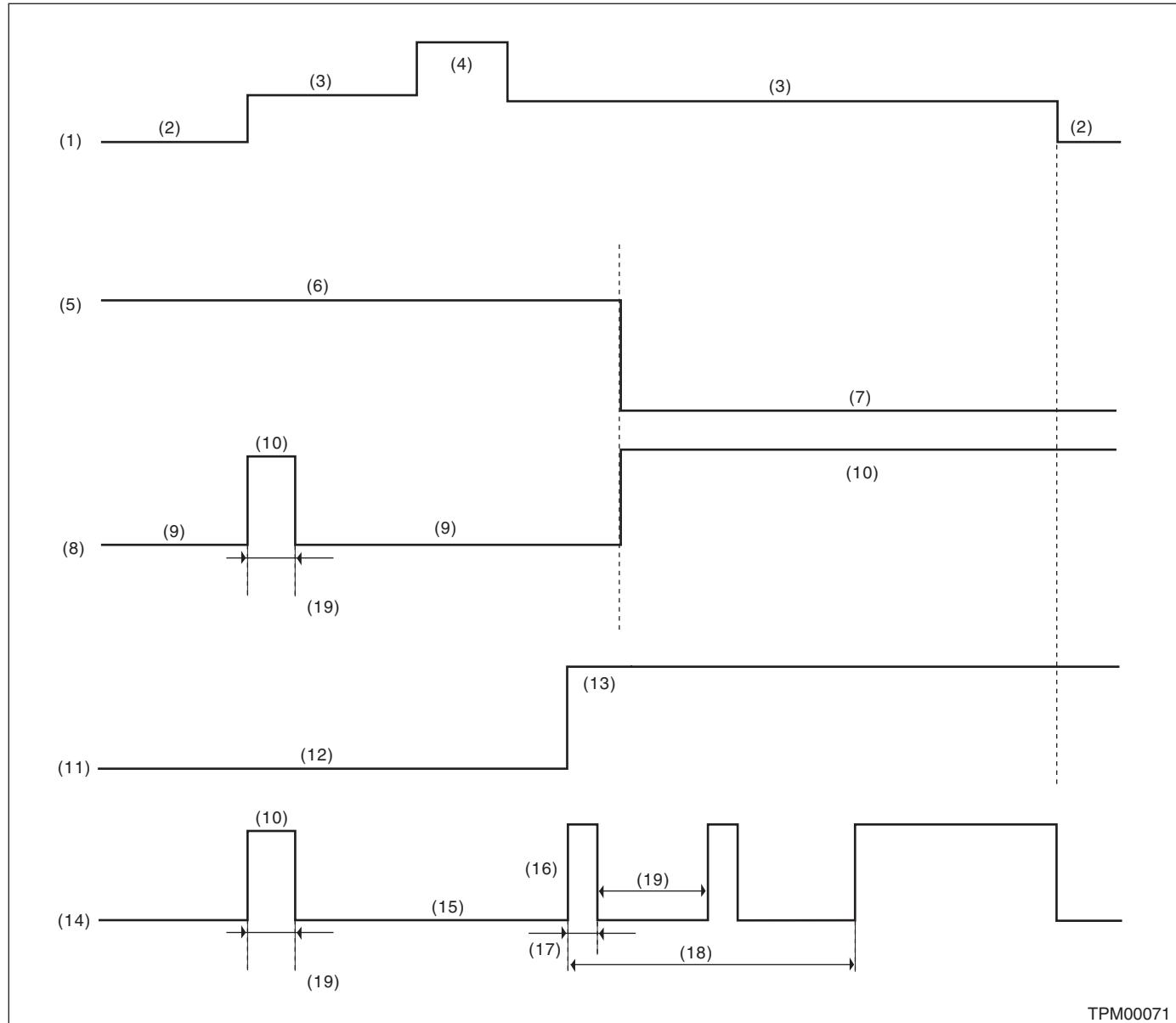


# Tire Pressure Warning Light / Trouble Indicator Light Illumination Pattern

## TIRE PRESSURE MONITORING SYSTEM (DIAGNOSTICS)

### 9. Tire Pressure Warning Light / Trouble Indicator Light Illumination Pattern

#### A: INSPECTION



(1) Ignition switch	(8) Tire pressure warning light (tire pressure condition)	(14) Tire inflation pressure warning light (system condition)
(2) OFF	(9) Light OFF	(15) Light OFF
(3) ON	(10) Light ON	(16) Blink
(4) Start	(11) System status	(17) 1 seconds
(5) Tire inflation pressure condition	(12) Normal	(18) Blinks 25 times
(6) Meet the specification	(13) Malfunction	(19) 2 seconds
(7) Less than standard value (For the pressure warning level, refer to "CURRENT DATA".) <Ref. to TPM(diag)-8, DATA DISPLAY, OPERATION, Subaru Select Mon- itor.>		

## Tire Pressure Warning Light / Trouble Indicator Light Illumination Pattern

### TIRE PRESSURE MONITORING SYSTEM (DIAGNOSTICS)

- 1) When the tire pressure warning light does not illuminate in accordance with this illumination pattern, there must be an electrical malfunction.
- 2) If the tire pressure warning light does not go off, check the TPMS & keyless entry control module/warning light circuit and the combination meter circuit. <Ref. to TPM(diag)-19, TIRE PRESSURE WARNING LIGHT DOES NOT COME OFF, Tire Pressure Warning Light / Trouble Indicator Light Illumination Pattern.>

#### NOTE:

If the problem is fixed while driving at approximately 40 km/h (25 MPH) after the tire pressure warning light blinks/lights, the warning light goes out and the tire pressure monitor system operates normally. (If there is a decrease in tire pressure, or a malfunction of the system, the malfunction history is displayed.)

