

SUPPLEMENTAL RESTRAINT SYSTEM

5-5

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1. Inspection and Replacement Standards

1. VEHICLES WHICH BECOME INVOLVED IN A COLLISION

If the vehicle equipped with an SRS airbag system is damaged in a collision, the airbag system parts must be checked and replaced in accordance with the following standards:

After faulty parts are replaced, the warning light operation must be checked.

- When the ignition switch is turned ON, it lights up for 8 seconds and then it goes out for at least 30 seconds.
- The trouble code stored in memory must be erased after the check.

2. AIRBAG MODULE (DRIVER AND PASSENGER)

Inspection standard:

- The vehicle damaged in a collision (regardless of whether or not airbag is deployed).
- The designated trouble code is output during self-diagnosis. (Refer to "Troubleshooting" Section.)

Replacement standard:

- Airbag is deployed.
- The pad surface is scratched or cracked.
- Harness and/or connector is deformed or cracked, their circuits are broken, lead wire is exposed, etc.
- Mounting bracket is cracked or deformed.
- The module surface is fouled with foreign matter (grease, oil, water, cleaning solvent, etc.)
- Airbag module dropped to the floor/ground.
- Airbag module determined as faulty during self-diagnosis.

3. MAIN HARNESS

Inspection standard:

- A vehicle damaged in a collision (regardless of whether or not airbag is deployed).
- The designated trouble code is output during self-diagnosis. (Refer to "Troubleshooting" Section.)

Replacement standard:

- Harness circuit is broken, lead wire is exposed, corrugated tube is cracked, etc.
- Connector is scratched or cracked.
- The designated trouble code is output during self-diagnosis.

4. AIRBAG CONTROL MODULE

Inspection standard:

- A vehicle damaged in a collision (regardless of whether or not airbag is deployed).
- The designated trouble code is output during self-diagnosis. (Refer to "Troubleshooting" Section.)

Replacement standard:

- Control module is cracked or deformed.
- Mounting bracket is cracked or deformed.
- Connector is scratched or cracked.
- Control module dropped to the floor/ground.
- Control module determined as faulty during troubleshooting.
- Airbag is deployed.

5. COMBINATION SWITCH

Inspection standard:

- A vehicle damaged in a collision (regardless of whether or not airbag is deployed).
- The designated trouble code is output during self-diagnosis. (Refer to "Troubleshooting" Section.)

Replacement standard:

- Combination switch or steering roll connector is deformed or cracked.

