

Last Modified: 12-04-2024	6.11:8.1.0	Doc ID: RM100000028NQT
Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [12/2022 -]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING SYSTEM: Tire Position Not Identified; 2023 - 2024 MY Prius Prius Prime [12/2022 -]		

Tire Position Not Identified

DESCRIPTION

The tire pressure warning ECU and receiver identifies the tire position for each tire pressure warning valve and transmitter according to the wheel speed signals from the No. 2 skid control ECU (brake actuator assembly) and acceleration rate signal from each acceleration sensor built into each tire pressure warning valve and transmitter.

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 after registration of the transmitter IDs into the tire pressure warning ECU and receiver if one of the valve and transmitters has been replaced.

for Registration:

Click here [INFO](#)

for Initialization

Click here [INFO](#)

PROCEDURE

1.	IDENTIFY TIRE POSITION FOR EACH TIRE PRESSURE WARNING VALVE AND TRANSMITTER
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(a) Set the tire pressure to the specified value.

Click here [INFO](#)

(b) Display the "ID Tire Inflation Pressure" value for each wheel using the GTS.

Chassis > Tire Pressure Monitor > Data List

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
ID 1 Tire Inflation Pressure	ID1 tire inflation pressure	Min.: Absolute pressure (abs) / 0 kPa (0 kgf/cm ² , 0 psi), Relative pressure (Gauge) / 0 kPa (0 kgf/cm ² , 0 psi) Max.: Absolute pressure (abs) / 480 kPa (4.9 kgf/cm ² , 70 psi), Relative	Actual tire inflation pressure	Not displayed, if data has not been received.*

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
		pressure (Gauge) / 380 kPa (3.9 kgf/cm ² , 55 psi)		
ID 2 Tire Inflation Pressure	ID2 tire inflation pressure	Min.: Absolute pressure (abs) / 0 kPa (0 kgf/cm ² , 0 psi), Relative pressure (Gauge) / 0 kPa (0 kgf/cm ² , 0 psi) Max.: Absolute pressure (abs) / 480 kPa (4.9 kgf/cm ² , 70 psi), Relative pressure (Gauge) / 380 kPa (3.9 kgf/cm ² , 55 psi)	Actual tire inflation pressure	Not displayed, if data has not been received.*
ID 3 Tire Inflation Pressure	ID3 tire inflation pressure	Min.: Absolute pressure (abs) / 0 kPa (0 kgf/cm ² , 0 psi), Relative pressure (Gauge) / 0 kPa (0 kgf/cm ² , 0 psi) Max.: Absolute pressure (abs) / 480 kPa (4.9 kgf/cm ² , 70 psi), Relative pressure (Gauge) / 380 kPa (3.9 kgf/cm ² , 55 psi)	Actual tire inflation pressure	Not displayed, if data has not been received.*
ID 4 Tire Inflation Pressure	ID4 tire inflation pressure	Min.: Absolute pressure (abs) / 0 kPa (0 kgf/cm ² , 0 psi), Relative pressure (Gauge) / 0 kPa (0 kgf/cm ² , 0 psi) Max.: Absolute pressure (abs) / 480 kPa (4.9 kgf/cm ² , 70 psi), Relative pressure (Gauge) / 380 kPa (3.9 kgf/cm ² , 55 psi)	Actual tire inflation pressure	Not displayed, if data has not been received.*

HINT:

- *: It may take a few minutes until the values are displayed.
- The wheel position cannot be determined from ID1 through ID4 on the Data List.

Chassis > Tire Pressure Monitor > Data List

TESTER DISPLAY
ID 1 Tire Inflation Pressure
ID 2 Tire Inflation Pressure
ID 3 Tire Inflation Pressure
ID 4 Tire Inflation Pressure

(c) Rapidly reduce the tire pressure for each wheel at least 40 kPa (0.4 kgf/cm², 5.8 psi) within 30 seconds.

NOTICE:

- It may take a few minutes until the values are displayed.
- When an "ID Tire Inflation Pressure" value has not changed, reset the tire pressure to the appropriate specified value and rotate the tire 90 to 270 degrees. Then rapidly release the tire pressure and recheck the value.

(d) Read the "ID Tire Inflation Pressure" value and identify the tire with reduced pressure, and record the corresponding tire pressure warning valve and transmitter (ID1 to ID4).

(e) Repeat for each tire.

(f) Set the tire pressure to the specified value.

Click here [INFO](#)

NEXT



2. PERFORM INITIALIZATION

(a) Leave the vehicle with the ignition switch turned off for 15 minutes or more.

