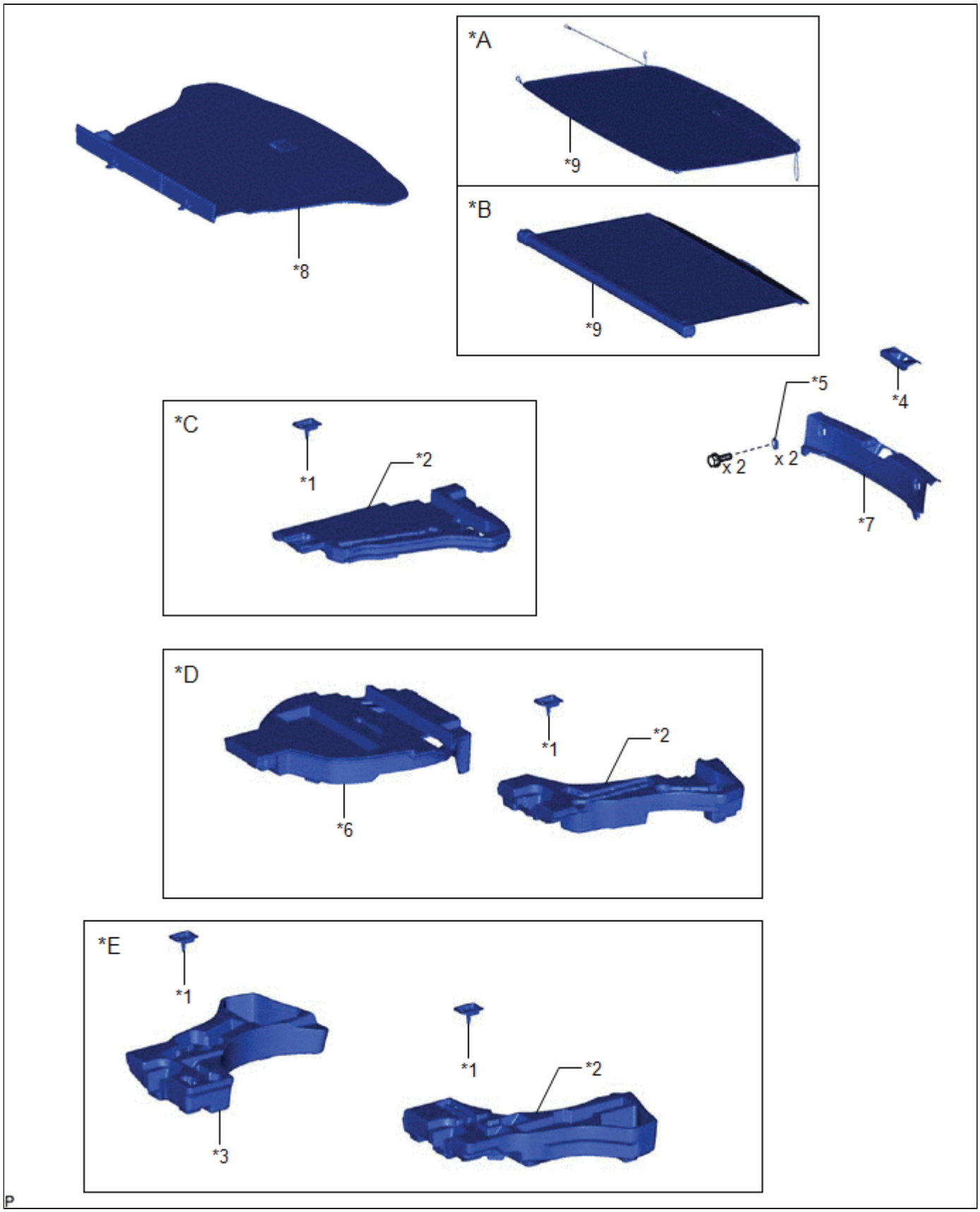
Last Modified: 01-14-2019	6.8:8.0.48	**Doc ID:** RM100000000QTAS
Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 - 12/2018]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING RECEIVER: COMPONENTS; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

COMPONENTS

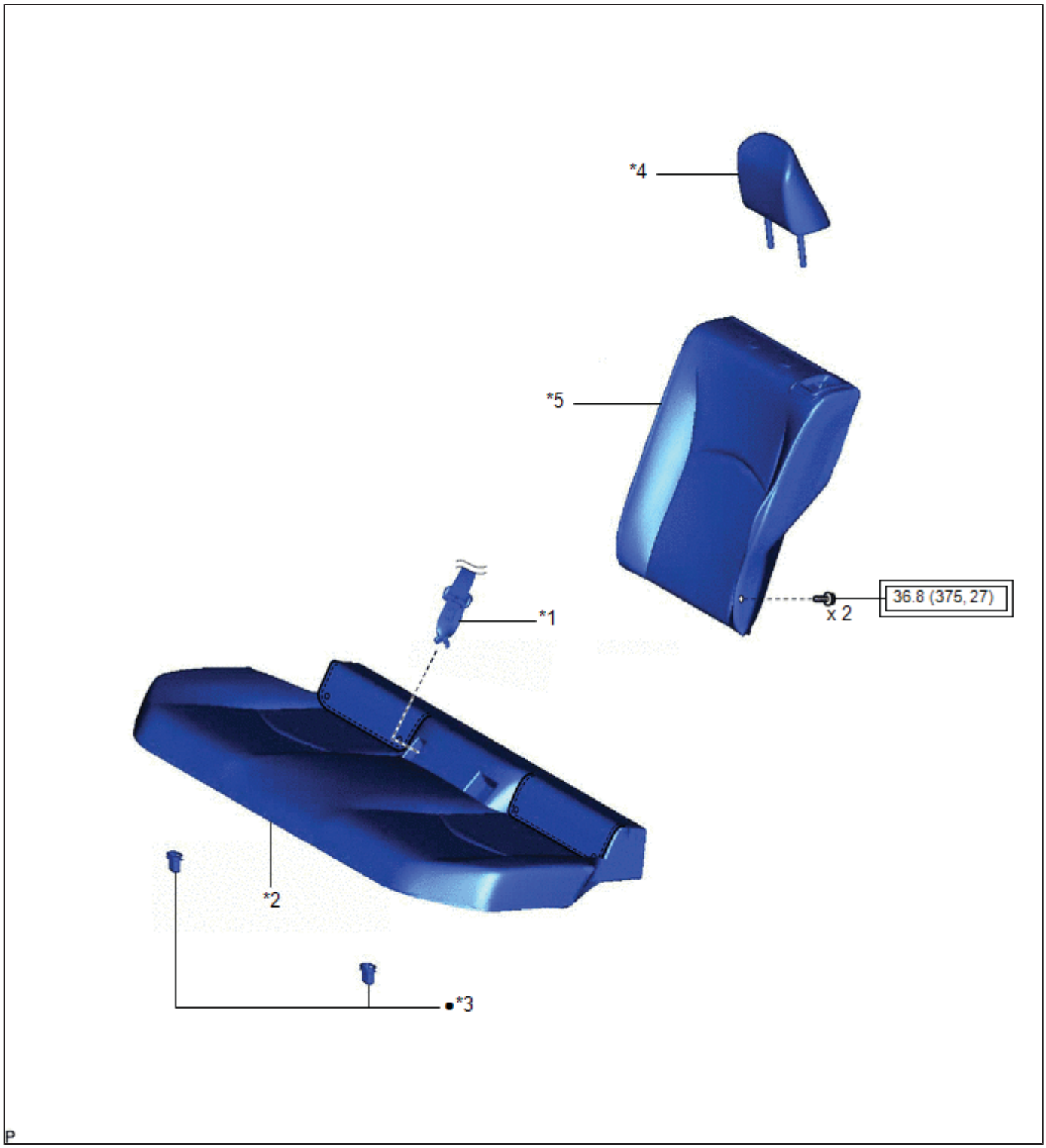
ILLUSTRATION



*A	w/o Blind Spot Monitor System	*B	w/ Blind Spot Monitor System
*C	w/o Spare Tire	*D	w/ Compact Spare Tire
*E	w/ Full Size Spare Tire	-	-
*1	DECK BOARD RETAINER	*2	DECK FLOOR BOX LH

*3	DECK FLOOR BOX RH	*4	DECK TRIM SERVICE HOLE COVER
*5	LUGGAGE HOLD BELT STRIKER ASSEMBLY	*6	REAR DECK FLOOR BOX
*7	REAR DECK TRIM COVER	*8	REAR NO. 1 FLOOR BOARD
*9	TONNEAU COVER ASSEMBLY	-	-

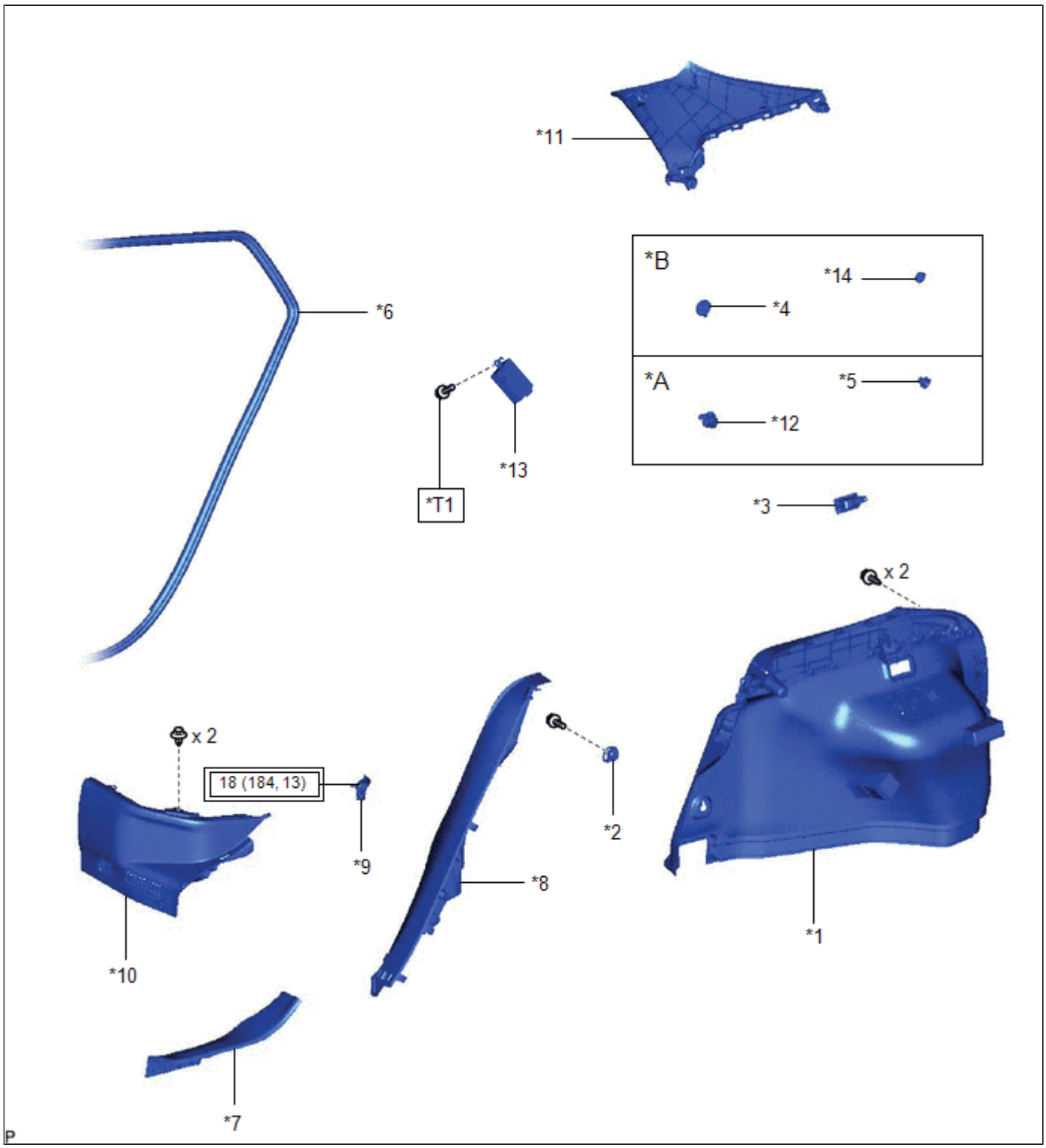
ILLUSTRATION



*1	REAR CENTER SEAT OUTER BELT ASSEMBLY	*2	REAR SEAT CUSHION ASSEMBLY
*3	REAR SEAT CUSHION LOCK HOOK	*4	REAR SEAT HEADREST ASSEMBLY
*5	REAR SEATBACK ASSEMBLY LH	-	-
	Tightening torque for "Major areas involving basic vehicle performance	•	Non-reusable part

	such as moving/turning/stopping" : N*m (kgf*cm, ft.*lbf)		

ILLUSTRATION



*A	w/o Blind Spot Monitor System	*B	w/ Blind Spot Monitor System
*1	DECK TRIM SIDE PANEL ASSEMBLY LH	*2	LUGGAGE HOLD BELT STRIKER ASSEMBLY

*3	NO. 1 LUGGAGE COMPARTMENT LIGHT ASSEMBLY	*4	NO. 1 TONNEAU COVER HOLDER CAP
*5	NO. 2 ROPE HOOK	*6	REAR DOOR OPENING TRIM WEATHERSTRIP LH
*7	REAR DOOR SCUFF PLATE LH	*8	REAR SEAT SIDE GARNISH LH
*9	REAR SEATBACK HINGE SUB-ASSEMBLY LH	*10	REAR UNDER SIDE COVER LH
*11	ROOF SIDE INNER GARNISH ASSEMBLY LH	*12	ROPE HOOK
*13	TIRE PRESSURE WARNING ECU AND RECEIVER	*14	TONNEAU COVER HOOK A
	N*m (kgf*cm, ft.*lbf): Specified torque		N*m (kgf*cm, ft.*lbf): Specified torque
*T1	for Type A: 8.3 (85, 73 in.*lbf) for Type B: 10 (102, 7)	-	-

Last Modified: 01-14-2019	6.8:8.0.48	**Doc ID:** RM100000000QTAR
Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 - 12/2018]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING RECEIVER: INSTALLATION; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

INSTALLATION

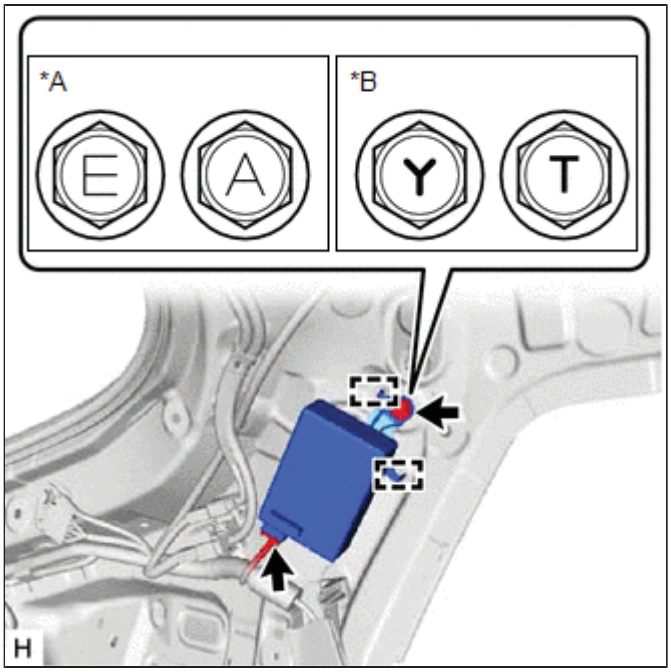
PROCEDURE

1. INSTALL TIRE PRESSURE WARNING ECU AND RECEIVER

NOTICE:

- Do not drop, strike or otherwise subject the tire pressure warning ECU and receiver to impact.
- If the tire pressure warning ECU and receiver is subjected to an impact, replace it with a new one.

(a) Connect the connector.



*A	for Type A
*B	for Type B

(b) Engage the 2 guides and install the tire pressure warning ECU and receiver with the bolt.

Torque:

for Type A :

8.3 N·m {85 kgf·cm, 73 in·lbf}

for Type B :

10 N·m {102 kgf·cm, 7 ft·lbf}

NOTICE:

There are 4 types of bolts and the tightening torque depends on the type of bolt used as shown in the illustration. Therefore, confirm the tightening torque before installing the bolt.

2. INSTALL ROOF SIDE INNER GARNISH ASSEMBLY LH

Click here INFO

3. INSTALL DECK TRIM SIDE PANEL ASSEMBLY LH

Click here INFO

4. INSTALL NO. 1 LUGGAGE COMPARTMENT LIGHT ASSEMBLY

Click here INFO

5. INSTALL ROPE HOOK (w/o Blind Spot Monitor System)

Click here INFO

6. INSTALL NO. 2 ROPE HOOK (w/o Blind Spot Monitor System)

Click here INFO

7. INSTALL NO. 1 TONNEAU COVER HOLDER CAP (w/ Blind Spot Monitor System)

Click here INFO

8. INSTALL TONNEAU COVER HOOK A (w/ Blind Spot Monitor System)

Click here INFO

9. INSTALL LUGGAGE HOLD BELT STRIKER ASSEMBLY (for LH Side)

Click here INFO

10. INSTALL REAR SEAT SIDE GARNISH LH

Click here INFO

11. INSTALL REAR SEATBACK HINGE SUB-ASSEMBLY LH

Click here INFO

12. INSTALL REAR UNDER SIDE COVER LH

Click here INFO

13. INSTALL REAR DOOR OPENING TRIM WEATHERSTRIP LH

Click here INFO

14. INSTALL REAR DOOR SCUFF PLATE LH

Click here INFO

15. INSTALL REAR SEAT CUSHION LOCK HOOK

Click here INFO

16. INSTALL REAR SEAT CUSHION ASSEMBLY

Click here INFO

17. INSTALL REAR SEATBACK ASSEMBLY LH

Click here INFO

18. CONNECT REAR CENTER SEAT OUTER BELT ASSEMBLY

Click here INFO

19. INSTALL REAR SEAT HEADREST ASSEMBLY

Click here INFO

20. INSTALL REAR DECK TRIM COVER

Click here INFO

21. INSTALL LUGGAGE HOLD BELT STRIKER ASSEMBLY (for Rear Side)

Click here INFO

22. INSTALL DECK TRIM SERVICE HOLE COVER

Click here INFO

23. INSTALL DECK FLOOR BOX LH (w/o Spare Tire)

Click here INFO

24. INSTALL DECK FLOOR BOX LH (w/ Compact Spare Tire)

Click here INFO

25. INSTALL REAR DECK FLOOR BOX (w/ Compact Spare Tire)

Click here INFO

26. INSTALL DECK FLOOR BOX LH (w/ Full Size Spare Tire)

Click here INFO

27. INSTALL DECK FLOOR BOX RH (w/ Full Size Spare Tire)

Click here INFO

28. INSTALL DECK BOARD RETAINER

Click here INFO

29. INSTALL REAR NO. 1 FLOOR BOARD

Click here INFO

30. INSTALL TONNEAU COVER ASSEMBLY

Click here INFO

31. REGISTER TRANSMITTER ID

Click here INFO

32. INSPECT TIRE PRESSURE WARNING SYSTEM

Click here INFO

33. PERFORM INITIALIZATION

Click here 

Last Modified: 01-14-2019	6.8:8.0.48	**Doc ID:** RM100000000QTAT
Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 - 12/2018]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING RECEIVER: REMOVAL; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

REMOVAL

CAUTION / NOTICE / HINT

The necessary procedures (adjustment, calibration, initialization or registration) that must be performed after parts are removed and installed, or replaced during tire pressure warning ECU and receiver removal/installation are shown below.

REPLACEMENT PART OR PROCEDURE	NECESSARY PROCEDURES	EFFECTS/INOPERATIVE WHEN NOT PERFORMED	LINK
Tire pressure warning ECU and receiver (Electrical key and tire pressure monitoring system receiver assembly)	• Register transmitter ID • Initialize tire pressure warning system	• When DTC detection conditions of "transmitter ID not received" DTC are met, TPWS indicator blinks for 1 minute, and then illuminates. • Tire pressure warning function	INFO for Registration INFO for Initialization

NOTICE:

When replacing the tire pressure warning ECU and receiver, read the transmitter IDs stored in the old ECU using the Techstream and write them down before removal.

Click here INFO

PROCEDURE

1. REMOVE TONNEAU COVER ASSEMBLY

Click here INFO

2. REMOVE REAR NO. 1 FLOOR BOARD

Click here INFO

3. REMOVE DECK BOARD RETAINER

Click here INFO

4. REMOVE DECK FLOOR BOX LH (w/o Spare Tire)

Click here INFO

5. REMOVE REAR DECK FLOOR BOX (w/ Compact Spare Tire)

Click here INFO

6. REMOVE DECK FLOOR BOX LH (w/ Compact Spare Tire)

Click here INFO

7. REMOVE DECK FLOOR BOX RH (w/ Full Size Spare Tire)

Click here INFO

8. REMOVE DECK FLOOR BOX LH (w/ Full Size Spare Tire)

Click here INFO

9. REMOVE DECK TRIM SERVICE HOLE COVER

Click here INFO

10. REMOVE LUGGAGE HOLD BELT STRIKER ASSEMBLY (for Rear Side)

Click here INFO

11. REMOVE REAR DECK TRIM COVER

Click here INFO

12. REMOVE REAR SEAT HEADREST ASSEMBLY

Click here INFO

13. DISCONNECT REAR CENTER SEAT OUTER BELT ASSEMBLY

Click here INFO

14. REMOVE REAR SEATBACK ASSEMBLY LH

Click here INFO

15. REMOVE REAR SEAT CUSHION ASSEMBLY

Click here INFO

16. REMOVE REAR SEAT CUSHION LOCK HOOK

Click here INFO

17. REMOVE REAR DOOR SCUFF PLATE LH

Click here INFO

18. DISCONNECT REAR DOOR OPENING TRIM WEATHERSTRIP LH

Click here INFO

19. REMOVE REAR UNDER SIDE COVER LH

Click here INFO

20. REMOVE REAR SEATBACK HINGE SUB-ASSEMBLY LH

Click here INFO

21. REMOVE REAR SEAT SIDE GARNISH LH

Click here INFO

22. REMOVE LUGGAGE HOLD BELT STRIKER ASSEMBLY (for LH Side)

Click here INFO

23. REMOVE ROPE HOOK (w/o Blind Spot Monitor System)

Click here INFO

24. REMOVE NO. 2 ROPE HOOK (w/o Blind Spot Monitor System)

Click here INFO

25. REMOVE NO. 1 TONNEAU COVER HOLDER CAP (w/ Blind Spot Monitor System)

Click here INFO

26. REMOVE TONNEAU COVER HOOK A (w/ Blind Spot Monitor System)

Click here INFO

27. REMOVE NO. 1 LUGGAGE COMPARTMENT LIGHT ASSEMBLY

Click here INFO

28. REMOVE DECK TRIM SIDE PANEL ASSEMBLY LH

Click here INFO

29. REMOVE ROOF SIDE INNER GARNISH ASSEMBLY LH

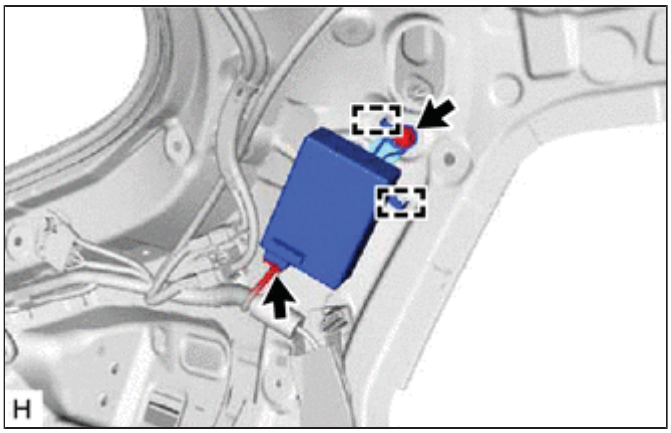
Click here INFO

30. REMOVE TIRE PRESSURE WARNING ECU AND RECEIVER

NOTICE:

- Do not drop, strike or otherwise subject the tire pressure warning ECU and receiver to impact.
- If the tire pressure warning ECU and receiver is subjected to an impact, replace it with a new one.

(a) Remove the bolt.



(b) Disengage the 2 guides.

(c) Disconnect the connector to remove the tire pressure warning ECU and receiver.

Last Modified: 01-14-2019	6.8:8.0.48	**Doc ID:** RM100000000U2HK
Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 - 12/2018]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING SYSTEM: B1247; Tire Pressure Monitor Receiver Communication Stop; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

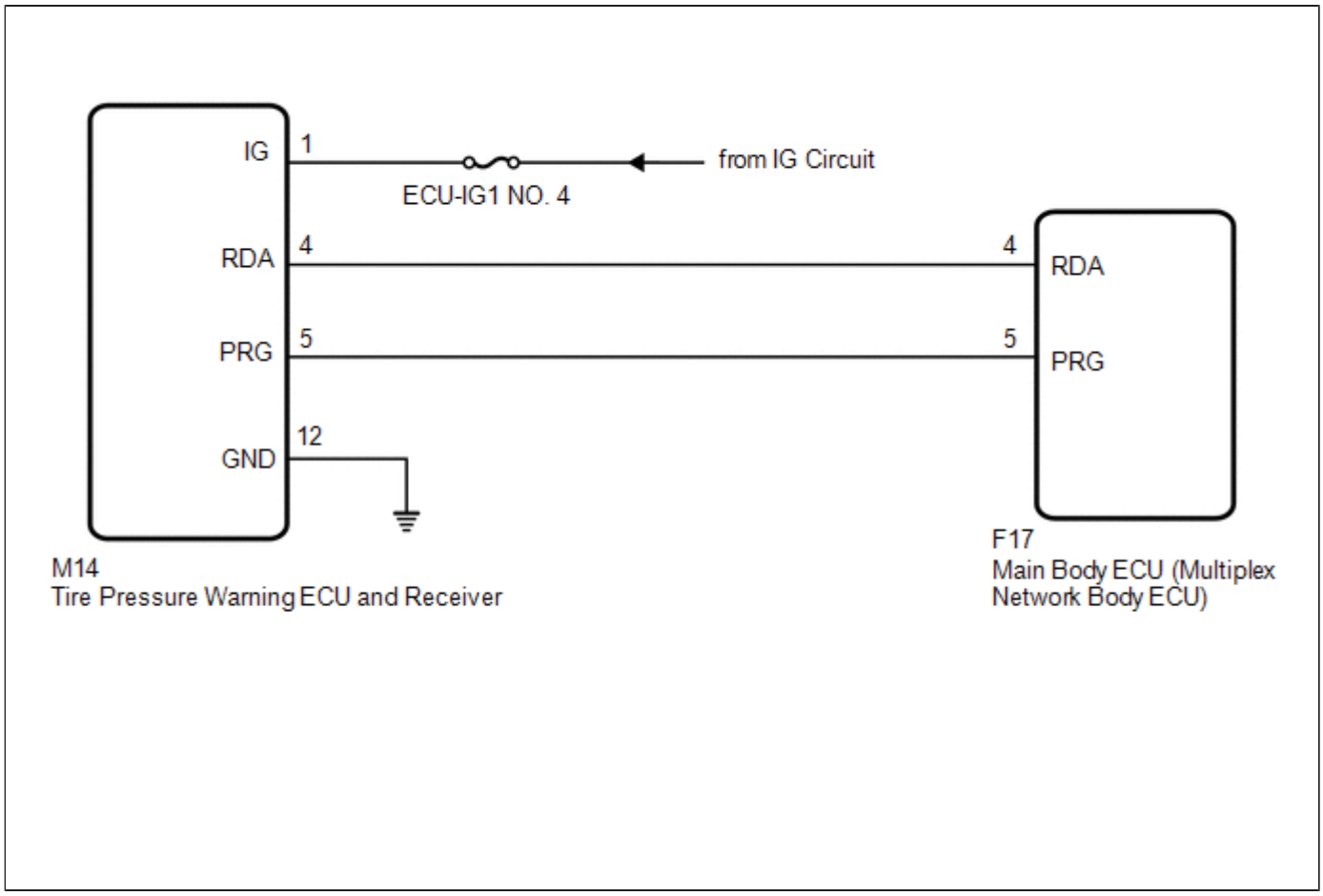
DTC	**B1247**	**Tire Pressure Monitor Receiver Communication Stop**

DESCRIPTION

The main body ECU (multiplex network body ECU) and tire pressure warning ECU and receiver are connected using 2 direct lines that they use to communicate with each other.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	NOTE
B1247	Tire Pressure Monitor Receiver Communication Stop	In diagnostic mode, an applicable RDA signal cannot be received within 10 seconds after a PRG signal is sent from the main body ECU (multiplex network body ECU).	• Tire pressure warning ECU and receiver • Wire harness or connector • Main body ECU (multiplex network body ECU)	This DTC is for main body ECU (multiplex network body ECU)

WIRING DIAGRAM



CAUTION / NOTICE / HINT

NOTICE:

- When replacing the tire pressure warning ECU and receiver, read the transmitter IDs stored in the old ECU using the Techstream and write them down before removal.
- It is necessary to perform initialization INFO after registration INFO of the transmitter IDs into the tire pressure warning ECU and receiver after the ECU has been replaced.
- Before replacing the main body ECU (multiplex network body ECU), refer to Registration.

