5. Subaru Select Monitor

A: OPERATION

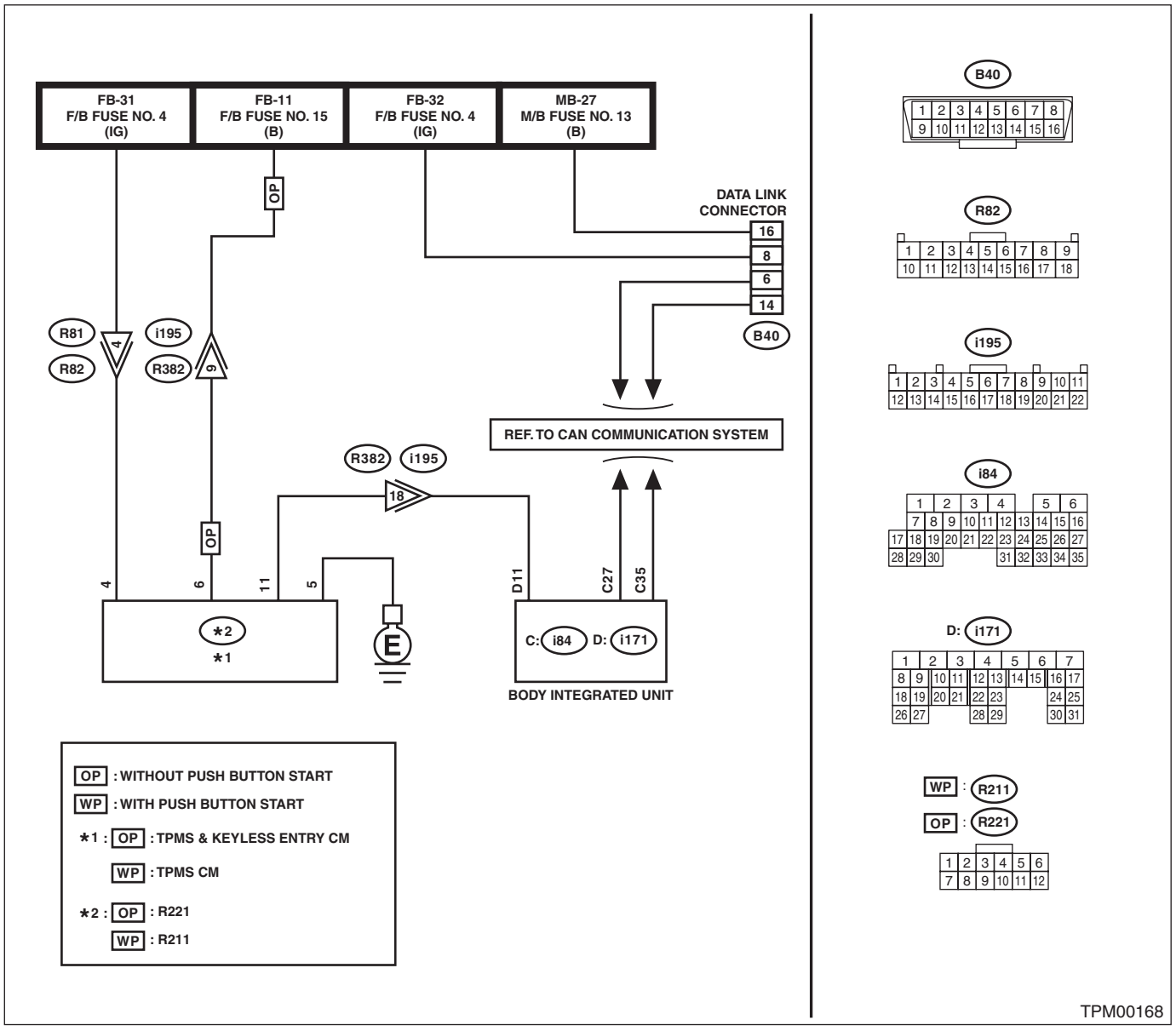
For the operation procedure, refer to the “PC application help for Subaru Select Monitor”.

NOTE:
If TPMS CM or TPMS & keyless entry CM cannot communicate with Subaru Select Monitor, check the communication circuit.<Ref. to TPM(diag)-8, INSPECTION, Subaru Select Monitor.>

B: INSPECTION

1. COMMUNICATION FOR INITIALIZING IMPOSSIBLE

DETECTING CONDITION:
Defective harness connector
TROUBLE SYMPTOM:
Communication is impossible between the TPMS CM or TPMS & keyless entry CM and the Subaru Select Monitor.
WIRING DIAGRAM:
Tire Pressure Monitoring System<Ref. to WI-402, WIRING DIAGRAM, Tire Pressure Monitoring System.>