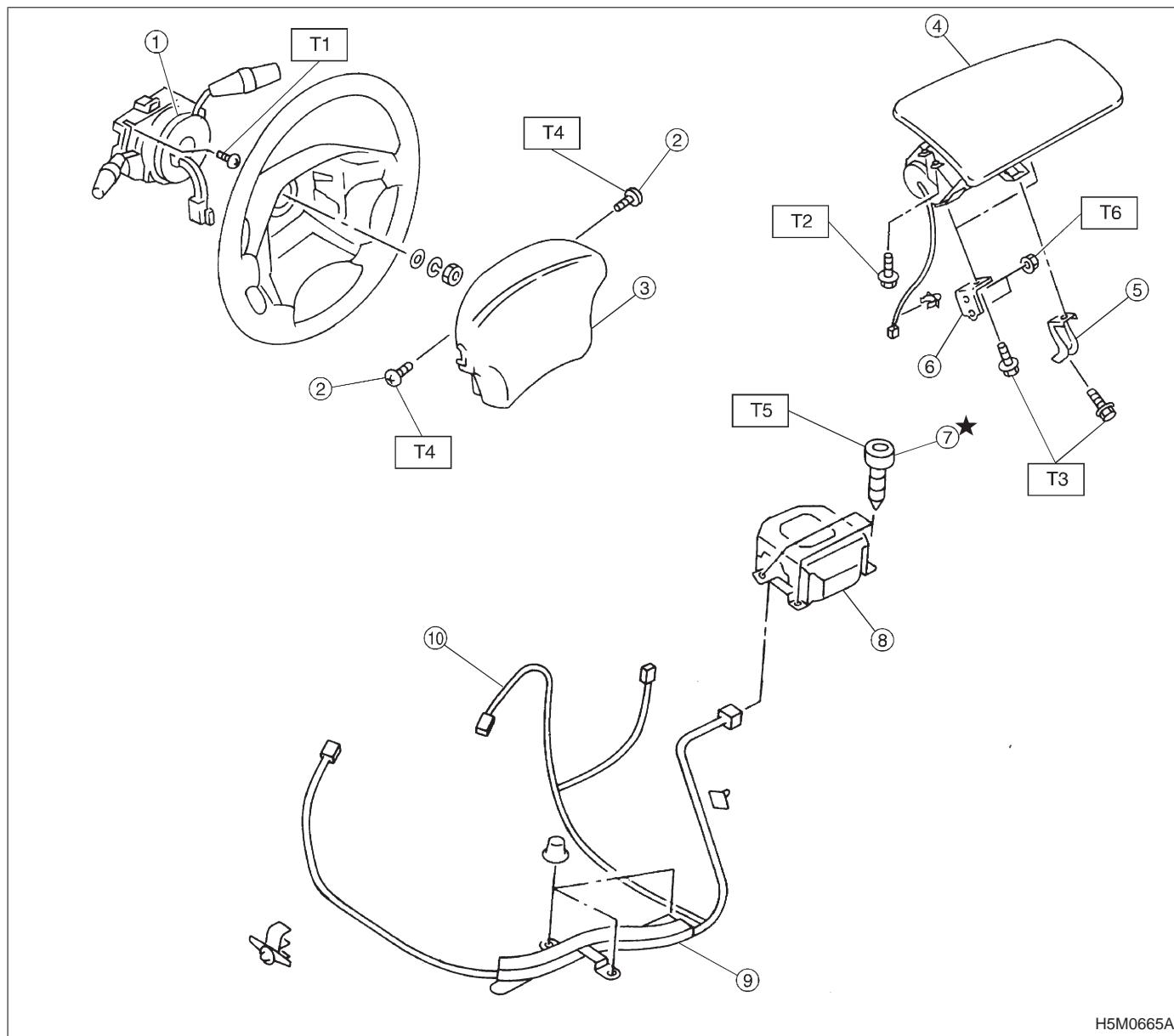
6. STEERING WHEEL

<Ref. to 4-3 [W2C2].>

7. STEERING COLUMN ASSEMBLY

<Ref. to 4-3 [W2C2].>

1. SRS Airbag

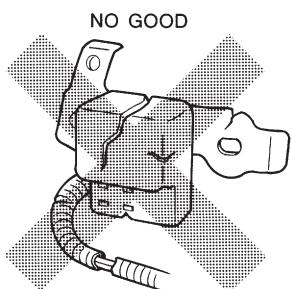


H5M0665A

- ① Combination switch ASSY with roll connector
- ② TORX® bolt
- ③ Airbag module ASSY (Driver)
- ④ Airbag module ASSY (Passenger)
- ⑤ BRKT A
- ⑥ BRKT B
- ⑦ TORX® bolt
- ⑧ Airbag control module
- ⑨ Protector LH
- ⑩ Airbag main harness

Tightening torque: N·m (kg·cm, in·lb)

- T1: 2.5 ± 0.5 (25 ± 5 , 21.7 ± 4.3)
- T2: 4.4 ± 1.5 (45 ± 15 , 39 ± 13)
- T3: 7.4 ± 0.2 (75 ± 2 , 65.1 ± 1.7)
- T4: 9.8 ± 2.0 (100 ± 20 , 87 ± 17)
- T5: 9.81 ± 2.45 (100.0 ± 25.0 , 86.8 ± 21.7)
- T6: 17.7 ± 4.9 (180 ± 50 , 156 ± 43)

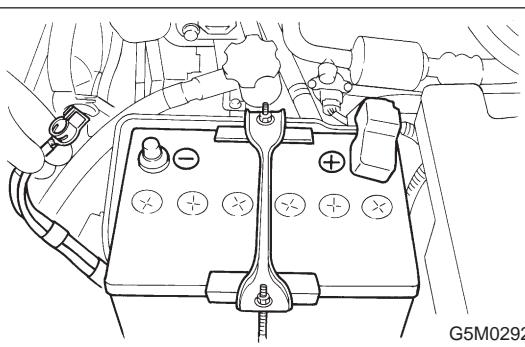


G5M0291

1. Precaution

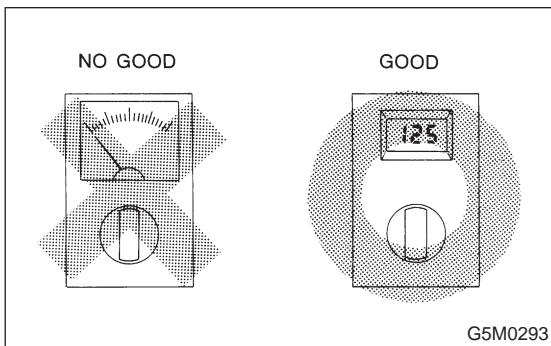
1. GENERAL CAUTIONS

1) If any of the airbag system parts such as sensors, airbag module, control module and harness are damaged or deformed, replace with new genuine parts.



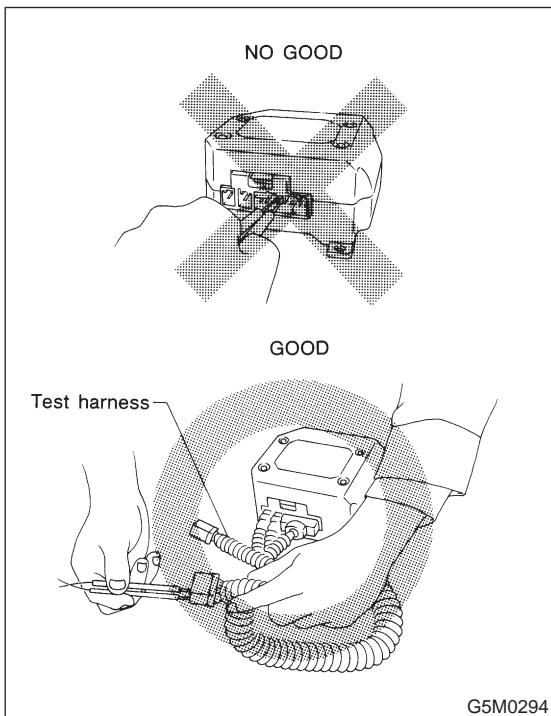
G5M0292

2) When servicing, be sure to turn the ignition switch off, disconnect the negative (-) battery terminal then the positive (+) terminal in advance, and wait for more than 20 seconds before starting.

