Last Modified: 12-04-2024	6.11:8.1.0	**Doc ID:** RM10000000291ZG
Model Year Start: 2023	**Model:** Prius Prime	**Prod Date Range:** [12/2022 -]
Title: AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: B15FE11,B15FE13; XM Tuner Antenna Circuit Short to Ground; 2023 - 2024 MY Prius Prius Prime [12/2022 -]		

DTC	**B15FE11**	**XM Tuner Antenna Circuit Short to Ground**

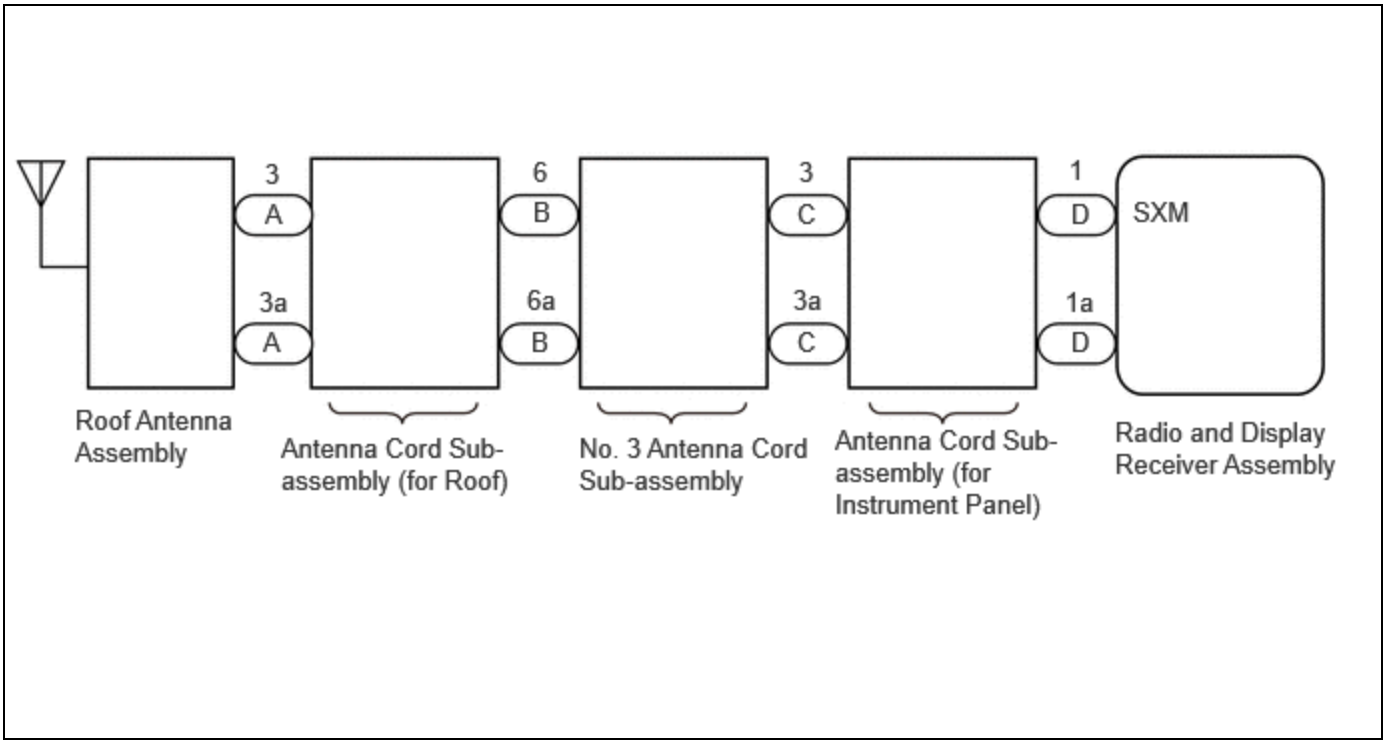
DTC	**B15FE13**	**XM Tuner Antenna Circuit Open**

DESCRIPTION

These DTCs are stored when a malfunction occurs in the roof antenna assembly which is connected to the radio and display receiver assembly.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	DTC OUTPUT FROM	PRIORITY
B15FE11	XM Tuner Antenna Circuit Short to Ground	The XM antenna is not connected. (2 trip detection logic)	• Roof antenna assembly • No. 3 Antenna cord sub-assembly • Antenna cord sub-assembly • Antenna cord sub-assembly (for Roof) • Radio and display receiver assembly	Navigation System	A
B15FE13	XM Tuner Antenna Circuit Open	A short occurs in the XM antenna. (2 trip detection logic)	• Roof antenna assembly • No. 3 Antenna cord sub-assembly • Antenna cord sub-assembly • Antenna cord sub-assembly (for Roof) • Radio and display receiver assembly	Navigation System	A

WIRING DIAGRAM



CAUTION / NOTICE / HINT

NOTICE:

Depending on the parts that are replaced during vehicle inspection or maintenance, performing initialization, registration or calibration may be needed. Refer to Precaution for Audio and Visual System.

