Last Modified: 12-04-2024	6.11:8.1.0	**Doc ID:** RM100000002BEMI
Model Year Start: 2023	**Model:** Prius Prime	**Prod Date Range:** [03/2023 -]
Title: HEATING / AIR CONDITIONING: AIR CONDITIONING SYSTEM (for PHEV Model): B14B287; Lost Communication with Front Panel LIN Missing Message; 2023 - 2024 MY Prius Prime [03/2023 -]		

DTC	**B14B287**	**Lost Communication with Front Panel LIN Missing Message**

DESCRIPTION

The air conditioning control assembly communicates with the air conditioning amplifier assembly via LIN communication.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	MIL	MEMORY	DTC OUTPUT FROM	PRIORITY	NOTE
B14B287	Lost Communication with Front Panel LIN Missing Message	Diagnosis Condition: Ignition switch ON Malfunction: Error or open in communication line between air conditioning amplifier assembly and air conditioning control assembly Detection Time: Continuously for 10 seconds or more	• Harness or connector • Air conditioning control assembly • Air conditioning amplifier assembly	Does not come on	Memorized	Air Conditioner	A	-

DTC Detection Condition Combination Table

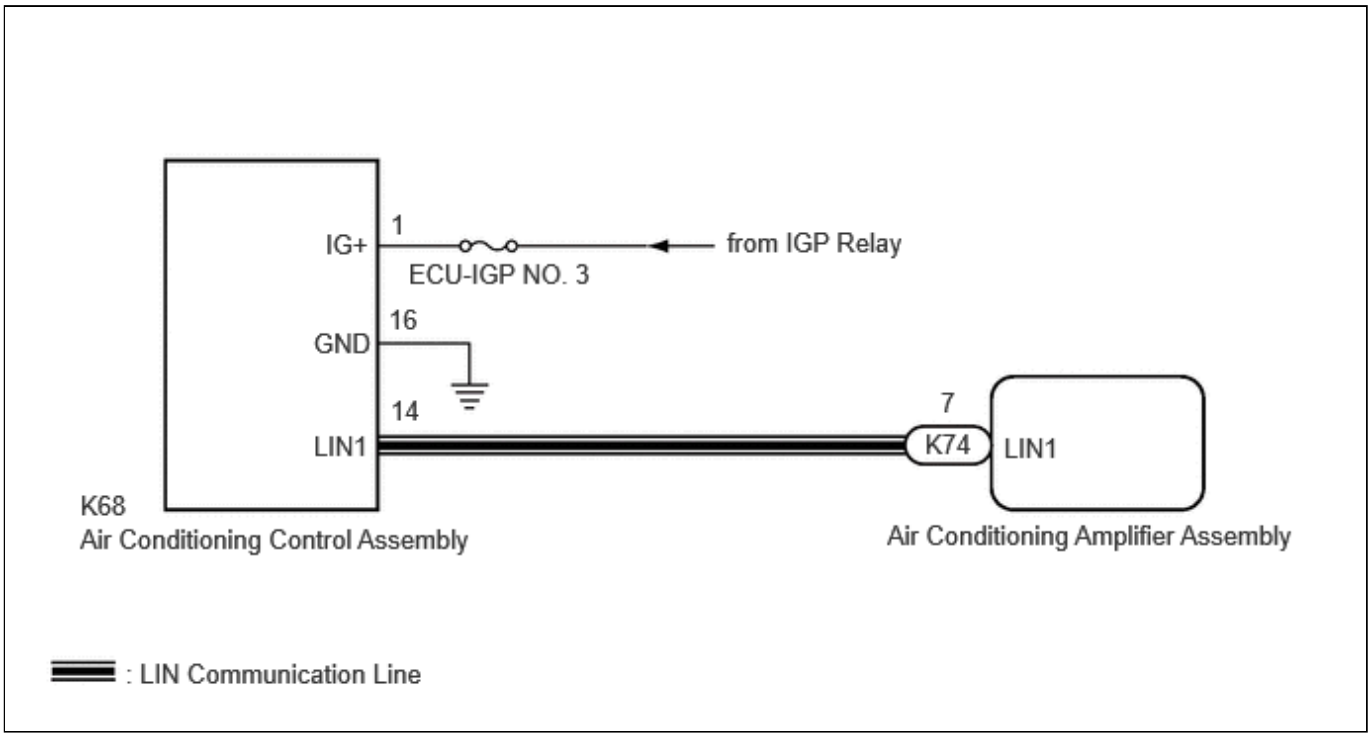
		VEHICLE CONDITION	
		PATTERN 1	PATTERN 2
Diagnosis Condition	Ignition switch ON	○	○
Malfunction	Error in communication line between air conditioning amplifier assembly and air conditioning control assembly	○	-

		VEHICLE CONDITION	
		PATTERN 1	PATTERN 2
	Open in communication line between air conditioning amplifier assembly and air conditioning control assembly	-	○
Detection Time		Continuously for 10 seconds or more	Continuously for 10 seconds or more
Trip Count		1 trip	1 trip

HINT:

If the conditions of either of these patterns are detected, a DTC will be stored.

WIRING DIAGRAM



CAUTION / NOTICE / HINT

NOTICE:

Inspect the fuses for circuits related to this system before performing the following procedure.

