

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

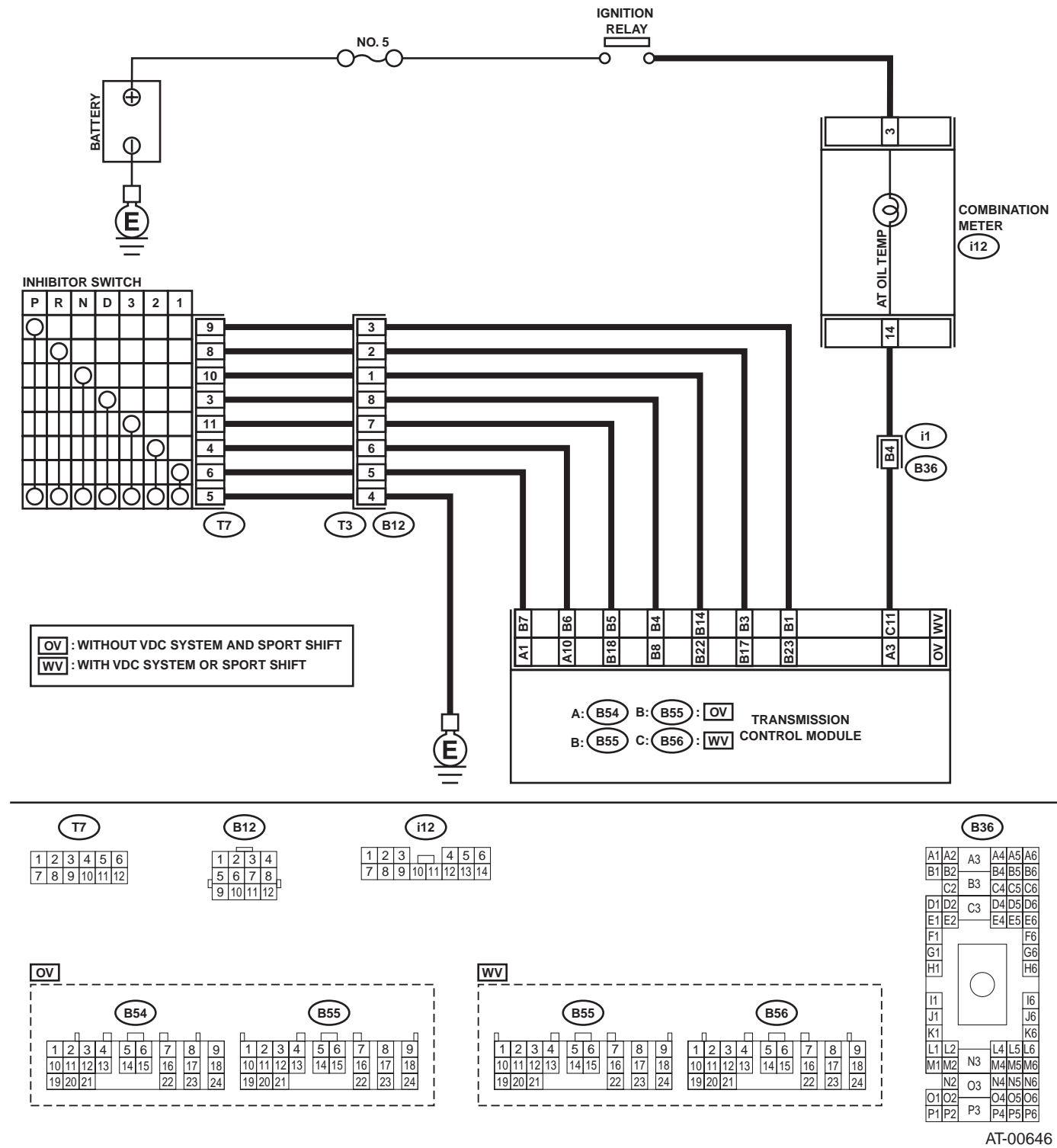
DIAGNOSIS:

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

TROUBLE SYMPTOM:

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

WIRING DIAGRAM:



AT-00646

AT-32

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| Step | Value | Yes | No |
|---|------------------------------|--|---|
| 1 CHECK AT OIL TEMP WARNING LIGHT. Turn ignition switch to ON (engine OFF). Does AT OIL TEMP warning light illuminate? | Indicator light illuminates. | Go to step 3. | Go to step 2. |
| 2 CHECK AT OIL TEMP WARNING LIGHT. 1) Turn ignition switch to OFF. 2) Remove combination meter. 3) Remove AT OIL TEMP warning light bulb from combination meter. Is AT OIL TEMP warning light bulb OK? | Bulb is OK. | Go to step 4. | Replace AT OIL TEMP warning light bulb. |
| 3 CHECK AT OIL TEMP WARNING LIGHT. Perform "Read Diagnostic Trouble Code (DTC)". <Ref. to AT-26, WITHOUT SUBARU SELECT MONITOR, OPERATION, Read Diagnostic Trouble Code (DTC).> Does AT OIL TEMP warning light blink? | Blinks. | A temporary poor contact of the connector or harness may be the cause. Repair harness or connector in TCM, inhibitor switch and combination meter. | Go to step 9. |
| 4 CHECK FUSE (No. 5). Remove fuse (No. 5). Is the fuse (No. 5) blown out? | Fuse (No. 5) is blown out. | Replace fuse (No. 5). If replaced fuse (No. 5) is blown out easily, repair short circuit in harness between fuse (No. 5) and combination meter. | Go to step 5. |
| 5 CHECK HARNESS CONNECTOR BETWEEN COMBINATION METER AND IGNITION RELAY. 1) Turn ignition switch to ON (engine OFF). 2) Measure voltage between combination meter connector and chassis ground. Connector & terminal (i12) No. 3 (+) — Chassis ground (-): Does the measured value exceed the specified value? | 9 V | Go to step 6. | Repair open or short circuit in harness between combination meter and battery. |
| 6 CHECK COMBINATION METER. Measure voltage between combination meter connector and chassis ground. Connector & terminal (i12) No. 14 (+) — Chassis ground (-): Is the measured value less than the specified value? | 1 V | Repair combination meter. <Ref. to IDI-4, Combination Meter System.> | Go to step 7. |
| 7 CHECK OPEN CIRCUIT OF HARNESS. 1) Turn ignition switch to OFF. 2) Disconnect TCM and combination meter connector. 3) Measure resistance of harness between combination meter. Connector & terminal With VDC system or SPORT shift: (B56) No. 11 — (i12) No. 14: Without VDC system and SPORT shift: (B54) No. 3 — (i12) No. 14: Is the measured value less than the specified value? | 1 Ω | Go to step 8. | Repair open circuit in harness between TCM and combination meter, and poor contact in coupling connector. |

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Vehicle-id:
 SIE-id::A:AT Oil Temp Warning Light does not
 Come On or Go Off

DIAGNOSTIC PROCEDURE FOR AT OIL TEMP WARNING LIGHT**AUTOMATIC TRANSMISSION (DIAGNOSTICS)**

| Step | Value | Yes | No |
|---|-------------------------------------|--|--|
| 8 CHECK INPUT SIGNAL FOR TCM. 1) Connect connector to TCM and combination meter. 2) Turn ignition switch to ON (engine OFF). 3) Measure voltage between TCM connector and chassis ground. Connector & terminal With VDC system or SPORT shift: (B56) No. 11 (+) — Chassis ground (-): Without VDC system and SPORT shift: (B54) No. 3 (+) — Chassis ground (-): Is the measured value less than the specified value? | 1 V | Even if AT OIL TEMP warning lights up, 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 harness or connector in TCM. | Replace TCM. <Ref. to AT-75, Transmission Control Module (TCM).> |
| 9 CHECK SUBARU SELECT MONITOR. Do you have SUBARU SELECT MONITOR? | Subaru Select Monitor is available. | Go to step 10. | Go to step 11. |
| 10 CHECK INHIBITOR SWITCH. 1) Connect Subaru Select Monitor to data link connector. 2) Turn ignition switch to ON. 3) Subaru Select Monitor to ON. 4) Read data of range switch using Subaru Select Monitor. •Range switch is indicated in ON ⇔ OFF. When each range is selected, does LED of Subaru Select Monitor light up? | LED lights up. | Go to step 11. | Check inhibitor switch circuit. <Ref. to AT-136, CHECK INHIBITOR SWITCH., Diagnostic Procedure for No-diagnostic Trouble Code (DTC).> |
| 11 CHECK SHORT CIRCUIT OF HARNESS. 1) Disconnect connector from TCM. 2) Remove combination meter. 3) Disconnect connector from combination meter. 4) Measure resistance of harness connector between TCM and chassis ground. Connector & terminal/specified resistance With VDC system or SPORT shift: (B56) No. 11 — Chassis ground: Without VDC system and SPORT shift: (B54) No. 3 — Chassis ground: Does the measured value exceed the specified value? | 1 MΩ | Replace TCM. <Ref. to AT-75, Transmission Control Module (TCM).> | Repair short circuit in harness between combination meter connector and TCM connector. |

