7. Subaru Select Monitor

A: OPERATION

- For detailed operation procedures, refer to “PC application help for Subaru Select Monitor”.
- When communication with Subaru Select Monitor is not established, perform “COMMUNICATION FOR INITIALIZING IMPOSSIBLE”. <Ref. to HEV(diag)-18, COMMUNICATION FOR INITIALIZING IMPOSSIBLE, Subaru Select Monitor.>

B: COMMUNICATION FOR INITIALIZING IMPOSSIBLE

Subaru Select Monitor communication line is open or shorted.

1. HYBRID POWERTRAIN CONTROL SYSTEM

DIAGNOSIS:

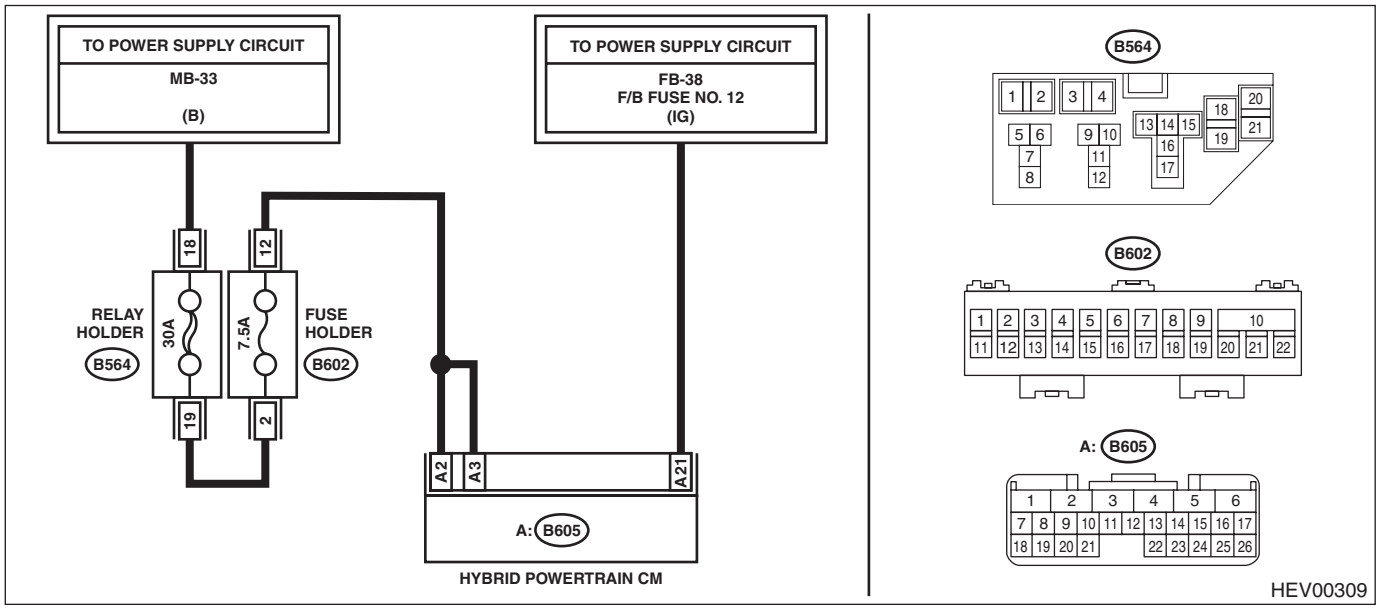
- Defective harness
- Power supply circuit malfunction
- Defective HPCM
- Defective CAN communication circuit
- Defective Subaru Select Monitor

TROUBLE SYMPTOM:

Not communicable with Subaru Select Monitor.

WIRING DIAGRAM:

Hybrid system <Ref. to WI(HEV)-140, WIRING DIAGRAM, Hybrid Electric Vehicle System.>



Step		Check	Yes	No
1	**CHECK FUSE.** Check HPCM fuse. <Ref. to HEV-12, Relay and Fuse.>	Is the condition normal?	Go to step **2**.	Replace the fuse. When the replaced fuse is blown immediately, repair ground short circuit of harness between 12 volt auxiliary battery and HPCM.

