Ignition switch ON

HINT:

The communication waveform changes according to the surrounding brightness.

CHECK COMBINATION METER ASSEMBLY

Click here [INFO](#)

CHECK STEERING SENSOR

for HEV Model: Click here [INFO](#)

for PHEV Model: Click here [INFO](#)

CHECK SHIFT CONTROL ECU (TRANSMISSION FLOOR SHIFT ASSEMBLY)

Click here [INFO](#)

PLUGIN CHARGE CONTROL ECU ASSEMBLY (for PHEV Model)

Click here [INFO](#)

