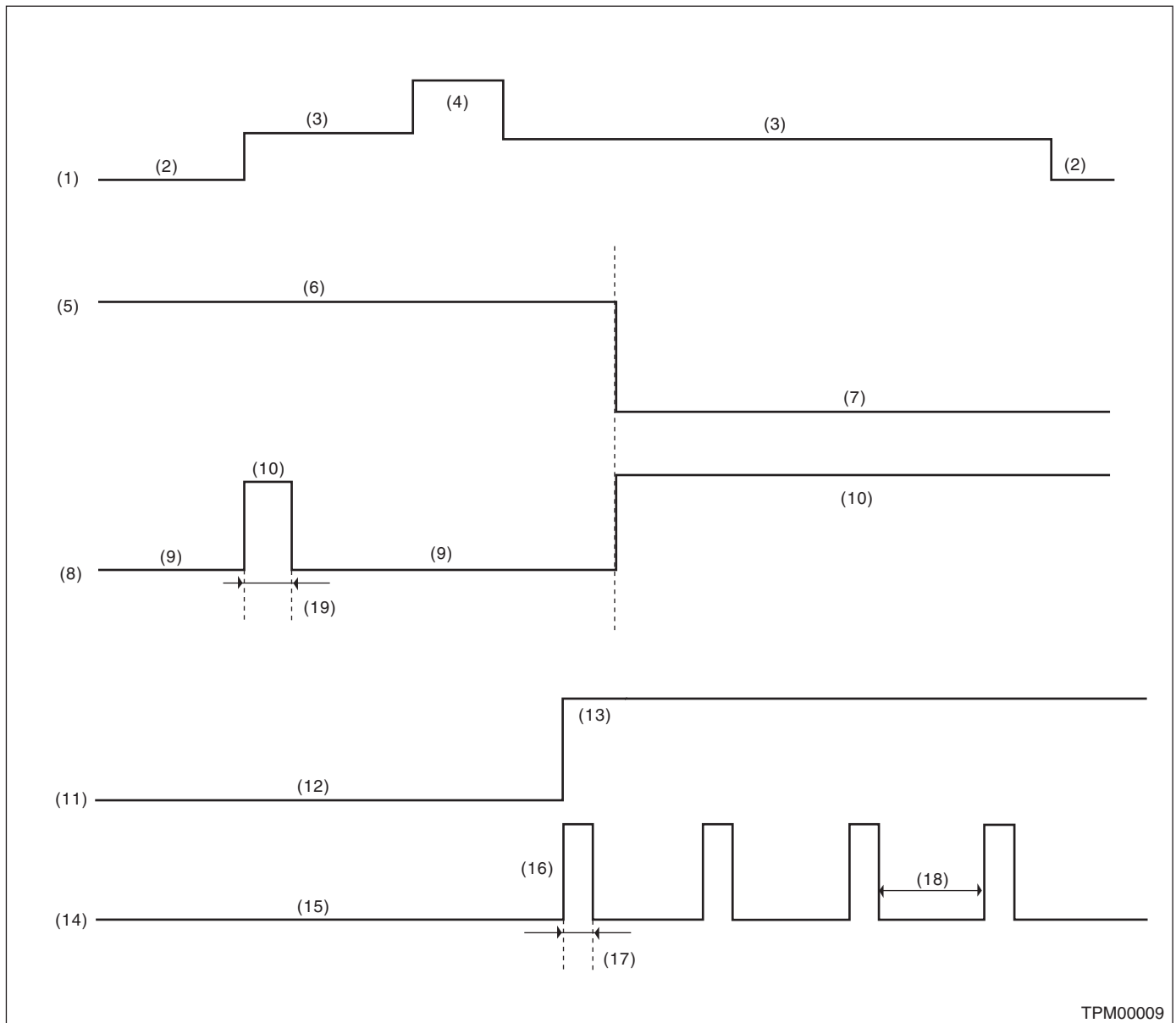


# Tire Pressure Warning Light / Trouble Indicator Light Illumination Pattern

TIRE PRESSURE MONITORING SYSTEM (DIAGNOSTICS)

