

Malfunction Indicator Light

ENGINE (DIAGNOSTICS)

16. Malfunction Indicator Light

A: PROCEDURE

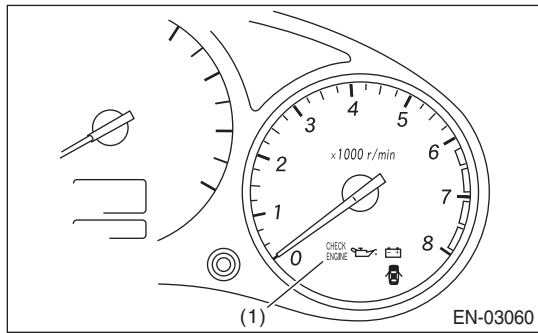
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| 1. Activation of malfunction indicator light. <Ref. to EN(H4SO)(diag)-49, ACTIVATION OF MALFUNCTION INDICATOR LIGHT, Malfunction Indicator Light.> |
| ↓ |
| 2. Malfunction indicator light does not come on. <Ref. to EN(H4SO)(diag)-50, MALFUNCTION INDICATOR LIGHT DOES NOT COME ON, Malfunction Indicator Light.> |
| ↓ |
| 3. Malfunction indicator light does not go off. <Ref. to EN(H4SO)(diag)-52, MALFUNCTION INDICATOR LIGHT DOES NOT GO OFF, Malfunction Indicator Light.> |

B: ACTIVATION OF MALFUNCTION INDICATOR LIGHT

1) When the ignition switch is turned on (engine off), the malfunction indicator light in the combination meter illuminates.

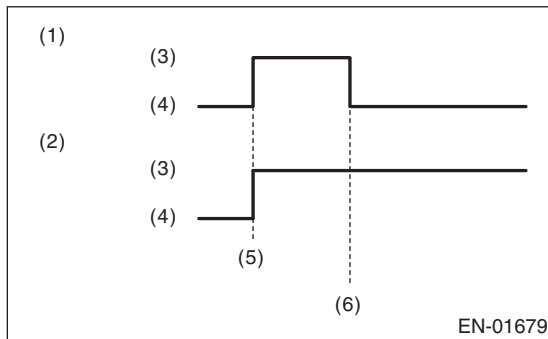
NOTE:

If the malfunction indicator light does not illuminate, perform diagnostics of the malfunction indicator light circuit or the combination meter circuit. <Ref. to EN(H4SO)(diag)-50, MALFUNCTION INDICATOR LIGHT DOES NOT COME ON, Malfunction Indicator Light.>



(1) Malfunction indicator light

2) After starting the engine, the malfunction indicator light goes out. If it does not go off, either the engine or emission control system has malfunction.



- (1) No faulty
- (2) Trouble occurs
- (3) ON
- (4) OFF
- (5) Ignition switch ON
- (6) Engine start

