

DIAGNOSTIC PROCEDURE FOR AT OIL TEMP WARNING LIGHT

AUTOMATIC TRANSMISSION (DIAGNOSTICS)

12. Diagnostic Procedure for AT OIL TEMP Warning Light

A: AT OIL TEMP WARNING LIGHT DOES NOT COME ON OR GO OFF

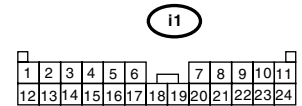
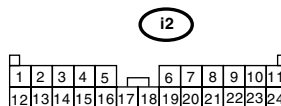
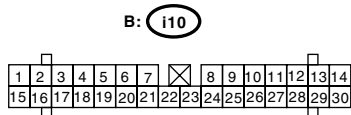
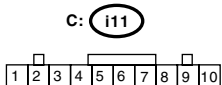
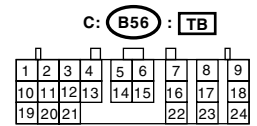
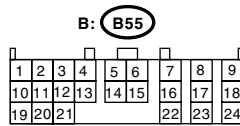
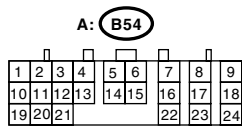
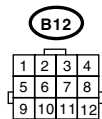
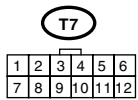
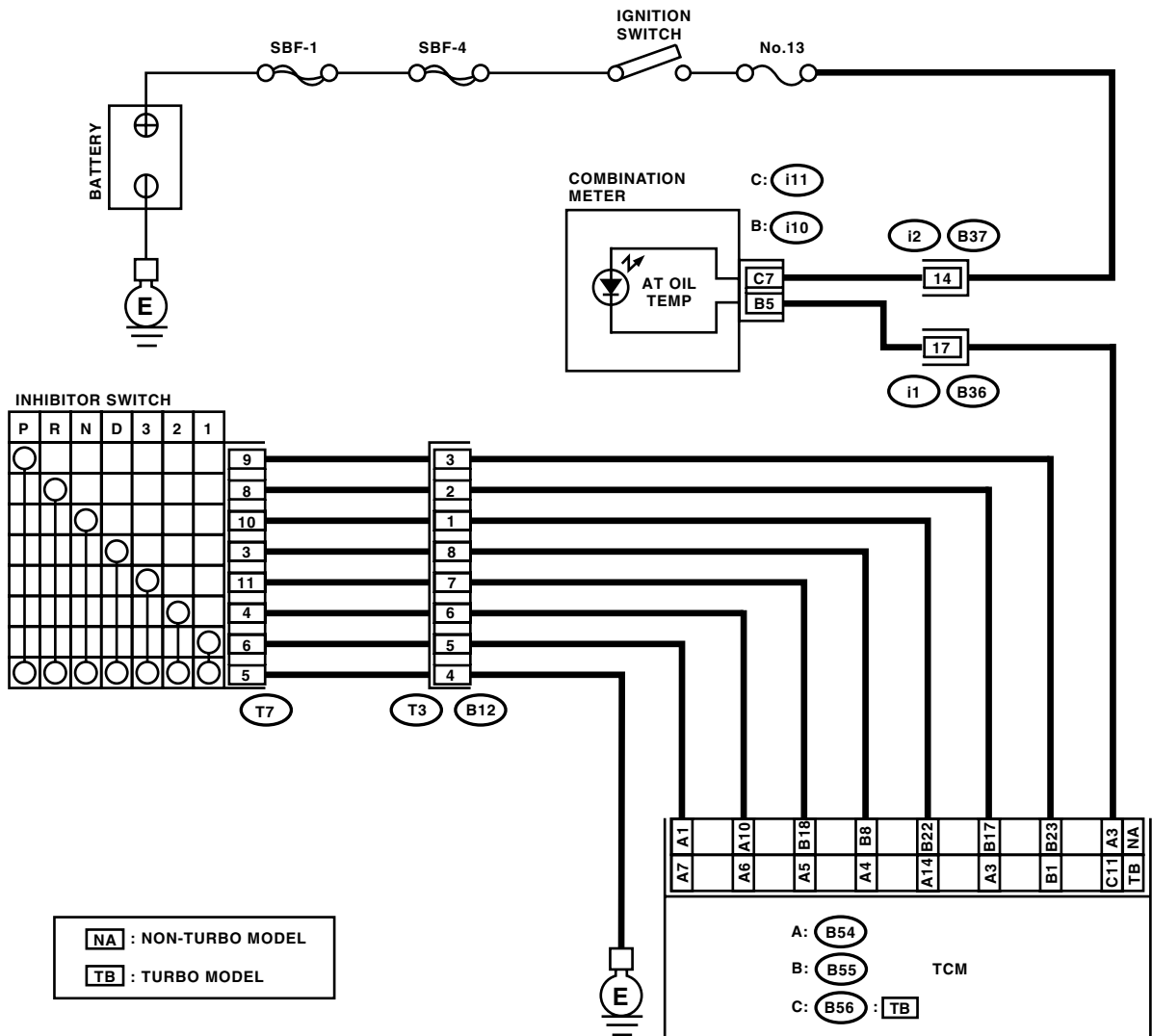
DIAGNOSIS:

The AT OIL TEMP warning light circuit is open or shorted.