PROCEDURE

1.	**CHECK HARNESS AND CONNECTOR (AIR CONDITIONING CONTROL ASSEMBLY - AUXILIARY BATTERY)**

Pre-procedure1

(a) Disconnect the K68 air conditioning control assembly connector.

Procedure1

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

Standard Voltage:

EWD INFO

Click Location & Routing(K68)
Click Connector(K68)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
K68-1 (IG+) - Body ground	Ignition switch ON	11 to 14 V	V

Post-procedure1

(c) None

NG ▶ **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK ▼

2.	**CHECK HARNESS AND CONNECTOR (AIR CONDITIONING CONTROL ASSEMBLY - BODY GROUND)**

Pre-procedure1

(a) Disconnect the K68 air conditioning control assembly connector.

Procedure1

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

Standard Resistance:

EWD INFO

Click Location & Routing(K68)
Click Connector(K68)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
K68-16 (GND) - Body ground	Always	Below 1 Ω	Ω

Post-procedure1

(c) None

NG ▶ **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK

3.	**CHECK HARNESS AND CONNECTOR (AIR CONDITIONING AMPLIFIER ASSEMBLY - AIR CONDITIONING CONTROL ASSEMBLY)**

Pre-procedure1

(a) Disconnect the K68 air conditioning control assembly connector.

(b) Disconnect the K74 air conditioning amplifier assembly connector.

Procedure1

(c) Measure the resistance according to the value(s) in the table below.

Standard Resistance:

EWD INFO

Click Location & Routing(K68,K74)
Click Connector(K68)
Click Connector(K74)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
K68-14 (LIN1) - K74-7 (LIN1)	Always	Below 1 Ω	Ω
K68-14 (LIN1) or K74-7 (LIN1) - Other terminals and body ground	Always	10 kΩ or higher	kΩ

Post-procedure1

(d) None

NG **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK

4.	**CHECK AIR CONDITIONING AMPLIFIER ASSEMBLY (OUTPUT)**

Pre-procedure1

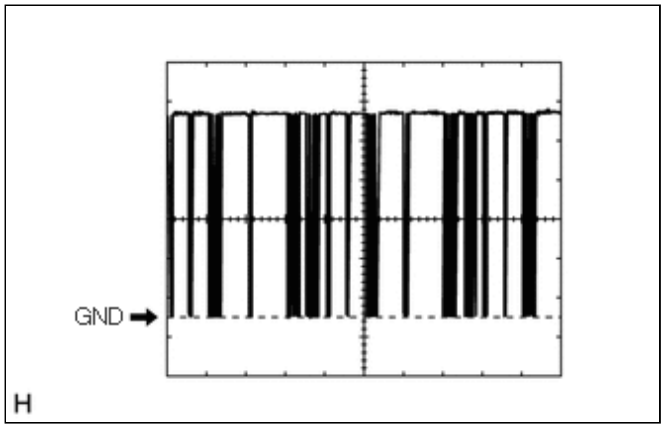
(a) Disconnect the K68 air conditioning control assembly connector.

(b) Connect the K74 air conditioning amplifier assembly connector.

Procedure1

(c) Using an oscilloscope, check the waveform.

ITEM	CONTENT
Tester Connection	K74-7 (LIN1) - Body ground
Tool Setting	2 V/DIV., 20 µs/DIV.
Condition	Ignition switch ON



OK:
The waveform displays properly.
Result:

PROCEED TO
OK
NG

Post-procedure1

(d) None

NG ▶ **REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY**

OK ▼

5.	CHECK AIR CONDITIONING CONTROL ASSEMBLY (OUTPUT)

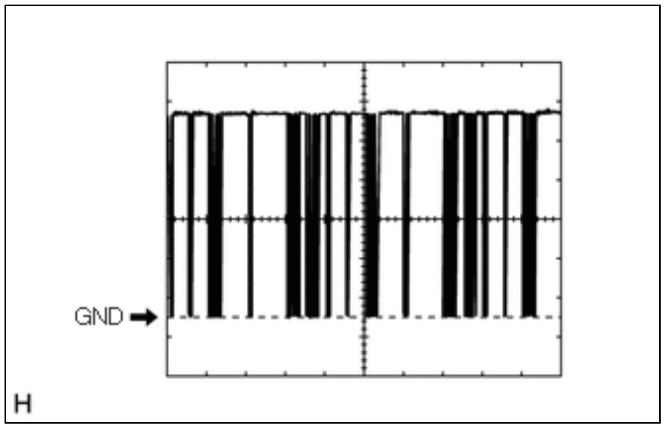
Pre-procedure1

(a) Connect the K68 air conditioning control assembly connector.

Procedure1

(b) Using an oscilloscope, check the waveform.

ITEM	CONTENT
Tester Connection	K68-14 (LIN1) - Body ground
Tool Setting	2 V/DIV., 20 µs/DIV.
Condition	Ignition switch ON



OK:
The waveform displays properly.
Result:

PROCEED TO
OK
NG

Post-procedure1

(c) None

OK ▶ **REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY**

NG ▶ **REPLACE AIR CONDITIONING CONTROL ASSEMBLY**