

### 13. Diagnostic Procedure for Select Monitor Communication

#### A: COMMUNICATION FOR INITIALIZING IMPOSSIBLE

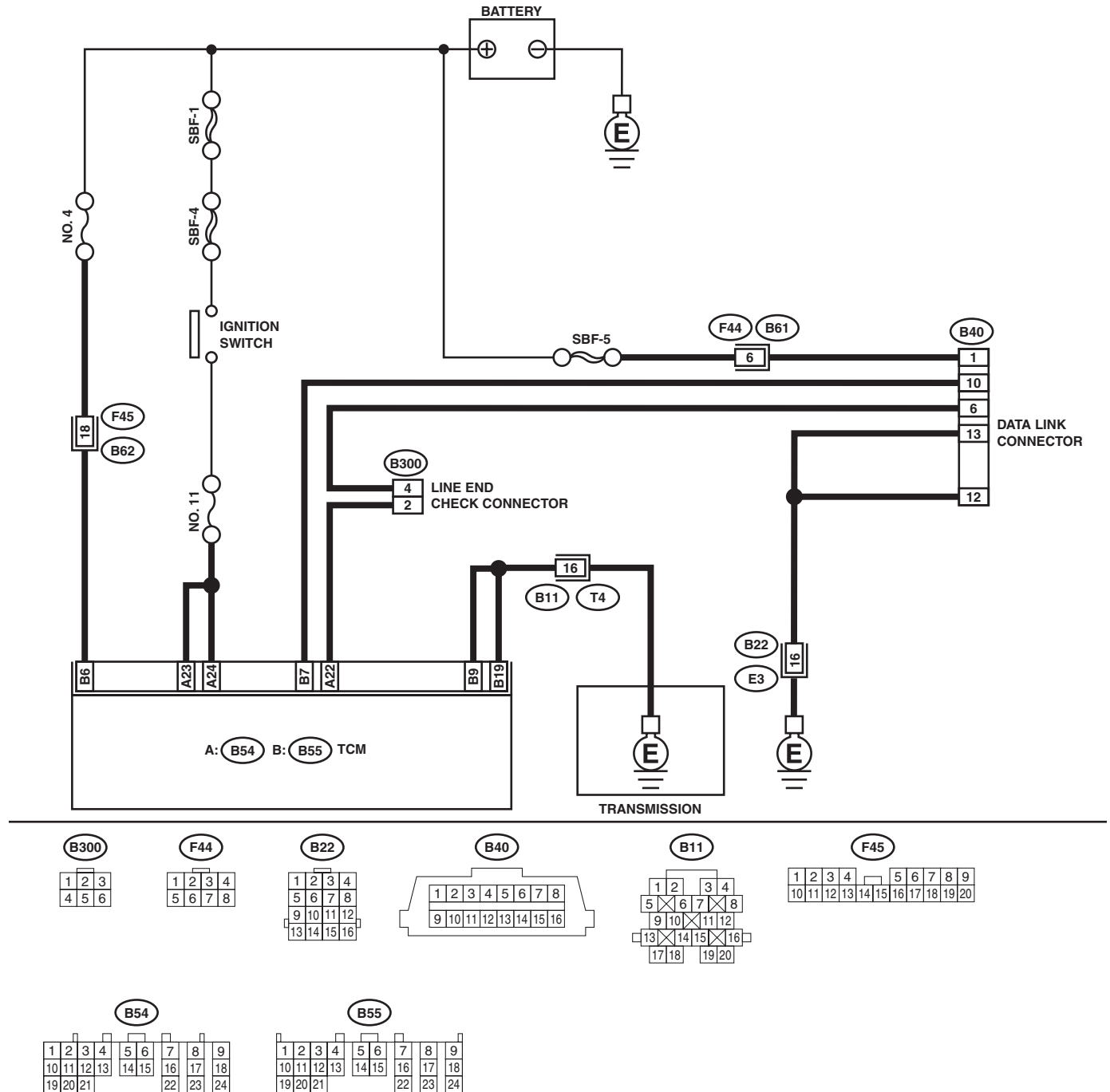
**DIAGNOSIS:**

- Faulty harness connector

**TROUBLE SYMPTOM:**

- Select monitor communication failure

**WIRING DIAGRAM:**



# DIAGNOSTIC PROCEDURE FOR SELECT MONITOR COMMUNICATION

AUTOMATIC TRANSMISSION (DIAGNOSTICS)