Click here INFO

HINT:

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

PROCEDURE

1.	**CHECK HARNESS AND CONNECTOR (MAIN BODY ECU (MULTIPLEX NETWORK BODY ECU) - TIRE PRESSURE WARNING ECU AND RECEIVER)**

(a) Disconnect the M14 tire pressure warning ECU and receiver connector.

(b) Disconnect the F17 main body ECU (multiplex network body ECU) connector.

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

Standard Resistance:

EWD INFO

Click Location & Routing(M14)
Click Location & Routing(F17)
Click Connector(M14)
Click Connector(F17)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
M14-4 (RDA) - F17-4 (RDA)	Always	Below 1 Ω
M14-4 (RDA) or F17-4 (RDA) - Body ground	Always	10 kΩ or higher

NG ▶ REPAIR OR REPLACE HARNESS OR CONNECTOR

OK ▼

2.	**CHECK HARNESS AND CONNECTOR (POWER SOURCE OF TIRE PRESSURE WARNING ECU AND RECEIVER)**

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

Standard Resistance:

EWD INFO

Click Location & Routing(M14)
Click Connector(M14)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
M14-12 (GND) - Body ground	Always	Below 1 Ω

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

Standard Voltage:

EWD INFO

Click Location & Routing(M14)
Click Connector(M14)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
M14-1 (IG) - Body ground	Power switch on (IG)	10 to 16 V

NG ▶ REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

3.	**REPLACE TIRE PRESSURE WARNING ECU AND RECEIVER**

(a) Replace the tire pressure warning ECU and receiver.

HINT:

Click here INFO

NEXT

4.	**CLEAR DTC**

(a) Clear the DTCs.

Chassis > Tire Pressure Monitor > Clear DTCs

NEXT

5.	**CHECK DTC OUTPUT**

(a) Turn the power switch off.

(b) Turn the power switch on (IG).

(c) Check for DTCs.

Chassis > Tire Pressure Monitor > Trouble Codes

RESULT	PROCEED TO
B1247 is not output	A
B1247 is output	B

A ▶ **END**

B ▶ **REPLACE MAIN BODY ECU (MULTIPLEX NETWORK BODY ECU)**

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Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 - 12/2018]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING SYSTEM: C2111/11-C2115/15; Transmitter ID1 Operation Stop; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

DTC	**C2111/11**	**Transmitter ID1 Operation Stop**

DTC	**C2112/12**	**Transmitter ID2 Operation Stop**

DTC	**C2113/13**	**Transmitter ID3 Operation Stop**

DTC	**C2114/14**	**Transmitter ID4 Operation Stop**

DTC	**C2115/15**	**Transmitter ID5 Operation Stop**

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 ECU and receiver stores a DTC when the tire pressure warning valve and transmitter stops transmitting signals. The signals can be forcibly transmitted by releasing the tire pressure rapidly. The stored DTCs are cleared when signal transmission resumes.

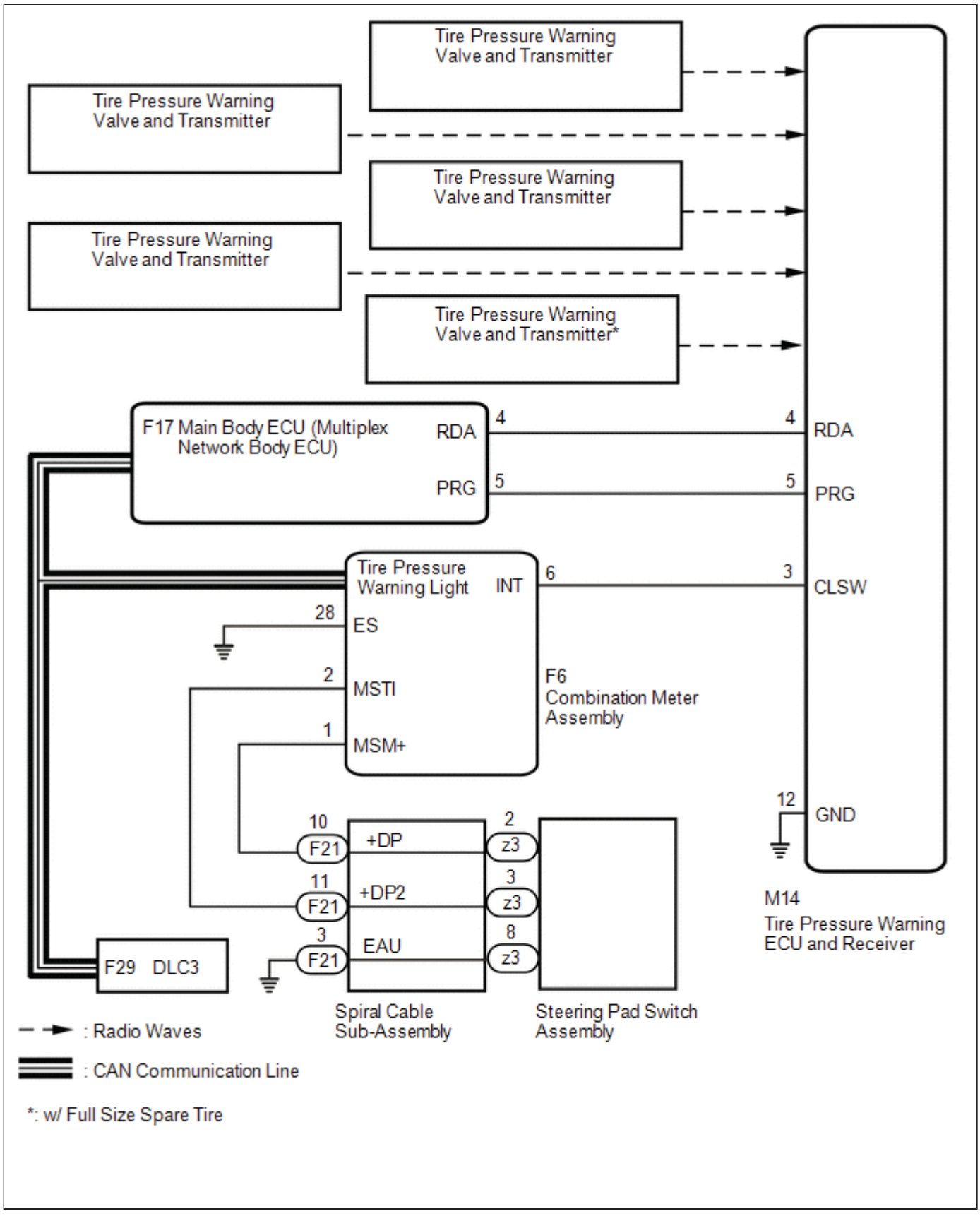
DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	NOTE
C2111/11	Transmitter ID1 Operation Stop	Tire pressure warning valve and transmitters stop transmitting signals	• Tire pressure warning valve and transmitter • Tire pressure warning ECU and receiver	-
C2112/12	Transmitter ID2 Operation Stop	Tire pressure warning valve and transmitters stop transmitting signals	• Tire pressure warning valve and transmitter • Tire pressure warning ECU and receiver	-
C2113/13	Transmitter ID3 Operation Stop	Tire pressure warning valve and transmitters stop transmitting signals	• Tire pressure warning valve and transmitter • Tire pressure warning ECU and receiver	-
			• Tire pressure warning	

C2114/14	Transmitter ID4 Operation Stop	Tire pressure warning valve and transmitters stop transmitting signals	valve and transmitter • Tire pressure warning ECU and receiver	-
C2115/15	Transmitter ID5 Operation Stop	Tire pressure warning valve and transmitters stop transmitting signals	• Tire pressure warning valve and transmitter • Tire pressure warning ECU and receiver	w/ Full Size Spare Tire

HINT:

It is necessary to perform the following procedure to identify the tire pressure warning valve and transmitter that is malfunctioning because it cannot be identified by the output DTC.

WIRING DIAGRAM



PROCEDURE

1.	PERFORM FORCED TRANSMISSION OF TRANSMITTER ID OF ALL WHEELS

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

Click here INFO INFO

(b) Turn the power switch off.

(c) Connect the Techstream to the DLC3.

(d) Turn the power switch on (IG).

(e) Turn the Techstream on.

(f) Enter the following menus: Chassis / Tire Pressure Monitor / Data List.

(g) Check the values by referring to the table below.

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	If N/A is displayed, data has not been received.*1
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	If N/A is displayed, data has not been received.*1
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	If N/A is displayed, data has not been received.*1
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	If N/A is displayed, data has not been received.*1

ID 5 Tire Inflation Pressure	ID5 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	• If N/A is displayed, data has not been received.*1 • *2

HINT:

- *1: It may take a few minutes until the values are displayed. If the values are not displayed after a few minutes, perform troubleshooting according to the inspection procedure for DTCs C2121/21 to C2124/24 (C2125/25: w/ Full Size Spare Tire).

  Click here INFO
- *2: w/ Full Size Spare Tire

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
ID 5 Tire Inflation Pressure

(h) Rapidly reduce the tire pressure for each wheel at least 40 kPa (0.4 kgf/cm^2, 5.8 psi) within 30 seconds.

(1) Check that each "ID Tire Inflation Pressure" value displayed on the Techstream has changed.

OK:

Each "ID Tire Inflation Pressure" value displayed on the Techstream changed to the actual tire inflation pressure value.

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.

(2) After confirming that all of the tire "ID Tire Inflation Pressure" values displayed on the Techstream have changed, set the tire pressure to the appropriate specified values.

HINT:

If an "ID Tire Inflation Pressure" value displayed on the Techstream has not changed after rechecking, inspect for another problem.

Click here INFO

OK ▶ END

NG ▶ GO TO TRANSMITTER AND RECEIVER INSPECTION PROCEDURE

Last Modified: 01-14-2019	6.8:8.0.48	**Doc ID:** RM100000000U2HM
Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 - 12/2018]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING SYSTEM: C2121-C2125,C2181-C2185; No Signal from Transmitter ID1; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

DTC	**C2121**	**No Signal from Transmitter ID1**

DTC	**C2122**	**No Signal from Transmitter ID2**

DTC	**C2123**	**No Signal from Transmitter ID3**

DTC	**C2124**	**No Signal from Transmitter ID4**

DTC	**C2125**	**No Signal from Transmitter ID5**

DTC	**C2181**	**Transmitter ID1 not Received (Test Mode DTC)**

DTC	**C2182**	**Transmitter ID2 not Received (Test Mode DTC)**

DTC	**C2183**	**Transmitter ID3 not Received (Test Mode DTC)**

DTC	**C2184**	**Transmitter ID4 not Received (Test Mode DTC)**

DTC	**C2185**	**Transmitter ID5 not Received (Test Mode DTC)**

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.

HINT:

When no transmitter ID is received from a tire pressure warning valve and transmitter for 20 minutes or more while the vehicle speed is more than 40 km/h (25 mph), or no transmitter ID is received from all of the tire pressure warning valve and transmitters for 20 minutes or more, DTCs from C2121 to C2124 (C2125: w/ Full Size Spare Tire) are stored.

DTCs C2121 to C2124 (C2125: w/ Full Size Spare Tire) can only be cleared by using the Techstream. DTCs C2181 to C2184 (C2185: w/ Full Size Spare Tire) can be cleared when the tire pressure warning valve and transmitter sends a forced transmission signal or test mode ends. DTCs C2181 to C2184 (C2185: w/ Full Size Spare Tire) are output only in test mode.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	NOTE
C2121	No Signal from Transmitter ID1	Either of the following conditions (a) or (b) is met: (a) When all conditions below are met: • Tire pressure warning valve and transmitter is not in stop mode. • Any transmitter ID is not received from tire pressure warning valve and transmitters. • Vehicle speed is more than 40 km/h (25 mph) or no vehicle speed signal is received for 20 minutes or more. (b) When both conditions below are met: • Tire pressure warning valve and transmitter is not in stop mode. • No transmitter ID is received from tire pressure warning valve and transmitters for 20 minutes or more.	• Tire pressure warning valve and transmitter • Tire pressure warning ECU and receiver	DTC: 21
C2122	No Signal from Transmitter ID2	Either of the following conditions (a) or (b) is met: (a) When all conditions below are met: • Tire pressure warning valve and transmitter is not in stop mode. • Any transmitter ID is not received from tire pressure warning valve and transmitters. • Vehicle speed is more than 40 km/h (25 mph) or no vehicle speed signal is received for 20 minutes or more. (b) When both conditions below are met: • Tire pressure warning valve and transmitter is not in stop mode. • No transmitter ID is received from tire	• Tire pressure warning valve and transmitter • Tire pressure warning ECU and receiver	DTC: 22

		pressure warning valve and transmitters for 20 minutes or more.		
C2123	No Signal from Transmitter ID3	Either of the following conditions (a) or (b) is met: (a) When all conditions below are met: • Tire pressure warning valve and transmitter is not in stop mode. • Any transmitter ID is not received from tire pressure warning valve and transmitters. • Vehicle speed is more than 40 km/h (25 mph) or no vehicle speed signal is received for 20 minutes or more. (b) When both conditions below are met: • Tire pressure warning valve and transmitter is not in stop mode. • No transmitter ID is received from tire pressure warning valve and transmitters for 20 minutes or more.	• Tire pressure warning valve and transmitter • Tire pressure warning ECU and receiver	DTC: 23
C2124	No Signal from Transmitter ID4	Either of the following conditions (a) or (b) is met: (a) When all conditions below are met: • Tire pressure warning valve and transmitter is not in stop mode. • Any transmitter ID is not received from tire pressure warning valve and transmitters. • Vehicle speed is more than 40 km/h (25 mph) or no vehicle speed signal is received for 20 minutes or more. (b) When both conditions below are met: • Tire pressure warning valve and transmitter is not in stop mode. • No transmitter ID is received from tire pressure warning valve and transmitters for 20 minutes or more.	• Tire pressure warning valve and transmitter • Tire pressure warning ECU and receiver	DTC: 24
C2125	No Signal from Transmitter ID5	Either of the following conditions (a) or (b) is met: (a) When all conditions below are met: • Tire pressure warning valve and transmitter is not in stop mode. • Any transmitter ID is not received from tire pressure warning valve and transmitters. • Vehicle speed is more than 40 km/h (25 mph) or no vehicle speed signal is	• Tire pressure warning valve and transmitter • Tire pressure	• DTC: 25 • w/ Full Size

		received for 20 minutes or more. (b) When both conditions below are met: • Tire pressure warning valve and transmitter is not in stop mode. • No transmitter ID is received from tire pressure warning valve and transmitters for 20 minutes or more.	warning ECU and receiver	Spare Tire
C2181	Transmitter ID1 not Received (Test Mode DTC)	Test mode procedure is performed.	• Tire pressure warning valve and transmitter • Tire pressure warning ECU and receiver	DTC: 81
C2182	Transmitter ID2 not Received (Test Mode DTC)	Test mode procedure is performed.	• Tire pressure warning valve and transmitter • Tire pressure warning ECU and receiver	DTC: 82
C2183	Transmitter ID3 not Received (Test Mode DTC)	Test mode procedure is performed.	• Tire pressure warning valve and transmitter • Tire pressure warning ECU and receiver	DTC: 83
C2184	Transmitter ID4 not Received (Test Mode DTC)	Test mode procedure is performed.	• Tire pressure warning valve and transmitter • Tire pressure warning ECU and receiver	DTC: 84
C2185	Transmitter ID5 not Received (Test Mode DTC)	Test mode procedure is performed.	• Tire pressure warning valve and transmitter • Tire pressure warning ECU and receiver	• DTC: 85 • w/ Full Size Spare Tire

NOTICE:

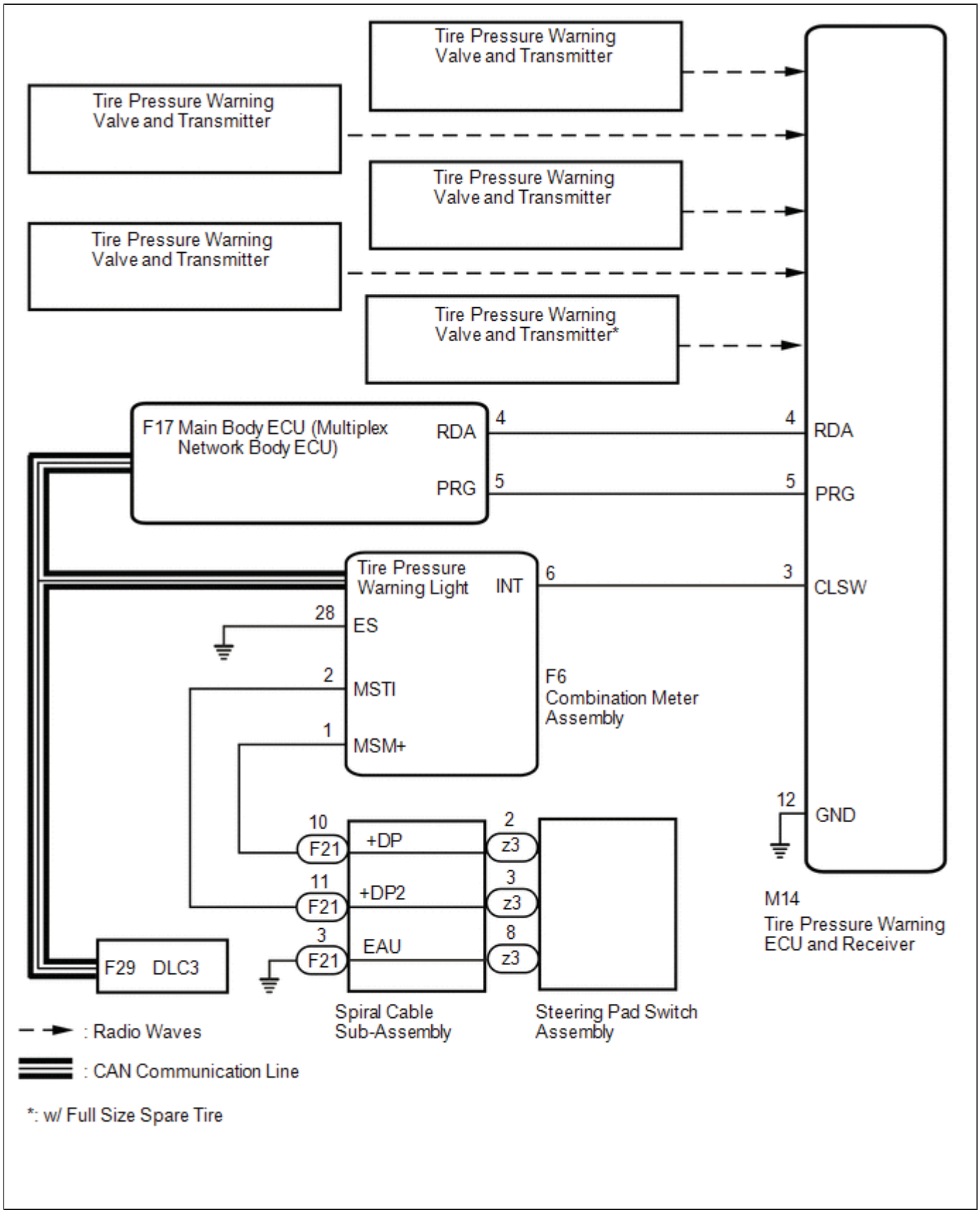
When DTCs C2121 to C2124 (C2125: w/ Full Size Spare Tire) are set, DTC C2179 may be set simultaneously. In such

cases, troubleshoot DTCs C2121 to C2124 (C2125: w/ Full Size Spare Tire) first, then troubleshoot DTC C2179.

HINT:

It is necessary to perform the following procedure to identify the tire pressure warning valve and transmitter that is malfunctioning because it cannot be identified by the output DTC.

WIRING DIAGRAM



CAUTION / NOTICE / HINT

NOTICE:

- When replacing the tire pressure warning ECU and receiver, read the transmitter IDs stored in the old ECU using the Techstream and write them down before removal.

- 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 1 minute due to interfering radio frequencies.

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

NG ▶ **CHECK IF ANY DEVICE IS INSTALLED BY USER**

OK ▼

2.	IDENTIFY TRANSMITTER CORRESPONDING TO DTC

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

Click here INFO INFO

(b) Turn the power switch off.

(c) Connect the Techstream to the DLC3.

(d) Turn the power switch on (IG).

(e) Turn the Techstream on.

(f) Enter the following menus: Chassis / Tire Pressure Monitor / Data List.

(g) Display the "ID Tire Inflation Pressure" value for each wheel using the Techstream.

(h) Rapidly reduce the tire pressure for each wheel at least 40 kPa (0.4 kg/cm2, 5.8 psi) within 30 seconds. If the "ID Tire Inflation Pressure" value displayed on the Techstream does not change, the tire pressure warning valve and transmitter corresponding to the unchanged "ID Tire Inflation Pressure" value was the cause of the output DTC.

HINT:

- Identify the malfunctioning tire pressure warning valve and transmitter by repeatedly decreasing the tire pressure for each tire.
- Record which "ID Tire Inflation Pressure" value corresponds to each tire.

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	If N/A is displayed, data has not been received.*1
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	If N/A is displayed, data has not been received.*1
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	If N/A is displayed, data has not been received.*1
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	If N/A is displayed, data has not been received.*1
ID 5 Tire Inflation Pressure	ID5 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	• If N/A is displayed, data has not been received.*1 • *2

HINT:

- *1: It may take a few minutes until the values are displayed.
- *2: w/ Full Size Spare Tire

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
ID 5 Tire Inflation Pressure

(i) Check the Data List.

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.
- Record the transmitter IDs and positions of transmitters that are normal.

(j) After confirming that the "ID Tire Inflation Pressure" value for one tire has changed, repeat this procedure one by one. Identify the transmitter that corresponds to the DTC.

RESULT	PROCEED TO
One or more transmitter is abnormal	A
All transmitters are normal	B

B ▶ **END**

A

3.	**CHECK TRANSMITTER ID**

(a) Turn the power switch off.

(b) Connect the Techstream to the DLC3.

(c) Turn the power switch on (IG).

(d) Turn the Techstream on.

(e) Enter the following menus: Chassis / Tire Pressure Monitor / Data List.

(f) Check the values by referring to the table below.

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.: FFFFFFF*1	ID No. registered for transmitter ID1 displayed	-
Registered ID 2 Code	Registered ID2 code	min.: 0 max.: FFFFFFF*1	ID No. registered for transmitter ID2 displayed	-
Registered ID 3 Code	Registered ID3 code	min.: 0 max.: FFFFFFF*1	ID No. registered for transmitter ID3 displayed	-
Registered ID 4 Code	Registered ID4 code	min.: 0 max.: FFFFFFF*1	ID No. registered for transmitter ID4 displayed	-
Registered ID 5 Code	Registered ID5 code	min.: 0 max.: FFFFFFF*1	ID No. registered for transmitter ID5 displayed	*2

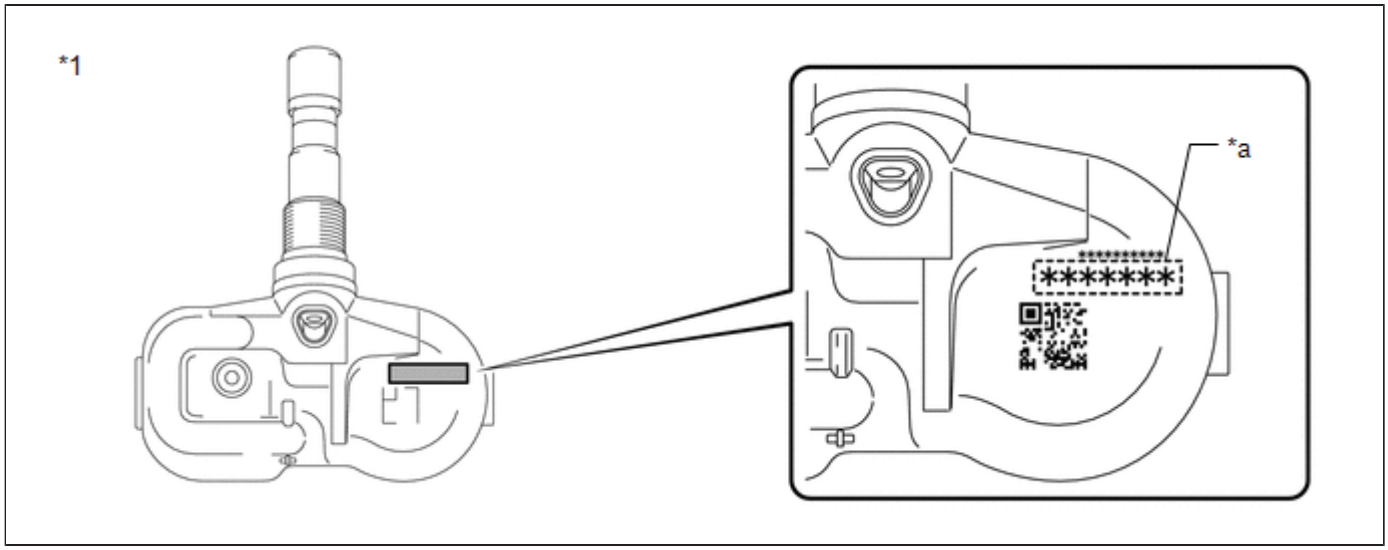
HINT:

- *1: Displayed only when the ID No. is not registered.
- *2: w/ Full Size Spare Tire

Chassis > Tire Pressure Monitor > Data List

TESTER DISPLAY
Registered ID 1 Code
Registered ID 2 Code
Registered ID 3 Code
Registered ID 4 Code
Registered ID 5 Code

(g) Check the ID number on the identified transmitter by removing it from the tire and wheel.



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

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

RESULT	PROCEED TO
Match	A
Do not match	B

B ▶ **GO TO STEP 5**

A

4.	**REPLACE TIRE PRESSURE WARNING VALVE AND TRANSMITTER**

(a) Replace the tire pressure warning valve and transmitter.

HINT:

Click here INFO

NEXT

5.	REGISTRATION OF TRANSMITTER ID

(a) Perform registration.

Click here INFO

NEXT

6.	PERFORM INITIALIZATION

(a) Perform initialization.

HINT:

Click here INFO

NEXT

7.	CONFIRM TIRE INFLATION PRESSURE (DATA LIST)

(a) Turn the power switch off.

(b) Connect the Techstream to the DLC3.

(c) Turn the power switch on (IG).

