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Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [12/2022 -]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING SYSTEM: C214187-C214487; Tire Pressure Monitor Transmitter ID 1 Missing Message; 2023 - 2024 MY Prius Prius Prime [12/2022 -]		

DTC	C214187	Tire Pressure Monitor Transmitter ID 1 Missing Message
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DTC	C214287	Tire Pressure Monitor Transmitter ID 2 Missing Message
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DTC	C214387	Tire Pressure Monitor Transmitter ID 3 Missing Message
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DTC	C214487	Tire Pressure Monitor Transmitter ID 4 Missing Message
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DESCRIPTION

The tire pressure warning valve and transmitters that are installed in the tire and wheel assemblies measure the tire pressure of each wheel. The measured values are transmitted to the tire pressure warning ECU and receiver in the vehicle as radio waves. The ECU compares the measured tire pressure values with the tire pressure threshold. When the measured tire pressure value is less than this threshold, the warning light in the combination meter assembly illuminates.

The tire pressure warning valve and transmitters constantly send radio waves to the tire pressure warning ECU and receiver.

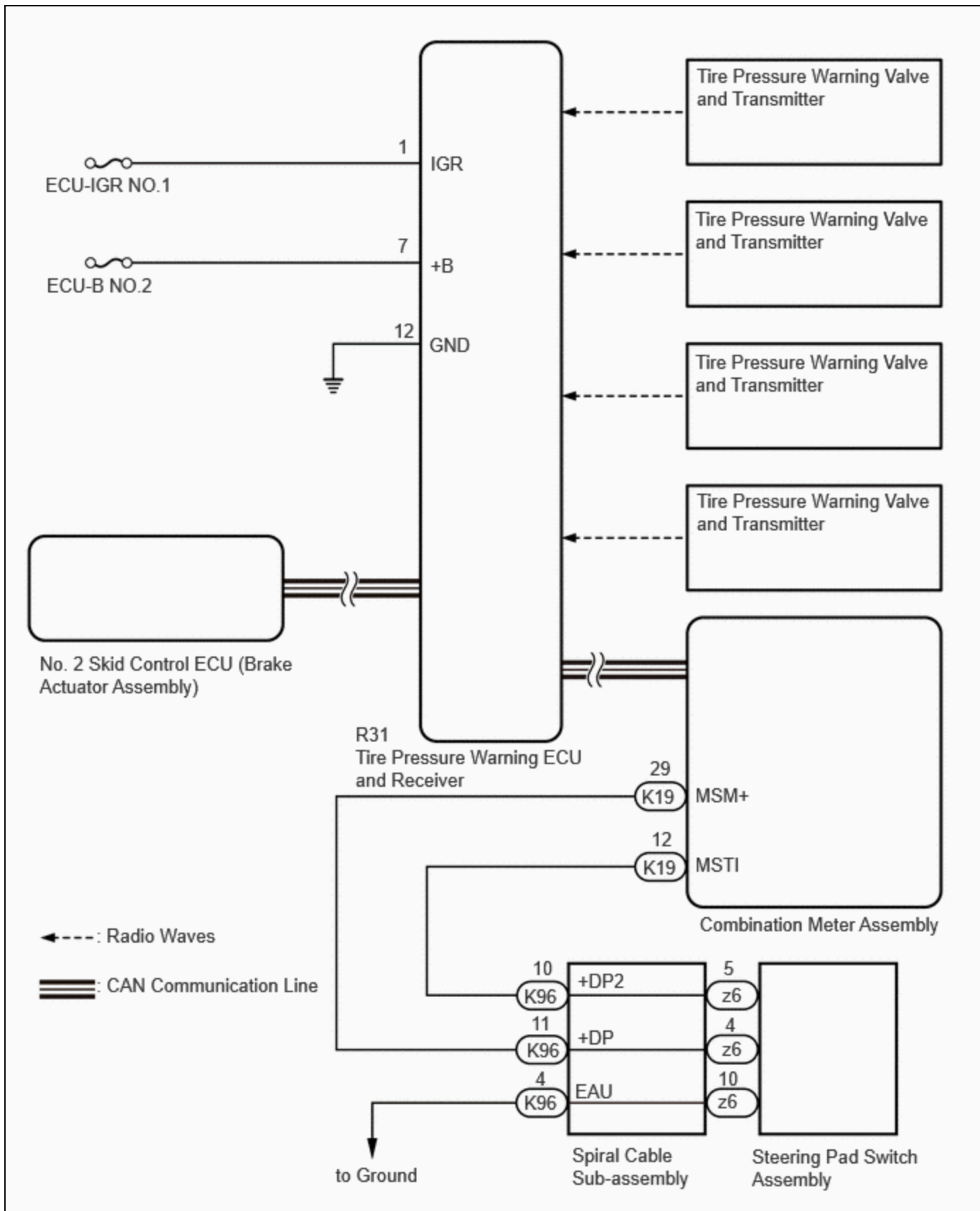
Under the conditions below, the tire pressure warning ECU and receiver is unable to receive the signals from the tire pressure warning valve and transmitters, and a DTC is stored.

