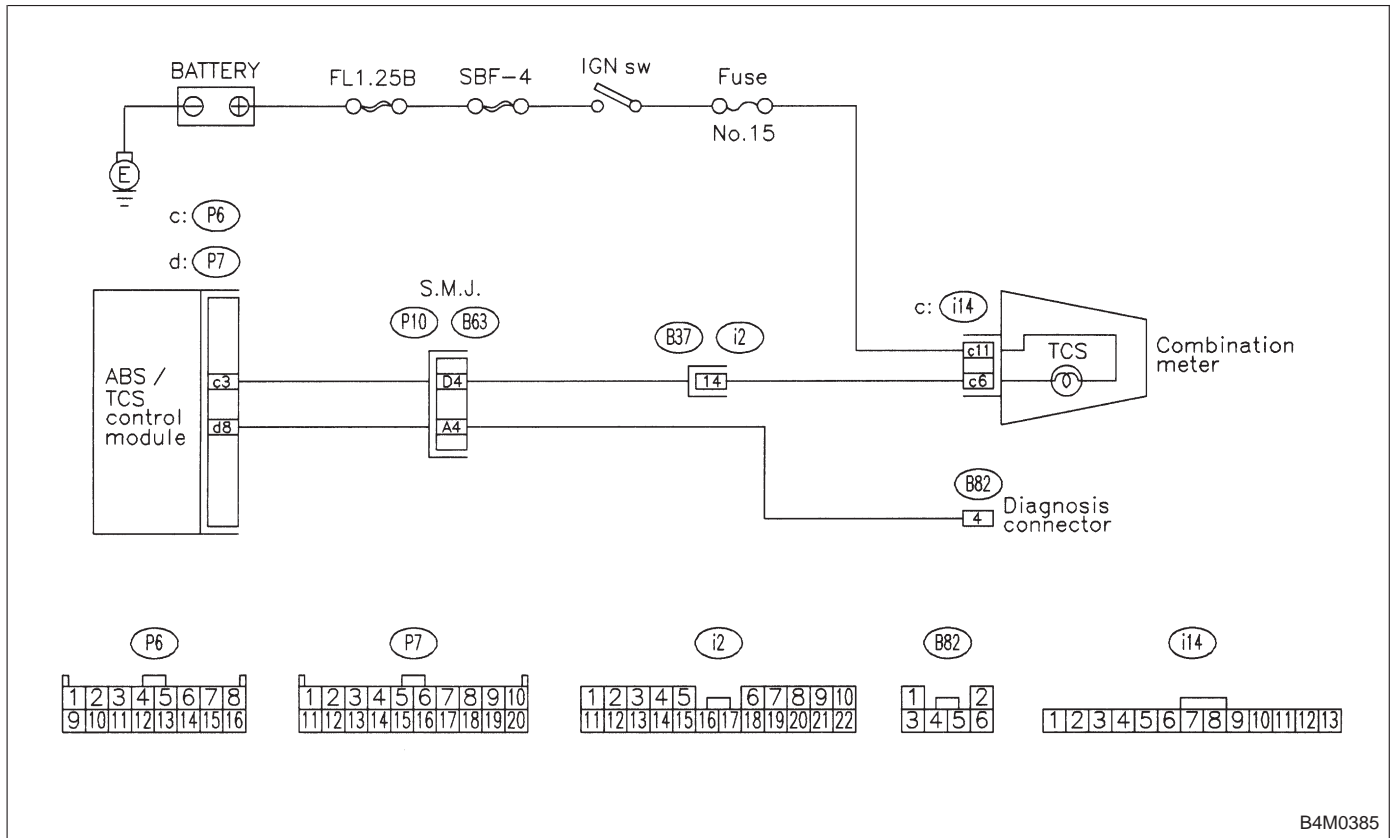
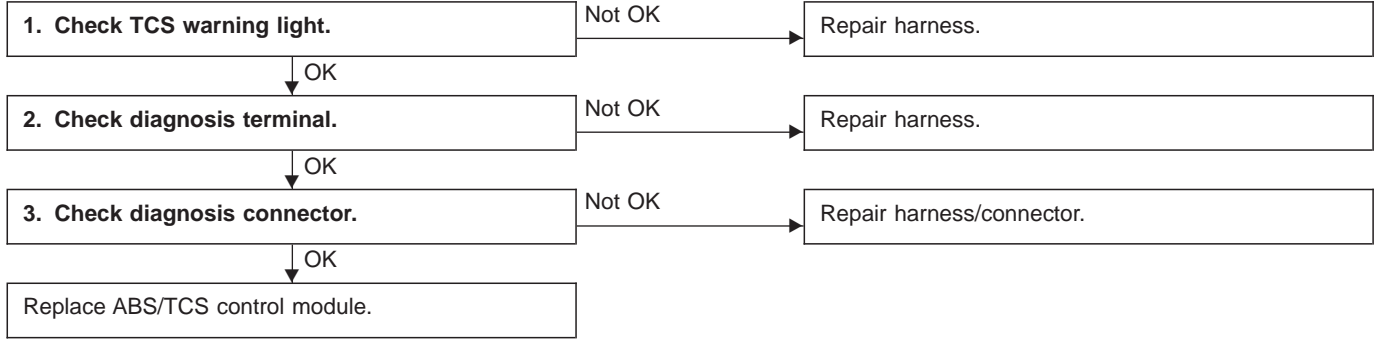
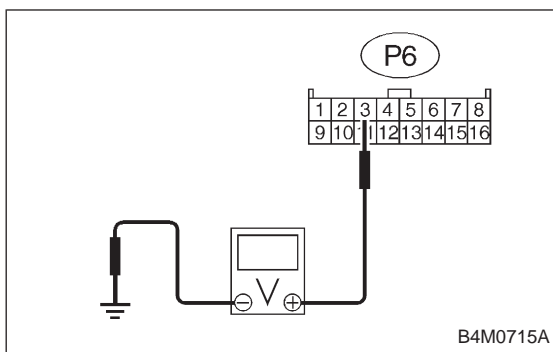


7. Diagnostics Chart for Warning Light Circuit Failure

A: TROUBLE CODE DOES NOT APPEAR. — TCS WARNING LIGHT COMES ON WHEN STARTING THE ENGINE. —



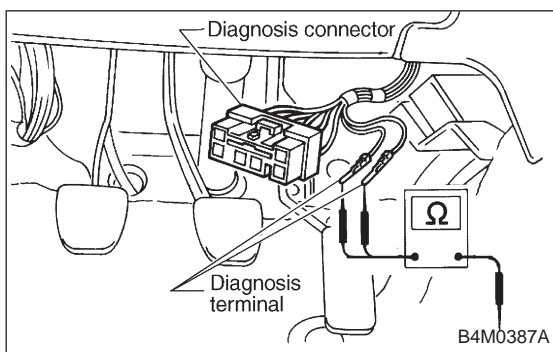
B4M0385



1. CHECK TCS WARNING LIGHT.

- 1) Turn ignition switch OFF.
- 2) Disconnect all connectors from ABS/TCS control module.
- 3) Turn ignition switch ON.
- 4) Measure voltage between ABS/TCS control module connector and body.

