

Last Modified: 12-04-2024	6.11:8.1.0	Doc ID: RM100000029KF5
Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [12/2022 -]
Title: METER / GAUGE / DISPLAY: METER / GAUGE SYSTEM: B151287; Lost Communication with Steering Switch Control Module Missing Message; 2023 - 2024 MY Prius Prius Prime [12/2022 -]		

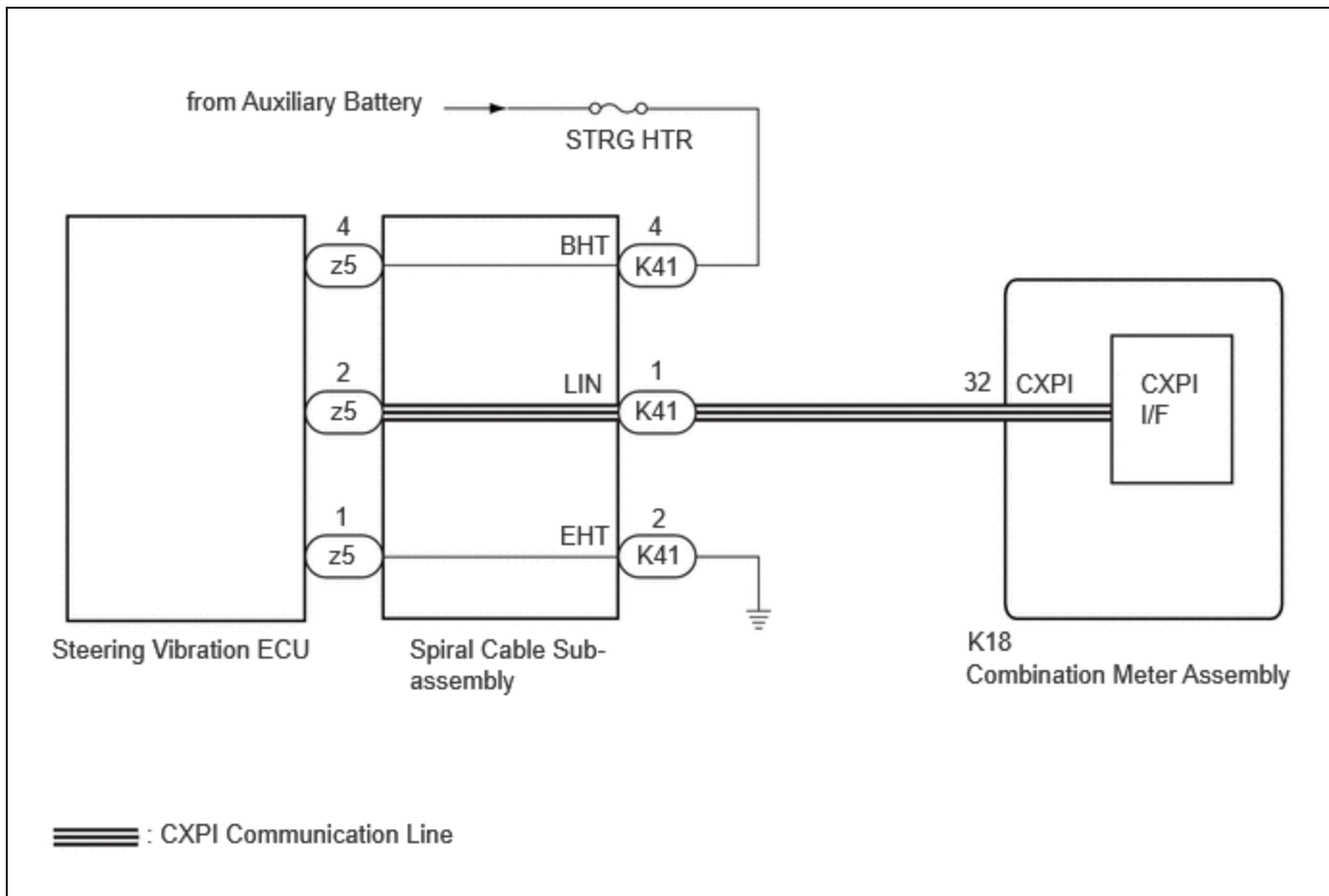
DTC	B151287	Lost Communication with Steering Switch Control Module Missing Message
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DESCRIPTION

This DTC is stored when a CXPI communication malfunction occurs between the combination meter assembly and steering vibration ECU.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	DTC OUTPUT FROM	PRIORITY
B151287	Lost Communication with Steering Switch Control Module Missing Message	Diagnosis Condition: <ul style="list-style-type: none"> • Ignition switch ON • IG power source voltage is 9.5 V or more Malfunction Status: No communication with steering vibration ECU Malfunction Time: 10 seconds or more	<ul style="list-style-type: none"> • Harness or connector • Spiral cable sub-assembly • Steering vibration ECU • Combination meter assembly 	Combination Meter	A

WIRING DIAGRAM



CAUTION / NOTICE / HINT

NOTICE:

- When replacing the combination meter assembly, always replace it with a new one. If a combination meter assembly which was installed to another vehicle is used, the information stored in it will not match the information from the vehicle and a DTC may be stored.
- When replacing the combination meter assembly, update the ECU security key.