- Facilities or devices that use similar radio frequencies are located in the vicinity of the vehicle.
- Devices using similar radio frequencies are used in the vehicle.
- The ID of a tire pressure warning valve and transmitter is mistyped during registration.
- A tire, wheel and/or transmitter from a different vehicle is installed.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	DTC OUTPUT FROM	PRIORITY
C214187	Tire Pressure Monitor Transmitter ID 1 Missing Message	When driving at 40 km/h (25 mph) or higher, the tire pressure warning ECU and receiver cannot receive electrical waves from the tire pressure warning valve and transmitter for a total of approximately 20 minutes	<ul style="list-style-type: none"> • Tire pressure warning valve and transmitter • Tire pressure warning ECU and receiver 	Tire Pressure Monitor	A
C214287	Tire Pressure Monitor	When driving at 40 km/h (25 mph) or higher, the tire pressure warning ECU	<ul style="list-style-type: none"> • Tire pressure warning valve 	Tire Pressure	A

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	DTC OUTPUT FROM	PRIORITY
	Transmitter ID 2 Missing Message	and receiver cannot receive electrical waves from the tire pressure warning valve and transmitter for a total of approximately 20 minutes	and transmitter <ul style="list-style-type: none"> Tire pressure warning ECU and receiver 	Monitor	
C214387	Tire Pressure Monitor Transmitter ID 3 Missing Message	When driving at 40 km/h (25 mph) or higher, the tire pressure warning ECU and receiver cannot receive electrical waves from the tire pressure warning valve and transmitter for a total of approximately 20 minutes	<ul style="list-style-type: none"> Tire pressure warning valve and transmitter Tire pressure warning ECU and receiver 	Tire Pressure Monitor	A
C214487	Tire Pressure Monitor Transmitter ID 4 Missing Message	When driving at 40 km/h (25 mph) or higher, the tire pressure warning ECU and receiver cannot receive electrical waves from the tire pressure warning valve and transmitter for a total of approximately 20 minutes	<ul style="list-style-type: none"> Tire pressure warning valve and transmitter Tire pressure warning ECU and receiver 	Tire Pressure Monitor	A

WIRING DIAGRAM



CAUTION / NOTICE / HINT

NOTICE:

- When replacing the tire pressure warning ECU and receiver, first use the GTS to record all of the current IDs and registered tires with transmitters (4 or 5 tires) of the tire pressure warning valve and transmitter

registered to the tire pressure warning ECU and receiver.

- It is necessary to perform initialization **INFO** after registration **INFO** of the transmitter IDs into the tire pressure warning ECU and receiver if the ECU and/or one of the valve and transmitters has been replaced.

PROCEDURE

1. CHECK FREQUENCY RECEIVING CONDITION

(a) Check that the following conditions are not met:

- (1) Facilities or devices that use similar radio frequencies are located in the vicinity of the vehicle.

HINT:

- If the vehicle is located in an area such as the one described above, the tire pressure warning light may illuminate after blinking for 1 minute due to interfering radio frequencies.

- (2) Devices using similar radio frequencies are used in the vehicle.

HINT:

Radio transmissions may be interrupted due to the surroundings or devices installed by the user.

RESULT	PROCEED TO
There is no device or facility that uses electrical waves of approximately the same frequency in the vicinity of the vehicle or inside the vehicle.	A
There is a device or facility that uses electrical waves of approximately the same frequency in the vicinity of the vehicle or inside the vehicle.	B

B ► GO TO STEP 9

A



2. CONFIRM OUTPUT DTC

(a) Check the stored DTC.

