

SERVICE MANUAL



SUBARU IMPREZA



Technical description

• Mechanism and function

BODY SECTION

13. Sunroof

The sunroof has two operating mechanisms. One raises the rear of the slide panel for ventilation and the other fully opens the panel.

The sunroof also has the following features:

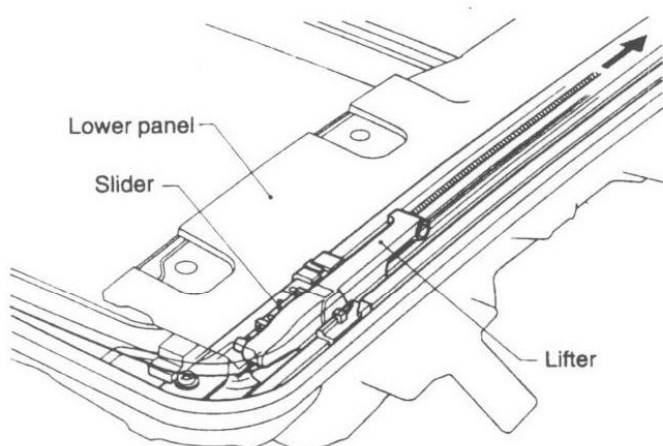
- Use of the outer slide type provides the sunroof function despite the small size of the roof.
- The reduced thickness of the roof provides extra-overhead clearance in the passenger compartment.
- Die-cast aluminum is used for roof components, thus reducing weight.
- Sheet metal components are copper-plated for rust proofing.

Operation (Operating time)	When opened:	Fully closed → tilted-up → Pause after tilt-up → Slides to rear in tilted-up mode → Fully open (Fully closed → 0.5 — 1.5 sec → Pause after tilt-up → 5.0 — 6.0 sec → Fully open)
	When closed:	Fully open → Slides to front in tilted-up mode → Pause with 150 mm (5.91 in) open → From tilt-up to tilt-down while sliding → Fully closed (Fully open → 2.5 — 3.5 sec → Pause with 150 mm (5.91 in) open → 3.0 — 4.0 sec → Fully closed)

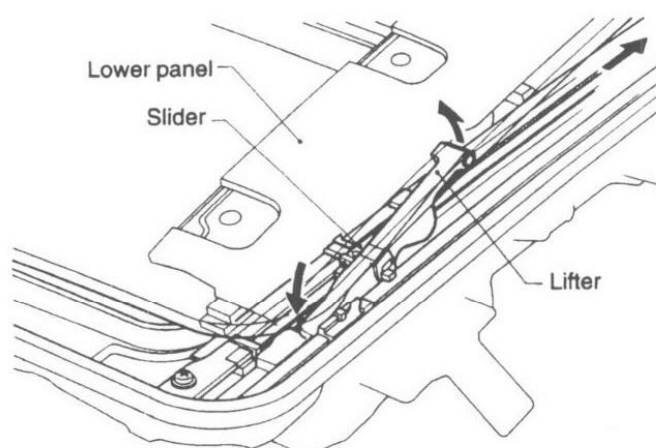
A: TILT-UP MECHANISM

1. OPERATION

- The lower panel installed with the outer panel is secured to the lifter.
- When the "OPEN" switch is pressed, the slider is pulled back by the motor.
- The slider guide pin moves along the guide hole to tilt the rear of the lifter up.
- When the "OPEN" switch is pressed again, the slider is pulled back further. Since the slider guide pin is located at the rear end of the lifter guide hole, the lifter and slider move back as a unit to open the sunroof.



G5H0065

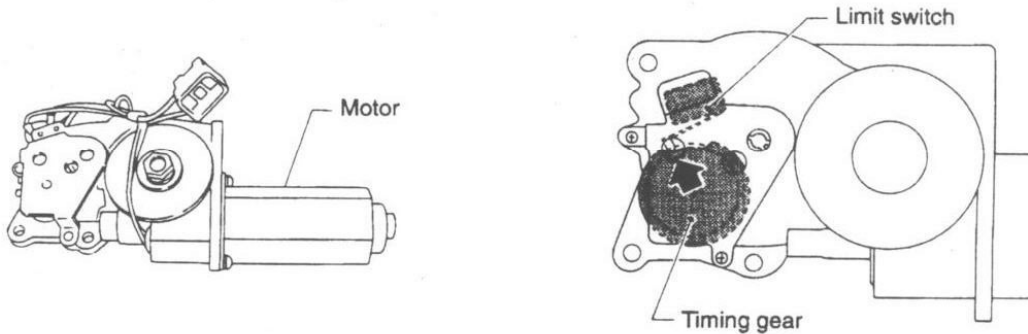


G5H0066

B: SUNROOF MOTOR

1. CONSTRUCTION

The sunroof motor consists essentially of a motor, timing gear and limit switch. The timing gear is provided with a pinion gear cam mechanism, and the limit switch turns the relay on or off according to the tilt-up position of the slide panel.

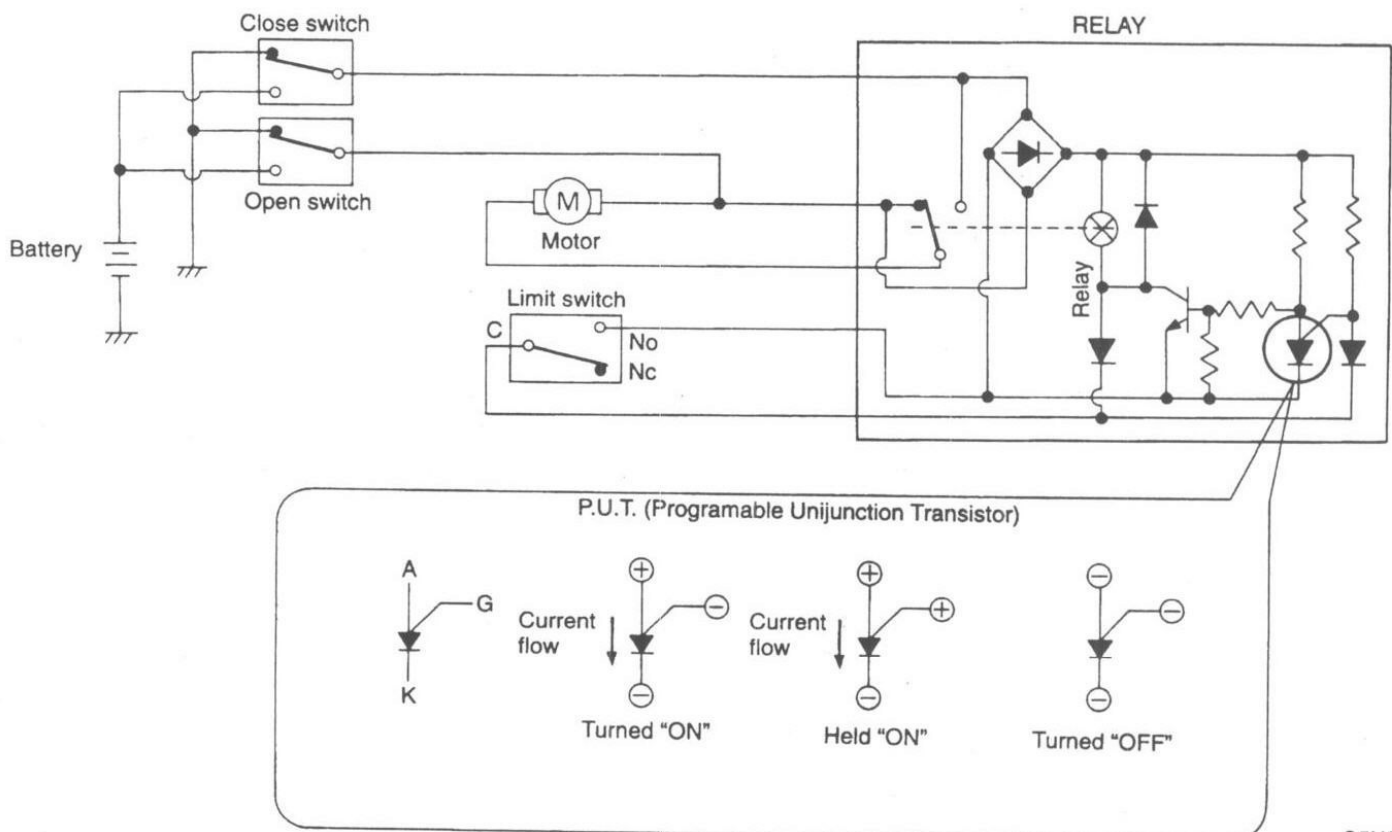


G5H0067

C: LIMIT SWITCH

1. CONSTRUCTION

This switch closes or opens according to the tilt-up position of the slide panel. It also activates when the slide panel reaches the 150 mm (5.91 in) open position.



G5H0068

D: SYSTEM OPERATION

1. SLIDE OPERATION

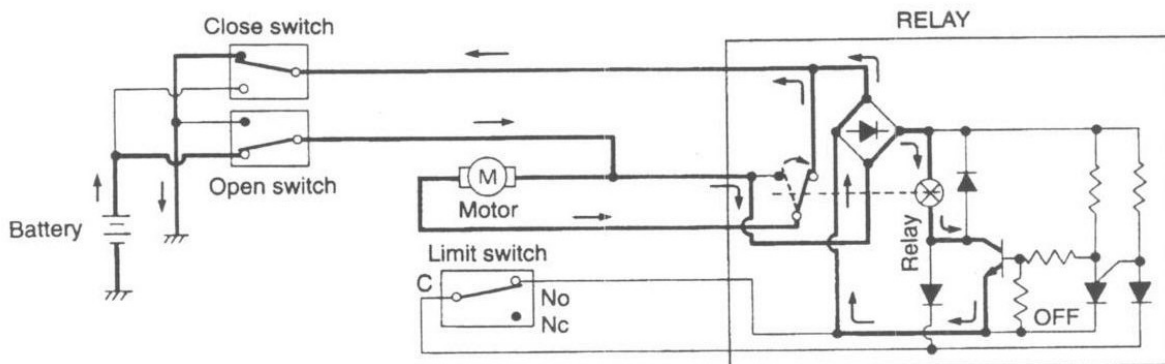
The slide panel continuously opens while the "OPEN" switch is pressed, and stops at the specified tilt-up position.

When the switch is released and pressed again, the slide panel continues to move to the fully open position.

The slide panel continuously closes while the "CLOSE" switch is pressed, and stops at approximately the 150 mm (5.91 in) open position. When the switch is released and pressed again, the slide panel continues to move to the fully closed position.

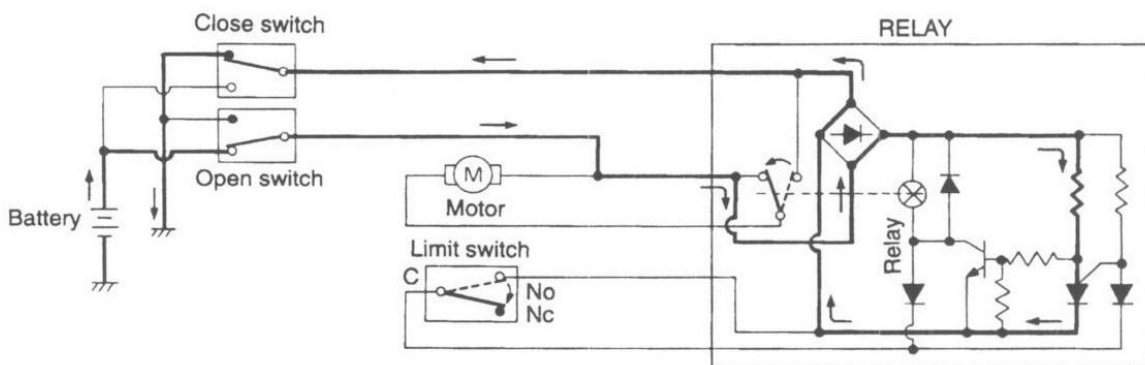
2. OPEN OPERATION

- When the "OPEN" switch is pressed, current flows to activate the transistor and relay so that the motor rotates in the direction that opens the slide panel. (The P.U.T. is held "OFF".)



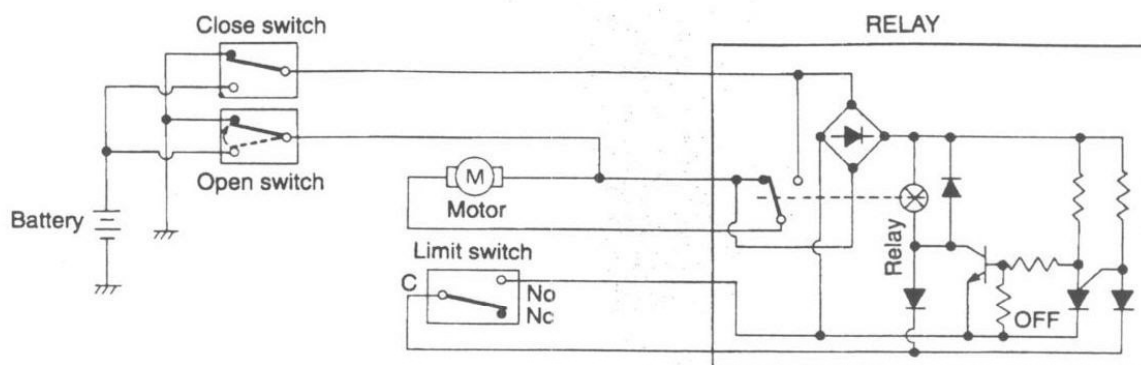
G5H0069

- The limit switch turns from "ON" to "OFF" so that the P.U.T. turns ON. This turns the transistor and relay off, and the motor will then stop.



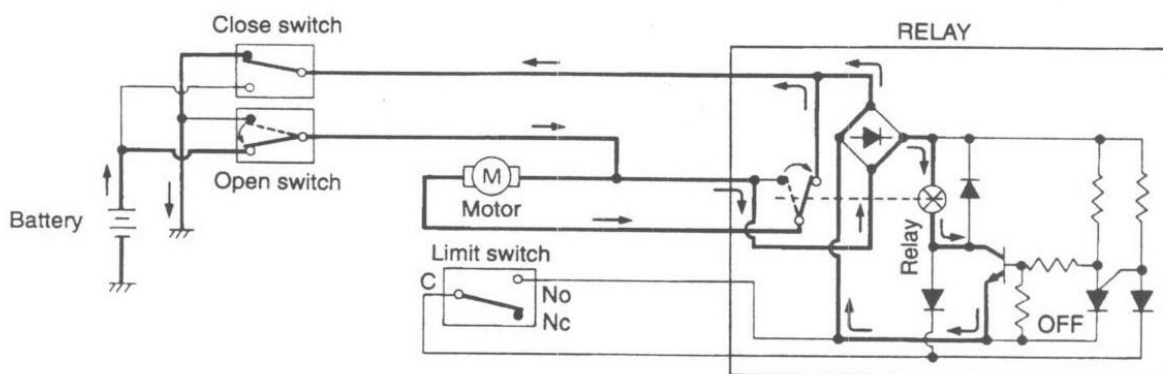
G5H0070

- When the "OPEN" switch is released, the P.U.T. turns OFF. The circuit is then held in a stand-by mode for ready operation.



G5H0071

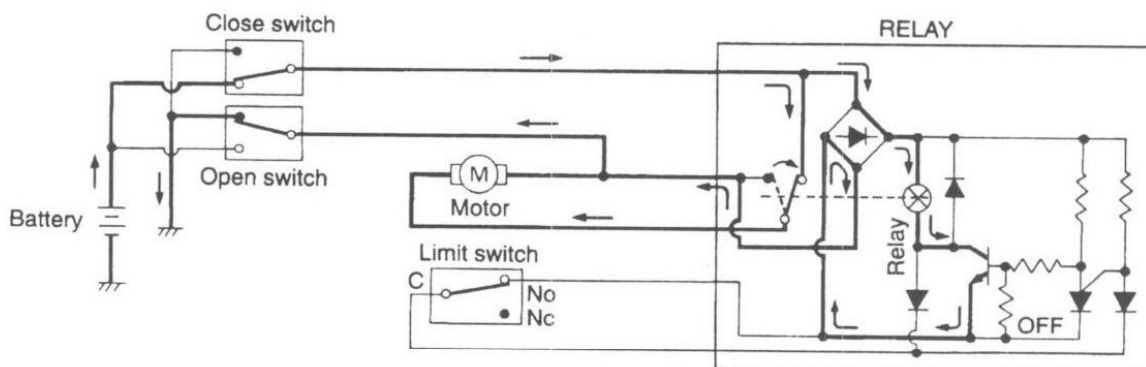
- When the "OPEN" switch is pressed again, the transistor and relay turn ON (the P.U.T. is held OFF). The motor will then rotate in the direction that opens the slide panel fully.



G5H0072

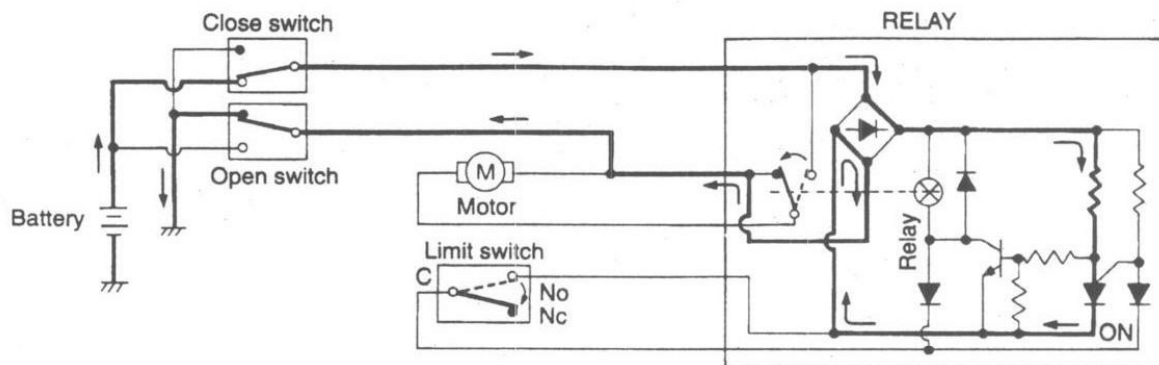
3. CLOSED OPERATION

- When the "CLOSE" switch is pressed, current flows to turn the transistor and relay ON (the P.U.T. is held OFF), the motor rotates in the direction that closes the slide panel.



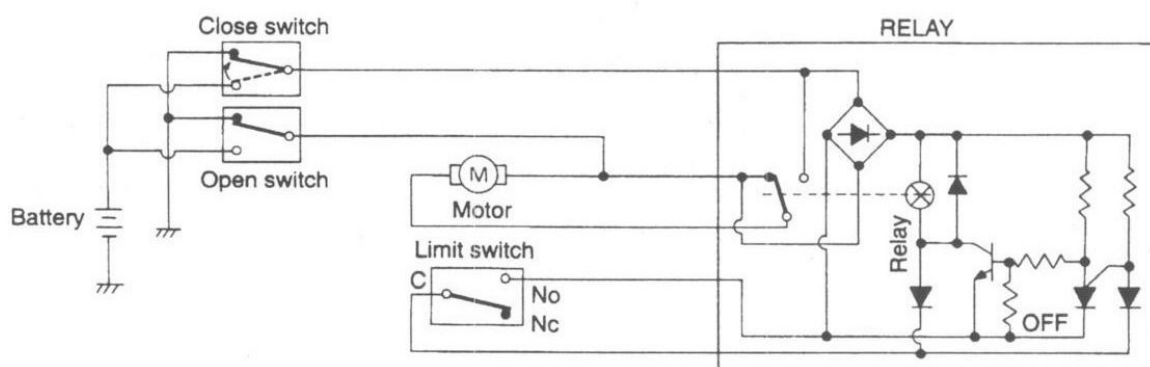
G5H0073

- The limit switch turns from ON to OFF (the P.U.T. turns ON), and the motor will stop.



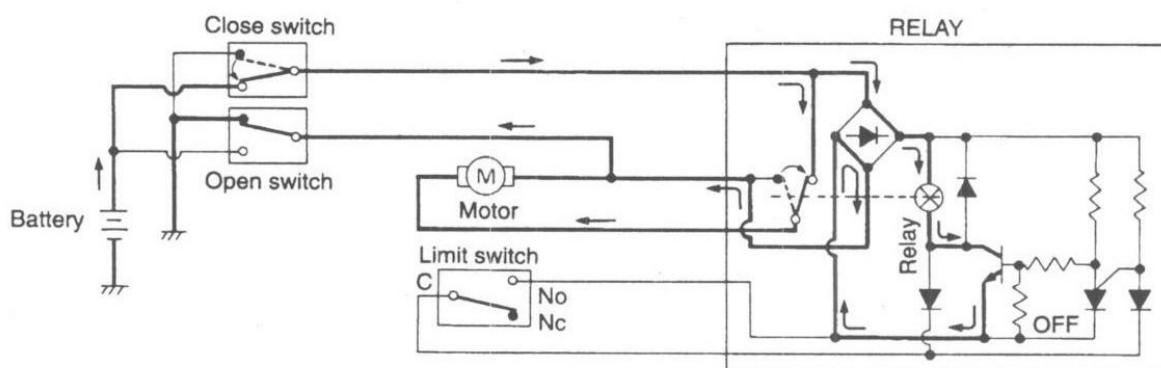
G5H0074

- When the "CLOSE" switch is released, the P.U.T. turns OFF, holding the circuit in a stand-by mode for ready operation.



G5H0075

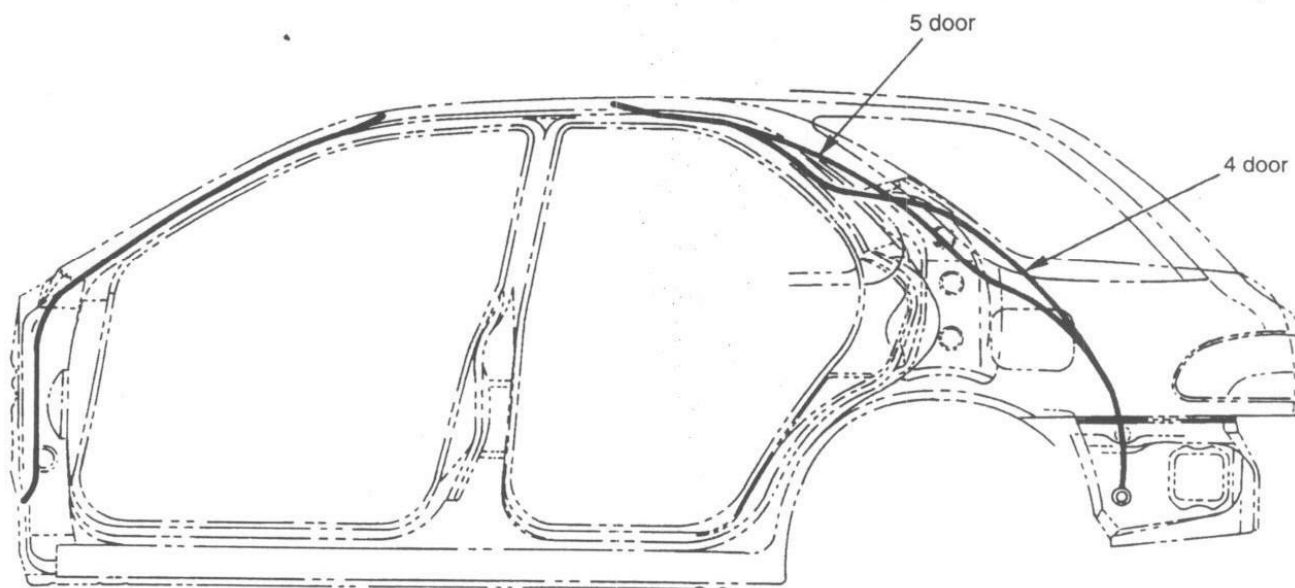
- When the "CLOSE" switch is pressed again, the transistor and relay turn ON. The motor will then rotate in the direction that closes the slide panel fully. (In this case, the slide panel does not stop at the tilt-up position.)



G5H0087

E: DRAIN TUBE LAYOUT

The front drain tube is routed to the inner side of the front wheel arch through the front pillar. The rear drain tube is routed to the back of the rear bumper through the side rail and rear pillar.