Click here [INFO](#)

- The vehicle is equipped with a Supplemental Restraint System (SRS) which includes components such as airbags. Before servicing (including removal or installation of parts), be sure to read the precaution for Supplemental Restraint System.

Click here [INFO](#)

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

PROCEDURE

1. INSPECT COMBINATION METER ASSEMBLY (OUTPUT WAVEFORM)

Pre-procedure1

(a) Disconnect the K41 spiral cable sub-assembly connector.

Procedure1

(b) Check the signal waveform.

HINT:

The waveform pattern changes according to signal.

Standard:



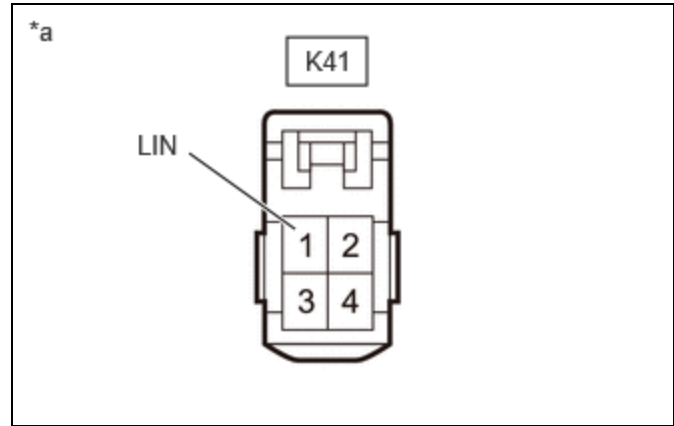
[Click Location & Routing\(K41\)](#)

[Click Connector\(K41\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
K41-1 (LIN) - Body ground	Ignition switch ON	Pulse generation

Result:

PROCEED TO
OK
NG



*a Front view of wire harness connector (to Spiral Cable Sub-assembly)

Post-procedure1

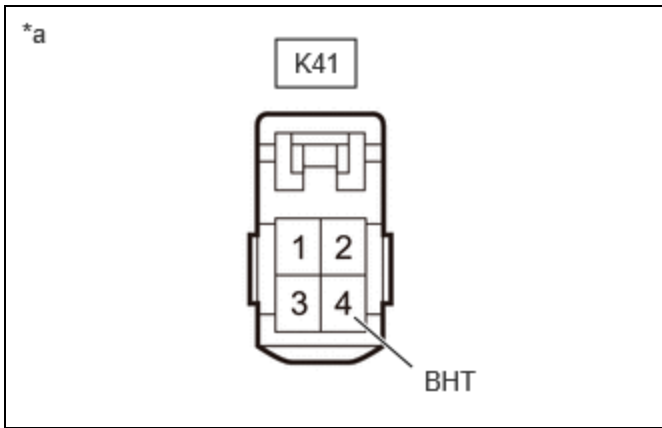
(c) None

NG ► GO TO STEP 5

OK



2.	CHECK HARNESS AND CONNECTOR (POWER SOURCE CIRCUIT)
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*a Front view of wire harness connector (to Spiral Cable Sub-assembly)

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

Standard Voltage:



[Click Location & Routing\(K41\)](#)

[Click Connector\(K41\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
K41-4 (BHT) - Body ground	Ignition switch ON	11 to 14 V	V

NG ► REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

3. CHECK HARNESS AND CONNECTOR (STEERING VIBRATION ECU - BODY GROUND)

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

Standard Resistance:



[Click Location & Routing\(K41\)](#)

[Click Connector\(K41\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
K41-2 (EHT) - Body ground	Always	Below 1 Ω	Ω

NG ► REPAIR OR REPLACE HARNESS OR CONNECTOR



4. INSPECT SPIRAL CABLE SUB-ASSEMBLY

Click here [INFO](#)

OK ▶ REPLACE STEERING VIBRATION ECU [INFO](#)

NG ▶ REPLACE SPIRAL CABLE SUB-ASSEMBLY [INFO](#)

5. CHECK HARNESS AND CONNECTOR (SPIRAL CABLE SUB-ASSEMBLY - COMBINATION METER ASSEMBLY)

Pre-procedure1

(a) Disconnect the K18 combination meter assembly connector.

Procedure1

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

Standard Resistance:



[Click Location & Routing\(K41,K18\).](#)

[Click Connector\(K41\).](#)

[Click Connector\(K18\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
K41-1 (LIN) - K18-32 (CXPI)	Always	Below 1 Ω	Ω
K41-1 (LIN) or K18-32 (CXPI) - Body ground	Always	10 kΩ or higher	kΩ

Post-procedure1

(c) None

OK ▶ REPLACE COMBINATION METER ASSEMBLY

NG ▶ REPAIR OR REPLACE HARNESS OR CONNECTOR