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MEMO:

AT-35

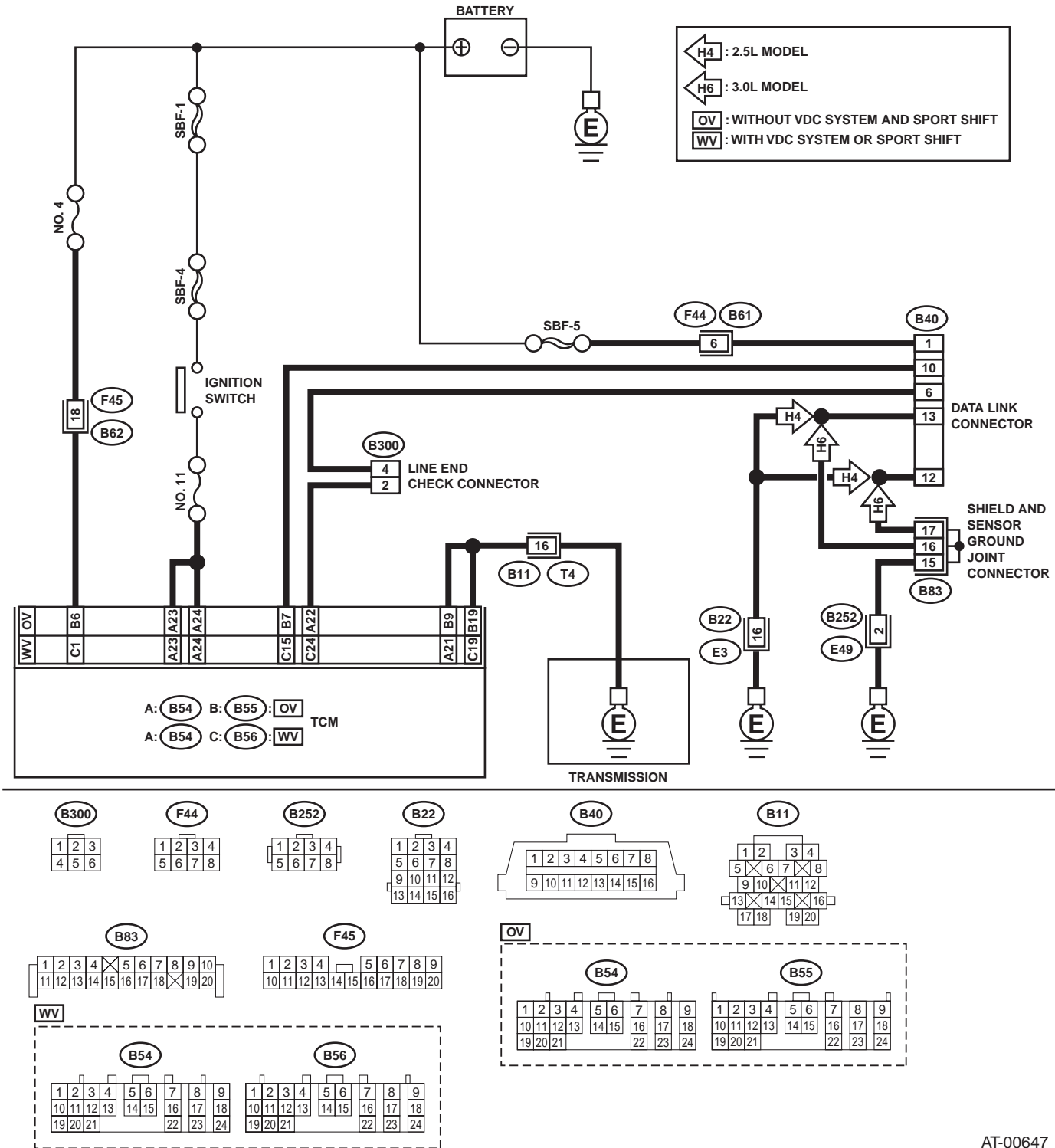
Vehicle-id:
SIE-id::A:AT Oil Temp Warning Light does not
Come On or Go Off
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DIAGNOSTIC PROCEDURE FOR AT OIL TEMP WARNING LIGHT