# Tire Pressure Warning Light / Trouble Indicator Light Illumination Pattern

## TIRE PRESSURE MONITORING SYSTEM (DIAGNOSTICS)

### B: TIRE PRESSURE WARNING LIGHT DOES NOT COME ON

#### DETECTING CONDITION:

Defective combination meter

#### TROUBLE SYMPTOM:

When the ignition switch is turned to ON, the tire pressure warning light does not turn on (for approx. 2 seconds).

Step	Check	Yes	No
<b>1 CHECK DIAGNOSTIC TROUBLE CODE (DTC).</b> Connect the Subaru Select Monitor, and read the Diagnostic Trouble Code. <Ref. to TPM(diag)-7, READ DIAGNOSTIC TROUBLE CODE (DTC), OPERATION, Subaru Select Monitor.>	Is diagnostics code (DTC) displayed?	Perform the diagnosis according to the DTC. <Ref. to TPM(diag)-22, List of Diagnostic Trouble Code (DTC).>	Replace the combination meter. <Ref. to IDI-11, REMOVAL, Combination Meter.>

### C: TIRE PRESSURE WARNING LIGHT DOES NOT COME OFF

#### DETECTING CONDITION:

- Defective combination meter
- Tires pressure drop
- Transmitter ID not registered

#### TROUBLE SYMPTOM:

Tire pressure warning light remains illuminating after engine starts.

Step	Check	Yes	No
1 <b>CHECK DTC.</b> Connect the Subaru Select Monitor, and read the Diagnostic Trouble Code. <Ref. to TPM(diag)-7, READ DIAGNOSTIC TROUBLE CODE (DTC), OPERATION, Subaru Select Monitor.>	Is a DTC displayed?	Perform the diagnosis according to the DTC. <Ref. to TPM(diag)-22, List of Diagnostic Trouble Code (DTC).>	Go to step 2.
2 <b>CHECK TRANSMITTER (ID).</b> Display the transmitter ID of the tire pressure monitor system. <Ref. to TPM(diag)-9, DISPLAY TRANSMITTER (ID), OPERATION, Subaru Select Monitor.>	Is the transmitter ID registered?	Go to step 3.	Register the transmitter ID. <Ref. to TPM(diag)-9, REGISTER TRANSMITTER (ID), OPERATION, Subaru Select Monitor.>
3 <b>CHECK TRANSMITTER DATA OUTPUT.</b> 1) Select data display of the tire pressure monitoring. 2) Start the engine and check the tire pressure warning light output.	Is the warning light output ON?	Replace the TPMS & keyless entry control module. <Ref. to WT-9, TPMS & KEY-LESS ENTRY CONTROL MODULE, REMOVAL, Tire Pressure Monitoring System.>	Replace the combination meter. <Ref. to IDI-11, REMOVAL, Combination Meter.>

