

# Subaru Select Monitor

## AIRBAG SYSTEM (DIAGNOSTICS)

### 7. Subaru Select Monitor

#### A: OPERATION

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

#### B: INSPECTION

##### 1. COMMUNICATION FOR INITIALIZING IMPOSSIBLE

###### DTC DETECTING CONDITION:

Defective harness connector

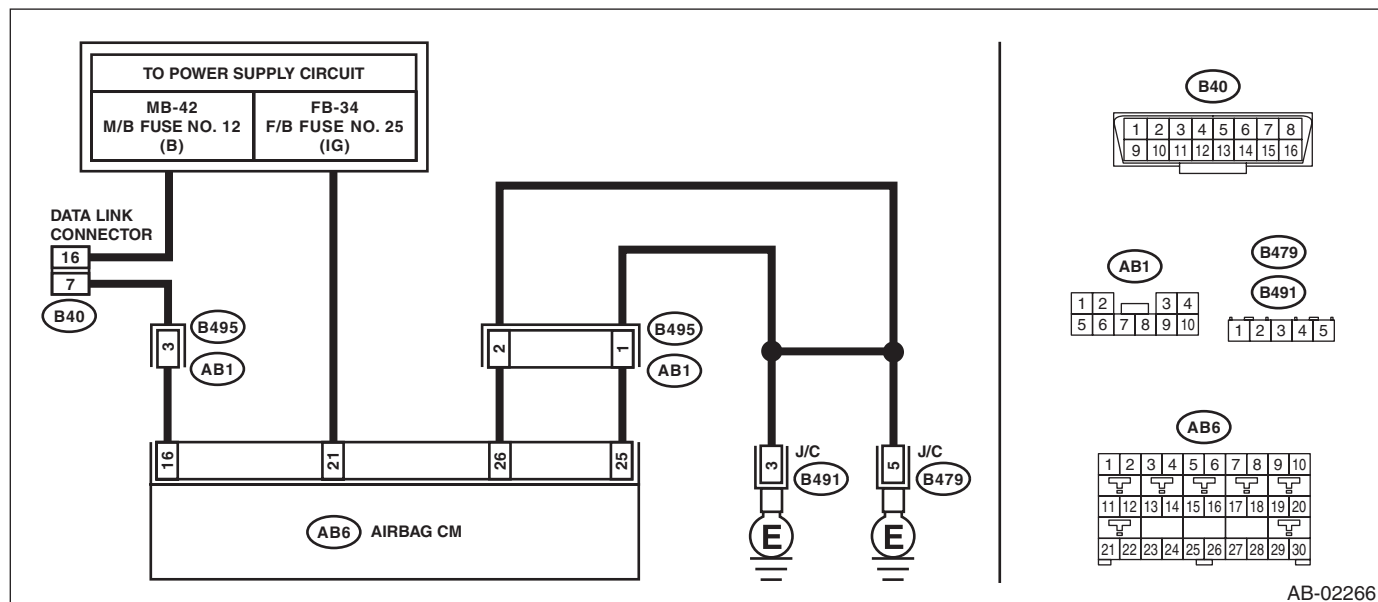
###### TROUBLE SYMPTOM:

Communication is impossible between the airbag control module and the Subaru Select Monitor.

###### CAUTION:

Before performing diagnosis, refer to “CAUTION” in “General Description”. <Ref. to AB(diag)-4, CAUTION, General Description.>

###### WIRING DIAGRAM:



| Step | Check   | Yes  | No                                      |
|------|---|--|---|
| 1    | <b>CHECK IGNITION SWITCH.</b>   | Is the ignition switch ON?                             | Go to step 2.                           |
| 2    | <b>CHECK BATTERY.</b><br>1) Turn the ignition switch to OFF.<br>2) Measure the battery voltage.   | Is the voltage 11 V or more?                           | Go to step 3.                           |
| 3    | <b>CHECK BATTERY TERMINAL.</b>  | Is there poor contact at battery terminal?             | Repair or tighten the battery terminal. |
| 4    | <b>CHECK SUBARU SELECT MONITOR COMMUNICATION.</b><br>1) Turn the ignition switch to ON.<br>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 11.                          |
| 5    | <b>CHECK SUBARU SELECT MONITOR.</b>   | Is Subaru Select Monitor powered on?                   | Go to step 7.                           |