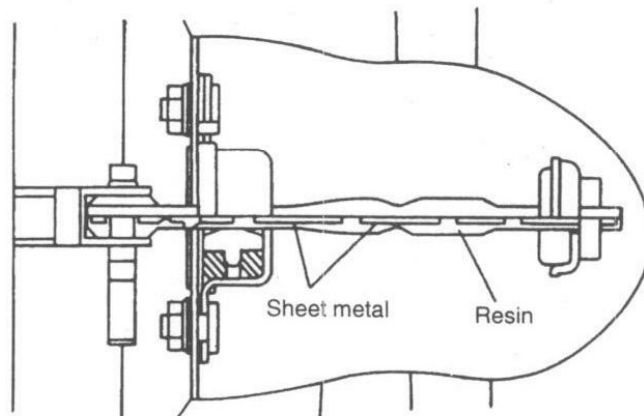


H5H0757A

1. Door

A: DOOR CHECKER

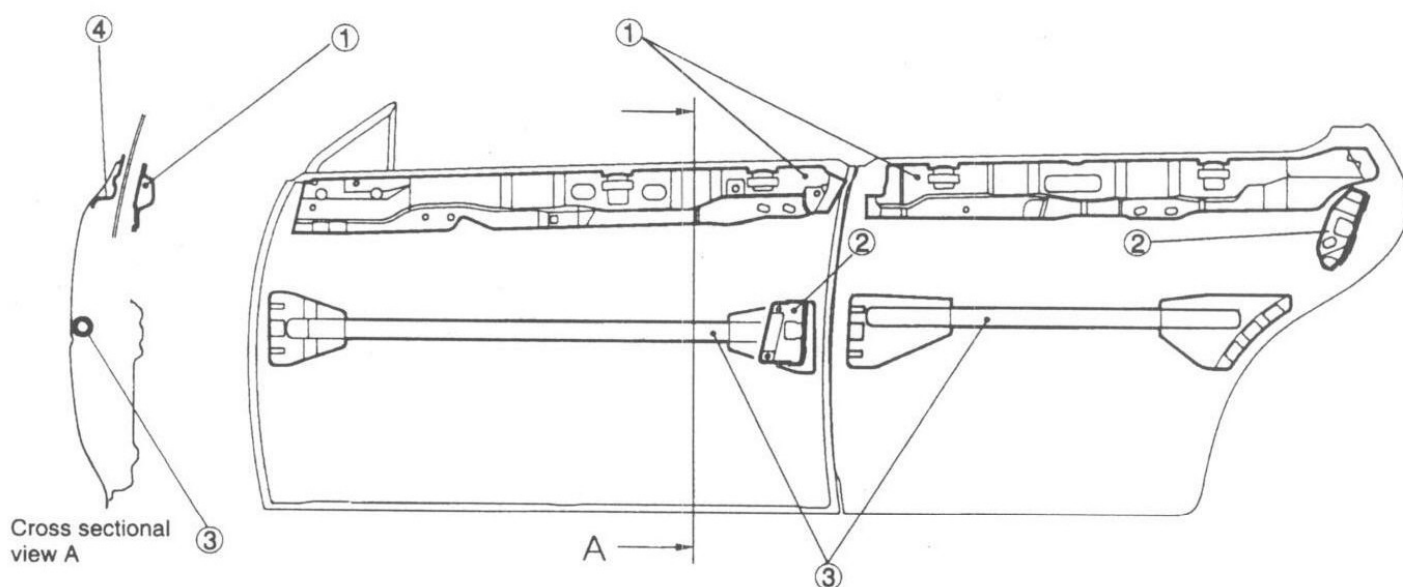
A resin molding type door checker is introduced (Front door).



B5H0471A

B: DOOR CONSTRUCTION

All front and rear doors are fitted with a side door beam, an inner upper reinforcement, an outer upper reinforcement and a reinforcement latch.



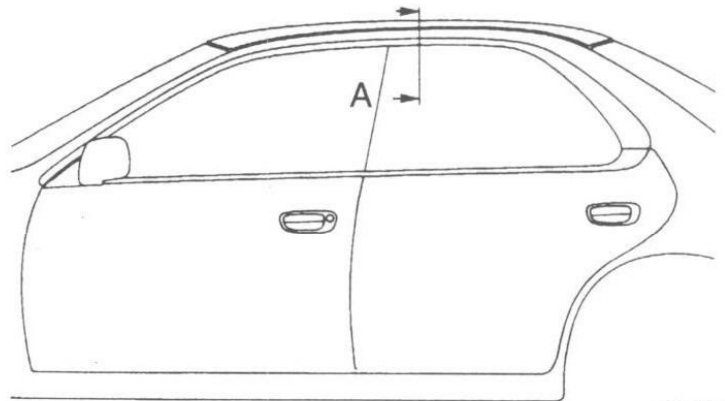
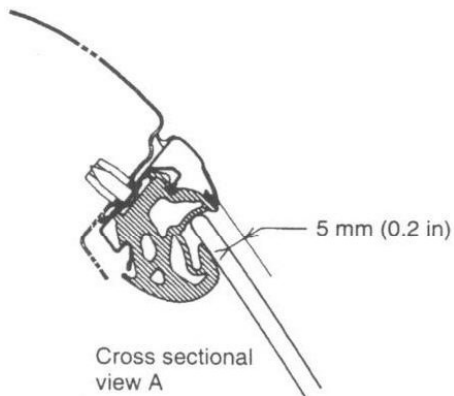
G5H0506

- ① Inner upper reinforcement
- ② Reinforcement latch

- ③ Side door beam
- ④ Outer upper reinforcement

2. Window Glass

The window glass aligns with the body paneling at surface level difference of approximately 5 mm (0.2 in).

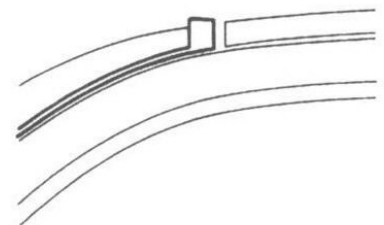
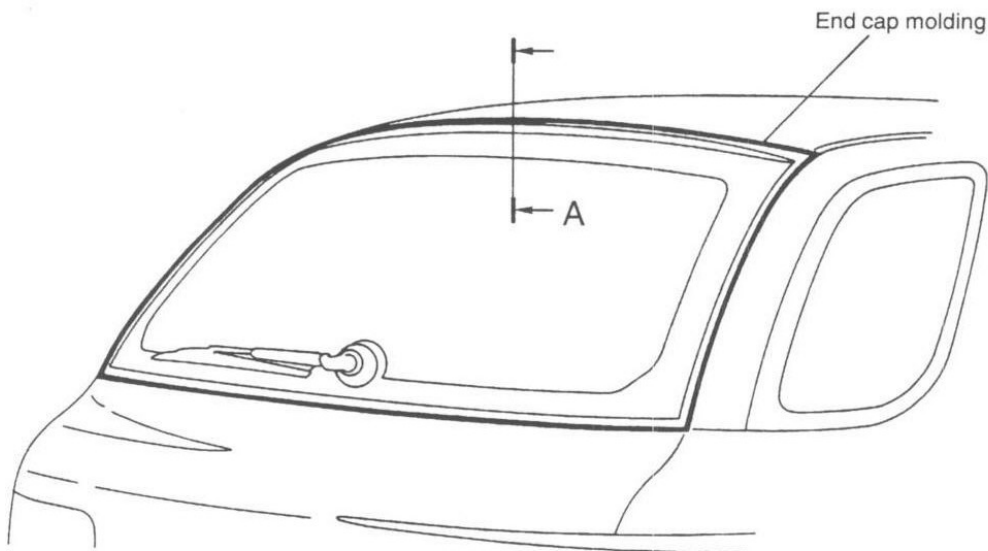


G5H0108

3. Rear Gate

The rear gate borders on the body paneling by the rear window glass.

The rear window glass has an end cap molding whose top section has a spoiler-like shape.



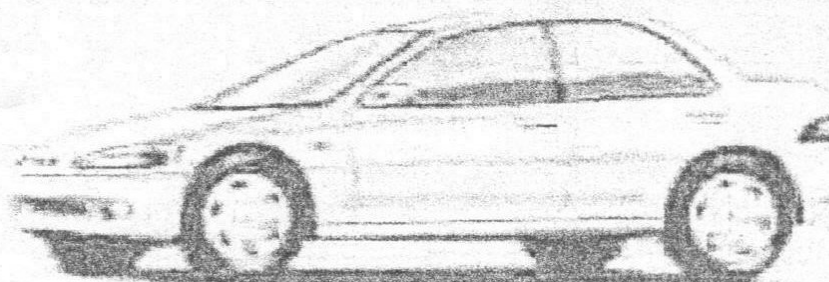
Cross sectional
view A

G5H0109

SERVICE MANUAL



SUBARU IMPREZA



SERVICE MANUAL

● Diagnostics section

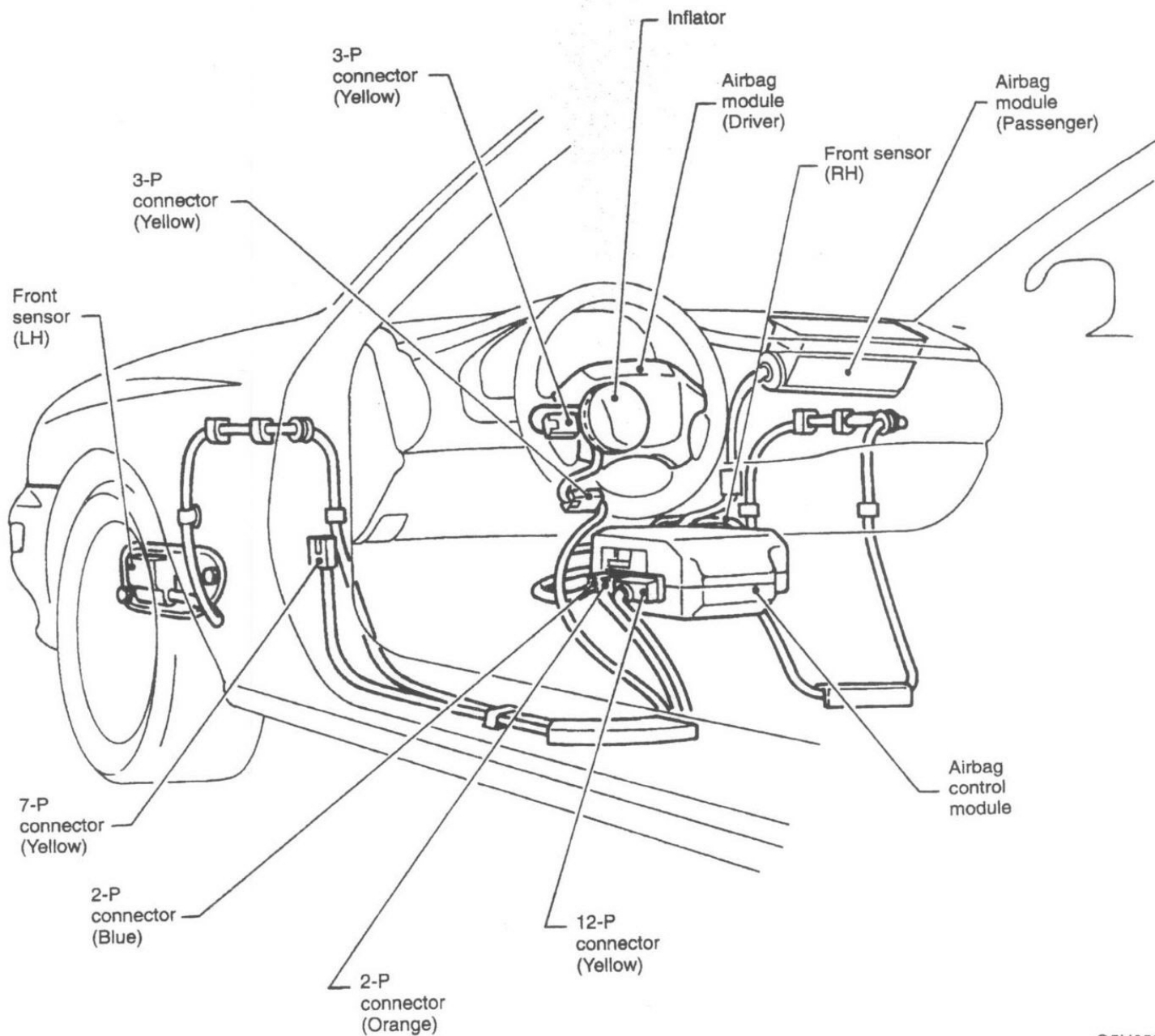
SUPPLEMENTAL RESTRAINT
SYSTEM

5-5

1. SRS Airbag System

A: INSTALLATION

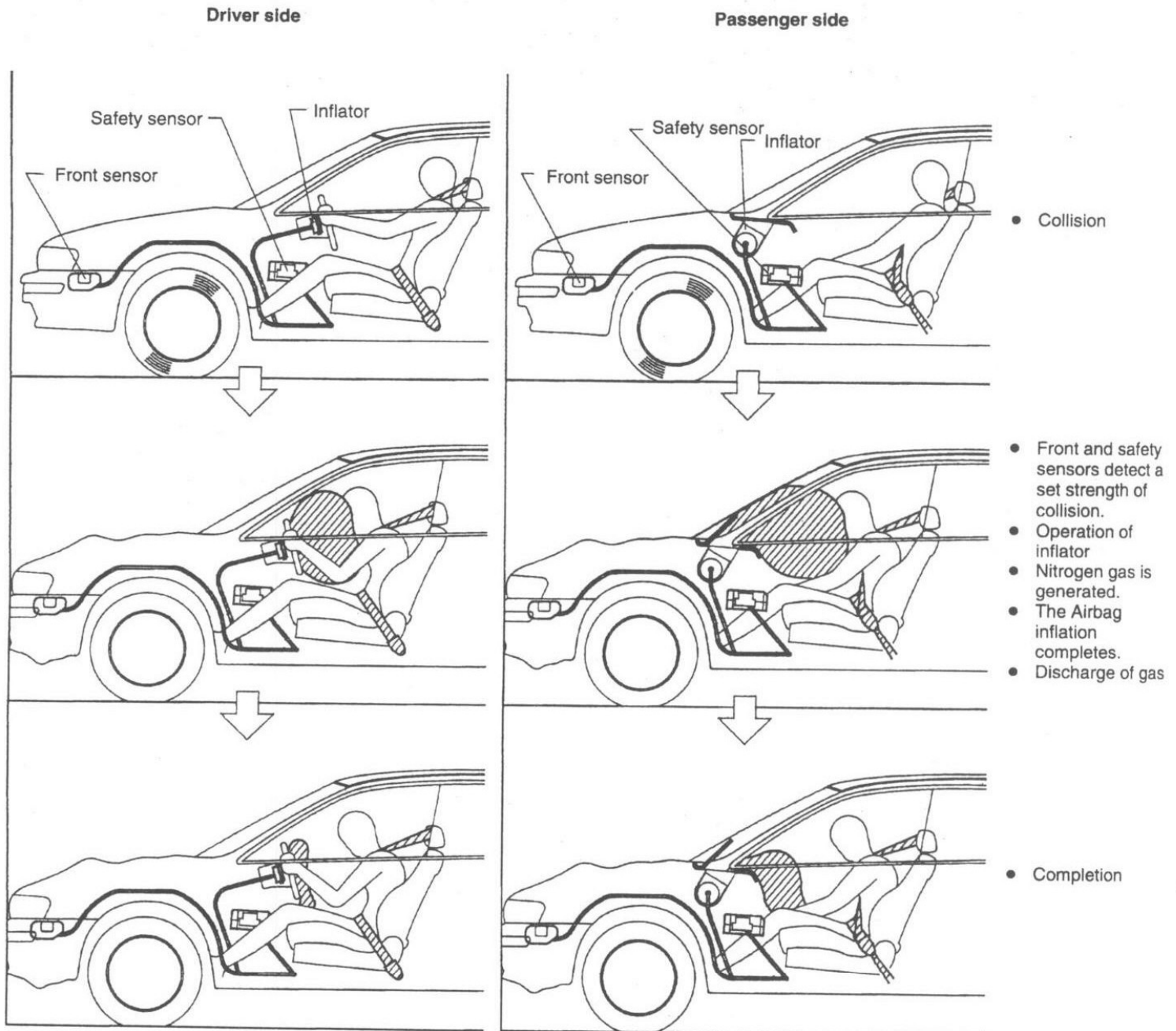
1. LHD MODEL



G5H0580

B. FUNCTION

The SRS airbag is provided as an auxiliary driver and passenger sit in front seat restraint system to be used in combination with the seat belt. When an impact greater than a set level is applied to the front of the vehicle, the sensor senses it and generates an electrical pulse to inflate the bag in the airbag module; thus preventing the driver and passenger sit in front seat of upper bodies from impacting the steering wheel, instrument panel and windshield.

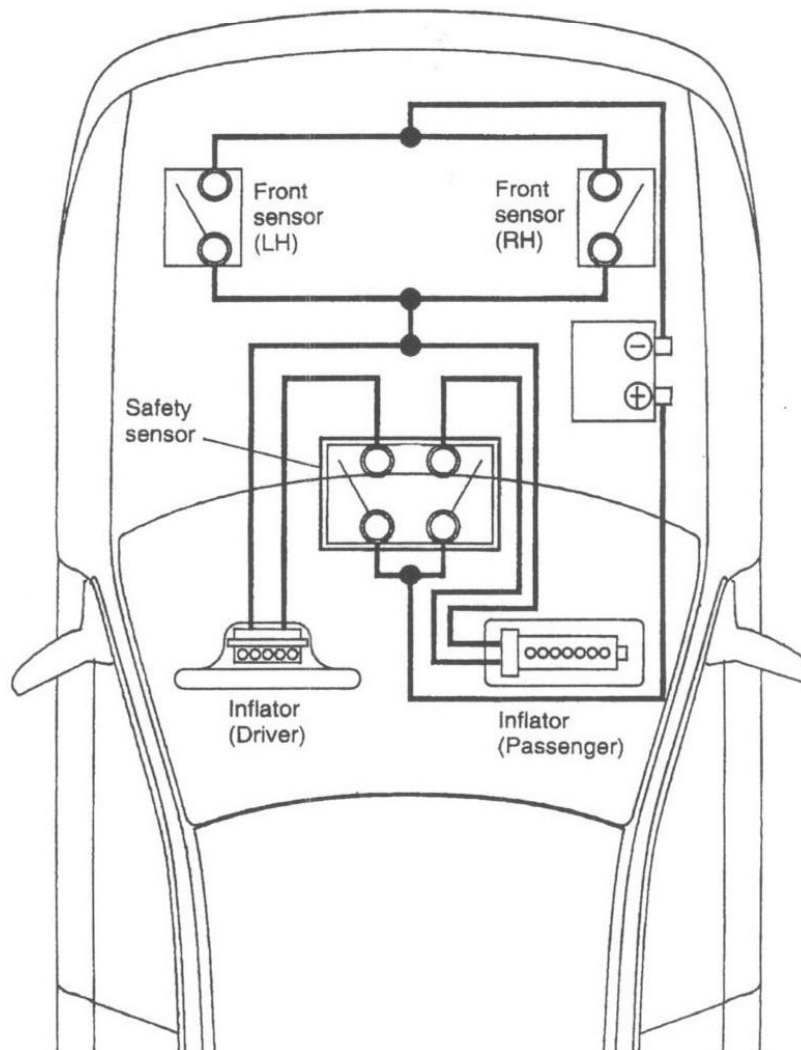


G5H0581

2. Construction

A: GENERAL

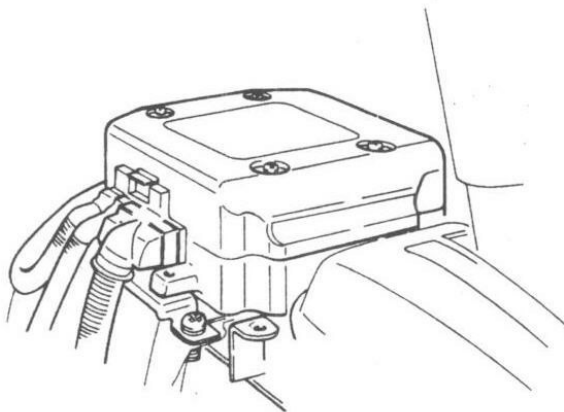
The SRS airbag consists of an airbag control module, left and right front sensors, safety sensor built into the control module, and airbag modules of driver and passenger containing an inflator and airbag. The left and right front sensors are connected in parallel respectively, and the front sensors and safety sensor are connected in series, so that the airbag will inflate if at least one front sensor and safety sensor sense an impact at the same time.



G5H0582

B: AIRBAG CONTROL MODULE

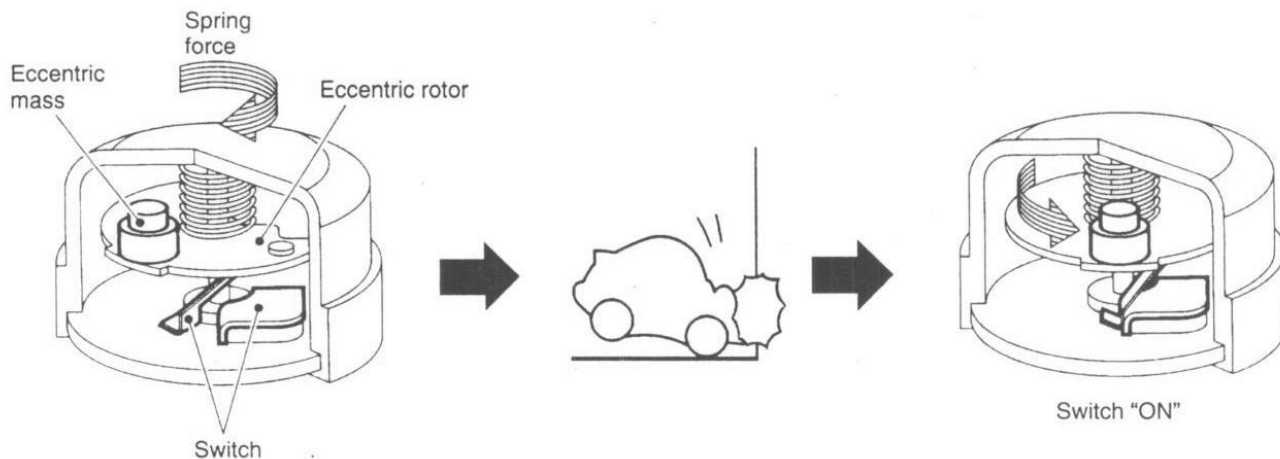
The airbag control module is installed ahead of the front floor tunnel. It detects the vehicle's deceleration by receiving electrical signals from the sensors and judges whether to fire the airbag. This control module has a built-in self-diagnosis function. If a trouble occurs inside the system, it lights up the airbag warning light in the combination meter. The trouble data is stored in the module. A back-up power supply is provided for possible damage to the battery during an accident, and a boosting circuit is built into the module in case of a battery voltage drop.



G5H0079

C: FRONT SENSOR

One front sensor is installed on both left and right sides ahead of the front wheel apron wall. If the rotary type sensor receives a frontal impact exceeding a certain set limit. The eccentric rotor rotates to turn the switch ON.



