

### 13. Diagnostic Procedure for Select Monitor Communication

#### A: COMMUNICATION FOR INITIALIZING IMPOSSIBLE

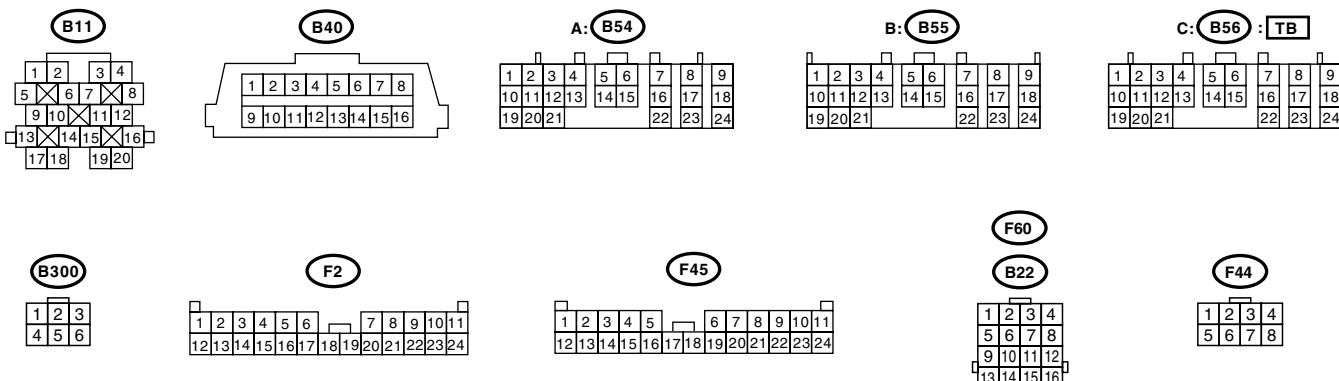
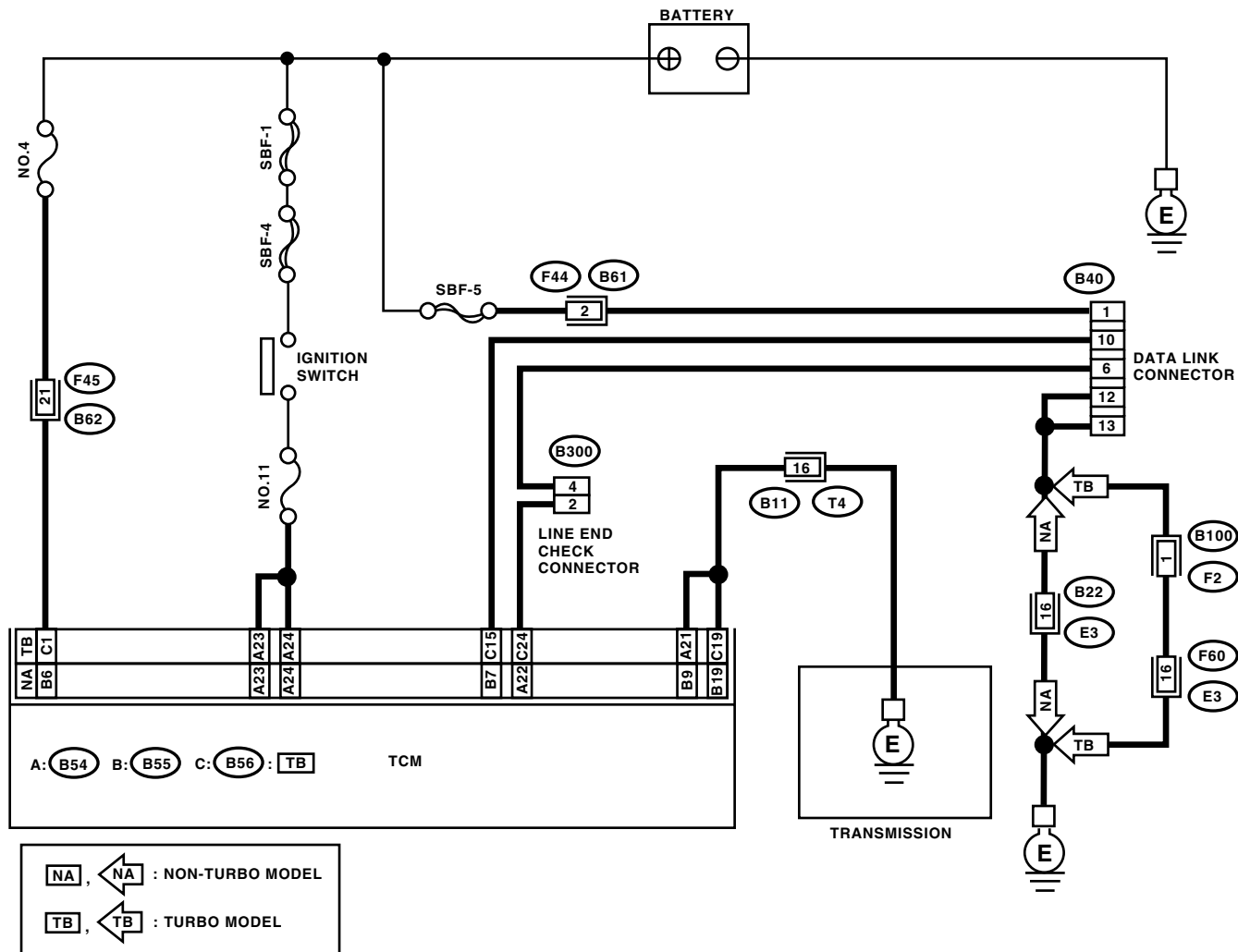
**DIAGNOSIS:**