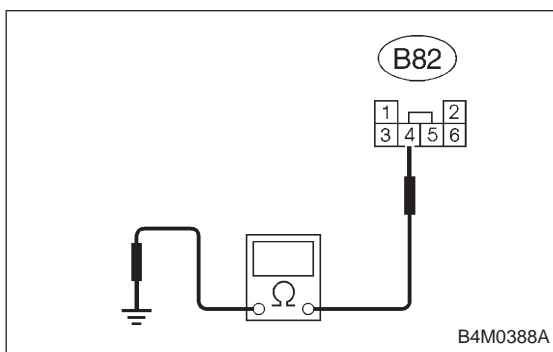
Connector & terminal / Specified voltage:
(P6) No. 3 — body / 10 — 14 V



2. CHECK DIAGNOSIS TERMINAL.

- 1) Turn ignition switch OFF.
- 2) Measure resistance between diagnosis terminal and body.

Connector/Specified resistance:
B81 — body / 0 Ω

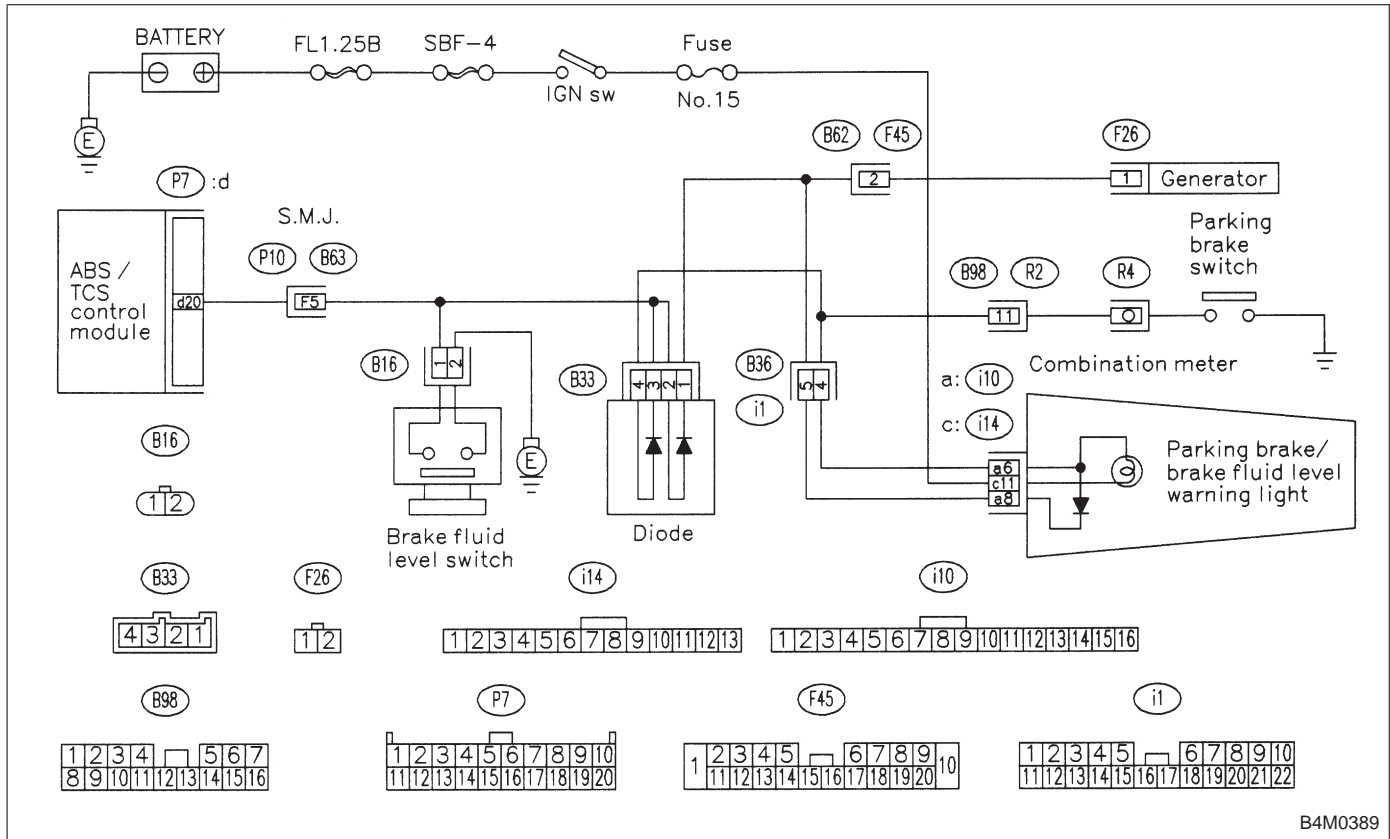
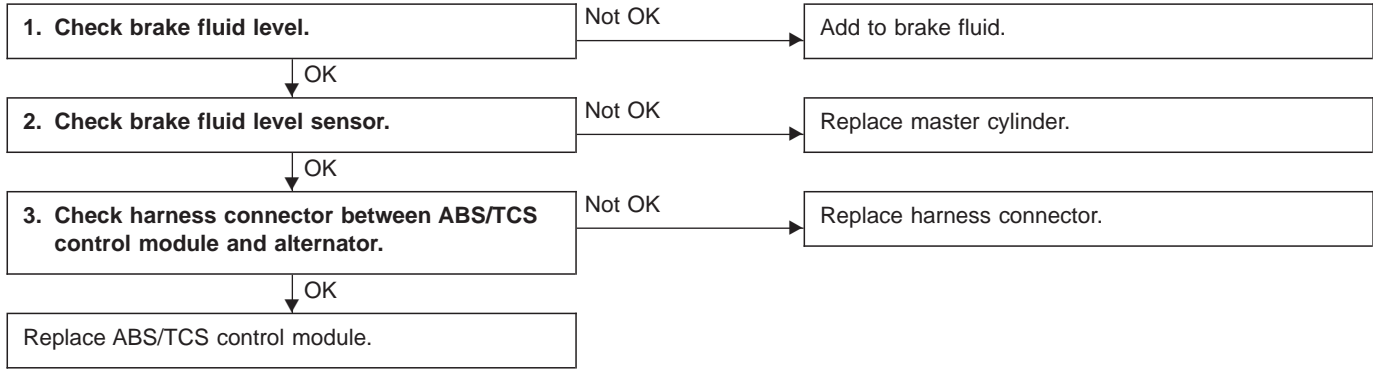


3. CHECK DIAGNOSIS CONNECTOR.

- 1) Turn ignition switch OFF.
- 2) Disconnect all connectors from ABS/TCS control module.
- 3) Measure resistance between diagnosis connector and body.

Connector & terminal / Specified resistance:
(B82) No. 4 — body / 0 Ω

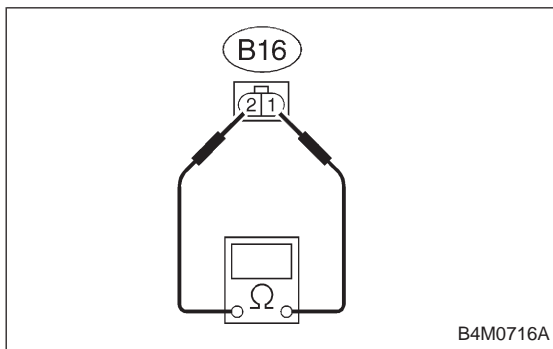
B: ABS AND TCS WARNING LIGHT DO NOT GO OFF.
— TCS OFF AND TCS OPERATING INDICATOR LIGHTS COME ON AND GO OFF PROPERLY WHEN STARTING THE ENGINE, WHILE ABS WARNING AND TCS WARNING LIGHTS KEEP ON. —



B4M0389

1. CHECK BRAKE FLUID LEVEL.

Check that brake fluid level is above the MIN indication on the reservoir tank.