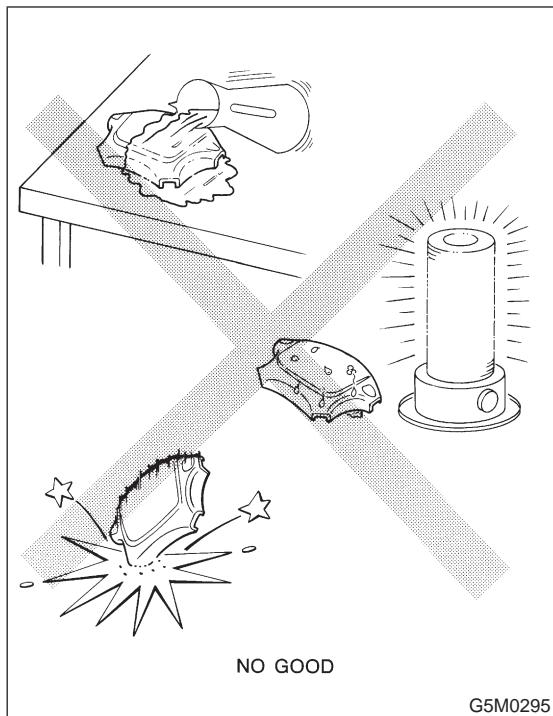


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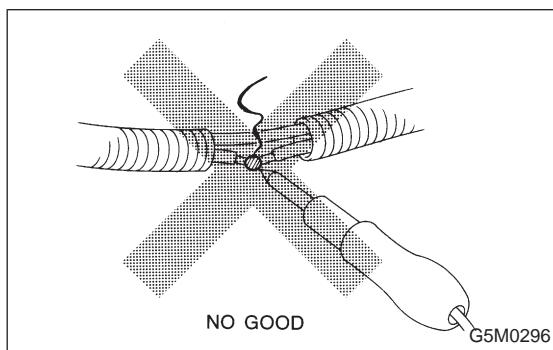
3) When checking the system, be sure to use a digital circuit tester. Use of an analog circuit tester may cause the airbag to activate erroneously. Do not directly apply the tester probe to any connector terminal of the airbag. When checking, use a test harness.



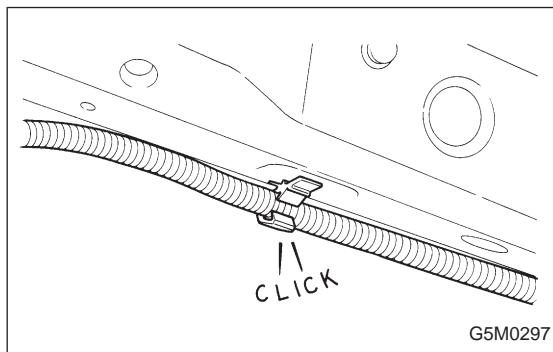
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4) Do not drop the airbag modulator parts, subject it to high temperatures over 90°C (194°F), or apply oil, grease, or water to it; otherwise, the internal parts may be damaged and its reliability greatly lowered.

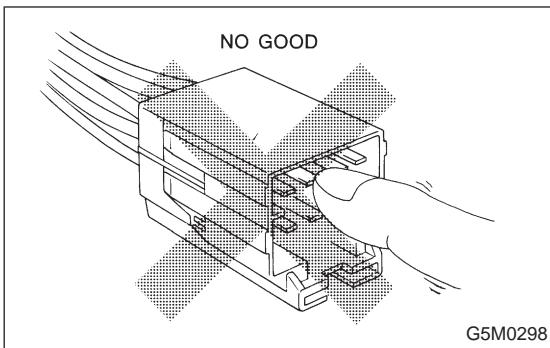


5) If any damage or open is found on the SRS airbag system wire harness, do not attempt to repair using soldering, etc. Be sure to replace the faulty harness with a new genuine part.

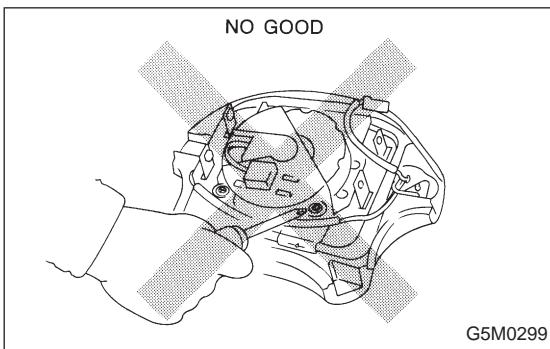


6) Install the wire harness securely with the specified clips so as to avoid interference or jamming with other parts.

7) Before connecting the airbag system to ground, make sure that the grounding terminal is free from paint and contamination.

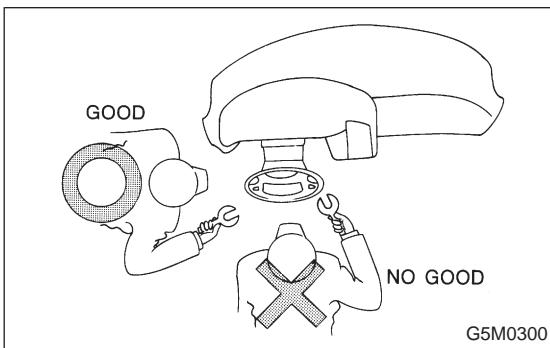


8) Do not allow water or oil to come in contact with the connector terminals. Do not touch the connector terminals.