(d) Turn the Techstream on.

(e) Enter the following menus: Chassis / Tire Pressure Monitor / Data List.

(f) Check the values by referring to the table below.

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	If N/A is displayed, data has not been received.*1

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	If N/A is displayed, data has not been received.*1
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	If N/A is displayed, data has not been received.*1
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	If N/A is displayed, data has not been received.*1
ID 5 Tire Inflation Pressure	ID5 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	• If N/A is displayed, data has not been received.*1 • *2

HINT:

- *1: 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.
- *2: w/ Full Size Spare Tire

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

ID 5 Tire Inflation Pressure

RESULT	PROCEED TO
Tire pressure values are not displayed.	A
All tire pressure readings are equal to specified values.	B

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

B ▶ **END**

Last Modified: 01-14-2019	6.8:8.0.48	**Doc ID:** RM100000000U2HI
Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 - 12/2018]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING SYSTEM: C2126; Transmitter ID not Received in Main Mode; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

DTC	**C2126**	**Transmitter ID not Received in Main Mode**

DESCRIPTION

After all transmitter IDs are registered, DTC C2126 is stored t in the tire pressure warning ECU and receiver and the tire pressure warning light blinks for 1 minute and then illuminates.

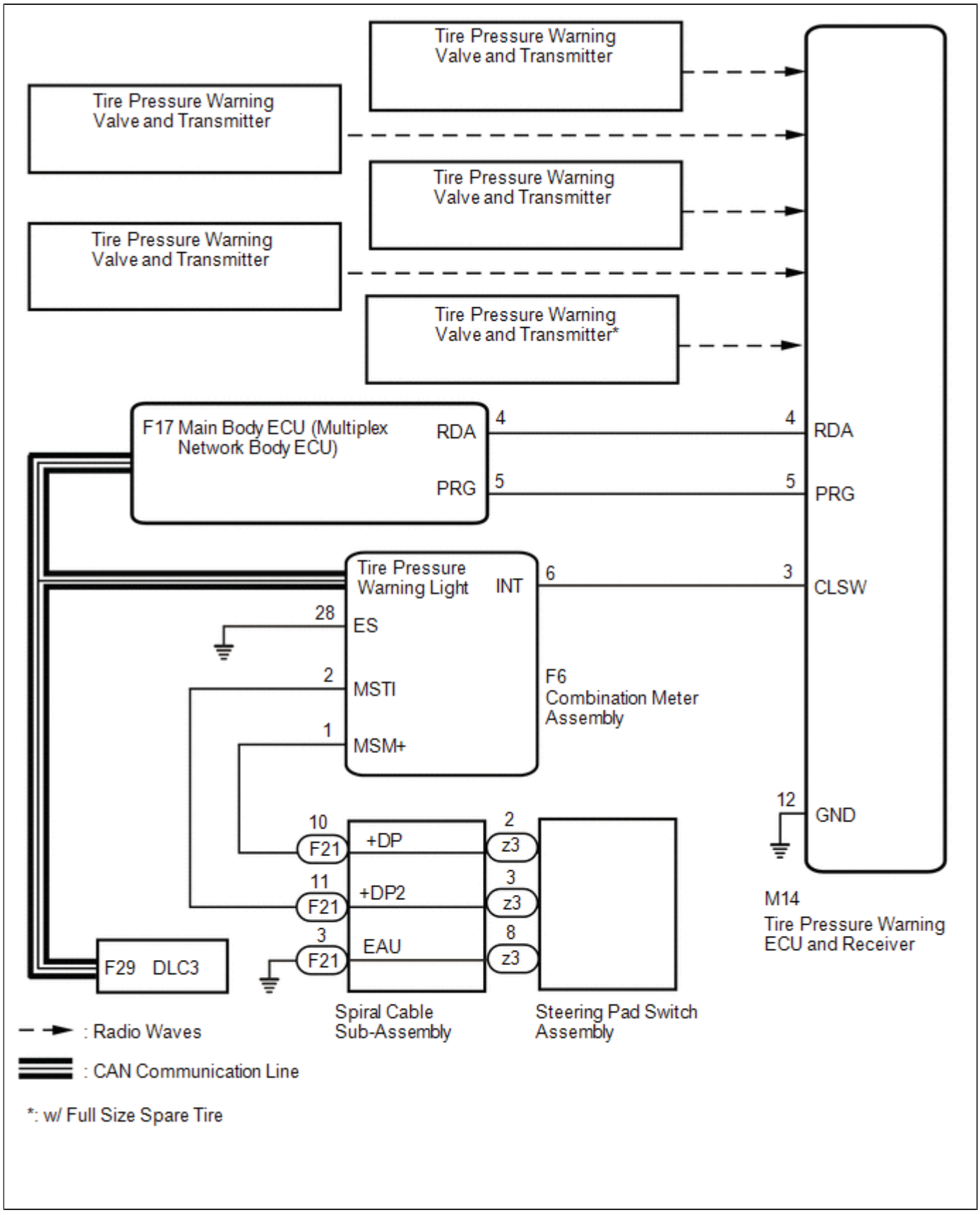
When the tire pressure warning ECU and receiver successfully receives radio waves from all the transmitters whose IDs are stored in the ECU, DTC C2126 is cleared and the tire pressure warning light goes off.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	NOTE
C2126	Transmitter ID not Received in Main Mode	After transmitter ID registration is completed, ECU does not receive radio waves from transmitters whose IDs are stored in ECU.	• Transmitter ID registration failure • Tire pressure warning valve and transmitter • Tire pressure warning ECU and receiver	DTC: 26

HINT:

The purpose of this DTC is to help prevent delivering a vehicle that has incorrectly registered transmitter IDs. After all IDs are registered, DTC C2126 is detected and the tire pressure warning light blinks for 1 minute and then illuminates. If the tire pressure warning light does not go off after a little while, the transmitter IDs may be incorrectly registered.

WIRING DIAGRAM



CAUTION / NOTICE / HINT

NOTICE:

- When replacing the tire pressure warning ECU and receiver, read the transmitter IDs stored in the old ECU using the Techstream and write them down before removal.

- 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.	**IDENTIFY TRANSMITTER NOT RECEIVED**

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

Click here INFO INFO

(b) Turn the power switch off.

(c) Connect the Techstream to the DLC3.

(d) Turn the power switch on (IG).

(e) Turn the Techstream on.

(f) Enter the following menus: Chassis / Tire Pressure Monitor / Data List.

(g) Display the "ID Tire Inflation Pressure" value for each wheel using the Techstream.

(h) Rapidly reduce the tire pressure for each wheel at least 40 kPa (0.4 kg/cm2, 5.8 psi) within 30 seconds. If the "ID Tire Inflation Pressure" value displayed on the Techstream does not change, the tire pressure warning valve and transmitter corresponding to the unchanged "ID Tire Inflation Pressure" value was the cause of the output DTC.

HINT:

- Identify the malfunctioning tire pressure warning valve and transmitter by repeatedly decreasing the tire pressure for each tire.
- Record which "ID Tire Inflation Pressure" value corresponds to each tire.

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	If N/A is displayed, data has not been received.*1
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	If N/A is displayed, data has not been received.*1

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	If N/A is displayed, data has not been received.*1
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	If N/A is displayed, data has not been received.*1
ID 5 Tire Inflation Pressure	ID5 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	• If N/A is displayed, data has not been received.*1 • *2

HINT:

- *1: It may take a few minutes until the values are displayed.
- *2: w/ Full Size Spare Tire

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
ID 5 Tire Inflation Pressure

(i) Check the Data List.

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.
- Record the transmitter IDs and positions of transmitters that are normal.

(j) After confirming that the "ID Tire Inflation Pressure" value for one tire has changed, repeat this procedure one by one. Identify the transmitter not received.

RESULT	PROCEED TO
One or more transmitter is abnormal	A
All transmitters are normal	B

B ▶ END

A ▼

2.	CHECK TRANSMITTER ID

(a) Turn the power switch off.

(b) Connect the Techstream to the DLC3.

(c) Turn the power switch on (IG).

(d) Turn the Techstream on.

(e) Enter the following menus: Chassis / Tire Pressure Monitor / Data List.

(f) Check the values by referring to the table below.

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.: FFFFFFF*1	ID No. registered for transmitter ID1 displayed	-
Registered ID 2 Code	Registered ID2 code	min.: 0 max.: FFFFFFF*1	ID No. registered for transmitter ID2 displayed	-
Registered ID 3 Code	Registered ID3 code	min.: 0 max.: FFFFFFF*1	ID No. registered for transmitter ID3 displayed	-
Registered ID 4	Registered ID4	min.: 0	ID No. registered for transmitter ID4	

Code	code	max.: FFFFFFF*1	displayed	-
Registered ID 5 Code	Registered ID5 code	min.: 0 max.: FFFFFFF*1	ID No. registered for transmitter ID5 displayed	*2

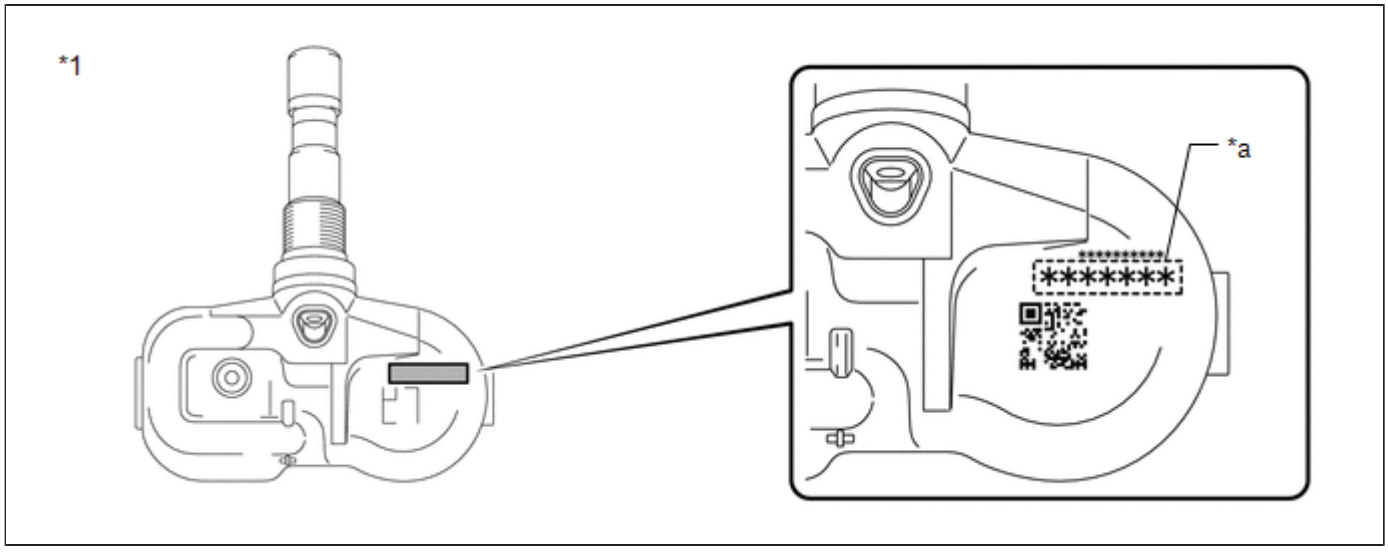
HINT:

- *1: Displayed only when the ID No. is not registered.
- *2: w/ Full Size Spare Tire

Chassis > Tire Pressure Monitor > Data List

TESTER DISPLAY
Registered ID 1 Code
Registered ID 2 Code
Registered ID 3 Code
Registered ID 4 Code
Registered ID 5 Code

(g) Check the ID number on the identified transmitter by removing it from the tire and wheel.



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

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

RESULT	PROCEED TO

Match	A
Do not match	B

B GO TO STEP 4

A

3.	REPLACE TIRE PRESSURE WARNING VALVE AND TRANSMITTER

(a) Replace the tire pressure warning valve and transmitter.

HINT:

Click here INFO

NEXT

4.	REGISTRATION OF TRANSMITTER ID

(a) Perform registration.

Click here INFO

NEXT

5.	PERFORM INITIALIZATION

(a) Perform initialization.

HINT:

Click here INFO

NEXT

6.	CONFIRM TIRE INFLATION PRESSURE (DATA LIST)

(a) Turn the power switch off.

(b) Connect Techstream to the DLC3.

(c) Turn the power switch on (IG).

(d) Turn the Techstream on.

(e) Enter the following menus: Chassis / Tire Pressure Monitor / Data List.

(f) Check the values by referring to the table below.

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	If N/A is displayed, data has not been received.*1
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	If N/A is displayed, data has not been received.*1
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	If N/A is displayed, data has not been received.*1
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	If N/A is displayed, data has not been received.*1

ID 5 Tire Inflation Pressure	ID5 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	• If N/A is displayed, data has not been received.*1 • *2

HINT:

- *1: 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.
- *2: w/ Full Size Spare Tire

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
ID 5 Tire Inflation Pressure

RESULT	PROCEED TO
Tire pressure values are not displayed.	A
All tire pressure readings are equal to specified values.	B

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

B ▶ **END**

Last Modified: 01-14-2019	6.8:8.0.48	**Doc ID:** RM100000000U2H6
Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 - 12/2018]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING SYSTEM: C2141-C2145; Transmitter ID1 Error; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

DTC	**C2141**	**Transmitter ID1 Error**

DTC	**C2142**	**Transmitter ID2 Error**

DTC	**C2143**	**Transmitter ID3 Error**

DTC	**C2144**	**Transmitter ID4 Error**

DTC	**C2145**	**Transmitter ID5 Error**

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.

When the internal circuit of a tire pressure warning valve and transmitter is malfunctioning, one of these DTCs is output.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	NOTE
C2141	Transmitter ID1 Error	If an "ERROR" signal is received 3 times consecutively, the tire pressure warning valve and transmitter will be judged as defective and a DTC will be output. This will happen in situations where the inflation pressure is outside the specified range (0 to 380 kPa (0 to 3.9 kgf/cm^2, 0 to 55 psi)), the temperature inside the tire is outside the specified range (-40 to 120°C (-40 to 248°F)), or an error occurs in the tire pressure warning valve and transmitter.	• Tire pressure warning valve and transmitter • Tire pressure warning ECU and receiver	DTC: 41
C2142	Transmitter ID2 Error	If an "ERROR" signal is received 3 times consecutively, the tire pressure warning valve and transmitter will be judged as defective and a DTC will be output. This will happen in situations where the inflation pressure is	• Tire pressure warning valve and transmitter • Tire	DTC: 42

		outside the specified range (0 to 380 kPa (0 to 3.9 kgf/cm^2, 0 to 55 psi)), the temperature inside the tire is outside the specified range (-40 to 120°C (-40 to 248°F)), or an error occurs in the tire pressure warning valve and transmitter.	pressure warning ECU and receiver	
C2143	Transmitter ID3 Error	If an "ERROR" signal is received 3 times consecutively, the tire pressure warning valve and transmitter will be judged as defective and a DTC will be output. This will happen in situations where the inflation pressure is outside the specified range (0 to 380 kPa (0 to 3.9 kgf/cm^2, 0 to 55 psi)), the temperature inside the tire is outside the specified range (-40 to 120°C (-40 to 248°F)), or an error occurs in the tire pressure warning valve and transmitter.	• Tire pressure warning valve and transmitter • Tire pressure warning ECU and receiver	DTC: 43
C2144	Transmitter ID4 Error	If an "ERROR" signal is received 3 times consecutively, the tire pressure warning valve and transmitter will be judged as defective and a DTC will be output. This will happen in situations where the inflation pressure is outside the specified range (0 to 380 kPa (0 to 3.9 kgf/cm^2, 0 to 55 psi)), the temperature inside the tire is outside the specified range (-40 to 120°C (-40 to 248°F)), or an error occurs in the tire pressure warning valve and transmitter.	• Tire pressure warning valve and transmitter • Tire pressure warning ECU and receiver	DTC: 44
C2145	Transmitter ID5 Error	If an "ERROR" signal is received 3 times consecutively, the tire pressure warning valve and transmitter will be judged as defective and a DTC will be output. This will happen in situations where the inflation pressure is outside the specified range (0 to 380 kPa (0 to 3.9 kgf/cm^2, 0 to 55 psi)), the temperature inside the tire is outside the specified range (-40 to 120°C (-40 to 248°F)), or an error occurs in the tire pressure warning valve and transmitter.	• Tire pressure warning valve and transmitter • Tire pressure warning ECU and receiver	• DTC: 45 • w/ Full Size Spare Tire

HINT:

It is necessary to perform the following procedure to identify the tire pressure warning valve and transmitter that is malfunctioning because it cannot be identified by the output DTC.

CAUTION / NOTICE / HINT

NOTICE:

- When replacing the tire pressure warning ECU and receiver, read the transmitter IDs stored in the old ECU using the Techstream and write them down before removal.
- 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.	IDENTIFY TRANSMITTER CORRESPONDING TO DTC

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

Click here INFO INFO

(b) Turn the power switch off.

(c) Connect the Techstream to the DLC3.

(d) Turn the power switch on (IG).

(e) Turn the Techstream on.

(f) Enter the following menus: Chassis / Tire Pressure Monitor / Data List.

(g) Display the "ID Tire Inflation Pressure" value for each wheel using the Techstream.

(h) Rapidly reduce the tire pressure for each wheel at least 40 kPa (0.4 kg/cm2, 5.8 psi) within 30 seconds. If the "ID Tire Inflation Pressure" value displayed on the Techstream does not change, the tire pressure warning valve and transmitter corresponding to the unchanged "ID Tire Inflation Pressure" value was the cause of the output DTC.

HINT:

- Identify the malfunctioning tire pressure warning valve and transmitter by repeatedly decreasing the tire pressure for each tire.
- Record which "ID Tire Inflation Pressure" value corresponds to each tire.

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	If N/A is displayed, data has not been received.*1
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	If N/A is displayed, data has not been received.*1
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	Actual tire inflation pressure	If N/A is displayed, data has not been received.*1

		kgf/cm^2, 70 psi), Relative pressure (Gauge) / 380 kPa (3.9 kgf/cm^2, 55 psi)		
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	If N/A is displayed, data has not been received.*1
ID 5 Tire Inflation Pressure	ID5 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	• If N/A is displayed, data has not been received.*1 • *2

- *1: It may take a few minutes until the values are displayed.
- *2: w/ Full Size Spare Tire

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
ID 5 Tire Inflation Pressure

(i) Check the Data List.

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.
- Record the transmitter IDs and positions of transmitters that are normal.

(j) After confirming that the "ID Tire Inflation Pressure" value for one tire has changed, repeat this procedure one by one. Identify the transmitter that corresponds to the DTC.

(k) When all of the "ID Tire Inflation Pressure" value has changed, identify the malfunctioning tire pressure warning valve and transmitter using the recorded ID numbers and output DTCs.

RESULT	PROCEED TO
One or more transmitter is abnormal	A
All transmitters are normal	B

B ▶ END

A

2.	REPLACE TIRE PRESSURE WARNING VALVE AND TRANSMITTER

(a) Replace the identified tire pressure warning valve and transmitter with a new one.

HINT:

Click here INFO

HINT:

- Before installing a new tire pressure warning valve and transmitter, read and write down its transmitter ID.
- The IDs for the tire pressure warning valve and transmitters which are not replaced should be checked using the Techstream and recorded.

NEXT

3.	REGISTRATION OF TRANSMITTER ID

(a) Perform registration.

Click here INFO

NEXT

4.	PERFORM INITIALIZATION

(a) Perform initialization.

HINT:

Click here

INFO

NEXT

5.	CONFIRM TIRE INFLATION PRESSURE (DATA LIST)

(a) Turn the power switch off.

(b) Connect the Techstream to the DLC3.

(c) Turn the power switch on (IG).

(d) Turn the Techstream on.

(e) Enter the following menus: Chassis / Tire Pressure Monitor / Data List.

(f) Check the values by referring to the table below.

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	If N/A is displayed, data has not been received.*1
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	If N/A is displayed, data has not been received.*1
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	If N/A is displayed, data has not been received.*1
		min.: Absolute pressure (abs) / 0 kPa (0 kgf/cm^2, 0		

ID 4 Tire Inflation Pressure	ID4 tire inflation pressure	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	If N/A is displayed, data has not been received.*1
ID 5 Tire Inflation Pressure	ID5 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	• If N/A is displayed, data has not been received.*1 • *2

HINT:

- *1: 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.
- *2: w/ Full Size Spare Tire

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
ID 5 Tire Inflation Pressure

RESULT	PROCEED TO
Tire pressure values are not displayed.	A
All tire pressure readings are equal to specified values.	B

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

B ▶ **END**

Last Modified: 01-14-2019	6.8:8.0.48	**Doc ID:** RM100000000U2HH
Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 - 12/2018]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING SYSTEM: C2171/71; Transmitter ID not Registered; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

DTC	**C2171/71**	**Transmitter ID not Registered**

DESCRIPTION

The IDs of each tire pressure warning valve and transmitter are registered to the tire pressure warning ECU and receiver.

When the ECU detects that a transmitter ID code is not registered in the ECU, this DTC is stored.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	NOTE
C2171/71	Transmitter ID not Registered	Transmitter ID code is not registered. (When an ID code is unregistered for 3 minutes or more)	Tire pressure warning ECU and receiver	-

CAUTION / NOTICE / HINT

NOTICE:

- When replacing the tire pressure warning ECU and receiver, read the transmitter IDs stored in the old ECU using the Techstream and write them down before removal.
- 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 has been replaced.

PROCEDURE

1.	**CONFIRM REGISTRATION CONDITION (REGISTERED ID CODES)**

(a) Turn the power switch off.

(b) Connect the Techstream to the DLC3.

(c) Turn the power switch on (IG).

(d) Turn the Techstream on.

(e) Enter the following menus: Chassis / Tire Pressure Monitor / Data List.

(f) Check the values by referring to the table below.

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.: FFFFFFF*1	ID No. registered for transmitter ID1 displayed	-

Registered ID 2 Code	Registered ID2 code	min.: 0 max.: FFFFFFF*1	ID No. registered for transmitter ID2 displayed	-
Registered ID 3 Code	Registered ID3 code	min.: 0 max.: FFFFFFF*1	ID No. registered for transmitter ID3 displayed	-
Registered ID 4 Code	Registered ID4 code	min.: 0 max.: FFFFFFF*1	ID No. registered for transmitter ID4 displayed	-
Registered ID 5 Code	Registered ID5 code	min.: 0 max.: FFFFFFF*1	ID No. registered for transmitter ID5 displayed	*2

HINT:

- *1: Displayed only when the ID No. is not registered.
- *2: w/ Full Size Spare Tire

Chassis > Tire Pressure Monitor > Data List

TESTER DISPLAY
Registered ID 1 Code
Registered ID 2 Code
Registered ID 3 Code
Registered ID 4 Code
Registered ID 5 Code

OK:

The registered transmitter ID codes are displayed on the Techstream.

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

NG ▼

2.	**PERFORM REGISTRATION (TRANSMITTER ID)**

(a) Perform registration.

Click here INFO

NEXT

3.	PERFORM INITIALIZATION

(a) Perform initialization.

Click here INFO

NEXT

4.	CONFIRM TIRE INFLATION PRESSURE (DATA LIST)

(a) Turn the power switch off.

(b) Connect the Techstream to the DLC3.

(c) Turn the power switch on (IG).

(d) Turn the Techstream on.

(e) Enter the following menus: Chassis / Tire Pressure Monitor / Data List.

(f) Check the values by referring to the table below.

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	If N/A is displayed, data has not been received.*1
ID 2 Tire Inflation	ID2 tire inflation	min.: Absolute pressure (abs) / 0 kPa (0 kgf/cm^2, 0 psi), Relative pressure (Gauge) / 0 kPa (0 kgf/cm^2, 0 psi)	Actual tire inflation	If N/A is displayed, data

Pressure	pressure	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)	pressure	has not been received.*1
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	If N/A is displayed, data has not been received.*1
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	If N/A is displayed, data has not been received.*1
ID 5 Tire Inflation Pressure	ID5 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	• If N/A is displayed, data has not been received.*1 • *2

HINT:

- *1: 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.
- *2: w/ Full Size Spare Tire

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
ID 5 Tire Inflation Pressure

RESULT	PROCEED TO
All tire pressure readings are equal to specified values.	A
Tire pressure values are not displayed.	B

A ▶ **END**

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

Last Modified: 01-14-2019	6.8:8.0.48	**Doc ID:** RM100000000U2HD
Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 - 12/2018]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING SYSTEM: C2176/76; Receiver Error; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

DTC	**C2176/76**	**Receiver Error**

DESCRIPTION

Tire pressure warning valve and transmitter signals are transmitted to the tire pressure warning ECU and receiver in the vehicle as radio waves.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	NOTE
C2176/76	Receiver Error	Malfunction in the tire pressure warning ECU and receiver internal circuit	Tire pressure warning ECU and receiver	-

CAUTION / NOTICE / HINT

NOTICE:

- When replacing the tire pressure warning ECU and receiver, read the transmitter IDs stored in the old ECU using the Techstream and write them down before removal.
- 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 has been replaced.

PROCEDURE

1.	**CHECK DTC OUTPUT (C2176/76)**

(a) Clear the DTCs.

Click here INFO

Chassis > Tire Pressure Monitor > Clear DTCs

(b) Turn the power switch off.

(c) Turn the power switch on (IG) and check for DTCs.

Click here INFO

Chassis > Tire Pressure Monitor > Trouble Codes

OK:

DTC C2176/76 is not output.

OK ▶ **END**

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

Last Modified: 01-14-2019	6.8:8.0.48	**Doc ID:** RM100000000U2HG
Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 - 12/2018]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING SYSTEM: C2177/77; Initialization not Completed; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

DTC	**C2177/77**	**Initialization not Completed**

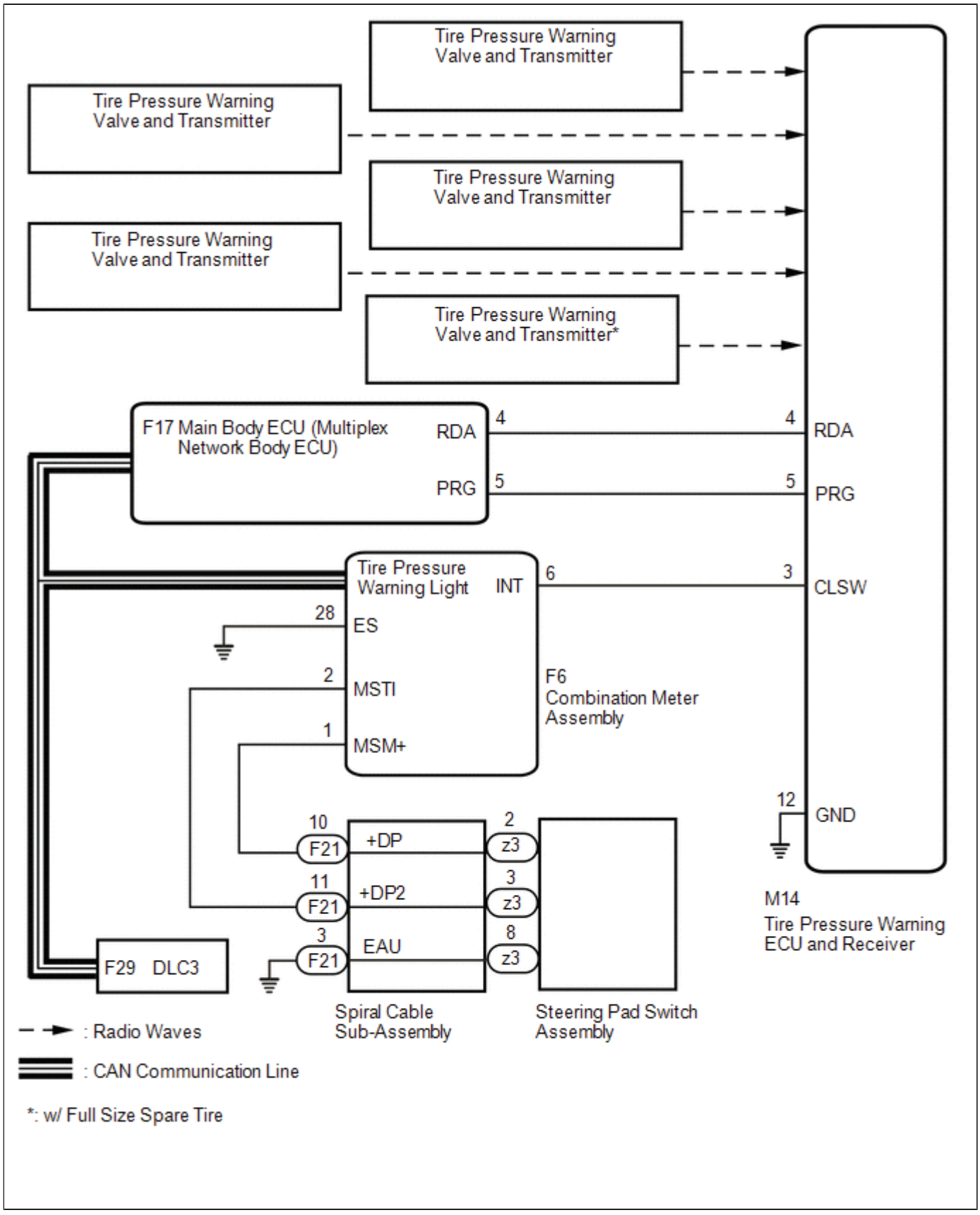
DESCRIPTION

Initialization is necessary if one of the following occurs:

- The tire pressure warning ECU and receiver is replaced.
- A tire pressure warning valve and transmitter is replaced.
- Tires with different standard tire pressures are installed.
- The tires are rotated.
- A new vehicle is delivered.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	NOTE
C2177/77	Initialization not Completed	All conditions below are met: • During initialization • Tire pressure warning valve and transmitter is not in stop mode • Signal is not received from tire pressure warning valve and transmitter for 20 minutes or more • Vehicle speed is more than 40 km/h (25 mph) for 20 minutes or more	• Tire pressure warning valve and transmitter • Wire harness or connector • Tire pressure warning ECU and receiver	-

WIRING DIAGRAM



CAUTION / NOTICE / HINT

NOTICE:

- When replacing the tire pressure warning ECU and receiver, read the transmitter IDs stored in the old ECU using the Techstream and write them down before removal.

- 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 1 minute due to interfering radio frequencies.

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

NG ▶ **CHECK IF ANY DEVICE IS INSTALLED BY USER**

OK
▼

2.	PERFORM INITIALIZATION

(a) Perform initialization.

Click here INFO

NEXT
▼

3.	CONFIRM TIRE INFLATION PRESSURE (DATA LIST)

(a) Turn the power switch off.

(b) Connect the Techstream to the DLC3.

(c) Turn the power switch on (IG).

(d) Turn the Techstream on.

(e) Enter the following menus: Chassis / Tire Pressure Monitor / Data List.

(f) Check the values by referring to the table below.

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	If N/A is displayed, data has not been received.*1
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	If N/A is displayed, data has not been received.*1
ID 3 Tire Inflation Pressure	ID 3 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	If N/A is displayed, data has not been received.*1
ID 4 Tire Inflation Pressure	ID 4 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	If N/A is displayed, data has not been received.*1
ID 5 Tire Inflation Pressure	ID5 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	• If N/A is displayed, data has not been received.*1 • *2

HINT:

- *1: 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.
- *2: w/ Full Size Spare Tire

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
ID 5 Tire Inflation Pressure

RESULT	PROCEED TO
All tire pressure readings are equal to specified values.	A
Tire pressure values are not displayed.	B

A ▶ **END**

B ▶ **GO TO DTC (C2121/21 TO C2125/25)**

Last Modified: 01-14-2019	6.8:8.0.48	**Doc ID:** RM100000000U2HJ
Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 - 12/2018]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING SYSTEM: C2179/79; Tire Pressure Monitor ECU Communication Stop; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

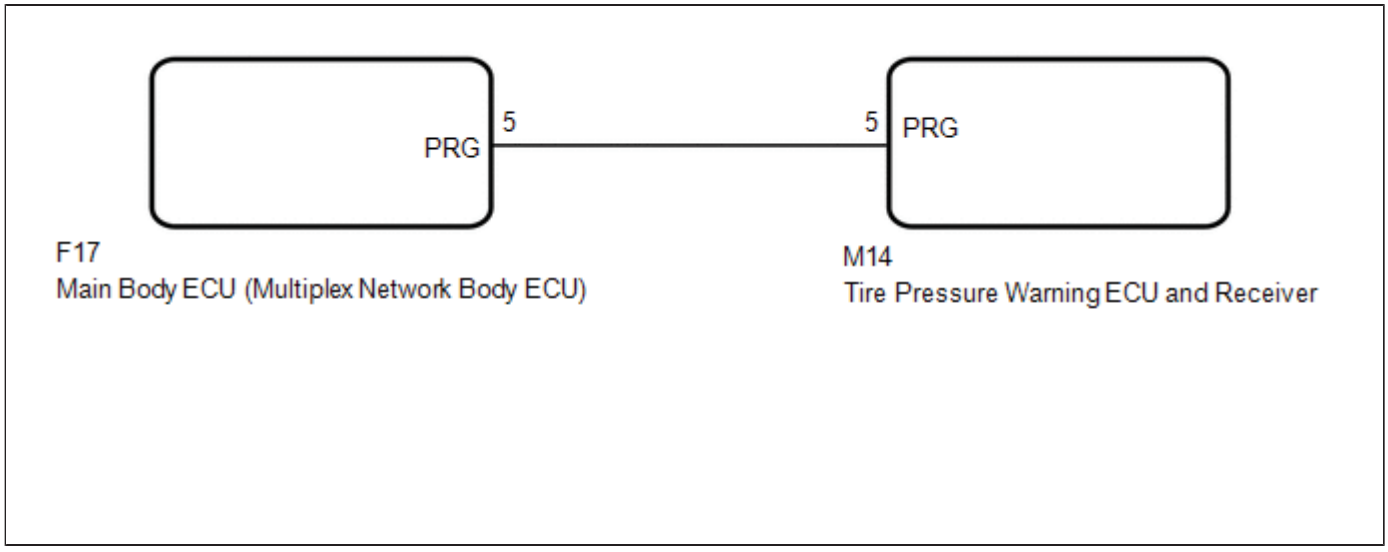
DTC	**C2179/79**	**Tire Pressure Monitor ECU Communication Stop**

DESCRIPTION

The main body ECU (multiplex network body ECU) sends signals to the tire pressure warning ECU and receiver via a direct line.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	NOTE
C2179/79	Tire Pressure Monitor ECU Communication Stop	Communication between the main body ECU (multiplex network body ECU) and tire pressure warning ECU and receiver is interrupted for 10 seconds or more.	• Main body ECU (Multiplex network body ECU) • Wire harness or connector • Tire pressure warning ECU and receiver	-

WIRING DIAGRAM



CAUTION / NOTICE / HINT

NOTICE:

- When replacing the tire pressure warning ECU and receiver, read the transmitter IDs stored in the old ECU using the Techstream and write them down before removal.
- It is necessary to perform initialization INFO after registration INFO of the transmitter IDs into the tire pressure warning ECU and receiver after the ECU has been replaced.
- Before replacing the main body ECU (multiplex network body ECU), refer to Registration.

Click here INFO

PROCEDURE

1.	**CHECK HARNESS AND CONNECTOR (TIRE PRESSURE WARNING ECU AND RECEIVER - MAIN BODY ECU (MULTIPLEX NETWORK BODY ECU))**

(a) Disconnect the M14 tire pressure warning ECU and receiver connector.

(b) Disconnect the F17 main body ECU (multiplex network body ECU) connector.

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

Standard Resistance:

EWD INFO

Click Location & Routing(M14)
Click Location & Routing(F17)
Click Connector(M14)
Click Connector(F17)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
M14-5 (PRG) - F17-5 (PRG)	Always	Below 1 Ω
M14-5 (PRG) or F17-5 (PRG) - Body ground	Always	10 kΩ or higher

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

OK
▼

2.	**REPLACE TIRE PRESSURE WARNING ECU AND RECEIVER**

(a) Replace the tire pressure warning ECU and receiver.

Click here INFO

NEXT
▼

3.	**CHECK DTC OUTPUT**

(a) Clear the DTCs.

Click here INFO

Chassis > Tire Pressure Monitor > Clear DTCs

(b) Turn the power switch off.

(c) Turn the power switch on (IG).

(d) Check for DTCs.

Click here INFO

Chassis > Tire Pressure Monitor > Trouble Codes

OK:

DTC C2179/79 is not output.

OK ▶ **END**

NG ▶ **REPLACE MAIN BODY ECU (MULTIPLEX NETWORK BODY ECU)**

Last Modified: 01-14-2019	6.8:8.0.48	**Doc ID:** RM100000000U2HQ
Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 - 12/2018]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING SYSTEM: C2198; Initialization Switch (for Test Mode DTC); 2016 - 2018 MY Prius [11/2015 - 12/2018]		

DTC	**C2198**	**Initialization Switch (for Test Mode DTC)**

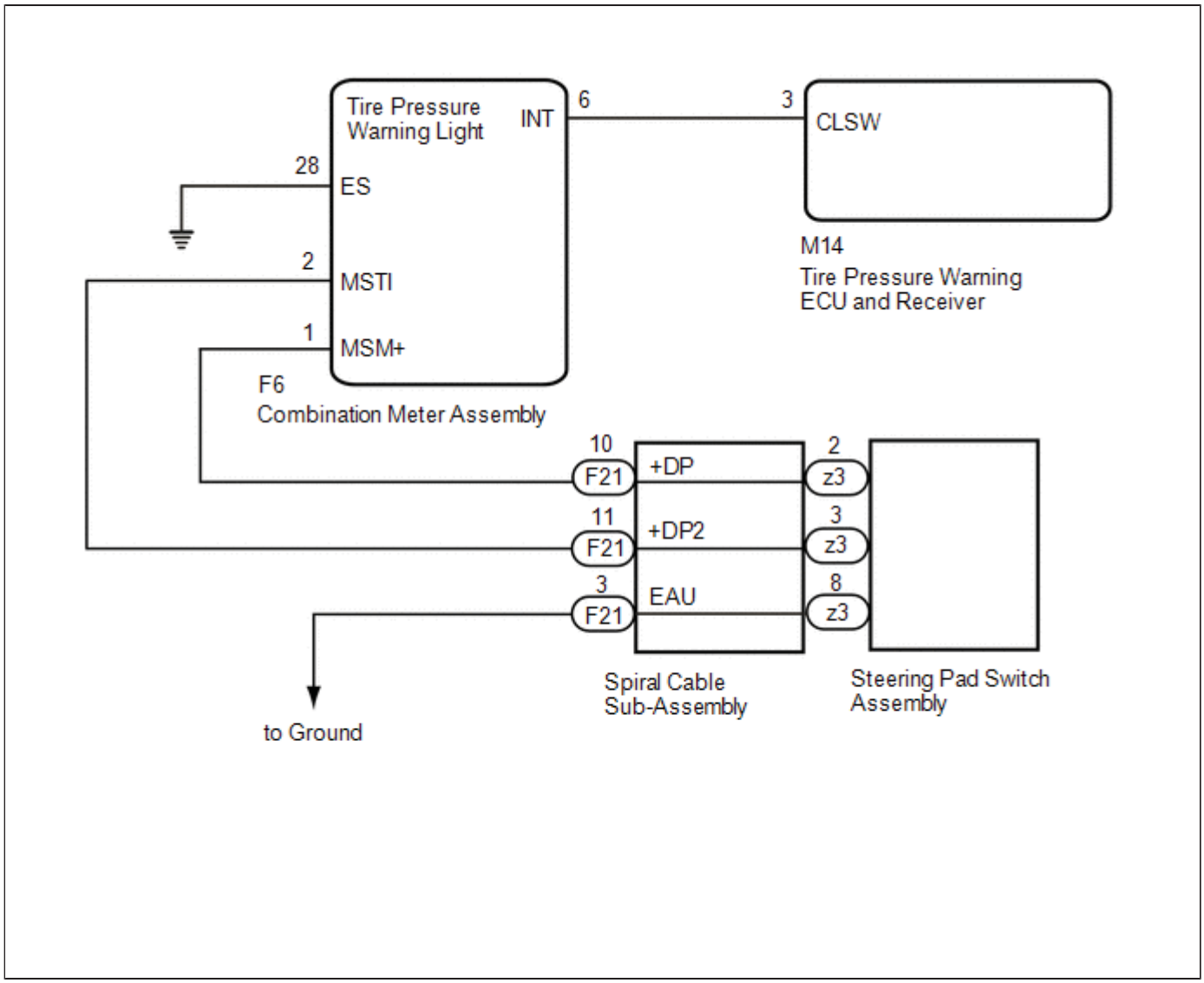
DESCRIPTION

The switch circuit inside the combination meter assembly turns on and off according to the steering pad switch assembly operation.

During test mode, when the steering pad switch assembly is operated, "TPMS" is selected on the multi-information display and the "ENTER" switch (steering pad switch assembly) is pressed, the tire pressure warning light illuminates, and when the "ENTER" switch (steering pad switch assembly) is not pressed, the tire pressure warning light blinks at 0.125 second intervals.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	NOTE
C2198	Initialization Switch (for Test Mode DTC)	Test mode procedure is performed.	• Steering pad switch assembly • Spiral cable sub-assembly • Wire harness or connector • Tire pressure warning ECU and receiver	DTC: 98

WIRING DIAGRAM



CAUTION / NOTICE / HINT

NOTICE:

- When replacing the tire pressure warning ECU and receiver, read the transmitter IDs stored in the old ECU using the Techstream and write them down before removal.
- 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 has been replaced.

PROCEDURE

1.	**INSPECT STEERING PAD SWITCH ASSEMBLY**

(a) Remove the steering pad switch assembly.

HINT:

Click here INFO

(b) Inspect the steering pad switch assembly.

Click here INFO

NG ▶ REPLACE STEERING PAD SWITCH ASSEMBLY

OK ▼

2.	INSPECT SPIRAL CABLE SUB-ASSEMBLY

(a) Remove the spiral cable sub-assembly.

HINT:

Click here INFO

(b) Inspect the spiral cable sub-assembly.

Click here INFO

NG ▶ REPLACE SPIRAL CABLE SUB-ASSEMBLY

OK ▼

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

(a) Disconnect the F21 spiral cable sub-assembly connector.

(b) Disconnect the F6 combination meter assembly connector.

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

Standard Resistance:

EWD INFO

Click Location & Routing(F21,F6)
Click Connector(F21)
Click Connector(F6)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
F21-10 (+DP) - F6-1 (MSM+)	Always	Below 1 Ω
F21-10 (+DP) or F6-1 (MSM+) - Body ground	Always	10 kΩ or higher
F21-11 (+DP2) - F6-2 (MSTI)	Always	Below 1 Ω
F21-11 (+DP2) or F6-2 (MSTI) - Body ground	Always	10 kΩ or higher

NG ▶ REPAIR OR REPLACE HARNESS OR CONNECTOR

OK ▼

4.	CHECK HARNESS AND CONNECTOR (COMBINATION METER ASSEMBLY - TIRE PRESSURE WARNING ECU AND RECEIVER)

(a) Disconnect the M14 tire pressure warning ECU and receiver connector.

(b) Disconnect the F6 combination meter assembly connector.

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

Standard Resistance:

EWD INFO

Click Location & Routing(M14)
Click Location & Routing(F6)
Click Connector(M14)
Click Connector(F6)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
M14-3 (CLSW) - F6-6 (INT)	Always	Below 1 Ω
M14-3 (CLSW) or F6-6 (INT) - Body ground	Always	10 kΩ or higher
F6-28 (ES) - Body ground	Always	Below 1 Ω

NG ▶ REPAIR OR REPLACE HARNESS OR CONNECTOR

OK ▼

5.	CHECK TERMINAL VOLTAGE (INT)

(a) Disconnect the F6 combination meter assembly connector.

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

Standard Voltage:

EWD INFO

Click Location & Routing(F6)
Click Connector(F6)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
F6-6 (INT) - Body ground	Power switch on (IG)	8 to 15 V

OK ▶ **GO TO METER / GAUGE SYSTEM**

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

Last Modified: 01-14-2019	6.8:8.0.48	**Doc ID:** RM100000000U2HB
Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 - 12/2018]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING SYSTEM: DATA LIST / ACTIVE TEST; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

DATA LIST / ACTIVE TEST

READ DATA LIST

HINT:

Using the Techstream to read the Data List allows the values or states of switches, sensors, actuators and other items to be read without removing any parts. This non-intrusive inspection can be very useful because intermittent conditions or signals may be discovered before parts or wiring is disturbed. Reading the Data List information early in troubleshooting is one way to save diagnostic time.

NOTICE:

In the table below, the values listed under "Normal Condition" are reference values. Do not depend solely on these reference values when deciding whether a part is faulty or not.

(a) Turn the power switch off.

(b) Connect the Techstream to the DLC3.

(c) Turn the power switch on (IG).

(d) Turn the Techstream on.

(e) Enter the following menus: Chassis / Tire Pressure Monitor / Data List.

(f) According to the display on the Techstream, read the Data List.

Chassis > Tire Pressure Monitor > Data List

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Mode Status	Tire pressure warning system mode	NORMAL or TEST	NORMAL: Normal mode TEST: Test mode	-
Main Tire	Number of main tire ID to be registered	0 or 1 or 2 or 3 or 4 or 5	0 to 5 displayed	-
Initialization Switch	Tire pressure warning reset switch	OFF or ON	OFF: "ENTER" switch (steering pad switch assembly) off ON: Steering pad switch assembly operated, "TPMS" selected on the multi-information display and "ENTER" switch (steering pad switch assembly) pressed and held	-
Vehicle Speed	Vehicle speed reading	min.: 0 km/h (0 mph) max.: 255 km/h (158 mph)	Actual vehicle speed	Speed indicated on the combination meter assembly

Registered ID 1 Code	Registered ID1 code	min.: 0 max.: FFFFFFF*1	ID No. registered for transmitter ID1 displayed	-
Registered ID 2 Code	Registered ID2 code	min.: 0 max.: FFFFFFF*1	ID No. registered for transmitter ID2 displayed	-
Registered ID 3 Code	Registered ID3 code	min.: 0 max.: FFFFFFF*1	ID No. registered for transmitter ID3 displayed	-
Registered ID 4 Code	Registered ID4 code	min.: 0 max.: FFFFFFF*1	ID No. registered for transmitter ID4 displayed	-
Registered ID 5 Code	Registered ID5 code	min.: 0 max.: FFFFFFF*1	ID No. registered for transmitter ID5 displayed	*3
ID 1 Temperature in Tire	ID1 temperature in tire	min.: -40°C (-40°F) max.: 120°C (248°F)	Actual tire temperature	If -40°C (-40°F) is displayed, data has not been received.
ID 2 Temperature in Tire	ID2 temperature in tire	min.: -40°C (-40°F) max.: 120°C (248°F)	Actual tire temperature	If -40°C (-40°F) is displayed, data has not been received.
ID 3 Temperature in Tire	ID3 temperature in tire	min.: -40°C (-40°F) max.: 120°C (248°F)	Actual tire temperature	If -40°C (-40°F) is displayed, data has not been received.
ID 4 Temperature in Tire	ID4 temperature in tire	min.: -40°C (-40°F) max.: 120°C (248°F)	Actual tire temperature	If -40°C (-40°F) is displayed, data has not been received.
ID 5 Temperature in Tire	ID5 temperature in tire	min.: -40°C (-40°F) max.: 120°C (248°F)	Actual tire temperature	• If -40°C (-40°F) is displayed, data has not been received. • *3
Initialization Switch Info	Tire pressure warning reset switch setting information	WITHOUT or WITH	WITH	-
		min.: Absolute pressure (abs) / 0 kPa (0 kgf/cm^2, 0		

ID 1 Tire Inflation Pressure	ID1 tire inflation pressure	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	If N/A is displayed, data has not been received.*2
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	If N/A is displayed, data has not been received.*2
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	If N/A is displayed, data has not been received.*2
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	If N/A is displayed, data has not been received.*2
ID 5 Tire	ID5 tire	min.: Absolute pressure (abs) / 0 kPa (0 kgf/cm^2, 0 psi), Relative pressure (Gauge) / 0 kPa (0		• If N/A is displayed,

Inflation Pressure	inflation pressure	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	data has not been received.*2 • *3
ID 1 Initial Threshold of Low-pressure	ID1 initial threshold of low-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)	Tire pressure after initialization	-
ID 2 Initial Threshold of Low-pressure	ID2 initial threshold of low-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)	Tire pressure after initialization	-
ID 3 Initial Threshold of Low-pressure	ID3 initial threshold of low-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)	Tire pressure after initialization	-
ID 4 Initial Threshold of Low-	ID4 initial threshold of low-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	Tire pressure after initialization	-

pressure		(abs) / 480 kPa (4.9 kgf/cm^2, 70 psi), Relative pressure (Gauge) / 380 kPa (3.9 kgf/cm^2, 55 psi)		
ID 5 Initial Threshold of Low-pressure	ID5 initial threshold of low-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)	Tire pressure after initialization	*3
Number of Trouble Code	Number of DTCs recorded	min.: 0 max.: 255	min.: 0 max.: -	-

HINT:

- *1: Displayed only when the ID No. is not registered.
- *2: It may take a few minutes until the values are displayed. If the values are not displayed after a few minutes, perform troubleshooting according to the inspection procedure for DTCs C2121/21 to C2124/24 (C2125/25: w/ Full Size Spare Tire).

  Click here INFO
- *3: w/ Full Size Spare Tire

PERFORM ACTIVE TEST

Using the Techstream to perform Active Tests allows the relays, VSVs, actuators and other items to be operated without removing any parts. This non-intrusive functional inspection can be very useful because intermittent operation may be discovered before parts or wiring is disturbed. Performing Active Tests early in trouble shooting is one way to save diagnostic time. Data List information can be displayed while performing Active Tests.

(a) Turn the power switch off.

(b) Connect the Techstream to the DLC3.

(c) Turn the power switch on (IG).

(d) Turn the Techstream on.

(e) Enter the following menus: Body Electrical / Combination Meter / Active Test.

(f) Check the operation by referring to the table below.

Body Electrical > Combination Meter > Active Test

TESTER DISPLAY	MEASUREMENT ITEM	CONTROL RANGE	DIAGNOSTIC NOTE
Indicat. Tire Pressure Warning System	Tire pressure warning light	OFF or ON	-

Last Modified: 01-14-2019	6.8:8.0.48	**Doc ID:** RM100000000U2H8
Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 - 12/2018]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING SYSTEM: DIAGNOSIS SYSTEM; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

DIAGNOSIS SYSTEM

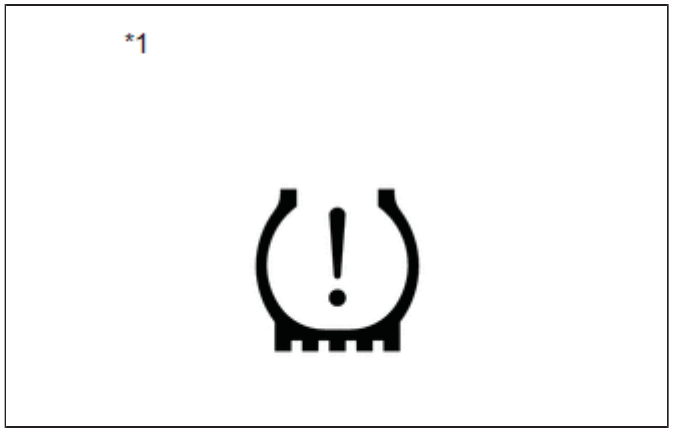
CHECK WARNING LIGHT

NOTICE:

- When there is a problem with the tire pressure warning system, the tire pressure warning light blinks at 0.5 second intervals, and illuminates after 1 minute.
- When the malfunction has been corrected, the tire pressure warning light goes off.
- When the tire pressure warning light illuminates, immediately check the tire pressure of the tires and adjust them to the specified value.
- After the power switch is turned on (IG), the tire pressure warning light illuminates for 3 seconds and then goes off. If the warning light does not illuminate for 3 seconds, proceed to the troubleshooting for the tire pressure warning light circuit.

Click here INFO

(a) Turn the power switch on (IG).



*1	Tire Pressure Warning Light

(b) Check that the tire pressure warning light illuminates for 3 seconds.

WHAT TO CONSIDER WHEN TIRE PRESSURE WARNING LIGHT ILLUMINATES

(a) When the tire pressure warning light does not go off, or when it illuminates during driving, check the tire pressure. If the tire pressure warning light illuminates within several hours after adjusting the tire pressure, a tire may have a slow air leak.

(b) The system is disabled under the following conditions (when the condition returns to normal, the system will work properly).

(1) When all of the tire and wheel assemblies that have tire pressure warning valve and transmitters registered with the tire pressure warning ECU and receiver have not been installed.

(2) When all of the transmitter ID codes are not registered with the tire pressure warning ECU and receiver.

(3) When the tire pressure warning valve and transmitter battery is depleted (Battery life is 10 years).

(c) The system may become disabled under the following conditions (when the condition returns to normal, the system will work properly).

(1) When electric devices or facilities using similar radio frequencies are nearby.

(2) When a wireless device or other equipment operating at a similar frequency is in use in the vehicle.

(3) When a window tint that affects radio wave signals is installed.

(4) When there is a lot of snow or ice on the vehicle, in particular, around the wheels or wheel housing.

(5) When non-genuine wheels are used.

(6) When tire chains are used.

(7) When aftermarket tire repair sealant is used.

CAUTION:

After use of tire repair sealant, replacement of the tire pressure warning valve and transmitter is required to ensure normal system operation. (Normal system operation cannot be ensured by only repairing or replacing the tire.)

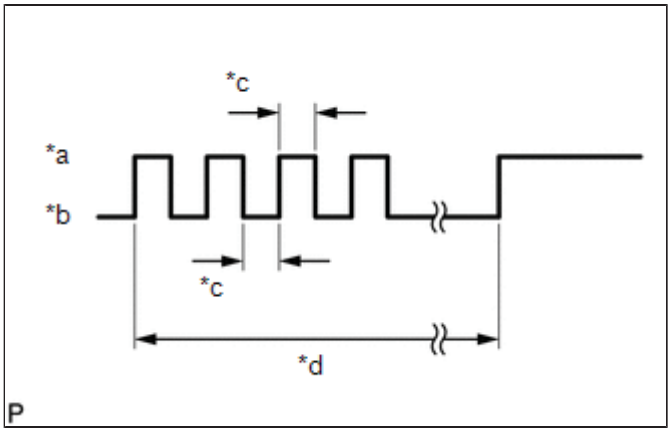
TIRE PRESSURE WARNING LIGHT AND INDICATOR CHART

HINT:

The table below indicates the state of the tire pressure warning light after the power switch is turned on (IG).