- Faulty harness connector

**TROUBLE SYMPTOM:**

- Select monitor communication failure

**WIRING DIAGRAM:**



# DIAGNOSTIC PROCEDURE FOR SELECT MONITOR COMMUNICATION

AUTOMATIC TRANSMISSION (DIAGNOSTICS)

Step	Check	Yes	No
<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>	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.
<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>	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.
<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.	Are the name and year of system displayed on Subaru Select Monitor?	Go to step 8.	Go to step 4.
<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.	Are the name and year of system displayed on Subaru Select Monitor?	Go to step 6.	Go to step 5.
<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.	Are the name and year of system displayed on Subaru Select Monitor?	Inspect the ECM.	Go to step 6.
<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&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>	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.
<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>	Is the voltage more than 1 V?	Repair the harness and connector between each control module and data link connector.	Go to step 8.

# DIAGNOSTIC PROCEDURE FOR SELECT MONITOR COMMUNICATION

## AUTOMATIC TRANSMISSION (DIAGNOSTICS)

Step	Check	Yes	No
<b>8 CHECK HARNESS/CONNECTOR BETWEEN TCM AND DATA LINK CONNECTOR.</b> Measure the resistance between TCM connector and data link connector. <i>Connector &amp; terminal</i> <b>NON-TURBO MODEL</b> (B55) No. 7 — (B40) No. 10: <b>TURBO MODEL</b> (B56) No. 15 — (B40) No. 10:	Is the resistance less than 0.5 $\Omega$ ?	Go to step <b>9</b> .	Repair the harness and connector between TCM and data link connector.
<b>9 CHECK HARNESS/CONNECTOR BETWEEN TCM AND DATA LINK CONNECTOR.</b> Measure the resistance between TCM and data link connector. <i>Connector &amp; terminal</i> <b>NON-TURBO MODEL</b> (B54) No. 22 — (B40) No. 6: <b>TURBO MODEL</b> (B56) No. 24 — (B40) No. 6:	Is the resistance more than 1 M $\Omega$ ?	Go to step <b>10</b> .	Repair the harness and connector between TCM and data link connector.
<b>10 CHECK INSTALLATION OF TCM CONNECTOR.</b> Turn the ignition switch to OFF.	Is the TCM connector inserted into TCM?	Go to step <b>11</b> .	Insert the TCM connector into TCM.
<b>11 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-67, Transmission Control Module (TCM).>