

SECTION **BF**

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When you read wiring diagrams:

- Read G1 section, "HOW TO READ WIRING DIAGRAMS".
- See EL section, "POWER SUPPLY ROUTING" for power distribution circuit.

When you perform trouble diagnoses, read G1 section, "HOW TO FOLLOW FLOW CHART IN TROUBLE DIAGNOSES".

Precautions

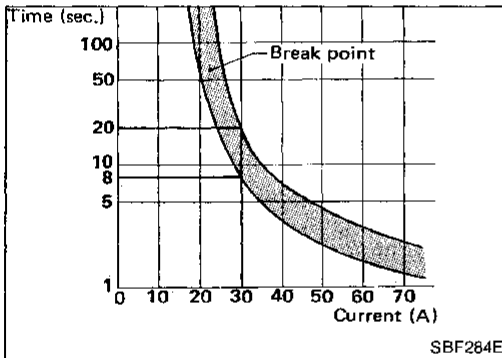
- When removing or installing various parts, place a cloth or padding onto the vehicle body to prevent scratches.
- Handle trim, molding, instruments, grille, etc. carefully during removing or installation. Be careful not to soil or damage them.
- Apply sealing compound where necessary when installing parts.
- When applying sealing compound, be careful that the sealing compound does not protrude from parts.
- When replacing any metal parts (for example body outer panel, members, etc.), be sure to take rust prevention measures.

Supplemental Restraint System "AIR BAG"

The Supplemental Restraint System "Air Bag" helps to reduce the risk or severity of injury to the driver in a frontal collision. The Supplemental Restraint System consists of an air bag (located in the center of the steering wheel), sensors, a diagnosis unit, warning lamp, wiring harness and spiral cable. Information necessary to service the system safely is included in the BF section of this Service Manual.

WARNING:

- To avoid rendering the SRS inoperative, which could lead to personal injury or death in the event of a severe frontal collision, all maintenance must be performed by an authorized NISSAN dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system.
- All SRS electrical wiring harnesses and connectors are covered with yellow outer insulation. Do not use electrical test equipment on any circuit related to the SRS "Air Bag".



Circuit Breaker Inspection



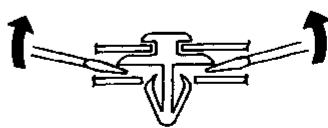
For example, when current is 30A, the circuit is broken within 8 to 20 seconds.

Circuit breakers are used in the following systems.

- Power window & power door lock
- Power sun roof


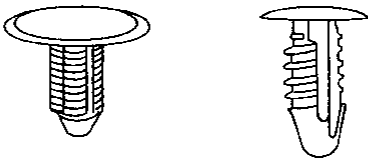
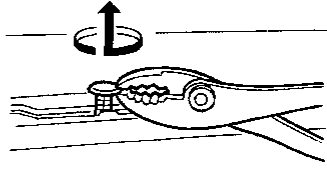

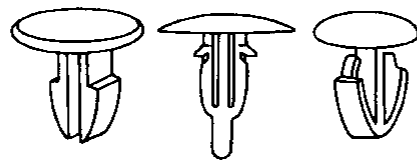
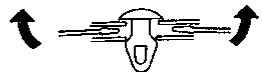
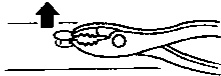

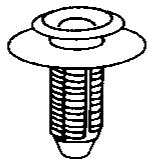
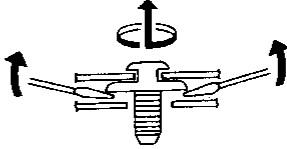

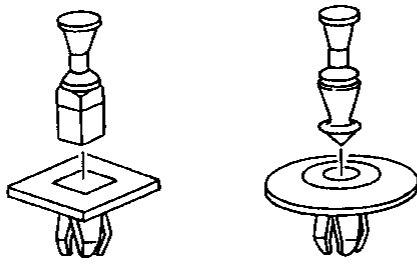
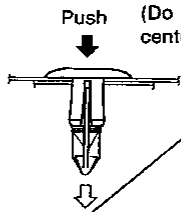
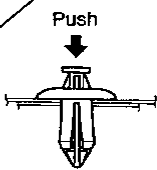

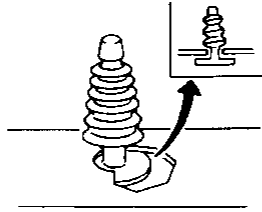
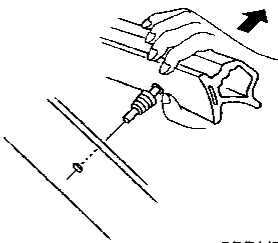
Clip and Fastener

- Clips and fasteners in BF section correspond to the following numbers and symbols.
- Replace any clips and/or fasteners which are damaged during removal or installation.

| Symbol No. | Shapes | Removal & Installation |
|---|---|--|
|  |  | <p>Removal: Remove by bending up with flat-bladed screwdrivers.</p>  |
| | SBF256G | SBF367B |

GENERAL SERVICING

Clip and Fastener (Cont'd)

| Symbol No. | Shapes | Removal & Installation |
|--|---|--|
| <p>C102</p>  |  <p style="text-align: right;">MBF176B</p> |  <p>Removal: Pull up by rotating.</p> <p style="text-align: right;">SBF115B</p> |
| <p>C103</p>  |  <p style="text-align: right;">SBF257G</p> | <p>Removal: Remove with a flat-bladed screwdriver or pliers.</p>   <p style="text-align: right;">SBF292C</p> |
| <p>C109</p>  |  <p style="text-align: right;">SBF189C</p> | <p>Removal: Remove with flat-bladed screwdrivers. (It is better to remove by pulling up and rotating.)</p>  <p style="text-align: right;">SBF190L</p> |
| <p>C203</p>  |  <p style="text-align: right;">SBF258G</p> | <p>Push center pin to catching position. (Do not remove center pin by hitting it.)</p>  <p>Installation:</p>  <p style="text-align: right;">SBF708E</p> |
| <p>CE103</p>  |  <p style="text-align: right;">SBF104B</p> | <p>Removal:</p>  <p style="text-align: right;">SBF147B</p> |

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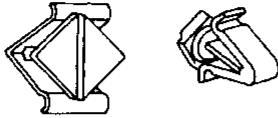

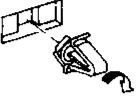

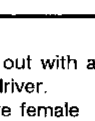

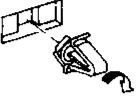

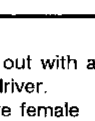

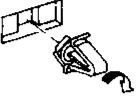

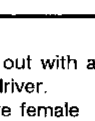

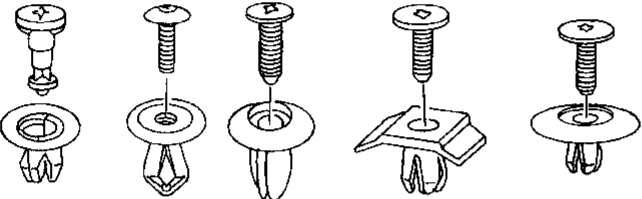

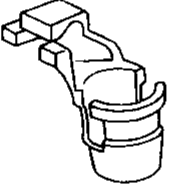
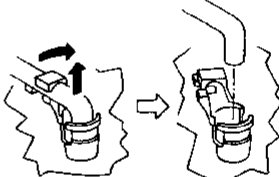
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GENERAL SERVICING

Clip and Fastener (Cont'd)

| Symbol No. | Shapes | Removal & Installation | | | | |
|--|--|--|--|--|---|--|
| <p>CG101</p>  |  <p style="text-align: right;">SBF145B</p> | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>Removal</p>  <p>Rotate 45° to remove.</p> </td> <td style="width: 50%; vertical-align: top;"> <p>Installation</p>  </td> </tr> <tr> <td style="vertical-align: top;"> <p>Removal</p>  </td> <td style="vertical-align: top;"> <p>Installation</p>  </td> </tr> </table> <p style="text-align: right;">SBF085B</p> | <p>Removal</p>  <p>Rotate 45° to remove.</p> | <p>Installation</p>  | <p>Removal</p>  | <p>Installation</p>  |
| <p>Removal</p>  <p>Rotate 45° to remove.</p> | <p>Installation</p>  | | | | | |
| <p>Removal</p>  | <p>Installation</p>  | | | | | |
| <p>CS101</p>  |  <p style="text-align: right;">SBF078B</p> | <p>Removal:</p> <ol style="list-style-type: none"> 1. Screw out with a Phillips screwdriver. 2. Remove female portion with flat-bladed screwdriver.  <p style="text-align: right;">SBF992G</p> | | | | |
| <p>CR103</p> |  <p style="text-align: right;">SBF768B</p> | <p>Removal:</p> <p>Holder portion of clip must be spread out to remove rod.</p>  <p style="text-align: right;">SBF770B</p> | | | | |

Body Front End

- Hood adjustment: Adjust at hinge portion.
- Hood lock adjustment: After adjusting, check hood lock control operation. Apply a coat of grease to hood locks engaging mechanism.
- Hood opener: Do not attempt to bend cable forcibly. Doing so increases effort required to unlock hood.

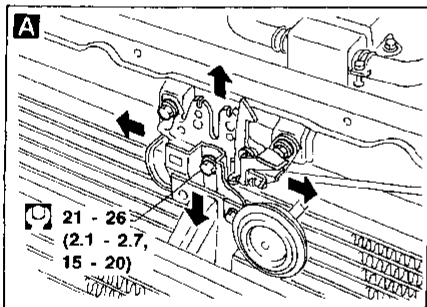
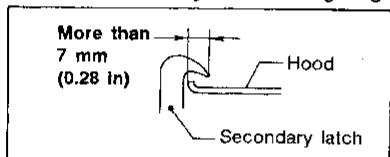
REMOVAL — Front bumper assembly

- 1 Remove clips (CS10) securing bumper fascia.
- 2 Remove bolts securing left and right under covers.
- 3 Remove screws securing bumper fascia to stays.
- 4 Remove screws located at wheel opening. Remove bumper fascia and fender.
- 5 Remove bolts securing bumper assembly.
- 6 Pull bumper assembly out. Disconnect left and right side marker lamp harness connectors.
- 7 Remove bumper assembly.

Hood lock adjustment **A**

- Adjust lock so that hood primary lock meshes at a position where hood is 1 to 1.5 mm (0.039 to 0.059 in) lower than fender.
- After hood lock adjustment, adjust bumper rubber.
- When securing hood lock, ensure it does not tilt. Striker must be positioned at the center of hood primary lock.
- After adjustment, ensure that hood primary and secondary lock operate properly.

Hood lock secondary latch hooking length

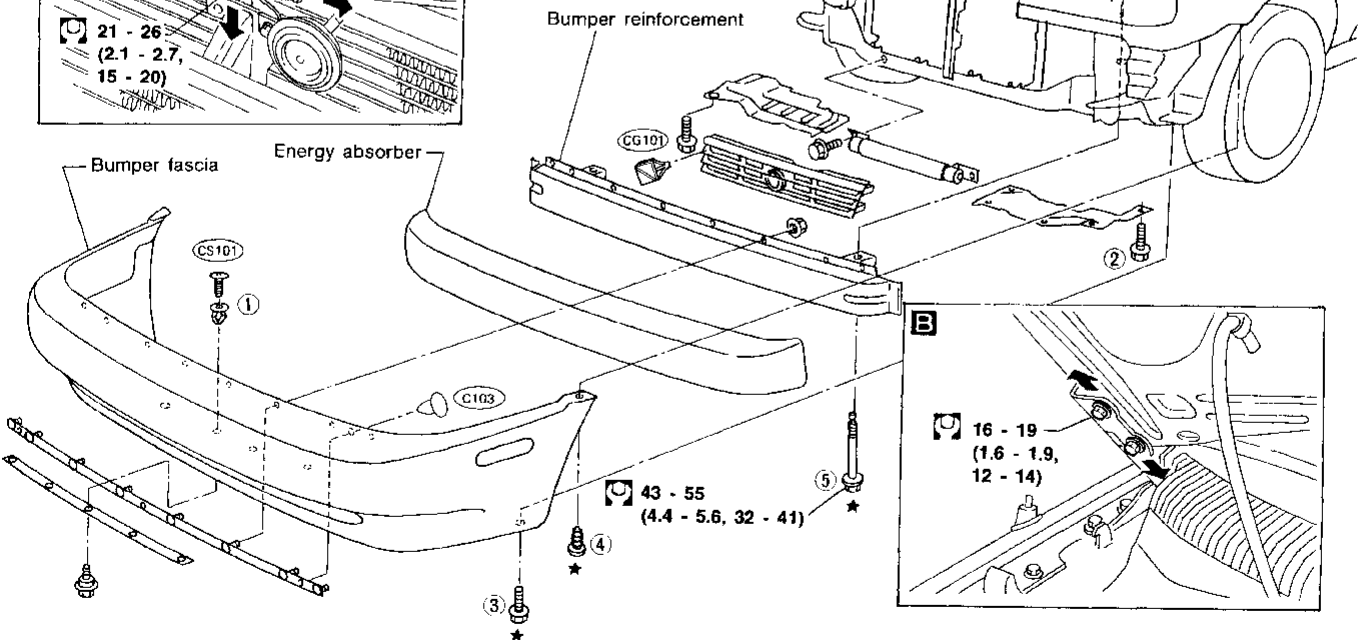


Bumper rubber adjustment

- Adjust so that hood is aligned with fender. [Bumper rubber free height is approx. 13 mm (0.51 in).]

★ : Bumper assembly mounting bolts & nuts
 □ : N·m (kg·m, ft·lb)

Hood adjustment **B**



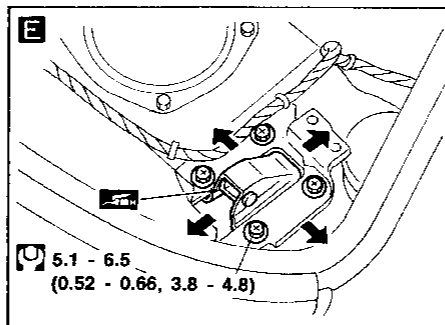
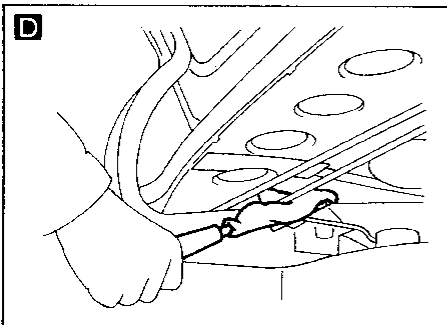
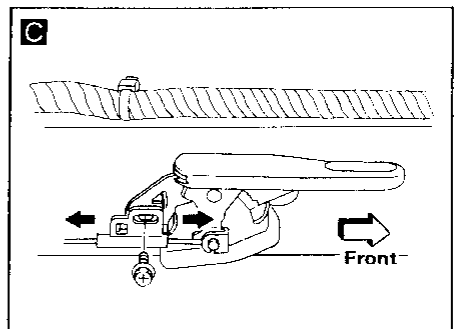
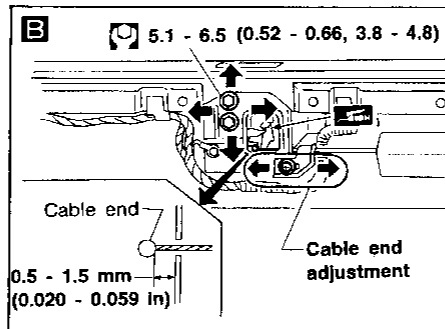
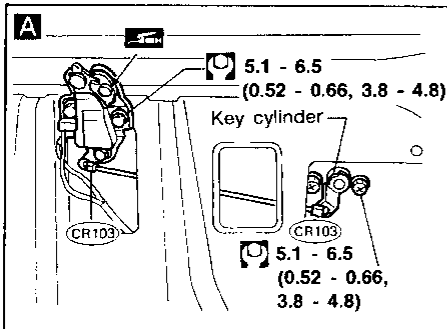
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Body Rear End and Opener

- Trunk lid adjustment: Adjust at hinge-trunk lid portion for proper trunk lid fit.
- Trunk lid lock system adjustment: Adjust striker so that it is in the center of the lock. After adjustment, check trunk lid lock operation.
- Opener cable: Do not attempt to bend cable using excessive force.
- After installing/adjusting opener, make sure that trunk lid and fuel filler lid open smoothly.

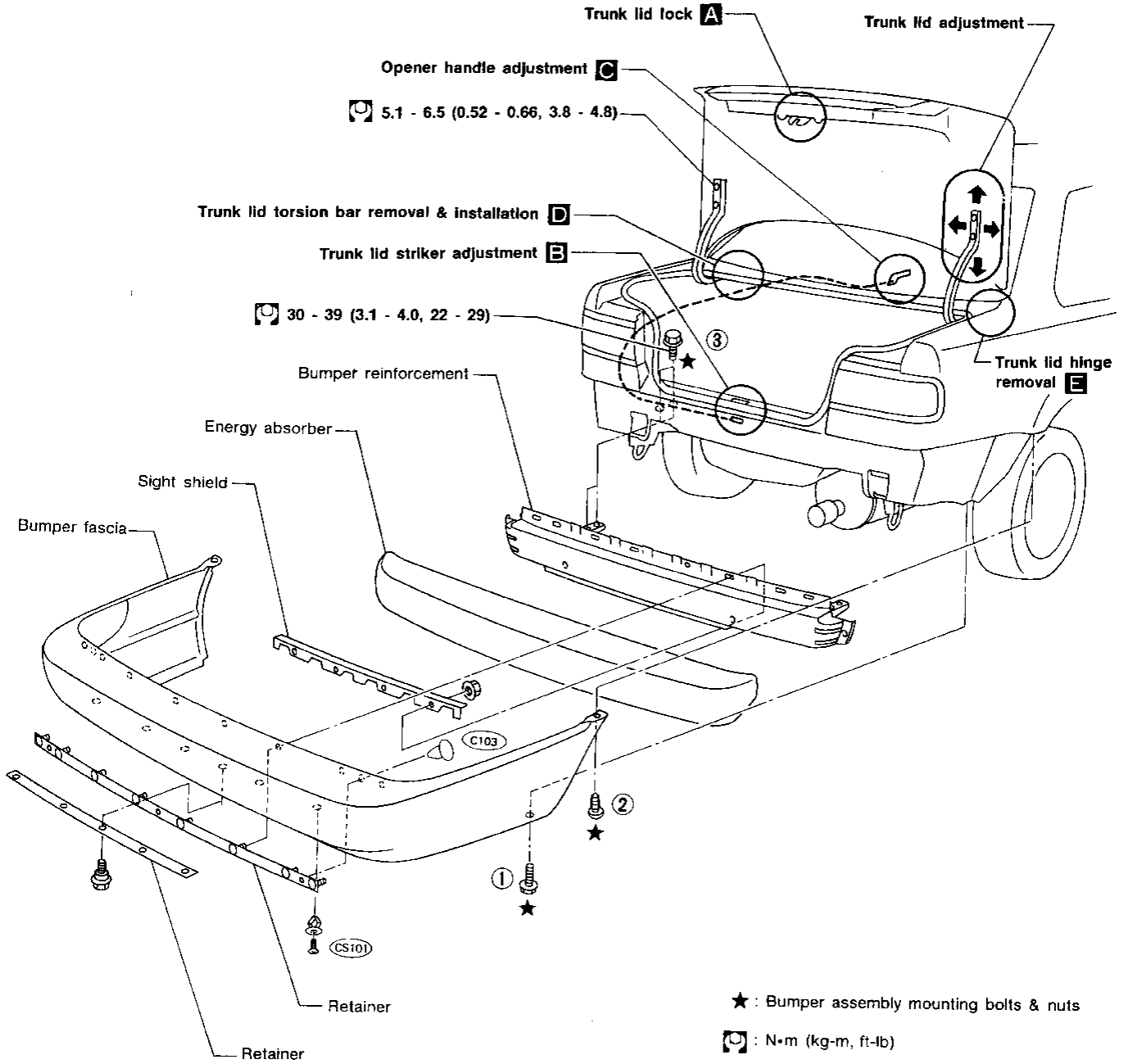
REMOVAL — Rear bumper assembly

- ① Remove screws securing bumper fascia to stays.
- ② Remove screws located at wheel opening. Remove bumper fascia and fender.
- ③ Remove bolts securing bumper assembly.
- ④ Pull bumper assembly out. Disconnect left and right side marker lamp harness connectors.
- ⑤ Remove bumper assembly.