Chassis > Tire Pressure Monitor > Trouble Codes

RESULT	PROCEED TO
C214187, C214287, C214387 or C214487 is output	A
C214187, C214287, C214387 and C214487 are output	B

B ► GO TO STEP 5



3. IDENTIFY TRANSMITTER CORRESPONDING TO DTC (TIRE POSITION)

- (a) Display the "ID Tire Position" value for each wheel using the GTS.
- (b) Refer to the following chart and check the wheel position of the DTC and transmitter match.

Chassis > Tire Pressure Monitor > Data List

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
ID 1 Tire Position	ID1 tire position	No Information / FL / FR / RL / RR / Spare / Judging	ID1 tire position is displayed	If no tire position information is stored, "No Information" will be displayed.
ID 2 Tire Position	ID2 tire position	No Information / FL / FR / RL / RR / Spare / Judging	ID2 tire position is displayed	If no tire position information is stored, "No Information" will be displayed.
ID 3 Tire Position	ID3 tire position	No Information / FL / FR / RL / RR / Spare / Judging	ID3 tire position is displayed	If no tire position information is stored, "No Information" will be displayed.
ID 4 Tire Position	ID4 tire position	No Information / FL / FR / RL / RR / Spare / Judging	ID4 tire position is displayed	If no tire position information is stored, "No Information" will be displayed.

Chassis > Tire Pressure Monitor > Data List

TESTER DISPLAY
ID 1 Tire Position
ID 2 Tire Position
ID 3 Tire Position
ID 4 Tire Position

NEXT



4. CHECK TRANSMITTER ID

Pre-procedure1

(a) Refer to the following chart and record the tire pressure warning valve and transmitter ID of the output DTC.

Chassis > Tire Pressure Monitor > Data List

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Registered ID 1 Code	Registered ID1 code	Min.: 0 Max.: FFFFFFFF*	ID No. registered for transmitter ID1 displayed	-
Registered ID 2 Code	Registered ID2 code	Min.: 0 Max.: FFFFFFFF*	ID No. registered for transmitter ID2 displayed	-
Registered ID 3 Code	Registered ID3 code	Min.: 0 Max.: FFFFFFFF*	ID No. registered for transmitter ID3 displayed	-
Registered ID 4 Code	Registered ID4 code	Min.: 0 Max.: FFFFFFFF*	ID No. registered for transmitter ID4 displayed	-

HINT:

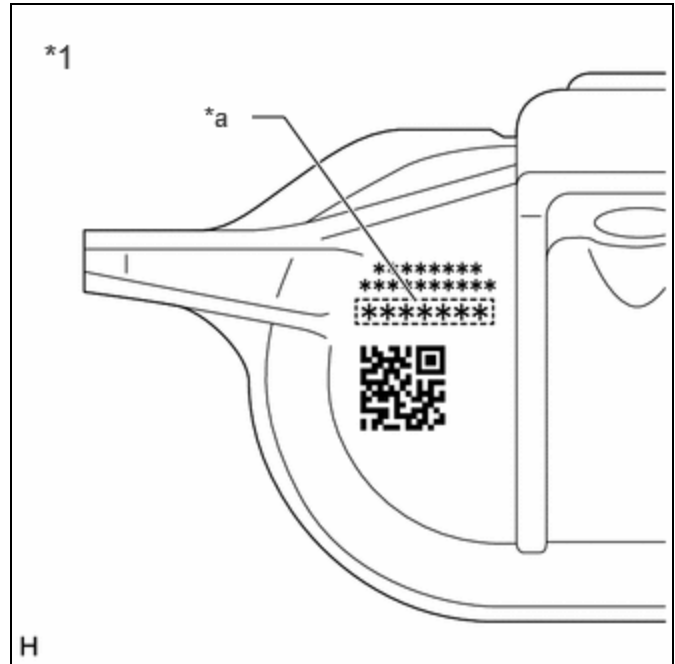
*: Displayed only when the ID No. is not registered.

Chassis > Tire Pressure Monitor > Data List

TESTER DISPLAY
Registered ID 1 Code
Registered ID 2 Code
Registered ID 3 Code
Registered ID 4 Code

Pre-procedure2

(b) Disassemble the tire indicated in the output DTC and check the tire pressure warning valve and transmitter ID.