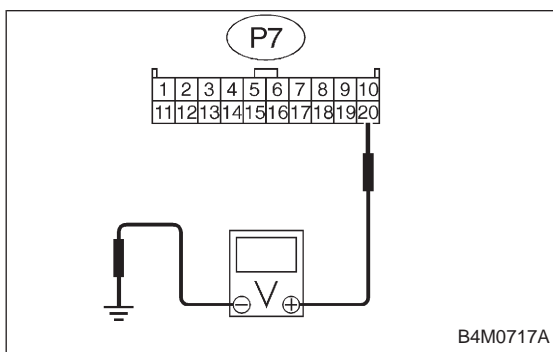
2. CHECK BRAKE FLUID LEVEL SENSOR.

- 1) Turn ignition switch OFF.
- 2) Disconnect connector from brake fluid level sensor.

Connector & terminal / Specified resistance:

(B16) No. 1 — No. 2 / 0 Ω (Leaving float where it is.)

(B16) No. 1 — No. 2 / 1 MΩ (When pushing float down.)



3. CHECK HARNESS CONNECTOR BETWEEN ABS/ TCS CONTROL MODULE AND ALTERNATOR.

- 1) Turn ignition switch OFF.
- 2) Connect connector from brake fluid level sensor.
- 3) Disconnect all connectors from ABS/TCS control module.
- 4) Measure voltage between ABS/TCS control module connector and body.

Connector & terminal / Specified voltage:

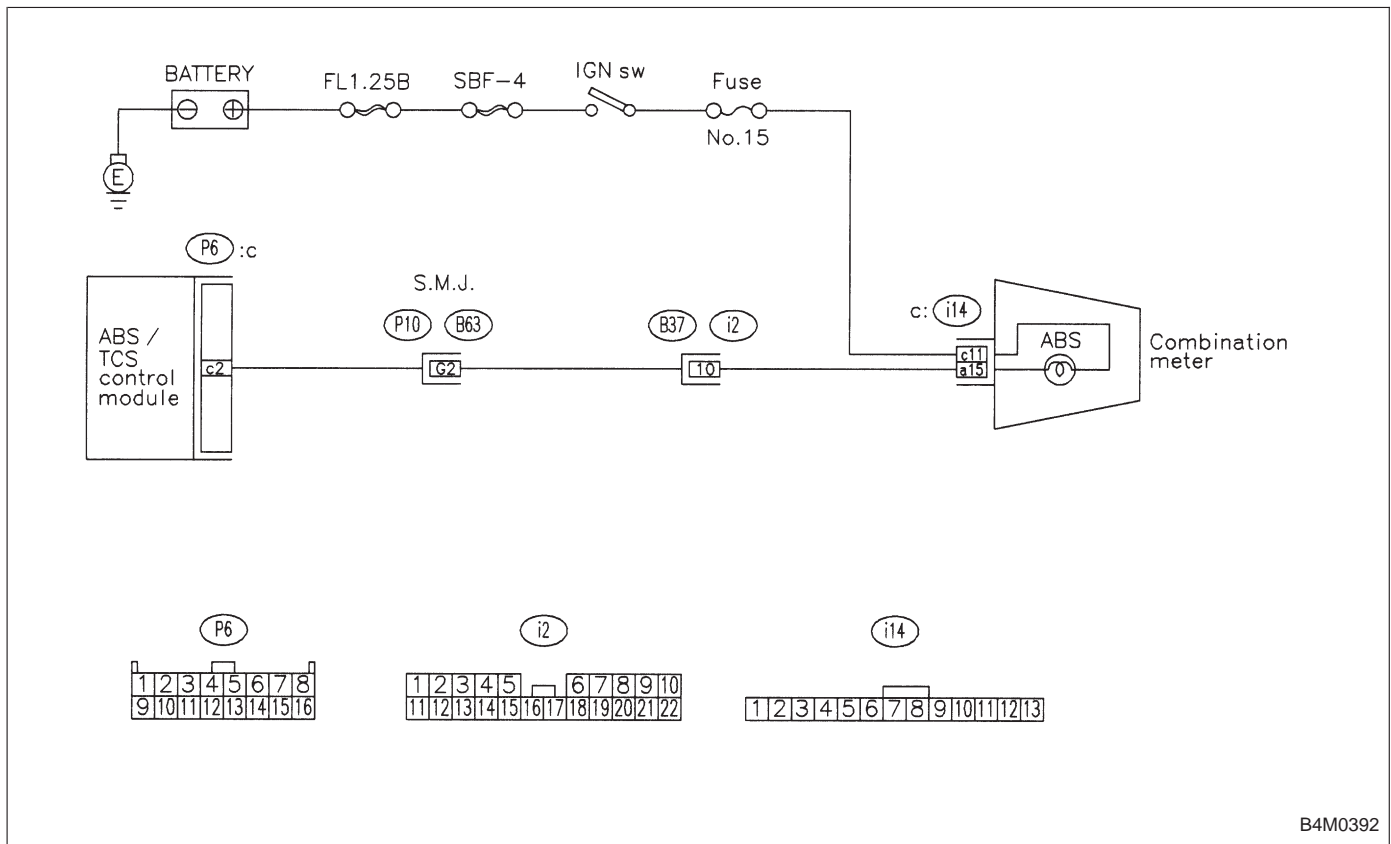
(P7) No. 20 — body / 2 V or less

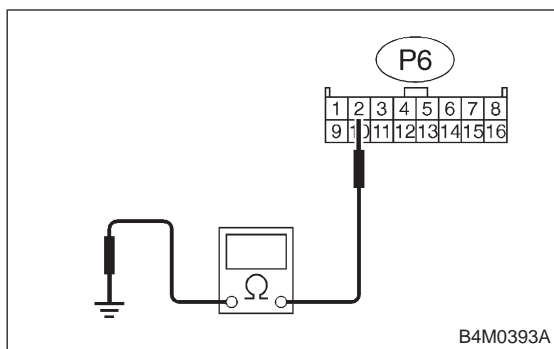
- 5) Start the engine.
- 6) Measure voltage between ABS/TCS control module connector and body.