Click here INFO

PROCEDURE

1.	**CHECK CONNECTION OF ANTENNA CABLE**

(a) Check if the roof antenna assembly cable is securely connected to the radio and display receiver assembly.

OK:

Roof antenna assembly cable is securely connected.

NG ▶ **SECURELY CONNECT ROOF ANTENNA ASSEMBLY**

OK ▼

2.	**CLEAR DTC**

(a) Clear the DTCs.

Body Electrical > Navigation System > Clear DTCs

NEXT

3.	**CHECK FOR DTC**

Pre-procedure1

(a) Turn the ignition switch off.

Procedure1

(b) Recheck for DTCs and check that no DTCs are output.

Body Electrical > Navigation System > Trouble Codes

RESULT	PROCEED TO
DTCs are not output	A
B15FE11 or B15FE13 is output	B

Post-procedure1

(c) None

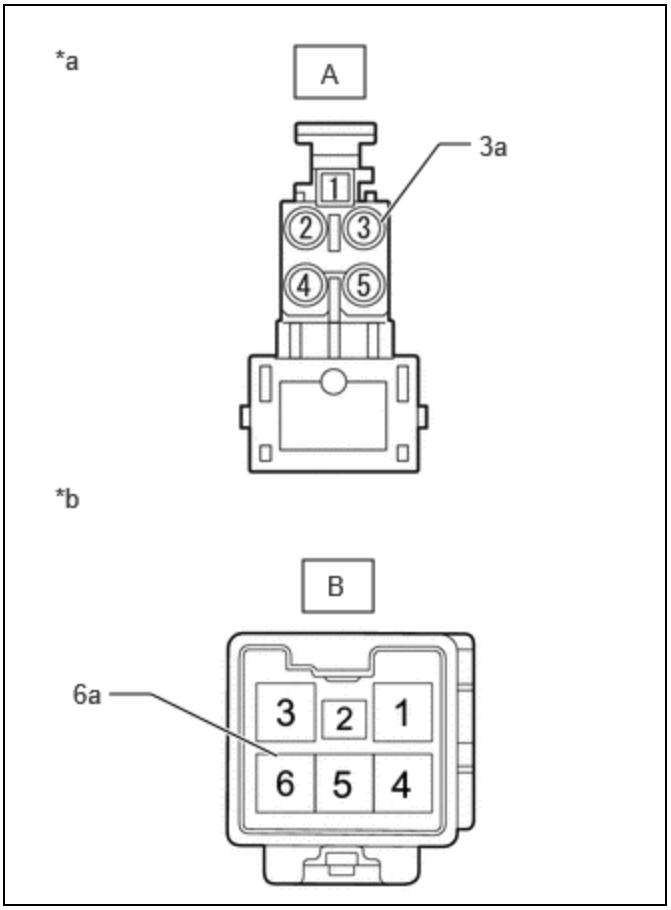
A **USE SIMULATION METHOD TO CHECK**

B

4.	**CHECK ANTENNA CORD SUB-ASSEMBLY (for Roof)**

Pre-procedure1

(a) Disconnect the antenna connector from the roof antenna assembly.



*a	Front view of wire harness connector (to Roof Antenna Assembly)
*b	Front view of wire harness connector(to antenna cord sub-assembly (for Roof))

(b) Disconnect the antenna connector from the No. 3 antenna cord sub-assembly.

Procedure1

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

Standard Resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
A-3 - B-6	Always	Below 1 Ω	Ω
A-3a - B-6a	Always	Below 1 Ω	Ω
A-3 - Body ground	Always	10 kΩ or higher	kΩ

Post-procedure1

(d) None

NG ▶ **REPLACE ANTENNA CORD SUB-ASSEMBLY (for Roof)**

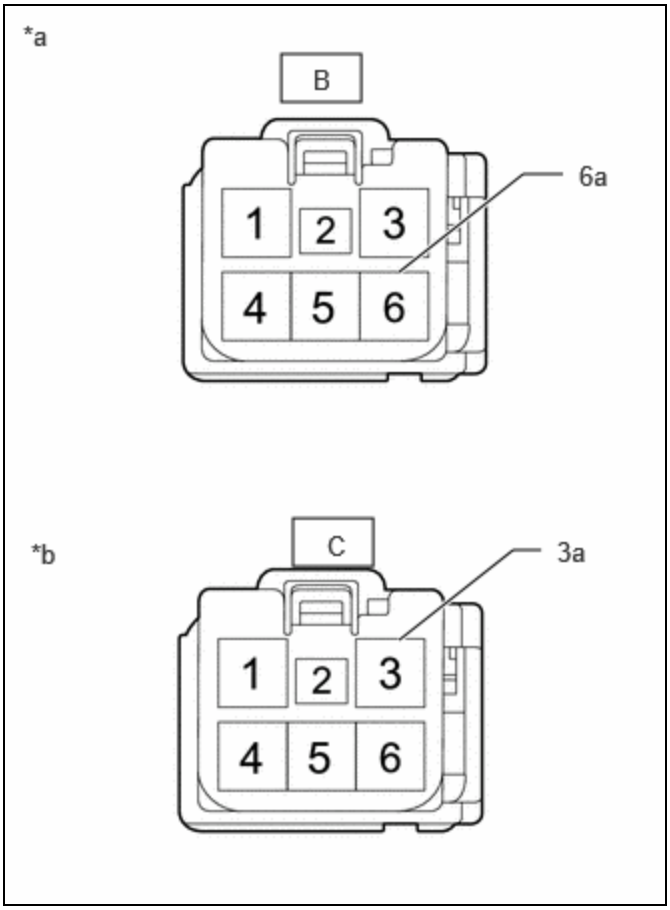
INFO

OK

5.	**CHECK NO. 3 ANTENNA CORD SUB-ASSEMBLY**

Pre-procedure1

(a) Disconnect the antenna connector from the antenna cord sub-assembly (for Roof).