	Step	Check	Yes	No
2	**CHECK HARNESS.** 1) Turn the ignition switch to OFF. 2) Disconnect the HPCM connector. 3) Turn the ignition switch to ON. 4) Using a tester, measure the voltage between the HPCM connector and chassis ground. ***Connector & terminal*** ***(B605) No. 2 (+) — Chassis ground (–):*** ***(B605) No. 3 (+) — Chassis ground (–):*** ***(B605) No. 21 (+) — Chassis ground (–):***	Is the voltage 10 — 13 V?	Go to step **3**.	Repair the open circuit of the harness between the HPCM connector and the fuse.
3	**CHECK OTHER COMMUNICATION.** Communicate with the system other than the hybrid powertrain control module using the Subaru Select Monitor.	Is the communication to other control module possible?	Go to step **4**.	Perform the "Communication for Initializing Impossible" of LAN system. <Ref. to LAN(HEV)(diag)-10, COMMUNICATION FOR INITIALIZING IMPOSSIBLE, Subaru Select Monitor.>
4	**CHECK LAN SYSTEM.** Inspect LAN system. <Ref. to LAN(HEV)(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>	Is there any fault?	Perform the inspection according to the diagnosis for LAN system.	Go to step **5**.
5	**CHECK HPCM.** 1) Turn the ignition switch to OFF. 2) Connect the HPCM connector. 3) Communicate with the hybrid powertrain control system using the Subaru Select Monitor.	Is communication possible?	It is possible that temporary poor communication occurs.	Replace the HPCM. <Ref. to HEV-37, Hybrid Powertrain Control Module.>

2. DRIVE MOTOR CONTROL SYSTEM

DIAGNOSIS:

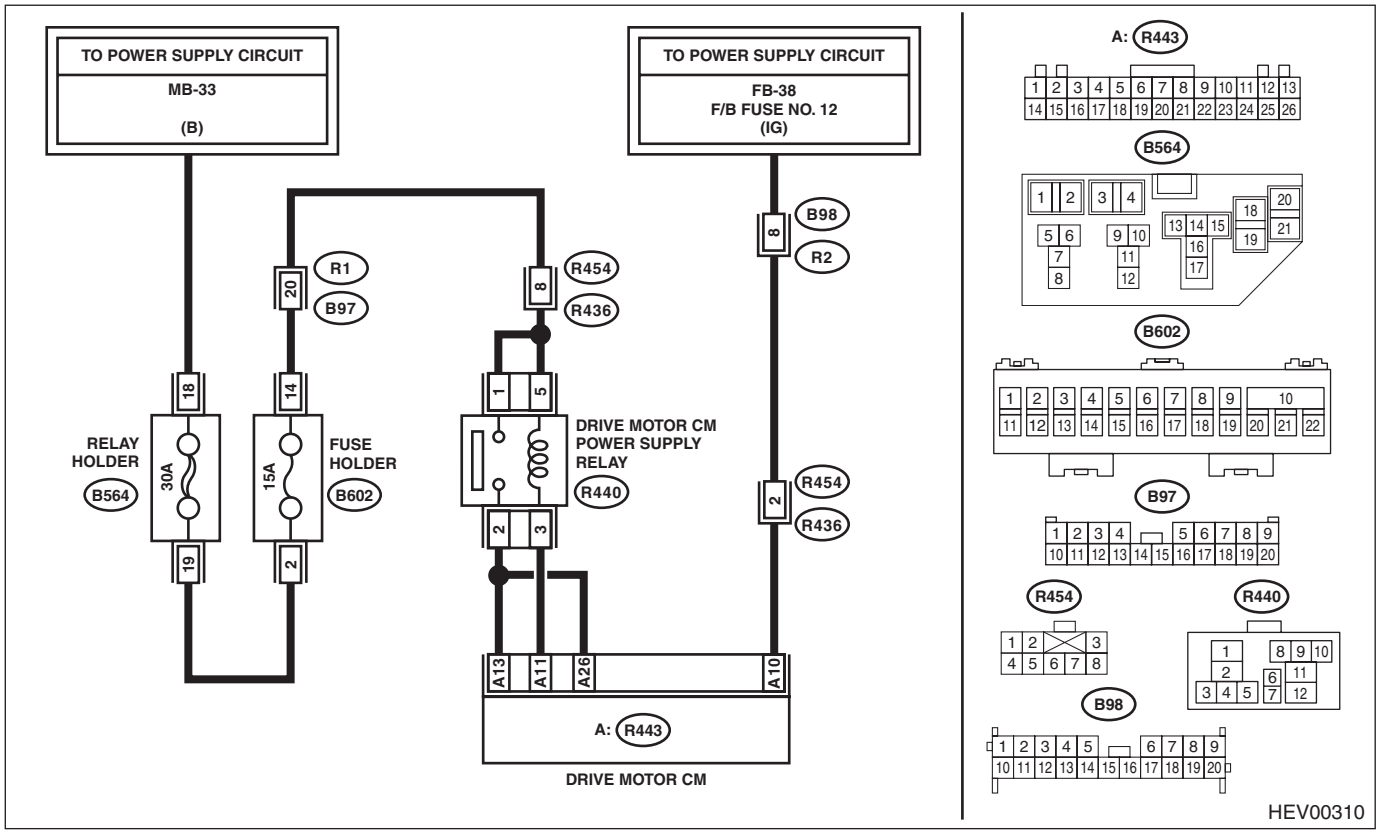
- Defective harness
- Power supply circuit malfunction
- Defective DMCM
- Defective CAN communication circuit
- Defective Subaru Select Monitor