BODY END

Body Rear End and Opener (Cont'd)

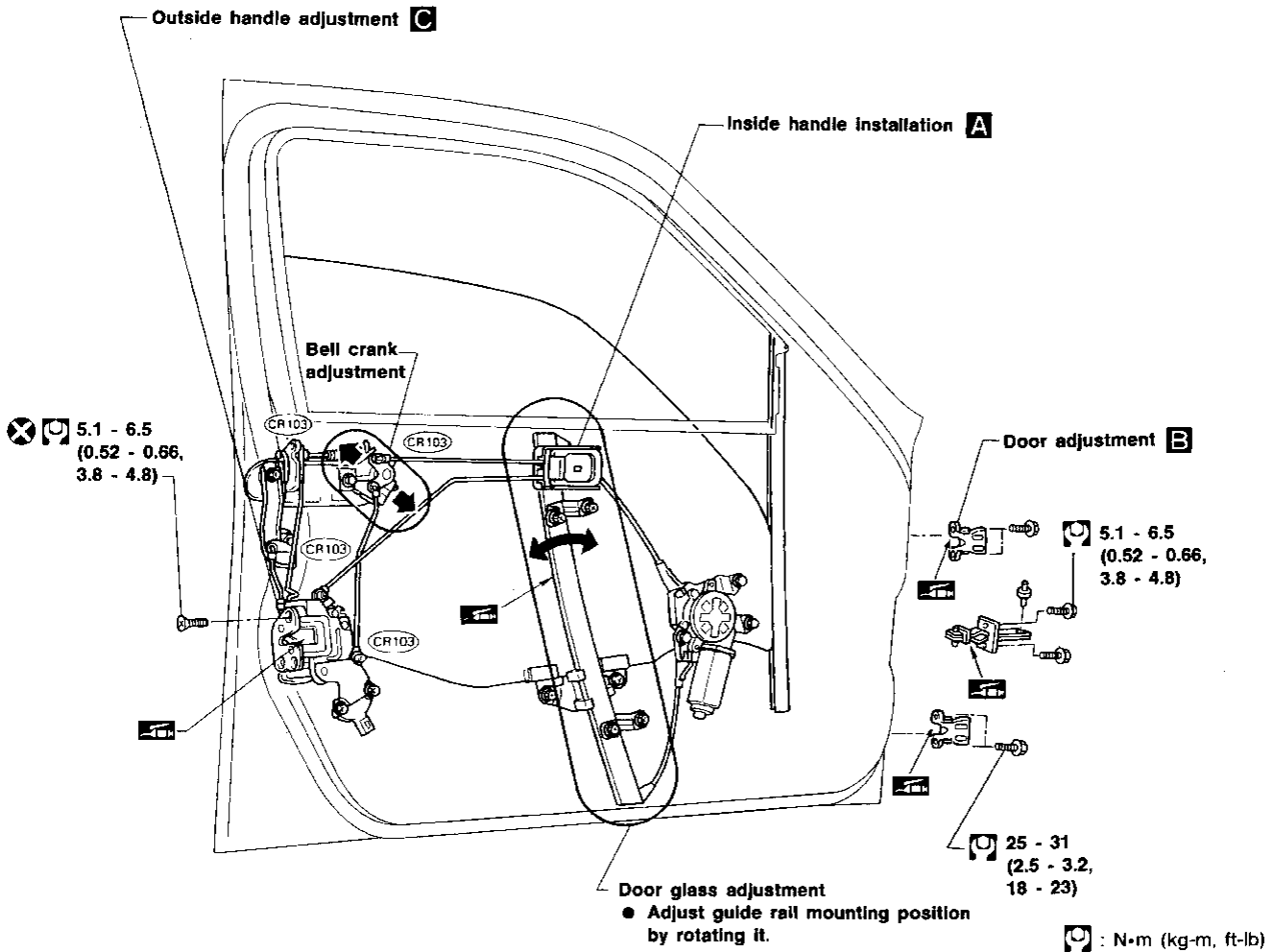


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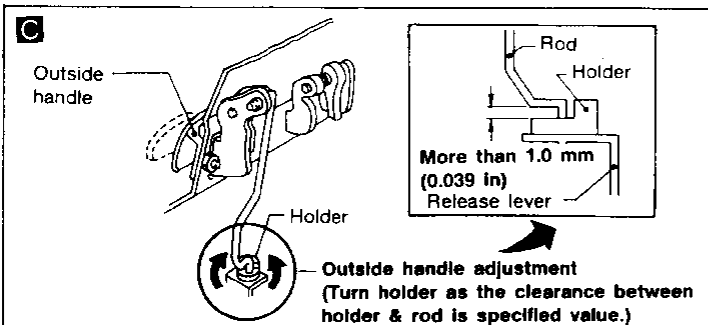
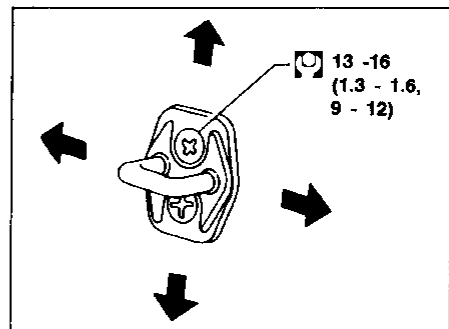
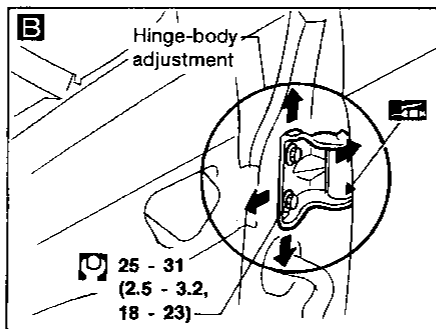
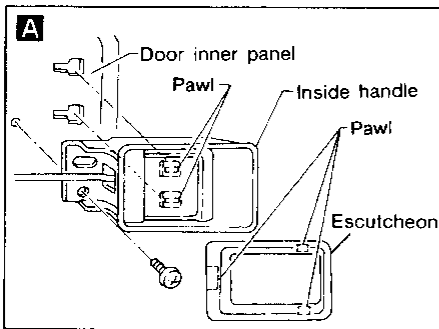
DOOR

Front Door

- For removal of door trim, refer to "INTERIOR AND EXTERIOR" BF-28.
- After adjusting door or door lock, check door lock operation.



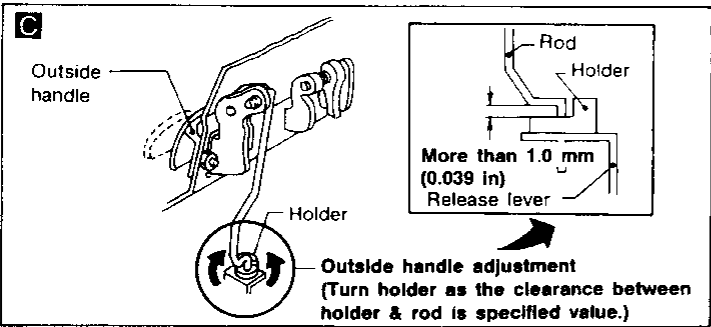
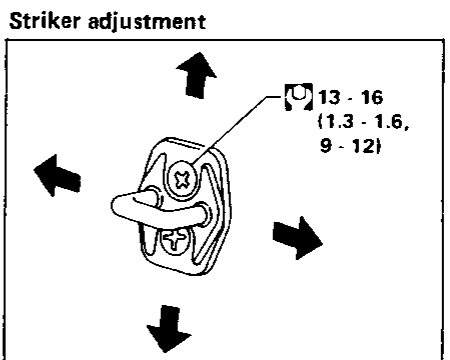
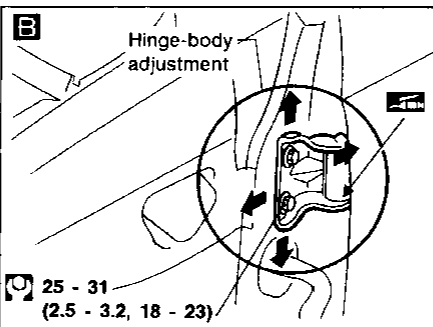
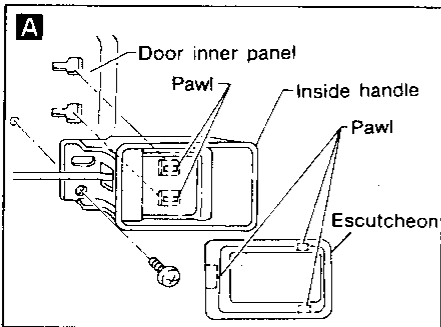
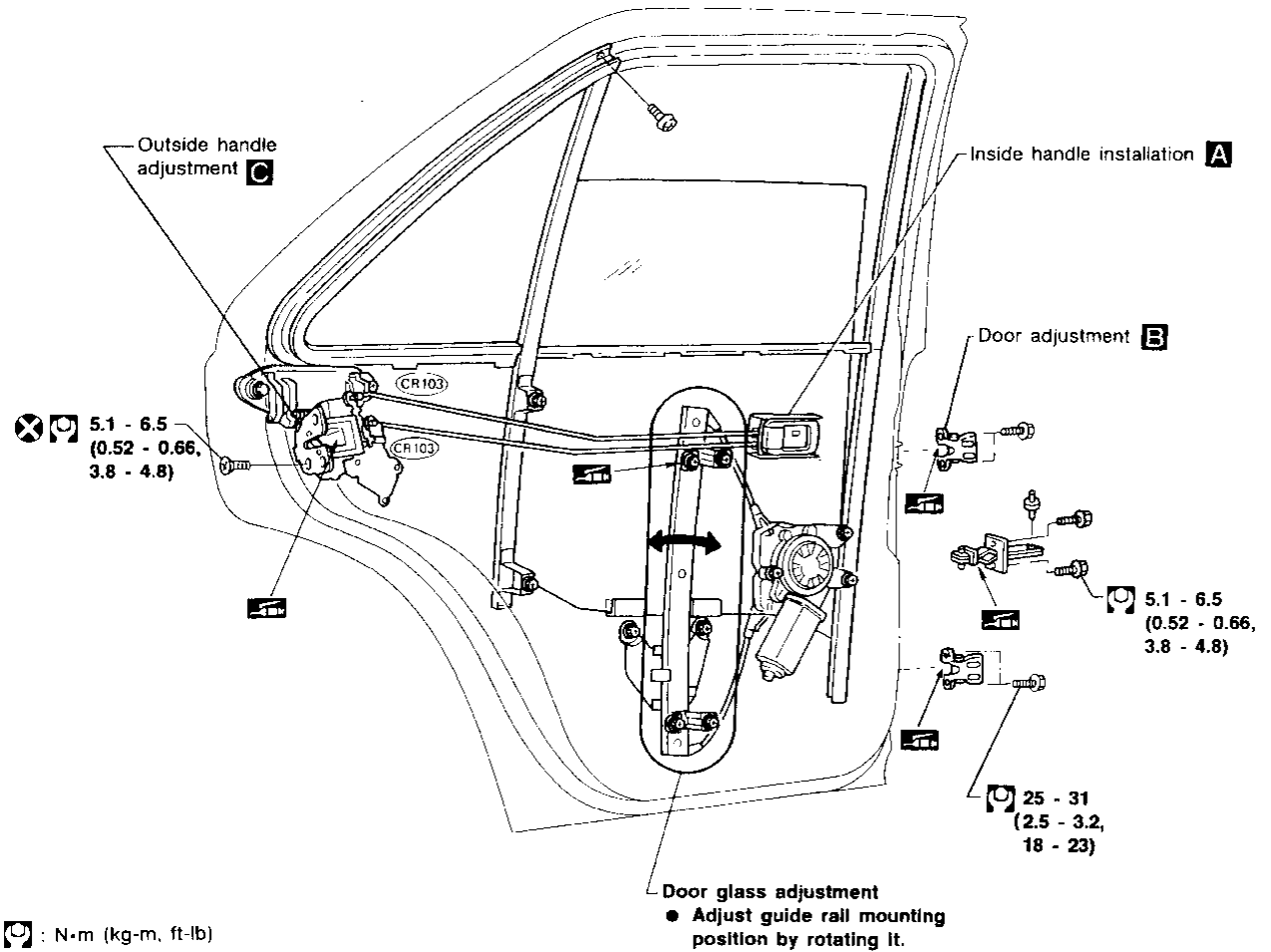
Striker adjustment



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DOOR

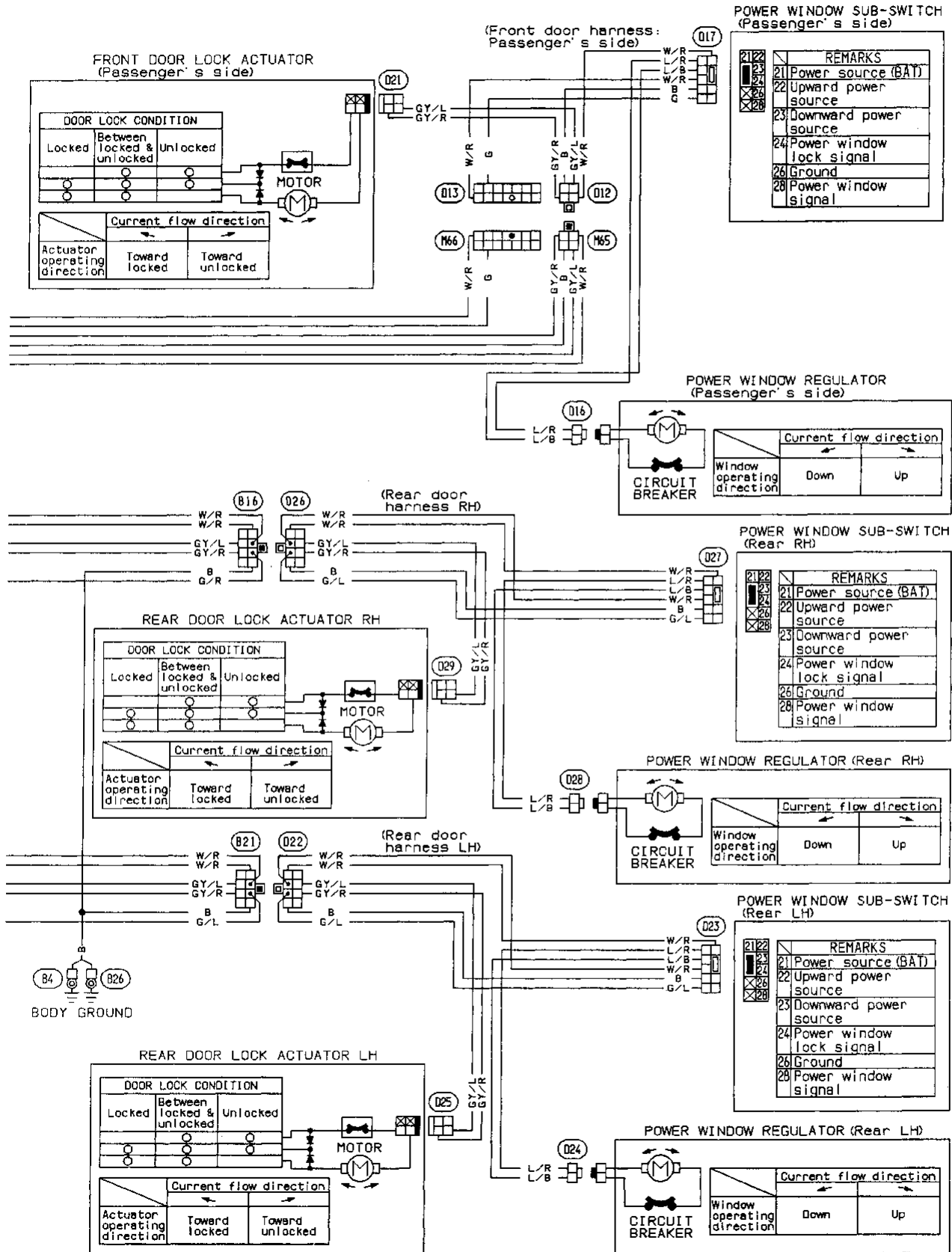
Rear Door



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DOOR

Power Window and Power Door Lock (Cont'd)



MBF231B

Contents

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Since left and right component parts are basically the same, harness layout and methods for electrical components inspection are shown for one side only.

Although methods for checking component parts on both sides are described in the flow chart, making it easier to troubleshoot, apply checking procedures to either side that have malfunction during trouble diagnoses.

DOOR — Trouble Diagnoses for Power Window and Power Door Lock

Symptom Chart

| Procedure | Main Power Supply and Ground Circuit Check | | | Diagnostic Procedure | | | | | | | Electrical Components Inspection | | | Remarks | |
|---|--|-------------|-------------|----------------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------------------------|-----------------------|-----------------------|---------|---|
| | BF-14 | BF-14 | BF-14 | BF-17 | BF-17 | BF-19 | BF-20 | BF-21 | BF-22 | BF-23 | BF-24 | BF-24 | BF-24 | | |
| Reference Page | | | | | | | | | | | | | | | |
| SYMPTOM | Procedure 1 | Procedure 2 | Procedure 3 | Procedure 1 | Procedure 2 | Procedure 3 | Procedure 4 | Procedure 5 | Procedure 6 | Procedure 7 | Lock knob switch | Door lock actuator(s) | Power window motor(s) | | |
| Power windows and power door locks cannot be operated. | ○ | | | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | — | — |
| Power door locks and passenger power window cannot be operated. | | | | ○ | ○ | ○ | | ○ | ○ | ○ | ○ | ○ | ○ | — | — |
| Power door locks cannot be operated by either the main or lock knob switches but power windows can be operated. | | | | ○ | ○ | ○ | | | | | ○ | ○ | | — | — |
| Power door locks cannot be operated by lock knob switch but can be operated by main switch. | | | | | ○ | | | | | | ○ | | | — | — |
| One or two door locks cannot be operated. | | | | | | ○ | | | | | | ○ | | — | — |
| Power windows cannot be operated but power door locks can be operated. | | | ○ | | | | ○ | ○ | ○ | ○ | | | ○ | — | — |
| Driver's side power window cannot be operated but other windows can be operated. | | | | | | | ○ | | | | | | ○ | — | — |
| Passenger power windows cannot be operated but door locks can be operated. | | ○ | | | | | | ○ | | ○ | | | ○ | — | — |
| Passenger power windows cannot be operated by main switch but can be operated by passenger's switches. | | | | | | | | | ○ | ○ | | | | — | — |
| Power window lock cannot be operated. | | | | | | | | | ○ | | | | | — | — |

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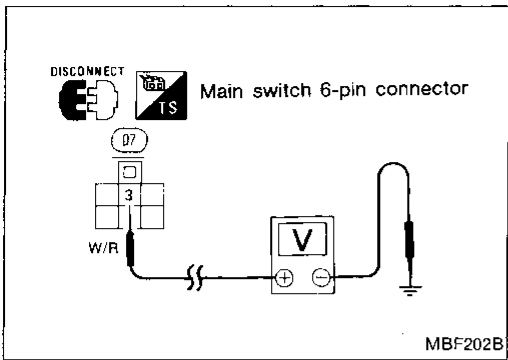
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DOOR — Trouble Diagnoses for Power Window and Power Door Lock



Main Power Supply and Ground Circuit Check

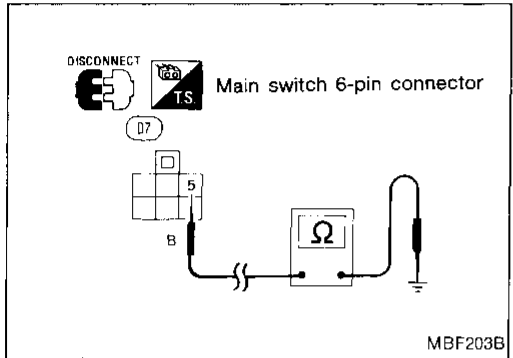
PROCEDURE 1

Main power supply

| Terminals | Battery voltage exists |
|------------|------------------------|
| ③ - Ground | Yes |

Ground circuit

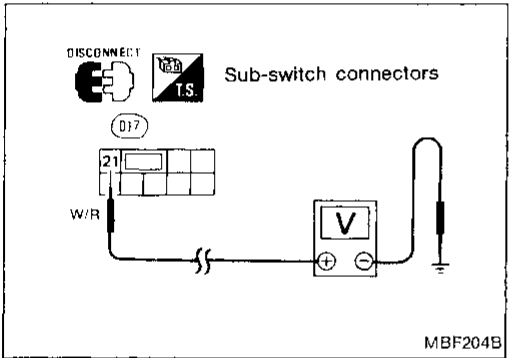
| Terminals | Continuity |
|------------|------------|
| ⑤ - Ground | Yes |



PROCEDURE 2

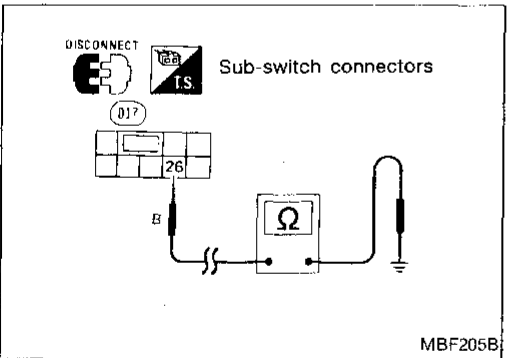
Power supply for sub-switch (passenger)

| Terminals | Battery voltage exists |
|-------------|------------------------|
| ②① - Ground | Yes |



Ground circuit for sub-switch (passenger)

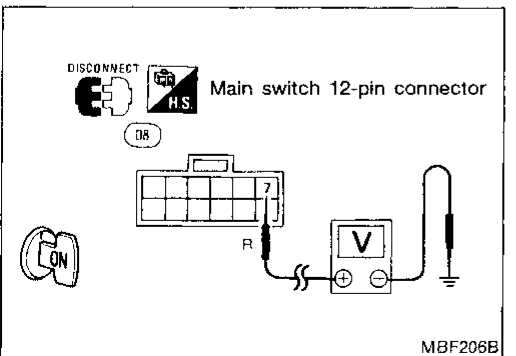
| Terminals | Continuity |
|-------------|------------|
| ②⑥ - Ground | Yes |