TROUBLE SYMPTOM:

- When the ignition switch is turned to ON (engine OFF), AT OIL TEMP warning light does not illuminate.
- When the on-board diagnostics is performed, AT OIL TEMP warning light remains illuminated.

WIRING DIAGRAM:



AT-01282

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Step	Check	Yes	No	
1	CHECK AT OIL TEMP WARNING LIGHT. Turn the ignition switch to ON (engine OFF).	Does the AT OIL TEMP warning light illuminate?	Go to step 3.	Go to step 2.
2	CHECK AT OIL TEMP WARNING LIGHT. 1) Turn the ignition switch to OFF. 2) Remove the combination meter.	Is the AT OIL TEMP warning light bulb OK?	Go to step 4.	Check the combination meter.
3	CHECK AT OIL TEMP WARNING LIGHT. Perform "Read Diagnostic Trouble Code (DTC)". <Ref. to 4AT-23, Read Diagnostic Trouble Code (DTC).>	Does the AT OIL TEMP warning light blink?	A temporary poor contact of the connector or harness may be the cause. Repair the harness or connector in TCM, inhibitor switch and combination meter.	Go to step 9.
4	CHECK FUSE (No. 13). Remove the fuse (No. 13).	Is the fuse (No. 13) blown out?	Replace the fuse (No. 13). If replaced fuse (No. 13) is blown out easily, repair short circuit in harness between fuse (No. 13) and combination meter.	Go to step 5.
5	CHECK HARNESS CONNECTOR BETWEEN COMBINATION METER AND IGNITION SWITCH. 1) Turn the ignition switch to ON (engine OFF). 2) Measure the voltage between combination meter connector and chassis ground. Connector & terminal (i11) No. 7 (+) — Chassis ground (-):	Is the voltage more than 9 V?	Go to step 6.	Repair the open circuit in harness between combination meter and battery.
6	CHECK COMBINATION METER. Measure the voltage between combination meter connector and chassis ground. Connector & terminal (i10) No. 5 (+) — Chassis ground (-):	Is the voltage less than 9 V?	Repair the combination meter. <Ref. to IDI-10, Combination Meter Assembly.>	Go to step 7.
7	CHECK OPEN CIRCUIT OF HARNESS. 1) Turn the ignition switch to OFF. 2) Disconnect the connector from combination meter connector. 3) Measure the resistance of harness between combination meter. Connector & terminal NON-TURBO MODEL (B54) No. 3 — (i10) No. 5: TURBO MODEL (B56) No. 11 — (i10) No. 5:	Is the resistance less than 1 Ω ?	Go to step 8.	Repair the open circuit in harness between TCM and combination meter, and poor contact in coupling connector.
8	CHECK INPUT SIGNAL FOR TCM. 1) Connect the connector to TCM and combination meter. 2) Turn the ignition switch to ON (engine OFF). 3) Measure the voltage between TCM connector and chassis ground. Connector & terminal NON-TURBO MODEL (B54) No. 3 (+) — Chassis ground (-): TURBO MODEL (B56) No. 11 (+) — Chassis ground (-):	Is the voltage less than 1 V?	Even if the AT OIL TEMP warning light illuminates, the circuit has returned to a normal condition at this time. A temporary poor contact of the connector or harness may be the cause. Repair the harness or connector in TCM.	Replace the TCM. <Ref. to 4AT-67, Transmission Control Module (TCM).>