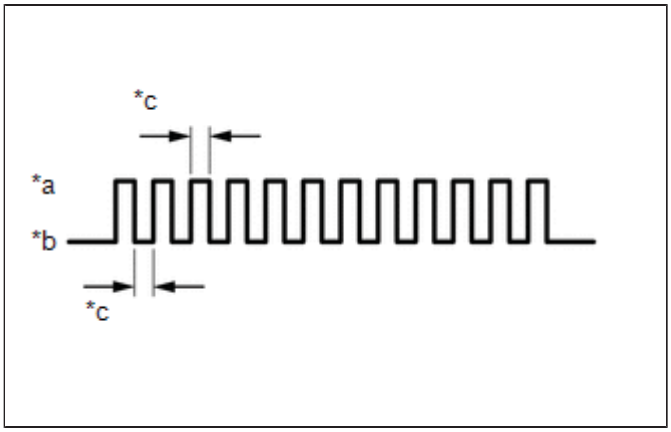
	IMMEDIATELY AFTER TURNING THE POWER SWITCH ON (IG)	ALWAYS			
		WARNING LIGHT OUTPUT PATTERN			
	ILLUMINATES FOR 3 SEC.	GOES OFF	ILLUMINATES	BLINKS	OUTPUTS DTC
Normal	○	○	-	-	-
Low tire pressure	○	-	○	-	-
System failure	○	-	-	*1	-
Test mode (signal check mode)	○	-	-	*2	-
Initialization	○	-	-	*3	-
ECU connector poorly connected	-	-	-	*4	-
TC grounded (DTCs are output)	○	-	-	-	○
TC grounded (DTCs are not output)	○	-	-	*5	-

*1: Blinks at 0.5 second intervals, and stays illuminated after 1 minute.



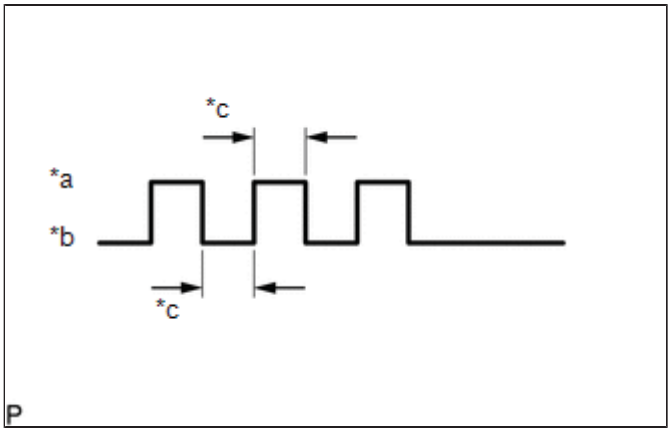
*a	ON
*b	OFF

*c	0.5 sec.
*d	1 minute



*2: Blinks at 0.125 second intervals.

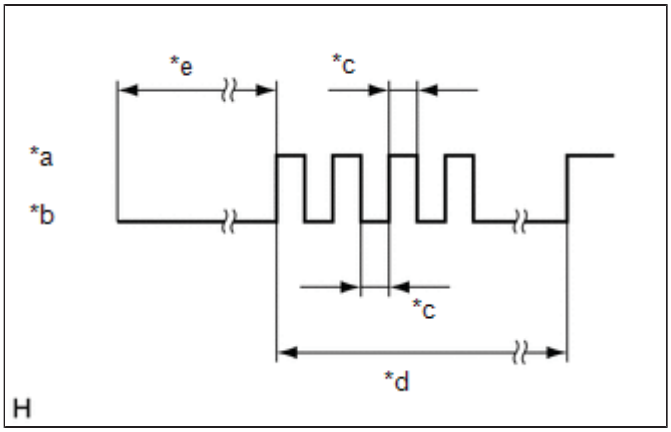
*a	ON
*b	OFF
*c	0.125 sec.



*3: Blinks 3 times at 1 second intervals.

*a	ON
*b	OFF
*c	1 sec.

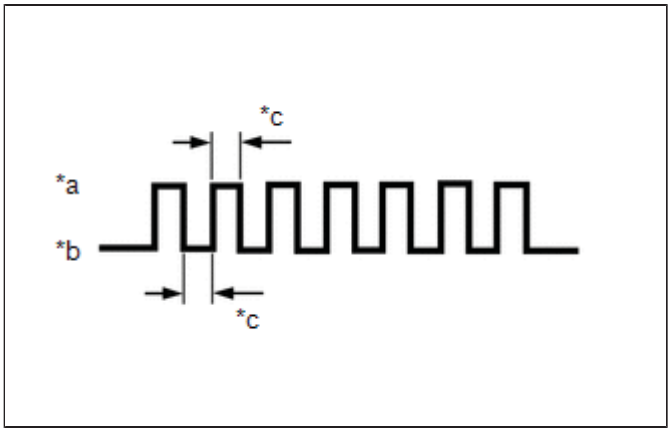
*4: Goes off for 10 seconds to check the connection of the ECU connector, and then blinks at 0.5 second intervals,



and stays illuminated after 1 minute.

*a	ON
*b	OFF
*c	0.5 sec.
*d	1 minute

*e	10 sec.



*5: Blinks at 0.25 second intervals.

*a	ON
*b	OFF
*c	0.25 sec.

NORMAL MODE DTC

(a) DTCs are stored in the tire pressure warning ECU and receiver and output by blinking the tire pressure warning light or by using the Techstream.

Click here INFO

TEST MODE (SIGNAL CHECK MODE) DTC

(a) By switching from normal mode into test mode (signal check mode), the tire pressure warning ECU and receiver, each tire pressure warning valve and transmitter and tire pressure warning reset switch can be inspected.

Click here INFO

Last Modified: 01-14-2019	6.8:8.0.48	**Doc ID:** RM100000000U2H1
Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 - 12/2018]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING SYSTEM: DIAGNOSTIC TROUBLE CODE CHART; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

DIAGNOSTIC TROUBLE CODE CHART

Tire Pressure Warning ECU and Receiver

DTC NO.	DETECTION ITEM	NOTE	LINK
B1247	Tire Pressure Monitor Receiver Communication Stop	This DTC is for main body ECU (multiplex network body ECU)	INFO
C2111/11	Transmitter ID1 Operation Stop	-	INFO
C2112/12	Transmitter ID2 Operation Stop	-	INFO
C2113/13	Transmitter ID3 Operation Stop	-	INFO
C2114/14	Transmitter ID4 Operation Stop	-	INFO
C2115/15	Transmitter ID5 Operation Stop	w/ Full Size Spare Tire	INFO
C2121	No Signal from Transmitter ID1	DTC: 21	INFO
C2122	No Signal from Transmitter ID2	DTC: 22	INFO
C2123	No Signal from Transmitter ID3	DTC: 23	INFO
C2124	No Signal from Transmitter ID4	DTC: 24	INFO
C2125	No Signal from Transmitter ID5	• DTC: 25 • w/ Full Size Spare Tire	INFO
C2126	Transmitter ID not Received in Main Mode	DTC: 26	INFO
C2141	Transmitter ID1 Error	DTC: 41	INFO
C2142	Transmitter ID2 Error	DTC: 42	INFO
C2143	Transmitter ID3 Error	DTC: 43	INFO

C2144	Transmitter ID4 Error	DTC: 44	INFO
C2145	Transmitter ID5 Error	• DTC: 45 • w/ Full Size Spare Tire	INFO
C2171/71	Transmitter ID not Registered	-	INFO
C2176/76	Receiver Error	-	INFO
C2177/77	Initialization not Completed	-	INFO
C2179/79	Tire Pressure Monitor ECU Communication Stop	-	INFO
C2181	Transmitter ID1 not Received (Test Mode DTC)	DTC: 81	INFO
C2182	Transmitter ID2 not Received (Test Mode DTC)	DTC: 82	INFO
C2183	Transmitter ID3 not Received (Test Mode DTC)	DTC: 83	INFO
C2184	Transmitter ID4 not Received (Test Mode DTC)	DTC: 84	INFO
C2185	Transmitter ID5 not Received (Test Mode DTC)	• DTC: 85 • w/ Full Size Spare Tire	INFO
C2198	Initialization Switch (for Test Mode DTC)	DTC: 98	INFO


Last Modified: 01-14-2019	6.8:8.0.48	**Doc ID:** RM100000000U2H9
Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 - 12/2018]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING SYSTEM: DTC CHECK / CLEAR; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

DTC CHECK / CLEAR

CHECK DTC (for TIRE PRESSURE WARNING ECU AND RECEIVER) (USING TECHSTREAM)

(a) Turn the power switch off.

(b) Connect the Techstream to the DLC3.

(c) Turn the power switch on (IG).

(d) Turn the Techstream on.

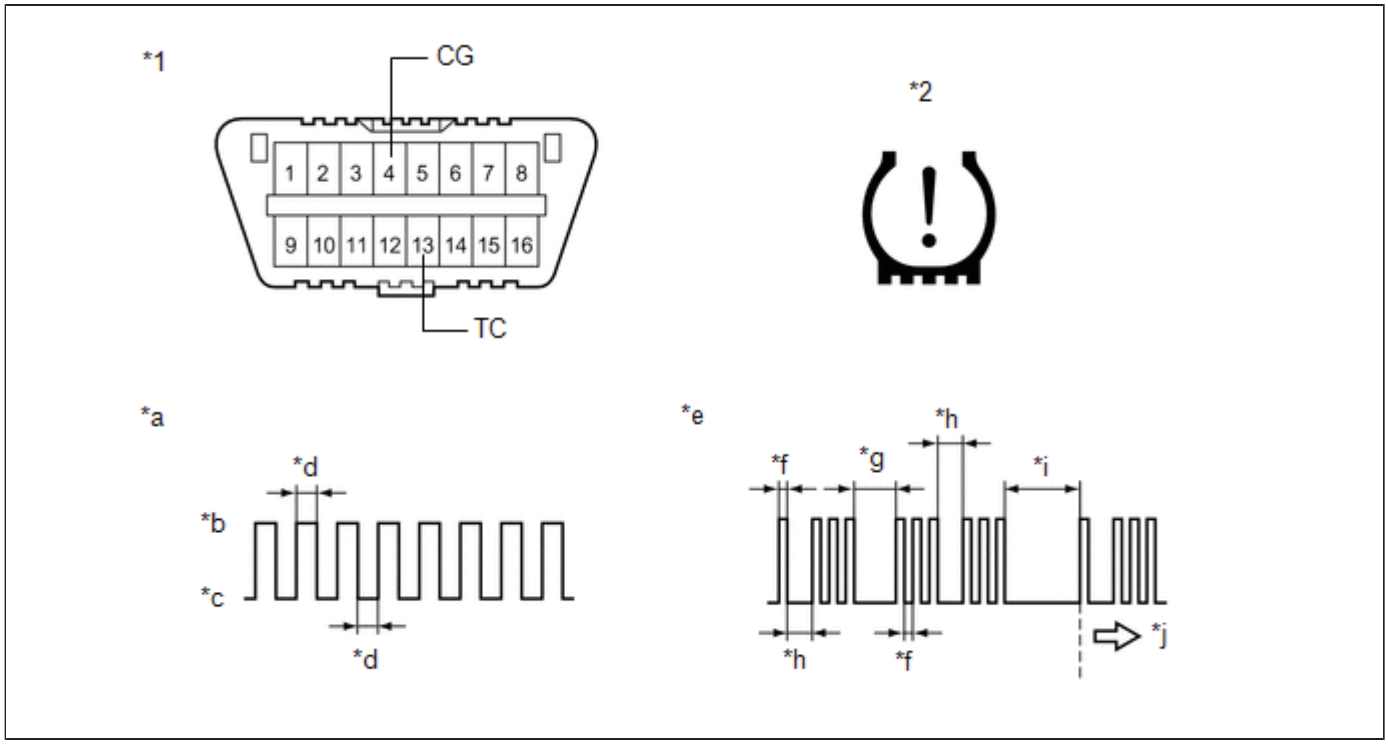
(e) Enter the following menus: Chassis / Tire Pressure Monitor / Trouble Codes.

Chassis > Tire Pressure Monitor > Trouble Codes

(f) Read the DTCs.

CHECK DTC (for TIRE PRESSURE WARNING ECU AND RECEIVER) (USING SST CHECK WIRE)

(a) Turn the power switch off.



*1	DLC3	*2	Tire Pressure Warning Light
*a	Normal System Code	*b	ON
*c	OFF	*d	0.25 sec.
*e	Code 13 and 33	*f	0.5 sec.
*g	2.5 sec.	*h	1.5 sec.
*i	4.5 sec.	*j	Repeat

(b) Using SST, connect terminals 13 (TC) and 4 (CG) of the DLC3.

SST: 09843-18040

(c) Turn the power switch on (IG).

(d) Read and record any DTCs indicated by the tire pressure warning light on the combination meter assembly. Refer to the illustration for examples of a normal system code and codes 13 and 33.

HINT:

- If the tire pressure warning light does not indicate any DTCs or the normal system code, inspect the tire pressure warning light circuit or TC and CG terminal circuit.

TROUBLE AREA	LINK
Tire pressure warning light circuit	INFO
TC and CG terminal circuit	INFO

- If 2 or more malfunctions are indicated at the same time, the lowest numbered DTC is displayed first.

(e) Refer to Diagnostic Trouble Code Chart for DTC information.

Click here INFO

(f) After completing the check, turn the power switch off and remove SST from the DLC3.

CHECK DTC (for MAIN BODY ECU (MULTIPLEX NETWORK BODY ECU))

(a) Turn the power switch off.

(b) Connect the Techstream to the DLC3.

(c) Turn the power switch on (IG).

(d) Turn the Techstream on.

(e) Enter the following menus: Body Electrical / Main Body / Trouble Codes.

Body Electrical > Main Body > Trouble Codes

(f) Read the DTCs.

CLEAR DTC (for TIRE PRESSURE WARNING ECU AND RECEIVER)

HINT:

After repairing the malfunctions, clear the DTCs.

(a) Turn the power switch off.

(b) Connect the Techstream to the DLC3.

(c) Turn the power switch on (IG).

(d) Turn the Techstream on.

(e) Enter the following menus: Chassis / Tire Pressure Monitor / Trouble Codes.

Chassis > Tire Pressure Monitor > Clear DTCs

(f) Clear the DTCs following the prompts on the Techstream screen.

HINT:

Refer to the Techstream operator's manual for further details.

CLEAR DTC (for MAIN BODY ECU (MULTIPLEX NETWORK BODY ECU))

HINT:

After repairing the malfunctions, clear the DTCs.

(a) Turn the power switch off.

(b) Connect the Techstream to the DLC3.

(c) Turn the power switch on (IG).

(d) Turn the Techstream on.

(e) Enter the following menus: Body Electrical / Main Body / Trouble Codes.

Body Electrical > Main Body > Clear DTCs

(f) Clear the DTCs following the prompts on the Techstream screen.

HINT:

Refer to the Techstream operator's manual for further details.

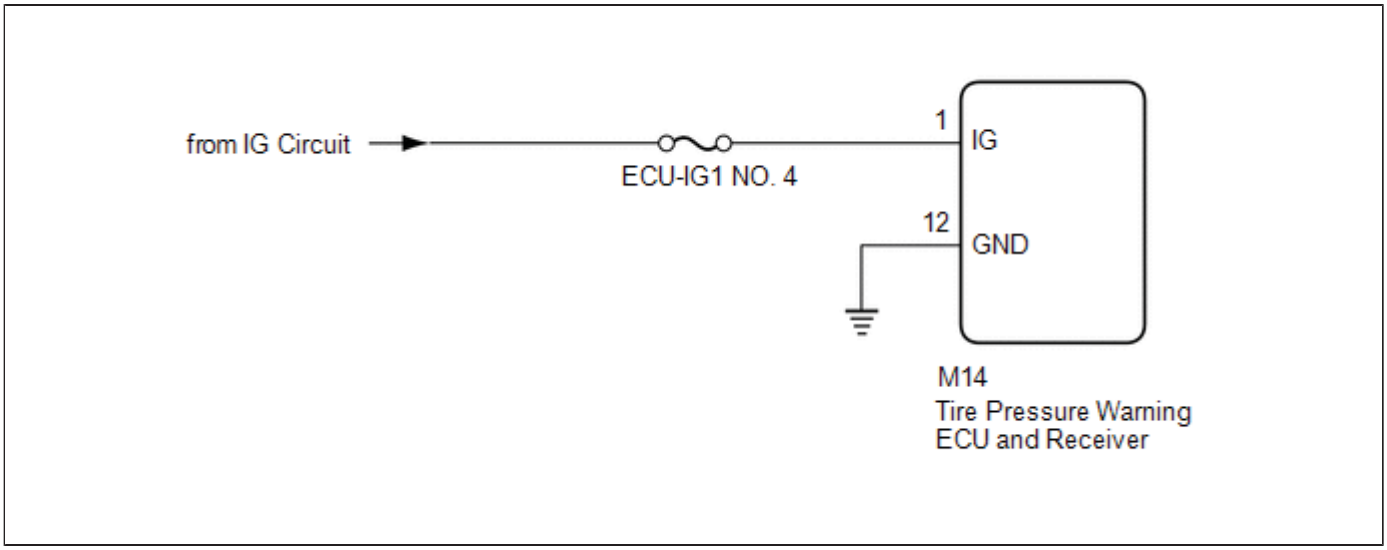
Last Modified: 01-14-2019	6.8:8.0.48	**Doc ID:** RM100000000U2H4
Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 - 12/2018]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING SYSTEM: ECU Power Source Circuit; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

ECU Power Source Circuit

DESCRIPTION

The IG circuit is the power source for the tire pressure warning ECU and receiver.

WIRING DIAGRAM



CAUTION / NOTICE / HINT

NOTICE:

- When replacing the tire pressure warning ECU and receiver, read the transmitter IDs stored in the old ECU using the Techstream and write them down before removal.
- 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 has been replaced.

HINT:

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

PROCEDURE

1.	**CHECK HARNESS AND CONNECTOR (TIRE PRESSURE WARNING ECU AND RECEIVER POWER SOURCE)**

(a) Disconnect the M14 tire pressure warning ECU and receiver connector.

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

Standard Voltage:

EWD INFO

Click Location & Routing(M14)
Click Connector(M14)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
M14-1 (IG) - Body ground	Power switch on (IG)	10 to 16 V
	Power switch off	Below 1 V

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

Standard Resistance:

EWD INFO

Click Location & Routing(M14)
Click Connector(M14)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
M14-12 (GND) - Body ground	Always	Below 1 Ω

OK ▶ REPLACE TIRE PRESSURE WARNING ECU AND RECEIVER

NG ▶ REPAIR OR REPLACE HARNESS OR CONNECTOR

Last Modified: 01-14-2019	6.8:8.0.48	**Doc ID:** RM100000000U2HR
Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 - 12/2018]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING SYSTEM: FAIL-SAFE CHART; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

FAIL-SAFE CHART

FAIL-SAFE FUNCTION

(a) When a malfunction occurs in the tire pressure warning system, the tire pressure warning light illuminates after blinking for 1 minute to inform the driver of the system failure.

(b) As a result of this, tire pressure monitoring is disabled and a DTC is stored in the tire pressure warning ECU and receiver.

Last Modified: 01-14-2019	6.8:8.0.48	**Doc ID:** RM100000000U2HN
Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 - 12/2018]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING SYSTEM: HOW TO PROCEED WITH TROUBLESHOOTING; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

HOW TO PROCEED WITH TROUBLESHOOTING

CAUTION / NOTICE / HINT

HINT:

- Use the following procedure to troubleshoot the tire pressure warning system.
- Make sure that the wireless door lock control system has exited diagnostic mode before performing the following procedure.
- *: Use the Techstream.

PROCEDURE

1.	**VEHICLE BROUGHT TO WORKSHOP**

NEXT

2.	**CUSTOMER PROBLEM ANALYSIS**

(a) Interview the customer to confirm the problem.

HINT:

It is important to collect as much specific information as possible from the customer to allow for a quick repair.

NEXT

3.	**ADJUST TIRE PRESSURE***

(a) Turn the power switch off.

(b) Connect the Techstream to the DLC3.

(c) Turn the power switch on (IG).

(d) Enter the following menus: Chassis / Tire Pressure Monitor / Data List.

(e) Set the all tire pressure to the specified value.

NOTICE:

Refer to the link as the procedure for adjusting the tire pressures differs depending on the temperature of the tires.

Click here INFO INFO

(f) Display "ID Tire Inflation Pressure" in the Data List and check that the tire pressure values match the adjusted pressure amount.

HINT:

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

(g) Perform initialization.

Click here INFO

HINT:

The tire pressure warning system illuminates the tire pressure warning light to warn the driver when any of the following condition is met:

- Due to the operation of the steering pad switch assembly, the tire pressure drops to approximately 75% or less of the tire pressure set during system initialization.

RESULT	PROCEED TO
Tire pressure warning light remains on	A
Tire pressure warning light goes off	B

B ▶ **GO TO STEP 11**

A ▼

4.	**CHECK ECU CONNECTED TO CAN BUS***

(a) Check the ECUs connected to the CAN bus.

Click here INFO INFO

RESULT	PROCEED TO
No malfunction appears	A
Malfunction appears	B

B ▶ **GO TO CAN COMMUNICATION SYSTEM**

A

5.	**CHECK FOR DTC (CAN COMMUNICATION SYSTEM)***

(a) Check for DTCs.

Click here INFO INFO

RESULT	PROCEED TO
CAN system DTCs are not output	A
CAN system DTCs are output	B

B GO TO CAN COMMUNICATION SYSTEM

A

6.	**CHECK FOR DTC***

(a) Check for DTCs.

Click here INFO

RESULT	PROCEED TO
DTCs are output	A
DTCs are not output	B

B GO TO STEP 8

A

7.	**DTC CHART**

(a) Refer to Diagnostic Trouble Code Chart.

Click here INFO

NEXT GO TO STEP 10

8.	PROBLEM SYMPTOMS TABLE

(a) Refer to Problem Symptoms Table.

Click here INFO

NEXT

9.	CIRCUIT INSPECTION*

(a) Refer to Electronic Circuit Inspection Procedure.

Click here INFO

NEXT

10.	REPAIR OR REPLACE

(a) Repair or replace parts based on the diagnosis result.

NEXT

11.	CONFIRMATION TEST*

(a) Check the Data List to confirm that the tire inflation pressure has been received.

Click here INFO

(b) Perform initialization.

Click here INFO

(c) Confirm that the initialization has been completed.

Last Modified: 01-14-2019	6.8:8.0.48	**Doc ID:** RM100000000U2HC
Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 - 12/2018]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING SYSTEM: INITIALIZATION; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

INITIALIZATION

NOTICE:

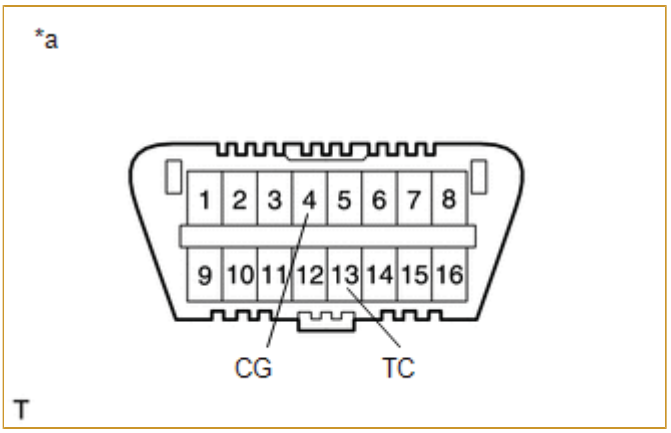
- Initialization can be confirmed through the tire pressure warning light.
- The order in which the data is received is random.
- If the signals from all the tire pressure warning valve and transmitters are received, initialization is completed.
- Initialization is completed when the Data List "ID Tire Inflation Pressure" display shows the correct pressures.

Click here INFO

- Initialization is normally completed within a few minutes.
- It may take a few minutes until the values are displayed. If the values are not displayed after a few minutes, perform troubleshooting according to the inspection procedure for DTCs C2121/21 to C2124/24 (C2125/25: w/ Full Size Spare Tire).

Click here INFO

- If initialization has not been completed successfully, DTC C2177/77 is stored after a vehicle speed of 40 km/h (25 mph) or more is detected for 20 minutes or more.
- During test mode (sensor check mode), the system will not change to initialization mode even if the initialization procedure is performed.
- Initialization can be terminated by connecting terminals 13 (TC) and 4 (CG) of the DLC3.



*a	Front view of DLC3

BEFORE INITIALIZATION

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

NOTICE:

Refer to the link as the procedure for adjusting the tire pressures differs depending on the temperature of the tires.

Click here INFO INFO

HINT:

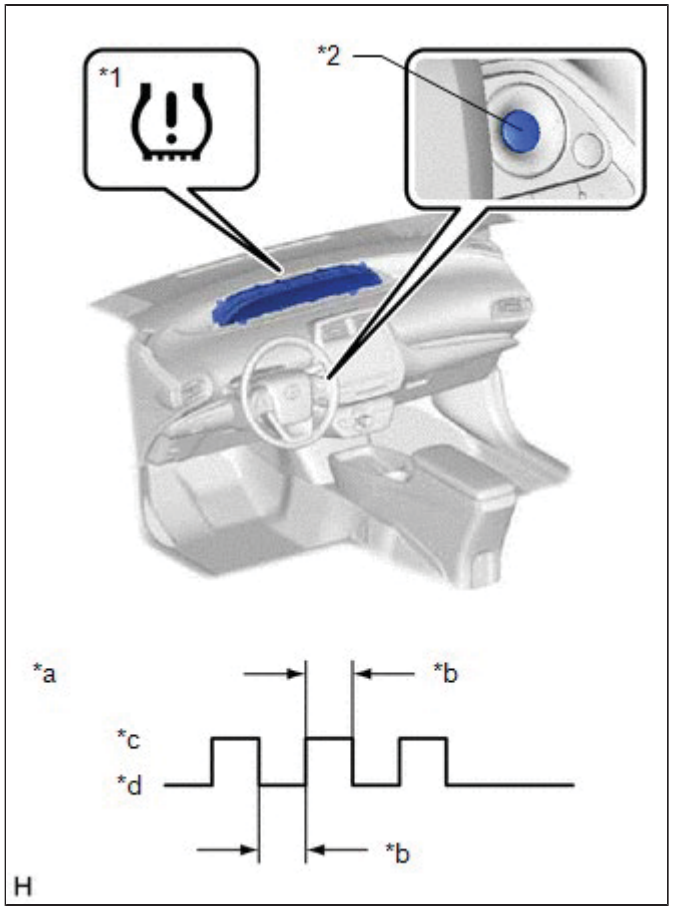
The tire pressure warning system illuminates the tire pressure warning light to warn the driver when any of the following condition is met:

- Due to the operation of the steering pad switch assembly, the tire pressure drops to approximately 75% or less of the tire pressure set during system initialization.

INITIALIZATION PROCEDURE

(a) Turn the power switch on (IG).

(b) Operate the steering pad switch assembly, select "TPMS" on the multi-information display and press and hold the "ENTER" switch (steering pad switch assembly) until the tire pressure warming light blinks 3 times.



*1	Tire Pressure Warning Light
*2	"ENTER" Switch (Steering Pad Switch Assembly)
*a	Tire Pressure Warning Light Output Pattern
*b	1 sec.
*c	ON
*d	OFF

(c) Turn the power switch off.

(d) Connect the Techstream to the DLC3.

(e) Turn the power switch on (IG) and turn the Techstream on.

(f) Enter the following menus: Chassis / Tire Pressure Monitor / Data List.

(g) Check that initialization has been completed.

(h) Confirm that the tire pressure data of all tires is displayed on the Techstream screen.

Last Modified: 01-14-2019	6.8:8.0.48	**Doc ID:** RM100000000U2HS
Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 - 12/2018]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING SYSTEM: OPERATION CHECK; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

OPERATION CHECK

CHECK TIRE PRESSURE WARNING SYSTEM FUNCTION

(a) Using the Data List, check that the current tire pressure is normal.

Click here INFO

(1) Slowly reduce the tire pressure of the front or rear tires and check that the tire pressure on the Data List changes.

(2) Further reduce the tire pressure and check that the warning light illuminates.