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

### A: INSPECTION



TPM00009

- |   |                                  |                |
|---|----------------------------------|----------------|
| (1) Ignition switch                                     | (8) Tire pressure warning light  | (15) Light OFF |
| (2) OFF   | (9) Light OFF                    | (16) Blink     |
| (3) ON  | (10) Light ON                    | (17) 1 second  |
| (4) Start   | (11) System status               | (18) 3 seconds |
| (5) Tire pressure                                       | (12) Normal                      | (19) 2 seconds |
| (6) Meet the specification                              | (13) Malfunction                 |                |
| (7) 180 kPa (1.8 kgf/cm <sup>2</sup> , 26 psi), or less | (14) Tire pressure warning light |                |

# **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 tire pressure monitoring control module/warning light circuit and the combination meter circuit. <Ref. to TPM(diag)-23, 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

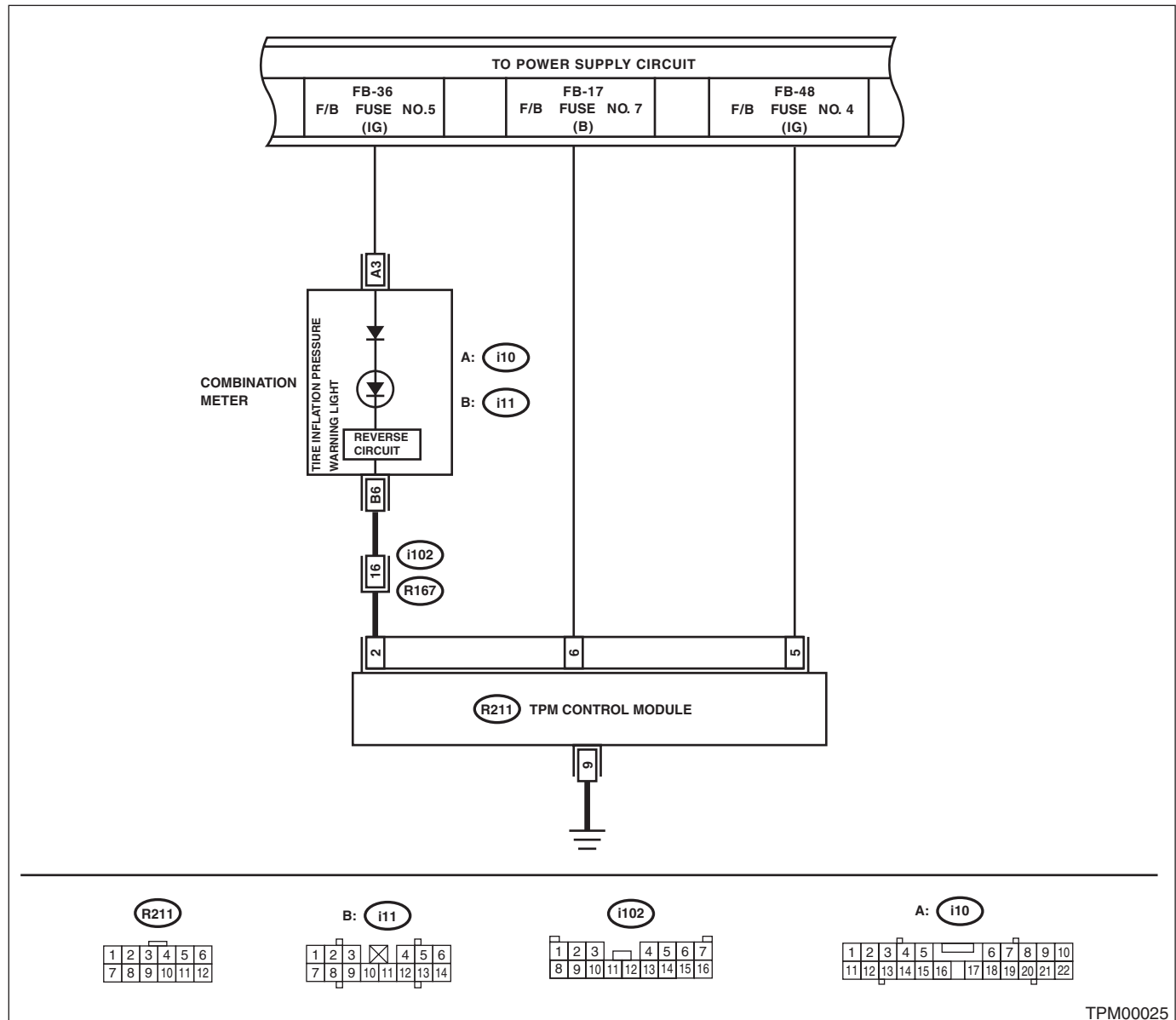
### DETECTING CONDITION:

- Defective combination meter
- Defective harness

### TROUBLE SYMPTOM:

When the ignition switch is turned to ON (engine OFF), the tire pressure warning light does not come on (for approximately 2 seconds).

### WIRING DIAGRAM:



TPM00025

# Tire Pressure Warning Light / Trouble Indicator Light Illumination Pattern

## TIRE PRESSURE MONITORING SYSTEM (DIAGNOSTICS)

Step		Check	Yes	No
1	<b>CHECK DIAGNOSTIC TROUBLE CODE (DTC).</b> Connect the Subaru Select Monitor, and read the Diagnostic Trouble Code. <Ref. to TPM(diag)-8, 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)-27, List of Diagnostic Trouble Code (DTC).>	Go to step 2.
2	<b>CHECK DATA OUTPUT.</b> 1) Select data display of the tire pressure monitoring. 2) Check that the warning light output is ON for approximately 2 seconds immediately after turning the ignition switch to ON.	Is the warning light output ON for approximately 2 seconds?	Go to step 3.	Replace the tire pressure monitoring control module. <Ref. to WT-11, TIRE PRESSURE MONITORING CONTROL MODULE, REMOVAL, Tire Pressure Monitoring System.>
3	<b>CHECK HARNESS.</b> 1) Disconnect the tire pressure monitoring control module connector. 2) Use a lead wire to short the terminal No. 2 of the tire pressure monitoring control module harness connector (R211) with the chassis ground, and turn the ignition switch to ON.	Is the tire pressure warning light lit?	Go to step 4.	Replace the tire pressure monitoring control module. <Ref. to WT-11, TIRE PRESSURE MONITORING CONTROL MODULE, REMOVAL, Tire Pressure Monitoring System.>
4	<b>CHECK HARNESS.</b> 1) Connect the tester to the terminal No. 2 of the tire pressure monitoring control module connector (R211) 2) Turn the ignition switch to ON and measure the voltage between the tire pressure monitoring control module connector and chassis ground. <b>Connector &amp; terminal</b> <b>(R211) No. 2 (+) — Chassis ground (-):</b>	Is the voltage 10 V or more?	Go to step 5.	Replace the combination meter. <Ref. to IDI-19, REMOVAL, Combination Meter.>
5	<b>CHECK COMBINATION METER.</b> 1) Short the combination meter connector (i11) No. 6 to chassis ground. 2) Turn the ignition switch to ON.	Is the tire pressure warning light lit?	Go to step 6.	Repair or replace the harness that is open between the combination meter connector and the tire pressure monitoring control module harness.
6	<b>CHECK HARNESS.</b> 1) Disconnect the combination meter connector (i11). 2) Measure the resistance between tire pressure monitoring control module connector (i11) and chassis ground. <b>Connector &amp; terminal</b> <b>(i11) No. 6 — Chassis ground:</b>	Is the resistance less than 1 $\Omega$ ?	Replace the combination meter. <Ref. to IDI-19, REMOVAL, Combination Meter.>	Repair or replace the harness that is open between the combination meter and the chassis ground.