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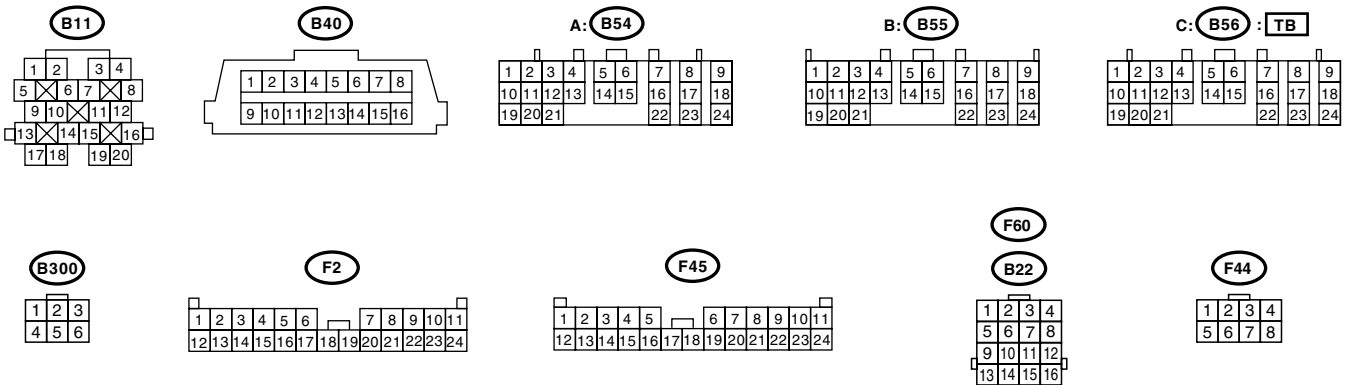
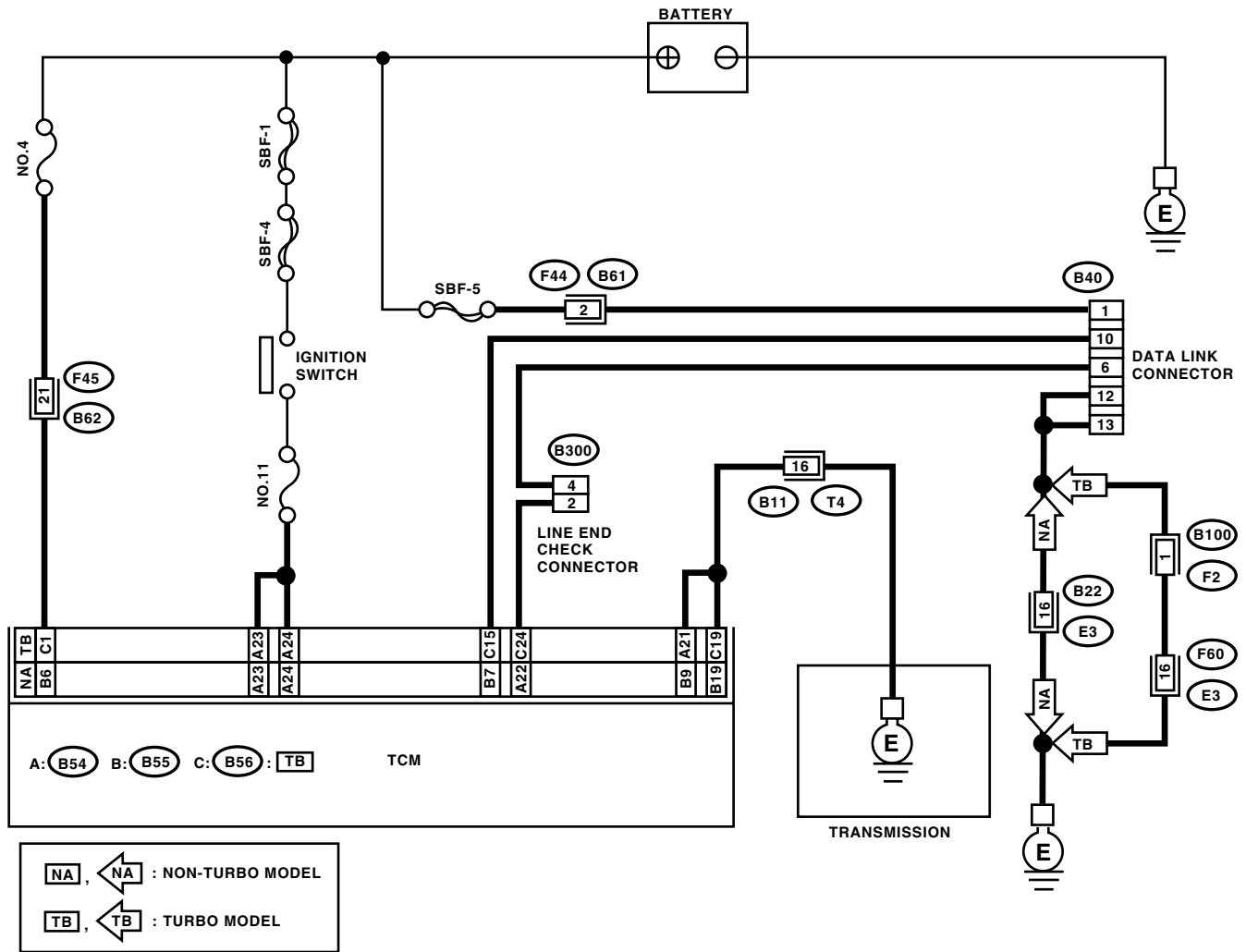
Step	Check	Yes	No
9 CHECK INHIBITOR SWITCH. 1)Connect the Subaru Select Monitor to data link connector. 2)Turn the ignition switch to ON. 3)Turn the Subaru Select Monitor to ON. 4)Read the data of range switch using Subaru Select Monitor. •Range switch is indicated in ON ⇔ OFF.	When each range is selected, does the LED of Subaru Select Monitor light up?	Go to step 10 .	Check the inhibitor switch circuit. <Ref. to 4AT-100, CHECK INHIBITOR SWITCH, Diagnostic Procedure without Diagnostic Trouble Code (DTC).>
10 CHECK SHORT CIRCUIT OF HARNESS. 1)Disconnect the connector from TCM. 2)Remove the combination meter. 3)Disconnect the connector from combination meter. 4)Measure the resistance of harness connector between TCM and chassis ground. Connector & terminal NON-TURBO MODEL (B54) No. 11 — Chassis ground: TURBO MODEL (B56) No. 11 — Chassis ground:	Is the resistance less than 1 MΩ?	Check the TCM power supply and ground line. <Ref. to 4AT-32, CHECK POWER SUPPLY AND GROUND LINE, Diagnostic Procedure for AT OIL TEMP Warning Light.>	Repair the short circuit in harness between combination meter connector and TCM connector.