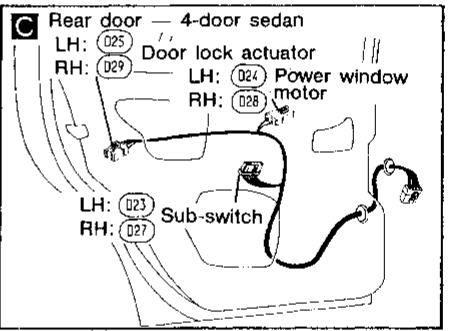
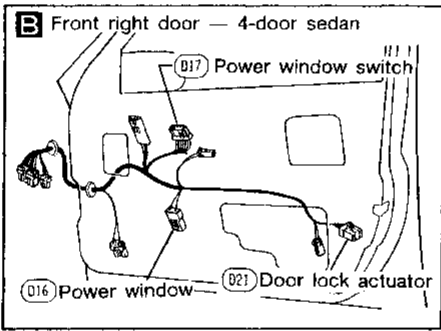
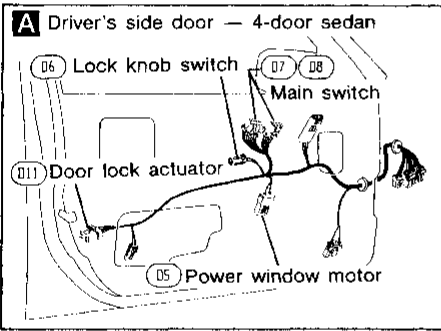
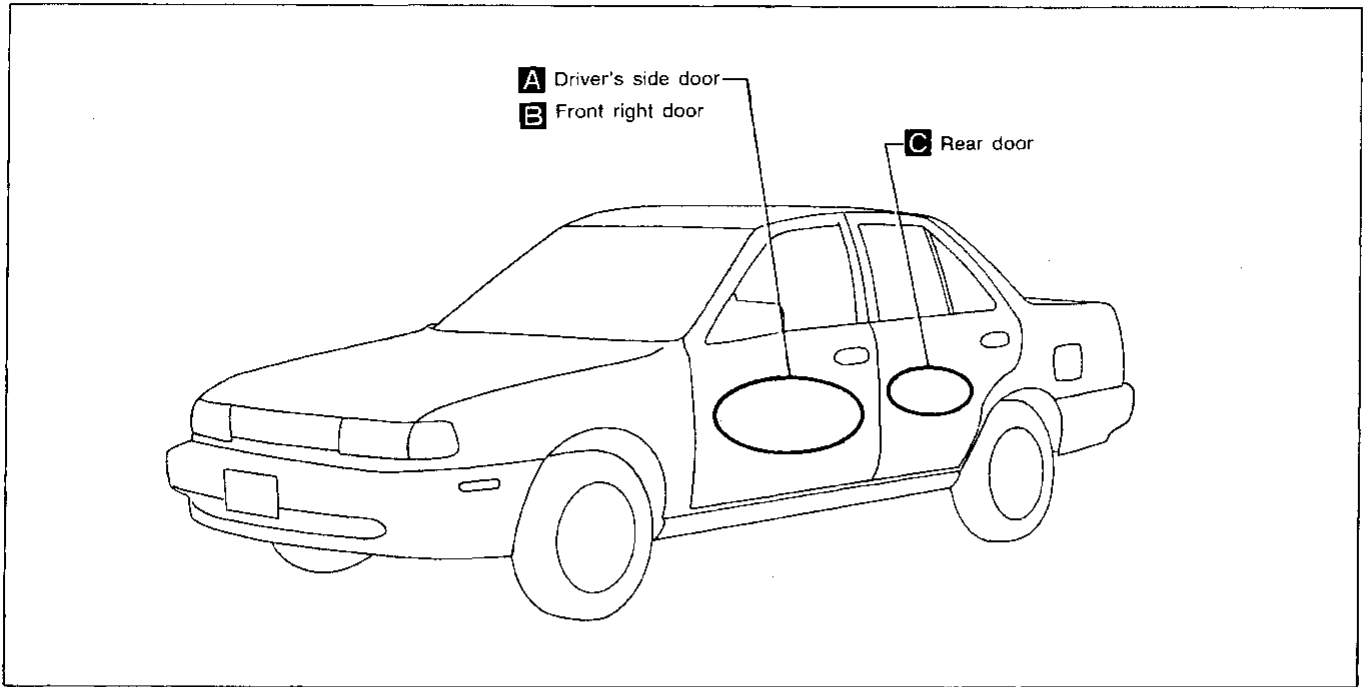
PROCEDURE 3

Power supply for ignition signal

| Terminals | Ignition switch | Battery voltage exists |
|------------|-----------------|------------------------|
| ⑦ - Ground | ON | Yes |



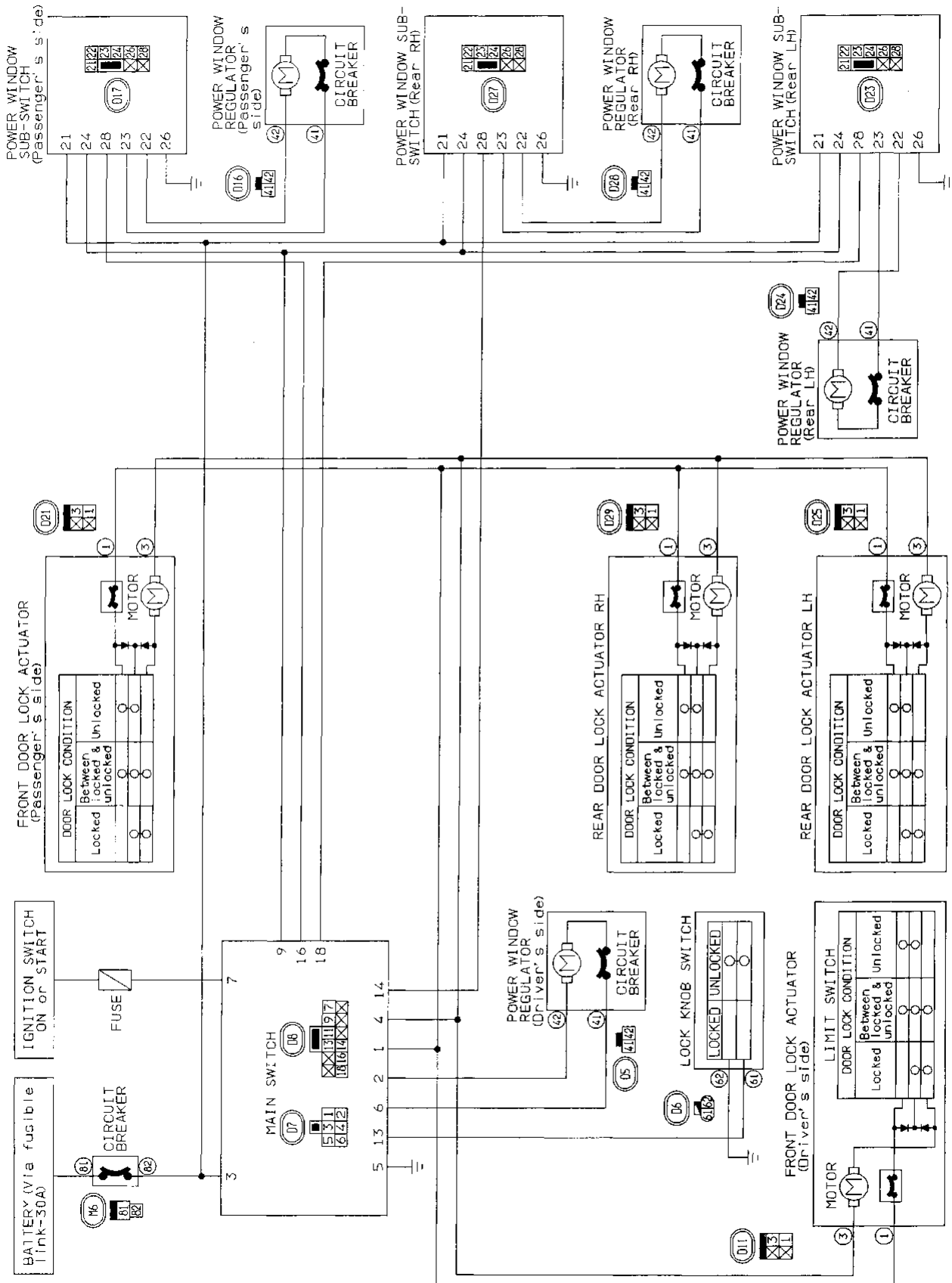
Harness Layout



GI
 MA
 EM
 LC
 EF &
 EC
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BF
 HA
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 DX

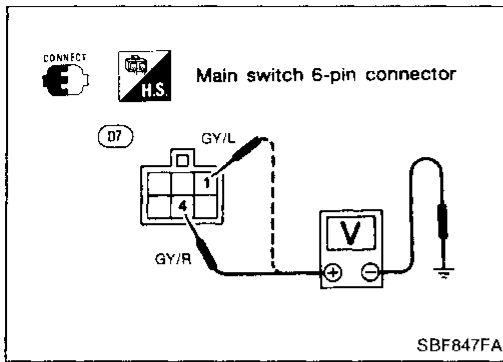
DOOR — Trouble Diagnoses for Power Window and Power Door Lock

Circuit Diagram for Quick Pinpoint Check



MBF232B

DOOR — Trouble Diagnoses for Power Window and Power Door Lock



Diagnostic Procedure 1

SYMPTOM:

Power door locks cannot be operated by either the main or door lock knob switches but power windows can be operated.

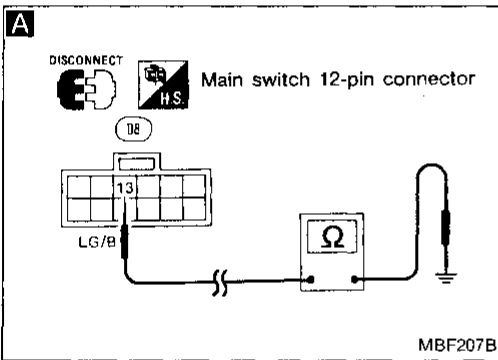
CHECK DOOR LOCK OPERATION CIRCUIT.
Check voltage for main switch 6-pin connector.

| Terminals | Main switch operation | Voltage |
|------------|-----------------------|---------------|
| ① - Ground | Unlock | 0V → 12V → 0V |
| ④ - Ground | Lock | 0V → 12V → 0V |

NG → Replace main switch.

OK

Go to Diagnostic Procedure 3.



Diagnostic Procedure 2

SYMPTOM:

Door locks cannot be operated by driver's side lock knob switch but can be operated by main switch.

CHECK LOCK KNOB SWITCH CIRCUIT.

- 1) Disconnect 12-pin connector from main switch.
- 2) Check continuity.

For driver's side lock knob

| Terminals | Door lock condition | Continuity |
|------------|---------------------|------------|
| ⑬ - Ground | Locked | No |
| | Unlocked | Yes |

OK → Replace main switch.

NG

(Go to ① on next page.)

GI

MA

EM

LC

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FA

RA

BR

ST

BF

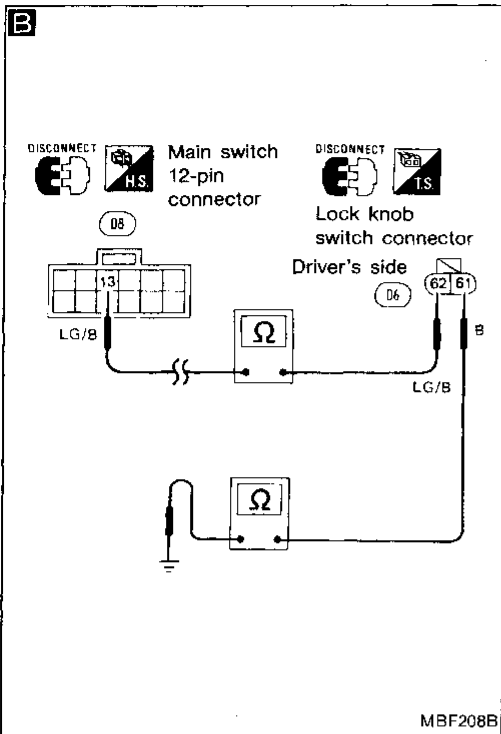
HA

EL

IDX

DOOR — Trouble Diagnoses for Power Window and Power Door Lock

Diagnostic Procedure 2 (Cont'd)



B

1) Disconnect connector from lock knob switch.
 2) Check continuity.

| Terminals | Continuity |
|-------------|------------|
| ⑬ - ⑥② | Yes |
| ⑥① - Ground | Yes |

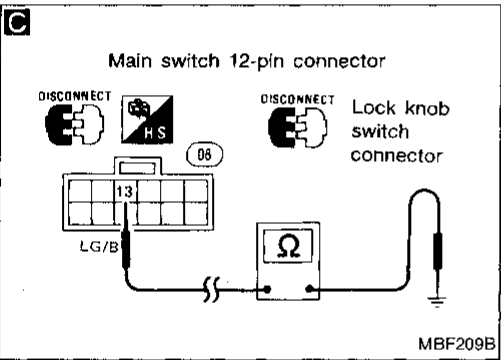
NG → Repair harness.

C

1) Disconnect connector from lock knob switch.
 2) Check continuity.
 For driver's side lock knob

| Terminals | Continuity |
|------------|------------|
| ⑬ - Ground | Yes |

Yes → Repair harness. There will be incorrect grounding between terminals ⑬ and ⑥② for driver's side lock knob switch.



No

Go to LOCK KNOB SWITCH in Electrical Components Inspection. (See page BF-24.)

OK → Check system again.

NG

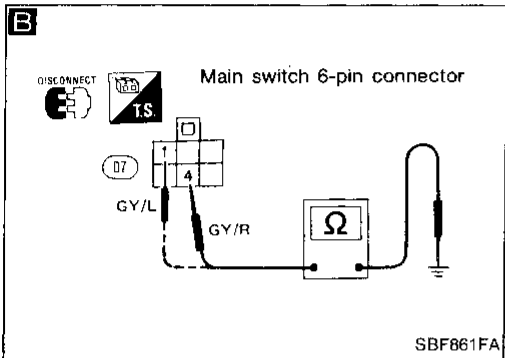
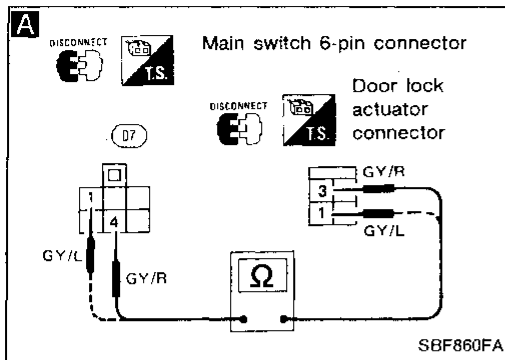
Check lock & unlock switch harness for open and short circuit.

NG → Repair harness.

OK

Replace lock knob switch.

DOOR — Trouble Diagnoses for Power Window and Power Door Lock



Diagnostic Procedure 3

SYMPTOM:

One or two door locks cannot be operated.

A

CHECK DOOR LOCK ACTUATOR CIRCUIT.

NG → Repair harness

- 1) Disconnect 6-pin connector from main switch.
- 2) Disconnect connector from inoperative door lock actuator(s).
- 3) Check continuity.

| Terminals | Continuity |
|-----------|------------|
| ④ - ③ | Yes |
| ① - ① | Yes |

OK

B

Does continuity exist?

Yes → Repair harness. There will be incorrect grounding between terminals ④ and ③, ① and ①.

| Connector | Terminals |
|--------------------|------------|
| Main switch | ④ - Ground |
| 6-pin connector ①⑦ | ① - Ground |

No

Go to DOOR LOCK ACTUATOR in Electrical Components Inspection. (See page BF-24.)

OK → Check system again.

NG

Replace door lock actuator.

GI

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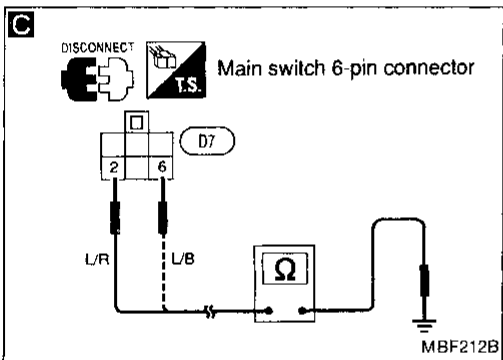
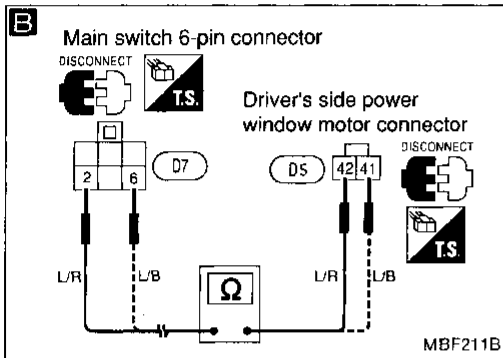
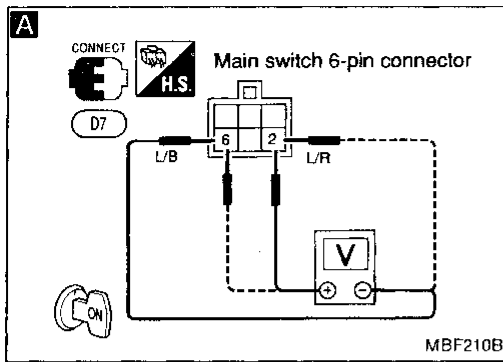
EL

IDX

Diagnostic Procedure 4

SYMPTOM:

Driver's side power window cannot be operated but other power windows can be operated.



A

CHECK DRIVER'S SIDE POWER WINDOW MOTOR CIRCUIT.
Check voltage for main switch 6-pin connector.

NG → Replace main switch.

| Terminals | | Main switch operation | Battery voltage exists |
|-----------|---|-----------------------|------------------------|
| ⊕ | ⊖ | | |
| ② | ⑥ | Up | Yes |
| ⑥ | ② | Down | Yes |

OK ↓

B

1) Disconnect 6-pin connector from main switch, and connector from driver side power window motor.
2) Check continuity.

NG → Repair harness.

| Terminals | Continuity |
|-----------|------------|
| ② - ④② | Yes |
| ⑥ - ④① | |

OK ↓

C

Does continuity exist?

Yes → Repair harness. There will be incorrect grounding.

| Terminals |
|------------|
| ② - Ground |
| ⑥ - Ground |

No ↓

Go to POWER WINDOW MOTOR in Electrical Components Inspection. (See page BF-24.)

OK → Check system again.

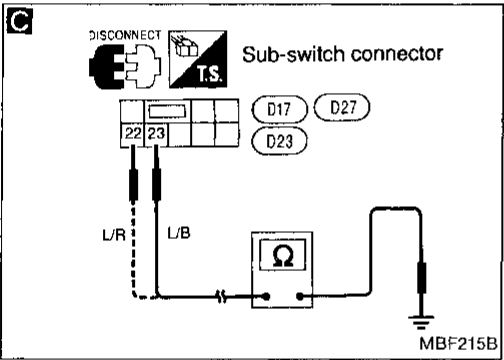
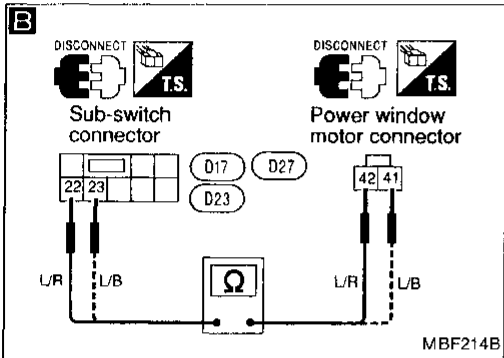
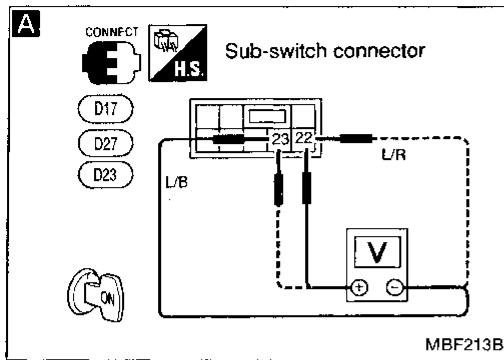
NG ↓

Check power window motor harness for open or short circuit.

NG → Repair harness.

OK ↓

Replace power window motor.



Diagnostic Procedure 5

SYMPTOM:

Passenger power windows cannot be operated but door locks can be operated.

A

CHECK PASSENGER POWER WINDOW CIRCUIT.
Check voltage for sub-switch connector.

NG → Replace sub-switch.

| Terminals | | Sub-switch operation | Voltage |
|-----------|----|----------------------|---------|
| ⊕ | ⊖ | | |
| 22 | 23 | Up | 12V |
| 23 | 22 | Down | 12V |

B

1) Disconnect connector from sub-switch and power window motor.
2) Check continuity.

NG → Repair harness.

| Terminals | | Continuity |
|-----------|----|------------|
| 22 | 42 | Yes |
| 23 | 41 | Yes |

C

Does continuity exist?

Yes → Repair harness. There will be incorrect grounding.

| Terminals | |
|-----------|----------|
| 22 | - Ground |
| 23 | - Ground |

No →

Go to POWER WINDOW MOTOR in Electrical Components Inspection. (See page BF-24.)

OK → Check system again.

NG →

Check power window motor harness for open or short circuit.

NG → Repair harness.

OK →

Replace power window motor.