# Tire Pressure Warning Light / Trouble Indicator Light Illumination Pattern

TIRE PRESSURE MONITORING SYSTEM (DIAGNOSTICS)

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

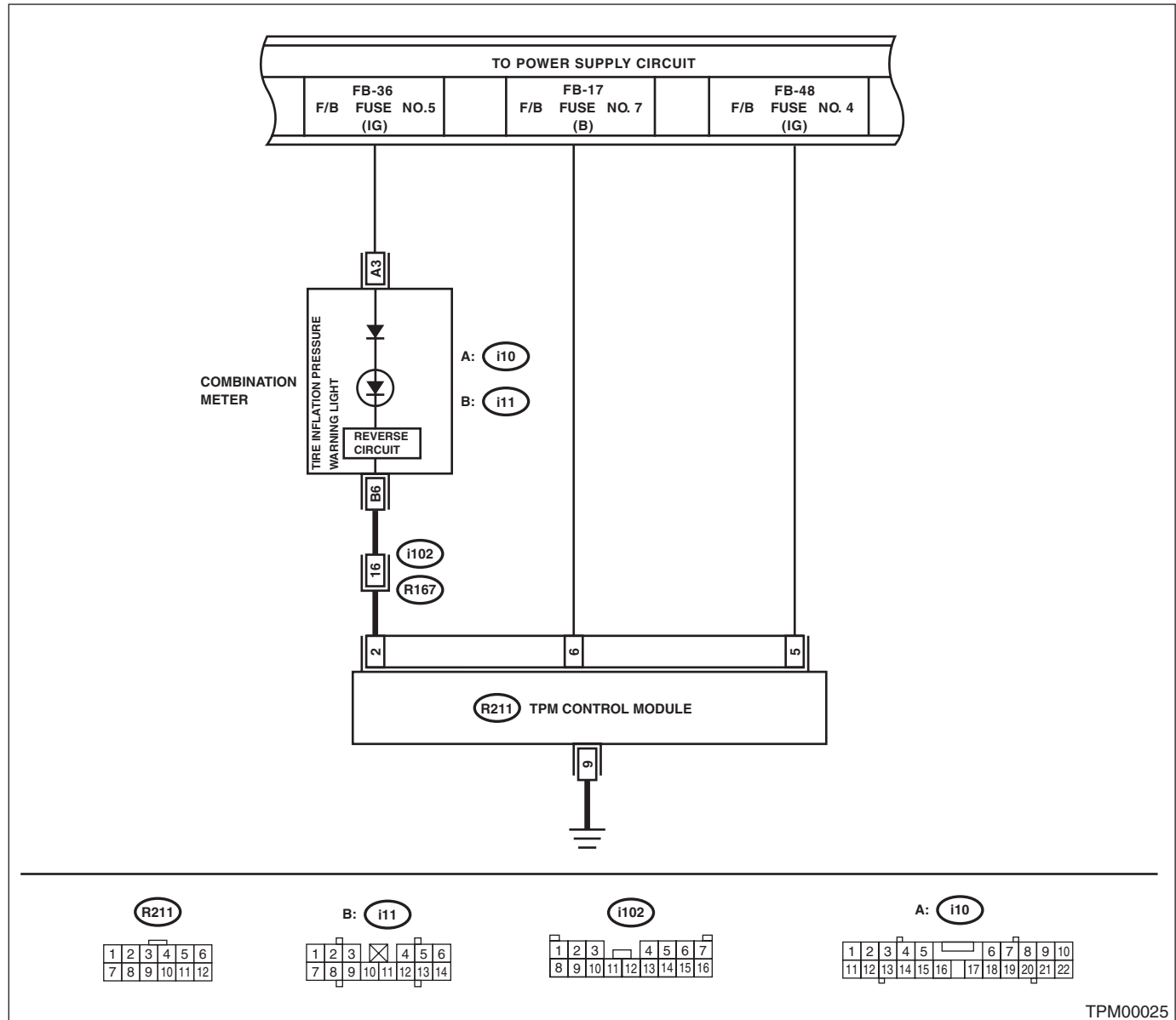
### DETECTING CONDITION:

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

### TROUBLE SYMPTOM:

Tire pressure warning light does not go off after engine starts.