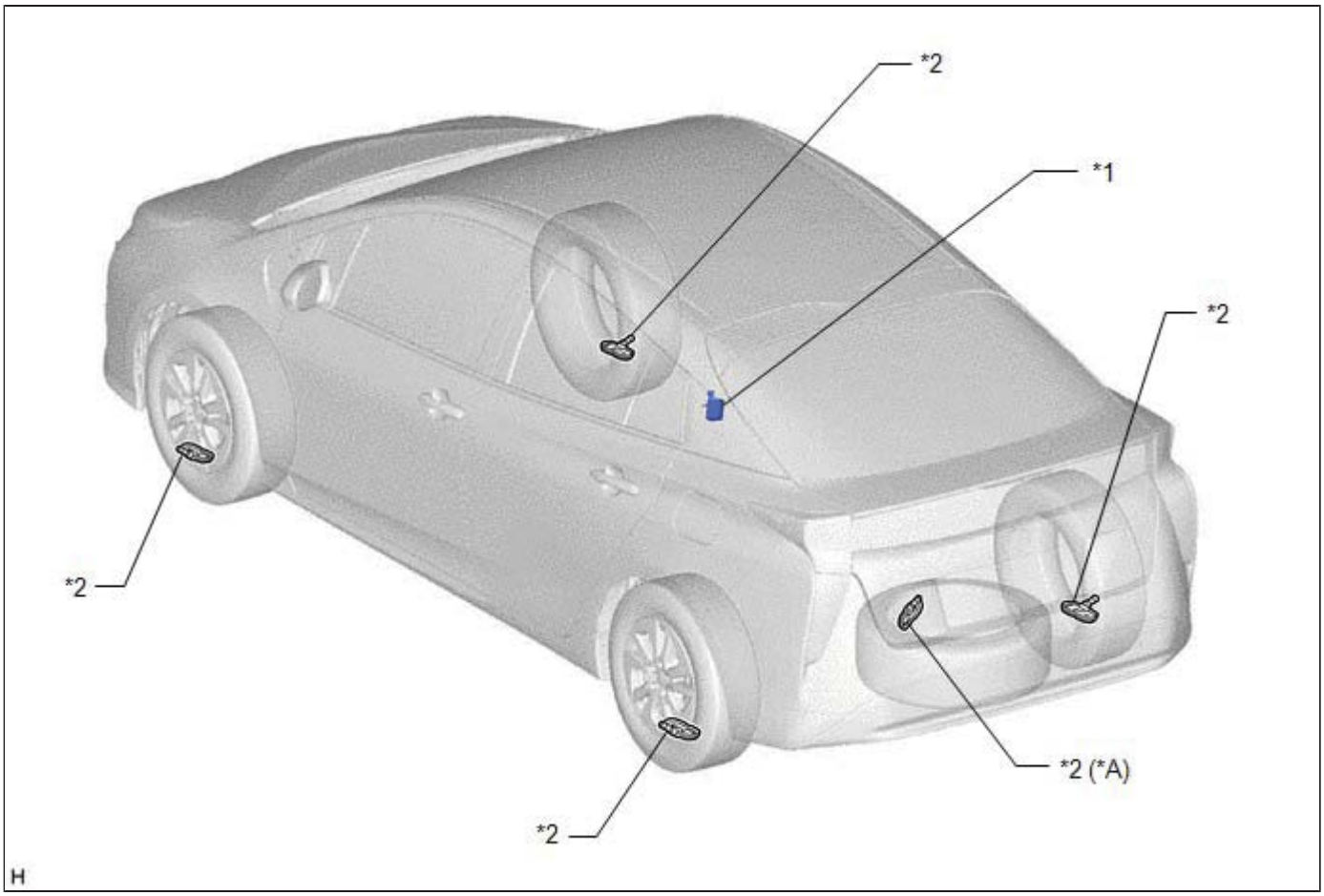
(b) After reducing the tire pressure, set the tire pressure to the specified value.

Click here INFO INFO

Last Modified: 01-14-2019	6.8:8.0.48	**Doc ID:** RM100000000U2H2
Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 - 12/2018]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING SYSTEM: PARTS LOCATION; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

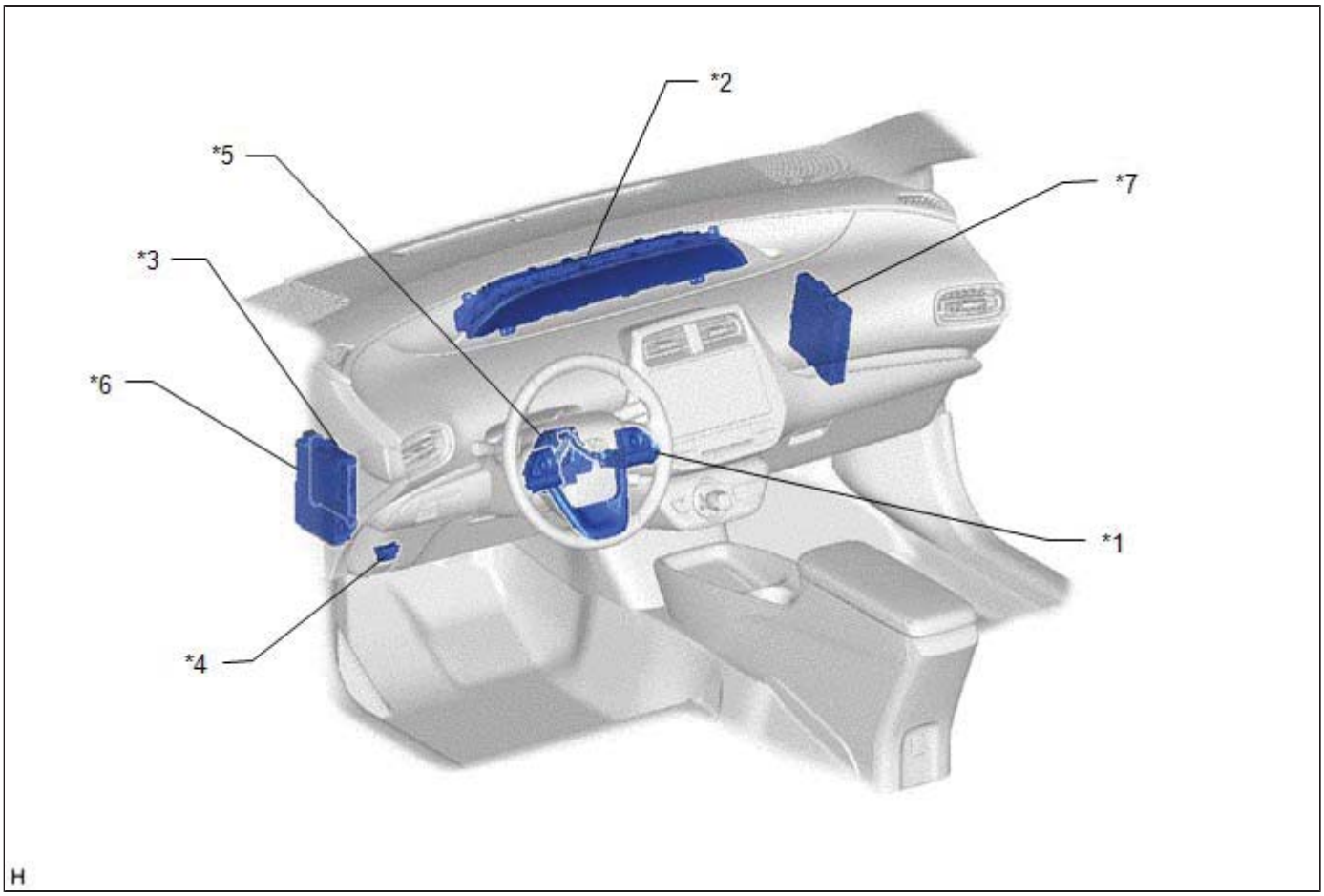
PARTS LOCATION

ILLUSTRATION



*A	w/ Full Size Spare Tire	-	-
*1	TIRE PRESSURE WARNING ECU AND RECEIVER	*2	TIRE PRESSURE WARNING VALVE AND TRANSMITTER

ILLUSTRATION



*1	STEERING PAD SWITCH ASSEMBLY	*2	COMBINATION METER ASSEMBLY - TIRE PRESSURE WARNING LIGHT
*3	MAIN BODY ECU (MULTIPLEX NETWORK BODY ECU)	*4	DLC3
*5	SPIRAL CABLE SUB-ASSEMBLY	*6	INSTRUMENT PANEL JUNCTION BLOCK ASSEMBLY - ECU-IG1 NO. 4 FUSE - ECU-B NO. 2 FUSE
*7	HYBRID VEHICLE CONTROL ECU	-	-

Last Modified: 01-14-2019	6.8:8.0.48	**Doc ID:** RM100000000U2H0
Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 - 12/2018]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING SYSTEM: PRECAUTION; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

PRECAUTION

PRECAUTION FOR DISCONNECTING CABLE FROM NEGATIVE AUXILIARY BATTERY TERMINAL

NOTICE:

When disconnecting the cable from the negative (-) auxiliary battery terminal, initialize the following systems after the cable is reconnected.

SYSTEM NAME	SEE PROCEDURE
Lane Departure Alert System (w/ Steering Control System)	INFO INFO
Intelligent Clearance Sonar System	
Simple Advanced Parking Guidance System	
Power Door Lock Control System	
Pre-collision System	

TIRE PRESSURE WARNING ECU AND RECEIVER EXPRESSIONS

(a) The electrical key and tire pressure monitoring system receiver assembly is referred to as the tire pressure warning ECU and receiver in this section.

TIRE PRESSURE WARNING SYSTEM PRECAUTION

(a) Tire pressure decreases naturally over time, which also occurs in vehicle models without a tire pressure warning system.

HINT:

Tire pressure decreases by approximately 5 kPa (0.05 kgf/cm^2, 0.7 psi) to 10 kPa (0.1 kgf/cm^2, 1.5 psi) per month.

(b) It is necessary for the tire pressures to be adjusted periodically.

(c) In winter, tire pressure may decrease due to low ambient temperatures (tire pressure decreases by approximately 10 kPa (0.1 kgf/cm^2, 1.5 psi) for every 10°C (18°F) drop in the ambient temperature). Therefore, the tire pressure warning system is more likely to indicate a warning if the tire pressures are not adjusted appropriately. If the daily temperature variation is large, increase the pressure of the tires so that the tire pressures are suitable under cold conditions. As a result, unnecessary tire pressure warning operations should decrease.

(d) Depending on the tire type, the system may not function properly even if the specified wheels are used.

(e) To prevent damage to the tire pressure warning valve and transmitter, make sure that the tire pressure warning valve and transmitter does not interfere with the tire bead when installing or removing a tire.

(f) To prevent damage to the tire pressure warning valve and transmitter, before disengaging the tire bead or removing the tire from the wheel, drop the tire pressure warning valve and transmitter into the wheel.

(g) Always use a new grommet and valve core when installing a tire pressure warning valve and transmitter to ensure the sealing performance.

(h) When one or more of the tire pressure warning valve and transmitters or the tire pressure warning ECU and receiver is replaced, the transmitter IDs for all of the tire pressure warning valve and transmitters must be re-registered. Before registering the transmitter ID of the new tire pressure warning valve and transmitter, check the Data List and record all of the transmitter IDs that are already registered.

(i) Use only a specified cap. If an unspecified cap is used, it may seize to the tire pressure warning valve and transmitter.

(j) The system is disabled under the following conditions (when the condition returns to normal, the system will work properly).

(1) When all of the tire and wheel assemblies that have tire pressure warning valve and transmitters registered with the tire pressure warning ECU and receiver have not been installed.

(2) When all of the transmitter ID codes are not registered with the tire pressure warning ECU and receiver.

(3) When the tire pressure warning valve and transmitter battery is depleted (Battery life is 10 years).

(k) The system may become disabled under the following conditions (when the condition returns to normal, the system will work properly).

(1) When electric devices or facilities using similar radio frequencies are nearby.

(2) When a wireless device or other equipment operating at a similar frequency is in use in the vehicle.

(3) When a window tint that affects radio wave signals is installed.

(4) When there is a lot of snow or ice on the vehicle, in particular, around the wheels or wheel housing.

(5) When non-genuine wheels are used.

(6) When tire chains are used.

(7) When aftermarket tire repair sealant is used.

CAUTION:

After use of tire repair sealant, replacement of the tire pressure warning valve and transmitter is required to ensure normal system operation. (Normal system operation cannot be ensured by only repairing or replacing the tire.)

NECESSARY PROCEDURES WHEN REPLACING PARTS

(a) ID Registration

When replacing the tire pressure warning valve and transmitter and tire pressure warning ECU and receiver, perform ID registration for the tire pressure warning valve and transmitter.

Click here INFO

(b) Initialization

After performing ID registration for the tire pressure warning valve and transmitter, make sure to initialize the tire pressure warning system.

Click here INFO

Last Modified: 01-14-2019	6.8:8.0.48	**Doc ID:** RM100000000U2H3
Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 - 12/2018]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING SYSTEM: PROBLEM SYMPTOMS TABLE; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

PROBLEM SYMPTOMS TABLE

HINT:

- Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.
- Inspect the fuses and relays related to this system before inspecting the suspected areas below.

Tire Pressure Warning System

SYMPTOM	SUSPECTED AREA	LINK
Tire pressure warning light does not illuminate despite tire pressure decreasing	Initialization	INFO
	Check Data List (ID Tire Inflation Pressure)	INFO
	ID code check (Registration)	INFO
Tire pressure warning light remains illuminated (Goes off during initial check)	Tire pressure warning light circuit	INFO
Tire pressure warning light remains illuminated (Illuminates during initial check)	Check Data List (ID Tire Inflation Pressure)	INFO
	Tire pressure adjustment	INFO INFO
	ID code check (Registration)	INFO
	Initialization	INFO
Initialization cannot be done	Tire pressure warning reset switch	INFO
DTC check cannot be done using SST check wire	TC and CG terminal circuit	INFO
	ECU power source circuit	INFO

Last Modified: 01-14-2019	6.8:8.0.48	**Doc ID:** RM100000000U2HF
Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 - 12/2018]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING SYSTEM: REGISTRATION; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

REGISTRATION

PROCEDURE

1. BEFORE REGISTRATION

NOTICE:

The transmitter ID is written on the tire pressure warning valve and transmitter. It is not possible to read the transmitter ID after installing the tire onto the wheel. Therefore, make a note of the transmitter ID before installing the tire.

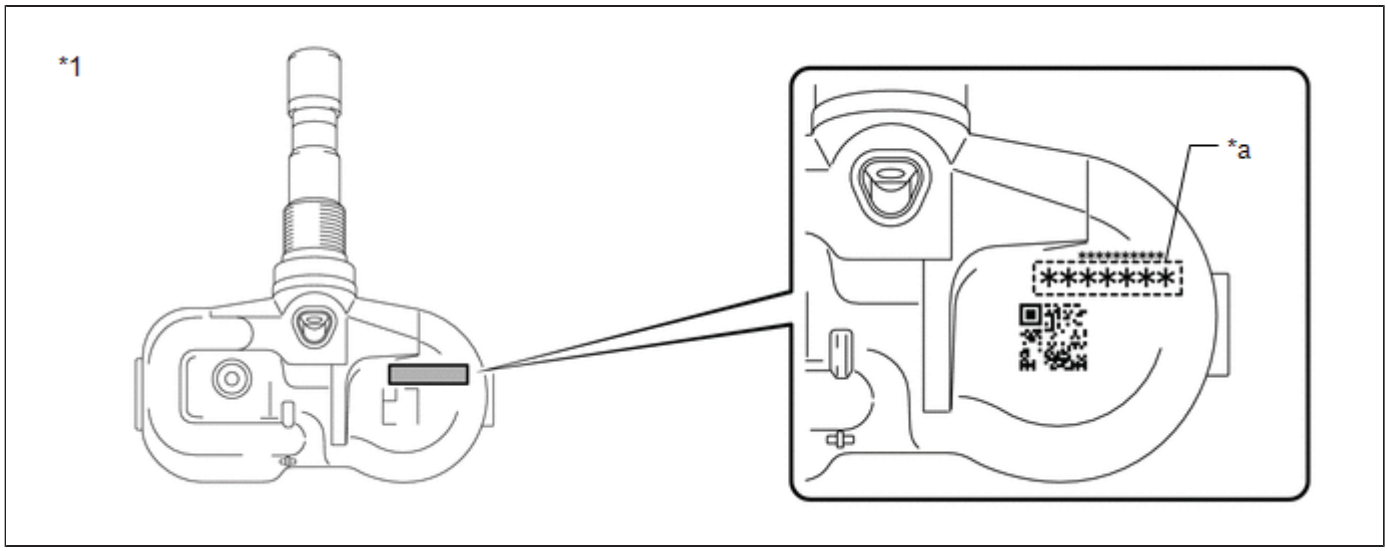
(a) In case of tire pressure warning ECU and receiver replacement:

(1) Read the registered transmitter IDs that are stored in the old ECU using the Techstream and write them down.

(2) If reading the stored transmitter IDs is impossible due to malfunctions of components such as the tire pressure warning ECU and receiver, remove the tires from the wheels and check the IDs located on the tire pressure warning valve and transmitters.

(b) In case of tire pressure warning valve and transmitter replacement:

(1) Take a note of the 7-digit number (transmitter ID) written on the tire pressure warning valve and transmitter.



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

2. REGISTER TRANSMITTER ID (USING TECHSTREAM)

HINT:

- The previously registered IDs will be cleared from memory when the registration is completed.
- If the ID registration step is not completed within 300 seconds, ID registration will be canceled.

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

Click here INFO INFO

(b) Turn the power switch off.

(c) Connect the Techstream to the DLC3.

(d) Turn the power switch on (IG) and the Techstream on.

(e) Enter the following menus: Chassis / Tire Pressure Monitor / Utility / ID Registration.

Chassis > Tire Pressure Monitor > Utility

TESTER DISPLAY
ID Registration

(f) Perform the procedure displayed on the Techstream.

3. CONFIRMATION OF TRANSMITTER ID REGISTRATION

It may take a few minutes until the values are displayed. If the values are not displayed after a few minutes, perform troubleshooting according to the inspection procedure for DTCs C2121 to C2124 (C2125: w/ Full Size Spare Tire).

HINT:

Click here INFO

NOTICE:

- If the transmitter IDs have not been registered, DTC C2171 is stored in the tire pressure warning ECU and receiver after 3 minutes or more.
- If normal pressure values are displayed, the transmitter IDs have been registered correctly.
- If the tire pressure values are not displayed after a few minutes, the transmitter IDs may be incorrect or the system may have a malfunction.
- After all transmitter IDs are registered, DTC C2126 is stored in the tire pressure warning ECU and receiver and the tire pressure warning light blinks for 1 minute and then illuminates. When the tire pressure warning ECU and receiver successfully receives signals from all the transmitters whose IDs are stored in the ECU, DTC C2126 is cleared and the tire pressure warning light goes off.

(a) Enter the following menus: Chassis / Tire Pressure Monitor / 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	If N/A is displayed, data has not been received.*1
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	If N/A is displayed, data has not been received.*1

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	If N/A is displayed, data has not been received.*1
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	If N/A is displayed, data has not been received.*1
ID 5 Tire Inflation Pressure	ID5 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	• If N/A is displayed, data has not been received.*1 • *2

HINT:

- *1: It may take a few minutes until the values are displayed. If the values are not displayed after a few minutes, perform troubleshooting according to the inspection procedure for DTCs C2121 to C2124 (C2125: w/ Full Size Spare Tire).
- *2: w/ Full Size Spare Tire

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
ID 5 Tire Inflation Pressure

(b) Reduce the tire inflation pressure of each tire 40 kPa (0.4 kgf/cm^2, 5.8 psi) or more, and check that the "ID Tire Inflation Pressure" data is updated and that the actual tire inflation pressures are displayed.

(c) After confirming that all of the tire inflation pressure values (except the compact spare tire) have been updated, adjust the tire inflation pressure to the specified value, operate the steering pad switch assembly and perform

initialization.

Last Modified: 01-14-2019	6.8:8.0.48	**Doc ID:** RM100000000U2H7
Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 - 12/2018]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING SYSTEM: SYSTEM DESCRIPTION; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

SYSTEM DESCRIPTION

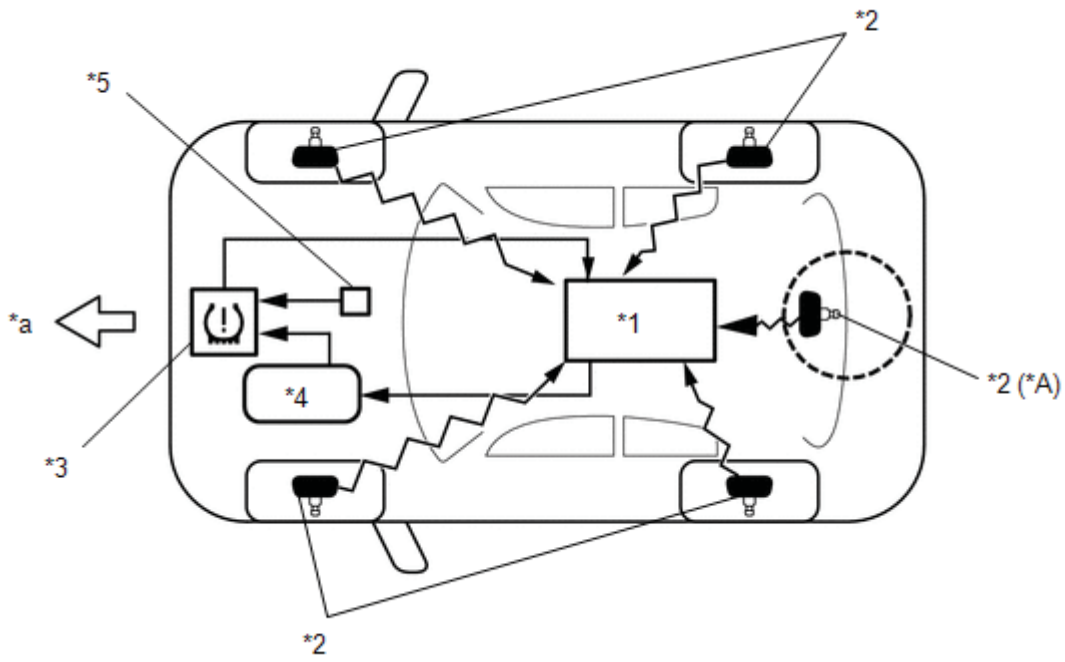
DESCRIPTION OF SYSTEM

(a) The tire pressure warning system warns the driver when the tire pressure has decreased in order to decrease CO2 emissions and enhance safety.

(b) The tire pressure warning system illuminates the tire pressure warning light to warn the driver when any of the following condition is met:

- Due to the operation of the steering pad switch assembly, the tire pressure drops to approximately 75% or less of the tire pressure set during system initialization.

(c) The tire pressure warning ECU and receiver receives the transmitter ID, temperature and tire pressure information from the tire pressure warning valve and transmitters shown in the following illustration. This information is used to determine when the pressure in one of the tires has dropped.



*A	w/ Full Size Spare Tire	-	-
*1	Tire Pressure Warning ECU and Receiver	*2	Tire Pressure Warning Valve and Transmitter
*3	Combination Meter Assembly - Tire Pressure Warning Light	*4	Main Body ECU (Multiplex Network Body ECU)
*5	Steering Pad Switch Assembly	-	-
*a	Front	-	-

DESCRIPTION OF REGISTRATION

(a) When tires and wheels are replaced, always ensure that each transmitter ID is correctly registered.

(b) When one or more of the tire pressure warning valve and transmitters or the tire pressure warning ECU and receiver is replaced, the transmitter IDs for all of the tire pressure warning valve and transmitters must be re-registered. Before registering the transmitter ID of the new tire pressure warning valve and transmitter, check the Data List and record all of the transmitter IDs that are already registered.

TIRE PRESSURE WARNING RESET SWITCH

(a) By operating the steering pad switch assembly, the tire pressure warning ECU and receiver can be set to issue a warning at an inflation pressure that corresponds to the type of tires fitted to the vehicle. Therefore, the warning threshold must be set to the proper value in order to comply with local regulations.

(b) Operate the steering pad switch assembly only after the inflation pressures of all tires (except the compact spare tire) have been adjusted on the vehicle.

DESCRIPTION OF INITIALIZATION

(a) During initialization, the tire pressure warning valve and transmitters measure the inflation pressure of the tires, and register the signals that are transmitted into the tire pressure warning ECU and receiver at a frequency of about once per minute. The initialization process is completed when signals from all tires (except the compact spare tire) have been received.

(b) Perform initialization in the following cases:

(1) Before delivery of a new vehicle.

(2) After replacement of the tire pressure warning ECU and receiver*.

(3) After replacement of a tire pressure warning valve and transmitter*.

(4) When the specified tire pressure changes due to the use of a different size or type of tire.

(5) When the specified tire pressure changes due to a change in the vehicle load, the speed range that the vehicle will be used in, etc.

(6) When a tire rotation is performed and the specified tire pressures are different for the front and rear of the vehicle.

HINT:

*: Perform initialization after the transmitter ID registration is completed.

FUNCTION OF MAIN COMPONENTS

COMPONENT	FUNCTION
Tire Pressure Warning ECU and Receiver	• Receives data from each tire pressure warning valve and transmitter and monitors the tire pressures. • When the tire pressure warning ECU and receiver detects a drop in the tire pressure, a system malfunction, or initialization mode, it outputs the respective signal to the combination meter assembly. • When the tire pressure warning ECU and receiver detects that the vehicle speed signal is lost, it determines that the vehicle is being driven.
Tire Pressure Warning Valve and Transmitter	Detects the pressure and internal temperature of the tire and transmits the measured values and the ID code to the tire pressure warning ECU and receiver.
Steering Pad Switch Assembly	Stores the warning threshold determined by the current tire pressure as the set pressure in the tire pressure warning ECU and receiver when operated.
Combination Meter Assembly	Transmits the vehicle speed signal to the tire pressure warning ECU and receiver.
Tire Pressure Warning Light	• Illuminates after blinking for 1 minute to warn the driver in accordance with the signal from the tire pressure warning ECU and receiver. • Displays 2-digit Diagnostic Trouble Codes (DTCs).

Multi-information Switch (Steering Pad Switch Assembly)	Houses the switches to operate the multi-information display.
Main Body ECU (Multiplex Network Body ECU)	• The main body ECU (multiplex network body ECU) and tire pressure warning ECU and receiver are connected using 2 direct lines that they use to communicate with each other. • The main body ECU (multiplex network body ECU) is connected to the combination meter assembly via CAN bus.