GI

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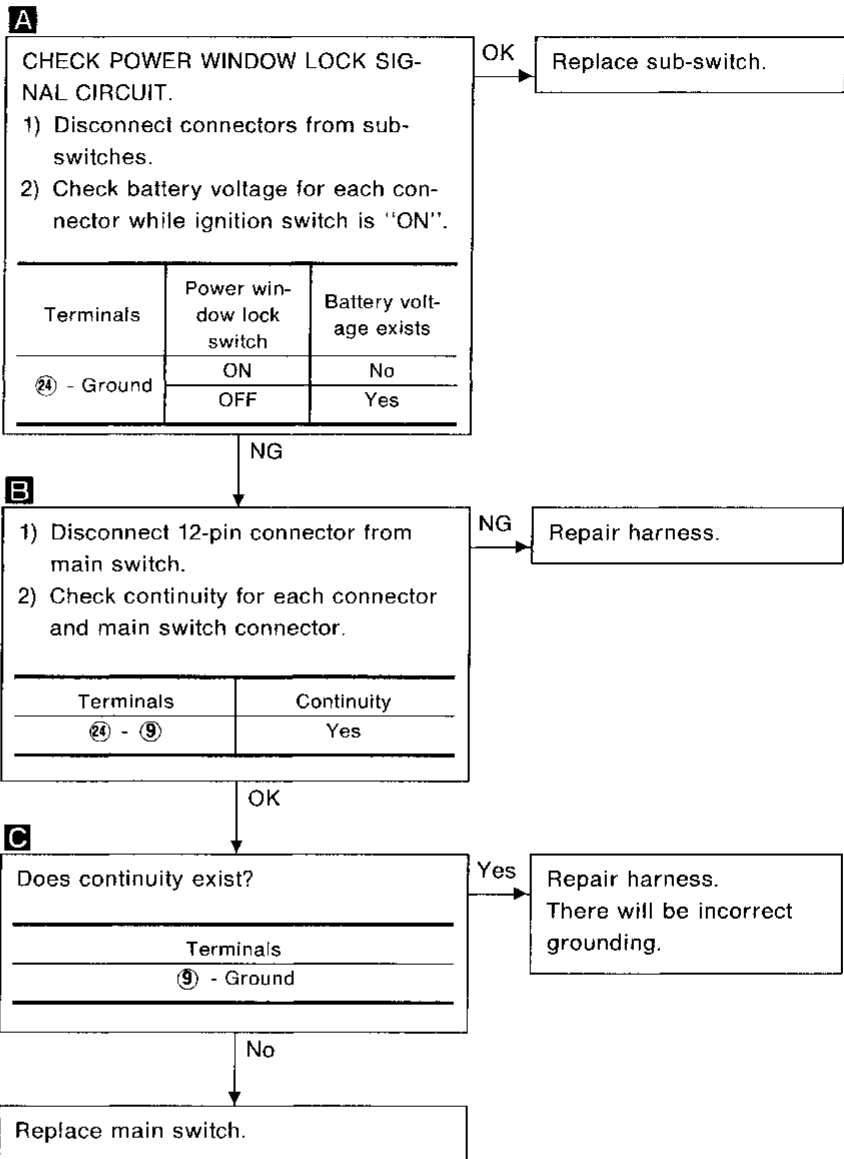
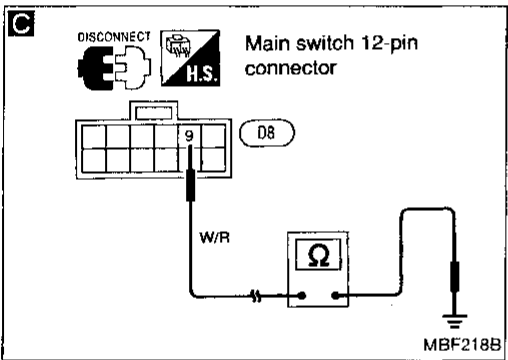
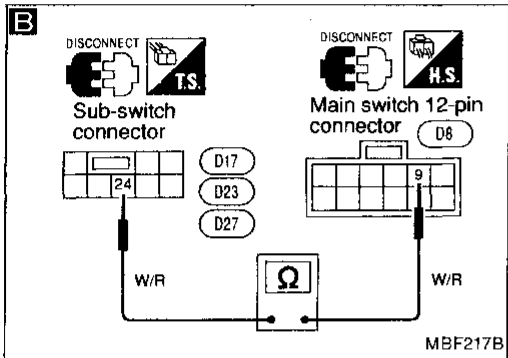
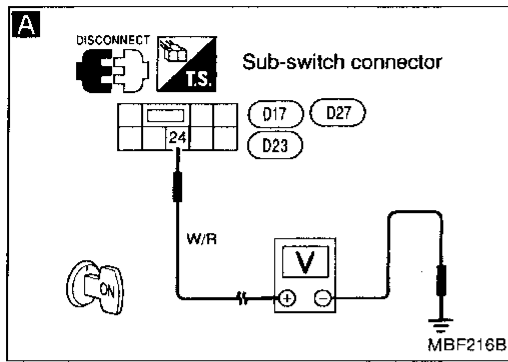
EL

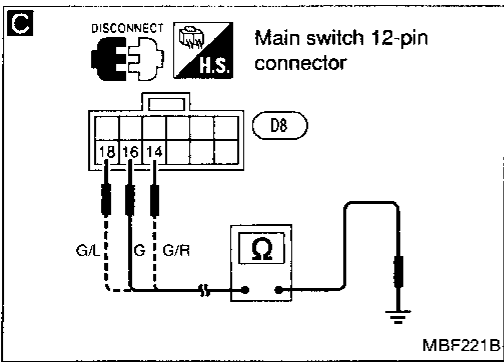
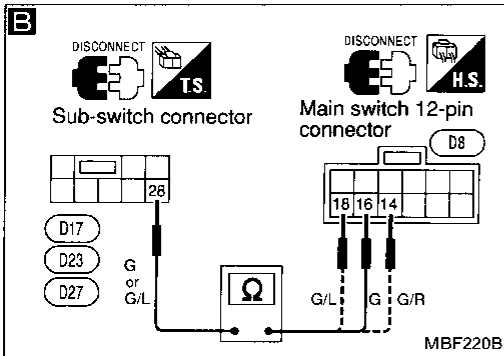
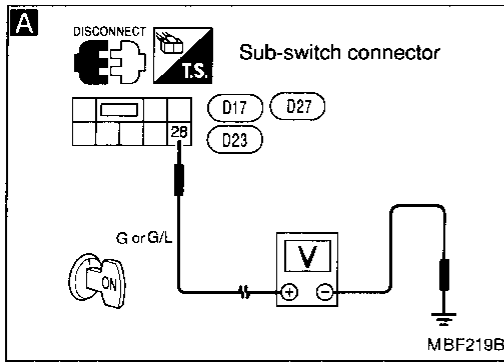
IDX

Diagnostic Procedure 6

SYMPTOM:

Passenger power windows cannot be operated by either the passenger's switches or main switch.

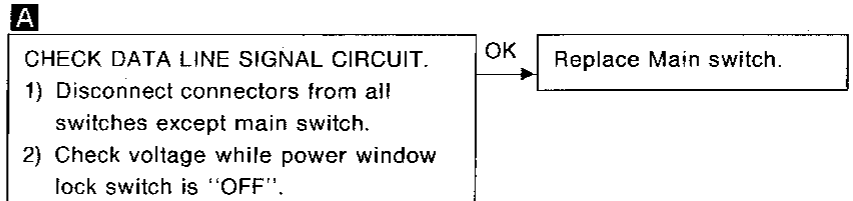




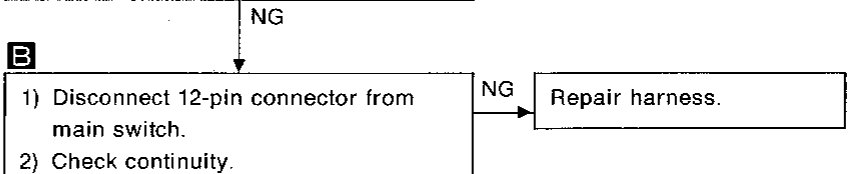
Diagnostic Procedure 7

SYMPTOM:

Passenger power windows cannot be operated by main switch but can be operated by passenger's switches.

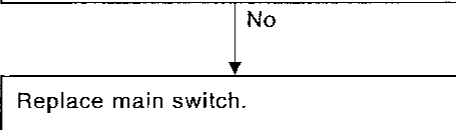
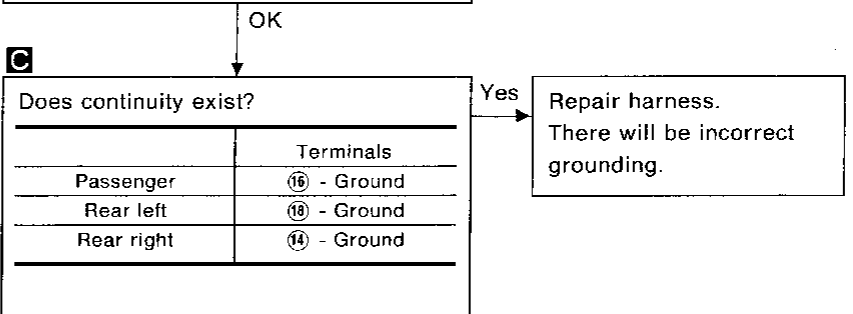


| Terminals | Main switch operation | Voltage |
|-------------|-----------------------|------------|
| 28 - Ground | Up | Above 12V |
| | Down | Approx. 4V |
| | No operation | Approx. 0V |



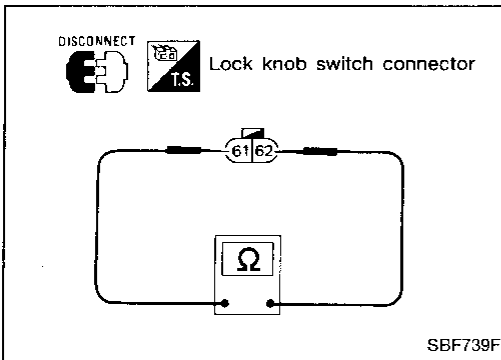
| | Terminals |
|------------|-----------|
| Passenger | 18 - 28 |
| Rear left | 16 - 28 |
| Rear right | 14 - 28 |

Continuity should exist.



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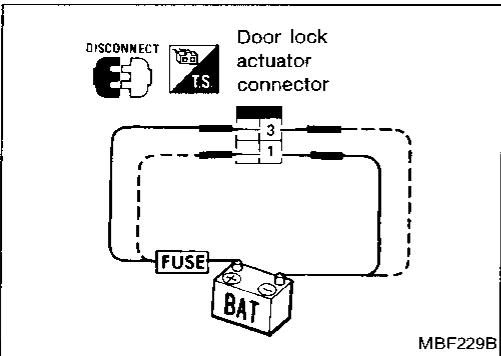
DOOR — Trouble Diagnoses for Power Window and Power Door Lock



Electrical Components Inspection

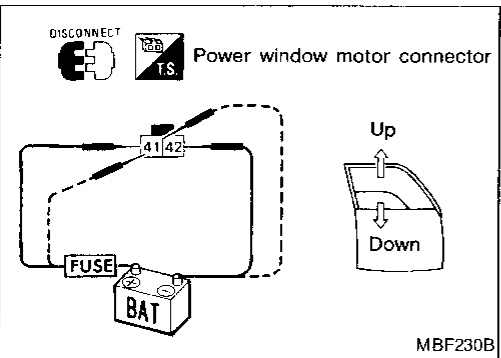
LOCK KNOB SWITCH

| Terminals | Condition | Continuity |
|-----------|-----------|------------|
| ⑥1 - ⑥2 | Locked | No |
| | Unlocked | Yes |



DOOR LOCK ACTUATOR

| | Terminals | | Operation |
|-------------------------------|-----------|---|-----------|
| | ⊕ | ⊖ | |
| Passenger (Front and rear) | ③ | ① | Lock |
| | ① | ③ | Unlock |



POWER WINDOW MOTOR

| | Terminals | | Operation |
|--|-----------|----|-----------|
| | ⊕ | ⊖ | |
| | ④1 | ④2 | Downward |
| | ④2 | ④1 | Upward |

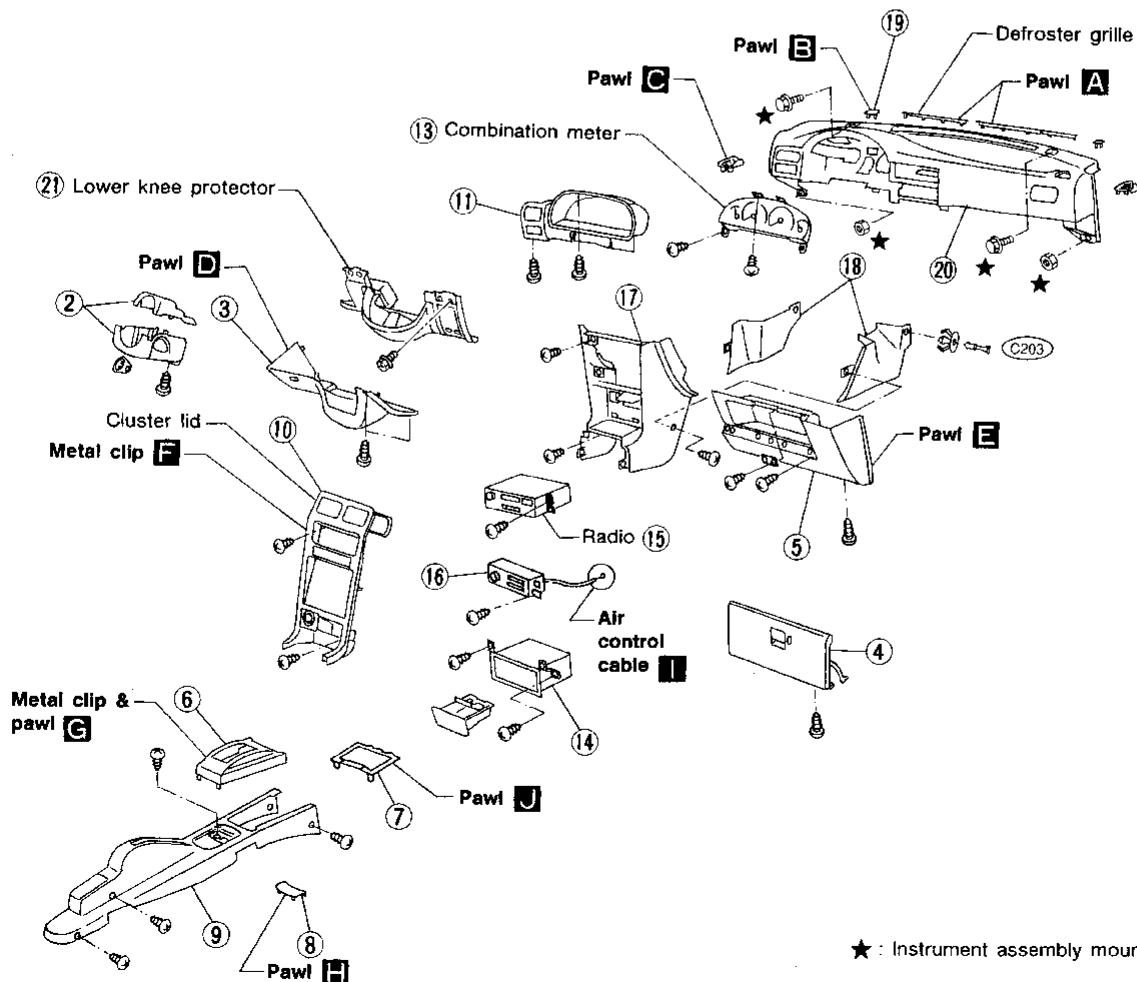
INSTRUMENT PANEL

CAUTION:

- Disconnect ground terminal from battery in advance.
- Disconnect air bag system line in advance.
- Be careful not to scratch pad and other parts.

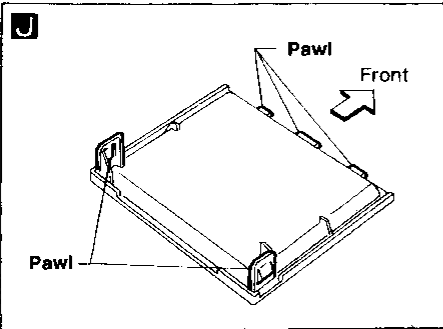
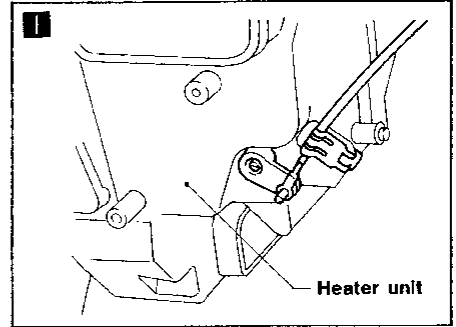
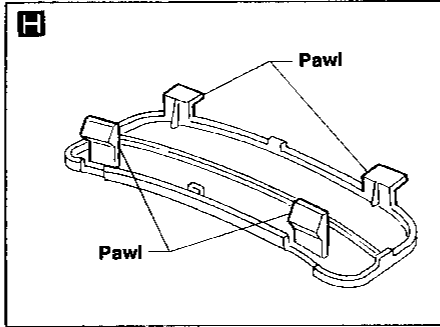
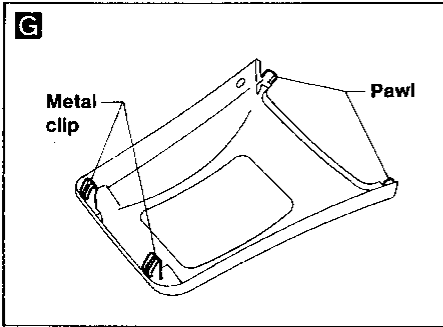
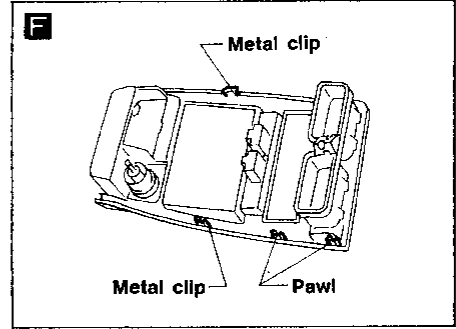
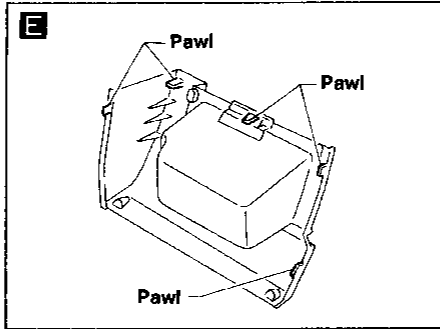
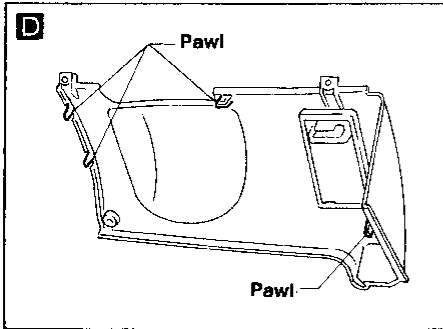
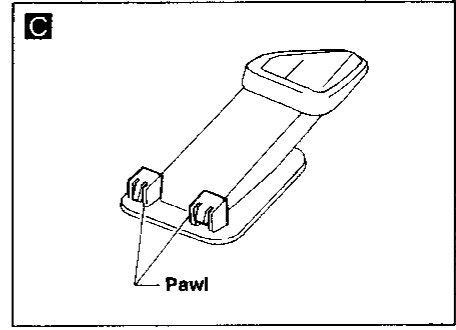
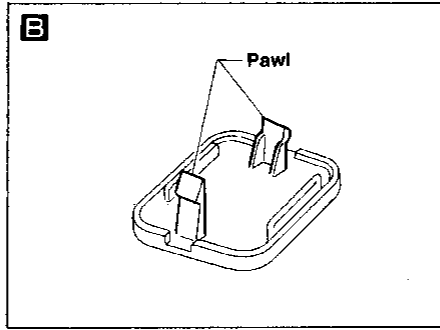
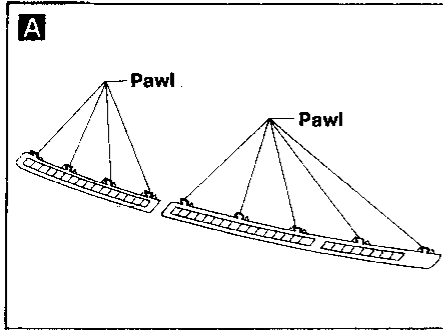
REMOVAL — Instrument panel assembly

- ① Remove steering wheel. Disengage air bag system in advance.
- ② Remove steering column cover.
- ③ Remove lower instrument cover on driver's side. **D**
- ④ Remove glove box lid.
- ⑤ Remove glove box. **E**
- ⑥ Remove A/T finisher or shift lever boot. **G**
- ⑦ Remove instrument lower center cover. **J**
- ⑧ Remove console mask. **H**
- ⑨ Remove console box.
- ⑩ Remove cluster lid C. **F**
- ⑪ Remove cluster lid A.
- ⑫ Remove speedometer cable at A/T or M/T side. — Needle type combination meter
- ⑬ Remove combination meter assembly.
- ⑭ Remove deck pocket.
- ⑮ Remove radio.
- ⑯ Remove A/C or heater control. **I**
- ⑰ Remove instrument lower panel center.
- ⑱ Remove instrument lower cover.
- ⑲ Remove instrument upper mask. **B**
- ⑳ Remove instrument panel and pads. **A**
- ㉑ Remove lower knee protector.