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C: MALFUNCTION INDICATOR LIGHT DOES NOT COME ON

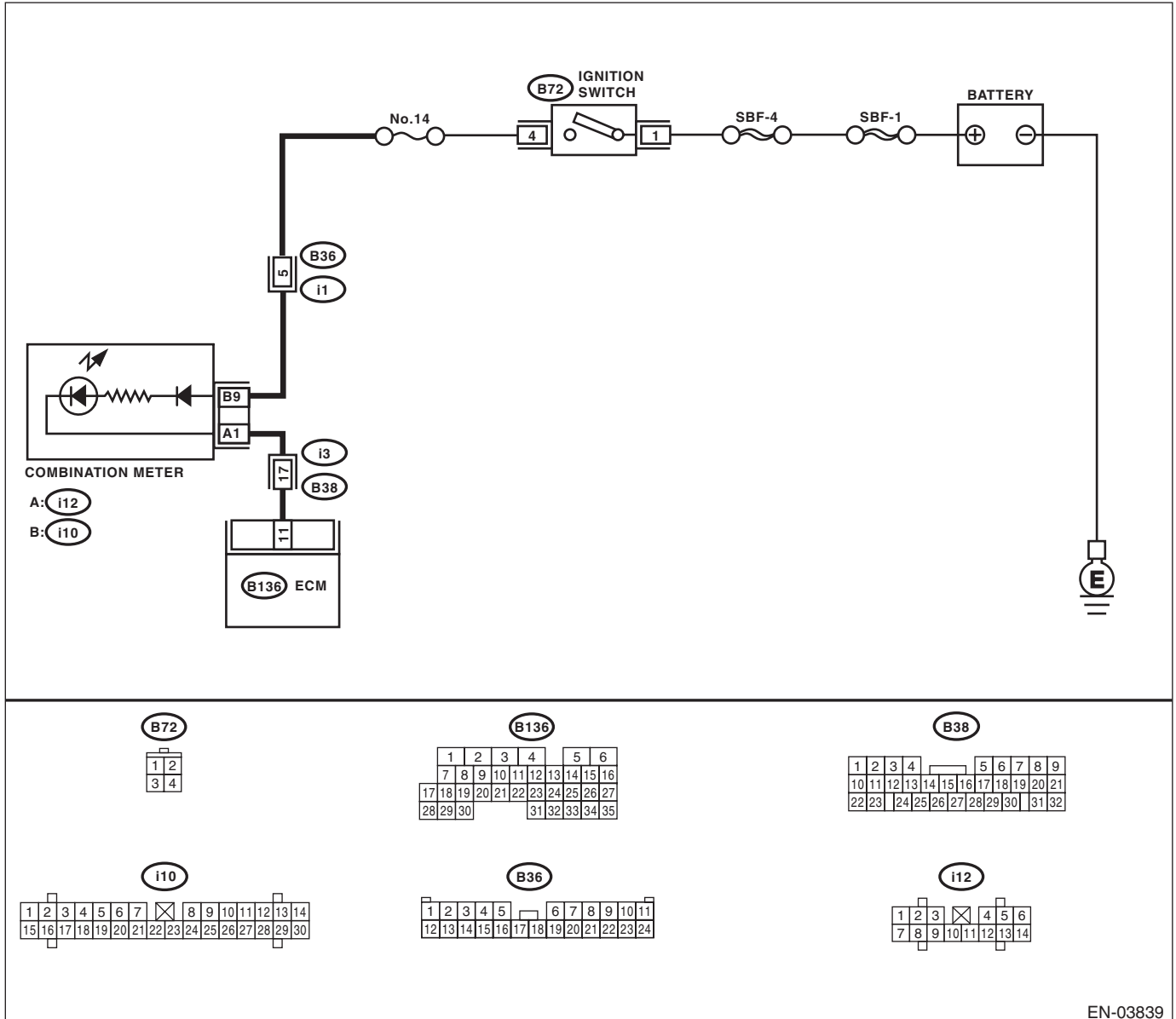
DIAGNOSIS:

The malfunction indicator light circuit is open or shorted.

TROUBLE SYMPTOM:

When the ignition switch is turned to ON (engine OFF), malfunction indicator light does not come on.

WIRING DIAGRAM:



EN-03839

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| Step | Check | Yes | No |
|---|---|---|--|
| 1 CHECK OUTPUT SIGNAL OF ECM. 1) Turn the ignition switch to ON. 2) Measure the voltage between ECM connector and chassis ground. <i>Connector & terminal</i> <i>(B136) No. 11 (+) — Chassis ground (-):</i> | Is the voltage less than 1 V? | Go to step 4. | Go to step 2. |
| 2 CHECK POOR CONTACT. Check for poor connection by shaking or pulling ECM connector and harness. | Does the malfunction indicator light illuminate? | Repair poor contact in ECM connector. | Go to step 3. |
| 3 CHECK ECM CONNECTOR. Check the connection of ECM connector. | Is the ECM connector correctly connected? | Replace the ECM. <Ref. to FU(H4SO)-40, Engine Control Module (ECM).> | Repair the connection of ECM connector. |
| 4 CHECK HARNESS BETWEEN COMBINATION METER AND ECM CONNECTOR. 1) Turn the ignition switch to OFF. 2) Remove the combination meter. <Ref. to IDI-10, Combination Meter.> 3) Disconnect the connector from ECM and combination meter. 4) Measure the resistance of harness between ECM and combination meter connector. <i>Connector & terminal</i> <i>(B136) No. 11 — (i12) No. 1:</i> | Is the resistance less than 1 Ω ? | Go to step 5. | Repair the harness and connector. NOTE: In this case, repair the following item: • Open circuit in harness between ECM and combination meter connector • Poor contact in coupling connector |
| 5 CHECK POOR CONTACT. Check poor contact of combination meter connector. | Is there poor contact in combination meter connector? | Repair the poor contact of combination meter connector. | Go to step 6. |
| 6 CHECK HARNESS BETWEEN COMBINATION METER AND IGNITION SWITCH CONNECTOR. 1) Turn the ignition switch to ON. 2) Measure the voltage between combination meter connector and chassis ground. <i>Connector & terminal</i> <i>(i10) No. 9 (+) — Chassis ground (-):</i> | Is the voltage 10 V or more? | Replace the combination meter circuit board. <Ref. to IDI-10, Combination Meter.> | Check the following item and repair if necessary. NOTE: • Blown out of fuse (No. 13) • Open or short circuit in harness between fuse (No. 13) and battery terminal • Poor contact in ignition switch connector |