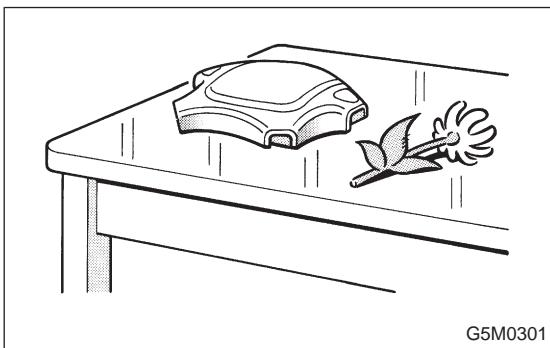


2. AIRBAG MODULE

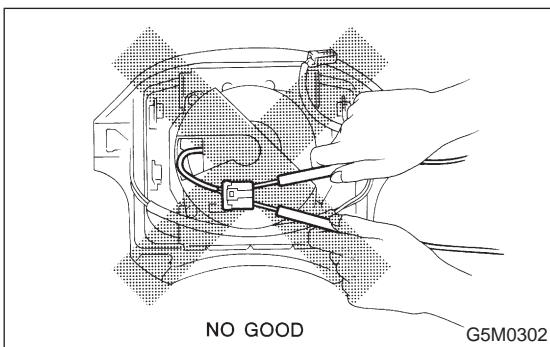
1) The airbag module (driver side and passenger side) must not be disassembled. The airbag module cannot be used again once inflated.



2) When removing and installing the airbag module (driver side and passenger side), the operator should stand, as much as possible, on the side of the airbag module.



3) After removal, the airbag module (driver side and passenger side) should be kept away from heat and light sources, and stored on a clean, flat surface to prevent from any damage to its lower structure.



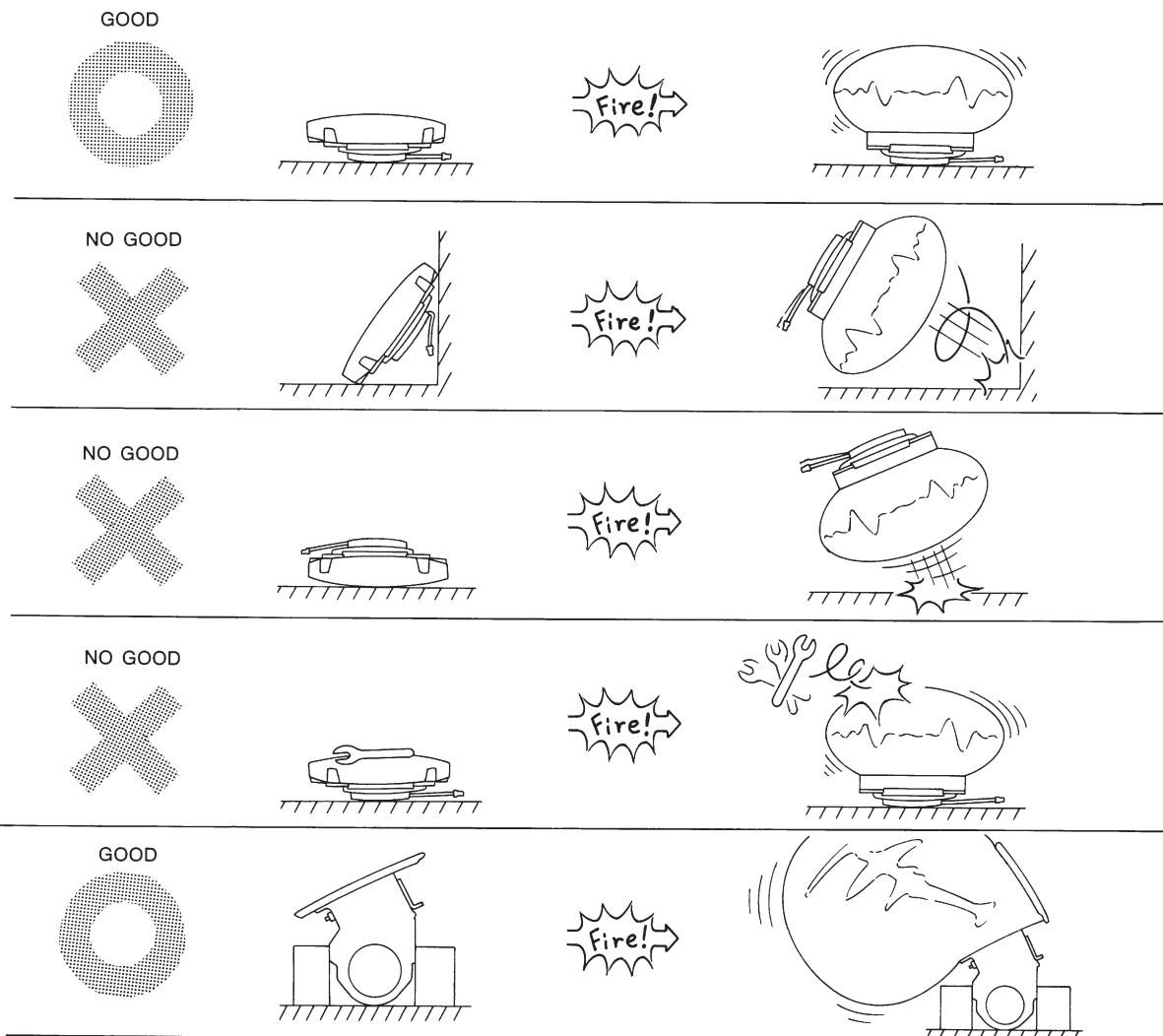
4) Do not check airbag module (driver side and passenger side) continuity with airbag removed from the vehicle body.