	Step	Check	Yes	No
1	**CHECK IGNITION SWITCH.**	Is the ignition switch ON?	Go to step **2**.	Turn the ignition switch to ON, and select TPM mode using Subaru Select Monitor.
2	**CHECK BATTERY.**	Is the voltage 11 V or more?	Go to step **3**.	Charge or replace the battery.
3	**CHECK BATTERY TERMINAL.**	Is there poor contact at battery terminal?	Repair or tighten the battery terminal.	Go to step **4**.
4	**CHECK SUBARU SELECT MONITOR COMMUNICATION.** 1) Turn the ignition switch to ON. 2) Using the Subaru Select Monitor, check whether communication to other systems can be executed normally.	Is the system name displayed on Subaru Select Monitor?	Go to step **8**.	Go to step **5**.
5	**CHECK SUBARU SELECT MONITOR COMMUNICATION.** 1) Turn the ignition switch to OFF. 2) Disconnect the connector of TPMS CM or TPMS & keyless entry CM. 3) Turn the ignition switch to ON. 4) Check whether communication to other systems can be executed normally.	Is the system name displayed on Subaru Select Monitor?	Replace the TPMS CM or TPMS & keyless entry CM.<Ref. to WT-9, REMOVAL, Tire Pressure Monitoring System.>	Go to step **6**.
6	**CHECK HARNESS CONNECTOR BETWEEN EACH CONTROL MODULE AND BODY INTEGRATED UNIT.** 1) Turn the ignition switch to OFF. 2) Disconnect the connector of TPMS CM or TPMS & keyless entry CM. 3) Measure the resistance between the body integrated unit and chassis ground. ***Connector & terminal*** ***(B40) No. 6 — Chassis ground:*** ***(B40) No. 14 — Chassis ground:***	Is the resistance 1 MΩ or more?	Go to step **7**.	Repair the harness and connector between each control module and body integrated unit.
7	**CHECK OUTPUT SIGNAL TO TPMS CM OR TPMS & KEYLESS ENTRY CM.** 1) Turn the ignition switch to ON. 2) Measure the voltage between TPMS CM or TPMS & keyless entry CM connector and chassis ground. ***Connector & terminal*** ***(B40) No. 6 (+) — Chassis ground (–):*** ***(B40) No. 14 (+) — Chassis ground (–):***	Is the voltage less than 1 V?	Go to step **8**.	Repair the harness and connector between each control module and body integrated unit.
8	**CHECK HARNESS CONNECTOR BETWEEN TPMS CM OR TPMS & KEYLESS ENTRY CM AND BODY INTEGRATED UNIT.** 1) Turn the ignition switch to OFF. 2) Measure the resistance between TPMS CM or TPMS & keyless entry CM connector and body integrated unit. ***Connector & terminal*** ***Without push button start*** ***(R221) No. 11 — (i171) No. 11:*** ***With push button start*** ***(R211) No. 11 — (i171) No. 11:***	Is the resistance less than 0.5 Ω?	Go to step **9**.	Repair the harness and connector between TPMS CM or TPMS & keyless entry CM connector and body integrated unit connector.

	Step	Check	Yes	No
9	**CHECK CONNECTORS OF TPMS CM OR TPMS & KEYLESS ENTRY CM.**	Is the connector inserted into the TPMS CM or TPMS & keyless entry CM until it locks?	Go to step **10**.	Insert the connector into the TPMS CM or TPMS & keyless entry CM.
10	**CHECK POWER SUPPLY CIRCUIT.** 1) Turn the ignition switch to ON. 2) Measure the ignition power supply voltage between TPMS CM or TPMS & keyless entry CM connector and chassis ground. ***Connector & terminal*** ***Without push button start*** ***(R221) No. 4 (+) — Chassis ground (–):*** ***With push button start*** ***(R211) No. 4 (+) — Chassis ground (–):***	Is the voltage 10 — 15 V?	Go to step **11**.	Repair open circuit of the harness between TPMS CM or TPMS & keyless entry CM connector and battery.
11	**CHECK HARNESS CONNECTOR BETWEEN TPMS CM OR TPMS & KEYLESS ENTRY CM AND CHASSIS GROUND.** 1) Turn the ignition switch to OFF. 2) Disconnect the connector from the TPMS CM or TPMS & keyless entry CM. 3) Measure the resistance of harness between TPMS CM or TPMS & keyless entry CM connector and chassis ground. ***Connector & terminal*** ***Without push button start*** ***(R221) No. 5 — Chassis ground:*** ***With push button start*** ***(R211) No. 5 — Chassis ground:***	Is the resistance less than 0.5 Ω?	Go to step **12**.	Repair open circuit of the harness between TPMS CM or TPMS & keyless entry CM connector and chassis ground.
12	**CHECK POOR CONTACT OF CONNECTOR.**	Is there poor contact in TPMS CM power supply or TPMS & keyless entry CM power supply, ground line and body integrated unit?	Repair the connector.	Replace the TPMS CM or TPMS & keyless entry CM.<Ref. to WT-9, REMOVAL, Tire Pressure Monitoring System.>