BODY SECTION

This service manual has been prepared to provide SUBARU service personnel with the necessary information and data for the correct maintenance and repair of SUBARU vehicles.

This manual includes the procedures for maintenance, disassembling, reassembling, inspection and adjustment of components and diagnostics for guidance of experienced mechanics.

Please peruse and utilize this manual fully to ensure complete repair work for satisfying our customers by keeping their vehicle in optimum condition. When replacement of parts during repair work is needed, be sure to use SUBARU genuine parts.

| HVAC SYSTEM (HEATER, VENTILATOR AND A/C) | AC |
|---|-----|
| HVAC SYSTEM (AUTO A/C) (DIAGNOSTICS) | AC |
| AIRBAG SYSTEM | AB |
| AIRBAG SYSTEM (DIAGNOSTICS) | АВ |
| SEAT BELT SYSTEM | SB |
| LIGHTING SYSTEM | LI |
| WIPER AND WASHER SYSTEMS | ww |
| ENTERTAINMENT | ET |
| COMMUNICATION SYSTEM | СОМ |
| GLASS/WINDOWS/MIRRORS | GW |
| BODY STRUCTURE | BS |
| INSTRUMENTATION/DRIVER INFO | IDI |
| SEATS | SE |
| SECURITY AND LOCKS | SL |
| IMMOBILIZER (DIAGNOSTICS) | IM |
| SUNROOF/T-TOP/CONVERTIBLE TOP (SUNROOF) | SR |
| | El |
| EXTERIOR/INTERIOR TRIM | |

All information, illustration and specifications contained in this manual are based on the latest product information available at the time of publication approval.

FUJI HEAVY INDUSTRIES LTD.

BODY SECTION

| EXTERIOR BODY PANELS | EB |
|--|----|
| CRUISE CONTROL SYSTEM | CC |
| CRUISE CONTROL SYSTEM (DIAGNOSTICS) | СС |
| | |

CRUISE CONTROL SYSTEM

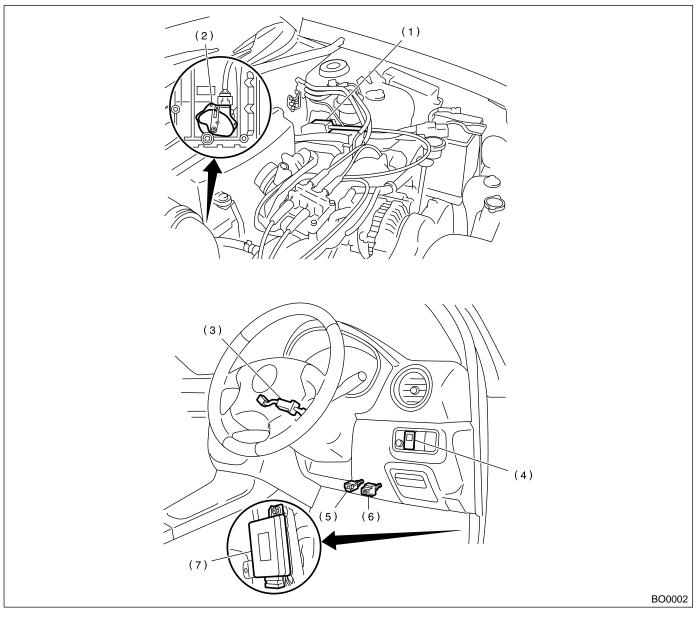
CC

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| | | гауе |
|----|-------------------------------|------|
| 1. | General Description | 2 |
| | Actuator | |
| 3. | Cruise Control Module | 4 |
| 4. | Cruise Control Main Switch | 5 |
| 5. | Cruise Control Command Switch | 6 |
| 6. | Stop and Brake Switch | 7 |
| 7. | Clutch Switch | |
| 8. | Inhibitor Switch | 9 |
| | | |

1. General Description

A: COMPONENT



Actuator (1)

(3)

- Inhibitor switch (AT) (2)
- Cruise control main switch (5) Clutch switch (MT)
- Cruise control module
- (7)

- Cruise control command switch
 - (6) Stop and brake switch

(4)

B: CAUTION

· Before disassembling or reassembling parts, always disconnect the battery ground cable. When repairing the radio, control module and other parts with memory functions, make note of the memory before disconnecting the battery ground cable. All memory will be erased.

· Reassemble parts in the reverse order of disassembly unless otherwise indicated.

· Adjust parts to specifications specified in this manual.

· Connect connectors and hoses securely during reassembly.