5) Replace airbag module (driver side and passenger side) with a new one, should any of the following conditions develop.

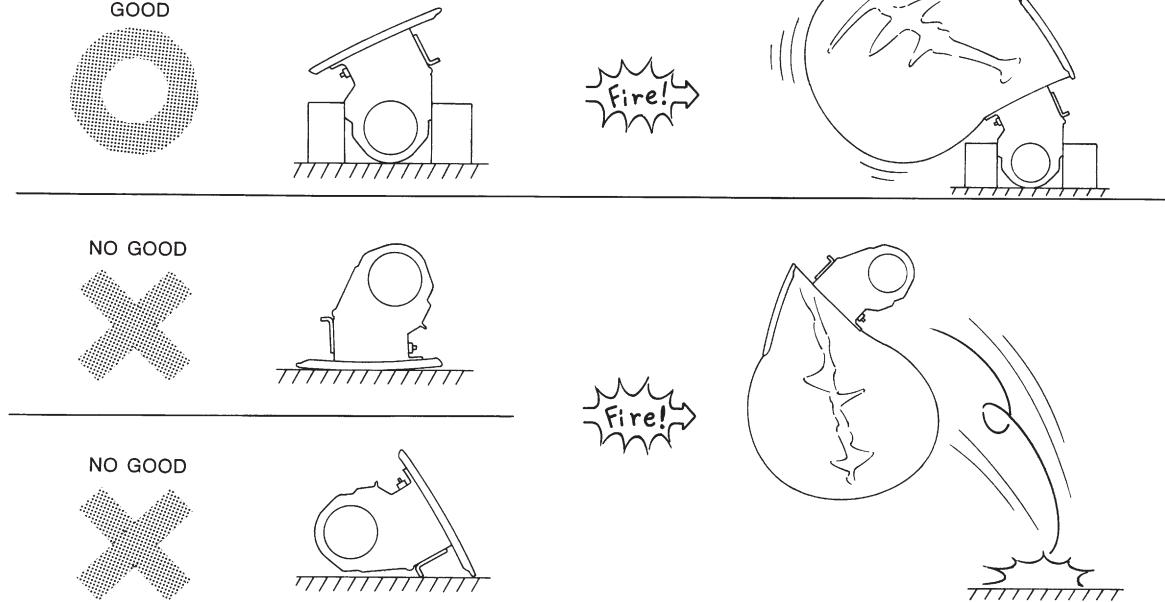
- Pad surface is scratched or cracked.
- Connector harness is damaged.
- Inflator side structure of module is cracked or deformed.
- Module is excessively stained with water, oil, etc.
- Module was accidentally dropped.

6) When storing a removed airbag module (driver side and passenger side), be sure to place it in parallel with floor with the pad facing up. Do not place it against a wall, or place anything on the pad; otherwise, a dangerous condition may be created if the module malfunctions.

Driver side



Passenger side

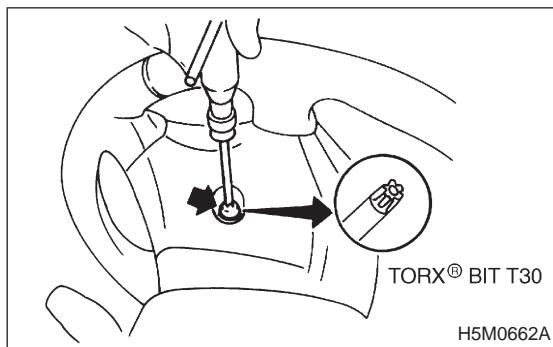


2. Airbag Module

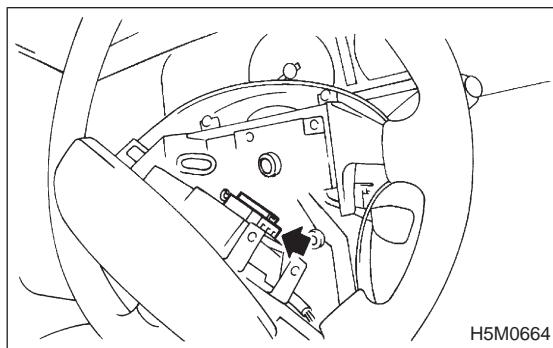
A: REMOVAL

1. DRIVER SIDE

- 1) Set front wheels in straight ahead position.
- 2) Turn ignition switch off.
- 3) Disconnect ground cable from battery and wait for at least 20 seconds before starting work.



- 4) Using TORX® BIT T30, remove two TORX® bolts.

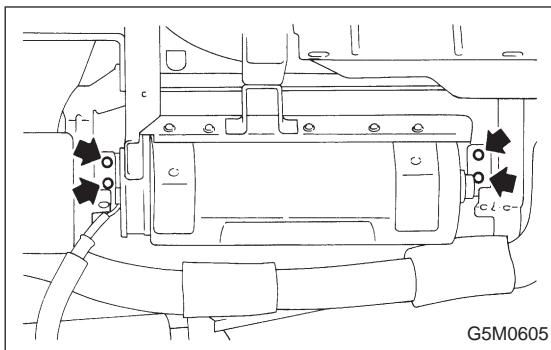


- 5) Disconnect airbag and horn connectors on back of airbag module. <Ref. to 5-5 [M2-6].>

- 6) Refer to "Precaution" for handling of a removed airbag module.