★ : Instrument assembly mounting screws

INSTRUMENT PANEL



Interior

SIDE AND FLOOR TRIM — Passenger room

CAUTION:

- Be sure to remove front, center and rear pillar garnishes by pulling them straight out. Use a long flat-bladed screwdriver when removing metal clips from rear pillar garnish.
- Wrap the tip of flat-bladed screwdriver with a cloth when removing metal clips from garnishes.

Removal — Body side trim

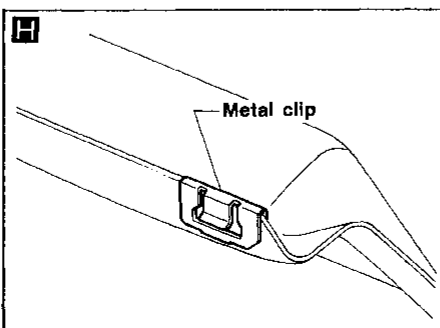
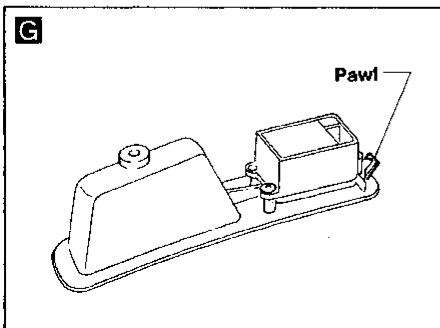
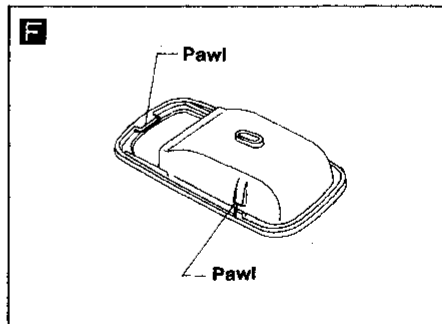
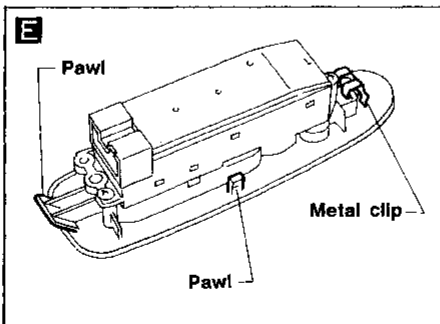
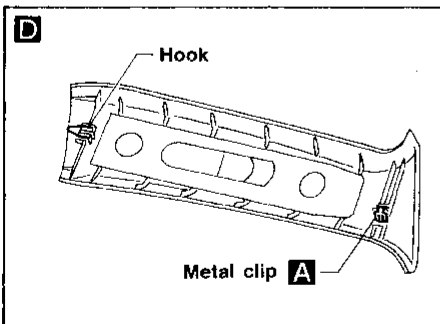
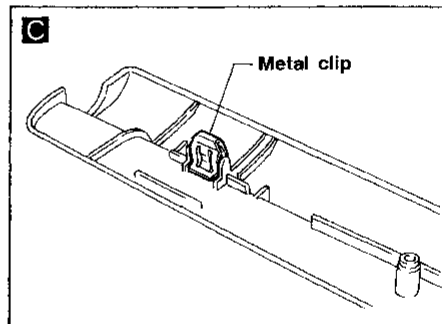
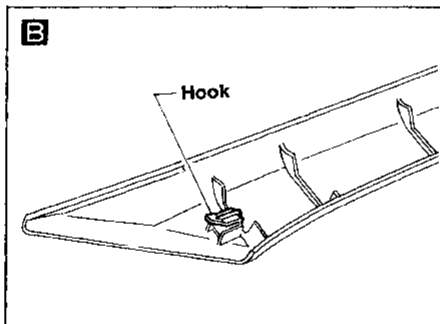
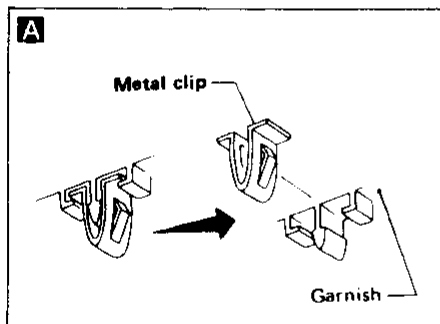
- ① Remove front pillar garnish.
- ② Remove front and rear kick plates.
- ③ Remove dash side finisher.
- ④ Remove upper garnish.
- ⑤ Remove center pillar lower garnish.
- ⑥ Remove center pillar upper garnish.
- ⑦ Remove rear parcel shelf.
- ⑧ Remove rear pillar finisher.

Removal — Rear parcel shelf finisher

- ① Remove rear seat cushion. For details, refer to "Rear Seat" in "SEAT".
- ② Remove rear seatback. For details, refer to "Rear Seat" in "SEAT".
- ③ Remove high-mounted stop lamp assembly.
- ④ Remove rear parcel shelf finisher.

Removal — Door trim

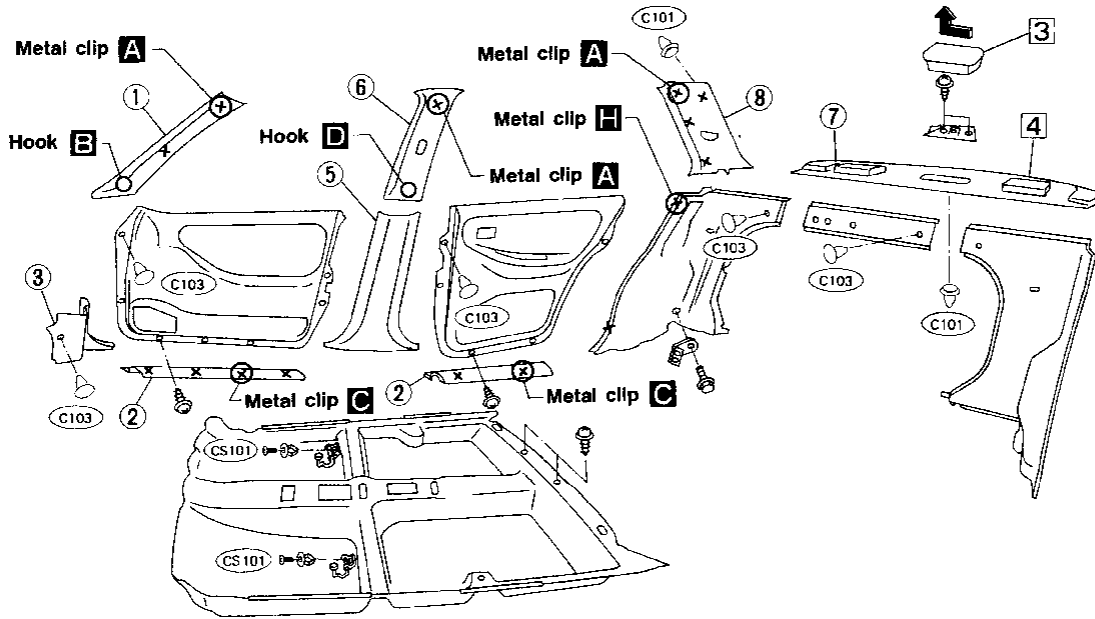
- ① Remove inside handle escutcheon.
- ② Remove power window switch assembly.
- ③ Remove pull handle.



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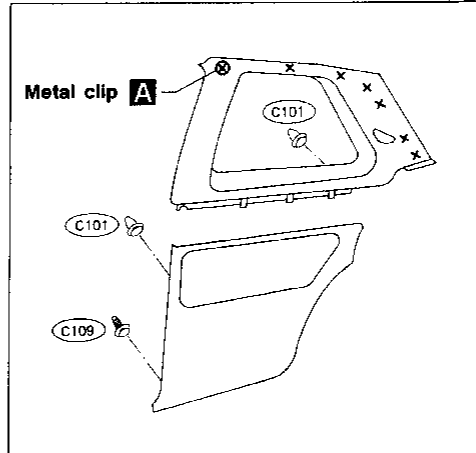
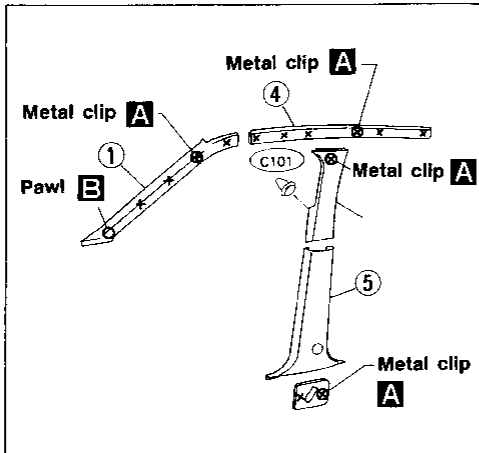
INTERIOR AND EXTERIOR

Interior (Cont'd)



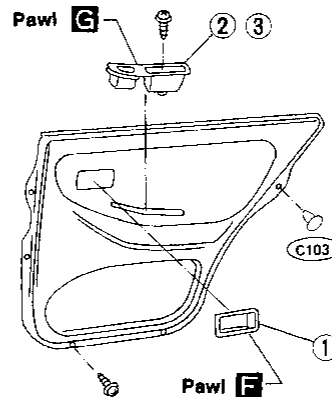
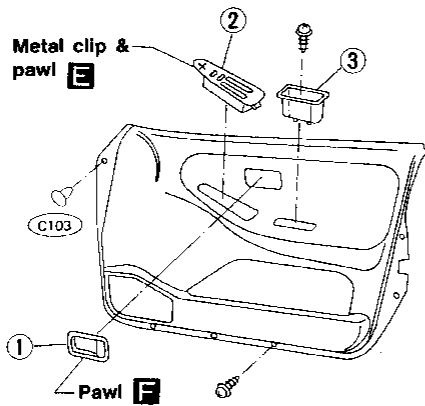
Models with 2-point motorized automatic seat bolt

2-door Sedan



Front door trim

Rear door trim



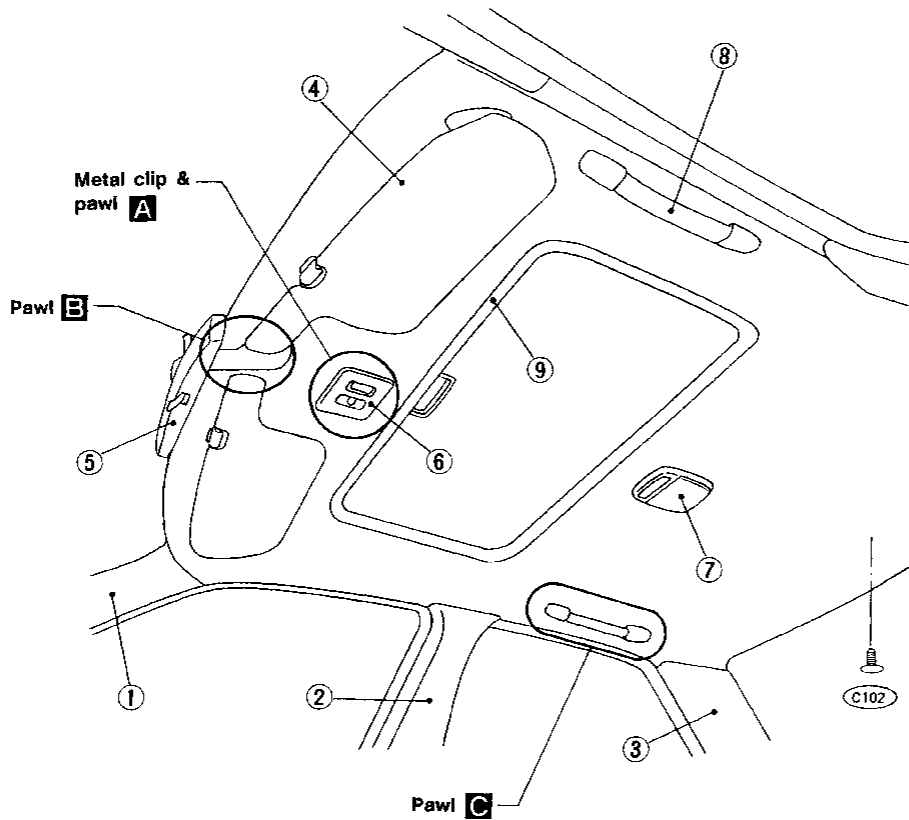
INTERIOR AND EXTERIOR

Interior (Cont'd)

ROOF TRIM

Removal — Headlining

- ① Remove front pillar garnish. Refer to "Removal — Body side trim" for details.
- ② Remove center pillar garnish. Refer to "Removal — Body side trim" for details.
- ③ Remove rear pillar garnish. Refer to "Removal — Body side trim" for details.
- ④ Remove sun visor.
- ⑤ Remove rearview mirror.
- ⑥ Remove sun roof control switch assembly.
- ⑦ Remove interior lamp assembly.
- ⑧ Remove assist grip.
- ⑨ Remove welt.
- ⑩ Remove headlining.



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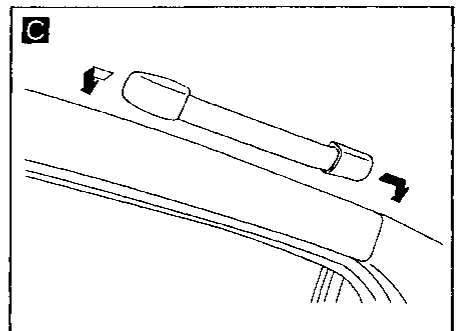
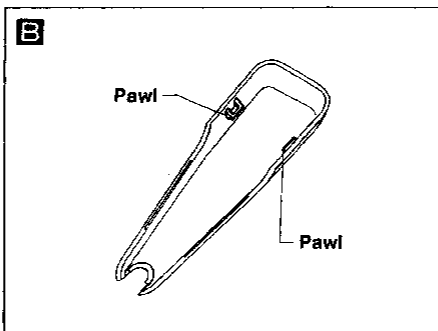
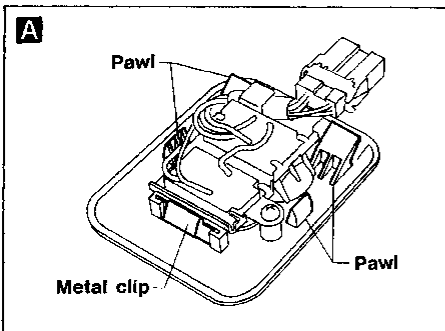
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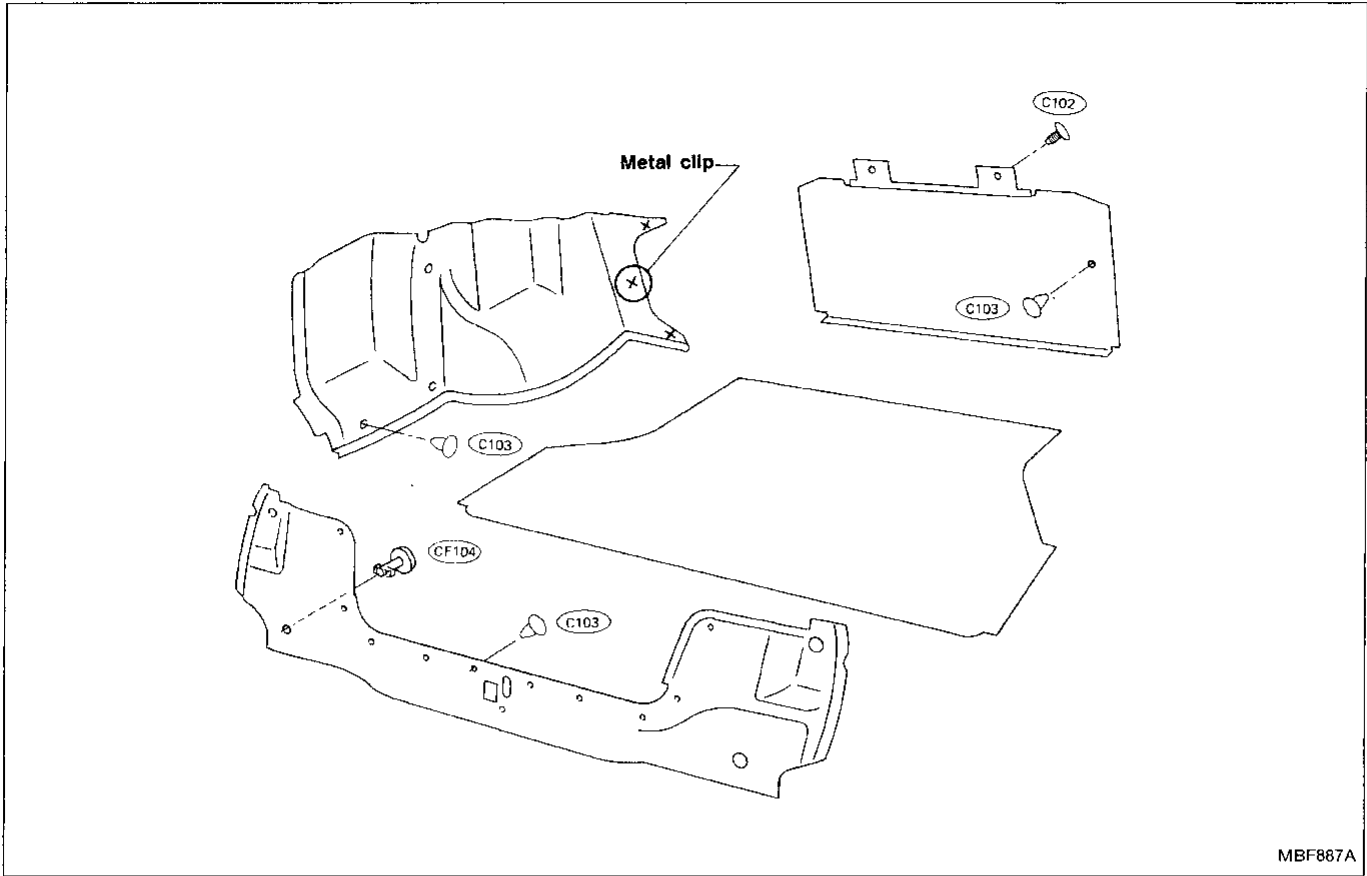
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INTERIOR AND EXTERIOR

Interior (Cont'd)

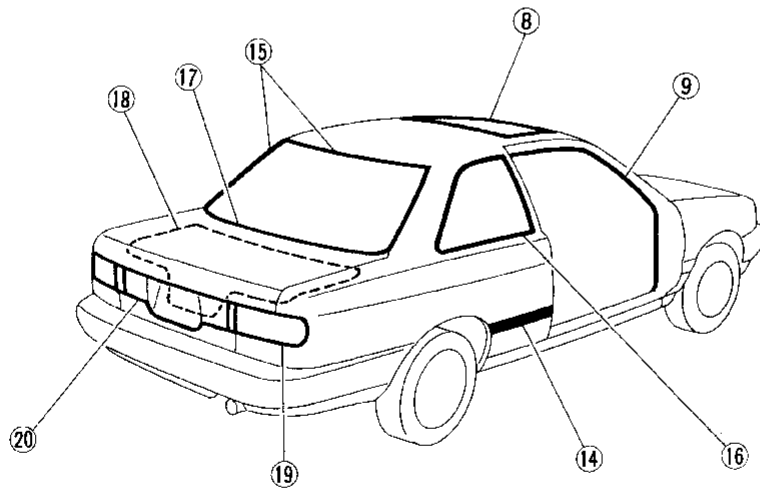
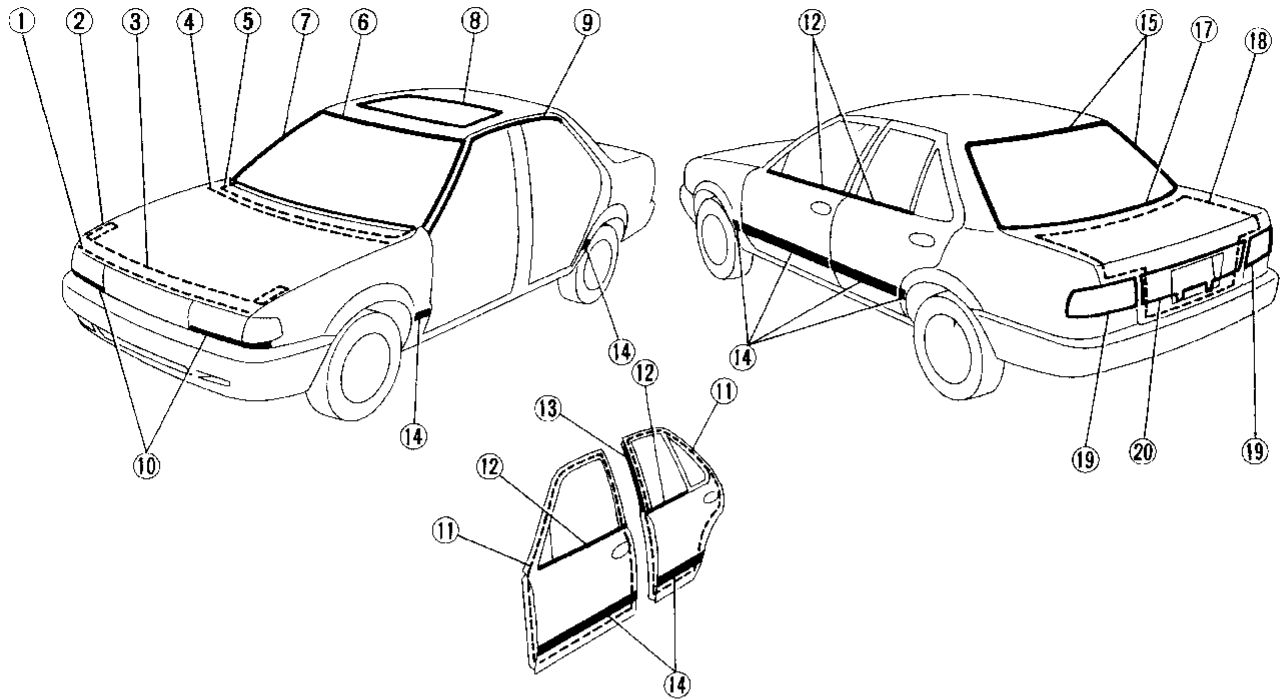
LUGGAGE COMPARTMENT TRIM — Trunk space