*a	Front view of wire harness connector (to Antenna Cord Sub-assembly (for Roof))
*b	Front view of wire harness connector (to Antenna Cord Sub-assembly (for Instrument Panel))

(b) Disconnect the antenna connector from the antenna cord sub-assembly (for Instrument Panel).

Procedure1

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

Standard Resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
B-6 - C-3	Always	Below 1 Ω	Ω
B-6a - C-3a	Always	Below 1 Ω	Ω
B-6 - Body ground	Always	10 kΩ or higher	kΩ

Post-procedure1

(d) None

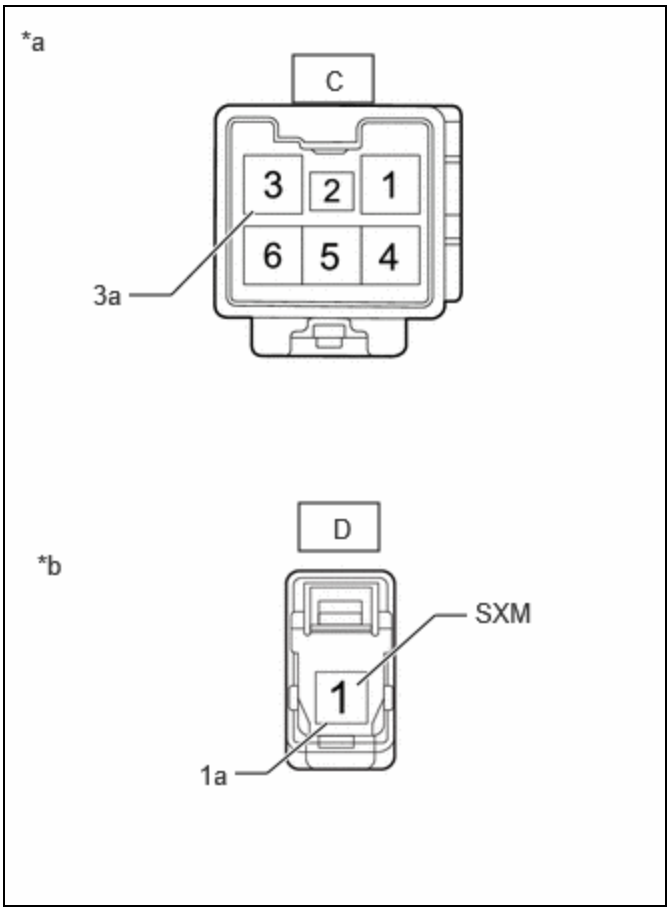
NG ▶ **REPLACE NO. 3 ANTENNA CORD SUB-ASSEMBLY** INFO

OK ▼

6.	**CHECK ANTENNA CORD SUB-ASSEMBLY**

Pre-procedure1

(a) Disconnect the antenna connector from the No. 3 antenna cord sub-assembly.



*a	Front view of wire harness connector (to No. 3 antenna cord sub-assembly)

*b	Front view of wire harness connector (to Radio and Display Receiver Assembly)

(b) Disconnect the antenna connector from the radio and display receiver assembly.

Procedure1

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

Standard Resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
C-3 - D-1 (SXM)	Always	Below 1 Ω	Ω
C-3a - D-1a	Always	Below 1 Ω	Ω
C-3 - Body ground	Always	10 kΩ or higher	kΩ

Post-procedure1

(d) None

NG ▶ **REPLACE ANTENNA CORD SUB-ASSEMBLY (for Instrument Panel)** INFO

OK ▼

7.	**REPLACE ROOF ANTENNA ASSEMBLY**

(a) Replace the roof antenna assembly with a new or known good one.

HINT:

Click here INFO

NEXT ▼

8.	**CLEAR DTC**

(a) Clear the DTCs.

Body Electrical > Navigation System > Clear DTCs

NEXT

9.	**CHECK DTC**

Pre-procedure1

(a) Turn the ignition switch off.

Procedure1

(b) Recheck for DTCs and check that no DTCs are output.

Body Electrical > Navigation System > Trouble Codes

RESULT	PROCEED TO
DTCs are not output	A
B15FE11 or B15FE13 is output	B

Post-procedure1

(c) None

A **END (ROOF ANTENNA ASSEMBLY IS DEFECTIVE)**

B **REPLACE RADIO AND DISPLAY RECEIVER ASSEMBLY**