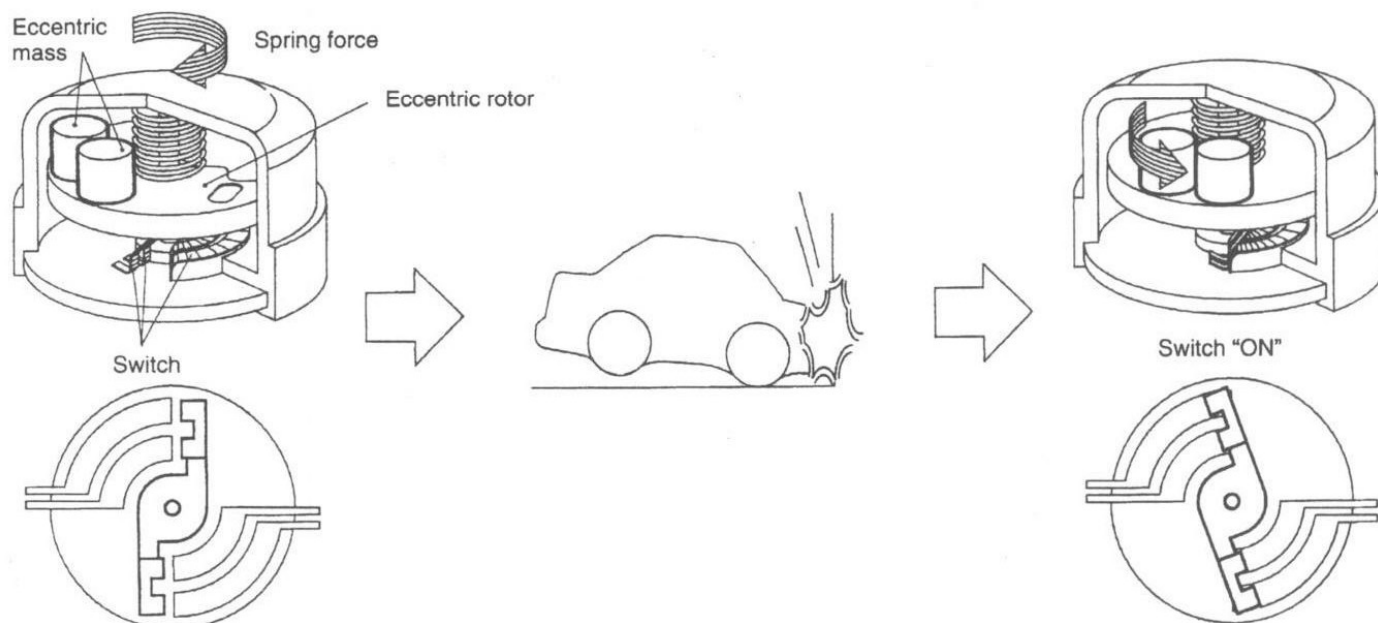
G5H0080

D: SAFETY SENSOR

1. WITH PASSENGER AIRBAG MODEL

Safety sensor is built into the airbag control module.

If the dual pole rotary type sensor receives a frontal impact exceeding a certain set limit. The eccentric rotor rotates to turn the switch ON.

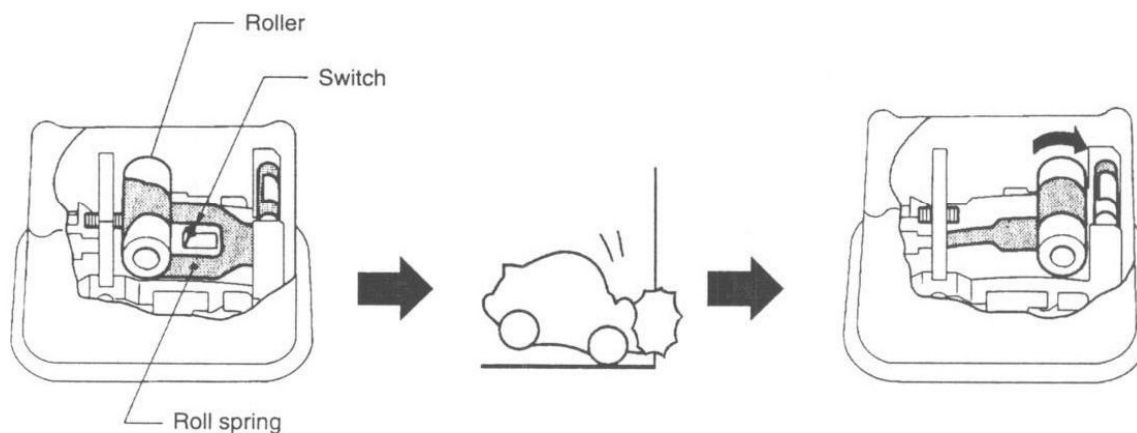


G5H0583

2. WITHOUT PASSENGER AIRBAG MODEL

Two safety sensors are built into the airbag control module.

If the roller-might type sensor receives a frontal impact exceeding a certain set limit. The roller rotates to turn the switch ON.

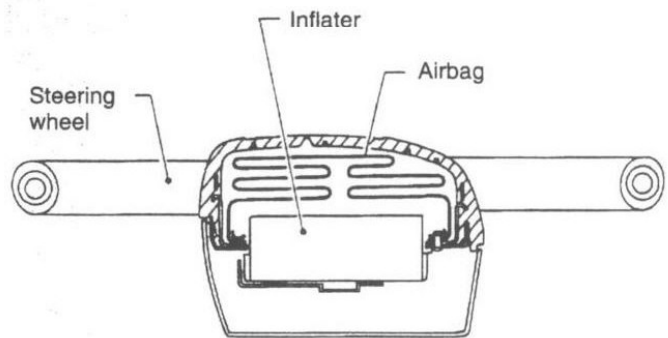
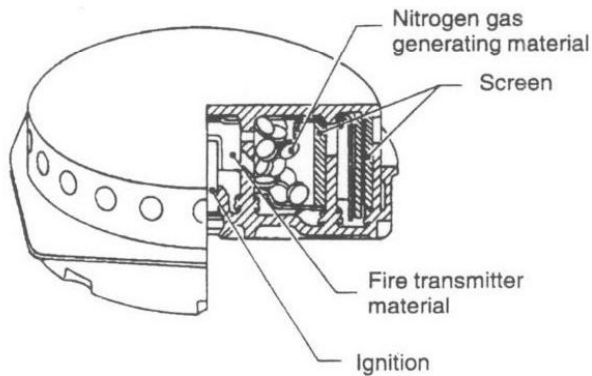


G5H0081

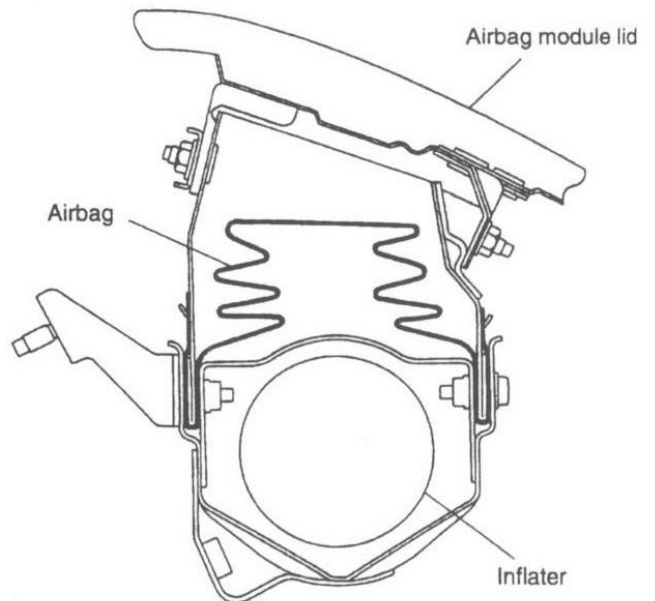
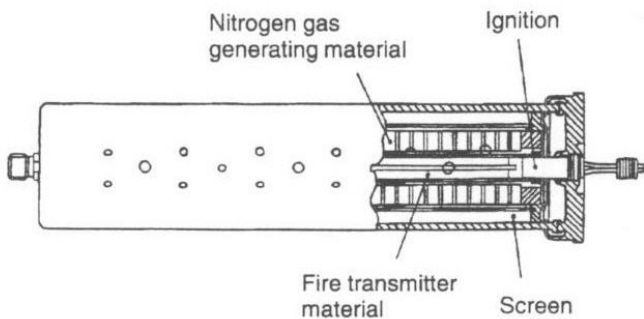
E: AIRBAG MODULE

The driver's airbag module is located at the center of the steering wheel, and passenger's airbag module is located at upper side of instrument panel, and it each contains an airbag and inflator. If a collision occurs, the inflator produces a large volume of nitrogen gas inflating the nylon airbag in a very short time.

Driver side



Passenger side



G5H0585

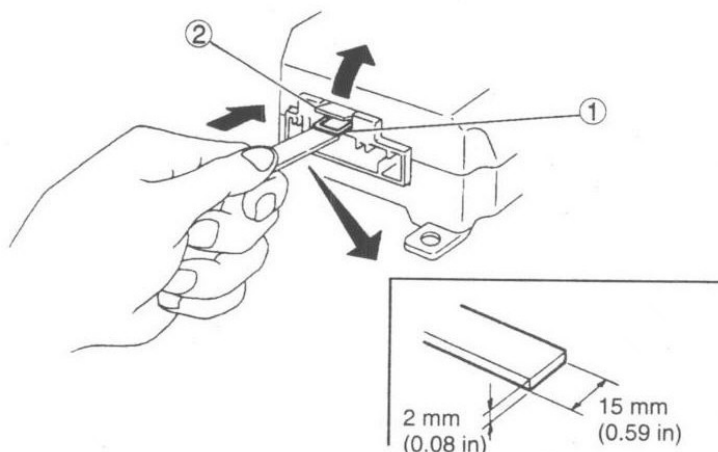
F: AIRBAG CONNECTOR

The SRS airbag adopts a connector which has a double lock mechanism and coupling error detection mechanism for enhanced reliability. If coupling is incomplete, the airbag warning light comes on in the combination meter.

1. CONNECTOR COUPLED TO AIRBAG CONTROL MODULE

To disconnect the connector, press wire ① of the control module as illustrated below until the green lever ② tilts up. This unlocks the double lock, then you can pull off the connector while pressing the connector lock.

To couple the connector, insert the three connectors until a "click" is heard, then push in the green lever ② to apply the double lock.

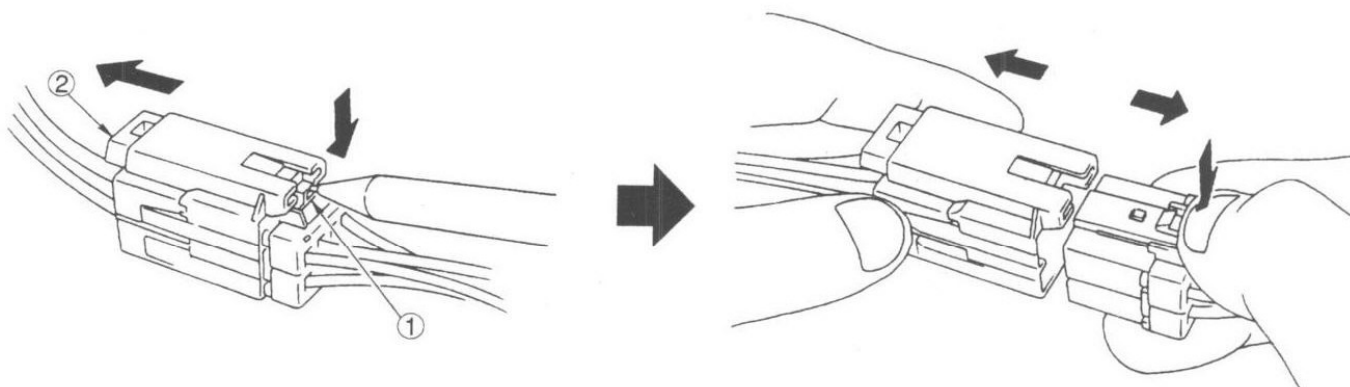


G5H0083

2. CONNECTOR BETWEEN HARNESSSES

To disconnect the connector, press lever ① to pop green lever ② out, this unlocks the double lock system. Then separate the connector by pulling both sides while holding the connector sections and pressing in lever ①.

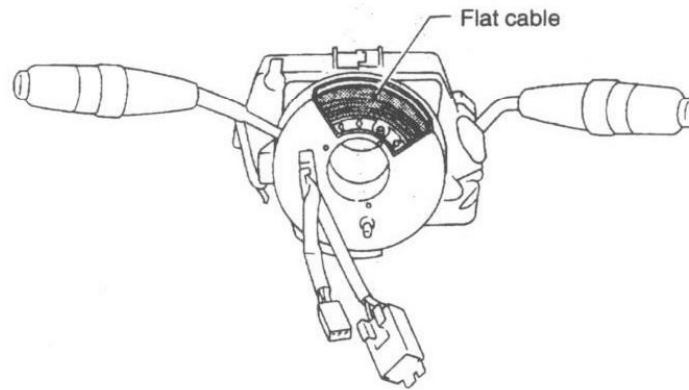
To couple the connector, insert both connectors until a "click" is heard, then push in the green lever ② until a "click" is heard; this applies the double lock.



G5H0084

G: STEERING ROLL CONNECTOR

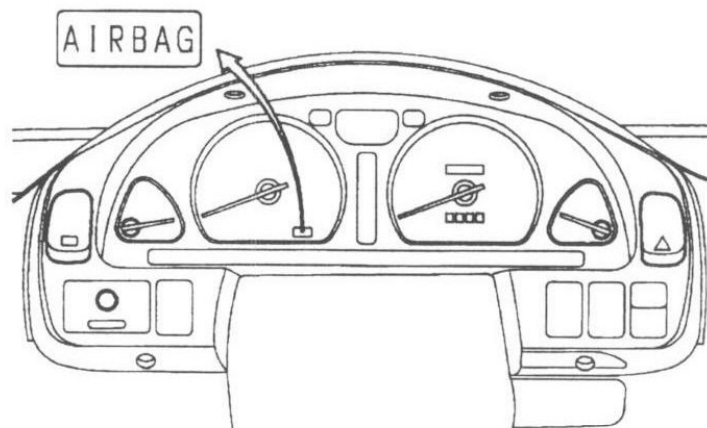
The steering roll connector is located between the steering column and steering wheel. A flat cable stored in a spiral form transmits the electrical signal from the airbag control module to the steering wheel from the body harness.



G5H0085

H: AIRBAG WARNING LIGHT

The airbag warning light is located inside the combination meter. It illuminates if a poor connection occurs, or if the airbag control module detects an abnormality. When the airbag system is normal, this light goes out about 7 seconds after turning the ignition switch ON.



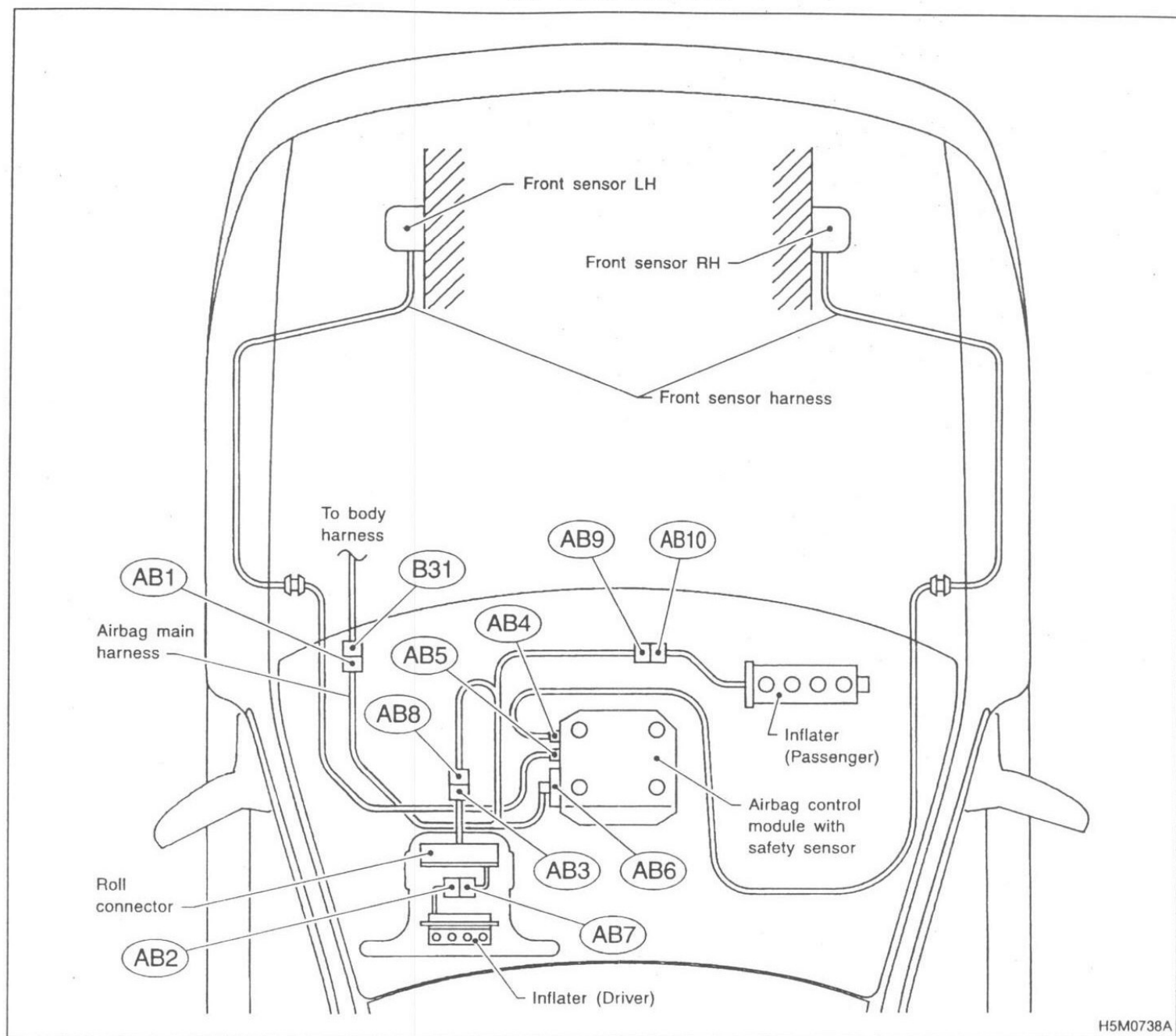
G5H0086

I: WIRE HARNESS

The wire harness of the SRS airbag is entirely covered with a yellow protective tube, and can easily be identified from harnesses of other systems.

1. Electrical Components Location

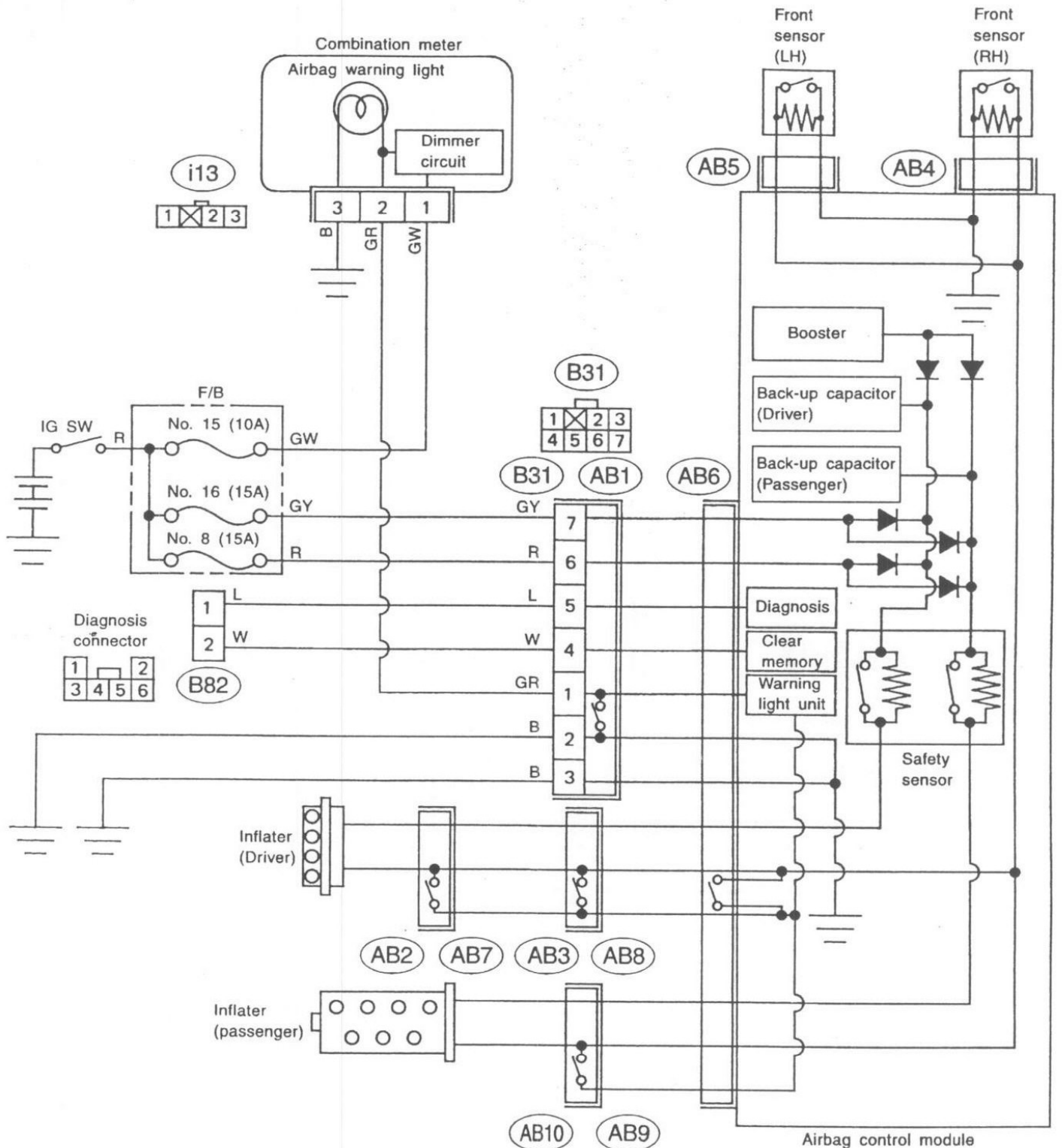
A: LHD MODEL



H5M0738A

Connector No.	(AB1)	(AB2)	(AB3)	(AB4)	(AB5)	(AB6)	(AB7)	(AB8)	(AB9)	(AB10)
Pole	7	3	3	2	2	12	3	3	3	3
Color	Yellow	Yellow	Yellow	Blue	Orange	Yellow	Yellow	Yellow	Yellow	Yellow
Male/Female	Male	Female	Female	Female	Female	Female	Male	Male	Male	Female

B: WITH PASSENGER'S AIRBAG MODEL



H5M0740A

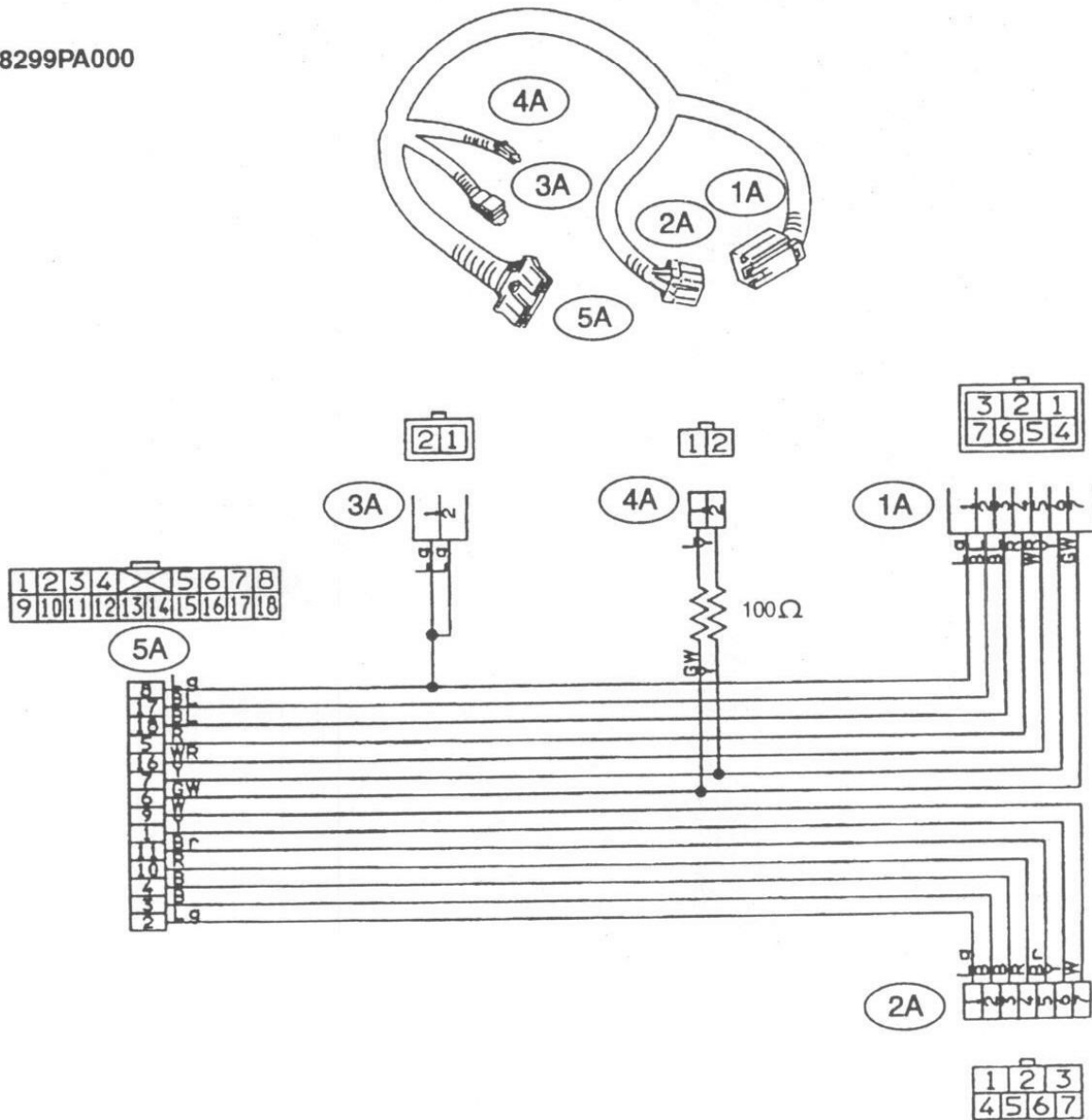
3. Tools for Diagnostics

CAUTION:

Be sure to use specified test harness A, B2 or C when measuring voltage, resistance, etc. of AIRBAG system component parts.