Connector & terminal / Specified voltage:

(P7) No. 20 — body / 10 — 14 V

C: TCS WARNING LIGHT AND TCS INDICATOR OFF AND TCS OPERATING INDICATOR LIGHTS COME ON AND GO OFF PROPERLY, WHILE ABS WARNING LIGHT DOES NOT GO OFF.
— TCS WARNING LIGHT AND TCS OFF INDICATOR AND TCS OPERATING INDICATOR LIGHTS COME ON AND GO OFF PROPERLY WHEN STARTING THE ENGINE, WHILE ABS WARNING LIGHT DOES NOT GO OFF. —



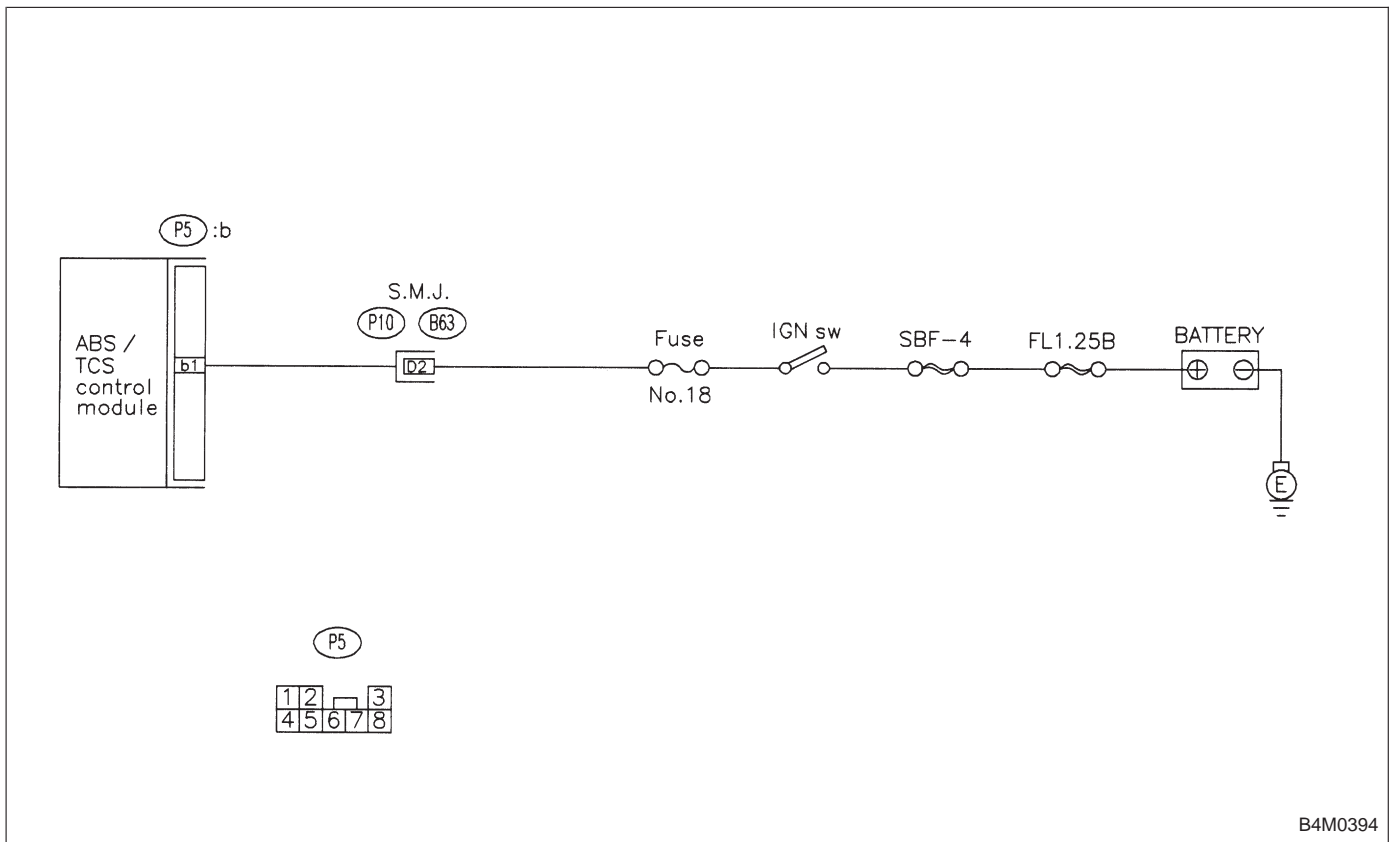
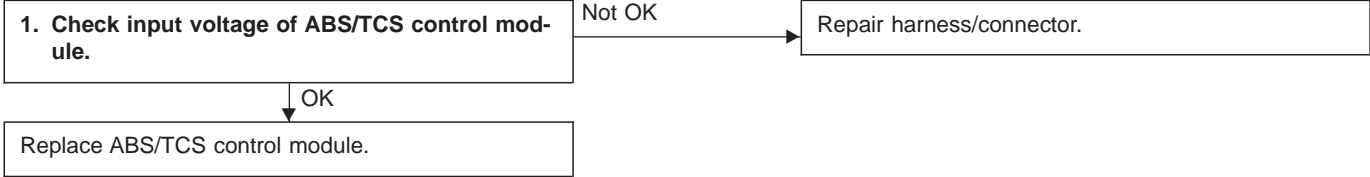


1. CHECK HARNESS CONNECTOR BETWEEN ABS/TCS CONTROL MODULE AND ABS WARNING LIGHT.

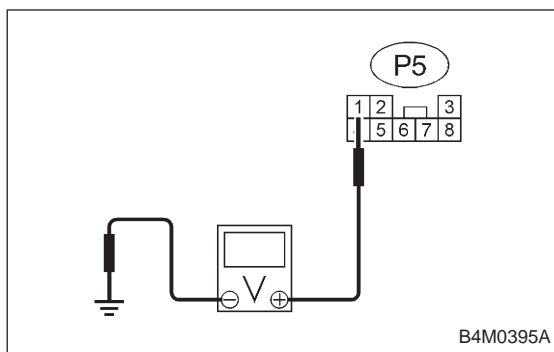
- 1) Turn ignition switch OFF.
- 2) Disconnect connector from ABS/TCS control module and TCS valve relay.
- 3) Measure resistance between ABS/TCS control module connector and body.

Connector & terminal / Specified resistance:
(P6) No. 2 — body / 1 MΩ or more

D: ABS WARNING LIGHT ONLY REMAINS ILLUMINATED.
— WHEN STARTING THE ENGINE, NEITHER TCS WARNING, TCS OFF INDICATOR NOR TCS OPERATING INDICATOR LIGHT COMES ON EVEN ONCE, AND ABS WARNING LIGHT AND MALFUNCTION INDICATOR LAMP ILLUMINATE. —



B4M0394



1. CHECK INPUT VOLTAGE OF ABS/TCS CONTROL MODULE.

- 1) Turn ignition switch OFF.
- 2) Disconnect connector from ABS/TCS control module.
- 3) Turn ignition switch ON.
- 4) Measure voltage between ABS/TCS control module connector and body.