· After reassembly, ensure functional parts operate properly.

C: PREPARATION TOOL

| TOOL NAME | REMARKS |
|----------------|---------------------------|
| Circuit Tester | Used for measuring resis- |
| | tance and voltage. |

2. Actuator

A: REMOVAL

CAUTION:

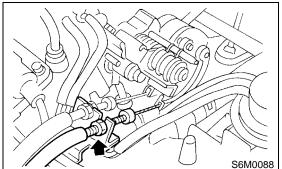
• Be careful not to apply excessive load to the wire cable when adjusting and/or installing; otherwise, the actuator may be deformed or damaged.

• Do not bend cable sharply with a radius less than 100 mm (3.94 in); otherwise, cable may bend permanently, resulting in poor performance.

• When installing cable, be careful not to sharply bend or pinch the inner cable; otherwise, the cable may break.

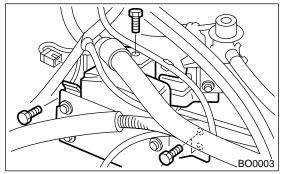
1) Remove clip bands from cruise control cable.

2) Loosen nut which secures cruise control cable end to throttle cam and then remove cable from throttle cam.



3) Remove actuator attaching bolts.

4) Remove actuator while disconnecting connector.



B: INSTALLATION

Install in the reverse order of removal.

Tightening torque:

7.4 N·m (0.75 kgf-m, 5.4 ft-lb)

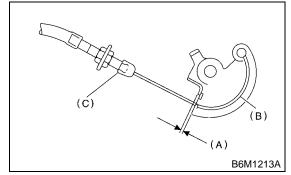
NOTE:

(A): Must be adjusted when cable end outer is fixed in place, so that gap between throttle cam and lever is 0 - 1 mm (0 - 0.04 in).

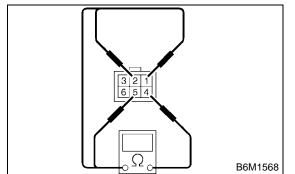
(Must be attached while throttle cam is being pulled by wire cable.)

(B): Must be coated evenly on cam end inner connection.

(C): Cover must be inserted securely, until tip of cable touches cover stopper.



C: INSPECTION



Measure resistance between cruise control actuator terminals.

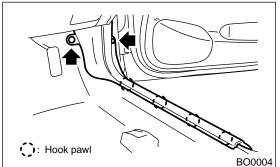
| Tester connection | Resistance (Ω) |
|-------------------|----------------|
| 4 — 1 | Approx. 5 |
| 4 — 2 | Approx. 5 |
| 4 — 5 | Approx. 5 |
| 3-6 | Approx. 39 |

If NG, replace cruise control actuator.

3. Cruise Control Module

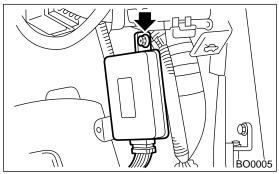
A: REMOVAL

1) Remove side sill front cover.



2) Disconnect connector from cruise control module.

3) Remove the volt, then detach cruise control module.



B: INSTALLATION

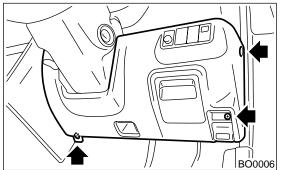
Install is in the reverse order of removal.

4. Cruise Control Main Switch

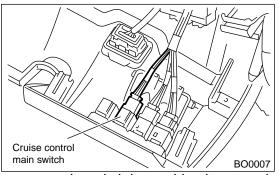
A: REMOVAL

1) Remove screws and clip from instrument panel lower cover.

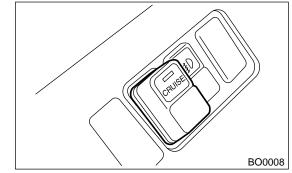
2) Remove instrument panel lower cover.



3) Disconnect connector from cruise control main switch.



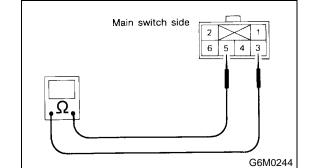
4) Remove main switch by pushing it outward.



B: INSTALLATION

Install is in the reverse order of removal.

C: INSPECTION



Check continuity between cruise control main switch terminals.

| Switch position | Tester connection | Specified condi- tion |
|-----------------|-------------------|--------------------------|
| OFF | 3-5 | No continuity |
| ON | 3 — 5 | Continuity |

If NG, replace cruise control main switch.