*1	Tire Pressure Warning Valve and Transmitter
*a	Transmitter ID (7-digit Number)

Procedure1

(c) Confirm that the ID number on the transmitter and recorded transmitter ID match.

RESULT	PROCEED TO
Match	A
Do not match	B

Post-procedure1

(d) None

A ► REPLACE CORRESPONDING TIRE PRESSURE WARNING VALVE AND TRANSMITTER

B ► GO TO STEP 6

5.	CHECK TIRE PRESSURE WARNING VALVE AND TRANSMITTER
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Pre-procedure1

(a) Refer to the following chart and record all of the tire pressure warning valve and transmitter IDs.

Chassis > Tire Pressure Monitor > Data List

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Registered ID 1 Code	Registered ID1 code	Min.: 0 Max.: FFFFFFFF*	ID No. registered for transmitter ID1 displayed	-
Registered ID 2 Code	Registered ID2 code	Min.: 0 Max.: FFFFFFFF*	ID No. registered for transmitter ID2 displayed	-
Registered ID 3 Code	Registered ID3 code	Min.: 0 Max.: FFFFFFFF*	ID No. registered for transmitter ID3 displayed	-
Registered ID 4 Code	Registered ID4 code	Min.: 0 Max.: FFFFFFFF*	ID No. registered for transmitter ID4 displayed	-

HINT:

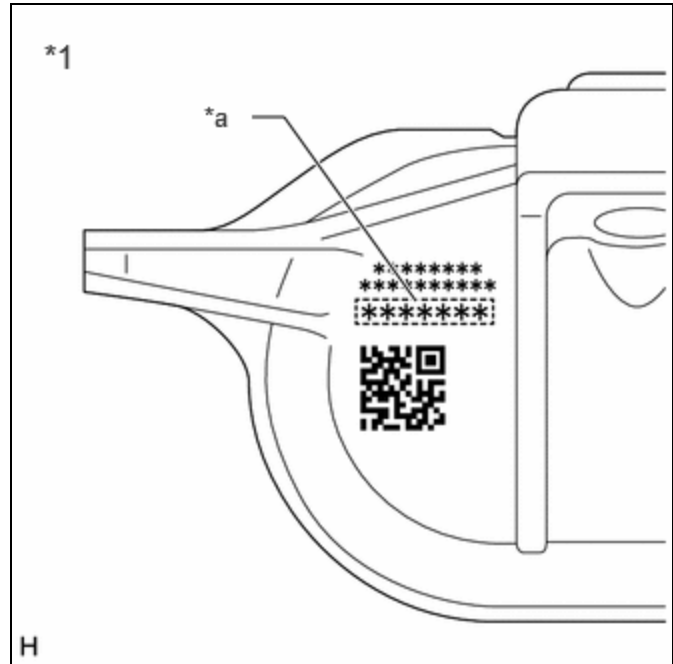
- *: Displayed only when the ID No. is not registered.
- The wheel position cannot be determined from ID1 through ID5 on the Data List.

Chassis > Tire Pressure Monitor > Data List

TESTER DISPLAY
Registered ID 1 Code
Registered ID 2 Code
Registered ID 3 Code
Registered ID 4 Code

Pre-procedure2

- (b) Disassemble all of the tires and check the tire pressure warning valve and transmitter IDs.



*1	Tire Pressure Warning Valve and Transmitter
*a	Transmitter ID (7-digit Number)

Procedure1

(c) Confirm that the ID number on the transmitter and recorded transmitter ID match.

RESULT	PROCEED TO
Match	A
Do not match	B

Post-procedure1

(d) None

A ▶ **REPLACE TIRE PRESSURE WARNING ECU AND RECEIVER**

B
▼

6.	REGISTRATION OF TRANSMITTER ID
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(a) Perform registration.

Click here 

NEXT



7. PERFORM INITIALIZATION

(a) Perform initialization.

HINT:

Click here 

NEXT



8. CLEAR DTC

(a) Clear the DTCs.

Chassis > Tire Pressure Monitor > Clear DTCs

NEXT  **END**

9. CLEAR DTC

(a) Clear the DTCs.

Chassis > Tire Pressure Monitor > Clear DTCs

NEXT  **END**

Explain to the customer that there is a high possibility that a device (located near or inside the vehicle) or facility using electrical waves of approximately the same frequency is causing electrical wave interference.