MBF887A

INTERIOR AND EXTERIOR

Exterior

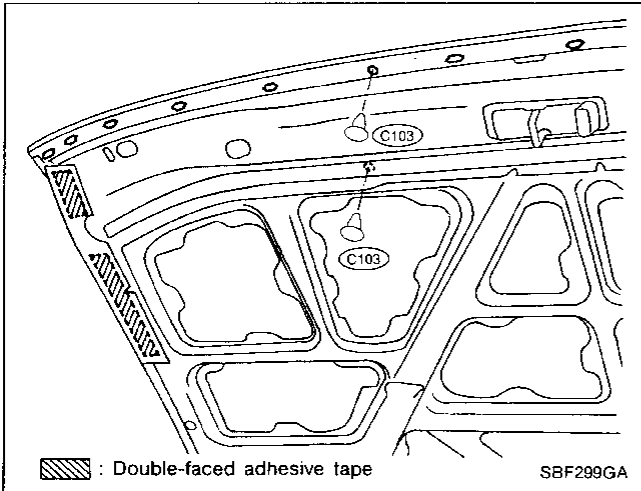


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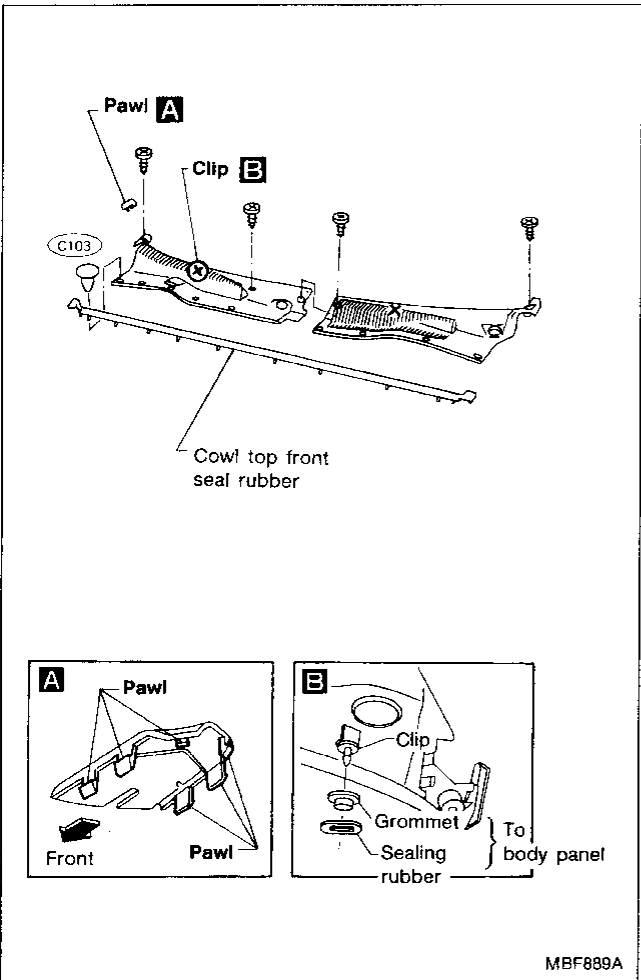
INTERIOR AND EXTERIOR

Exterior (Cont'd)

① ② ③ Hood front seal



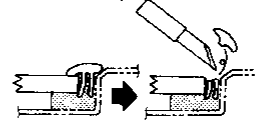
④ ⑤ Cowl top seal and cowl top grille



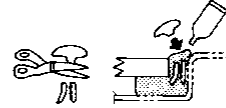
⑥ Windshield upper molding

Method 1

Cut off top portion of molding and clean glass and panel surfaces.



Apply sealant to top portion of molding.



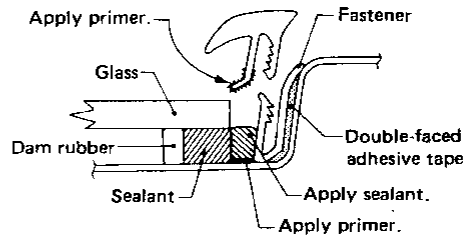
Cut off lower portion of new molding.



Finish well to give it a good appearance.

Method 2

1. Cut off sealant at glass end.
2. Clean the side on which panel was mounted.
3. Set molding fastener and apply sealant to body panel, and apply primer to molding and body.



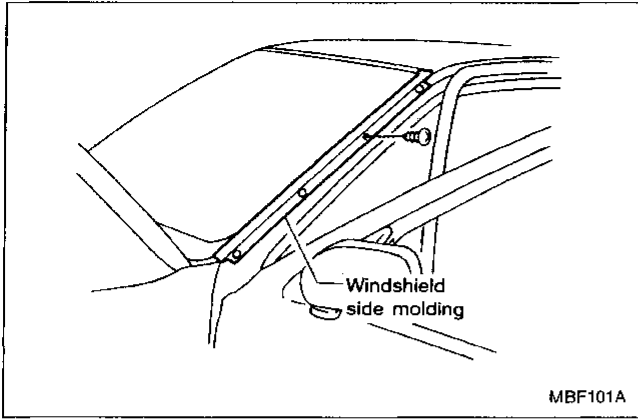
4. Install molding by aligning the molding mark located on center with vehicle center. Be sure to install tightly so that there is no gap around the corner.

SBF161E

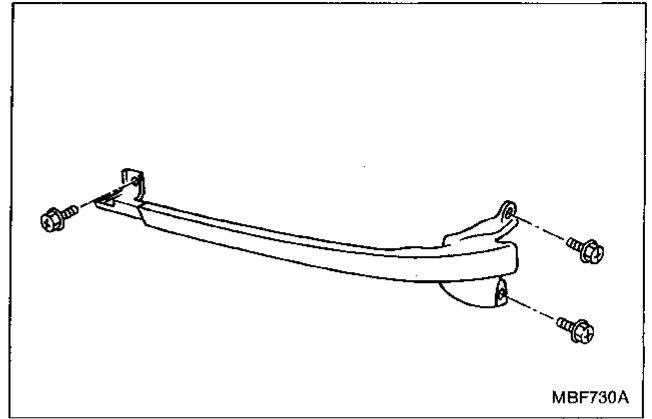
INTERIOR AND EXTERIOR

Exterior (Cont'd)

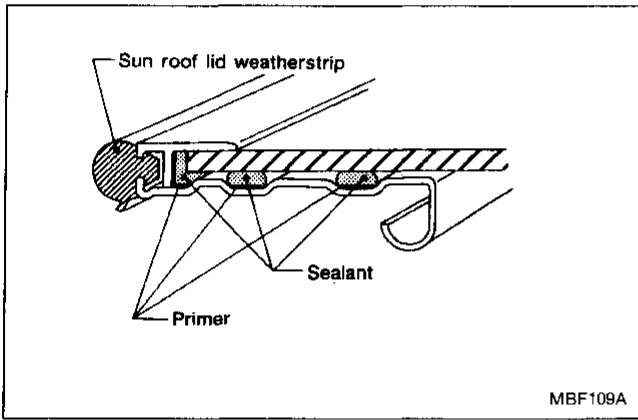
⑦ Windshield side molding



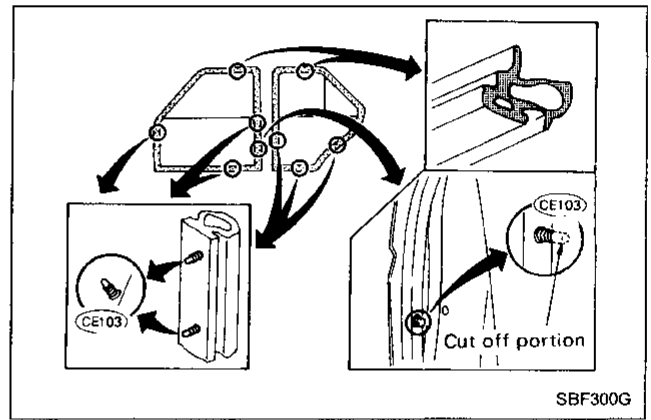
⑩ Front apron



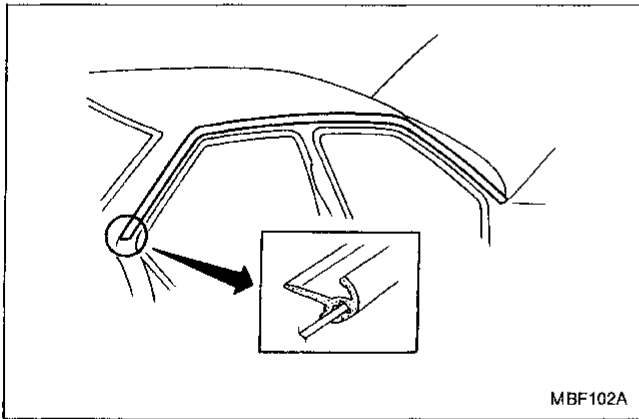
⑧ Sun roof lid weatherstrip



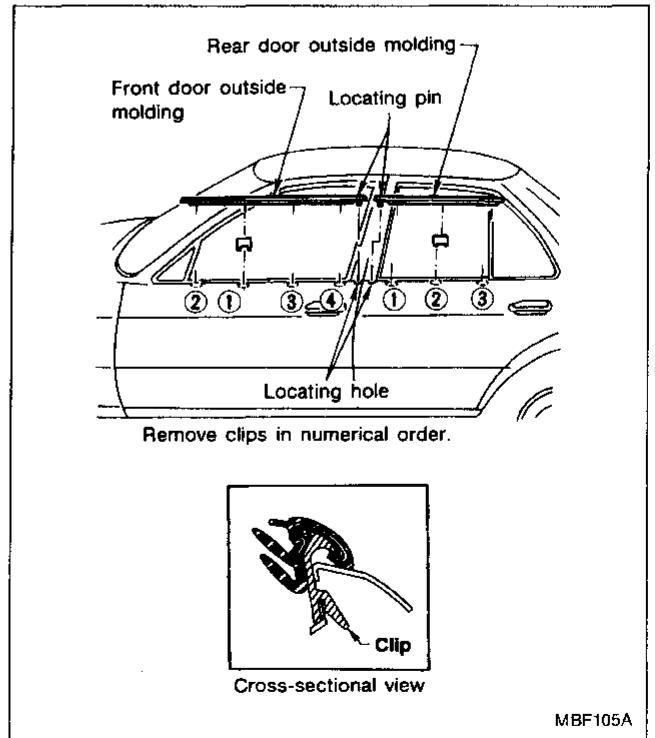
⑪ Door weatherstrip



⑨ Body side drip weatherstrip



⑫ Door waist outside molding



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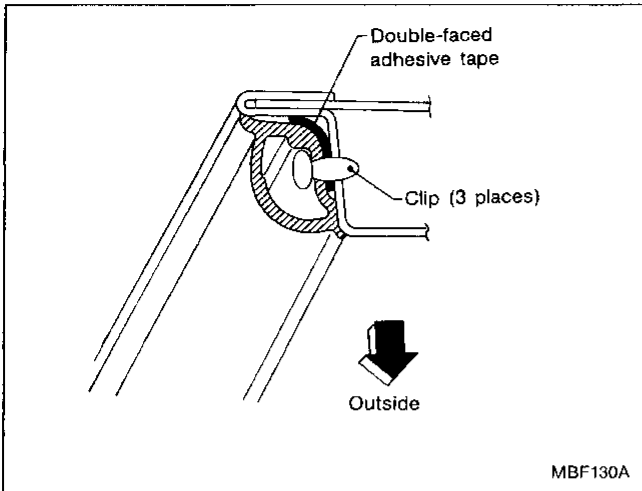
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INTERIOR AND EXTERIOR

Exterior (Cont'd)

13 Rear door parting seal



14 Side guard molding

A diagram showing a car with arrows pointing to the side guard molding. Below the car, a cross-section of the molding is shown with a label "Double-faced adhesive tape".

- **Removal:**
 1. Heat molding portion to 30 to 40°C (86 to 104°F) with a heat gun.
- 2. Raise end of molding and, while cutting off bonding agent, detach molding.

A diagram showing a hand holding a heat gun, with a stream of heat directed at a surface. The label "Heat gun" is below the device.

- **Installation:**
 1. Remove all traces of bonding agent from body panel. Then clean contact face of body.
 2. Heat body panel and molding to 30 to 40°C (86 to 104°F) with a heat gun. Then install molding.

MBF223B

15 Rear window upper & side molding

Basically the same as windshield upper molding. Refer to ⑥ Windshield upper molding.

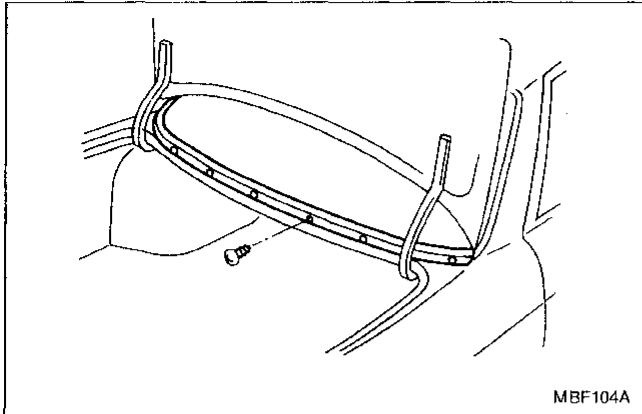
16 Side window molding (2-door)

Refer to "Rear Side Window".

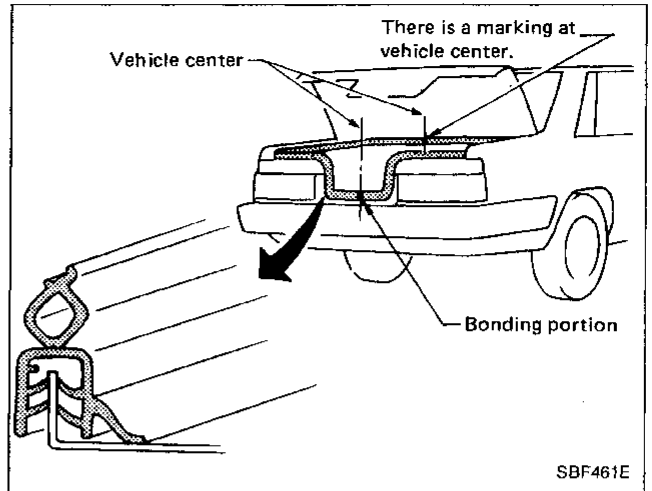
INTERIOR AND EXTERIOR

Exterior (Cont'd)

17 Rear window lower molding



18 Trunk lid weatherstrip



19 Rear combination lamp

- Rear combination lamps are installed with nuts and butyl seal.

Removal

Heat gun
Butyl seal

- Warm up lamp assembly area to a temperature slightly below 60°C (140°F).

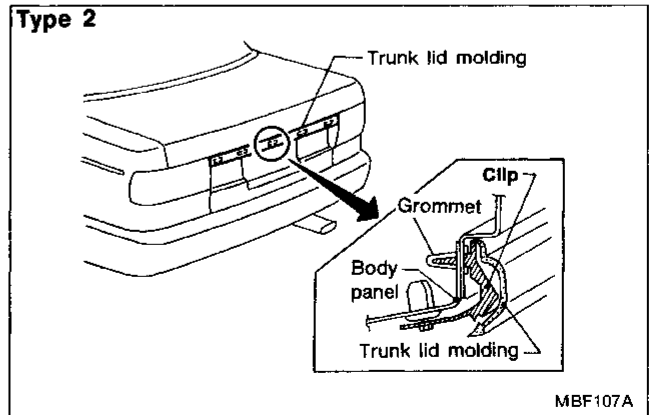
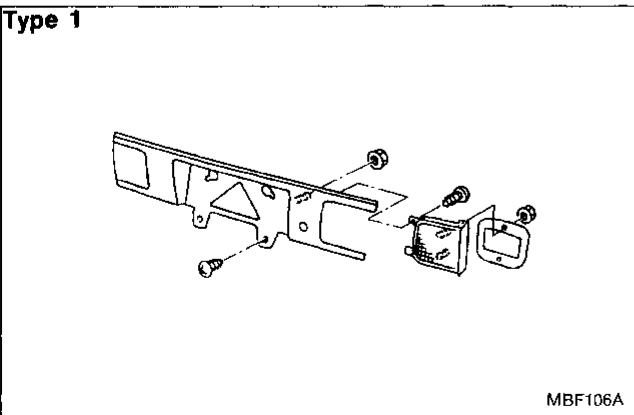
Installation

Heat gun
Butyl seal

- Apply butyl seal evenly as it tends to become thin at the corners.
- Warm up lamp assembly area to a temperature slightly below 60°C (140°F).

MBF120A

20 Trunk lid finisher and molding



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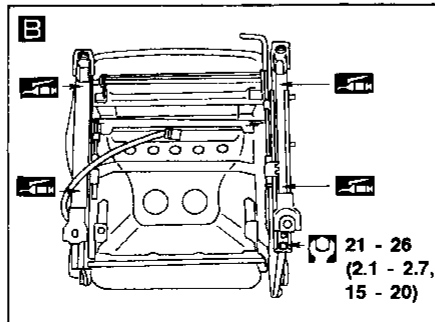
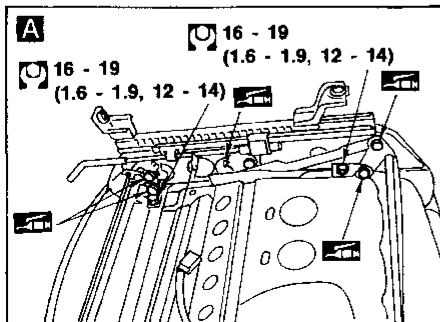
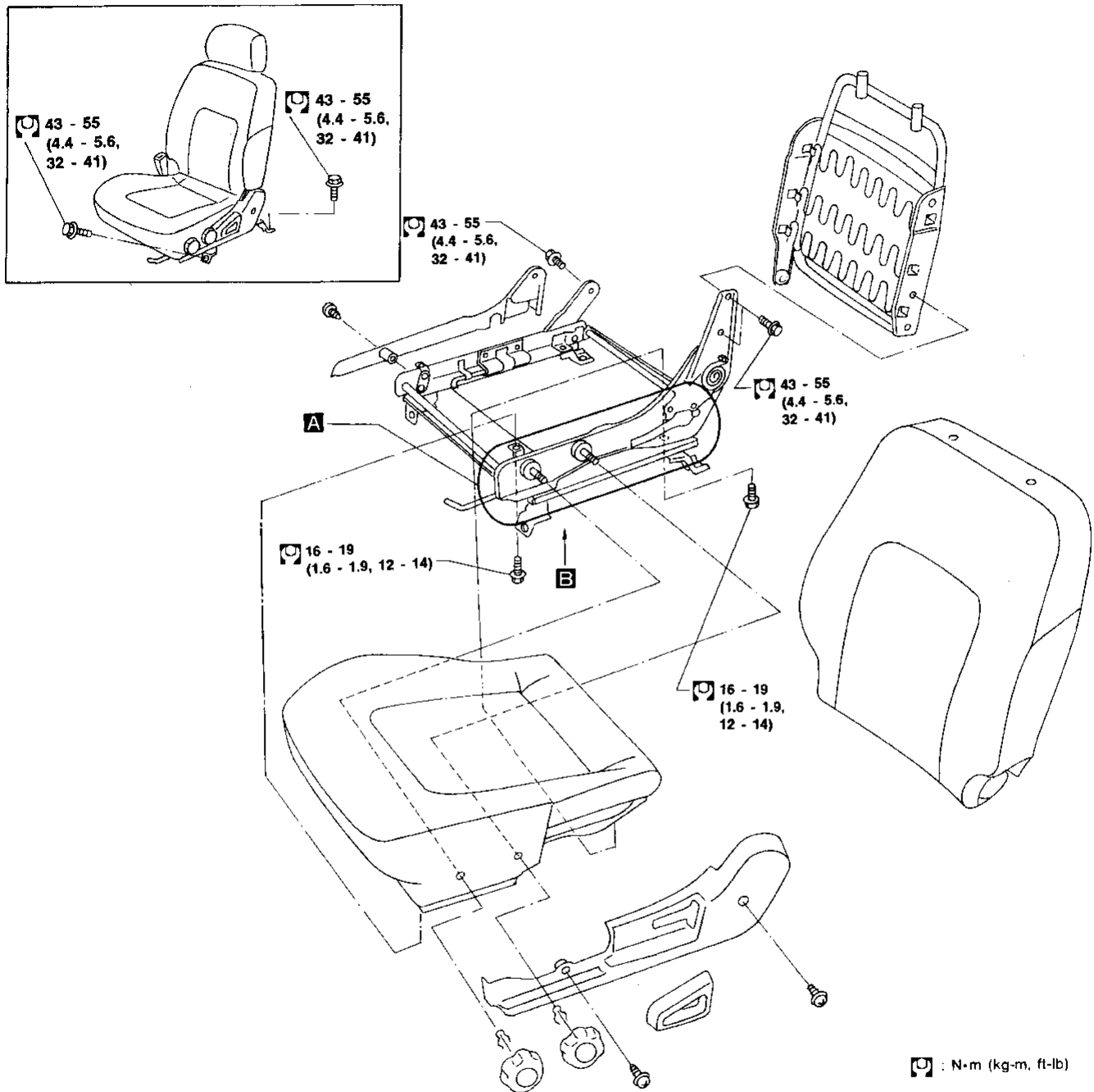
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SEAT

- When removing or installing the seat trim, handle it carefully to keep dirt out and avoid damage.