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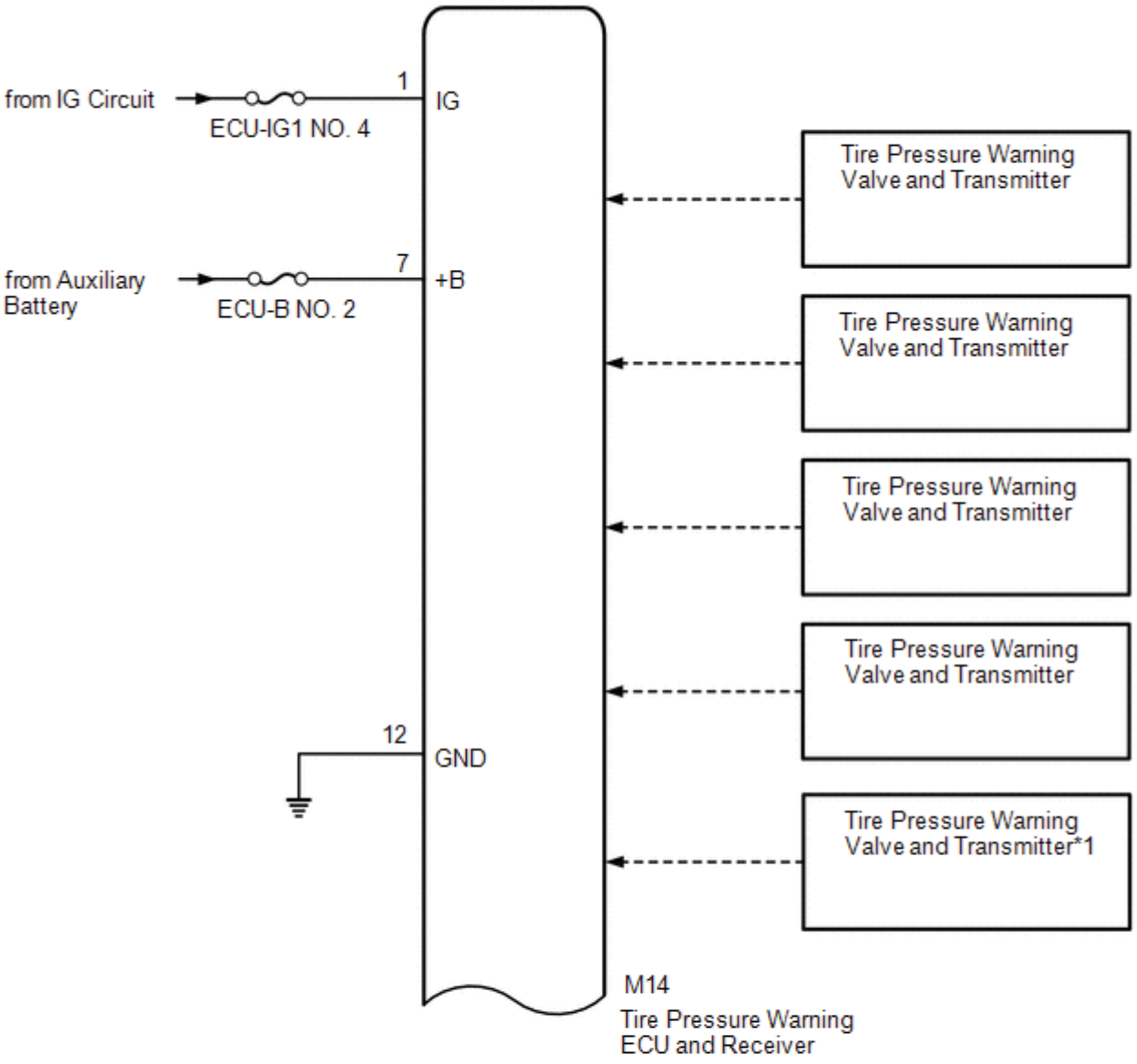
Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 - 12/2018]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING SYSTEM: SYSTEM DIAGRAM; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

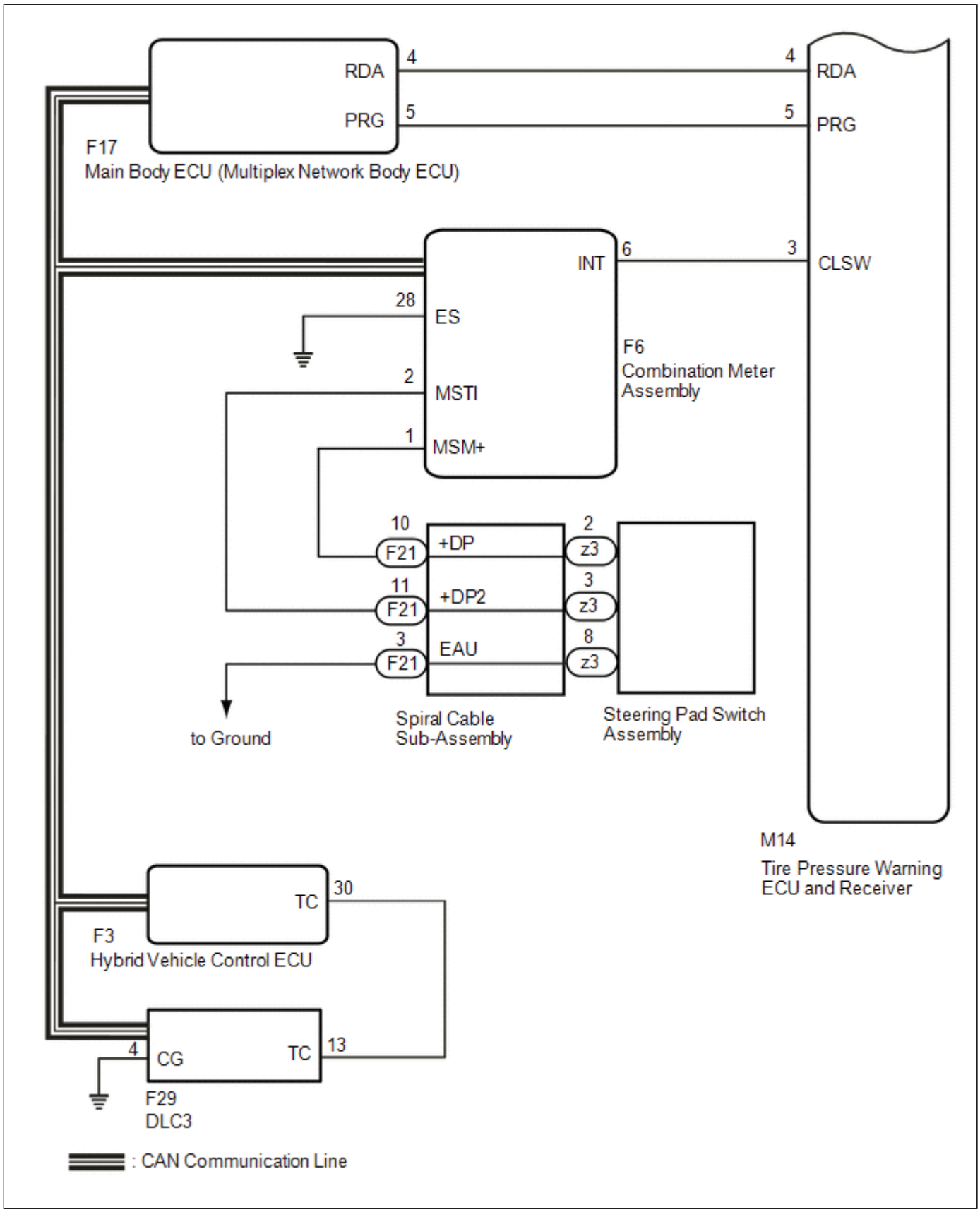
SYSTEM DIAGRAM



: Radio Waves

: CAN Communication Line

*1: w/ Full Size Spare Tire



HINT:

Each tire pressure warning valve and transmitter sends its transmitter ID, temperature and tire pressure information to the tire pressure warning ECU and receiver.

TRANSMITTING ECU	RECEIVING ECU	SIGNAL	COMMUNICATION

(TRANSMITTER)			METHOD
Combination Meter Assembly	Main Body ECU (Multiplex Network Body ECU)	Vehicle speed signal	CAN communication line
Main Body ECU (Multiplex Network Body ECU)	Combination Meter Assembly	Tire pressure warning light signal	CAN communication line

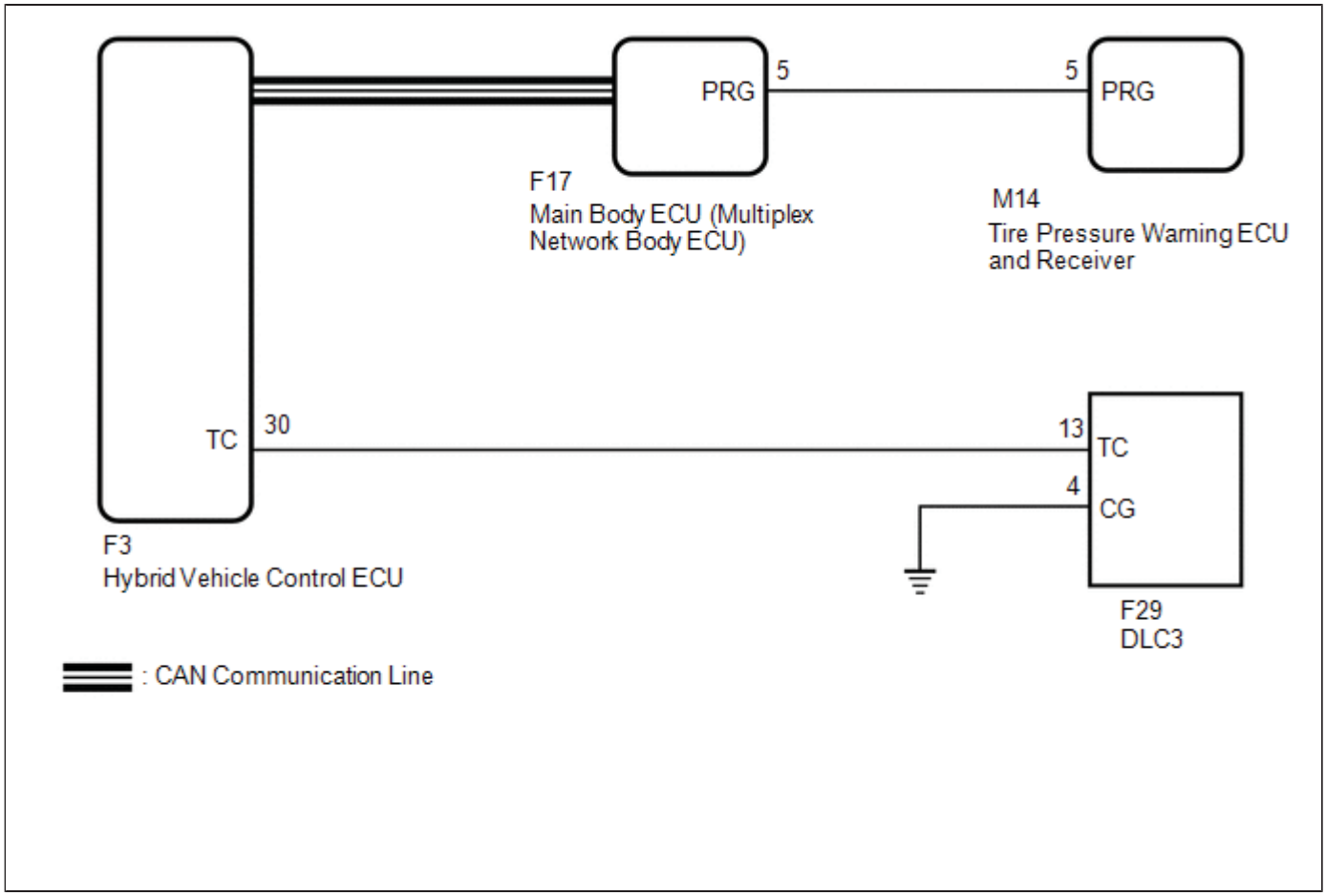
Last Modified: 01-14-2019	6.8:8.0.48	**Doc ID:** RM100000000U2HP
Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 - 12/2018]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING SYSTEM: TC and CG Terminal Circuit; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

TC and CG Terminal Circuit

DESCRIPTION

Tire pressure warning system DTCs can be checked by connecting terminals 13 (TC) and 4 (CG) of the DLC3. The DTCs are indicated by blinking the tire pressure warning light.

WIRING DIAGRAM



PROCEDURE

1.	**CHECK CAN COMMUNICATION SYSTEM**

(a) Check for DTCs.

Click here INFO INFO

RESULT	PROCEED TO
DTCs are not output.	A
DTCs are output.	B

B GO TO CAN COMMUNICATION SYSTEM

A

2.	**CHECK DTC (C2179/79)**

(a) Check if DTC C2179/79 is output.

Click here INFO

Chassis > Tire Pressure Monitor > Trouble Codes

RESULT	PROCEED TO
DTC C2179/79 is not output.	A
DTC C2179/79 is output.	B

B GO TO DTC C2179/79

A

3.	**CHECK HARNESS AND CONNECTOR (TC of DLC3 - HYBRID VEHICLE CONTROL ECU)**

(a) Disconnect the F3 hybrid vehicle control ECU connector.

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

Standard Resistance:

EWD INFO

Click Location & Routing(F29,F3)
Click Connector(F29)
Click Connector(F3)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
F29-13 (TC) - F3-30 (TC)	Always	Below 1 Ω
F29-13 (TC) or F3-30 (TC) - Body ground	Always	10 kΩ or higher

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

OK ▼

4.	CHECK HARNESS AND CONNECTOR (CG of DLC3 - BODY GROUND)

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

Standard Resistance:

EWD INFO

Click Location & Routing(F29)
Click Connector(F29)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
F29-4 (CG) - Body ground	Always	Below 1 Ω

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

OK ▼

5.	INSPECT DLC3 TERMINAL VOLTAGE (TC VOLTAGE)

(a) Reconnect the F3 hybrid vehicle control ECU connector.

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

Standard Voltage:

EWD INFO

Click Location & Routing(F29)
Click Connector(F29)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION

F29-13 (TC) - F29-4 (CG)	Power switch on (IG)	11 to 14 V

OK ▶ **PROCEED TO NEXT SUSPECTED AREA SHOWN IN PROBLEM SYMPTOMS TABLE**

NG ▶ **REPLACE HYBRID VEHICLE CONTROL ECU**

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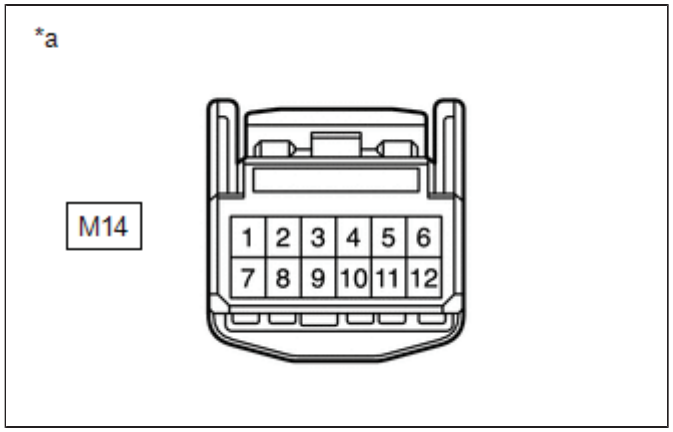
Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 - 12/2018]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING SYSTEM: TERMINALS OF ECU; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

TERMINALS OF ECU

CHECK TIRE PRESSURE WARNING ECU AND RECEIVER

(a) Disconnect the M14 tire pressure warning ECU and receiver connector and measure the voltage or resistance on the wire harness side.



*a	Front view of wire harness connector (to Tire Pressure Warning ECU and Receiver)

TERMINAL NO. (SYMBOL)	WIRING COLOR	TERMINAL DESCRIPTION	CONDITION	SPECIFIED CONDITION
M14-1 (IG) - M14-12 (GND)	B - W-B (*1) G - W-B (*2)	IG power source	Power switch on (IG)	10 to 16 V
M14-7 (+B) - M14-12 (GND)	B - W-B	Power supply (from auxiliary battery)	Always	10 to 16 V
M14-12 (GND) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω

*1: w/ Blind Spot Monitor System

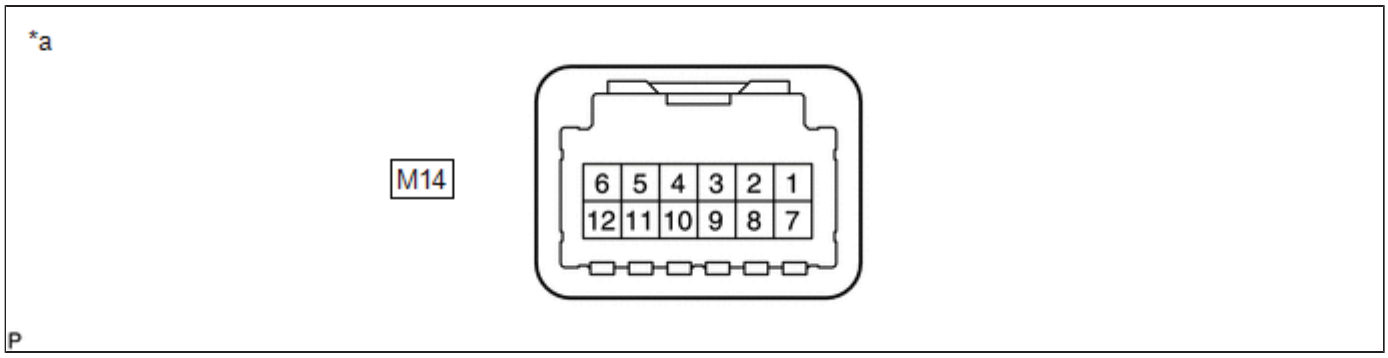
*2: w/o Blind Spot Monitor System

(b) Connect the M14 tire pressure warning ECU and receiver connector.

(c) Measure the voltage and resistance according to the value(s) in the table below. If the result is not as specified, the ECU may be malfunctioning.

HINT:

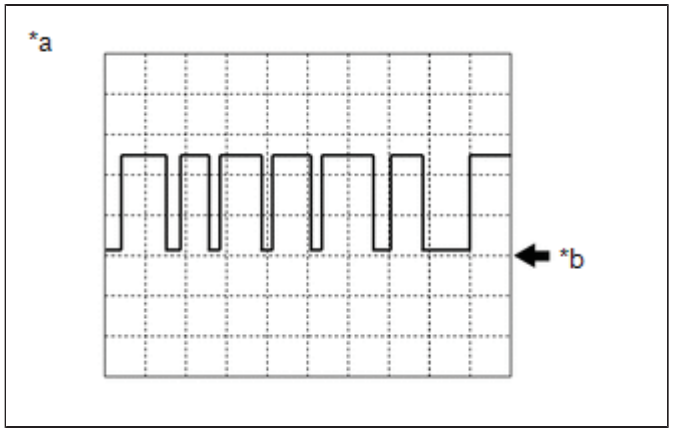
Measure the values on the wire harness side while the connector is connected.



*a	Component with harness connected (Tire Pressure Warning ECU and Receiver)	-	-

TERMINAL NO. (SYMBOL)	WIRING COLOR	TERMINAL DESCRIPTION	CONDITION	SPECIFIED CONDITION
M14-3 (CLSW) - M14-12 (GND)	L - W-B	Tire pressure warning reset switch	• Power switch on (IG) • Steering pad switch assembly operated, "TPMS" selected on the multi-information display and "ENTER" switch (steering pad switch assembly) pressed and held	Below 1.5 V
			• Power switch on (IG) • "ENTER" switch (steering pad switch assembly) off	8 to 15 V
M14-4 (RDA) - M14-12 (GND)	LG - W-B	Output signals	Power switch on (IG)	Pulse generation (see waveform 1)
M14-5 (PRG) - M14-12 (GND)	GR - W-B	Input signals	Power switch on (IG)	Pulse generation (see waveform 1)

(d) Using an oscilloscope, check waveform 1.



*a	Example
*b	GND

Waveform 1:

ITEM	CONTENTS
Terminal	M14-4 (RDA) - M14-12 (GND) M14-5 (PRG) - M14-12 (GND)
Tool setting	5 V/DIV, 5 ms./DIV.
Vehicle condition	Power switch on (IG)

HINT:

The waveform shown in the illustration is an example. If the tester displays a waveform that alternates between high and low, where high is a voltage that is between the IG power source voltage and a voltage 2.2 V lower than the IG power source voltage, and where low is a voltage of between 0 and 1.2 V, the ECU can be judged normal.

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Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 - 12/2018]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING SYSTEM: TEST MODE PROCEDURE; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

TEST MODE PROCEDURE

TEST MODE (SIGNAL CHECK MODE) PROCEDURE

HINT:

- When entering test mode (signal check mode), the tire pressure warning ECU and receiver sets all the test mode (signal check mode) DTCs first.

  After the tire pressure warning ECU and receiver completes the signal check for each inspection item, the DTCs for systems that are determined to be normal will be cleared.

  The DTCs for other inspection items may not be cleared when only a certain signal is inspected.
- When test mode (signal check mode) returns to normal mode, all the test mode (signal check mode) DTCs will be cleared.
- Operation of the tire pressure warning reset switch can be checked in test mode (signal check mode).
- During test mode (signal check mode), the system will not be initialized by operating the steering pad switch assembly. The circuit of the tire pressure warning reset switch can be inspected during this mode.

(a) Turn the power switch off.

(b) Connect the Techstream to the DLC3.

(c) Turn the power switch on (IG) and the Techstream on.

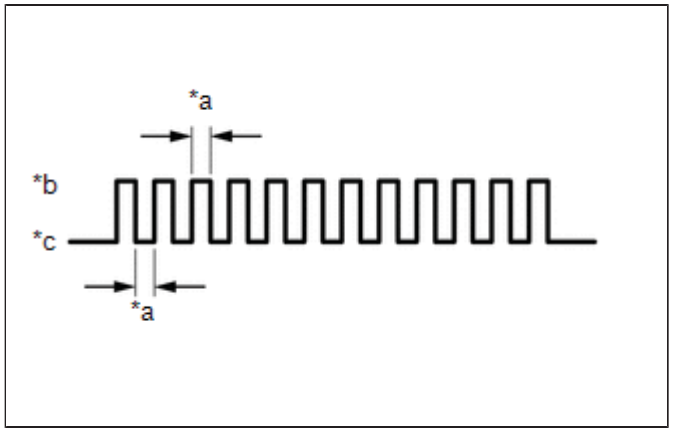
(d) Enter the following menus: Chassis / Tire Pressure Monitor / Utility / Signal Check.

Chassis > Tire Pressure Monitor > Utility

TESTER DISPLAY
Signal Check

HINT:

Every time the test mode (signal check mode) DTC clear conditions are satisfied, the tire pressure warning light illuminates for 1 second. Following this, the tire pressure warning light blinks at 0.125 second intervals.



*a	0.125 sec.
*b	ON
*c	OFF

(e) Tire pressure warning reset switch check (DTC C2198/98).

(1) Operate the steering pad switch assembly, select "TPMS" on the multi-information display and press the "ENTER" switch (steering pad switch assembly).

(f) Wait for 1.5 minutes with the vehicle stopped, or drive the vehicle at a speed of 50 km/h (31 mph) or more for 1 minute (DTCs C2181/81 to C2184/84 (C2185/85: w/ Full Size Spare Tire)).

HINT:

The tire pressure warning valve and transmitters send signals to the tire pressure warning ECU and receiver once every 1.5 minutes while the vehicle is stopped and once every minute while driving.

(g) Check that the tire pressure warning system test mode (signal check mode) DTCs are cleared.

TEST MODE (SIGNAL CHECK MODE) DTC	TEST SIGNAL	TEST MODE (SIGNAL CHECK MODE) DTC CLEAR CONDITION
C2181/81 to C2184/84 (C2185/85*)	Transmitter Data	Data is received from the relevant transmitter which has a registered ID in the tire pressure warning ECU and receiver.
C2198/98	Tire Pressure Warning Reset Switch Signal	A signal is received indicating that the steering pad switch assembly is operated, "TPMS" on the multi-information display is selected and the "ENTER" switch (steering pad switch assembly) is pressed.
*: w/ Full Size Spare Tire		

(h) Result

HINT:

After the signal check is completed, check for test mode (signal check mode) DTCs to confirm the system status.

CONDITION	PROCEDURE
Test mode (signal check mode) DTCs are output	Repair the faulty part and enter Signal Check again
Test mode (signal check mode) DTCs are cleared	No problem

(i) End of test mode (signal check mode)

(1) After completing test mode (signal check mode), turn the power switch off and disconnect the Techstream.

(j) Test mode (signal check mode) DTCs

(1) If a trouble code is displayed during the test mode (signal check mode) DTC check, check the diagnosis procedure listed for that code. For details of each code, refer to Link below.

DTC NO.	DETECTION ITEM	TROUBLE AREA	LINK
C2181/81	Transmitter ID1 not received	• Tire pressure warning valve and transmitter • Wire harness or connector • Tire pressure warning ECU and receiver	INFO
C2182/82	Transmitter ID2 not received	• Tire pressure warning valve and transmitter • Wire harness or connector • Tire pressure warning ECU and receiver	INFO
		• Tire pressure warning valve and transmitter	

C2183/83	Transmitter ID3 not received	Wire harness or connector • Tire pressure warning ECU and receiver	INFO
C2184/84	Transmitter ID4 not received	• Tire pressure warning valve and transmitter • Wire harness or connector • Tire pressure warning ECU and receiver	INFO
C2185/85*	Transmitter ID5 not received	• Tire pressure warning valve and transmitter • Wire harness or connector • Tire pressure warning ECU and receiver	INFO
C2198/98	Initialization switch error	• Steering pad switch assembly • Spiral cable sub-assembly • Wire harness or connector • Tire pressure warning ECU and receiver	INFO
*: w/ Full Size Spare Tire			

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Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 - 12/2018]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING SYSTEM: Tire Pressure Warning Light Circuit; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

Tire Pressure Warning Light Circuit

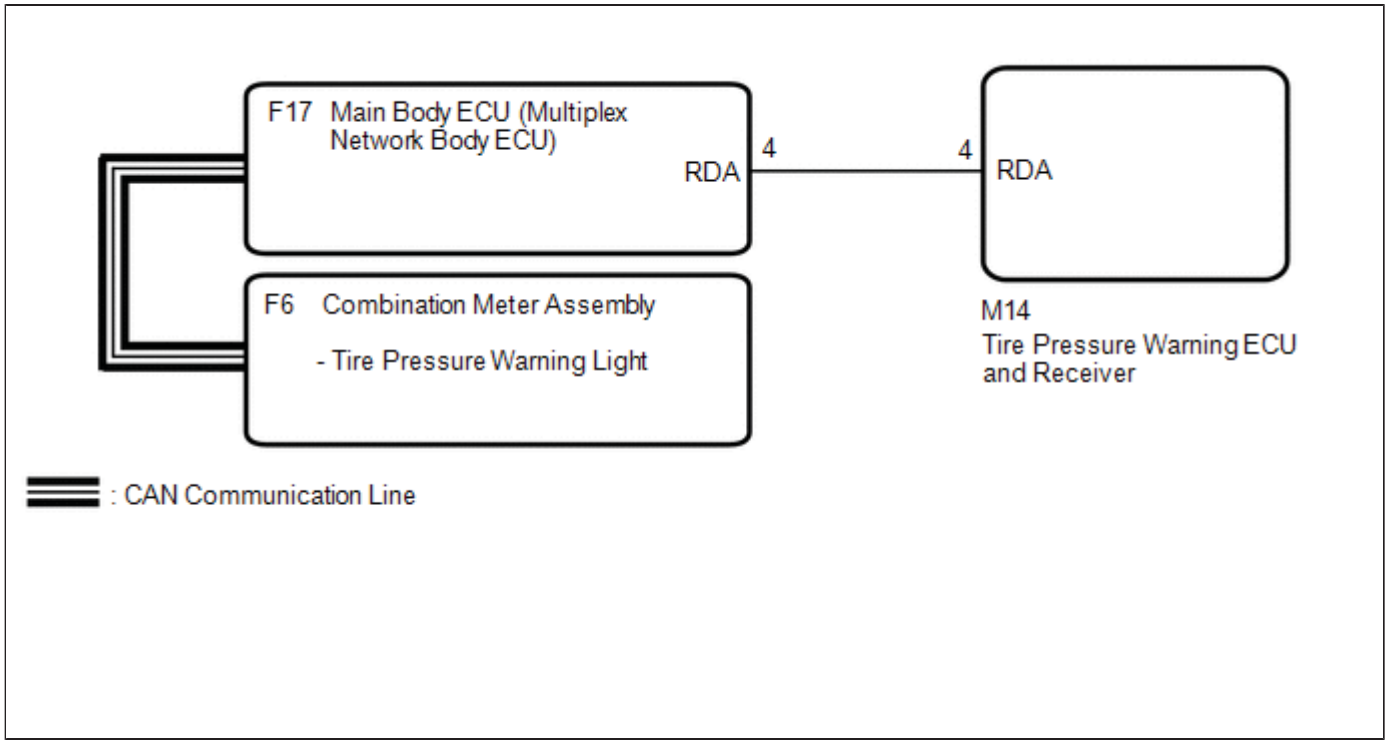
DESCRIPTION

If the tire pressure warning ECU and receiver detects any problems, the tire pressure warning light blinks for 1 minute then illuminates, and tire pressure monitoring is disabled at the same time. At this time, the ECU stores a DTC in memory.