A: TEST HARNESS A

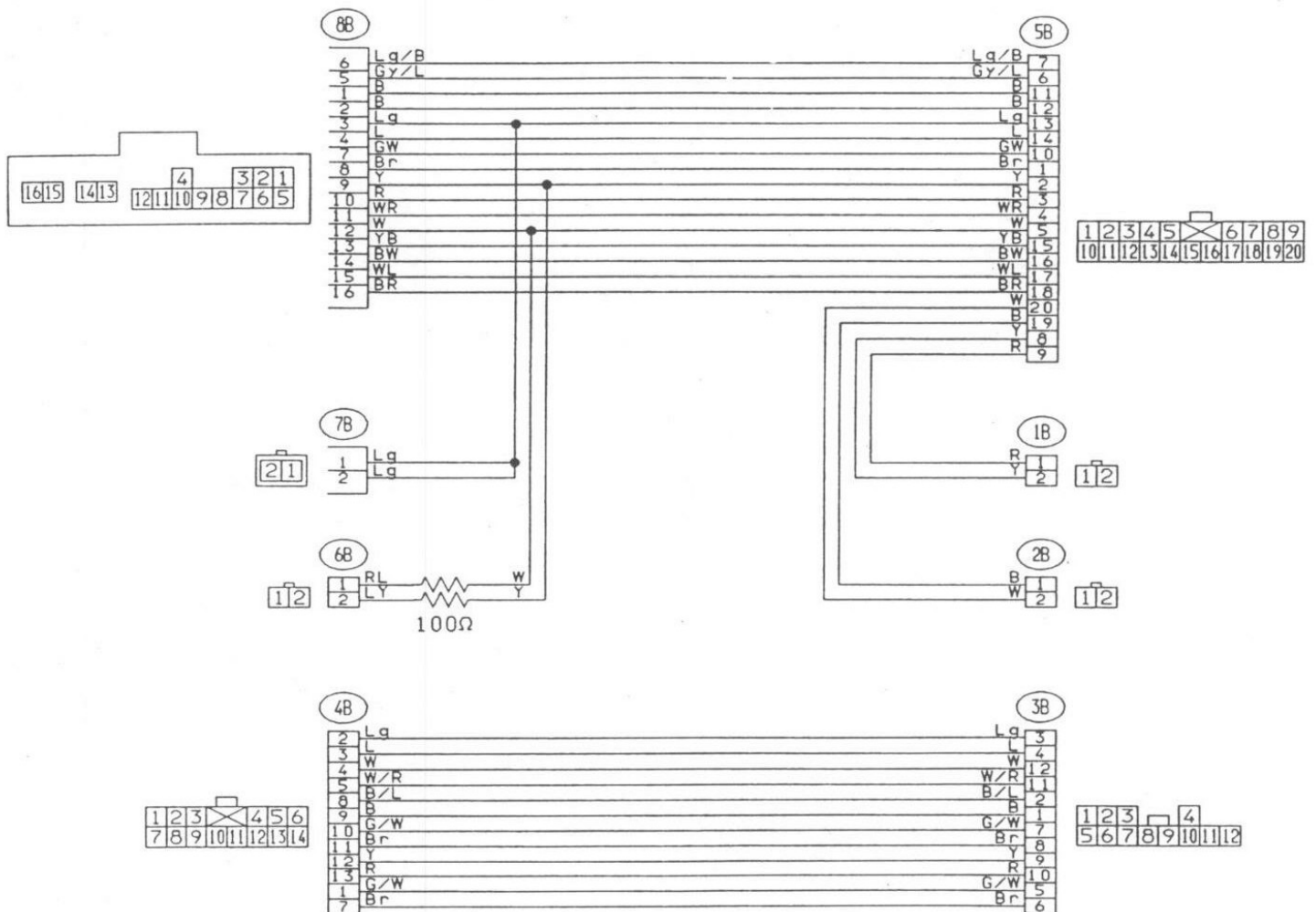
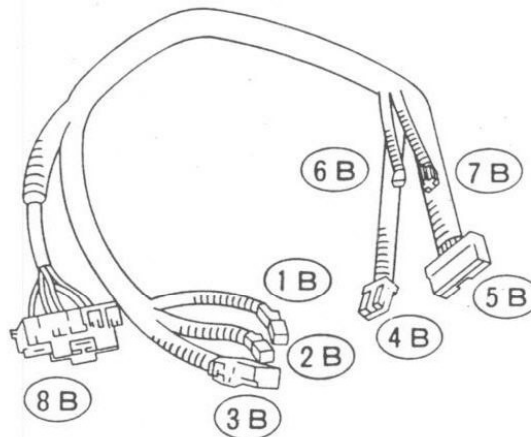
PN 98299PA000



B5M0112A

B: TEST HARNESS B2

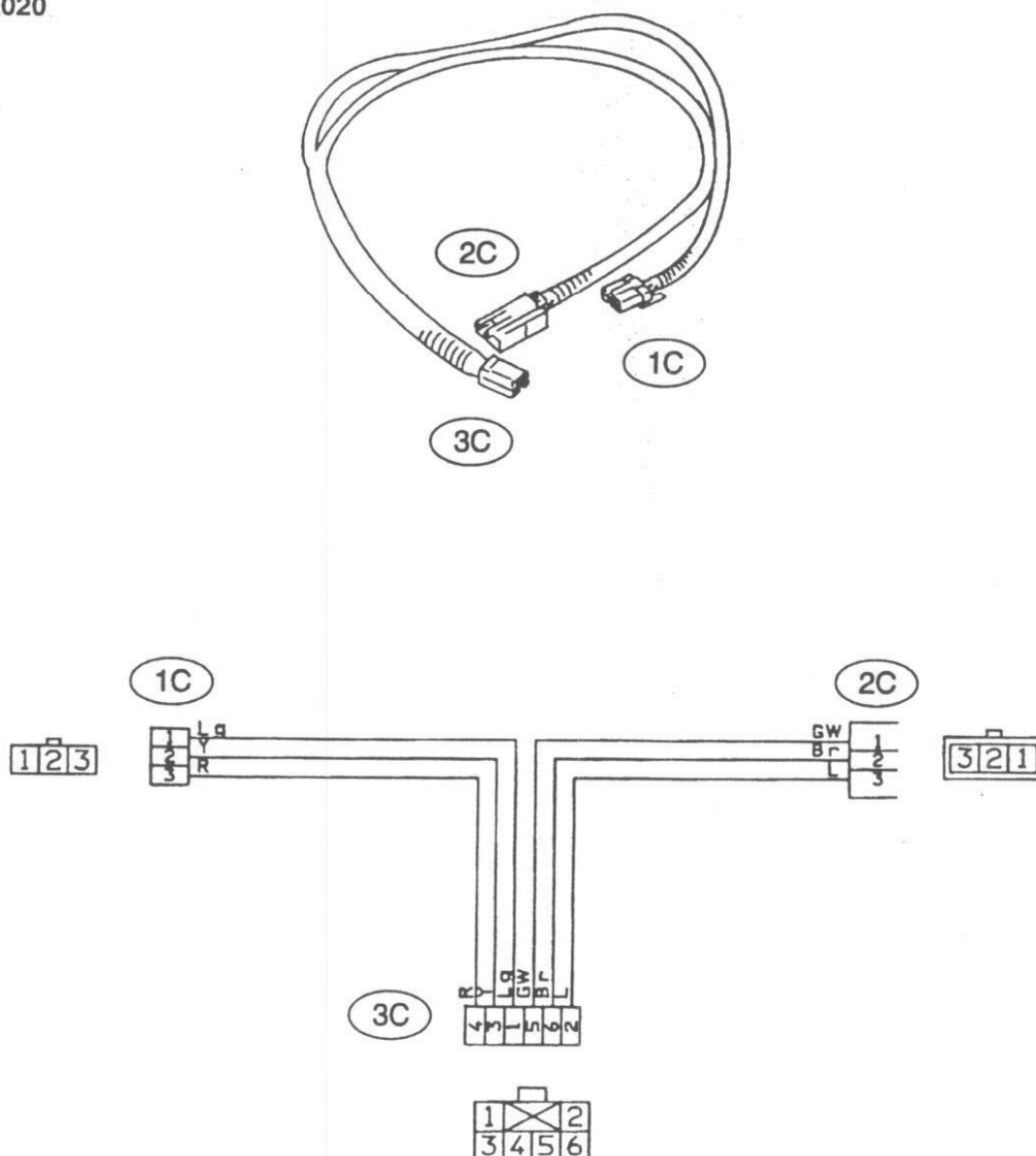
PN 98299PA011



G5M0593

C: TEST HARNESS C

PN 98299PA020

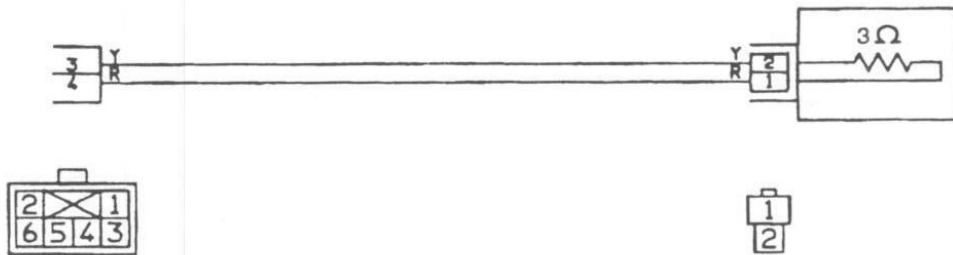
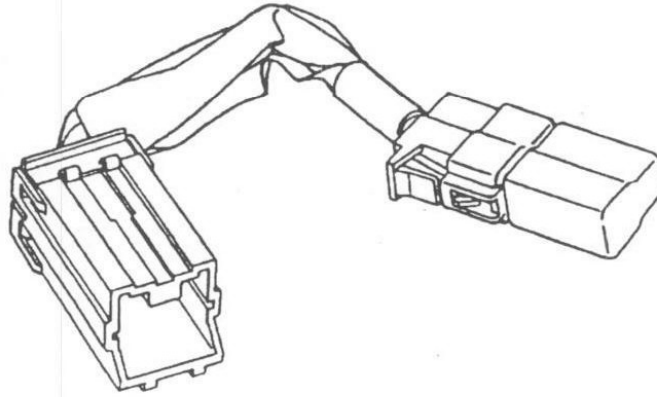


B5M0113A

D: AIRBAG RESISTOR

The airbag resistor is used during diagnostics. The airbag resistor has the same resistance as the airbag module and thus provides safety when used instead of the airbag module. It also makes it possible to finish, diagnostics in less time.

PN 98299PA040



B5M0114A

4. Diagnostics Chart for On-board Diagnostic System

A: BASIC DIAGNOSTICS PROCEDURE

4A1	CHECK AIRBAG WARNING LIGHT ILLUMINATES.
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- 1) Airbag warning light comes ON.
- 2) Turn ignition switch to ON (engine OFF).
- 3) Check airbag warning light illuminates.

CHECK : *Does airbag warning light stay ON after about 7 seconds or remain OFF, or come back ON after 30 seconds?*

YES : Repair and replace. <Ref. to 5-5 [T4D0].>

NO : Go to step **4A2**.

4A2	CHECK TROUBLE CODE INDICATES.
------------	--------------------------------------

Perform ON-BOARD DIAGNOSTICS.

<Ref. to 5-5 [T4B0].>

CHECK : *Does trouble code indicate?*
<Ref. to 5-5 [T5A0].>

YES : Repair and replace. <Ref. to 5-5 [T5Q0].>
Then go to step **4A3**.

NO : Repair and replace. <Ref. to 5-5 [T5R0].> Then go to step **4A3**.

4A3	CHECK AIRBAG WARNING LIGHT ILLUMINATES.
------------	--

- 1) Turn ignition switch to ON (engine OFF).
- 2) Check airbag warning light illuminates.

CHECK : *Does airbag warning light stay ON after about 7 seconds or come back ON after 30 seconds?*

YES : Repair and replace. <Ref. to 5-5 [T4D0].>

NO : Go to step **4A4**.

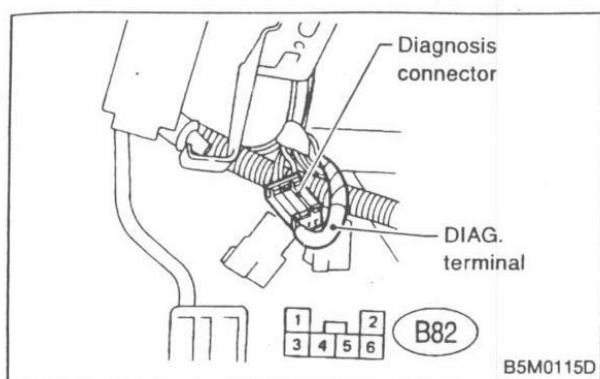
4A4	CHECK AIRBAG WARNING LIGHT ILLUMINATES.
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Check airbag warning light illuminates.

CHECK : *Does airbag warning light come ON for about 7 seconds, then go out and stay out?*

YES : Perform clear memory. <Ref. to 5-5 [T4C0].>

NO : Go to step **4A1**.

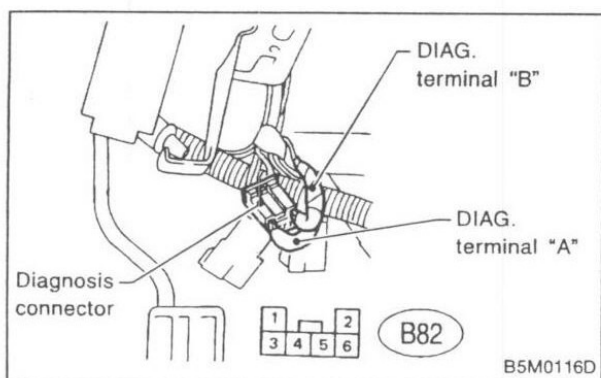


B: ON-BOARD DIAGNOSTIC

When the airbag system is in functioning condition, the airbag warning light will remain on for about 7 seconds and go out when the ignition switch is set to ON.

If there is any malfunction, the airbag warning light will either stay on or off continuously. In such cases, perform on-board diagnostic in accordance with the specified procedure to determine trouble codes.

- 1) Turn ignition switch ON (with engine OFF).
- 2) Connect DIAG. terminal to No. 1 terminal of diagnosis connector located below lower cover.
- 3) Check in accordance with the trouble code indicated by the AIRBAG warning light, and record the trouble codes.
- 4) Turn the ignition switch "OFF" and remove the DIAG. terminal from No.1 terminal of diagnosis connector.



C: CLEAR MEMORY

After eliminating problem as per trouble code, clear memory as follows:

- 1) Make sure ignition switch is ON (and engine off). Connect one DIAG. terminal "A" on diagnosis connector terminal No. 1.

While warning light is flashing, contact the other DIAG. terminal "B" on terminal No. 2 for at least three seconds.

- 2) After memory is cleared, normal warning light flashing rate resumes. (Warning light flashes every 0.6 seconds ON-OFF operation.) Memory cannot be cleared if any problem exists.

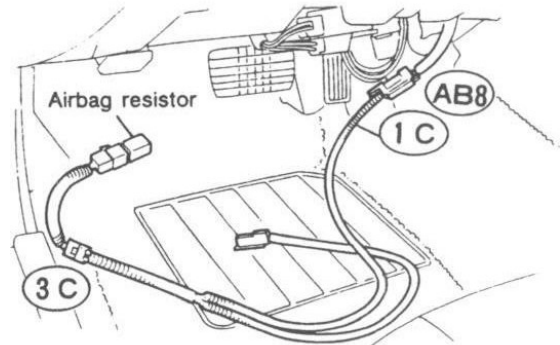
- 3) After clear memory and then DIAG. terminals "A" and "B", extract from diagnosis connector.

D: DIAGNOSTICS PROCEDURE**1. WITHOUT PASSENGER'S AIRBAG MODEL**

Airbag warning light stays on after about 7 seconds.

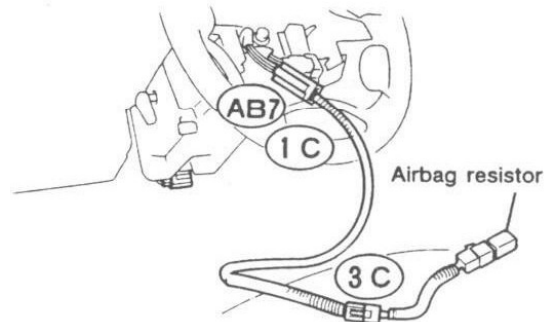
- 1) Perform on-board diagnostic. <Ref. to 5-5 [T4B0].>
- 2) Are trouble codes 2, 12, 13, or 23 indicated? <Ref. to 5-5 [T5A2].>
Trouble code is written down.
- 3) If "NO", proceed with diagnostics and repair according to trouble code indicated then perform step 20).
- 4) If "YES", proceed by turning ignition switch "OFF", disconnecting the battery, and waiting 20 seconds. If codes 12 or 13 are indicated proceed to step 6). If codes 2 or 13 are not indicated proceed to step 5).

- 5) Remove lower cover panel and connect test harness C connector (1C) to (AB8) <Ref. to 5-4 [W1A0].> with airbag resistor attached to test harness C connector (3C).
Turn ignition switch "ON". Does airbag warning light go "OFF" after about 7 seconds and remain off for more than 30 seconds?
See notes 1) and 2).
If "YES" proceed to step 6).
If "NO" proceed to step 3).



G5M0429

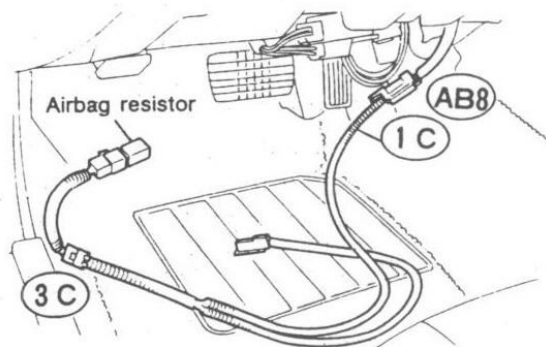
- 6) Remove airbag module and connect test harness C connector (1C) to (AB7). <Ref. to 5-5 [W3A1].>
Connect airbag resistor to test harness C connector (3C).



G5M0430

- 7) Reconnect battery cable.
- 8) Turn ignition switch "ON", does airbag warning light go out after about 7 seconds and remain "OFF" for more than 30 seconds? See notes 1) and 2).
- 9) If "YES", disconnect battery, turn ignition switch "OFF", and wait 20 seconds. Install a new airbag module <Ref. to 5-5 [W3B1].> then proceed to step 20).

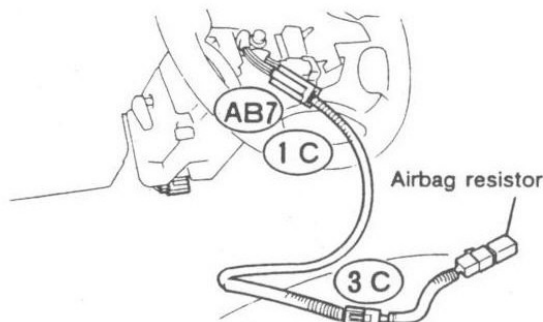
- 10) If "NO", connect test harness C connector (1C) to (AB8) <Ref. to 5-4 [W1A0].> with airbag resistor attached to test harness C connector (3C).



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- 11) Turn ignition switch "ON". Does airbag warning light go "OFF" after about 7 seconds and remain off for more than 30 seconds? See notes 1) and 2).
- 12) If "YES", replace combination switch, <Ref. to 5-5 [W6A0].> and proceed to step 16).
- 13) If "NO", proceed with diagnostics according to trouble code indicated during on-board diagnostic.

- 14) After repair, reconnect test harness C connector (1C) to (AB7) <Ref. to 5-5 [W3A1].> with airbag resistor attached to (3C).



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- 15) Turn ignition switch "ON". Does airbag warning light go "OFF" after about 7 seconds and remain off for more than 30 seconds? See notes 1) and 2).
- 16) If "YES", disconnect battery. Turn ignition switch "OFF", and wait 20 seconds. Install airbag module <Ref. to 5-5 [W3B1].> and proceed to step 18).
- 17) If "NO", replace combination switch, <Ref. to 5-5 [W6A0].> and proceed to step 16).
- 18) Reconnect battery and turn ignition switch "ON". Does airbag warning light go off after about 7 seconds and remain off for more than 30 seconds? See notes 1) and 2).
- 19) If "NO", disconnect battery, turn ignition switch "OFF", replace a new airbag module <Ref. to 5-5 [W3A1].> and repeat step 18).
- 20) If "YES", perform clear memory procedure. <Ref. to 5-5 [T4C0].>
- 21) If memory cannot be cleared, another trouble code exists. Proceed to returning to step 1).

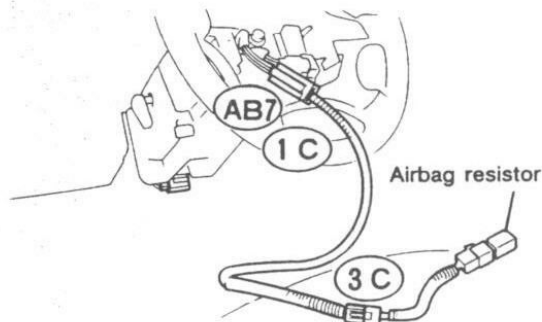
NOTES:

- Always remember to secure the green double locks before turning the Ignition switch "ON".
- In some cases the airbag warning light will go "OFF" after about 7 seconds but will turn "ON" again within 30 seconds. In this case continue diagnostics with the basic diagnostics procedures or trouble code procedures.

2. WITH PASSENGER'S AIRBAG MODEL

Airbag warning light stays on after about 7 seconds.

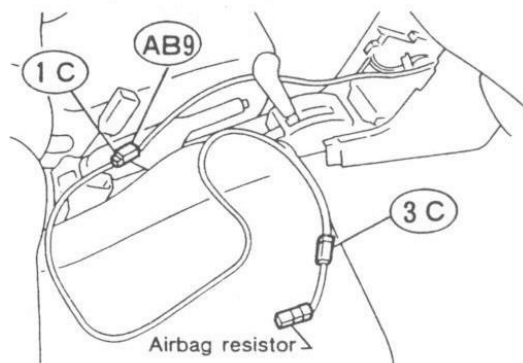
- 1) Perform on-board diagnostic. <Ref. to 5-5 [T4B0].>
- 2) Are trouble codes 2, 4, 12, 13, 22, 23, 24 or 32 indicated? <Ref. to 5-5 [T5A2].>
Record trouble codes.
- 3) If "NO", proceed with diagnostics and repair according to trouble code indicated then perform step 29).
- 4) If "YES", proceed by turning ignition switch "OFF", disconnect battery ground cable, and wait 20 seconds. If codes 12 or 13 are indicated proceed to step 5). If codes 12 or 13 are not indicated proceed to step 6).
- 5) Remove driver side airbag module and connect test harness C connector (1C) to (AB7). <Ref. to 5-5 [W3A1].>
Connect airbag resistor to test harness C connector (3C).
Proceed to step 19).



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- 6) If codes 4 or 22 are indicated, proceed to step 7). If codes 4 or 22 are not indicated proceed to step 11).