Connector & terminal / Specified voltage:

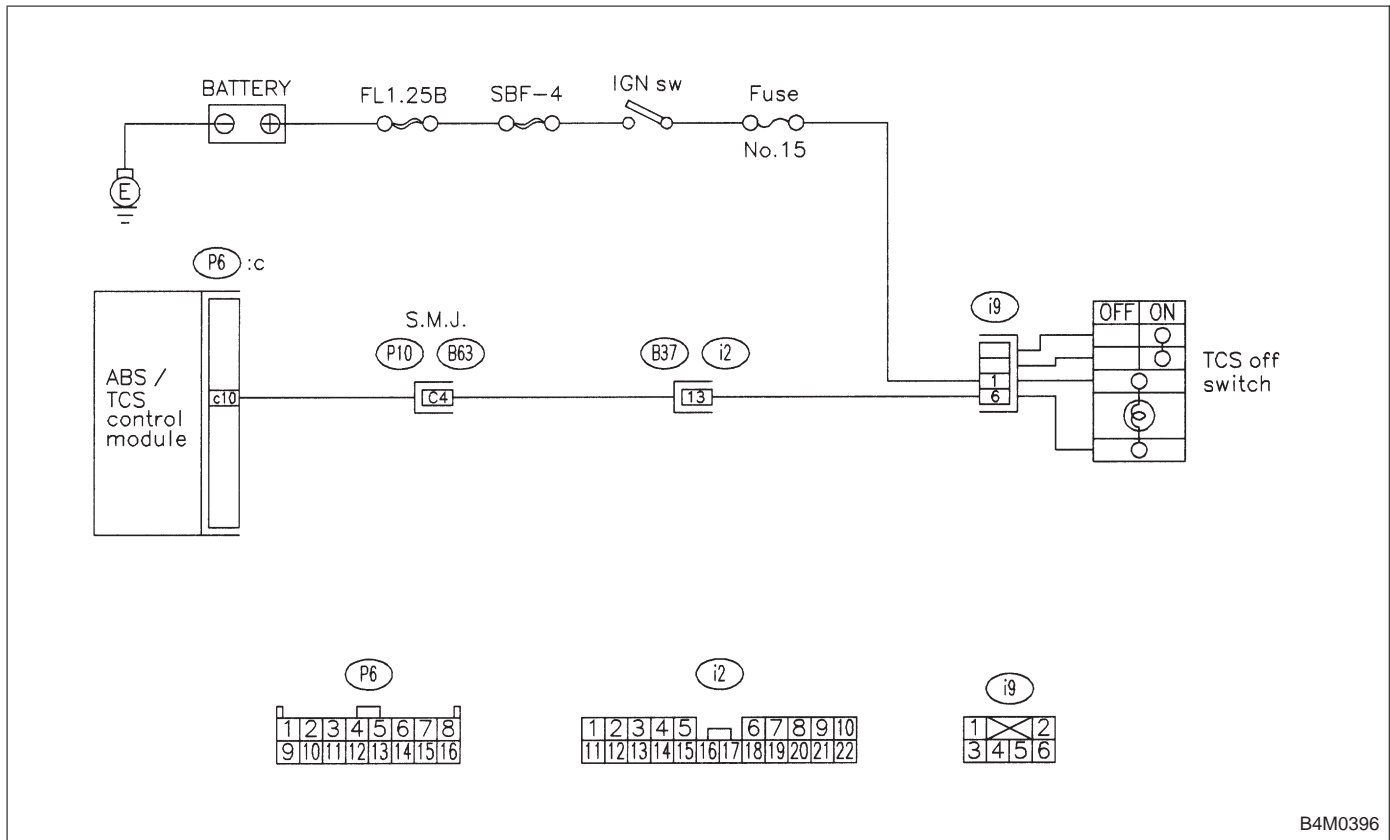
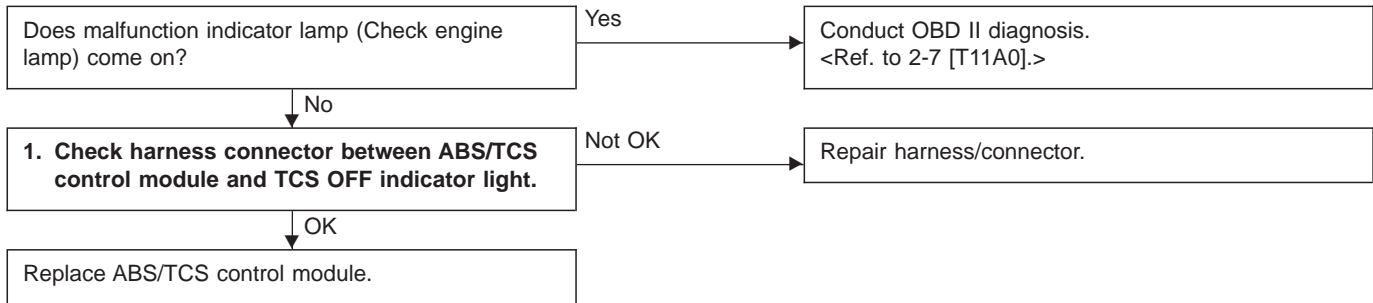
(P5) No. 1 — body / 10 — 13 V

NOTE:

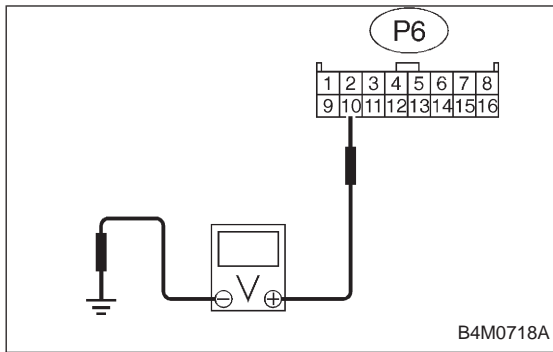
- When ABS/TCS control module is defective, the same condition occurs.
- Confirm that ABS/TCS control module is installed.

E: TCS OFF INDICATOR LIGHT DOES NOT GO OFF.

— ABS WARNING, TCS WARNING AND TCS OPERATING INDICATOR LIGHTS COME ON AND GO OFF PROPERLY WHEN STARTING THE ENGINE, BUT TCS OFF INDICATOR DOES NOT GO OFF FOR MORE THAN 30 SECONDS AFTER ENGINE RUNNING. —



B4M0396



1. CHECK HARNESS CONNECTOR BETWEEN ABS/TCS CONTROL MODULE AND TCS OFF INDICATOR LIGHT.

- 1) Turn ignition switch OFF.
- 2) Disconnect all connectors from ABS/TCS control module.
- 3) Turn ignition switch ON.
- 4) Measure voltage between ABS/TCS control module connector and body.

Connector & terminal / Specified voltage:
(P6) No. 10 — body / 10 — 13 V

F: TCS OPERATING INDICATOR LIGHT DOES NOT GO OFF.
— WHEN STARTING THE ENGINE, ABS WARNING, TCS WARNING AND TCS OFF INDICATOR LIGHTS COME ON AND GO OFF PROPERLY BUT TCS OPERATING INDICATOR LIGHT ONLY KEEPS ON. —