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D: MALFUNCTION INDICATOR LIGHT DOES NOT GO OFF

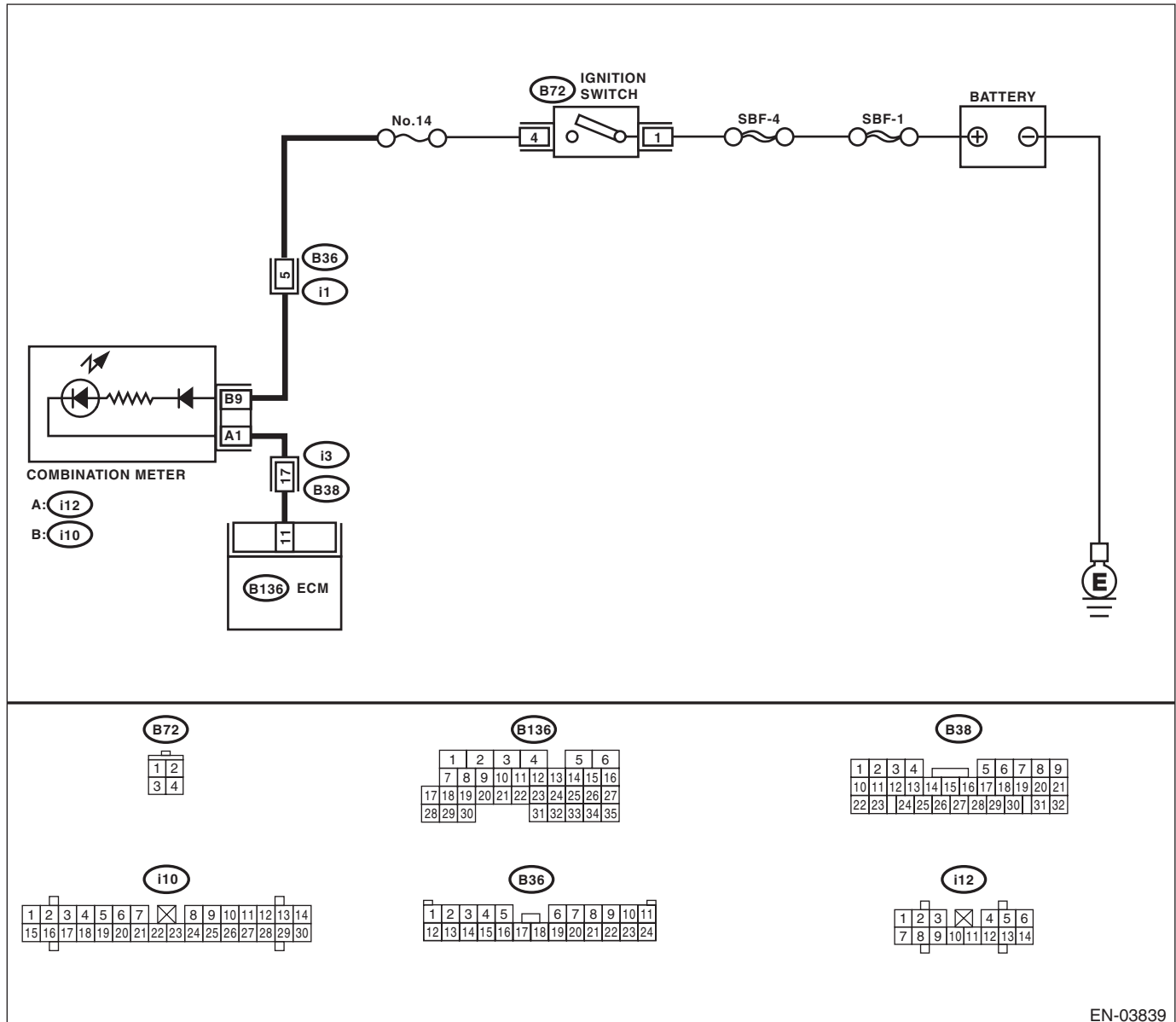
DIAGNOSIS:

The malfunction indicator light circuit is shorted.

TROUBLE SYMPTOM:

Although malfunction indicator light comes on when the engine runs, DTC is not shown on the Subaru Select Monitor or general scan tool display.

WIRING DIAGRAM:



| Step | Check | Yes | No |
|--|--|--|--|
| 1 CHECK HARNESS BETWEEN COMBINATION METER AND ECM CONNECTOR. 1) Turn the ignition switch to OFF. 2) Disconnect the connectors from ECM. 3) Turn the ignition switch to ON. | Does the malfunction indicator light illuminate? | Repair the short circuit of harness between combination meter and ECM connector. | Replace the ECM. <Ref. to FU(H4SO)-40, Engine Control Module (ECM).> |