- 7) Turn ignition switch "OFF", disconnect battery ground cable, and wait 20 seconds. Disconnect passenger side airbag module connector (AB9) to (AB10). <Ref. to 5-5 [W3A2].> Connect test harness C connector (1C) to (AB9).
Connect airbag resistor to test harness C connector (3C).



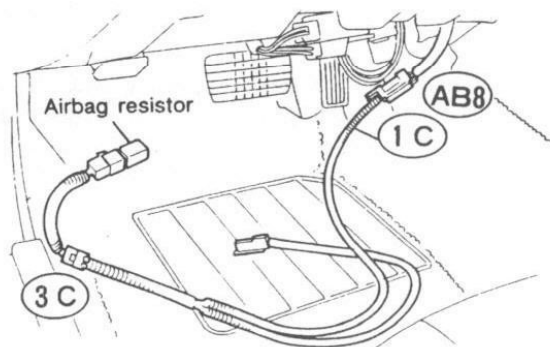
G5M0589

- 8) Reconnect battery ground cable and turn ignition switch "ON", does airbag warning light go out after about 7 seconds and remain "OFF" for more than 30 seconds? See notes 1) and 2). (Refer to end of chart.)

- 9) If "YES", turn ignition switch "OFF", disconnect battery ground cable, and wait 20 seconds. Install a new passenger side airbag module <Ref. to 5-5 [W3B2].> then proceed to step 29).

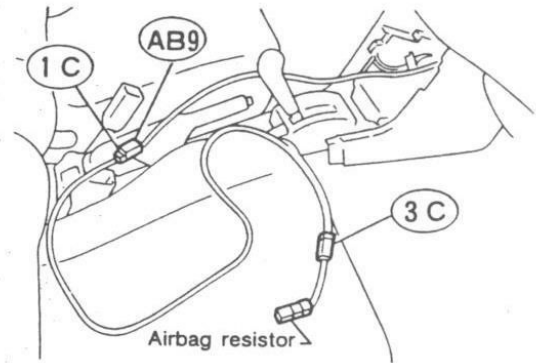
- 10) If "NO" proceed to step 1).

- 11) Remove lower cover panel and connect test harness C connector (1C) to (AB8) <Ref. to 5-4 [W1A0].> with airbag resistor attached to test harness C connector (3C). Turn ignition switch "ON". Does airbag warning light go "OFF" after about 7 seconds and remain off for more than 30 seconds?
See notes 1) and 2). (Refer to end of chart.)
If "YES" proceed to step 5).
If "NO" proceed to step 12).



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- 12) Turn ignition switch "OFF", disconnect battery ground cable, and wait 20 seconds. Connect connector (AB3) to (AB8). Disconnect passenger side airbag module connector (AB9) to (AB10). <Ref. to 5-5 [W3A2].>
Connect test harness C connector (1C) to (AB9). Connect airbag resistor to test harness C connector (3C).

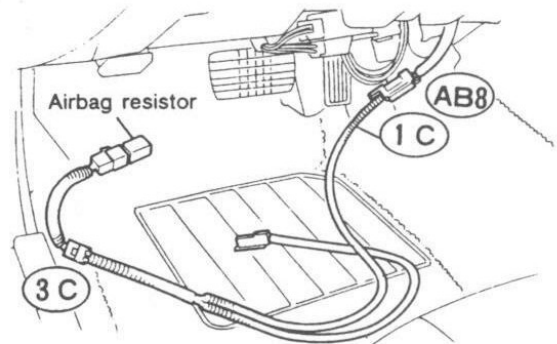


G5M0589

- 13) Reconnect battery ground cable and turn ignition switch "ON". Does airbag warning light go "OFF" after about 7 seconds and remain off for more than 30 seconds? See notes 1) and 2). (Refer to end of chart.)

- 14) If "YES", proceed to step 9).

- 15) If "NO", turn ignition switch "OFF", disconnect battery ground cable, and wait 20 seconds. Disconnect connector (AB3) to (AB8). Connect test harness C connector (1C) to (AB8). Connect airbag resistor to test harness C connector (3C).



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- 16) Reconnect battery ground cable and turn ignition switch "ON". Does airbag warning light go "OFF" after about 7 seconds and remain off for more than 30 seconds? See notes 1) and 2). (Refer to end of chart.)

- 17) If "YES", turn ignition switch "OFF", disconnect battery ground cable and wait 20 seconds. Install a new passenger side airbag module <Ref. to 5-5 [W3B2].> then proceed to step 5).

- 18) If "NO", proceed with diagnostics according to trouble code indicated during on-board diagnostic. Proceed to step 29).

- 19) Reconnect battery ground cable and turn ignition switch "ON", does airbag warning light go out after about 7 seconds and remain "OFF" for more than 30 seconds? See notes 1) and 2). (Refer to end of chart.)

- 20) If "YES", turn ignition switch "OFF", disconnect battery ground cable and wait 20 seconds. Install driver side airbag module <Ref. to 5-5 [W3B1].> and proceed to step 29).

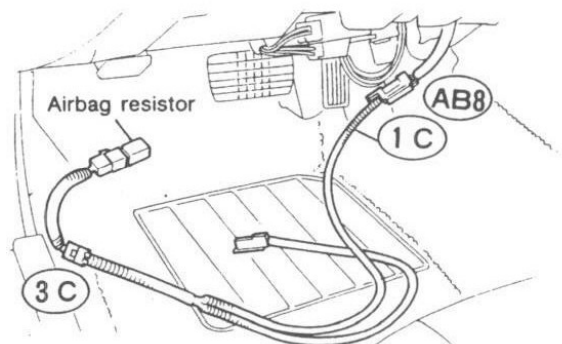
- 21) If "NO", remove lower cover panel and connect test harness C connector (1C) to (AB8) <Ref. to 5-4 [W1A0].> with airbag resistor attached to test harness C connector (3C).

Turn ignition switch "ON". Does airbag warning light go "OFF" after about 7 seconds and remain off for more than 30 seconds?

See notes 1) and 2). (Refer to end of chart.)

If "YES" proceed to step 22).

If "NO" proceed to step 23).

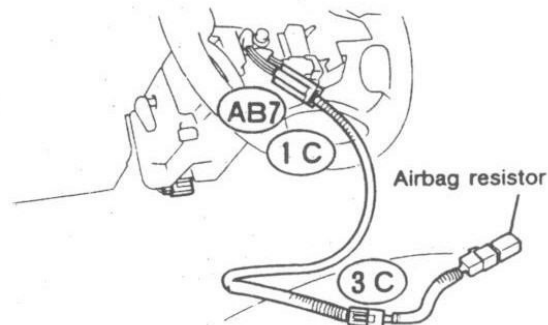


G5M0429

- 22) If "YES", replace combination switch, <Ref. to 5-5 [W6A0].> and proceed to step 26).

- 23) If "NO", proceed with diagnostics and repair according to trouble code indicated, then perform step 24).

- 24) Turn ignition switch "OFF", disconnect battery ground cable, and wait 20 seconds. Remove driver side airbag module and connect test harness C connector (1C) to (AB7) <Ref. to 5-5 [W3A1].> with airbag resistor attached to test harness C connector (3C).



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- 25) Reconnect battery ground cable and turn ignition switch "ON". Does airbag warning light go "OFF" after about 7 seconds and remain off for more than 30 seconds? See notes 1) and 2). (Refer to end of chart.) If "YES", proceed to step 26). If "NO", proceed to step 27).
- 26) Turn ignition switch "OFF", disconnect battery ground cable, and wait 20 seconds. Install driver side airbag module <Ref. to 5-5 [W3B1].> and proceed to step 27).
- 27) Replace combination switch, <Ref. to 5-5 [W6A0].> and proceed to step 26).
- 28) Reconnect battery and turn ignition switch "ON". Does airbag warning light go off after about 7 seconds and remain off for more than 30 seconds? See notes 1) and 2). (Refer to end of chart.) If "YES", proceed to step 29). If "NO", proceed to step 31).
- 29) Perform clear memory procedure. <Ref. to 5-5 [T4C0].>
- 30) If memory cannot be cleared, another trouble code exists. Return to step 1).
- 31) Turn ignition switch "OFF", disconnect battery ground cable, and wait 20 seconds. Replace driver side airbag module. <Ref. to 5-5 [W3A1].> Proceed to step 28).

NOTES:

- Always remember to secure the green double locks before turning the ignition switch "ON".
- In some cases the airbag warning light will go "OFF" after about 7 seconds but will turn "ON" again within 30 seconds. In this case continue diagnostics with the basic diagnostics procedures or trouble code procedures.

5. Diagnostics Chart with Trouble Code

A: TROUBLE CODES

1. LIST OF TROUBLE CODES

Trouble code/ Contents of troubles	Memory function	Contents of diagnosis	Index No.
02	Provided.	1) Front sensor harness is shorted. 2) Airbag main harness is shorted. 3) Airbag module harness (Dr/Ps) is shorted. 4) Roll connector is shorted. 5) Airbag control module is faulty.	< Ref. to 5-5 [T5B0]. >
03	Provided.	1) Front sensor harness circuit is open. 2) Front sensor unit circuit is open.	< Ref. to 5-5 [T5C0]. >
04	Provided.	1) Airbag main harness circuit is shorted. 2) Airbag module harness (Ps) circuit is shorted. 3) Airbag control module is faulty.	< Ref. to 5-5 [T5D0]. >
11	Provided.	1) Airbag control module is faulty. 2) Airbag main harness circuit is open. 3) Fuse No. 8 is blown. 4) Body harness circuit is open.	< Ref. to 5-5 [T5E0]. >
12	Provided.	1) Airbag main harness circuit is open. 2) Airbag module harness (Dr) circuit is open. 3) Roll connector circuit is open. 4) Airbag control module is faulty.	< Ref. to 5-5 [T5F0]. >
13	Provided.	1) Airbag main harness circuit is shorted. 2) Airbag module harness (Dr) is shorted. 3) Roll connector circuit is shorted. 4) Airbag control module is faulty.	< Ref. to 5-5 [T5G0]. >
14	Not provided.	1) (AB9) and (AB10) are not connected properly. 2) (AB2) and (AB7) are not connected properly. 3) (AB3) and (AB8) are not connected properly. 4) (AB4), (AB5) and (AB6) are not connected properly to airbag control module.	< Ref. to 5-5 [T5H0]. >
21	Provided.	Airbag control module is faulty.	< Ref. to 5-5 [T5I0]. >
22	Provided.	1) Airbag main harness circuit is open. 2) Airbag module harness (Ps) circuit is open. 3) Airbag control module is faulty.	< Ref. to 5-5 [T5J0]. >
23	Provided.	1) Airbag main harness is shorted to power supply. 2) Front sensor harness is shorted to power supply. 3) Airbag module harness (Dr/Ps) is damaged. 4) Roll connector is shorted to power supply. 5) Airbag control module is faulty.	< Ref. to 5-5 [T5K0]. >
24	Provided.	1) Airbag main harness circuit is open. 2) Airbag module harness (Dr) circuit is open. 3) Roll connector circuit is open. 4) Airbag control module is faulty. 5) Above diagnosis plus other faulty of airbag moduler parts.	< Ref. to 5-5 [T5L0]. >
31	Not provided.	1) Airbag control module is faulty. 2) Airbag main harness circuit is open. 3) Fuse No. 16 is blown. 4) Body harness circuit is open.	< Ref. to 5-5 [T5M0]. >
32	Provided.	1) Airbag main harness circuit is open. 2) Airbag module harness (Ps) circuit is open. 3) Airbag control module is faulty. 4) Above diagnosis plus other faulty of airbag moduler parts.	< Ref. to 5-5 [T5N0]. >

NOTE: Dr: Driver side Ps: Passenger side

Trouble code/ Contents of troubles	Memory function	Contents of diagnosis	Index No.
Airbag warning light remains on.	Not provided.	1) Airbag warning light is faulty. 2) Airbag control module to airbag warning light harness circuit is shorted or open. 3) Grounding circuit is faulty. 4) Airbag control module is faulty. 5) (AB1) and (B31) are not connected properly.	< Ref. to 5-5 [T5O0]. >
Airbag warning light remains off.	Not provided.	1) Fuse No. 15 is blown. 2) Body harness circuit is open. 3) Airbag warning light is faulty. 4) Airbag main harness is faulty. 5) Airbag control module is faulty.	< Ref. to 5-5 [T5P0]. >
Warning light indicates trouble code, then normal code. (Flashing trouble code.)	Provided.	Airbag system component parts are faulty.	< Ref. to 5-5 [T5Q0]. >
Warning light indicates trouble code, then normal code. (Flashing trouble code.)	Not provided.	1) Airbag connector is faulty. 2) Fuse No. 16 is blown. 3) Airbag main harness is faulty. 4) Airbag control module is faulty. 5) Body harness is faulty.	< Ref. to 5-5 [T5R0]. >

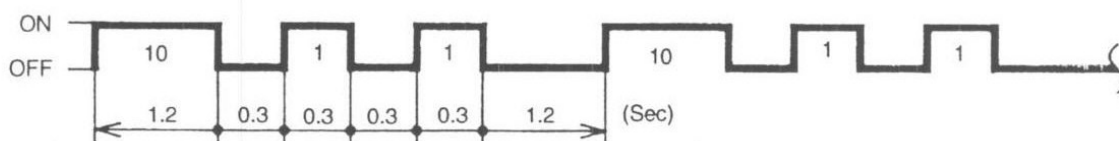
2. HOW TO READ TROUBLE CODES

The AIRBAG warning light flashes a code corresponding to the faulty parts.

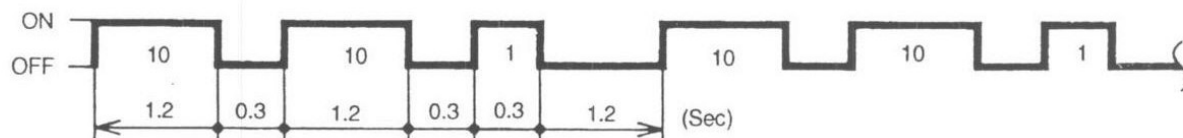
The long segment (1.2 sec on) indicates a "ten", and the short segment (0.3 sec on) indicates a "one".

Example:

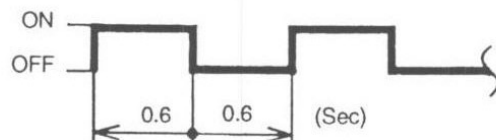
Flashing
code 12:



Flashing
code 21:



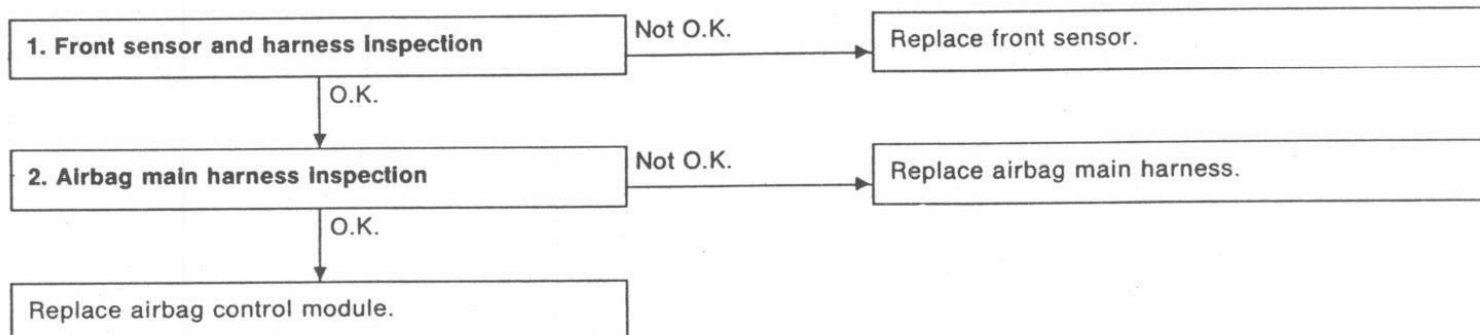
Flashing
normal
code:



B5M0117A

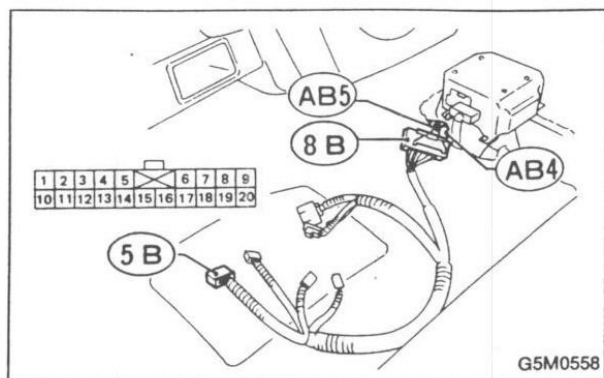
B: TROUBLE CODE 02**DIAGNOSIS:**

- Front sensor harness is shorted.
- Airbag main harness is shorted.
- Airbag module harness (Driver or passenger) is shorted.
- Roll connector is shorted.
- Airbag control module is faulty.

**CAUTION:**

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground terminal and then wait at least 20 seconds.

After 20 seconds elapse, remove instrument panel lower cover, and disconnect (AB3) and (AB8), (AB9) and (AB10).



1. FRONT SENSOR AND HARNESS INSPECTION

- 1) Disconnect connectors (AB4) and (AB5) from airbag control module. <Ref. to 5-5 [W6A0].>
- 2) Connect connectors (AB4) and (AB5) to connector (8B) of test harness B2.
- 3) Measure resistance between connector (5B) terminals indicated.

(5B) Terminals / Specified resistance:

(RH: AB4): No. 17 — No. 18 / 1.4 — 1.6 k Ω

(LH: AB5): No. 15 — No. 16 / 1.4 — 1.6 k Ω

- 4) Measure resistance between each connector (5B) terminal and body.

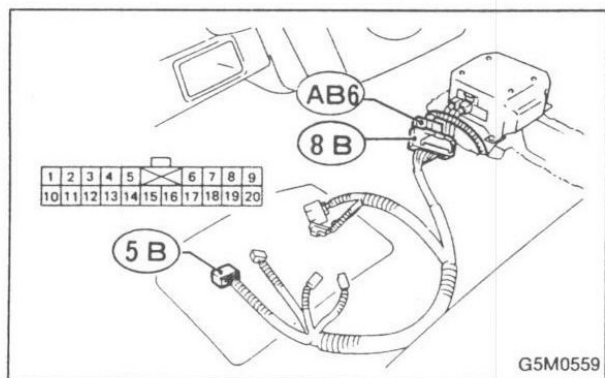
(5B) Terminals / Specified resistance:

(RH: AB4): No. 17 — Body / 200 Ω , or more

No. 18 — Body / 200 Ω , or more

(LH: AB5): No. 15 — Body / 200 Ω , or more

No. 16 — Body / 200 Ω , or more



2. AIRBAG MAIN HARNESS INSPECTION

- 1) Disconnect connector (AB6) from airbag control module <Ref. to 5-5 [W6A0].>, and connect (AB6) to test harness B2 connector (8B).
- 2) Measure resistance between each (5B) terminal and body.

(5B) Terminals / Specified resistance:

No. 1 — Body / 200 Ω , or more

No. 14 — Body / 200 Ω , or more

C: TROUBLE CODE 03**DIAGNOSIS:**

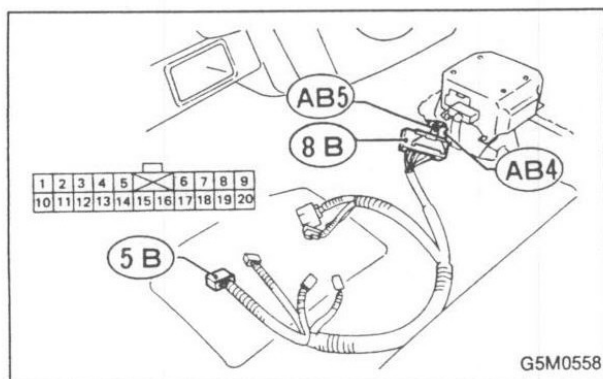
- Front sensor harness circuit is open.
- Front sensor unit circuit is open.

1. Front sensor (LH and RH) Inspection

Identify faulty sensor and replace front sensor.

CAUTION:

Before performing the diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground terminal and then wait at least 20 seconds.

**1. FRONT SENSOR (LH AND RH) INSPECTION**

- 1) Disconnect connectors (AB4) and (AB5) from airbag control module. <Ref. to 5-5 [W6A0].>
- 2) Connect connectors (AB4) and (AB5) to test harness B2 connector (8B).
- 3) Measure resistance between connector (5B) terminals.

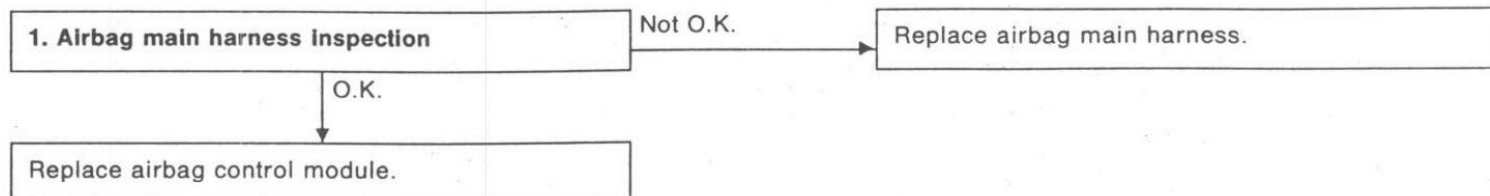
(5B) Terminals / Specified resistance:

(RH: AB4): No. 17 — No. 18 / 1.4 — 1.6 kΩ

(LH: AB5): No. 15 — No. 16 / 1.4 — 1.6 kΩ

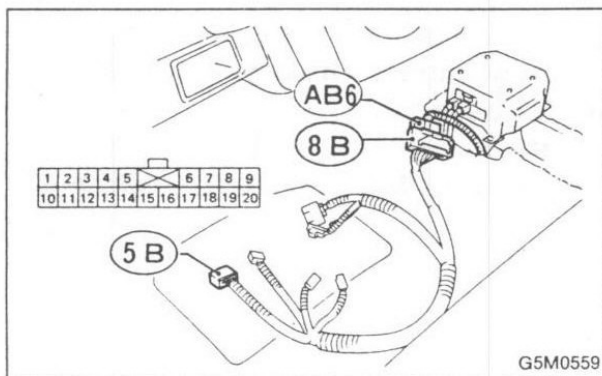
D: TROUBLE CODE 04**DIAGNOSIS:**

- Airbag main harness circuit is shorted.
- Airbag module harness (Passenger) circuit is shorted.
- Airbag control module is faulty.

**CAUTION:**

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds.

After 20 seconds elapse, remove instrument panel lower cover, and disconnect (AB3) and (AB8), (AB9) and (AB10).

**1. AIRBAG MAIN HARNESS INSPECTION**

- 1) Disconnect connector (AB6) from airbag control module <Ref. to 5-5 [W5A0].>, and connect it to test harness B2 connector (8B).
- 2) Measure resistance between test harness B2 connector (5B) terminals.