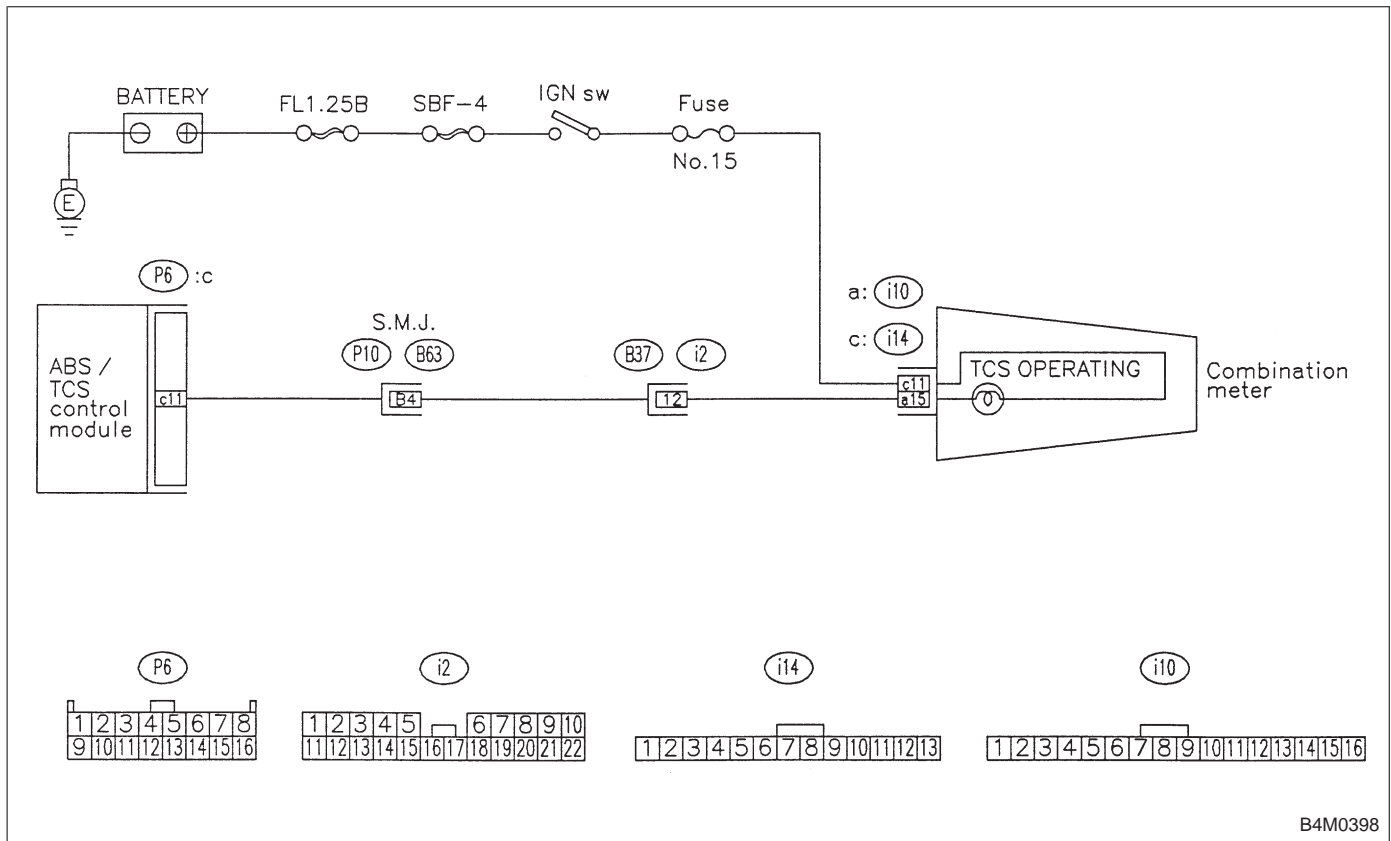
1. Check harness connector between ABS/TCS control module and TCS operating indicator light.

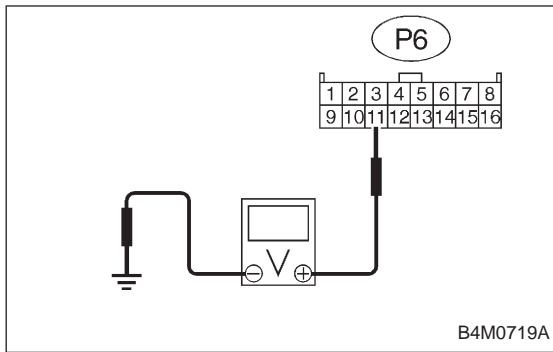
Not OK

Repair harness/connector.

OK

Replace ABS/TCS control module.



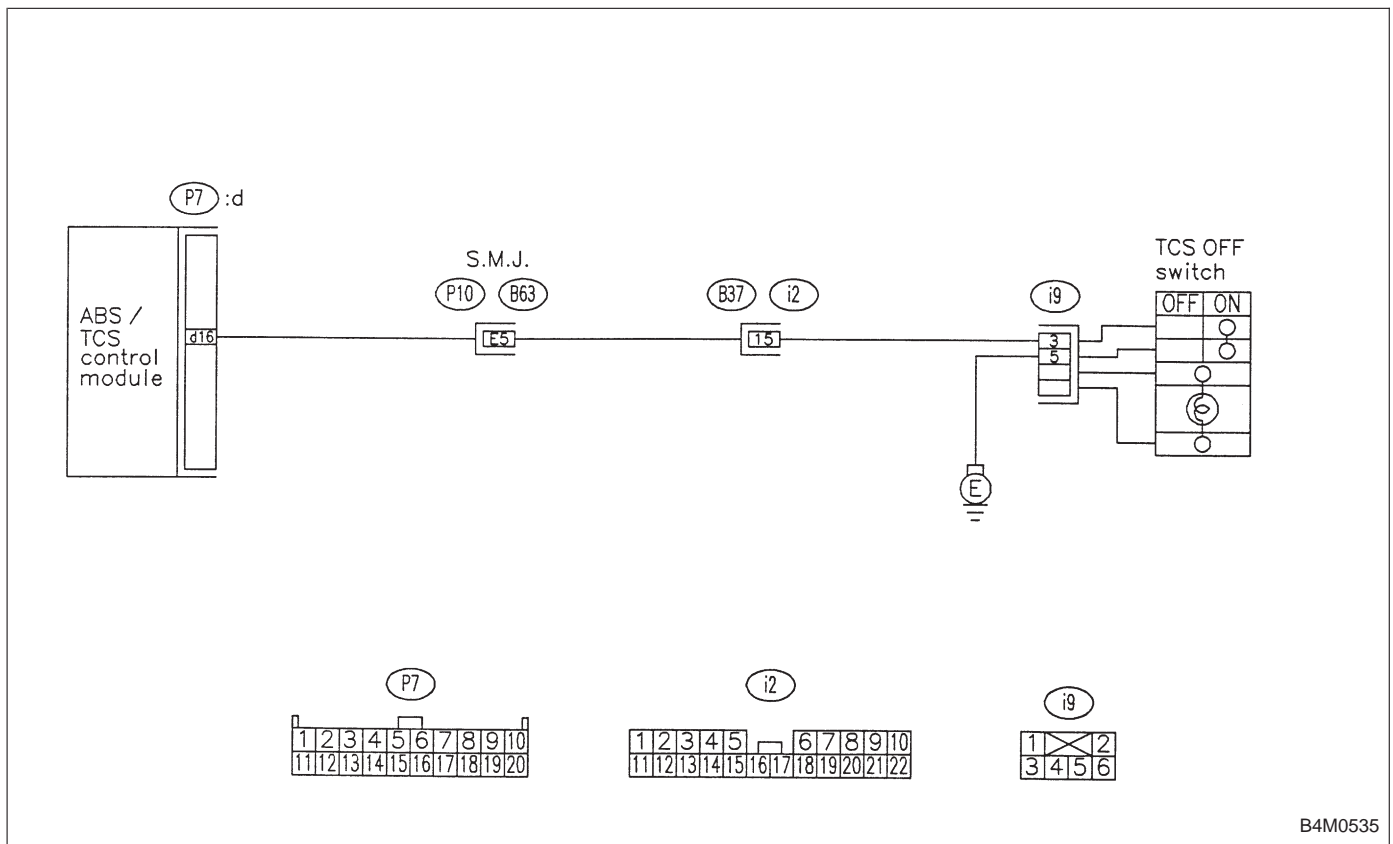
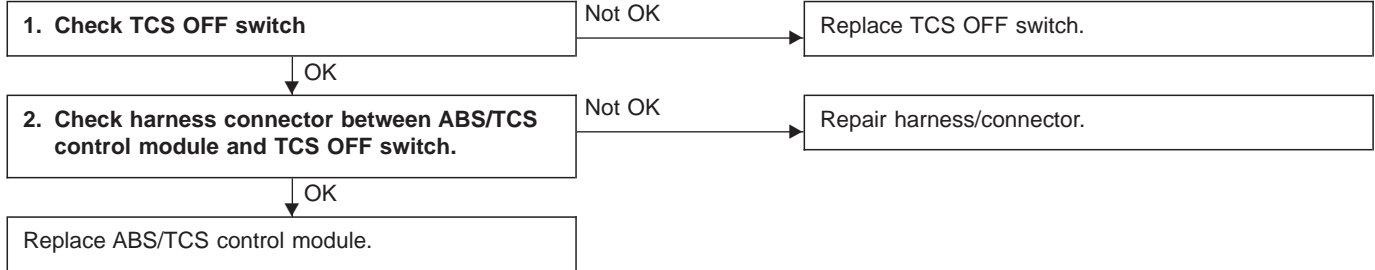