Front Seat

TYPE A



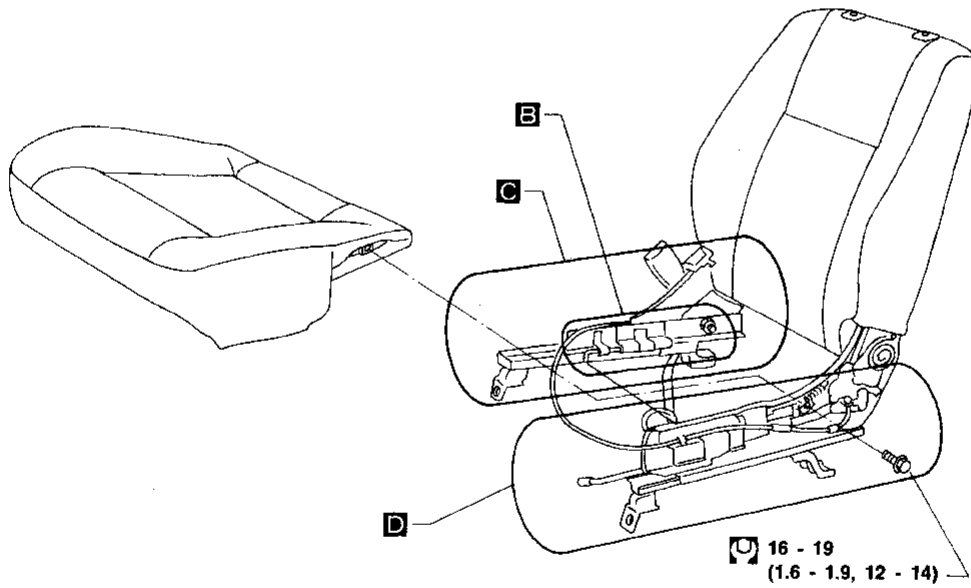
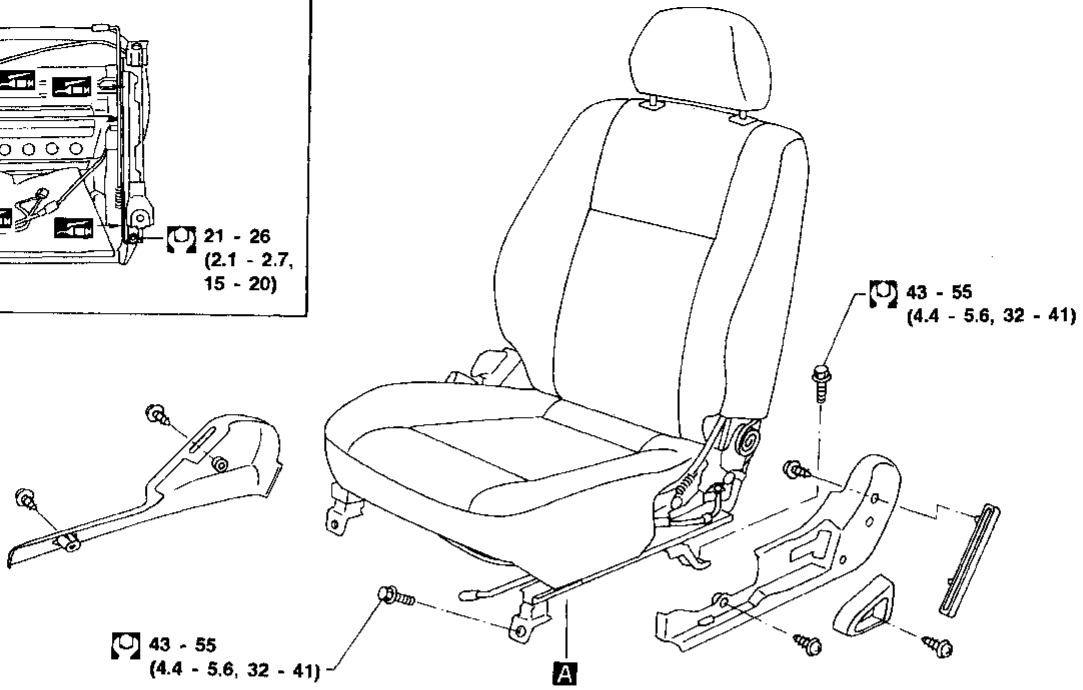
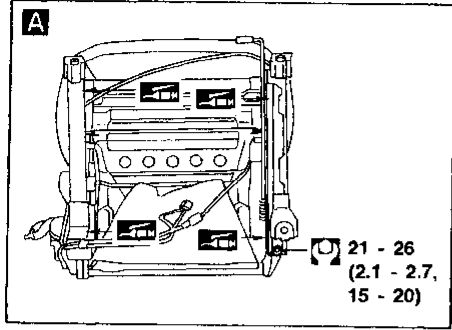
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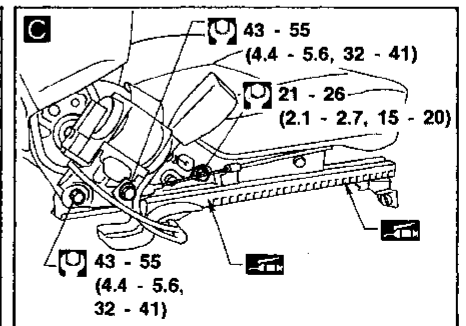
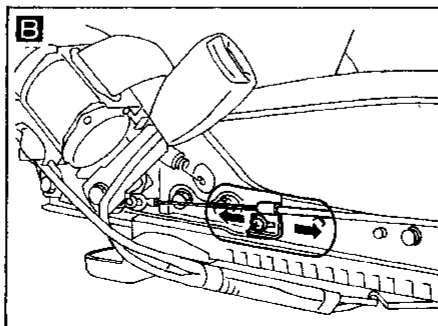
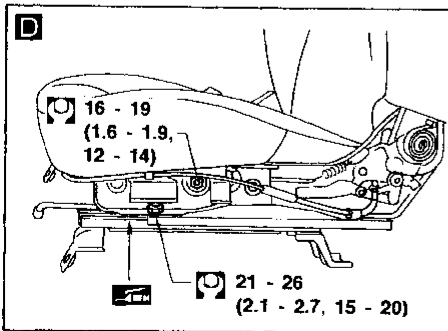
SEAT

Front Seat (Cont'd)

TYPE B



: N·m (kg·m, ft·lb)



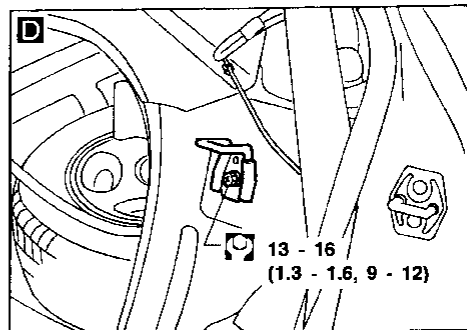
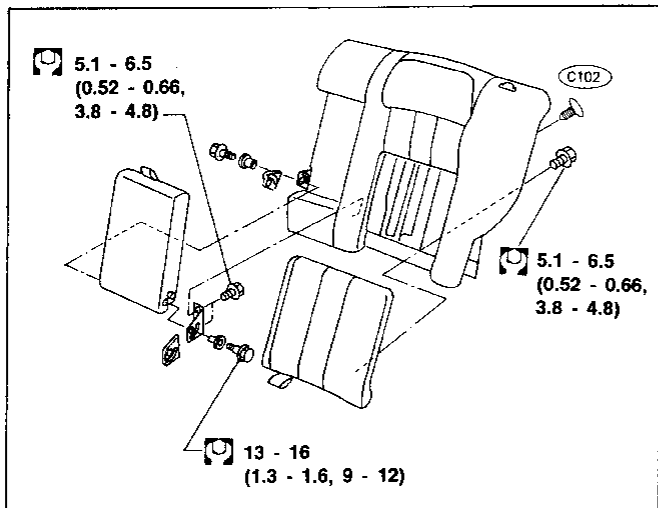
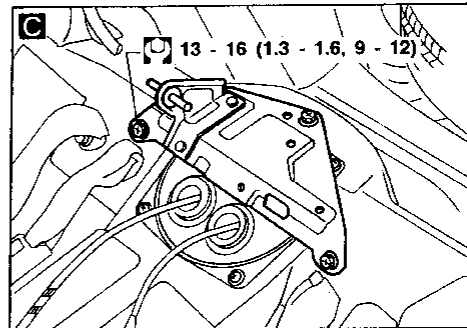
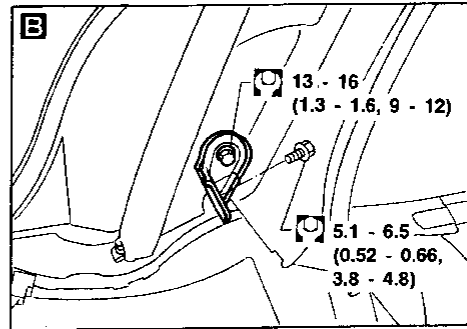
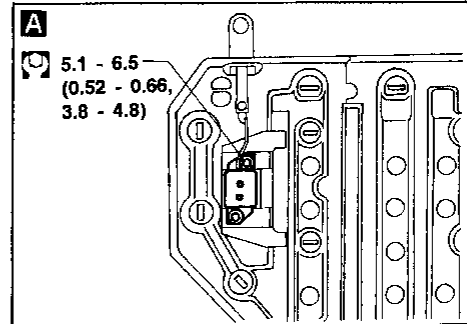
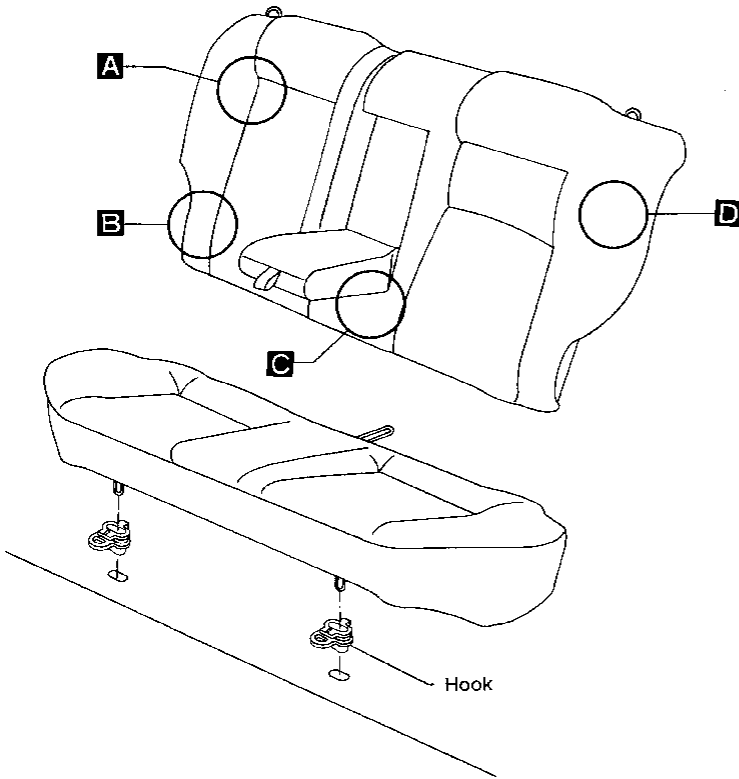
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SEAT

Rear Seat

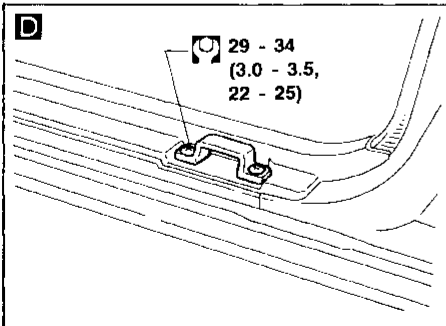
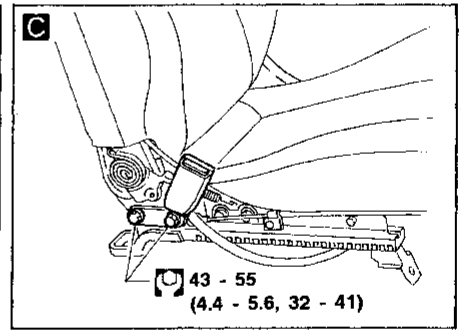
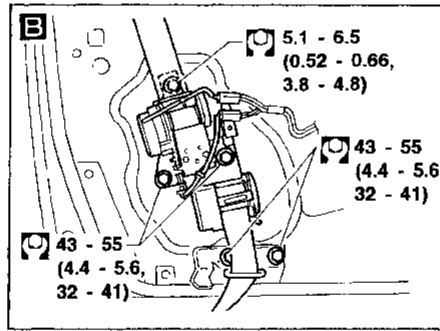
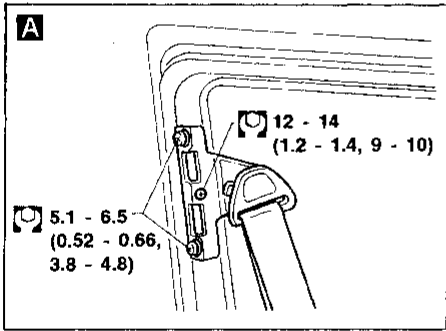
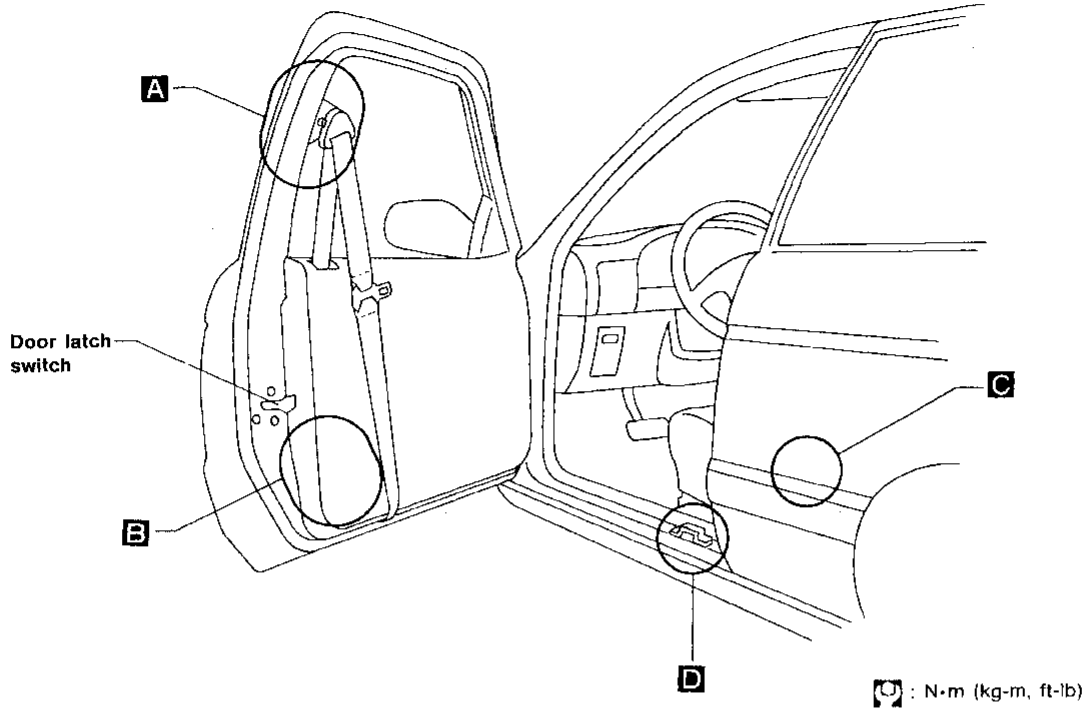


 : N·m (kg-m, ft-lb)

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3-POINT FIXED AUTOMATIC SEAT BELT SYSTEM — 2-door Sedan

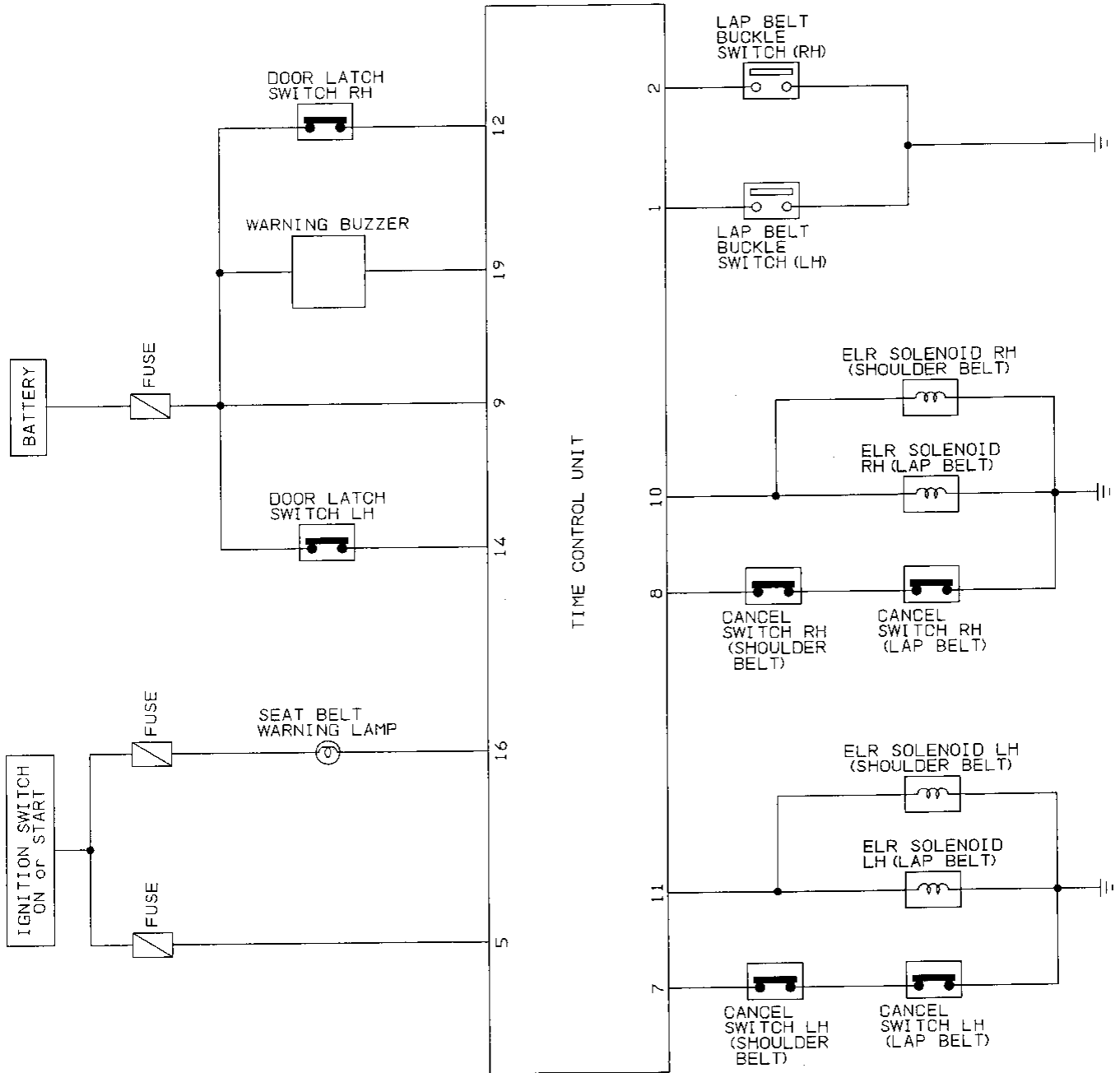
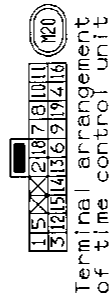
Unit Location



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3-POINT FIXED AUTOMATIC SEAT BELT SYSTEM — 2-door Sedan