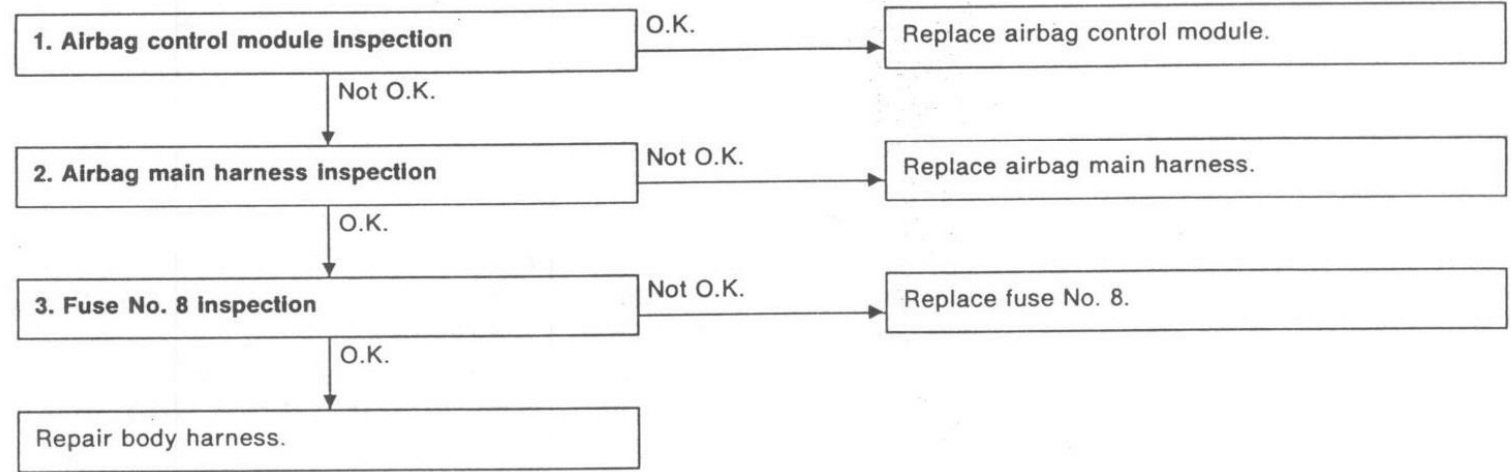
(5B) Terminal / Specified resistance:

No. 6 — No. 7 / 10 kΩ, or more

E: TROUBLE CODE 11

DIAGNOSIS:

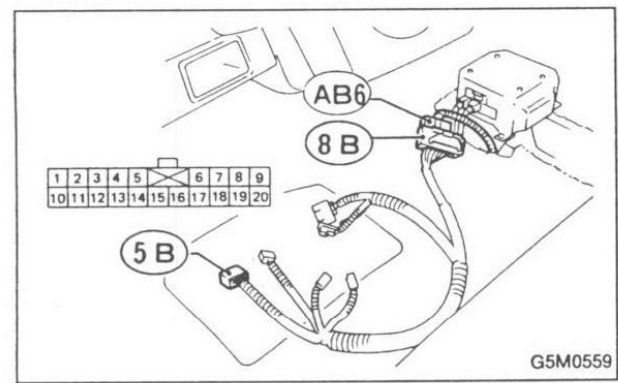
- Airbag control module is faulty.
- Airbag main harness circuit is open.
- Fuse No. 8 is blown.
- Body harness circuit is open.



CAUTION:

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds.

After 20 seconds elapse, remove instrument panel lower cover, and disconnect (AB3) and (AB8), (AB9) and (AB10).



1. AIRBAG CONTROL MODULE INSPECTION

- 1) Disconnect connector (AB6) from airbag control module <Ref. to 5-5 [W6A0].> and connect it to test harness B2 connector (8B).
- 2) Connect battery ground cable and turn ignition switch "ON". (engine off)
- 3) Measure voltage across connector (5B) terminal and body.

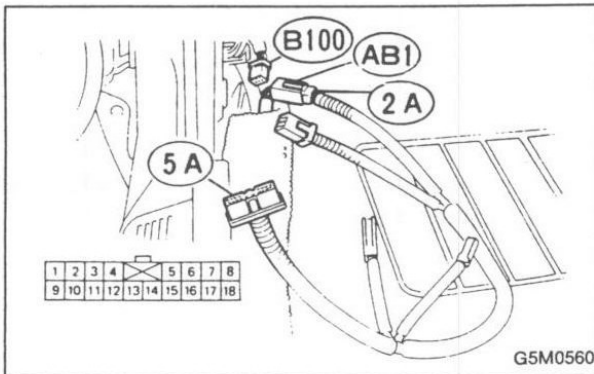
(5B) Terminal / Specified voltage:

No. 2 — Body / 10 V, or more

2. AIRBAG MAIN HARNESS INSPECTION

1) Go to step 2) below after performing diagnostics on airbag system as per flowchart under "1. AIR BAG CONTROL MODULE INSPECTION" previously outlined.

2) Turn ignition switch "OFF", disconnect battery ground terminal and then wait at least 20 seconds.



3) Disconnect bulk harness connector (B100) from connector (AB1) at front lower pillar, and connect connector (AB1) to test harness A connector (2A).

4) Measure resistance between test harness A connector (5A) terminal and test harness B connector (5B) terminal.

Connector & terminal / Specified resistance:

(5A) No. 1 — (5B) No. 2 / 10 Ω, or less

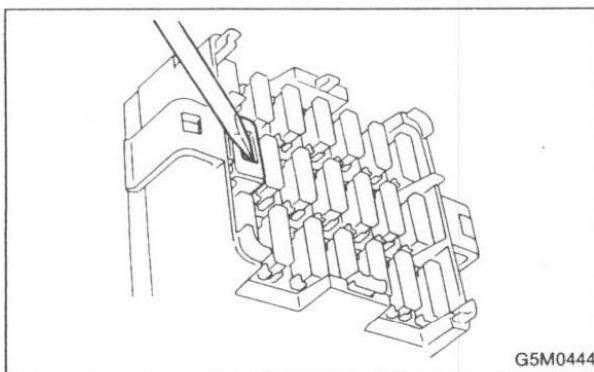
5) Measure resistance between terminals of connectors (5A) and (5B).

(5A) Terminal / Specified resistance:

No. 1 — Body / 10 kΩ, or more

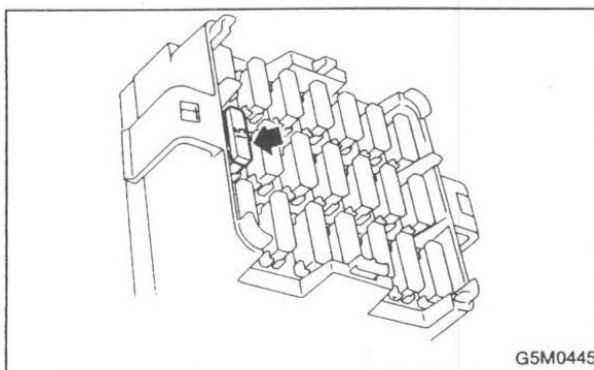
(5B) Terminal / Specified resistance:

No. 2 — Body / 10 kΩ, or more



3. FUSE No. 8 INSPECTION

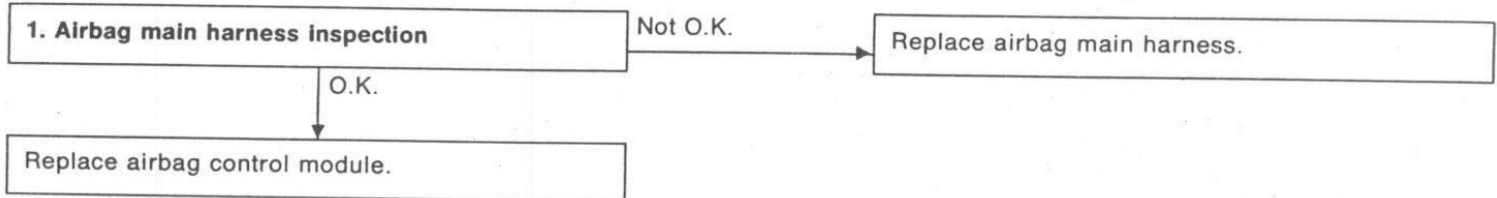
1) Turn ignition switch "OFF", and remove airbag fuse protector.



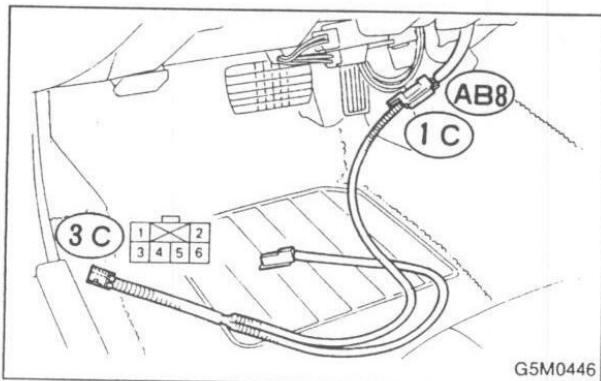
2) Remove and visually check fuse No. 8.

F: TROUBLE CODE 12**DIAGNOSIS:**

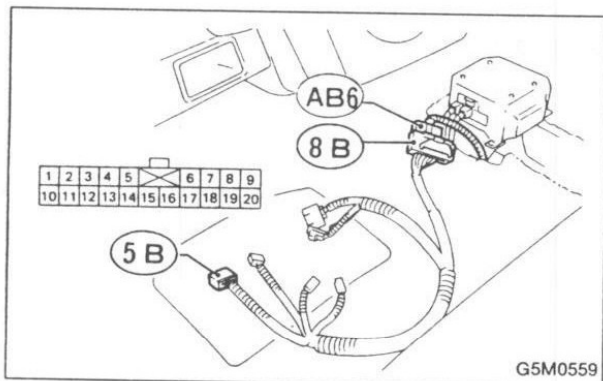
- Airbag main harness circuit is open.
- Airbag module harness (Driver) circuit is open.
- Roll connector circuit is open.
- Airbag control module is faulty.

**CAUTION:**

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds.

**1. AIRBAG MAIN HARNESS INSPECTION**

1) Remove lower cover panel <Ref. to 5-4 [W1A0].>, and connect connector (AB8) below steering column to test harness C connector (1C).



2) Disconnect connector (AB6) <Ref. to 5-5 [W6A0].> from airbag control module, and connect it to test harness B2 connector (8B) terminal.

3) Measure resistance between test harness B2 connector (5B) and test harness C connector (3C) terminals.

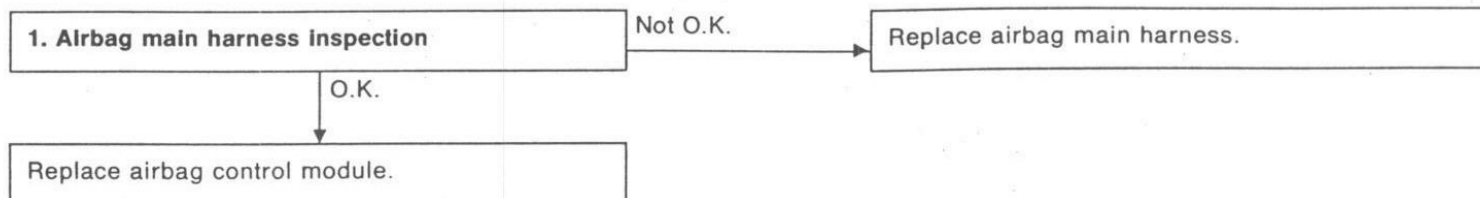
Connector & terminal / Specified resistance:

(5B) No. 14 — (3C) No. 4 / 10 Ω, or less

(5B) No. 1 — (3C) No. 3 / 10 Ω, or less

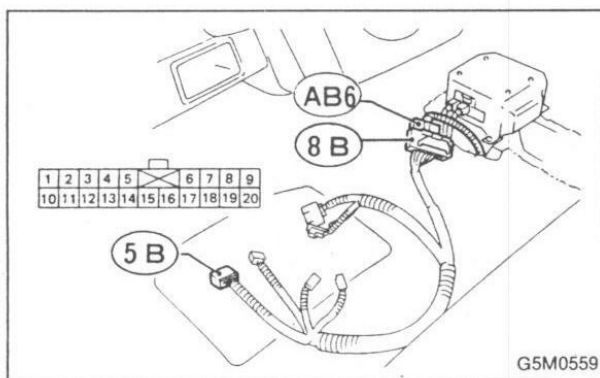
G: TROUBLE CODE 13**DIAGNOSIS:**

- Airbag main harness circuit is shorted.
- Airbag module harness (Driver) is shorted.
- Roll connector circuit is shorted.
- Airbag control module is faulty.

**CAUTION:**

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds.

After 20 seconds elapse, remove instrument panel lower cover, and disconnect (AB3) and (AB8), (AB9) and (AB10).

**1. AIRBAG MAIN HARNESS INSPECTION**

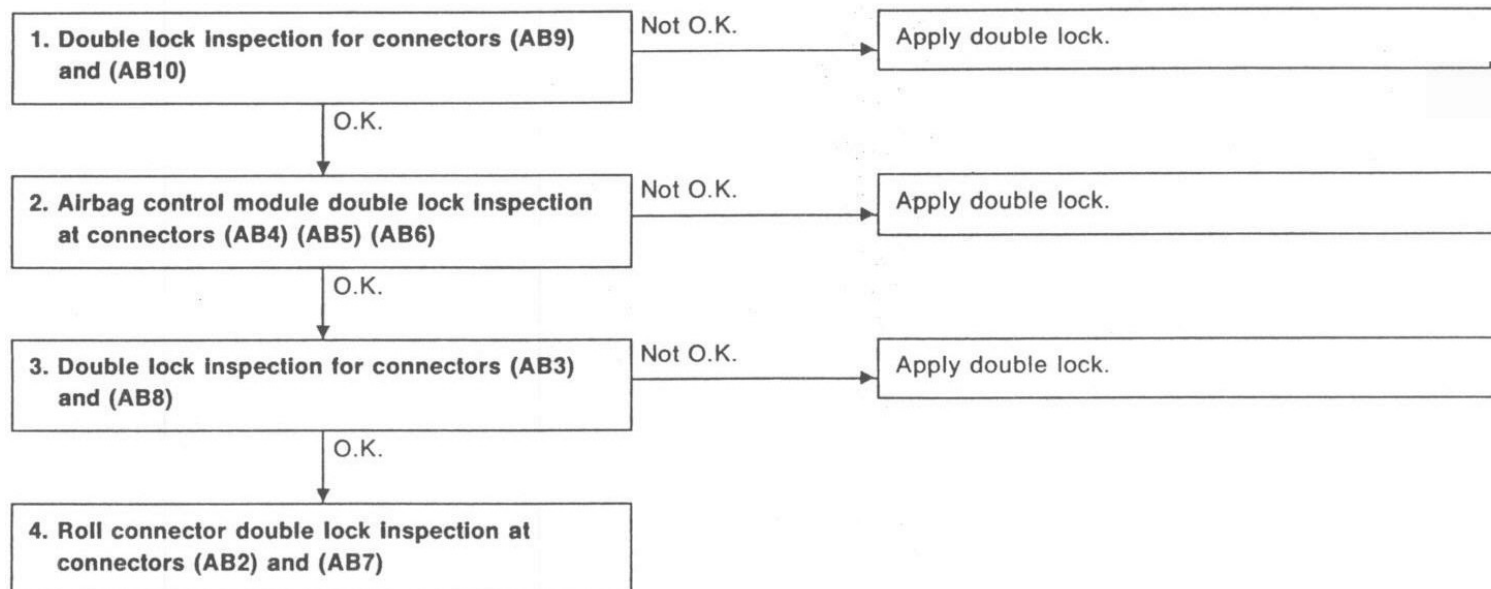
- 1) Disconnect connector (AB6) from airbag control module <Ref. to 5-5 [W6A0].>, and connect it to test harness B2 connector (8B).
- 2) Measure resistance between test harness B2 connector (5B) terminals.

(5B) Terminal / Specified resistance:

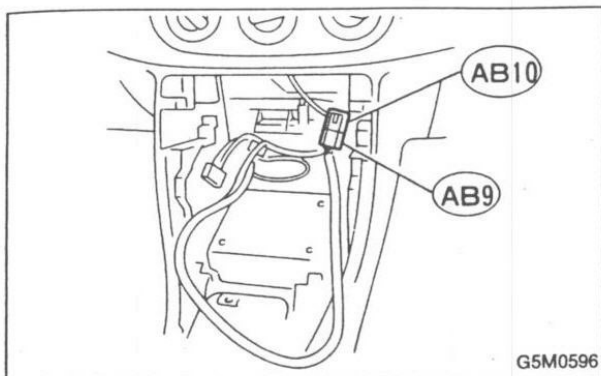
No. 1 — No. 14 / 10 kΩ, or more

H: TROUBLE CODE 14**DIAGNOSIS:**

- (AB9) and (AB10) are not connected properly.
- (AB2) and (AB7) are not connected properly.
- (AB3) and (AB8) are not connected properly.
- (AB4), (AB5) and (AB6) are not connected properly to airbag control module.

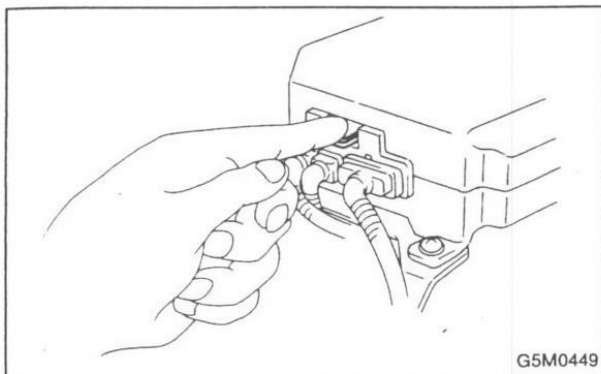
**CAUTION:**

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds.



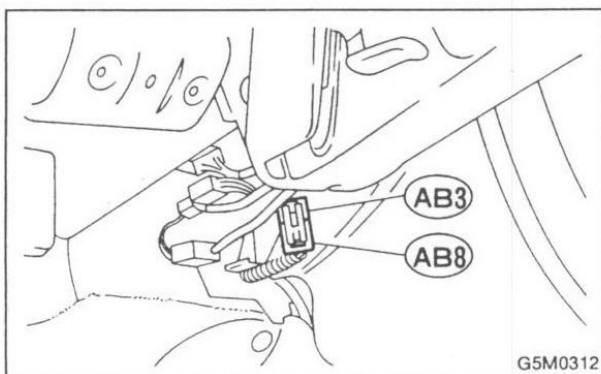
1. DOUBLE LOCK INSPECTION FOR CONNECTORS (AB9) AND (AB10)

- 1) Remove console cover and radio. <Ref. to 5-4 [W1A0].>
- 2) Check double lock of connectors (AB9) and (AB10).



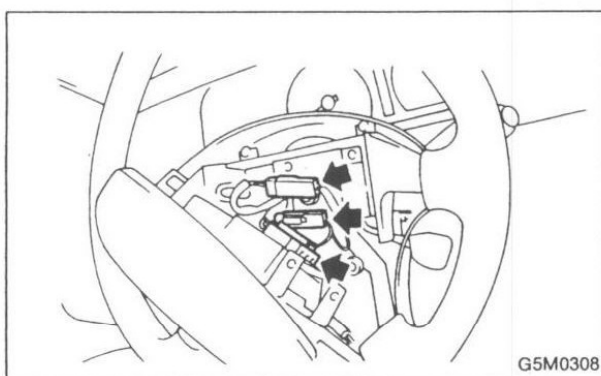
2. AIRBAG CONTROL MODULE DOUBLE LOCK INSPECTION AT CONNECTORS (AB4) (AB5) (AB6)

- 1) Check double lock of connectors (AB4) (AB5) (AB6) connected to airbag control module. <Ref. to 5-5 [W6A0].>



3. DOUBLE LOCK INSPECTION FOR CONNECTORS (AB3) AND (AB8)

- 1) Remove lower cover panel. <Ref. to 5-4 [W1A0].>
- 2) Check double lock of connectors (AB3) and (AB8) below steering column.



4. ROLL CONNECTOR DOUBLE LOCK INSPECTION AT CONNECTORS (AB2) AND (AB7)

- 1) Remove airbag module <Ref. to 5-5 [W3A1].>, and check double lock of connectors (AB2) and (AB7) at roll connector.

I: TROUBLE CODE 21**DIAGNOSIS:**

- Airbag control module is faulty.

Replace airbag control module.

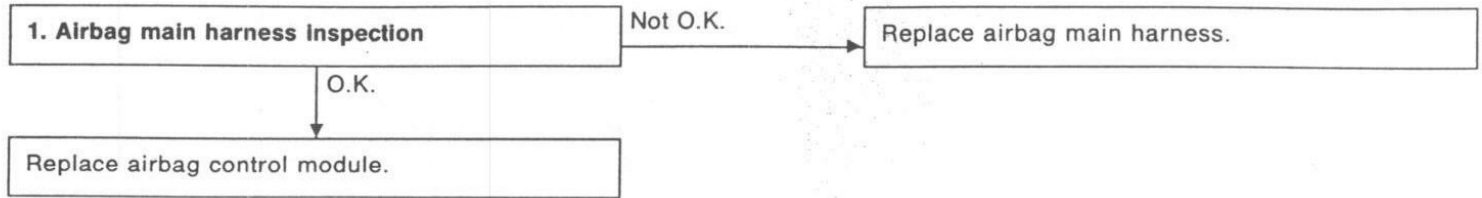
CAUTION:

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground terminal, and then wait at least 20 seconds. < Ref. to 5-5 [W6A0]. >

J: TROUBLE CODE 22

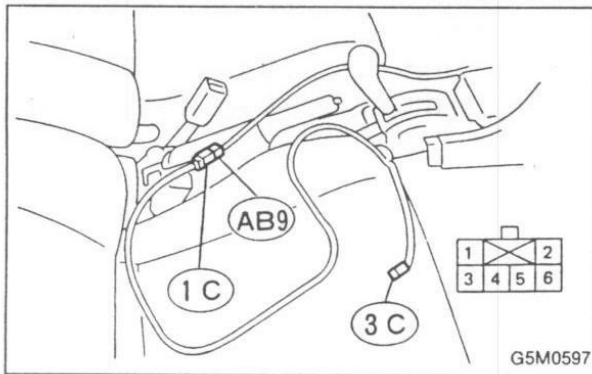
DIAGNOSIS:

- Airbag main harness circuit is open.
- Airbag module harness (Passenger) circuit is open.
- Airbag control module is faulty.



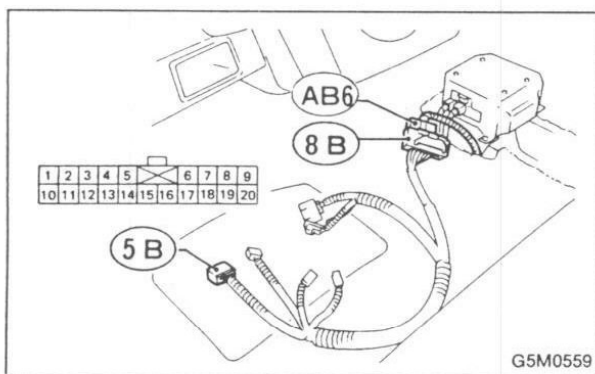
CAUTION:

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds.



1. AIRBAG MAIN HARNESS INSPECTION

1) Remove console cover and radio <Ref. to 5-4 [W1A0].>, disconnect connector (AB9) and (AB10) and connect connector (AB9) to test harness C connector (1C).



2) Disconnect connector (AB6) <Ref. to 5-5 [W6A0].> from airbag control module, and connect it to test harness B2 connector (8B) terminal.

3) Measure resistance between test harness B2 connector (5B) and test harness C connector (3C) terminals.

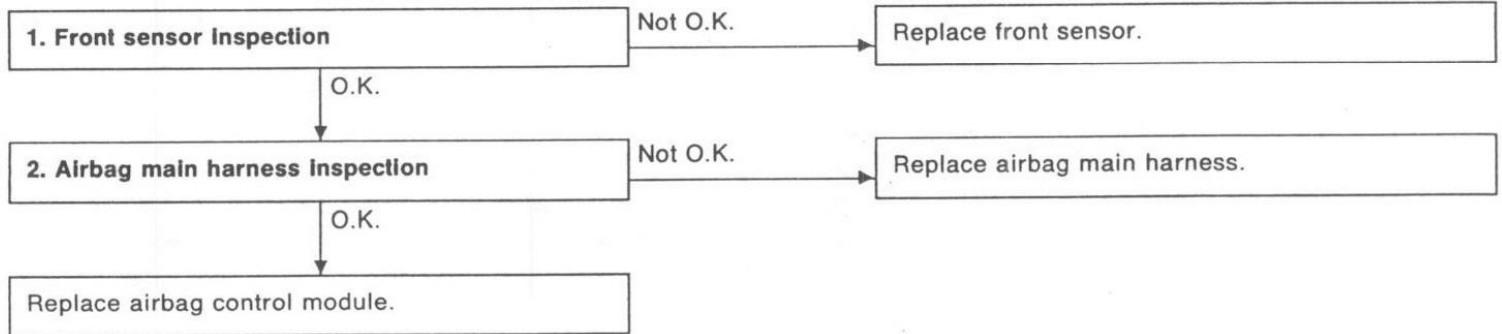
Connector & terminal / Specified resistance:

(5B) No. 6 — (3C) No. 4 / 10 Ω, or less

(5B) No. 7 — (3C) No. 3 / 10 Ω, or less

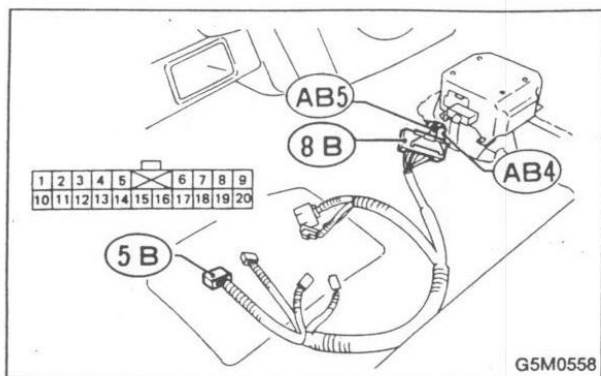
K: TROUBLE CODE 23**DIAGNOSIS:**

- Airbag main harness is shorted to power supply.
- Front sensor harness is shorted to power supply.
- Airbag module harness (Driver or passenger) is damaged.
- Roll connector is shorted to power supply.
- Airbag control module is faulty.