HINT:

After the vehicle has been stopped for 15 minutes or more, the tire pressure warning valve and transmitter will transmit radio wave signals more frequently for the first several minutes of driving (4 times more frequent than usual).

(b) Perform initialization to clear the existing tire position information.

Click here [INFO](#)

NEXT



3. IDENTIFY TIRE POSITION DURING DRIVING

(a) Drive the vehicle at 40 km/h (25 mph) or more for 10 to 30 minutes in 1 trip.

HINT:

Do not drive the vehicle in reverse gear while performing Tire Position Identification. If the vehicle is driven in reverse gear while performing Tire Position Identification, identification information will be discarded and Tire Position Identification may take longer than usual.

(b) Without turning off the ignition switch, check the tire position for each transmitter.

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

RESULT	PROCEED TO
A transmitter with its tire position as "Judging" exists.	A
No transmitter with its tire position as "Judging" exists, and no tire pressures are displayed on the multi-information display.	B
No transmitter with its tire position as "Judging" exists, and tire pressures are displayed on the multi-information display.	C

B ▶ GO TO TIRE PRESSURE WARNING LIGHT CIRCUIT INSPECTION PROCEDURE

HINT:

Perform "Tire Pressure Warning Light Circuit" inspection to check the communication status between the

combination meter assembly and tire pressure warning ECU and receiver.

C  **END**

A



4. CHECK TIRE PRESSURE WARNING VALVE AND TRANSMITTER

- (a) Without turning off the ignition switch, check each transmitter with its tire position displayed as "Judging".
- (b) According to the display on the GTS, display the "ID Tire Inflation Pressure" item of the Data List.

Chassis > Tire Pressure Monitor > Data List

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
ID 1 Tire Inflation Pressure	ID1 tire inflation pressure	Min.: Absolute pressure (abs) / 0 kPa (0 kgf/cm ² , 0 psi), Relative pressure (Gauge) / 0 kPa (0 kgf/cm ² , 0 psi) Max.: Absolute pressure (abs) / 480 kPa (4.9 kgf/cm ² , 70 psi), Relative pressure (Gauge) / 380 kPa (3.9 kgf/cm ² , 55 psi)	Actual tire inflation pressure	Not displayed, if data has not been received.*
ID 2 Tire Inflation Pressure	ID2 tire inflation pressure	Min.: Absolute pressure (abs) / 0 kPa (0 kgf/cm ² , 0 psi), Relative pressure (Gauge) / 0 kPa (0 kgf/cm ² , 0 psi) Max.: Absolute pressure (abs) / 480 kPa (4.9 kgf/cm ² , 70 psi), Relative pressure (Gauge) / 380 kPa (3.9 kgf/cm ² , 55 psi)	Actual tire inflation pressure	Not displayed, if data has not been received.*
ID 3 Tire Inflation Pressure	ID3 tire inflation pressure	Min.: Absolute pressure (abs) / 0 kPa (0 kgf/cm ² , 0 psi), Relative pressure (Gauge) / 0 kPa (0 kgf/cm ² , 0 psi) Max.: Absolute pressure (abs) / 480 kPa (4.9 kgf/cm ² , 70 psi), Relative pressure (Gauge) / 380 kPa (3.9 kgf/cm ² , 55 psi)	Actual tire inflation pressure	Not displayed, if data has not been received.*

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
ID 4 Tire Inflation Pressure	ID4 tire inflation pressure	Min.: Absolute pressure (abs) / 0 kPa (0 kgf/cm ² , 0 psi), Relative pressure (Gauge) / 0 kPa (0 kgf/cm ² , 0 psi) Max.: Absolute pressure (abs) / 480 kPa (4.9 kgf/cm ² , 70 psi), Relative pressure (Gauge) / 380 kPa (3.9 kgf/cm ² , 55 psi)	Actual tire inflation pressure	Not displayed, if data has not been received.*

HINT:

*: It may take a few minutes until the values are displayed.

Chassis > Tire Pressure Monitor > Data List

TESTER DISPLAY
ID 1 Tire Inflation Pressure
ID 2 Tire Inflation Pressure
ID 3 Tire Inflation Pressure
ID 4 Tire Inflation Pressure

RESULT	PROCEED TO
Displayed	A
Not displayed	B

B ▶ **REPLACE CORRESPONDING TIRE PRESSURE WARNING VALVE AND TRANSMITTER**

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5.	CHECK FREQUENCY RECEIVING CONDITION
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(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.

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

OK:

Facilities or devices that use similar radio frequencies are not located in the vicinity of the vehicle.

HINT:

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

OK ► IDENTIFY TIRE POSITION DURING DRIVING AGAIN

NG ► CHECK IF ANY DEVICE IS INSTALLED BY USER