Connecting terminals TC and CG of the DLC3 makes the tire pressure warning light blink to output DTCs.

The tire pressure warning ECU and receiver sends the tire pressure warning light illumination request signal to the main body ECU (multiplex network body ECU) via a direct line. The main body ECU (multiplex network body ECU) then sends the signal to the combination meter assembly via CAN communication.

WIRING DIAGRAM



CAUTION / NOTICE / HINT

NOTICE:

- When replacing the tire pressure warning ECU and receiver, read the transmitter IDs stored in the old ECU using the Techstream and write them down before removal.
- 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 has been replaced.

PROCEDURE

1.	CHECK FOR DTC (CAN COMMUNICATION SYSTEM)

(a) Check if CAN communication system DTCs are output.

Click here INFO INFO

RESULT	PROCEED TO
DTCs are not output.	A
DTCs are output.	B

B ▶ GO TO CAN COMMUNICATION SYSTEM

A ▼

2.	CHECK DTC OUTPUT (B1247)

(a) Clear the DTCs.

Click here INFO

Chassis > Tire Pressure Monitor > Clear DTCs

(b) Turn the power switch off.

(c) Turn the power switch on (IG).

(d) Check for DTCs.

Click here INFO

Chassis > Tire Pressure Monitor > Trouble Codes

OK:

DTC B1247 is not output.

NG ▶ GO TO DTC (B1247)

OK ▼

3.	CHECK OPERATION OF TIRE PRESSURE WARNING LIGHT (ACTIVE TEST)

(a) Turn the power switch off.

(b) Connect the Techstream to the DLC3.

(c) Turn the power switch on (IG).

(d) Turn the Techstream on.

(e) Enter the following menus: Body Electrical / Combination Meter / Active Test.

(f) Check the condition of the tire pressure warning light using the Techstream.

Body Electrical > Combination Meter > Active Test

TESTER DISPLAY	MEASUREMENT ITEM	CONTROL RANGE	DIAGNOSTIC NOTE
Indicat. Tire Pressure Warning System	Tire pressure warning light	OFF or ON	-

Body Electrical > Combination Meter > Active Test

TESTER DISPLAY
Indicat. Tire Pressure Warning System

OK:

The tire pressure warning light turns on or off in accordance with the Techstream operation.

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

NG ▶ **GO TO METER / GAUGE SYSTEM**

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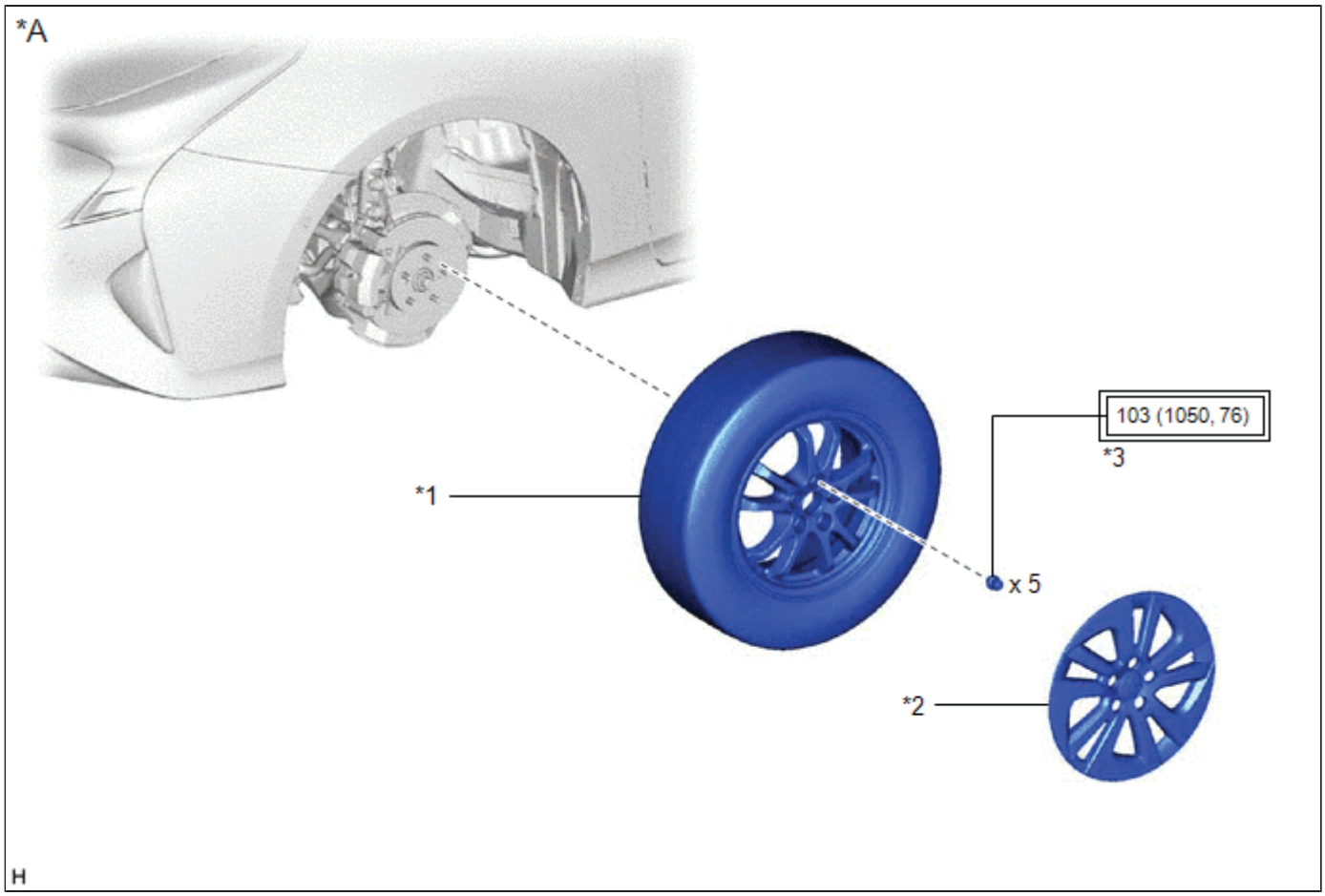
Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 - 12/2018]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING VALVE: COMPONENTS; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

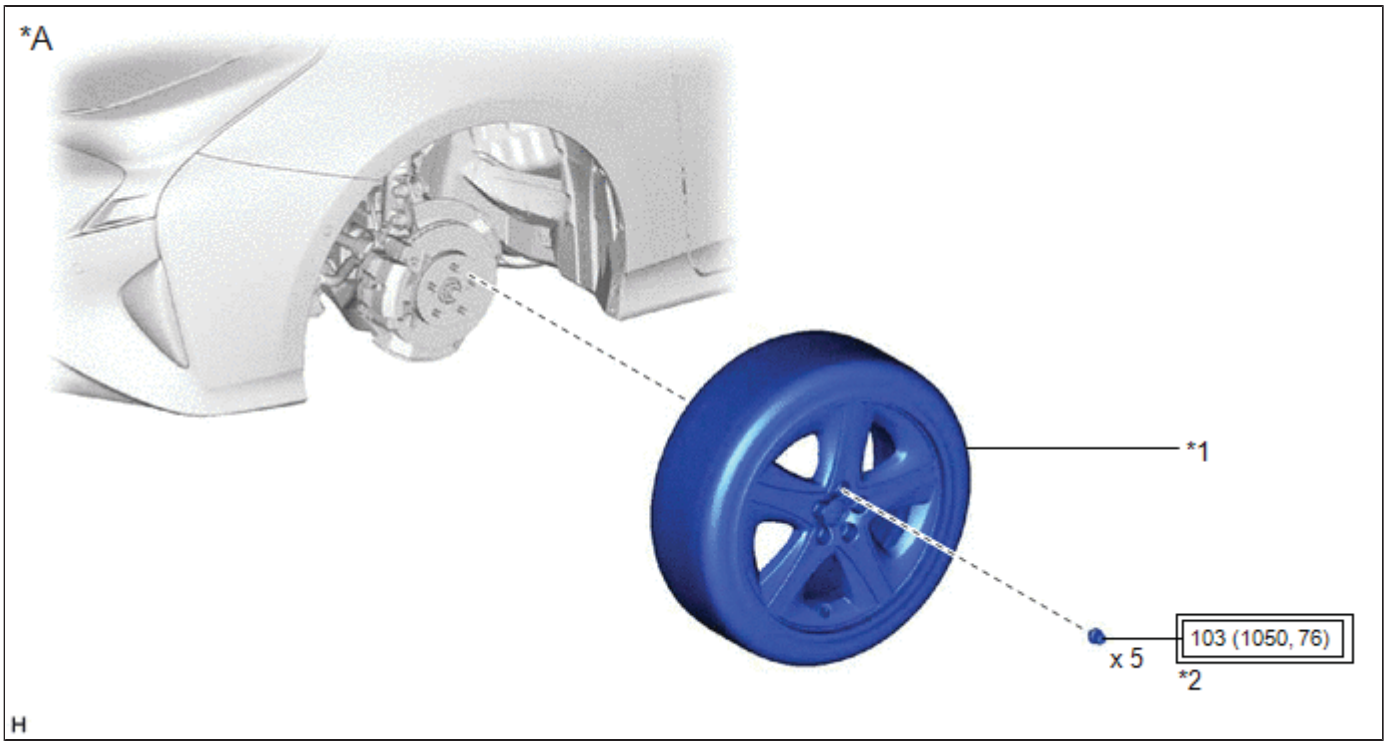
COMPONENTS

ILLUSTRATION



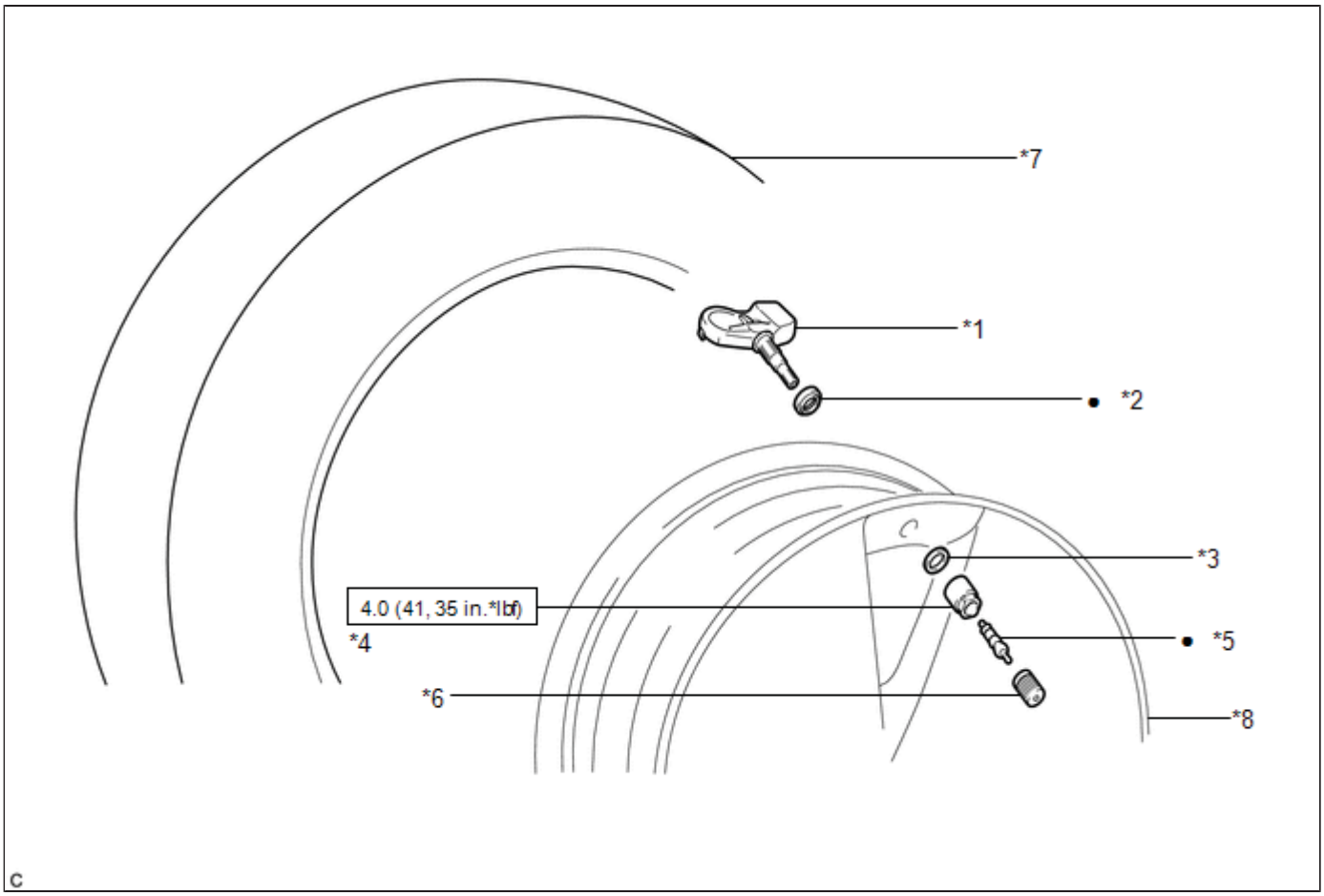
*A	for 15 inch Wheel	-	-
*1	WHEEL ASSEMBLY	*2	WHEEL CAP
*3	AXLE HUB NUT	-	-
	Tightening torque for "Major areas involving basic vehicle performance such as moving/turning/stopping" : N*m (kgf*cm, ft.*lbf)	-	-

ILLUSTRATION



*A	for 17 inch Wheel	-	-
*1	WHEEL ASSEMBLY	*2	AXLE HUB NUT
▭	Tightening torque for "Major areas involving basic vehicle performance such as moving/turning/stopping" : N*m (kgf*cm, ft.*lbf)	-	-

ILLUSTRATION



*1	TIRE PRESSURE WARNING VALVE AND TRANSMITTER	*2	GROMMET
*3	WASHER	*4	NUT
*5	VALVE CORE	*6	TIRE VALVE CAP
*7	TIRE	*8	DISC WHEEL
□	N*m (kgf*cm, ft.*lbf): Specified torque	•	Non-reusable part

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Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 -]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING VALVE: DISPOSAL; 2016 - 2019 MY Prius [11/2015 -]		

DISPOSAL

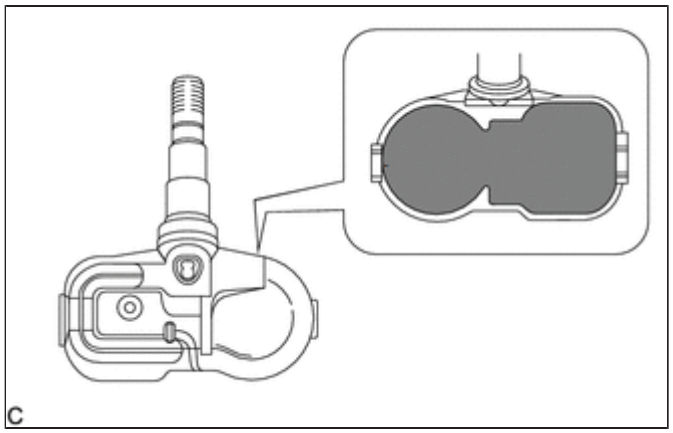
CAUTION / NOTICE / HINT

HINT:

The tire pressure warning valve and transmitter is powered by a lithium battery. When disposing of the tire pressure warning valve and transmitter, remove the battery and dispose of it properly.

PROCEDURE

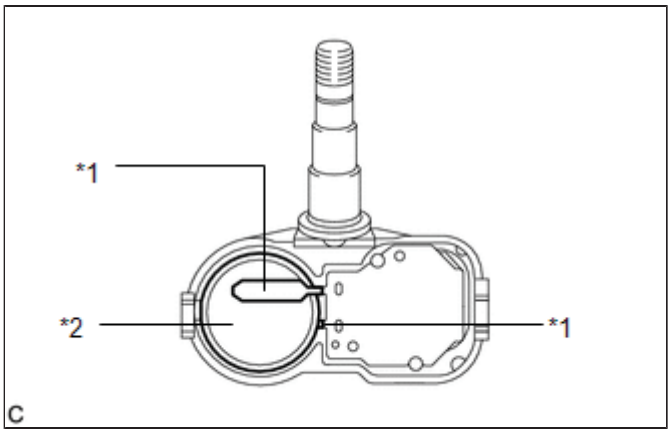
1. DISPOSE OF TIRE PRESSURE WARNING VALVE AND TRANSMITTER



	Urethane

(a) Remove the urethane that protects the lithium battery and the circuit board.

(b) Cut the 2 terminals to remove the lithium battery from the tire pressure warning valve and transmitter.



*1	Terminal
*2	Lithium Battery

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Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 -]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING VALVE: INSTALLATION; 2016 - 2019 MY Prius [11/2015 -]		

INSTALLATION

CAUTION / NOTICE / HINT

NOTICE:

- Always use a new grommet and valve core when installing the tire pressure warning valve and transmitter.
- Check that the washer and nut are not damaged, and replace them if necessary.
- Make sure not to damage the urethane covered backside of the tire pressure warning valve and transmitter (the surface opposite to the side with the ID code) with anything sharp.
- Write down the ID number before installation.
- Check that there is no oil, water or lubricant around the rim hole, tire pressure warning valve and transmitter, washer and nut. Failing to do so may result in improper installation.
- Use only a specified tire valve cap. If an unspecified tire valve cap is used, it may seize to the tire pressure warning valve and transmitter.

PROCEDURE

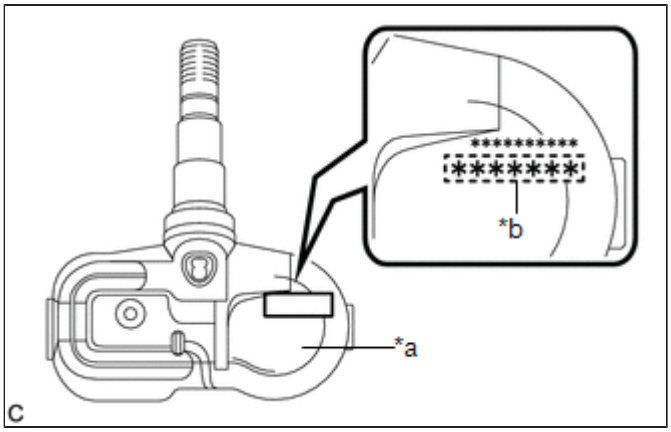
1. INSTALL TIRE PRESSURE WARNING VALVE AND TRANSMITTER

(a) Install a new grommet to the tire pressure warning valve and transmitter.

NOTICE:

A new tire pressure warning valve and transmitter comes with a grommet installed. Make sure not to install an extra grommet.

(b) Write down the 7-digit transmitter ID number shown in the illustration.



*a	Printed Surface
*b	7-digit Transmitter ID Number

(c) Insert the tire pressure warning valve and transmitter with grommet from the inside of the rim.

NOTICE:

- Make sure that the tire pressure warning valve and transmitter is installed so that the printed surface can be seen. If the tire pressure warning valve and transmitter is installed upside down, it may be damaged or fail to transmit signals when driving at high speeds.
- Check that there is no deformation or damage to the tire pressure warning valve and transmitter.
- Check that there is no foreign matter on the grommet and around the rim hole.

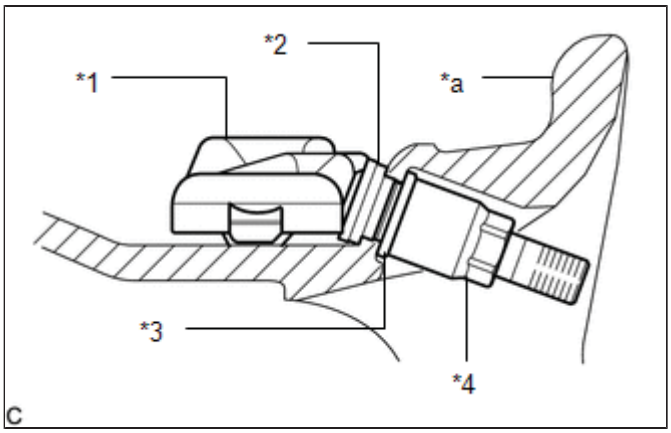
(d) Install the washer to the tire pressure warning valve and transmitter from the outside of the rim, and using an 11 mm socket wrench, tighten the nut.

Torque:

4.0 N·m {41 kgf·cm, 35 in·lbf}

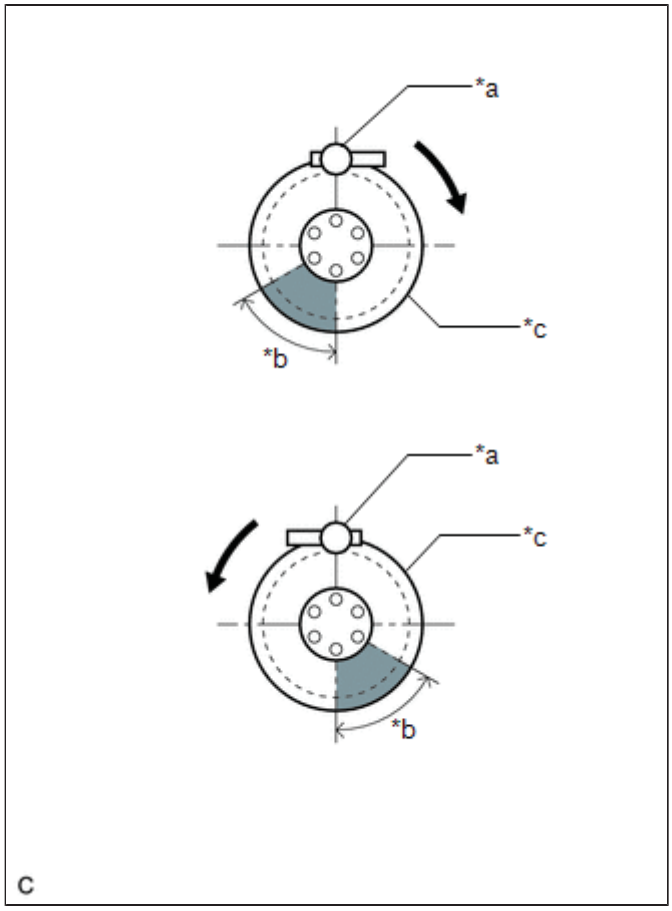
NOTICE:

- No further tightening is required once the nut is tightened to the specified torque.
- Check that there is no foreign matter on the grommet, washer and nut.



*1	Tire Pressure Warning Valve and Transmitter
*2	Grommet
*3	Washer
*4	Nut
*a	Rim

(e) Set the tire and disc wheel onto the mounting machine as shown in the illustration.



*a	Mount Tool of the Mounting Machine
*b	60°
*c	Rim

	Rim Rotating Direction
	Area for Tire Pressure Warning Valve and Transmitter

NOTICE:

- Position the main body of the tire pressure warning valve and transmitter in the area shown in the illustration.
- If the tire pressure warning valve and transmitter is positioned outside this area, it will interfere with the tire bead and may be damaged.

(f) Apply a sufficient coat of soapy water or equivalent to the tire bead and rim.

NOTICE:

Do not apply soapy water or equivalent directly to the tire pressure warning valve and transmitter.

(g) Using a mounting machine, install the tire to the disc wheel.

NOTICE:

- Make sure that the tire bead and mount tool do not interfere with the tire pressure warning valve and transmitter.
- Make sure that the tire pressure warning valve and transmitter is not clamped by the bead and rim.

(h) Install a new valve core.

(i) Inflate the tire to the specified tire inflation pressure.

Click here INFO INFO INFO

(j) After the tire is inflated, the nut may be loose. Using an 11 mm socket wrench, retighten the nut to the specified torque.

Torque:

4.0 N·m {41 kgf·cm, 35 in·lbf}

NOTICE:

No further tightening is required once the nut is tightened to the specified torque.

(k) Check the surroundings of the tire pressure warning valve and transmitter for air leaks with soapy water or equivalent.

(1) If air is leaking from the valve core, press the valve core several times to remove foreign matter. Replace the valve core as necessary.

(2) If air is leaking from around the tire pressure warning valve and transmitter, check if the grommet, washer and nut are not deformed, damaged or contaminated with foreign matter. Replace the grommet, washer or nut as necessary.

(l) Install the tire valve cap.

2. INSTALL WHEEL ASSEMBLY

Click here INFO INFO

3. INSPECT TIRES

Click here INFO INFO INFO

4. REGISTER TRANSMITTER ID

Click here INFO INFO

5. INSPECT TIRE PRESSURE WARNING SYSTEM

Click here INFO INFO

6. PERFORM INITIALIZATION

Click here INFO INFO

Last Modified: 01-14-2019	6.8:8.0.48	**Doc ID:** RM100000000QTAX
Model Year Start: 2016	**Model:** Prius	**Prod Date Range:** [11/2015 -]
Title: TIRE PRESSURE MONITORING: TIRE PRESSURE WARNING VALVE: REMOVAL; 2016 - 2019 MY Prius [11/2015 -]		

REMOVAL

CAUTION / NOTICE / HINT

The necessary procedures (adjustment, calibration, initialization or registration) that must be performed after parts are removed and installed, or replaced during tire pressure warning valve and transmitter removal/installation are shown below.

REPLACEMENT PART OR PROCEDURE	NECESSARY PROCEDURES	EFFECTS/INOPERATIVE WHEN NOT PERFORMED	LINK
Tire pressure warning valve and transmitter	• Register transmitter ID • Initialize tire pressure warning system	• When DTC detection conditions of "transmitter ID not received" DTC are met, TPWS indicator blinks for 1 minute, and then illuminates. • Tire pressure warning function	INFO INFO for Registration INFO INFO for Initialization

PROCEDURE

1. REMOVE WHEEL ASSEMBLY

Click here INFO INFO

2. REMOVE TIRE PRESSURE WARNING VALVE AND TRANSMITTER

(a) Remove the tire valve cap.

NOTICE:

Keep the removed tire valve cap.

(b) Remove the valve core to release the air from the tire.

NOTICE:

Make sure that a sufficient amount of air has been released.

(c) Using an 11 mm deep socket wrench, remove the nut and washer.

(d) Drop the tire pressure warning valve and transmitter with grommet into the tire.

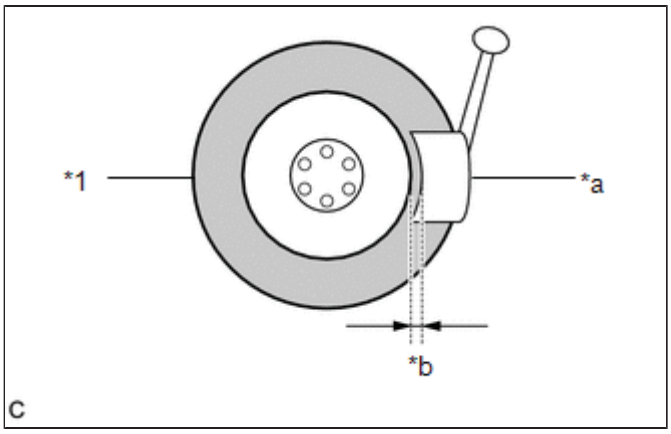
HINT:

The grommet may remain attached to the rim.

(e) Using a tire remover, remove the tire from the disc wheel.

NOTICE:

- Be careful not to damage the tire pressure warning valve and transmitter due to interference between the valve and the tire bead.
- Set the tire remover shoe as shown in the illustration.



*1	Tire
*a	Shoe
*b	10 to 20 mm (0.394 to 0.787 in.)

(f) Take out the tire pressure warning valve and transmitter with grommet from the tire.

(g) Remove the grommet from the tire pressure warning valve and transmitter.