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B: CHECK POWER SUPPLY AND GROUND LINE

WIRING DIAGRAM:



AT-00647

AT-36

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AUTOMATIC TRANSMISSION (DIAGNOSTICS)

| Step | Value | Yes | No |
|---|--|---|---|
| 1 CHECK BATTERY TERMINAL. Turn ignition switch to OFF. | Is there poor contact at battery terminal? | Repair battery terminal. | Go to step 2. |
| 2 CHECK POWER SUPPLY OF TCM. 1) Disconnect connector from TCM. 2) Turn ignition switch to ON. 3) Measure voltage between TCM connector and chassis ground. Connector & terminal With VDC system or SPORT shift: (B56) No. 1 (+) — Chassis ground (-): Without VDC system and SPORT shift: (B55) No. 6 (+) — Chassis ground (-): Is the measured value within the specified range? | 10 - 15 V | Go to step 4. | Go to step 3. |
| 3 CHECK FUSE (NO. 4). Remove fuse (No. 4). Is the fuse (No. 4) blown out? | Fuse (No. 4) is blown out. | Replace fuse (No. 4). If replaced fuse (No. 4) has blown out easily, repair short circuit in harness between fuse (No. 4) and TCM. | Repair 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 ignition switch to ON (engine OFF). 2) Measure ignition power supply voltage between TCM connector and chassis ground. Connector & terminal (B54) No. 23 (+) — Chassis ground (-): (B54) No. 24 (+) — Chassis ground (-): Does the measured value exceed the specified value? | 10 V | Go to step 6. | Go to step 5. |
| 5 CHECK FUSE (NO. 11). Remove fuse (No. 11). Is the fuse (No. 11) blown out? | Fuse (No. 11) is blown out. | Replace fuse (No. 11). If replaced fuse (No. 11) has blown out easily, repair short circuit in harness between fuse (No. 11) and TCM. | Repair open circuit in harness between fuse (No. 11) and TCM, or fuse (No. 11) and battery, and poor contact in coupling connector. |
| 6 CHECK HARNESS CONNECTOR BETWEEN TCM AND TRANSMISSION. 1) Turn ignition switch to OFF. 2) Disconnect connector from TCM and transmission. 3) Measure resistance of harness between TCM and transmission connector. Connector & terminal With VDC system or SPORT shift: (B56) No. 19 — (B11) No. 16: (B54) No. 21 — (B11) No. 16: Without VDC system and SPORT shift: (B55) No. 19 — (B11) No. 16: (B55) No. 9 — (B11) No. 16: Is the measured value less than the specified value? | 1 Ω | Go to step 7. | Repair open circuit in harness between TCM and transmission harness connector, and poor contact in coupling connector. |

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| Step | Value | Yes | No |
|---|------------------------|-----------------------|--|
| 7 CHECK HARNESS CONNECTOR BETWEEN TRANSMISSION AND TRANSMISSION GROUND. Measure resistance of harness between transmission and transmission ground. Connector & terminal (T4) No. 16 — Transmission ground: Is the measured value less than the specified value? | 1 Ω | Go to step 8 . | Repair open circuit in harness between transmission and transmission ground. |
| 8 CHECK POOR CONTACT IN CONNECTORS. Is there poor contact in control module power supply and ground line? | There is poor contact. | Repair connector. | Replace TCM. <Ref. to AT-75, Transmission Control Module (TCM).> |

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AUTOMATIC TRANSMISSION (DIAGNOSTICS)

MEMO:

AT-39

Vehicle-id:
SIE-id: :B:Check Power Supply and Ground Line
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