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B: CHECK POWER SUPPLY AND GROUND LINE

WIRING DIAGRAM:



AT-01283

Step	Check	Yes	No	
1	CHECK BATTERY TERMINAL. Turn the ignition switch to OFF.	Is there poor contact at battery terminal?	Repair or tighten the battery terminal.	Go to step 2.

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AUTOMATIC TRANSMISSION (DIAGNOSTICS)

Step	Check	Yes	No
2 CHECK POWER SUPPLY OF TCM. 1)Disconnect the connector from TCM. 2)Turn the ignition switch to ON. 3)Measure the voltage between TCM connector and chassis ground. <i>Connector & terminal</i> NON-TURBO MODEL (B55) No. 6 (+) — Chassis ground (-): TURBO MODEL (B56) No. 1 (+) — Chassis ground (-):	Is the voltage 10 — 13 V?	Go to step 4.	Go to step 3.
3 CHECK FUSE (NO. 4). Remove the fuse (No. 4).	Is the fuse (No. 4) blown out?	Replace the fuse (No. 4). If replaced fuse (No. 4) has blown out easily, repair short circuit in harness between fuse (No. 4) and TCM.	Repair the open circuit in harness between fuse (No. 4) and TCM, or fuse (No. 4) and battery, and poor contact in coupling connector.
4 CHECK IGNITION POWER SUPPLY CIRCUIT. 1)Turn the ignition switch to ON (engine OFF). 2)Measure the ignition power supply voltage between TCM connector and chassis ground. <i>Connector & terminal</i> (B54) No. 23 (+) — Chassis ground (-): (B54) No. 24 (+) — Chassis ground (-):	Is the voltage 10 — 13 V?	Go to step 6.	Go to step 5.
5 CHECK FUSE (NO. 11). Remove the fuse (No. 11).	Is the fuse (No. 11) blown out?	Replace the fuse (No. 11). If replaced fuse (No. 11) has blown out easily, repair short circuit in harness between fuse (No. 11) and TCM.	Repair the open circuit in harness between fuse (No. 4) and TCM, or fuse (No. 4) and battery, and poor contact in coupling connector.
6 CHECK HARNESS CONNECTOR BETWEEN TCM AND TRANSMISSION. 1)Turn the ignition switch to OFF. 2)Disconnect the connector from TCM and transmission. 3)Measure the resistance of harness between TCM and transmission connector. <i>Connector & terminal</i> NON-TURBO MODEL (B54) No. 21 — (B11) No. 16: (B56) No. 19 — (B11) No. 16: TURBO MODEL (B56) No. 19 — (B11) No. 16: (B54) No. 21 — (B11) No. 16:	Is the resistance less than 1 Ω ?	Go to step 7.	Repair the open circuit in harness between TCM, transmission harness connector, and poor contact in coupling connector.
7 CHECK HARNESS CONNECTOR BETWEEN TRANSMISSION AND TRANSMISSION GROUND. Measure the resistance of harness between transmission and transmission ground. <i>Connector & terminal</i> (T4) No. 16 — Transmission ground:	Is the resistance less than 1 Ω ?	Go to step 8.	Repair the open circuit in harness between transmission and transmission ground.
8 CHECK POOR CONTACT IN CONNECTORS.	Is there poor contact in control module power supply, ground line and data link connector?	Repair the connector.	Replace the TCM. <Ref. to 4AT-67, Transmission Control Module (TCM).>