Step	Check	Yes	No
<p><b>1 CHECK SUBARU SELECT MONITOR POWER SUPPLY CIRCUIT.</b> Measure the voltage between data link connector and chassis ground. <b>Connector &amp; terminal</b> <b>(B40) No. 1 (+) — Chassis ground (-):</b></p>	Is the voltage more than 10 V?	Go to step 2.	Repair the harness and connector between battery and data link connector, and poor contact in coupling connector.
<p><b>2 CHECK SUBARU SELECT MONITOR GROUND CIRCUIT.</b> Measure the resistance of harness between data link connector and chassis ground. <b>Connector &amp; terminal</b> <b>(B40) No. 12 — Chassis ground:</b> <b>(B40) No. 13 — Chassis ground:</b></p>	Is the resistance less than 1 $\Omega$ ?	Go to step 3.	Repair the open circuit in harness between data link connector and ground terminal, and poor contact in coupling connector.
<p><b>3 CHECK COMMUNICATION OF SELECT MONITOR.</b> 1) Turn the ignition switch to ON. 2) Using the Subaru Select Monitor, check whether communication to engine systems can be executed normally.</p>	Is the name of system displayed on Subaru Select Monitor?	Go to step 8.	Go to step 4.
<p><b>4 CHECK COMMUNICATION OF SELECT MONITOR.</b> 1) Turn the ignition switch to OFF. 2) Disconnect the TCM connector. 3) Check whether communication to engine systems can be executed normally.</p>	Is the name of system displayed on Subaru Select Monitor?	Go to step 6.	Go to step 5.
<p><b>5 CHECK COMMUNICATION OF SELECT MONITOR.</b> 1) Turn the ignition switch to OFF. 2) Connect the TCM connector. 3) Disconnect the ECM connector. 4) Check whether communication to transmission systems can be executed normally.</p>	Is the name of system displayed on Subaru Select Monitor?	Inspect the ECM.	Go to step 6.
<p><b>6 CHECK HARNESS CONNECTOR BETWEEN EACH CONTROL MODULE AND DATA LINK CONNECTOR.</b> 1) Turn the ignition switch to OFF. 2) Disconnect the TCM, ECM, ABSCM&amp;H/U, cruise control module and immobilizer control module connectors. 3) Measure the resistance between TCM connector and chassis ground. <b>Connector &amp; terminal</b> <b>(B40) No. 10 — Chassis ground:</b> <b>(B40) No. 6 — Chassis ground:</b></p>	Is the resistance more than 1 M $\Omega$ ?	Go to step 7.	Repair the harness and connector between each control module and data link connector.
<p><b>7 CHECK OUTPUT SIGNAL FOR TCM.</b> 1) Turn the ignition switch to ON. 2) Measure the voltage between TCM and chassis ground. <b>Connector &amp; terminal</b> <b>(B40) No. 10 (+) — Chassis ground (-):</b> <b>(B40) No. 6 (+) — Chassis ground (-):</b></p>	Is the voltage more than 1 V?	Repair the harness and connector between each control module and data link connector.	Go to step 8.
<p><b>8 CHECK HARNESS/CONNECTOR BETWEEN TCM AND DATA LINK CONNECTOR.</b> Measure the resistance between TCM connector and data link connector. <b>Connector &amp; terminal</b> <b>(B55) No. 7 — (B40) No. 10:</b></p>	Is the resistance less than 0.5 $\Omega$ ?	Go to step 9.	Repair the harness and connector between TCM and data link connector.

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## AUTOMATIC TRANSMISSION (DIAGNOSTICS)

Step	Check	Yes	No
<b>9</b> <b>CHECK HARNESS/CONNECTOR BETWEEN TCM AND DATA LINK CONNECTOR.</b> Measure the resistance between TCM and data link connector. <b>Connector &amp; terminal</b> <b>(B54) No. 22 — (B40) No. 6:</b>	Is the resistance more than 1 M $\Omega$ ?	Go to step 10.	Repair the harness and connector between TCM and data link connector.
<b>10</b> <b>CHECK INSTALLATION OF TCM CONNECTOR.</b> Turn the ignition switch to OFF.	Is the TCM connector inserted into TCM?	Go to step 11.	Insert the TCM connector into TCM.
<b>11</b> <b>CHECK POOR CONTACT IN CONNECTORS.</b>	Is there poor contact in control module and data link connector?	Repair the poor contact.	Replace the TCM. <Ref. to 4AT-77, Transmission Control Module (TCM).>

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AUTOMATIC TRANSMISSION (DIAGNOSTICS)

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MEMO: