

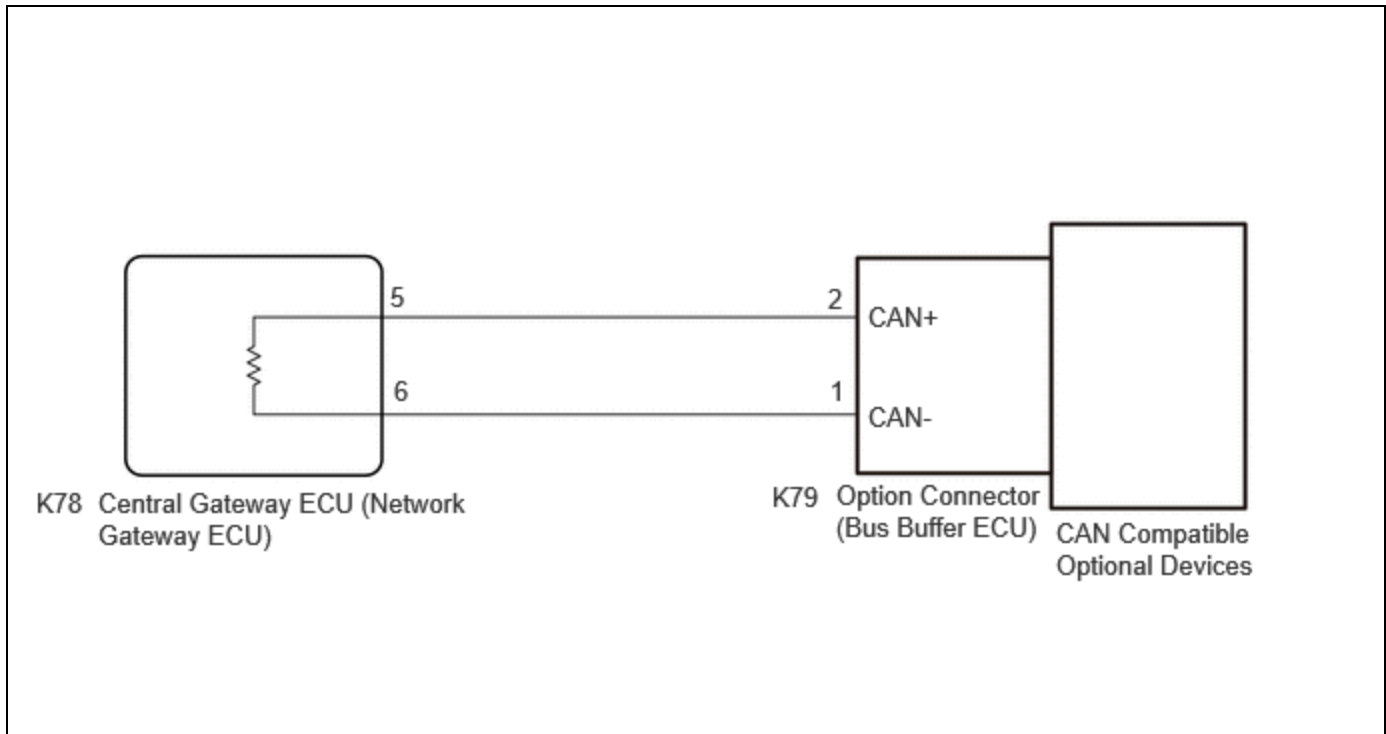
<b>Last Modified:</b> 12-04-2024	6.11:8.1.0	<b>Doc ID:</b> RM1000000029GSN
<b>Model Year Start:</b> 2023	<b>Model:</b> Prius	<b>Prod Date Range:</b> [12/2022 - ]
<b>Title:</b> NETWORKING: CAN COMMUNICATION SYSTEM (for HEV Model): Bus Buffer ECU Communication Stop Mode; 2023 - 2024 MY Prius [12/2022 - ]		

**Bus Buffer ECU Communication Stop Mode**

**DESCRIPTION**

DETECTION ITEM	SYMPTOM	TROUBLE AREA
Bus Buffer ECU Communication Stop Mode	Communication stop for "Remote Engine Starter" is indicated on the "Communication Bus Check" screen of the GTS. Click here <a href="#">INFO</a>	<ul style="list-style-type: none"> <li>Option connector (bus buffer ECU) main line or connector</li> <li>CAN compatible optional devices</li> <li>Main body ECU (multiplex network body ECU)</li> </ul>

**WIRING DIAGRAM**



**CAUTION / NOTICE / HINT**

**CAUTION:**

When performing the confirmation driving pattern, obey all speed limits and traffic laws.