2. PASSENGER SIDE

- 1) Remove instrument panel. <Ref. to 5-4 [W1A0].>



- 2) Remove four bolts and then carefully remove airbag module.
- 3) Refer to "5-5 [W102]" for handing of a removed airbag module.

B: INSTALLATION

Installation is in reverse order of removal procedures. Observe the following: Make sure that ignition switch is off.

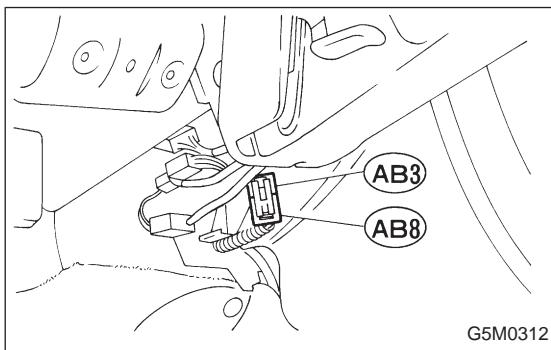
CAUTION:

Do not allow harness and connectors to interfere or get caught with other parts.

3. Main Harness

A: REMOVAL

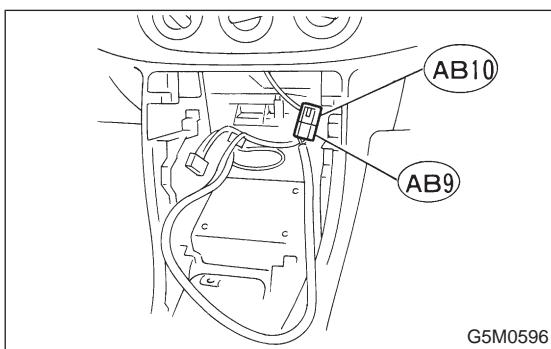
- 1) Turn ignition switch off.
- 2) Disconnect ground cable from battery and wait for at least 20 seconds before starting work.



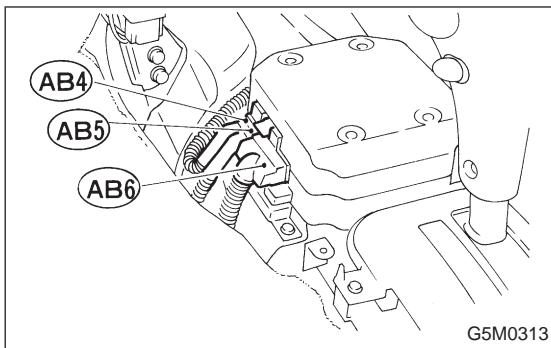
- 3) Remove lower cover. <Ref. to 5-4 [W1A0].> Disconnect airbag connector (AB3) and (AB8) below steering column.

CAUTION:

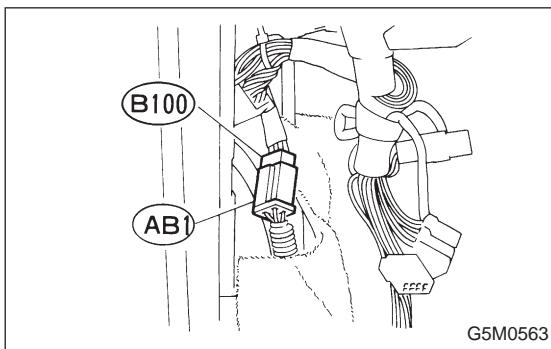
Do not reconnect airbag connector at steering column until main harness are securely re-installed.



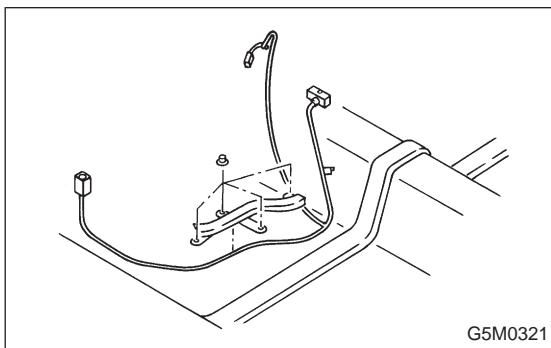
- 4) Disconnect airbag connector (AB9) and (AB10) <Ref. to 5-5 [T5F1].>



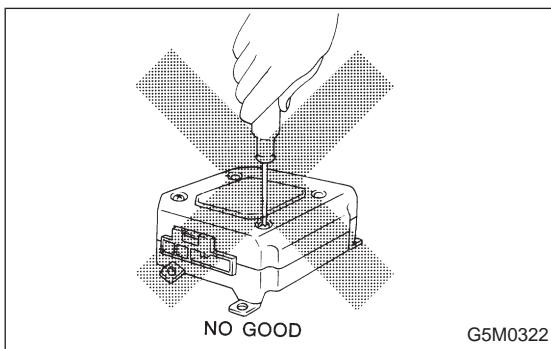
5) Remove instrument panel console. <Ref. to 5-4 [W1A0].> Disconnect 12-pin yellow connector (AB6) from airbag control unit. <Ref. to 5-5 [M2-6].>



6) Disconnect body harness connector (B100) from connector (AB1).