**CAUTION:**

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground terminal and then wait at least 20 seconds.

After 20 seconds elapse, remove instrument panel lower cover, and disconnect (AB3) and (AB8), (AB9) and (AB10).



1. FRONT SENSOR INSPECTION

- 1) Disconnect connectors (AB4) and (AB5) from airbag control module. <Ref. to 5-5 [W6A0].>
- 2) Connect connectors (AB4) and (AB5) to test harness B2 connector (8B).
- 3) Measure resistance between test harness B2 connector (5B) terminals.

(5B) Terminals / Specified resistance:

(RH: AB4): No. 17 — No. 18 / 1.4 — 1.6 k Ω

(LH: AB5): No. 15 — No. 16 / 1.4 — 1.6 k Ω

2. AIRBAG MAIN HARNESS INSPECTION

- 1) Disconnect connector (AB6) from airbag control module <Ref. to 5-5 [W6A0].>, and connect it to test harness B2 connector (8B).
- 2) Connect battery ground cable and turn ignition switch "ON" (engine off).
- 3) Measure voltage across each test harness B2 connector (5B) terminal and body.

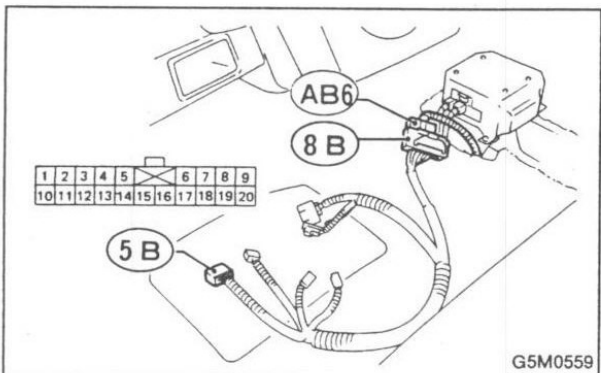
(5B) Terminals / Specified voltage:

No. 1 — Body / 1 V, or less

No. 6 — Body / 1 V, or less

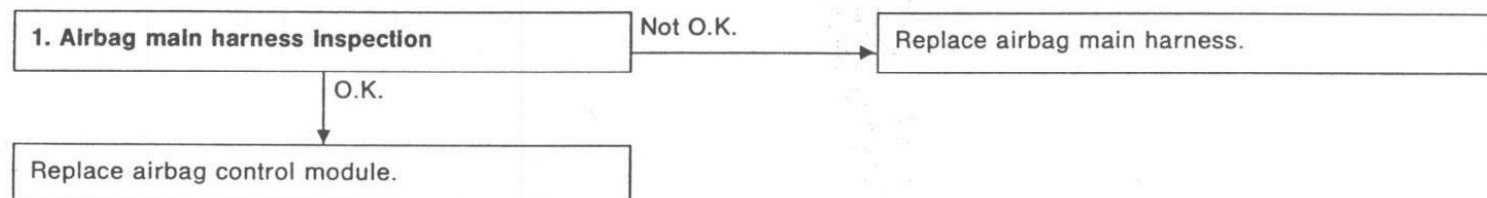
No. 7 — Body / 1 V, or less

No. 14 — Body / 1 V, or less

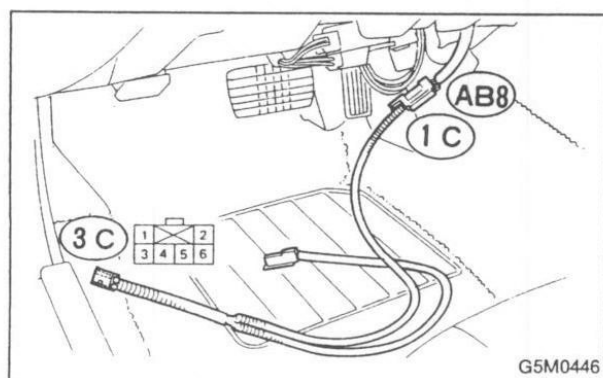


L: TROUBLE CODE 24**DIAGNOSIS:**

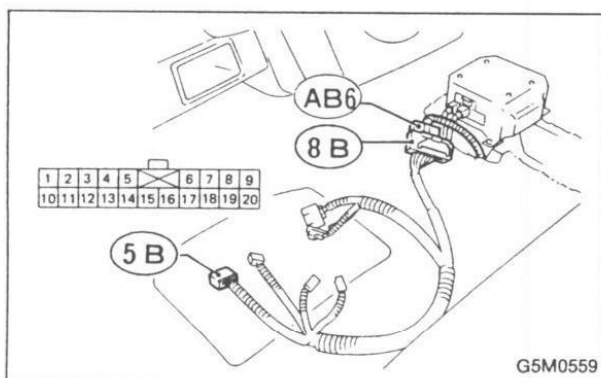
- Airbag main harness circuit is open.
- Airbag module harness (Driver) circuit is open.
- Roll connector circuit is open.
- Airbag control module is faulty.
- Above diagnosis plus other faulty of airbag moduler parts

**CAUTION:**

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds.

**1. AIRBAG MAIN HARNESS INSPECTION**

1) Remove lower cover panel <Ref. to 5-4 [W1A0].>, and connect connector (AB8) below steering column to test harness C connector (1C).



2) Disconnect connector (AB6) <Ref. to 5-5 [W6A0].> from airbag control module, and connect it to test harness B2 connector (8B) terminal.

3) Measure resistance between test harness B2 connector (5B) and test harness C connector (3C) terminals.

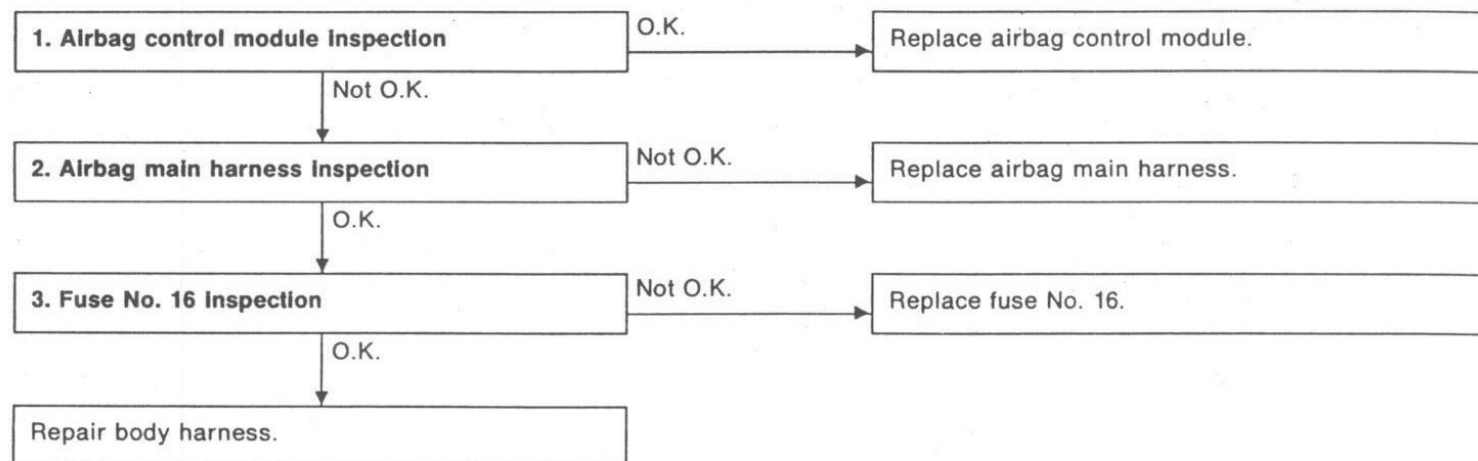
Connector & terminal / Specified resistance:

(5B) No. 14 — (3C) No. 4 / 10 Ω, or less

(5B) No. 1 — (3C) No. 3 / 10 Ω, or less

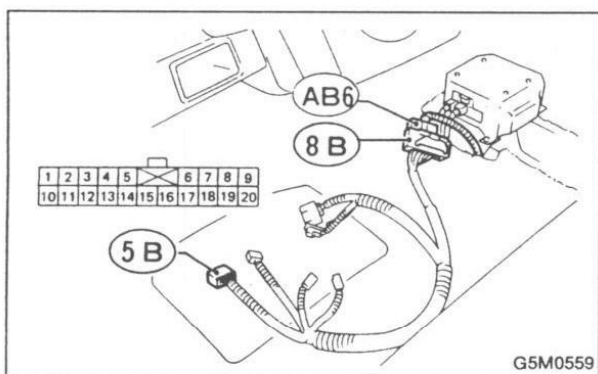
M: TROUBLE CODE 31**DIAGNOSIS:**

- Airbag control module is faulty.
- Airbag main harness circuit is open.
- Fuse No. 16 is blown.
- Body harness circuit is open.

**CAUTION:**

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds.

After 20 seconds elapse, remove instrument panel lower cover, and disconnect (AB3) and (AB8), (AB9) and (AB10).

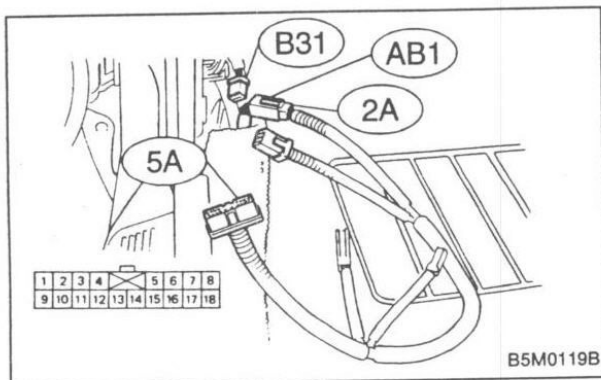
**1. AIRBAG CONTROL MODULE INSPECTION**

- 1) Disconnect connector (AB6) from airbag control module <Ref. to 5-5 [W6A0].>, and connect it to test harness B2 connector (8B).
- 2) Connect battery ground cable and turn ignition switch "ON" (engine off).
- 3) Measure voltage across connector (5B) terminal and body.

(5B) Terminal / Specified voltage:
No. 5 — Body / 10 V, or more

2. AIRBAG MAIN HARNESS INSPECTION

- 1) Go to step 2) below after performing diagnostics on airbag system as per flowchart under "1. AIRBAG CONTROL MODULE INSPECTION" previously outlined.
- 2) Turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds.



- 3) Disconnect connector (AB1) from bulk harness connector (B31) at front lower pillar, and connect connector (AB1) to test harness A connector (2A).
- 4) Measure resistance between test harness A connector (5A) and test harness B2 connector (5B) terminals.

Connector & terminal / Specified resistance:

(5A) No. 9 — (5B) No. 5 / 10 Ω, or less

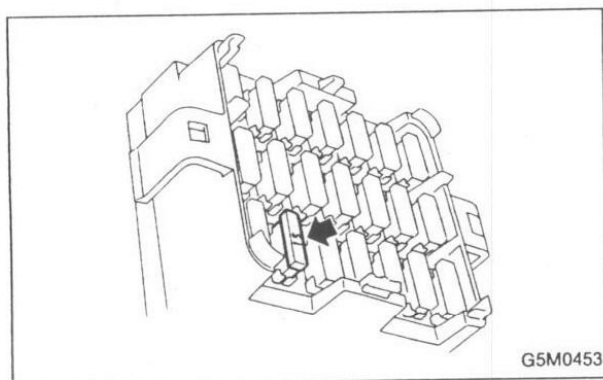
- 5) Measure resistance between each terminal of connectors (5A) and (5B) and body.

(5A) Terminal / Specified resistance:

No. 9 — Body / 10 kΩ, or more

(5B) Terminal / Specified resistance:

No. 5 — Body / 10 kΩ, or more

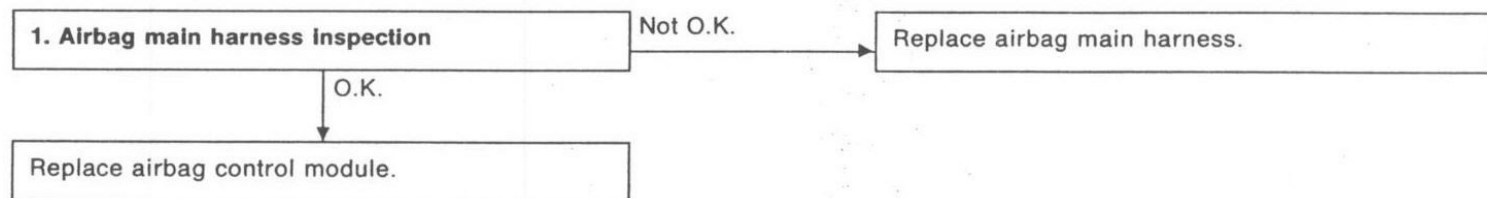


3. FUSE No. 16 INSPECTION

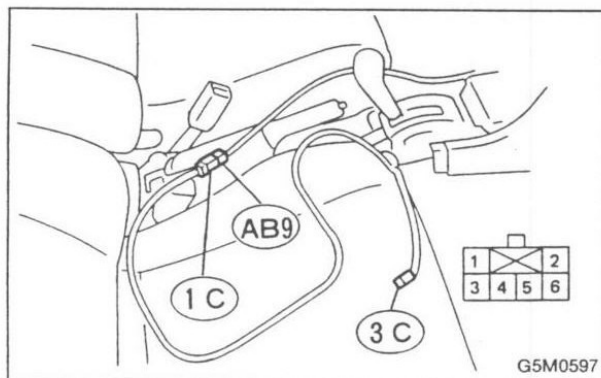
Make sure ignition switch is turned "OFF", then remove and visually check fuse No. 16.

N: TROUBLE CODE 32**DIAGNOSIS:**

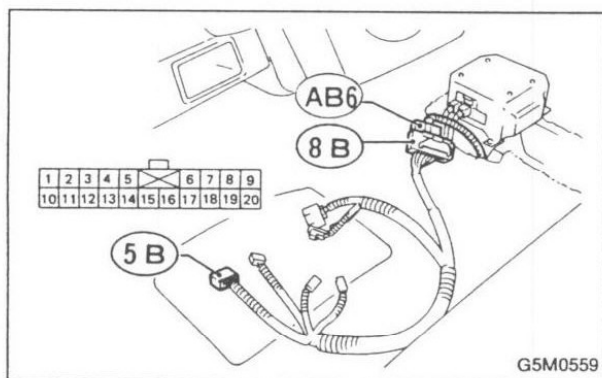
- Airbag main harness circuit is open.
- Airbag module harness (Passenger) circuit is open.
- Airbag control module is faulty.
- Above diagnosis plus other faulty of airbag modular parts

**CAUTION:**

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds.

**1. AIRBAG MAIN HARNESS INSPECTION**

1) Remove console cover and radio <Ref. to 5-4 [W1A0].>, disconnect connector (AB9) and (AB10) and connect connector (AB9) to test harness C connector (1C).



2) Disconnect connector (AB6) <Ref. to 5-5 [W6A0].> from airbag control module, and connect it to test harness B2 connector (8B) terminal.

3) Measure resistance between test harness B2 connector (5B) and test harness C connector (3C) terminals.

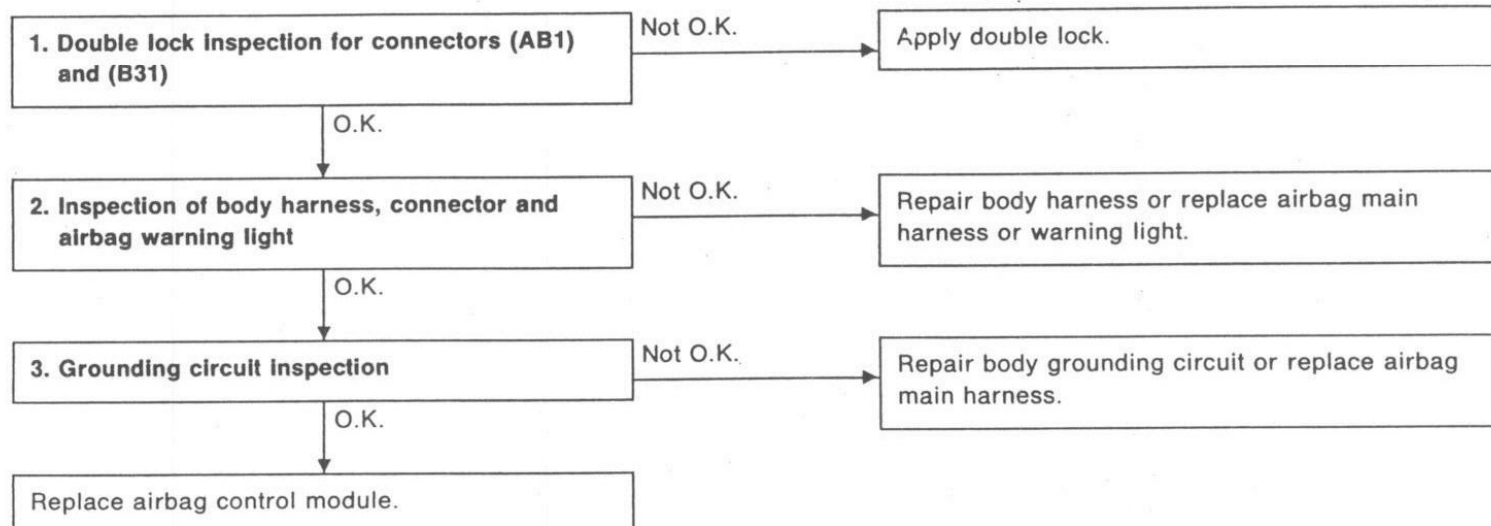
Connector & terminal / Specified resistance:

(5B) No. 6 — (3C) No. 4 / 10 Ω, or less

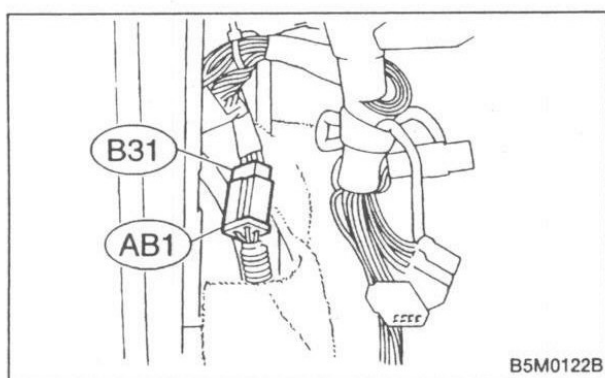
(5B) No. 7 — (3C) No. 3 / 10 Ω, or less

O: AIRBAG WARNING LIGHT REMAINS ON.**DIAGNOSIS:**

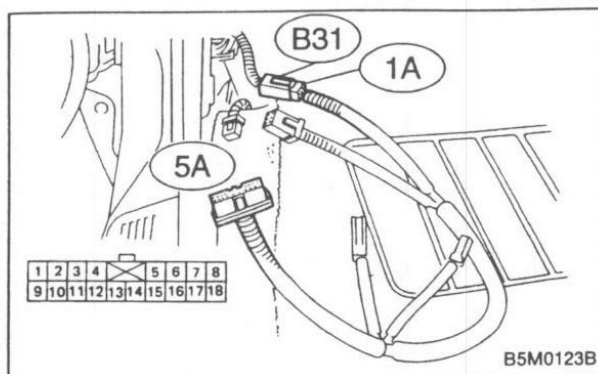
- Airbag warning light is faulty.
- Airbag control module to airbag warning light harness circuit is shorted or open.
- Grounding circuit is faulty.
- Airbag control module is faulty.
- (AB1) and (B31) are not connected properly.

**CAUTION:**

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds.

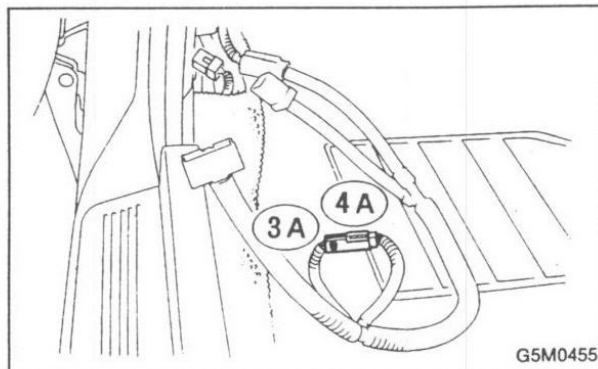
**1. DOUBLE LOCK INSPECTION FOR CONNECTORS (AB1) AND (B31)**

- 1) Remove front pillar lower trim (Driver side).
- 2) Check double lock of connectors (AB1) and (B31).

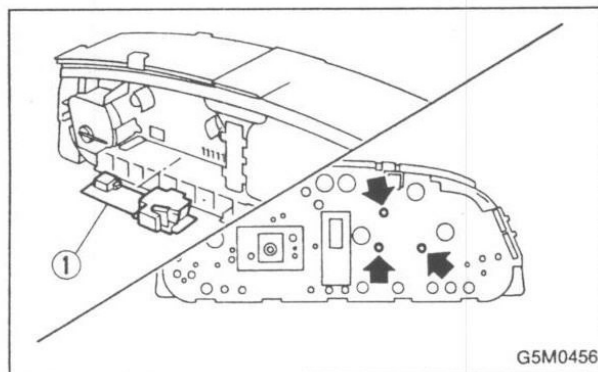


2. INSPECTION OF BODY HARNESS, CONNECTOR AND AIRBAG WARNING LIGHT

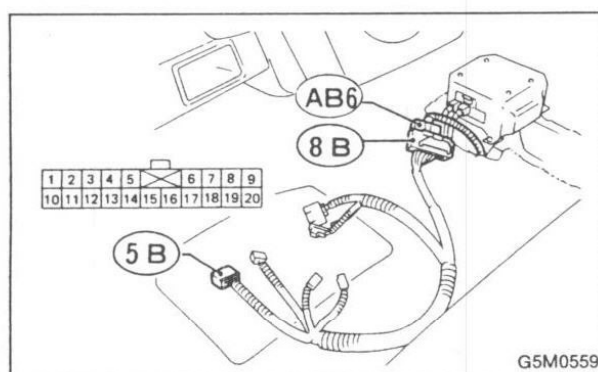
1) Turn ignition switch "OFF" and connect connector (B31) to test connector A connector (1A).



2) Connect battery ground cable and turn ignition switch "ON", (engine off) and connect connectors (3A) and (4A) to check if warning light goes out. If it does, go to step 4) below. If it remains on, check body harness and repair if necessary.

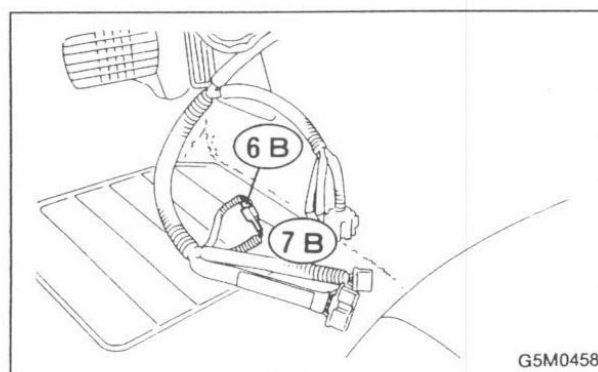


3) If body harness is satisfactory, replace airbag warning light unit ①. After problem has been eliminated, disconnect connectors (3A) and (4A).