**NOTICE:**

- Because the order of diagnosis is important to allow correct diagnosis, make sure to begin troubleshooting using How to Proceed with Troubleshooting when CAN communication system related DTCs are output.

Click here [INFO](#)

- Before measuring the resistance of the CAN bus, turn the ignition switch off and leave the vehicle for 1 minute or more without operating the key or any switches, or opening or closing the doors. After that, disconnect the cable from the negative (-) auxiliary battery terminal and leave the vehicle for 10 minutes or more before measuring the resistance.
- After the ignition switch is turned off, there may be a waiting time before disconnecting the negative (-) auxiliary battery terminal.

Click here [INFO](#)

- When disconnecting and reconnecting the auxiliary battery.

**HINT:**

When disconnecting and reconnecting the auxiliary battery, there is an automatic learning function that completes learning when the respective system is used.

Click here [INFO](#)

- Some parts must be initialized and set when replacing or removing and installing parts.

Click here [INFO](#)

- After performing repairs, perform the DTC check procedure and confirm that the DTCs are not output again.

DTC check procedure: Turn the ignition switch to ON and wait for 1 minute or more. Then operate the suspected malfunctioning system and drive the vehicle at 60 km/h (37 mph) or more for 5 minutes or more.

- After the repair, perform the CAN bus check and check that all the ECUs and sensors connected to the CAN communication system are displayed as normal.

Click here [INFO](#)

- Inspect the fuses for circuits related to this system before performing the following procedure.
- Before replacing the main body ECU (multiplex network body ECU), refer to Registration.

Click here [INFO](#)

**HINT:**

- Before disconnecting related connectors for inspection, push in on each connector body to check that the connector is not loose or disconnected.
- When a connector is disconnected, check that the terminals and connector body are not cracked, deformed or corroded.

## PROCEDURE

<b>1.</b>	<b>CHECK VEHICLE TYPE</b>
-----------	---------------------------

(a) Check whether dealer installed options that support CAN communication are installed.

RESULT	PROCEED TO
Installed	A
Not installed	B

**B** **GO TO STEP 3**



<b>2.</b>	<b>CHECK FOR OPEN IN CAN BUS LINES (OPTION CONNECTOR (BUS BUFFER ECU) MAIN LINE)</b>
-----------	--

- (a) Disconnect the cable from the negative (-) auxiliary battery terminal.
- (b) Disconnect the K79 option connector (bus buffer ECU) connector.
- (c) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(K79\).](#)

[Click Connector\(K79\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
K79-2 (CAN+) - K79-1 (CAN-)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 $\Omega$

**OK** ► **REPAIR OR REPLACE CAN COMPATIBLE OPTIONAL DEVICES**

**NG** ► **REPAIR OR REPLACE CAN MAIN BUS LINES OR CONNECTOR (OPTION CONNECTOR (BUS BUFFER ECU))**

<b>3.</b>	<b>CHECK FOR DTC</b>
-----------	----------------------

- (a) Initialize the ECU.

**Body Electrical > Central Gateway > Utility**

TESTER DISPLAY
Initialization

**Body Electrical > Main Body > Utility**

TESTER DISPLAY
Initialization

(b) Clear the DTCs.

**Body Electrical > Main Body > Clear DTCs**

(c) Read the DTCs.

**Body Electrical > Main Body > Trouble Codes**

RESULT	PROCEED TO
DTC U111787 is not output from the main body ECU (multiplex network body ECU)	A
DTC U111787 is output from the main body ECU (multiplex network body ECU)	B

**A** ► **END**

**B** ► **REPLACE MAIN BODY ECU (MULTIPLEX NETWORK BODY ECU)**

Click here [INFO](#)