# Tire Pressure Warning Light / Trouble Indicator Light Illumination Pattern

## TIRE PRESSURE MONITORING SYSTEM (DIAGNOSTICS)

### D: TIRE PRESSURE WARNING LIGHT IS 25 TIMES BLINKING AND TURN ON

#### DETECTING CONDITION:

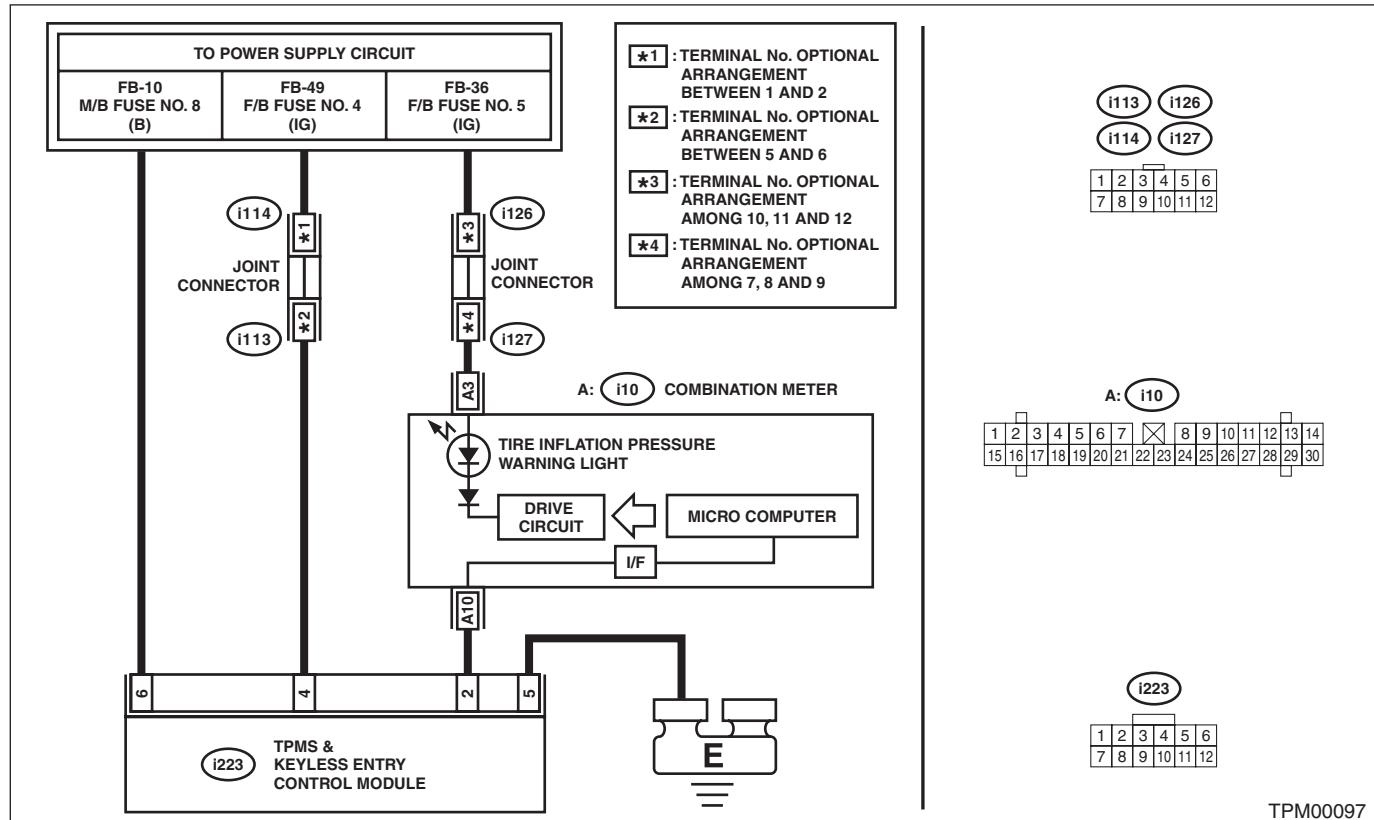
- Defective TPMS & keyless entry control module
- Defective harness
- Transmitter is faulty.

#### TROUBLE SYMPTOM:

Every time the engine starts, tire pressure warning light blinks 25 times and then illuminates.

#### WIRING DIAGRAM:

Tire pressure monitoring system <Ref. to WI-62, WIRING DIAGRAM, Tire Pressure Monitoring System. >



Step	Check	Yes	No
1 <b>CHECK DTC.</b> Connect the Subaru Select Monitor, and read the Diagnostic Trouble Code. <Ref. to TPM(diag)-7, READ DIAGNOSTIC TROUBLE CODE (DTC), OPERATION, Subaru Select Monitor.>	Is diagnostics code (DTC) displayed?	Perform the diagnosis according to the DTC. <Ref. to TPM(diag)-22, List of Diagnostic Trouble Code (DTC).>	Go to step 2.
2 <b>CHECK HARNESS.</b> 1) Connect the Subaru Select Monitor to the terminal No. 2 of the TPMS & keyless entry control module connector (i223). <b>Connector &amp; terminal</b> <b>(i223) No. 2 (+) — Chassis ground (-):</b> 2) Turn the ignition switch to ON, and select "Oscilloscope" from the Main Menu of Subaru Select Monitor. 3) Check the voltage displayed.	Is the voltage 10 V or more?	Go to step 3.	Go to step 4.

# Tire Pressure Warning Light / Trouble Indicator Light Illumination Pattern

## TIRE PRESSURE MONITORING SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
<b>3 CHECK HARNESS.</b> 1) Check the output waveform displayed in the oscilloscope of Subaru Select Monitor.	Is the pattern the same output waveform as shown in the figure? (1) $400 \pm 9$ ms Duty 50% High: Battery voltage Low: 1.5 V or less	Check the combination meter.	Replace the TPMS & keyless entry control module. <Ref. to WT-9, REMOVAL, Tire Pressure Monitoring System.>
<b>4 CHECK HARNESS.</b> 1) Disconnect the TPMS & keyless entry control module connector. 2) Connect the Subaru Select Monitor to the terminal No. 2 of the TPMS & keyless entry control module connector (i223). <b>Connector &amp; terminal</b> <i>(i223) No. 2 (+) — Chassis ground (-):</i> 3) Turn the ignition switch to ON, and select "Oscilloscope" from the Main Menu of Subaru Select Monitor. 4) Check the voltage displayed.	Is the voltage 10 V or more?	Replace the TPMS & keyless entry control module. <Ref. to WT-9, REMOVAL, Tire Pressure Monitoring System.>	The harness between the combination meter connector and the TPMS & keyless entry control module connector is shorted or open. Repair or replace the harness.