### WIRING DIAGRAM:



# Tire Pressure Warning Light / Trouble Indicator Light Illumination Pattern

## TIRE PRESSURE MONITORING SYSTEM (DIAGNOSTICS)

Step		Check	Yes	No
1	<b>CHECK DIAGNOSTIC TROUBLE CODE (DTC).</b> Connect the Subaru Select Monitor, and read the Diagnostic Trouble Code. <Ref. to TPM(diag)-8, READ DIAGNOSTIC TROUBLE CODE (DTC), OPERATION, Subaru Select Monitor.>	Is DTC displayed?	Perform the diagnosis according to the DTC. <Ref. to TPM(diag)-27, 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.	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 tire pressure monitoring control module. <Ref. to WT-11, TIRE PRESSURE MONITORING CONTROL MODULE, REMOVAL, Tire Pressure Monitoring System.>	Go to step 4.
4	<b>CHECK HARNESS.</b> 1) Disconnect the tire pressure monitoring control module connector. 2) Connect the tester to the terminal No. 2 of the tire pressure monitoring control module connector (R211) 3) Turn the ignition switch to ON, and measure the voltage. <b>Connector &amp; terminal</b> <b>(R211) No. 2 (+) — Chassis ground (–):</b>	Is the voltage 10 V or more?	Go to step 5.	Replace the combination meter. <Ref. to IDI-19, REMOVAL, Combination Meter.>
5	<b>CHECK COMBINATION METER.</b> 1) Short the combination meter connector (i11) No. 6 to chassis ground. 2) Turn the ignition switch to ON.	Is the tire pressure warning light lit?	Go to step 6.	Repair or replace the harness that is open between the combination meter connector and the tire pressure monitoring control module harness.
6	<b>CHECK HARNESS.</b> 1) Disconnect the combination meter connector (i11). 2) Measure the resistance between the tire pressure monitoring control module connector (i11) terminal No. 2 and chassis ground. <b>Connector &amp; terminal</b> <b>(i11) No. 2 — Chassis ground:</b>	Is the resistance 1 MΩ or more?	Replace the combination meter. <Ref. to IDI-19, REMOVAL, Combination Meter.>	Repair or replace the harness connector short circuit between the combination meter connector and the tire pressure monitoring control module connector.

# Tire Pressure Warning Light / Trouble Indicator Light Illumination Pattern

TIRE PRESSURE MONITORING SYSTEM (DIAGNOSTICS)

## D: TIRE PRESSURE WARNING LIGHT IS BLINKING

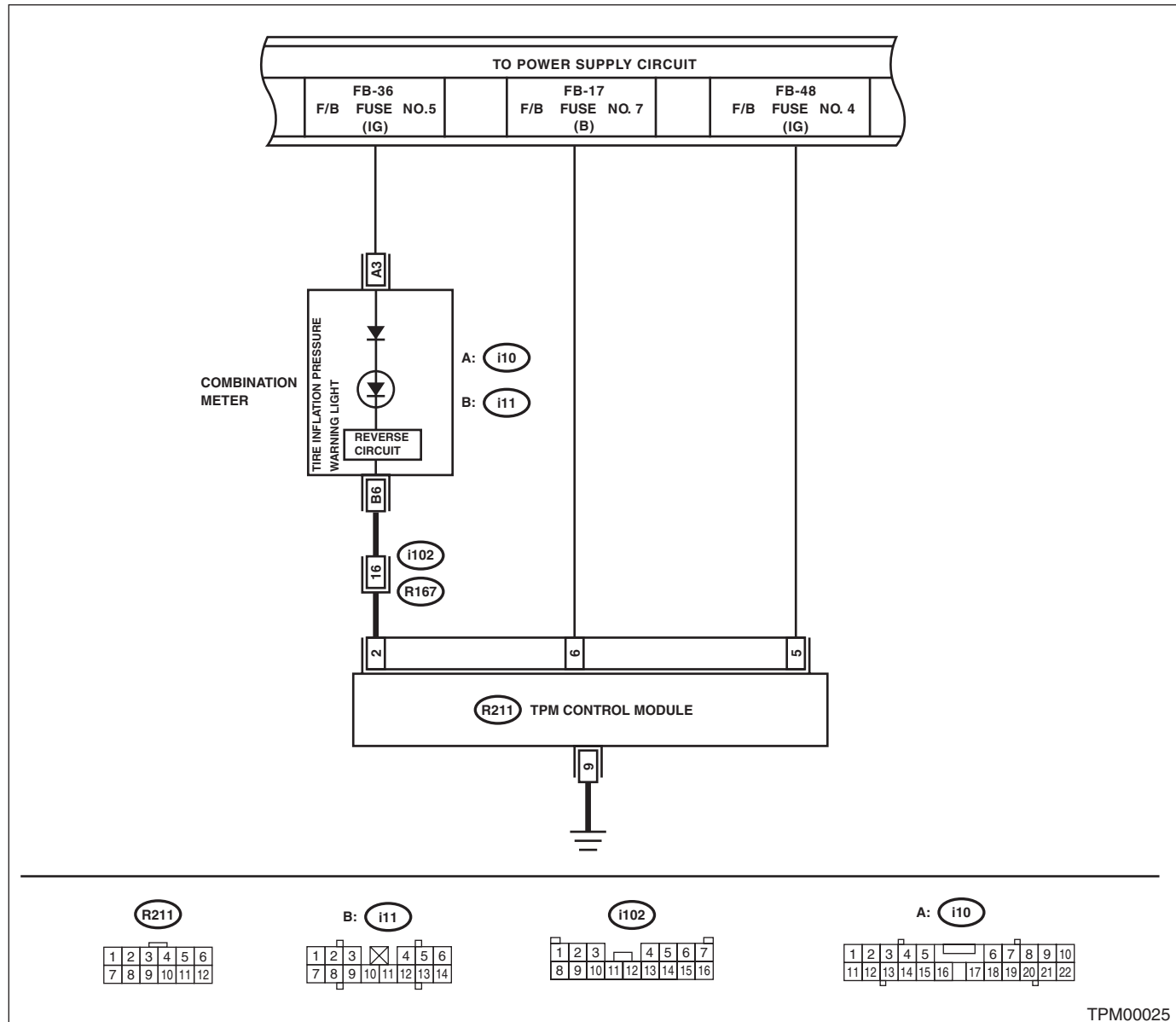
### DETECTING CONDITION:

- Tire pressure monitoring control module is faulty.
- Defective harness
- Transmitter is faulty.

### TROUBLE SYMPTOM:

Tire pressure warning light blinks continuously after engine starting.

### WIRING DIAGRAM:



TPM00025

# Tire Pressure Warning Light / Trouble Indicator Light Illumination Pattern

## TIRE PRESSURE MONITORING SYSTEM (DIAGNOSTICS)

Step		Check	Yes	No
1	<b>CHECK DIAGNOSTIC TROUBLE CODE (DTC).</b> Connect the Subaru Select Monitor, and read the Diagnostic Trouble Code. <Ref. to TPM(diag)-8, 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)-27, List of Diagnostic Trouble Code (DTC).>	Go to step 2.
2	<b>CHECK HARNESS.</b> 1) Disconnect the tire pressure monitoring control module connector. 2) Short the terminal No. 2 of the tire pressure monitoring control module harness connector (R211) with the chassis ground, and turn the ignition switch to ON.	Is the tire pressure warning light lit?	Go to step 3.	Replace the tire pressure monitoring control module. <Ref. to WT-11, REMOVAL, Tire Pressure Monitoring System.>
3	<b>CHECK HARNESS.</b> 1) Connect the tester to the terminal No. 2 of the tire pressure monitoring control module connector (R211) 2) Turn the ignition switch to ON, and measure the voltage. <b>Connector &amp; terminal</b> <b>(R211) No. 2 (+) — Chassis ground (–):</b>	Is the voltage 10 V or more?	Go to step 4.	Replace the combination meter. <Ref. to IDI-19, REMOVAL, Combination Meter.>
4	<b>CHECK COMBINATION METER.</b> 1) Short the combination meter connector (i11) No. 6 to chassis ground. 2) Turn the ignition switch to ON.	Is the tire pressure warning light lit?	Go to step 5.	There is an open circuit between the combination meter connector and the tire pressure monitoring control module harness. Repair or replace the harness.
5	<b>CHECK HARNESS.</b> 1) Disconnect the combination meter connector (i11). 2) Measure the resistance between tire pressure monitoring control module connector (i11) and chassis ground. <b>Connector &amp; terminal</b> <b>(i11) No. 6 — Chassis ground:</b>	Is the resistance 1 MΩ or more?	Replace the combination meter. <Ref. to IDI-19, REMOVAL, Combination Meter.>	Repair or replace the harness connector short circuit between the combination meter connector and the tire pressure monitoring control module connector.