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| Step  | Check   | Yes   | No  |
|---|---|---|---|
| <b>6 CHECK FUSE.</b><br>Remove fuse No. 12 from the fuse & relay box, and perform visual inspection.  | Is the fuse OK?   | Repair the harness between the battery and the data link connector.           | Replace the fuse. If the fuse is blown out again, check the power supply circuit.   |
| <b>7 CHECK AIRBAG CONTROL MODULE CONNECTOR.</b><br>1) Turn the ignition switch to OFF, disconnect the battery ground cable, and wait for 60 seconds or more.<br>2) Confirm that the connectors of airbag control module (AB6, AB17, AB18) are securely connected.   | Is the connector of the airbag control module securely connected? | Go to step 8.   | Connect the connector of the airbag control module.   |
| <b>8 CHECK SUBARU SELECT MONITOR COMMUNICATION.</b><br>1) Disconnect the airbag control module connector.<br>2) Connect the battery ground terminal.<br>3) Turn the ignition switch to ON.<br>4) Check whether communication to other systems can be executed normally.   | Is the system name displayed on Subaru Select Monitor?            | Replace the airbag control module.<br><Ref. to AB-67, Airbag Control Module.> | Go to step 9.   |
| <b>9 CHECK HARNESS CONNECTOR BETWEEN EACH CONTROL MODULE AND DATA LINK CONNECTOR.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect the airbag control module, VDCCM&H/U, body integrated unit, impact sensor, TPMS CM, power steering CM, ECM and TCM.<br>3) Measure the resistance between data link connector and chassis ground.<br><b>Connector &amp; terminal</b><br><b>(B40) No. 7 — Chassis ground:</b> | Is the resistance 1 MΩ or more?                                   | Go to step 10.  | Repair the harness and connector between each control module and data link connector. (Replace the entire harness if repair is necessary for airbag harness.) |
| <b>10 CHECK OUTPUT SIGNAL TO THE AIRBAG CONTROL MODULE.</b><br>1) Turn the ignition switch to ON in the condition of step 9.<br>2) Measure the voltage between data link connector and chassis ground.<br><b>Connector &amp; terminal</b><br><b>(B40) No. 7 (+) — Chassis ground (-):</b>   | Is the voltage less than 1 V?                                     | Repair each control module.   | Repair the harness and connector between each control module and data link connector. (Replace the entire harness if repair is necessary for airbag harness.) |
| <b>11 CHECK FUSE.</b><br>Remove fuse No. 25 from the fuse & relay box, and perform visual inspection.   | Is the fuse OK?   | Go to step 12.  | Replace the fuse. If the fuse is blown out again, check the power supply circuit.   |
| <b>12 CHECK AIRBAG CONTROL MODULE CONNECTOR.</b><br>1) Turn the ignition switch to OFF, disconnect the battery ground cable, and wait for 60 seconds or more.<br>2) Confirm that the connectors of airbag control module (AB6, AB17, AB18) are securely connected.  | Is the connector of the airbag control module securely connected? | Go to step 13.  | Connect the connector of the airbag control module.   |

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| Step   | Check   | Yes   | No  |
|--|---|---|---|
| <b>13 CHECK THE HARNESS BETWEEN THE AIRBAG CONTROL MODULE AND DATA LINK CONNECTOR.</b><br>1) Disconnect the connectors (AB6, AB17, AB18) from airbag control module.<br>2) Connect the connector (1AG) in the test harness AG to the connectors (AB6, AB17, AB18).<br><b>NOTE:</b><br>For sedan models, connect test harness AH between the connectors (AB6, AB17, AB18) and (1AG).<br>3) Measure the resistance between connector (4AG) in the test harness AG and the data link connector.<br><b>Connector &amp; terminal</b><br><b>(4AG) No. 1 — (B40) No. 7:</b> | Is the resistance less than 10 $\Omega$ ?   | Go to step 14.  | Repair the harness between the airbag control module and the data link connector. Or replace the airbag main harness along with the bulkhead harness. |
| <b>14 CHECK POWER SUPPLY CIRCUIT.</b><br>1) Turn the ignition switch to ON.<br>2) Measure the voltage between connector (2AG) in the test harness AG and chassis ground.<br><b>Connector &amp; terminal</b><br><b>(2AG) No. 1 (+) — Chassis ground (-):</b>  | Is the voltage 10 V or more?  | Go to step 15.  | Repair the harness between the airbag control module and the battery. Or replace the airbag main harness along with the bulkhead harness.             |
| <b>15 CHECK BETWEEN AIRBAG CONTROL MODULE AND CHASSIS GROUND.</b><br>1) Turn the ignition switch to OFF.<br>2) Measure the resistance between connector (2AG) in the test harness AG and chassis ground.<br><b>Connector &amp; terminal</b><br><b>(2AG) No. 4 — Chassis ground:</b><br><b>(2AG) No. 3 — Chassis ground:</b>  | Is the resistance less than 10 $\Omega$ ?   | Go to step 16.  | Repair the harness between the airbag control module and the chassis ground. Or replace the airbag main harness along with the bulkhead harness.      |
| <b>16 CHECK POOR CONTACT OF CONNECTOR.</b>   | Is there poor contact of the control module power supply, ground circuit and data link connector? | Repair the connector. (Replace the harness instead of repairing the airbag system connector.) | Replace the airbag control module.<br><Ref. to AB-67, REMOVAL, Airbag Control Module.>  |