1. CHECK HARNESS CONNECTOR BETWEEN ABS/TCS CONTROL MODULE AND TCS OPERATING INDICATOR LIGHT.

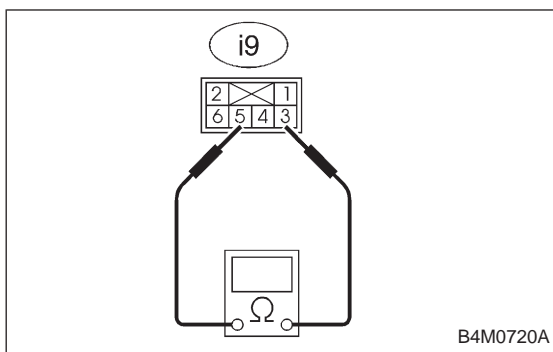
- 1) Turn ignition switch OFF.
- 2) Disconnect all connectors from ABS/TCS control module.
- 3) Turn ignition switch ON.
- 4) Measure voltage between ABS/TCS control module connector and body.

Connector & terminal / Specified voltage:
(P6) No. 11 — body / 10 — 13 V

G: TCS OFF SWITCH DOES NOT FUNCTION. — TCS OFF INDICATOR LIGHT COMES ON AND GOES OFF PROPERLY WHEN STARTING THE ENGINE, WHILE THIS LIGHT NEITHER COMES ON NOR GOES OFF WHEN PUSHING THE TCS OFF SWITCH. —



B4M0535



1. CHECK TCS OFF SWITCH.

- 1) Turn ignition switch OFF.
- 2) Disconnect connector from TCS OFF switch.
- 3) Measure resistance between TCS OFF switch terminals.

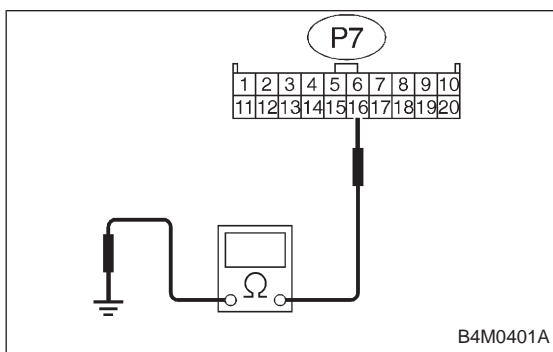
Connector & terminal / Specified resistance:

(i9) No. 5 — No. 3 / 1 Ω or less

(When the switch is pressed, turns ON.)

/ 1 MΩ or less

(When the switch is released, turns OFF.)



2. CHECK HARNESS CONNECTOR BETWEEN ABS/ TCS CONTROL MODULE AND TCS OFF SWITCH.

- 1) Turn ignition switch OFF.
- 2) Disconnect connector to TCS OFF switch.
- 3) Disconnect connector from ABS/TCS control module.
- 4) Measure resistance between ABS/TCS control module connector terminals.

Connector & terminal / Specified resistance:

(P7) No. 16 — body / 1 Ω or less (When the switch is pressed, turns ON.)

/ 1 MΩ or more (When the switch is released, turns OFF.)

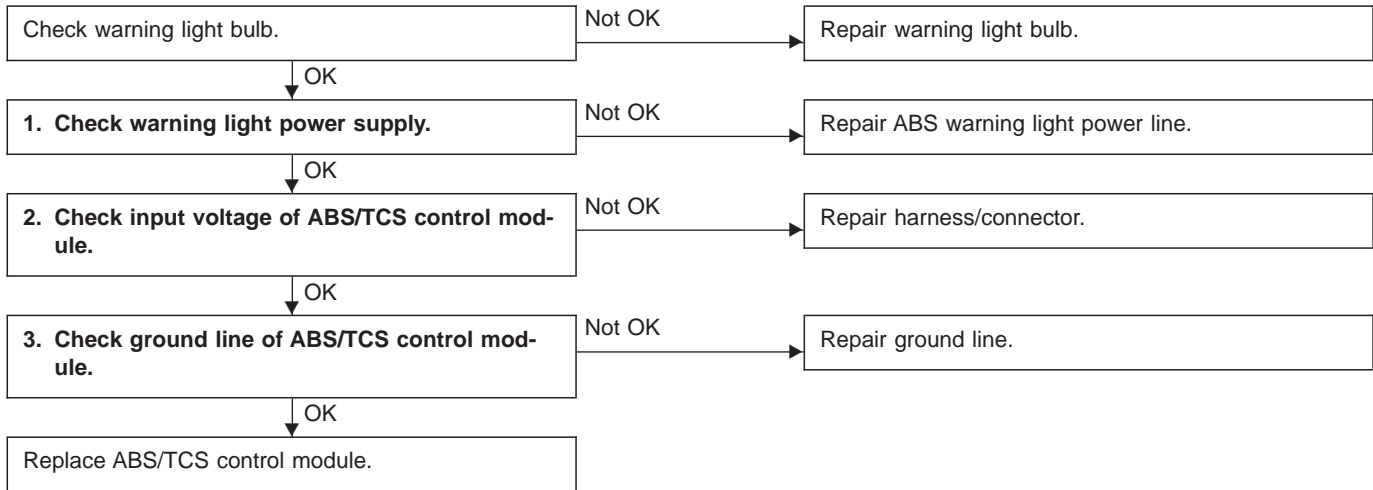
H: ABS WARNING, TCS WARNING, TCS OPERATING INDICATOR AND/OR TCS OFF INDICATOR LIGHTS DO NOT COME ON. — TROUBLE IN WARNING LIGHT DRIVE CIRCUIT —