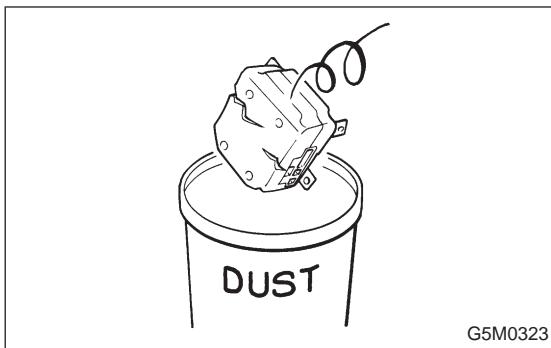
7) Roll up floor mat and side sill cover. (LH side). Remove main harness from clip and protector.



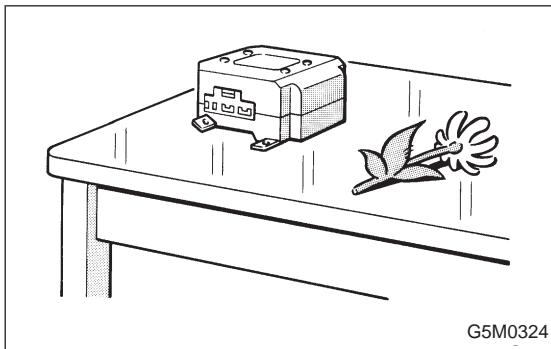
4. Airbag Control Module

CAUTION:

- Do not disassemble the airbag control module.



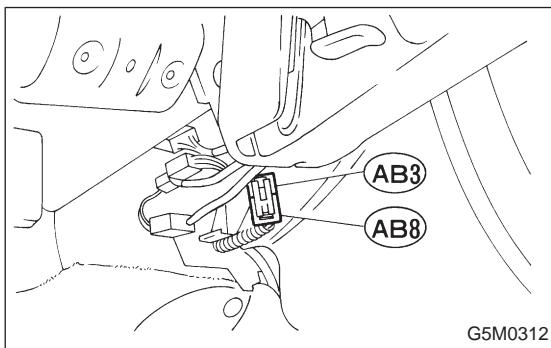
- If the airbag control module is deformed, or if water damage is suspected, replace the airbag control module with a new genuine part.



- After removal, keep the airbag control module on a dry, clean surface away from heat and light sources, and moisture and dust.

A: REMOVAL

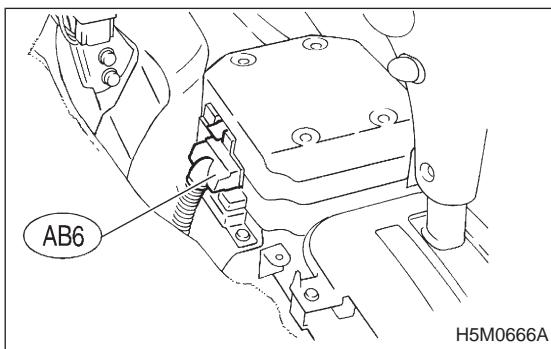
- 1) Turn ignition switch off.
- 2) Disconnect ground cable from battery and wait for at least 20 seconds before starting work.



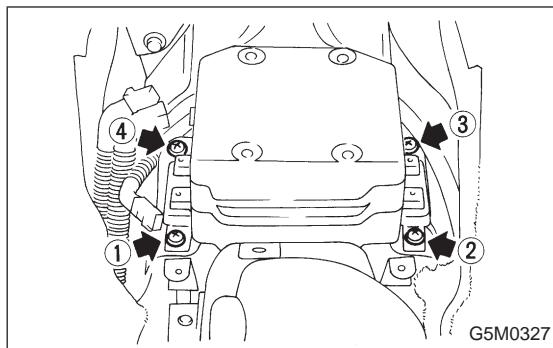
- 3) Remove lower cover. <Ref. to 5-4 [W1A0].> Disconnect airbag connector (AB3) and (AB8) below steering column.

CAUTION:

Do not reconnect airbag connector at steering column until airbag control module is securely re-installed.



- 4) Remove instrument panel console. <Ref. to 5-4 [W1A0].>
- 5) Disconnect 12-pin yellow connector (AB6) from airbag control module. <Ref. to 5-5 [M2-6].>



6) Using TORX® BIT T30, remove four TORX® bolts in numerical sequence shown in figure. Discard the old TORX® bolts.

CAUTION:

Use new TORX® bolts during re-assembly.

B: INSTALLATION

Installation is in reverse order of removal procedures.

CAUTION:

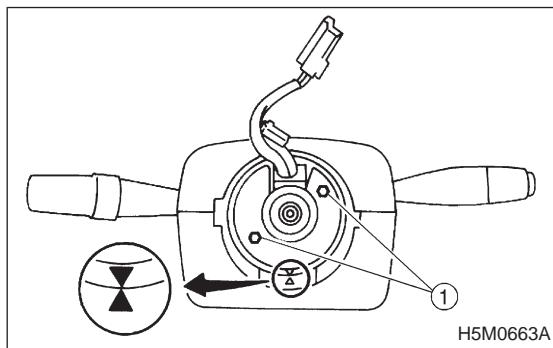
Be sure to fully secure all airbag system connectors during re-assembly and confirm that all green double lock mechanisms are engaged.