TROUBLE SYMPTOM:

Not communicable with Subaru Select Monitor.

WIRING DIAGRAM:

Hybrid system <Ref. to WI(HEV)-140, WIRING DIAGRAM, Hybrid Electric Vehicle System.>



Step		Check	Yes	No
1	**CHECK FUSE.** Check DMCM fuse. <Ref. to HEV-12, Relay and Fuse.>	Is the condition normal?	Go to step **2**.	Replace the fuse. When the replaced fuse is blown immediately, repair ground short circuit of harness between 12 volt auxiliary battery and HPCM.
2	**CHECK HARNESS.** 1) Turn the ignition switch to OFF. 2) Disconnect the DMCM connector. 3) Turn the ignition switch to ON. 4) Using a tester, measure the voltage between the DMCM connector and chassis ground. ***Connector & terminal*** ***(B443) No. 11 (+) — Chassis ground (–):*** ***(B443) No. 10 (+) — Chassis ground (–):***	Is the voltage 10 — 13 V?	Go to step **3**.	Repair the open circuit of the harness between the DMCM connector and the fuse.

	Step	Check	Yes	No
3	**CHECK OTHER COMMUNICATION.** Communicate with the system other than the drive motor control system using the Subaru Select Monitor.	Is the communication to other control module possible?	Go to step **4**.	Perform the "Communication for Initializing Impossible" of LAN system. <Ref. to LAN(HEV)(diag)-10, COMMUNICATION FOR INITIALIZING IMPOSSIBLE, Subaru Select Monitor.>
4	**CHECK LAN SYSTEM.** Inspect LAN system. <Ref. to LAN(HEV)(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>	Is there any fault?	Perform the inspection according to the diagnosis for LAN system.	Go to step **5**.
5	**CHECK DMCM.** 1) Turn the ignition switch to OFF. 2) Connect the DMCM connector. 3) Communicate with the drive motor control system using the Subaru Select Monitor.	Is communication possible?	It is possible that temporary poor communication occurs.	Replace DMCM. <Ref. to CVT(TH58A)-157, Drive Motor Control Module.>

3. BATTERY ENERGY CONTROL SYSTEM

DIAGNOSIS:

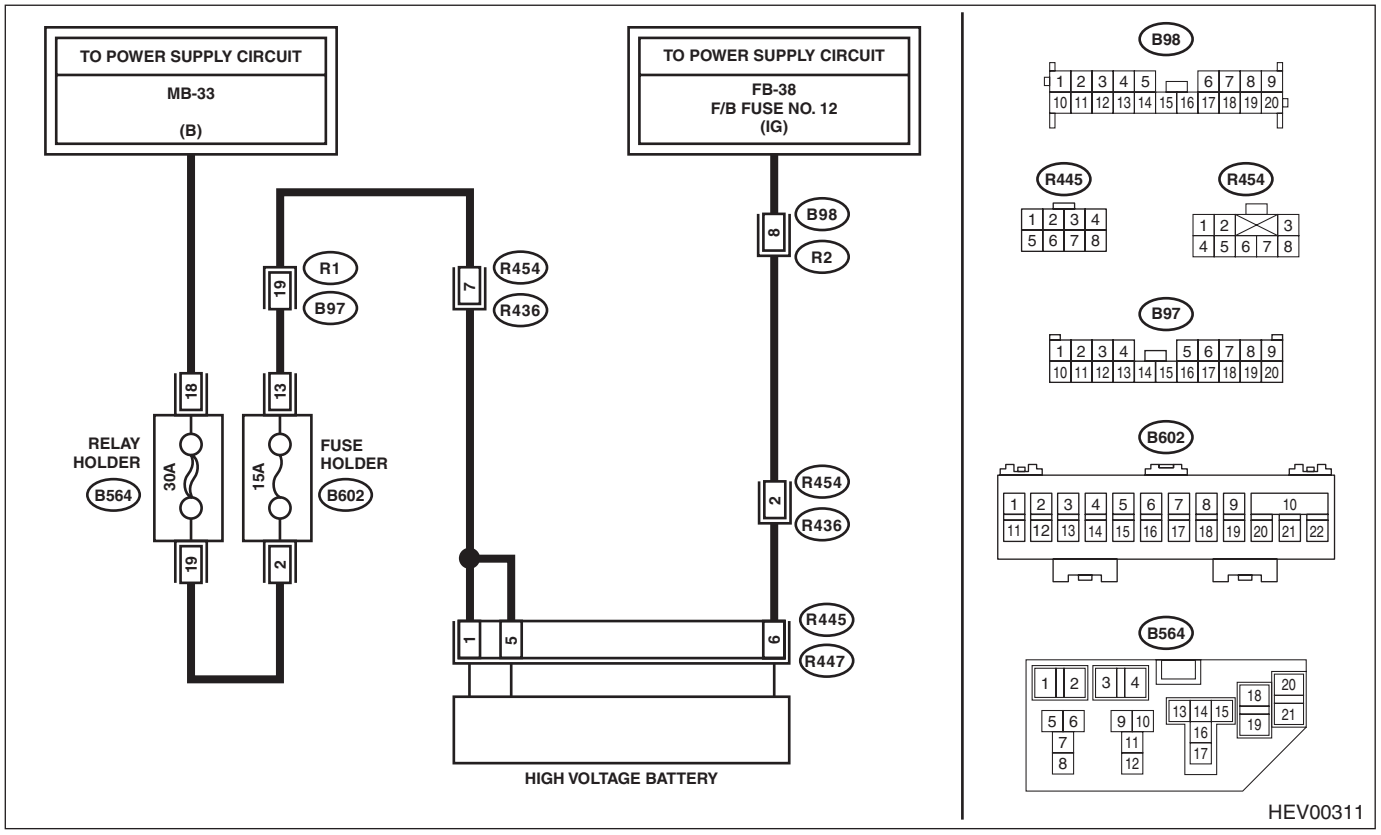
- Defective harness
- Power supply circuit malfunction
- Defective high voltage battery
- Defective CAN communication circuit
- Defective Subaru Select Monitor

TROUBLE SYMPTOM:

Not communicable with Subaru Select Monitor.

WIRING DIAGRAM:

Hybrid system <Ref. to WI(HEV)-140, WIRING DIAGRAM, Hybrid Electric Vehicle System.>



Step		Check	Yes	No
1	**CHECK FUSE.** Check High voltage battery fuse. <Ref. to HEV-12, Relay and Fuse.>	Is the condition normal?	Go to step **2**.	Replace the fuse. When the replaced fuse is blown immediately, repair ground short circuit of harness between 12 volt auxiliary battery and the high voltage battery.

	Step	Check	Yes	No
2	**CHECK HARNESS.** 1) Turn the ignition switch to OFF. 2) Disconnect the high voltage battery connector. 3) Turn the ignition switch to ON. 4) Using a tester, measure the voltage between the BECM connector and chassis ground. ***Connector & terminal*** ***(B445) No. 6 (+) — Chassis ground (–):*** ***(B445) No. 1 (+) — Chassis ground (–):*** ***(B445) No. 5 (+) — Chassis ground (–):***	Is the voltage 10 — 13 V?	Go to step **3**.	Repair the open circuit of the harness between the high voltage battery connector and the fuse.
3	**CHECK OTHER COMMUNICATION.** Communicate with the system other than the battery energy control system using the Subaru Select Monitor.	Is the communication to other control module possible?	Go to step **4**.	Perform the “Communication for Initializing Impossible” of LAN system.
4	**CHECK LAN SYSTEM.** Inspect LAN system. <Ref. to LAN(HEV)(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>	Is there any fault?	Perform the inspection according to the diagnosis for LAN system.	Go to step **5**.
5	**CHECK HIGH VOLTAGE BATTERY.** 1) Turn the ignition switch to OFF. 2) Disconnect the high voltage battery connector. 3) Connect the disconnected connectors. 4) Communicate with the battery energy control system using the Subaru Select Monitor.	Is communication possible?	It is possible that temporary poor communication occurs.	Replace the high voltage battery. <Ref. to HEV-17, High Voltage Battery.>