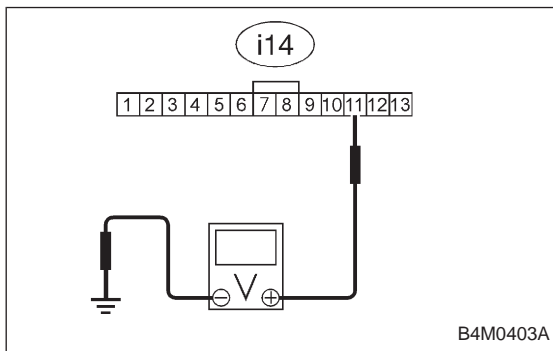
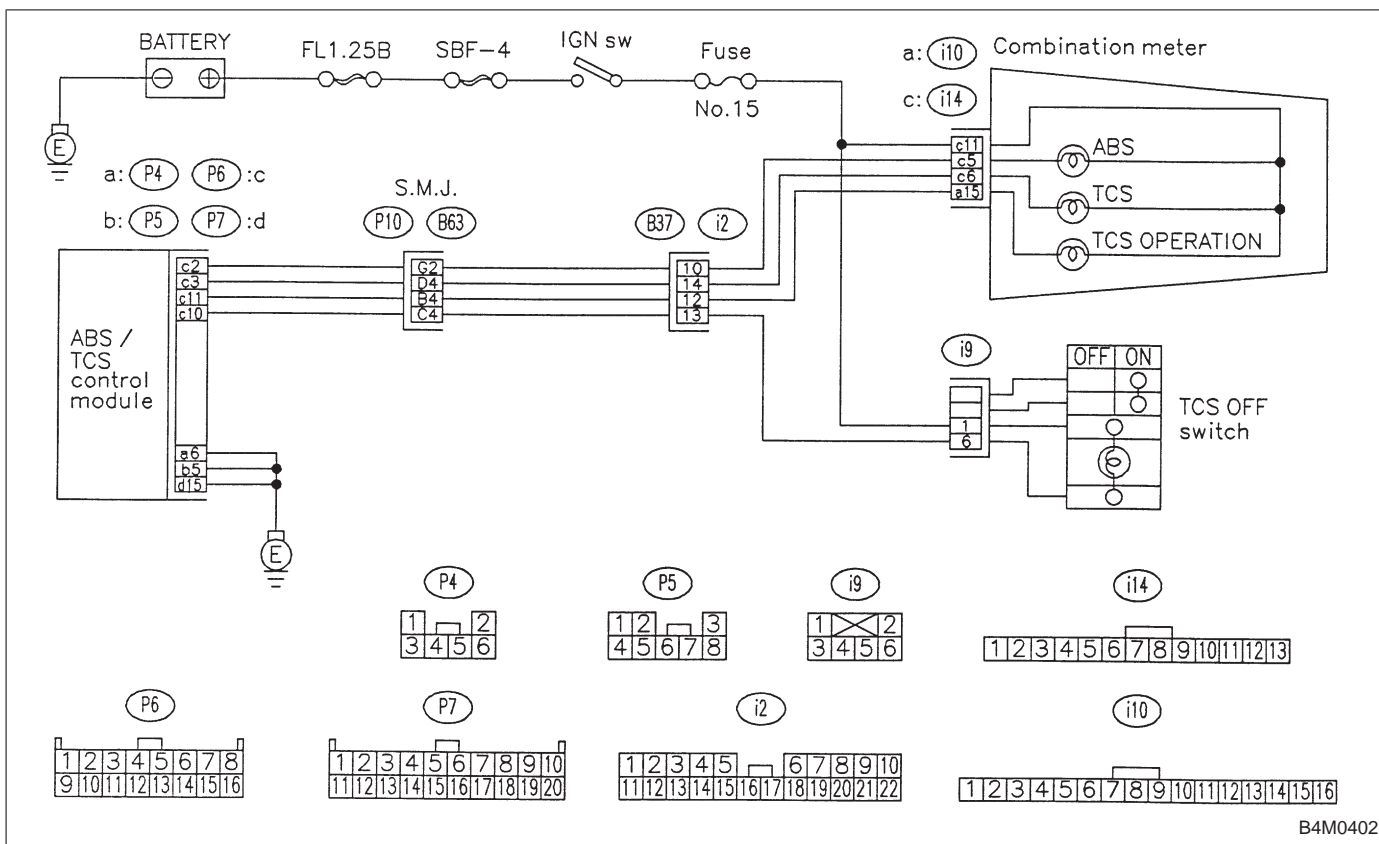
DIAGNOSIS:

- Faulty ABS warning light
- Faulty TCS warning light
- Faulty TCS OFF light
- Faulty TCS operating indicator light
- Faulty harness connector
- Faulty ABS/TCS control module

TROUBLE SYMPTOM:

- Warning light does not illuminate.
- Impossible to read trouble code.

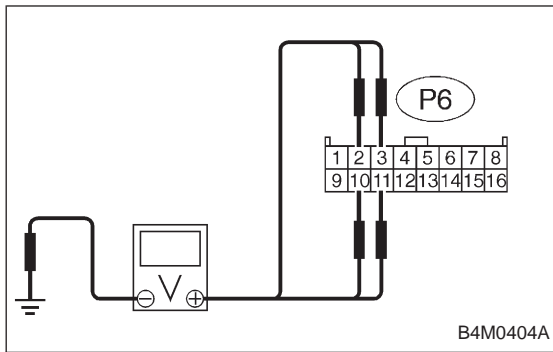




1. CHECK WARNING LIGHT POWER SUPPLY.

- 1) Turn ignition switch OFF.
- 2) Disconnect combination meter.
- 3) Turn ignition switch ON.
- 4) Measure voltage between combination meter connector and body.

Connector & terminal / Specified voltage:
(i14) No. 11 — body / 10 — 13 V



2. CHECK INPUT VOLTAGE OF ABS/TCS CONTROL MODULE.

- 1) Turn ignition switch OFF and connect combination meter connector.
- 2) Disconnect all connectors from ABS/TCS control module.
- 3) Remove ABS/TCS valve relay.
- 4) Turn ignition switch ON.
- 5) Measure voltage between ABS/TCS control module and body.

Connector & terminal / Specified voltage:

ABS warning:

(P6) No. 2 — body / 10 — 13 V

TCS warning:

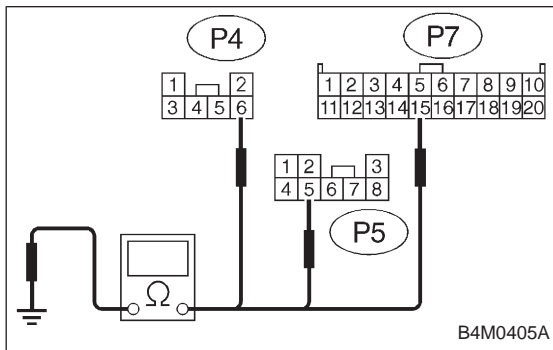
(P6) No. 3 — body / 10 — 13 V

TCS operation:

(P6) No. 11 — body / 10 — 13 V

TCS OFF:

(P6) No. 10 — body / 10 — 13 V



3. CHECK GROUND LINE OF ABS/TCS CONTROL MODULE.

Measure resistance between ABS/TCS control module and body.

Connector & terminal / Specified resistance:

(P4) No. 6 — body / 1 Ω or less

(P5) No. 5 — body / 1 Ω or less

(P7) No. 15 — body / 1 Ω or less