5. Combination Switch

1. CENTERING ROLL CONNECTOR

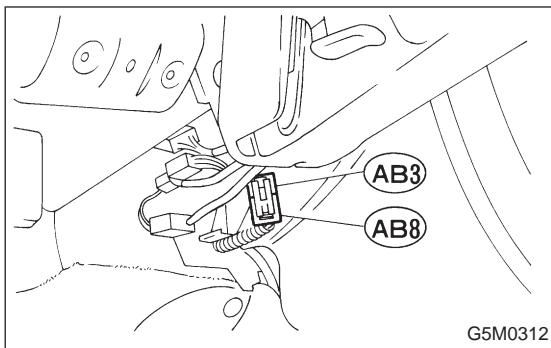
Before installing combination switch and steering wheel, make sure to center roll connector built into combination switch.

- 1) Make sure that front wheels are positioned straight ahead.
- 2) Install steering gearbox, steering shaft and combination switch properly. Turn roll connector pin ① **clockwise** until it stops.
- 3) Then, back off roll connector pin ① approximately 2.65 turns until “▲” marks aligned.



A: REMOVAL

- 1) Turn ignition switch off.
- 2) Disconnect ground cable from battery and wait for at least 20 seconds before starting work.

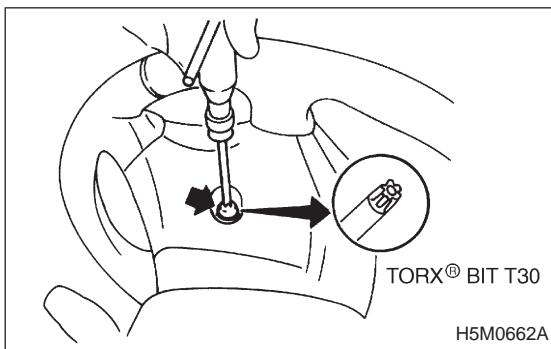


3) Remove lower cover. <Ref. to 5-4 [W1A0].> Disconnect airbag connector (AB3) and (AB8) below steering column.

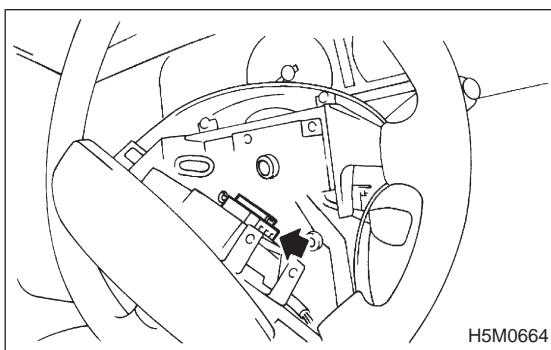
CAUTION:

Do not reconnect airbag connector at steering column until combination switch is securely re-installed.

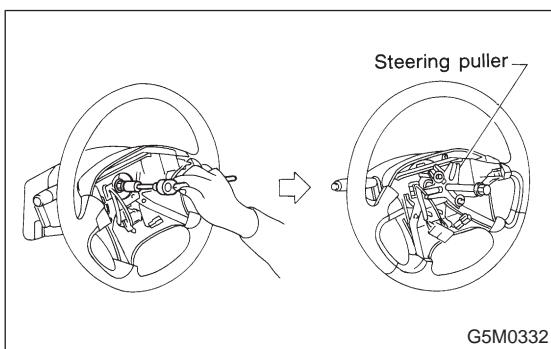
4) Disconnect combination switch connectors from body harness connector.



5) Set front wheels in straight ahead position. Using TORX® BIT T30, remove two TORX® bolts.



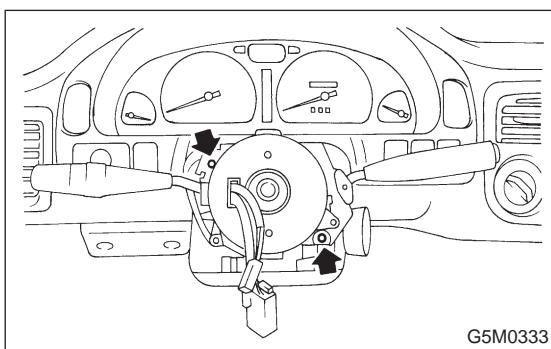
6) Disconnect airbag connector and horn connector on back of airbag module. Remove airbag module, and place it with pad side facing upward. <Ref. to 5-5 [W102].>



7) Using steering puller, remove steering wheel.

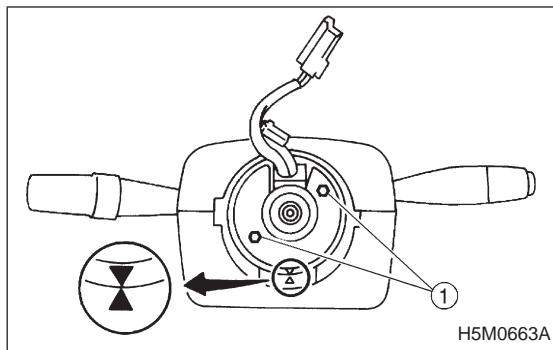
CAUTION:

Do not allow connector to interfere when removing steering wheel.



8) Remove steering column covers.

9) Removing two retaining screws, remove combination switch.



B: INSTALLATION

- 1) Before installing combination switch, check to ensure that combination switch is off and front wheels are set in the straight ahead position.

CAUTION:

Failure to do this might damage roll connector.

- 2) Install column cover and center roll connector. <Ref. to 5-5 [W501].>

- 3) Install steering wheel in neutral position. Carefully insert roll connector pin ① into hole on steering wheel.

NOTE:

If steering wheel angle requires fine adjustment, adjust tie-rod. <Ref. to 4-3 [W3F0].>

- 4) Install airbag module and lower cover in the reverse order of removal.