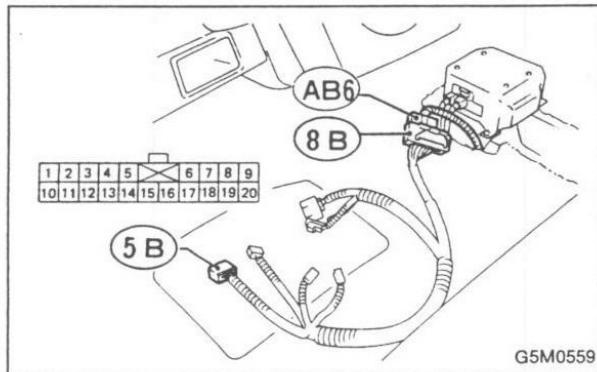
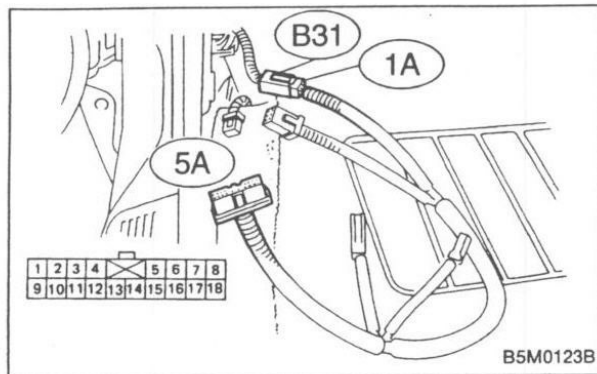


4) Turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds, and re-connect connectors (AB1) and (B31).

5) Remove instrument panel lower cover and disconnect (AB3) with (AB8), then disconnect connector (AB6) from airbag control module, <Ref. to 5-5 [W6A0].> and connect it to test harness B2 connector (8B).



6) Connect battery ground cable and turn ignition switch "ON," (engine off) and connect connectors (6B) and (7B) to check if warning light goes out. If it does, go to "3. GROUNDING CIRCUIT INSPECTION". If it remains on, replace airbag main harness. After problem has been eliminated, disconnect connectors (6B) and (7B).



3. GROUNDING CIRCUIT INSPECTION

1) Turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds. Disconnect connector (AB1) from bulk harness connector (B31), and connect connector (B31) to test harness A connector (1A). Measure resistance between connector (5A) terminal and body.

(5A) Terminal / Specified resistance:

No. 17 — Body / 10 Ω, or less

No. 18 — Body / 10 Ω, or less

If resistance is greater than 10 ohms, body grounding circuit is faulty and should be repaired. If resistance is less than 10 ohms, go to step 2) below.

2) Connect connectors (AB1) and (B31). Disconnect connector (AB6) from airbag control module <Ref. to 5-5 [W6A0].>, and connect it to test harness B2 connector (8B).

3) Measure resistance between each test harness B2 connector (5B) terminal and body.

(5B) Terminal / Specified resistance:

No. 11 — Body / 10 Ω, or less

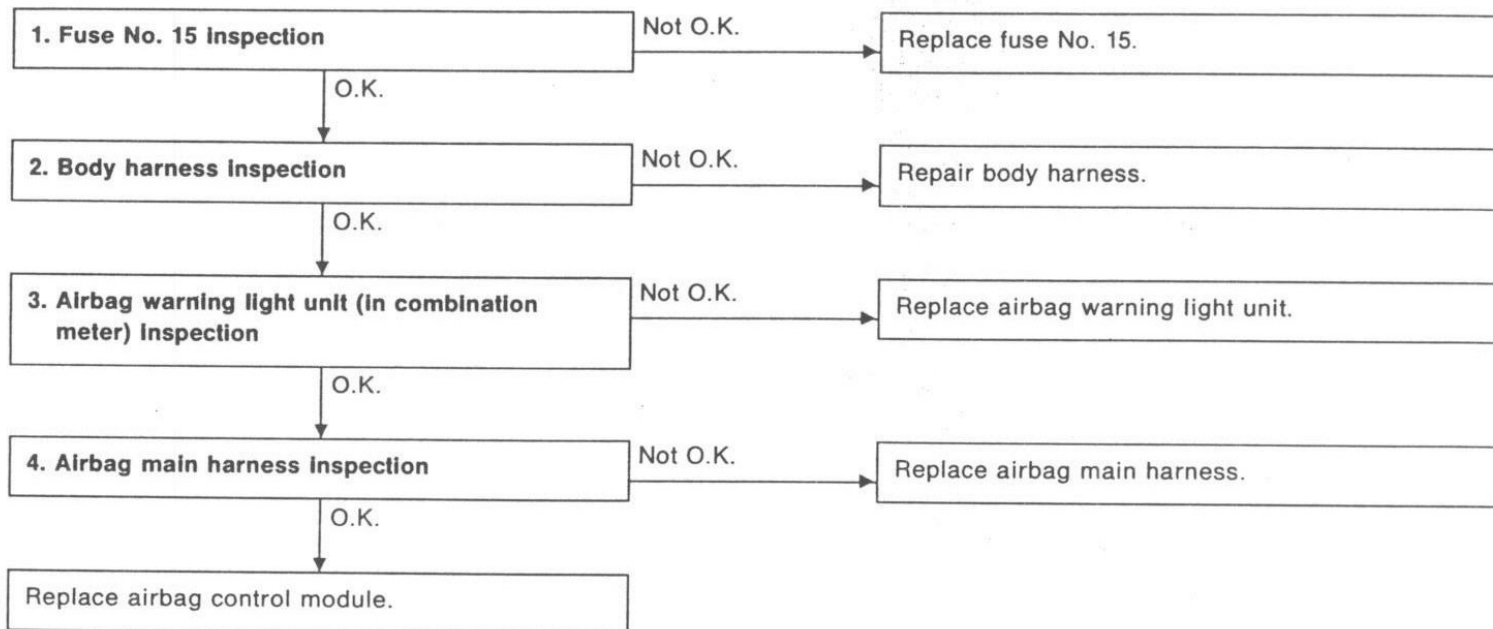
No. 12 — Body / 10 Ω, or less

If resistance is greater than 10 ohms, replace airbag main harness.

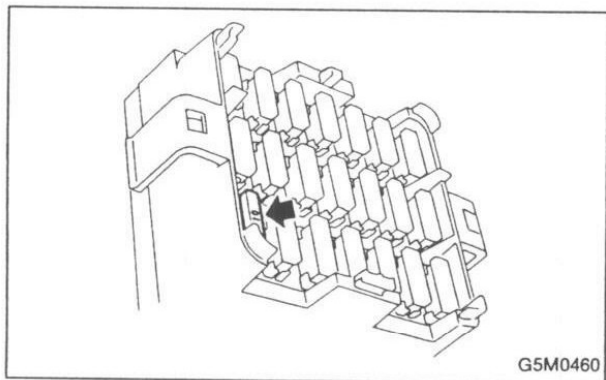
If resistance is less than 10 ohms, replace airbag control module.

P: AIRBAG WARNING LIGHT REMAINS OFF.**DIAGNOSIS:**

- Fuse No. 15 is blown.
- Body harness circuit is open.
- Airbag warning light is faulty.
- Airbag main harness is faulty.
- Airbag control module is faulty.

**CAUTION:**

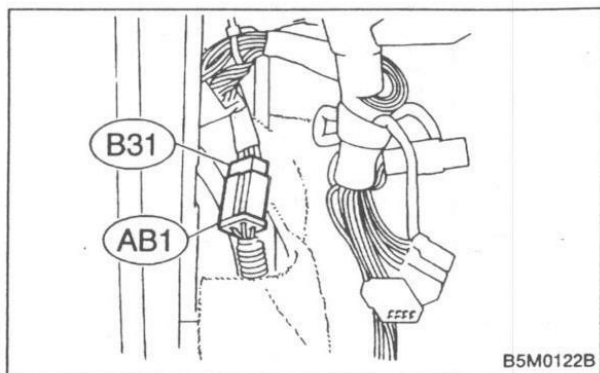
Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground terminal, and then wait at least 20 seconds.

**1. FUSE No. 15 INSPECTION**

- 1) Remove and visually check fuse No. 15.
- 2) If fuse is blown, replace it with a new one. After connecting battery cable and turning ignition switch "ON", if it blows again, proceed to "2. BODY HARNESS INSPECTION".

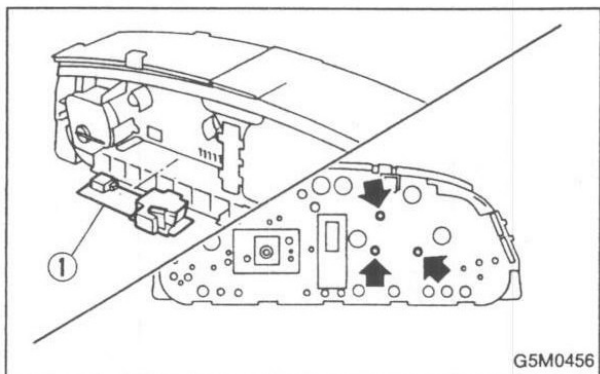
2. BODY HARNESS INSPECTION

- 1) Turn ignition switch "ON" (engine off) to make sure other warning lights (in combination meter) illuminate. If they do not, check body harness.

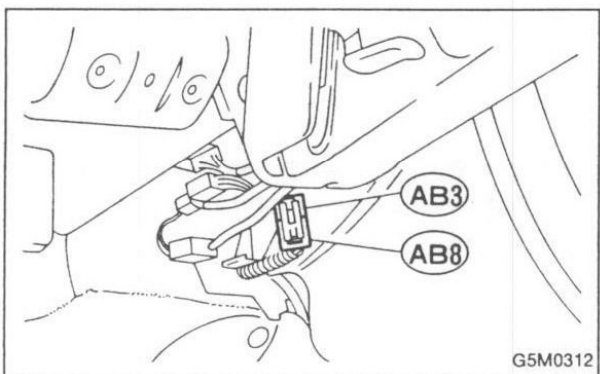


3. AIRBAG WARNING LIGHT UNIT (IN COMBINATION METER) INSPECTION

- 1) Turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds.
- 2) Disconnect bulk harness connector (B31) from connector (AB1).

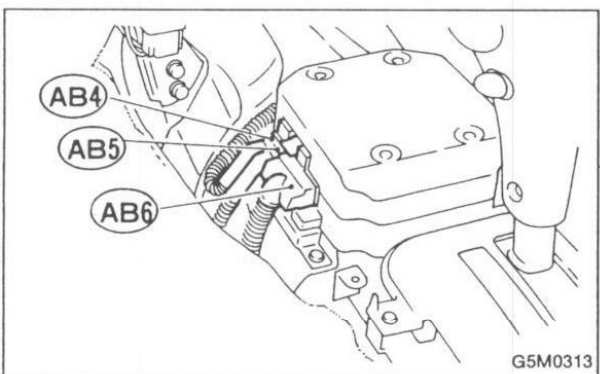


- 3) Connect battery ground cable and turn ignition switch "ON" (engine off) to make sure airbag warning light illuminates.
- If it does not, replace airbag warning light unit ①.



4. AIRBAG MAIN HARNESS INSPECTION

- 1) Turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds.
- 2) Connect bulk harness connector (B31) and connector (AB1).
- 3) Disconnect connectors (AB3) and (AB8) below steering column.

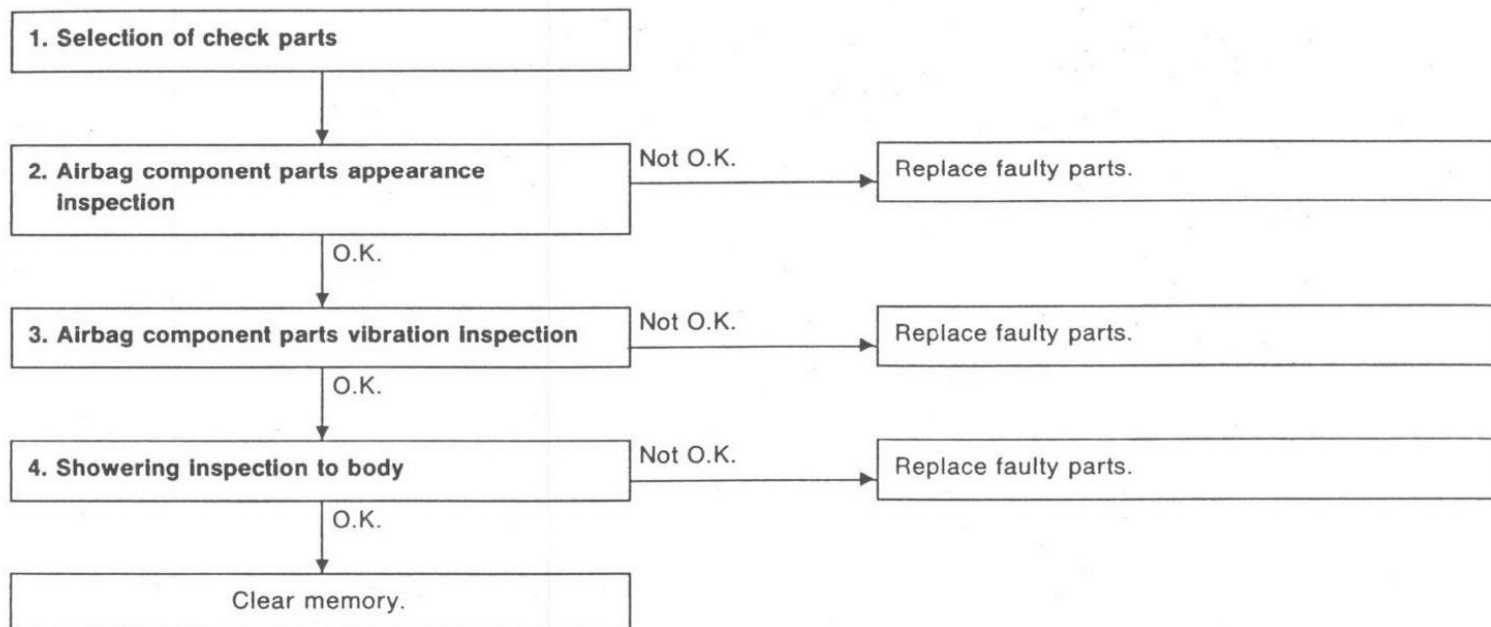


- 4) Disconnect connector (AB6) from airbag control module. <Ref. to 5-5 [W6A0].>
- 5) Connect battery ground cable and turn ignition switch "ON" to make sure airbag warning light illuminates.

Q: WARNING LIGHT INDICATES TROUBLE CODE, THEN NORMAL CODE.
— FLASHING TROUBLE CODE. —

DIAGNOSIS:

- Airbag system component parts are faulty.



CAUTION:

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground cable, and then wait at least 20 seconds.

1. SELECTION OF CHECK PARTS

1) Conduct on-board diagnostic and call up trouble codes stored in memory. <Ref. to [T4B0].>

2) Select trouble code required to check airbag component parts from those listed in table and reproduce symptom.

Trouble codes	Check parts	Index No.
02	● Front sensor (RH, LH) ● Airbag main harness ● Airbag module (Driver/Passenger) ● Roll connector ● Airbag control module	<Ref. to 5-5 [W400].> <Ref. to 5-5 [W500].> <Ref. to 5-5 [W300].> <Ref. to 5-5 [W700].> <Ref. to 5-5 [W600].>
03	● Front sensor (RH, LH) ● Airbag control module	<Ref. to 5-5 [W400].> <Ref. to 5-5 [W600].>
04	● Airbag module (Passenger) ● Airbag main harness ● Airbag control module	<Ref. to 5-5 [W300].> <Ref. to 5-5 [W500].> <Ref. to 5-5 [W600].>
11	● Fuse No. 8 ● Airbag main harness ● Airbag control module ● Body harness	<Ref. to 5-5 [T5E3].> <Ref. to 5-5 [W500].> <Ref. to 5-5 [W600].> —
12	● Roll connector ● Airbag module (Driver) ● Airbag main harness ● Airbag control module	<Ref. to 5-5 [W700].> <Ref. to 5-5 [W300].> <Ref. to 5-5 [W500].> <Ref. to 5-5 [W600].>
13	● Airbag module (Driver) ● Roll connector ● Airbag main harness ● Airbag control module	<Ref. to 5-5 [W300].> <Ref. to 5-5 [W700].> <Ref. to 5-5 [W500].> <Ref. to 5-5 [W600].>
21	● Airbag control module	<Ref. to 5-5 [W600].>
22	● Airbag module (Passenger) ● Airbag main harness ● Airbag control module	<Ref. to 5-5 [W300].> <Ref. to 5-5 [W500].> <Ref. to 5-5 [W600].>
23	● Airbag main harness ● Roll connector ● Airbag module (Driver/Passenger) ● Front sensor (RH, LH) ● Airbag control module	<Ref. to 5-5 [W500].> <Ref. to 5-5 [W700].> <Ref. to 5-5 [W300].> <Ref. to 5-5 [W400].> <Ref. to 5-5 [W600].>
24	● Airbag module (Driver) ● Roll connector ● Airbag main harness ● Airbag control module	<Ref. to 5-5 [W300].> <Ref. to 5-5 [W700].> <Ref. to 5-5 [W500].> <Ref. to 5-5 [W600].>
32	● Airbag module (Passenger) ● Roll connector ● Airbag main harness ● Airbag control module	<Ref. to 5-5 [W300].> <Ref. to 5-5 [W700].> <Ref. to 5-5 [W500].> <Ref. to 5-5 [W600].>

2. AIRBAG COMPONENT PARTS APPEARANCE INSPECTION

1) Conduct appearance inspection on parts selected.

NOTE:

Also check connector terminals, wiring harness, case, etc. for damage.

3. AIRBAG COMPONENT PARTS VIBRATION INSPECTION

1) Gently shake check parts (to determine faults.).

2) To check airbag module or roll connector, turn and tilt steering wheel.

CAUTION:

Do not shake or vibrate airbag control module and front sensor at the same time as erroneous operation may result.



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4. SHOWERING INSPECTION TO BODY

1) Spray water on vehicle body.

CAUTION:

Do not directly spray water on airbag components.

2) Check passenger compartment for traces of leaking.

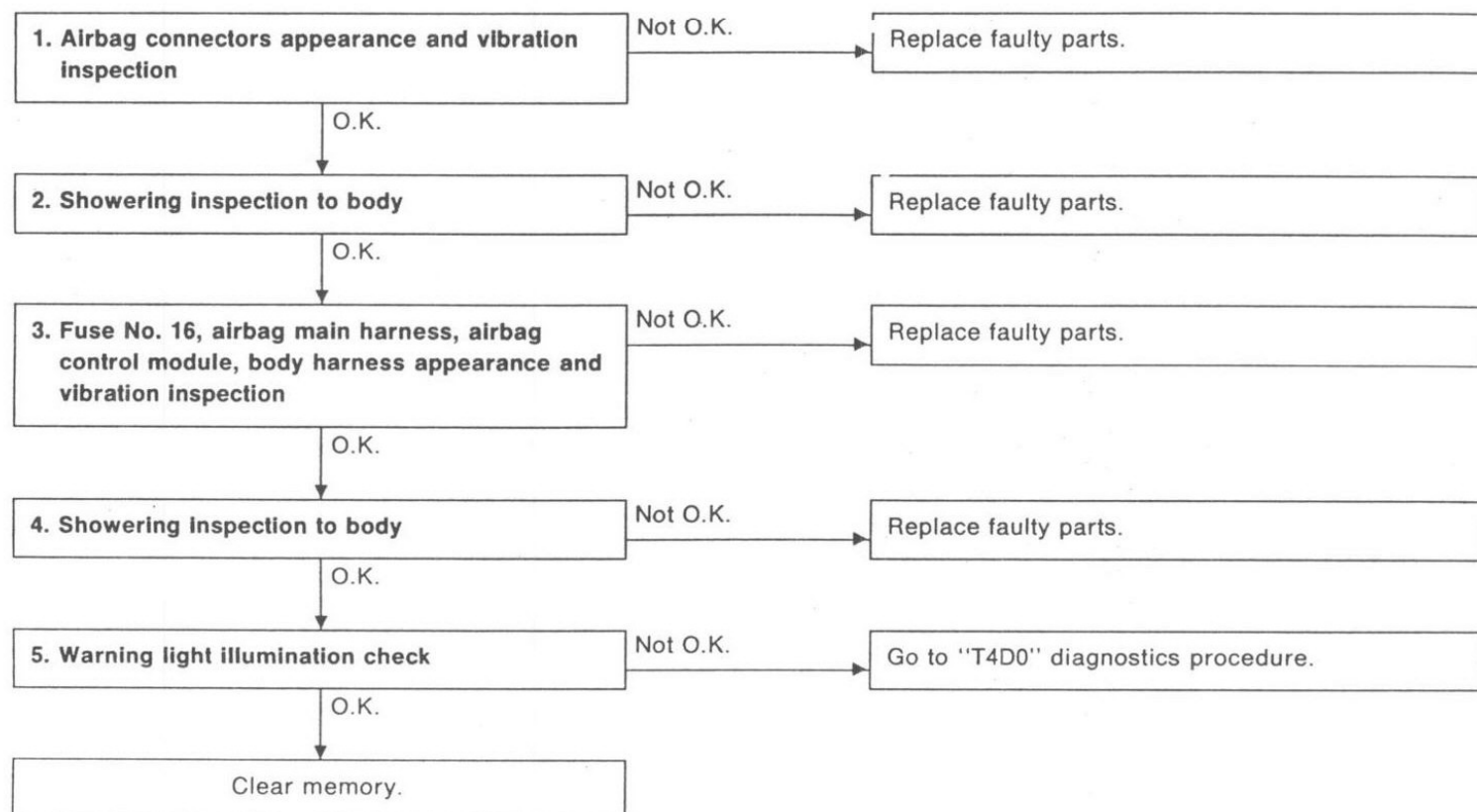
NOTE:

Also check wiring harnesses as water may leak along them and get airbag component parts wet.

R: WARNING LIGHT INDICATES TROUBLE CODE, THEN NORMAL CODE.
— FLASHING NORMAL CODE. —

DIAGNOSIS:

- Airbag connector is faulty.
- Fuse No. 16 is blown.
- Airbag main harness is faulty.
- Airbag control module is faulty.
- Body harness is faulty.

**CAUTION:**

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground cable, and then wait at least 20 seconds.

1. AIRBAG CONNECTORS APPEARANCE AND VIBRATION INSPECTION

1) Conduct appearance inspection on airbag connectors (AB2 through AB8). <Ref. to [T100].>

NOTE:

Check terminals, case and wiring harnesses for damage.

2) Conduct vibration inspection on airbag connectors (AB2 through AB8). <Ref. to [T100].>

NOTE:

Gently shake each airbag connector.

**2. SHOWERING INSPECTION TO BODY**

- 1) Spray water on vehicle body.

CAUTION:

Do not directly spray water on airbag components.

- 2) Check passenger compartment for traces of leaking.

NOTE:

If leaks are noted, also check wiring harnesses as water may leak along them and wet airbag connectors.

3. FUSE No. 16, AIRBAG MAIN HARNESS, AIRBAG CONTROL MODULE, BODY HARNESS APPEARANCE AND VIBRATION INSPECTION

- 1) Conduct appearance inspection on fuse No. 16 <Ref. to [T5M3].>, airbag main harness <Ref. to [W5A0].>, airbag control module <Ref. to [W6A0].> and body harness.

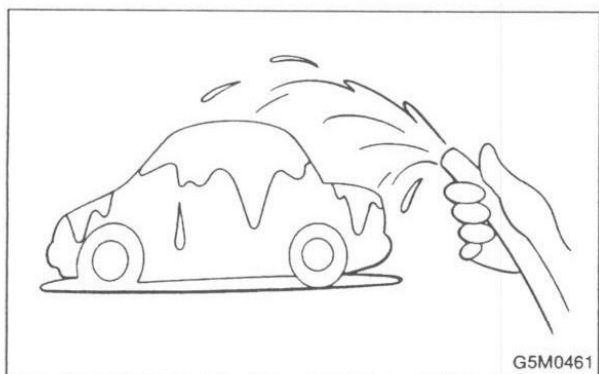
NOTE:

Also check connectors, terminals, wiring harness and case for damage.

- 2) Conduct vibration inspection on fuse No. 16, airbag main harness, airbag control module and body harness.

NOTE:

Gently shake each part.

**4. SHOWERING INSPECTION TO BODY**

- 1) Spray water on vehicle body.

CAUTION:

Do not directly spray water on each part.

- 2) Check passenger compartment for traces of leaking.

NOTE:

If leaks are noted, check wiring harnesses as water may leak along them and get parts wet.

5. WARNING LIGHT ILLUMINATION CHECK

- 1) Turn ignition switch "ON" (engine "OFF") and observe airbag warning light.

Airbag warning light comes "ON" for about 7 seconds then goes out and stays out.