5. Cruise Control Command Switch

A: REMOVAL

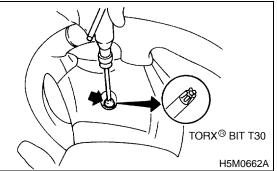
WARNING:

Before servicing, be sure to read the notes in the AB section for proper handling of the driver's airbag module. <Ref. to AB-3, CAUTION, General Description.>

- 1) Set front wheels in straight ahead position.
- 2) Turn ignition switch OFF.

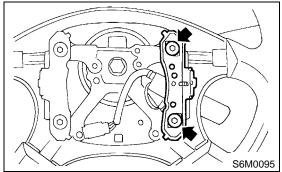
3) Disconnect battery ground cable from battery and wait for at least 20 seconds before starting work.

4) Using TORX[®] BIT T30 (Tamper resistant type), loosen two TORX[®] bolts which secure driver's airbag module.

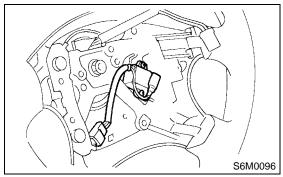


5) Disconnect airbag module connector on back of airbag module.

6) Remove horn switch from steering wheel as shown.



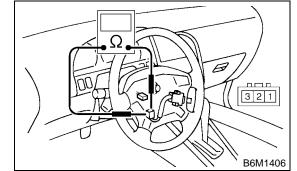
7) Disconnect horn and cruise control command switch connector, then remove cruise control command switch.



B: INSTALLATION

Install is in the reverse order of removal.

C: INSPECTION



Check continuity between cruise control command switch terminals.

| Switch | Position | Tester con- nection | Specified condition |
|-----------|----------|------------------------|---------------------|
| CANCEL | ON | 1 (+) - 2 (-) | Continuity |
| CANCEL | ON | 1 (+) — 3 (–) | Continuity |
| SET/COAST | OFF | 1 — 3 | No continuity |
| SET/COAST | ON 1-3 | 1 — 3 | Continuity |
| RESUME/ | OFF | 1 — 2 | No continuity |
| ACCEL | ON | 1 — 2 | Continuity |

If NG, replace cruise control command switch.

6. Stop and Brake Switch

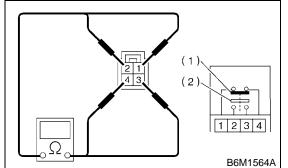
A: REMOVAL

Disconnect connector from switch, and then remove the switch. <Ref. to BR-77, REMOVAL, Stop Light Switch.>

B: INSTALLATION

Install in the reverse order of removal.

C: INSPECTION



Check continuity brake switch (1) and stop light switch (2) between terminals.

| Switch | Pedal | Tester con- nection | Specified condition |
|------------|-----------|------------------------|---------------------|
| Brake | Released | 1 — 4 | Continuity |
| Diake | Depressed | 1 — 4 | No continuity |
| Stop light | Released | 2-3 | No continuity |
| Stop light | Depressed | 2-3 | Continuity |

If NG, replace stop and brake switch.

7. Clutch Switch

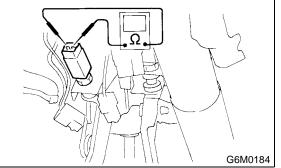
A: REMOVAL

Disconnect the connector from the switch, and then remove the switch. <Ref. to CL-34, DISASSEM-BLY, Clutch Pedal.>

B: INSTALLATION

Install in the reverse order of removal.

C: INSPECTION



Check continuity between clutch switch terminals.

| Switch | Pedal | Tester con- nection | Specified condition |
|--------|-----------|------------------------|---------------------|
| Clutch | Released | 1 — 2 | Continuity |
| Clutch | Depressed | 1 — 2 | No continuity |

If NG, replace the clutch switch.

8. Inhibitor Switch

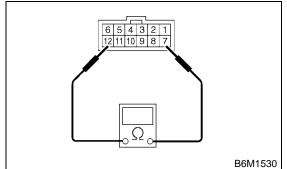
A: REMOVAL

Disconnect connector from switch, and then remove the switch. <Ref. to AT-29, REMOVAL, Inhibitor Switch.>

B: INSTALLATION

Installation is in the reverse order of removal.

C: INSPECTION



Check continuity between inhibitor switch terminals.

| Selector lever position | Tester connection | Specified condi- tion |
|-------------------------|-------------------|--------------------------|
| Р | | Continuity |
| N | 7 — 12 | Continuity |
| Except P and N | | No continuity |

If NG, replace inhibitor switch.