5. Subaru Select Monitor

A: OPERATION

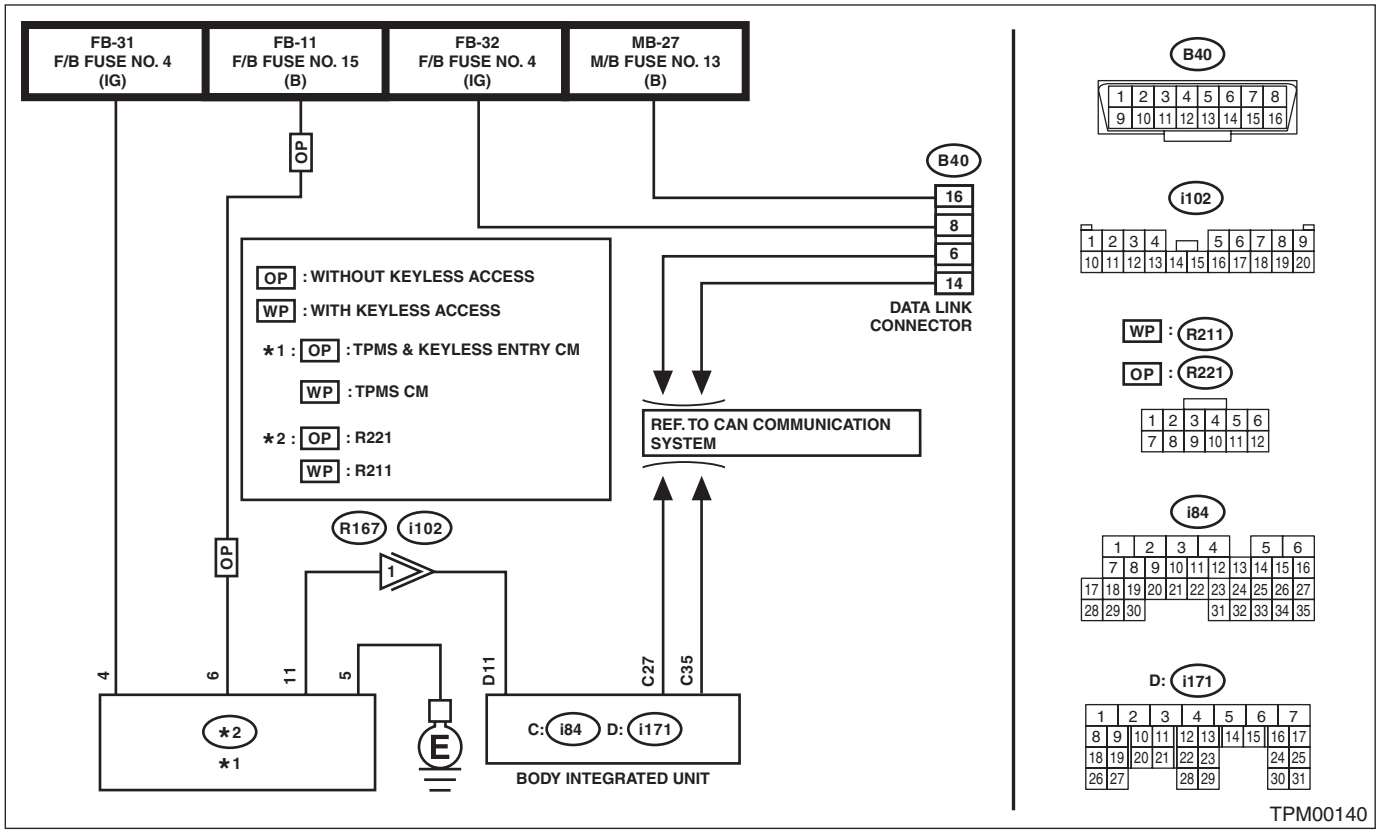
For the operation procedure, refer to the “PC application help for Subaru Select Monitor”.

NOTE:
If TPMS & keyless entry CM or TPMS CM and Subaru Select Monitor cannot communicate, 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 & keyless entry CM or TPMS CM and the Subaru Select Monitor.
WIRING DIAGRAM:
Tire Pressure Monitoring System <Ref. to WI-403, 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.** Check the battery voltage.	Is the voltage 11 V or more?	Go to step **3**.	Charge or replace the battery.
3	**CHECK BATTERY TERMINAL.** Check the battery terminal.	Is there poor contact at battery terminal?	Repair or tighten the battery terminal.	Go to step **4**.

	Step	Check	Yes	No
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 TPMS & keyless entry CM connector or TPMS CM connector. 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 & keyless entry CM or TPMS CM. <Ref. to WT-9, 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 the TPMS & keyless entry CM or TPMS 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 & KEYLESS ENTRY CM OR TPMS CM.** 1) Turn the ignition switch to ON. 2) Measure the voltage between TPMS & keyless entry CM or TPMS CM 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 & KEYLESS ENTRY CM OR TPMS CM AND BODY INTEGRATED UNIT.** 1) Turn the ignition switch to OFF. 2) Measure the resistance between TPMS & keyless entry CM connector or TPMS CM connector and body integrated unit. ***Connector & terminal*** ***Without keyless access*** ***(R221) No. 11 — (i171) No. 11:*** ***With keyless access*** ***(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 & keyless entry CM or TPMS CM and body integrated unit.
9	**CHECK TPMS & KEYLESS ENTRY CM CONNECTOR OR TPMS CM CONNECTOR.**	Is the connector inserted into the TPMS & keyless entry CM or TPMS CM until it locks?	Go to step **10**.	Insert the connector into the TPMS & keyless entry CM or TPMS CM.
10	**CHECK POWER SUPPLY CIRCUIT.** 1) Turn the ignition switch to ON. 2) Measure the ignition power supply voltage between TPMS & keyless entry CM connector or TPMS CM connector and chassis ground. ***Connector & terminal*** ***Without keyless access*** ***(R221) No. 4 (+) — Chassis ground (–):*** ***With keyless access*** ***(R211) No. 4 (+) — Chassis ground (–):***	Is the voltage 10 — 15 V?	Go to step **11**.	Repair open circuit of the harness between TPMS & keyless entry CM or TPMS CM and battery.

	Step	Check	Yes	No
11	**CHECK HARNESS CONNECTOR BETWEEN TPMS & KEYLESS ENTRY CM OR TPMS CM AND CHASSIS GROUND.** 1) Turn the ignition switch to OFF. 2) Disconnect the connector from the TPMS & keyless entry CM or TPMS CM. 3) Measure the resistance of harness between TPMS & keyless entry CM or TPMS CM and chassis ground. ***Connector & terminal*** ***Without keyless access*** ***(R221) No. 5 — Chassis ground:*** ***With keyless access*** ***(R211) No. 5 — Chassis ground:***	Is the resistance less than 0.5 Ω?	Go to step **12**.	Repair open circuit of the harness of TPMS & keyless entry CM or TPMS CM.
12	**CHECK POOR CONTACT OF CONNECTOR.**	Is there poor contact in TPMS & keyless entry CM power supply or TPMS CM power supply, ground line and body integrated unit?	Repair the connector.	Replace the TPMS & keyless entry CM or TPMS CM. <Ref. to WT-9, Tire Pressure Monitoring System.>