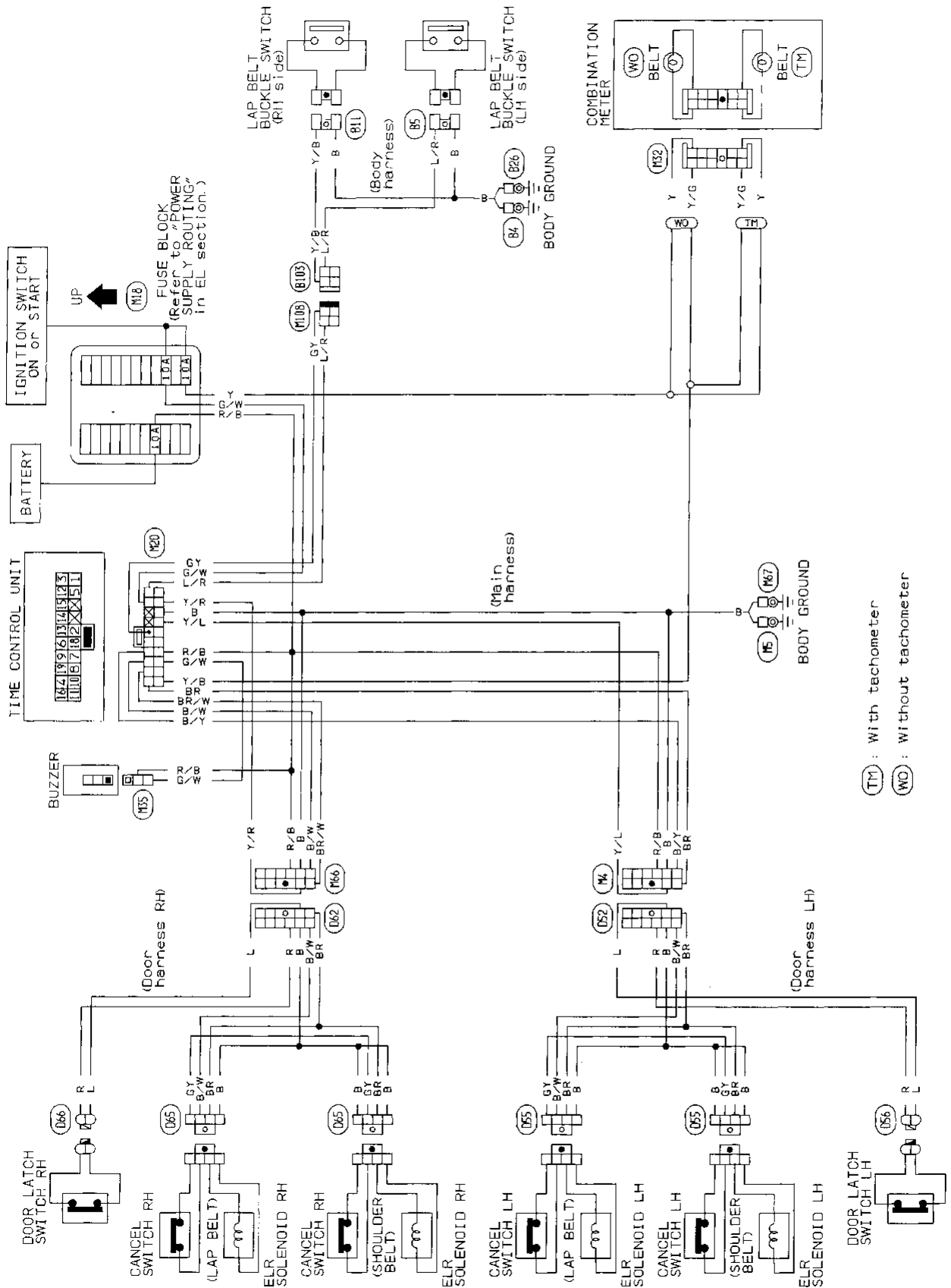
Schematic



MBF233B

3-POINT FIXED AUTOMATIC SEAT BELT SYSTEM — 2-door Sedan

Wiring Diagram



MBF234B

3-POINT FIXED AUTOMATIC SEAT BELT SYSTEM — 2-door Sedan

Description

WARNING LIGHT AND CHIME OPERATION

The warning light and chime are controlled by the following input signals.

| Input signal | Switch application | | Notice |
|-------------------------|--------------------|----------------|----------------------------|
| | Driver's side | Passenger side | |
| Ignition switch | — | — | Ignition switch condition |
| Door latch switch | Yes | Yes | Door is open. |
| Seat belt buckle switch | Yes | Yes | Seat belt is not fastened. |
| Cancel switch | Yes | Yes | ELR solenoid is on. |

● Basic operation

| Door | Ignition switch | Shoulder belt | | ELR solenoid | Warning light | Warning buzzer |
|--------|-----------------|----------------------------------|-----------|--------------|-----------------------------------|---------------------|
| | | Driver's | Passenger | | | |
| OPEN | OFF → ON | Fastened | Fastened | ON | Lights continuously | OFF |
| | | Except above | | | Lights continuously | 4 times (6 seconds) |
| | ON | Either fastened or not fastened. | | | Lights continuously | OFF |
| CLOSED | OFF → ON | Fastened | Fastened | OFF | Lights for 6 seconds | OFF |
| | | Except above | | | Lights continuously (100 seconds) | 4 times (6 seconds) |
| | ON | Fastened | Fastened | | OFF | OFF |
| | | Except above | | | Lights continuously (100 seconds) | OFF |

SEAT BELT LOCKING CANCELER

Seat belt retractors for both sides have been equipped with a system to cancel the seat belt locks.

Function

The seat belt retractor does not lock belt length when the door is opened. While ignition switch is "ON", the system warning lamp also glows.

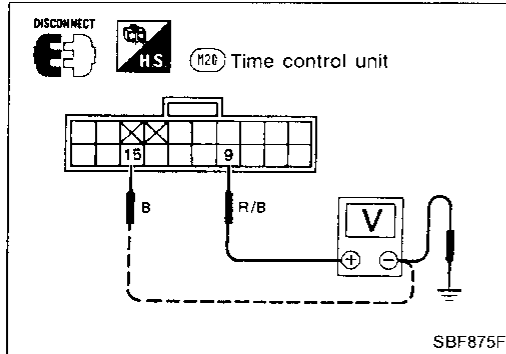
ALARM FUNCTION (Ignition switch "ON")

When time control unit output for ELR solenoid is off and the input from door latch switch is on, the warning lamp will flash and the buzzer will operate for 6 seconds when the ignition switch is turned on and the door is closed.

Trouble Diagnoses

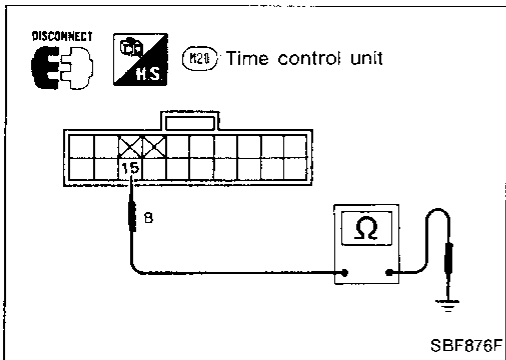
Remove driver's side lower instrument cover. Refer to "INSTRUMENT PANEL" BF-25.

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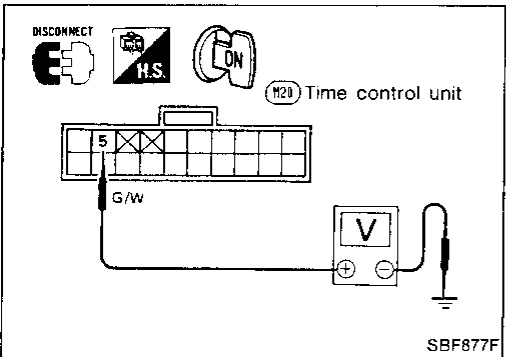
POWER SUPPLY CIRCUIT CHECK (Ignition switch ON or START)

| | Terminals | | Voltage |
|-------------------|-----------|-------------|-------------|
| | ⊕ | ⊖ | |
| Time control unit | ⑨ | Body ground | Approx. 12V |
| | ⑨ | ⑮ | Approx. 12V |



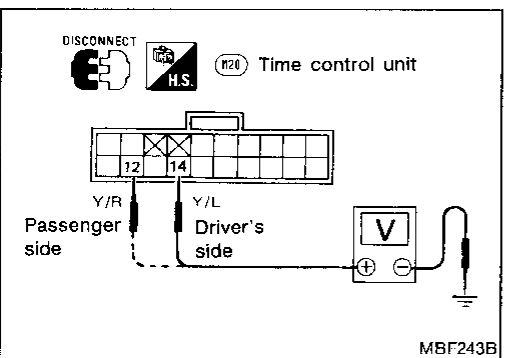
GROUND CIRCUIT CHECK

| | Terminals | | Continuity |
|-------------------|-----------|-------------|------------|
| Time control unit | ⑮ | Body ground | Yes |



IGNITION SWITCH CIRCUIT CHECK (Ignition switch ON)

| | Terminals | | Voltage |
|-------------------|-----------|-------------|-------------|
| Time control unit | ⑤ | Body ground | Approx. 12V |



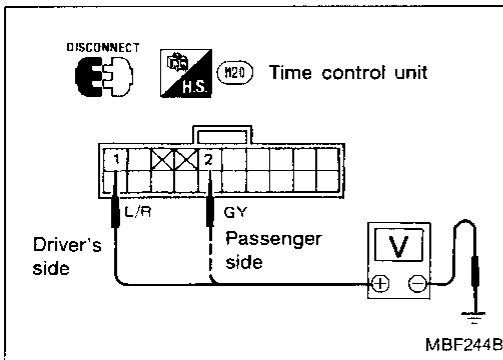
LATCH SWITCH CIRCUIT CHECK

| | Condition | Terminals | | Voltage |
|------|-----------|-----------|-------------|-------------|
| Door | OPEN | ⑭ | Body ground | Approx. 12V |
| | | ⑫ | | |
| | CLOSED | ⑭ | | 0V |
| | | ⑫ | | |

3-POINT FIXED AUTOMATIC SEAT BELT SYSTEM — 2-door Sedan

Trouble Diagnoses (Cont'd)

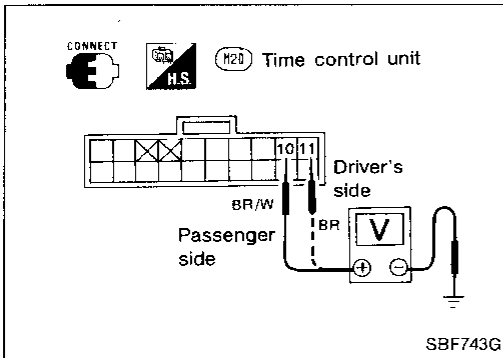
BUCKLE SWITCH CIRCUIT CHECK



| | | Condition | Terminals | Voltage |
|-----------|----------------|--------------|-----------|-------------|
| Seat belt | Driver's side | FASTENED | ① | Approx. 12V |
| | | NOT FASTENED | | 0V |
| | Passenger side | FASTENED | ② | Approx. 12V |
| | | NOT FASTENED | | 0V |

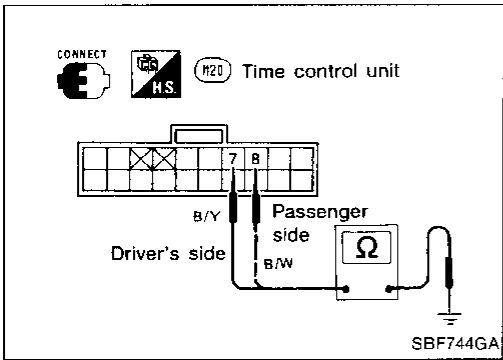
SEAT BELT LOCKING CANCELLER CIRCUIT CHECK

ELR solenoid



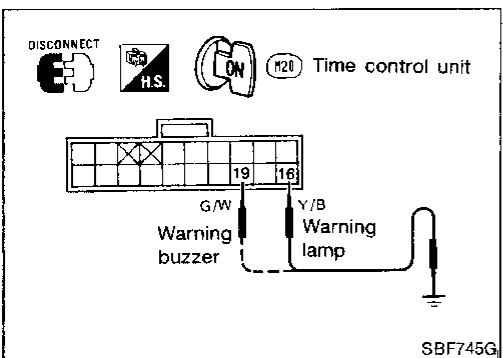
| | | Condition | Terminals | Voltage |
|------|----------------|-----------|-----------|-------------|
| Door | Driver's side | Open | ⑪ | Approx. 12V |
| | | Closed | | 0V |
| | Passenger side | Open | ⑩ | Approx. 12V |
| | | Closed | | 0V |

Cancel switch



| | | Condition | Terminals | Continuity |
|------|----------------|-----------|-----------|---------------------|
| Door | Driver's side | Open | ⑦ | No (more than 1 kΩ) |
| | | Closed | | Yes (less than 10Ω) |
| | Passenger side | Open | ⑧ | No (more than 1 kΩ) |
| | | Closed | | Yes (less than 10Ω) |

SEAT BELT WARNING LAMP AND BUZZER CIRCUIT CHECK



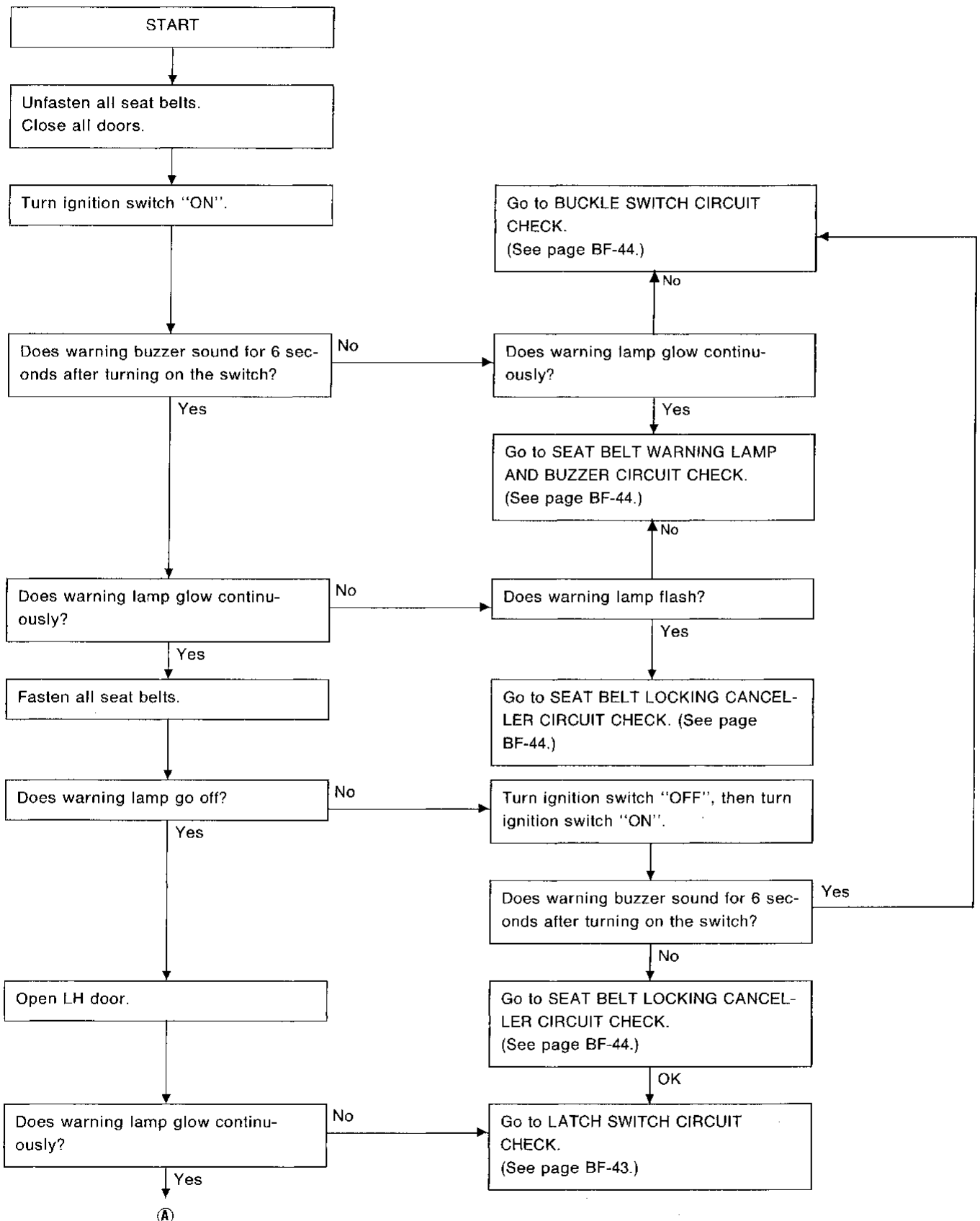
| | Condition | Operation |
|----------------|-------------------------|----------------|
| Warning lamp | Terminal ⑱ is grounded. | Lamp glows. |
| Warning buzzer | Terminal ⑲ is grounded. | Buzzer sounds. |

3-POINT FIXED AUTOMATIC SEAT BELT SYSTEM — 2-door Sedan

Trouble Diagnoses (Cont'd)

PROCEDURE 1

Warnings indicate incorrectly or do not function.



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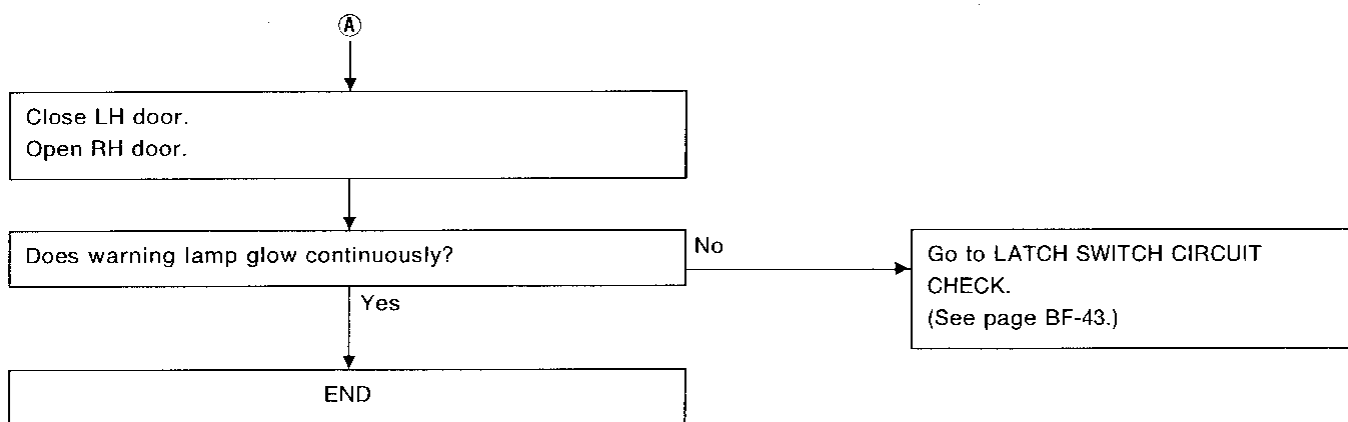
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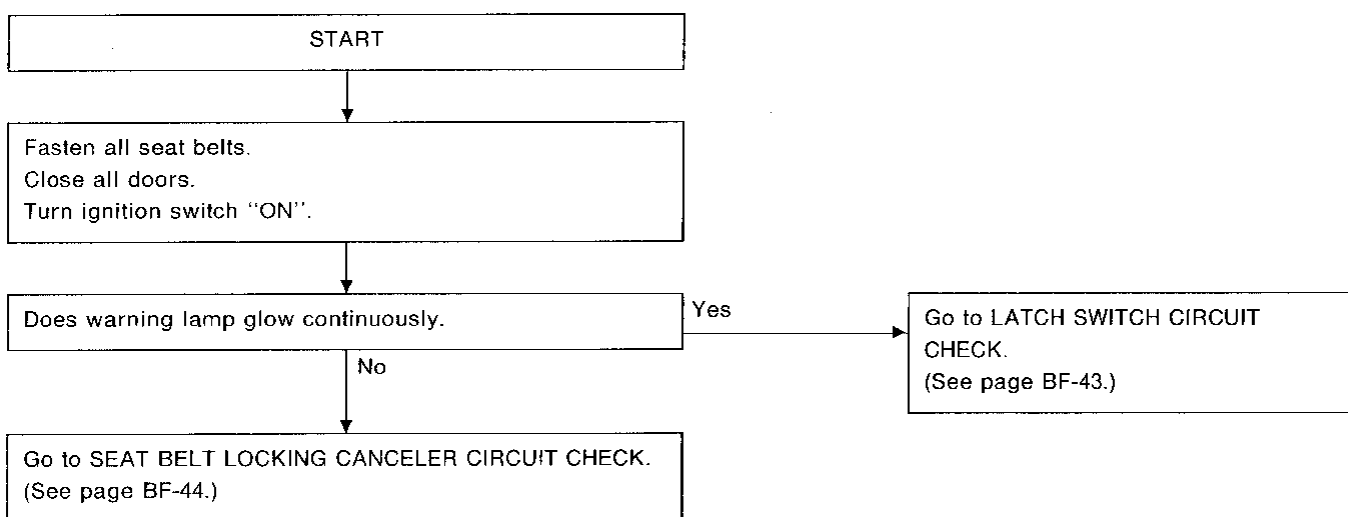
3-POINT FIXED AUTOMATIC SEAT BELT SYSTEM — 2-door Sedan

Trouble Diagnoses (Cont'd)



PROCEDURE 2

Seat belt locks when opening the door.



3-POINT FIXED AUTOMATIC SEAT BELT SYSTEM — 2-door Sedan

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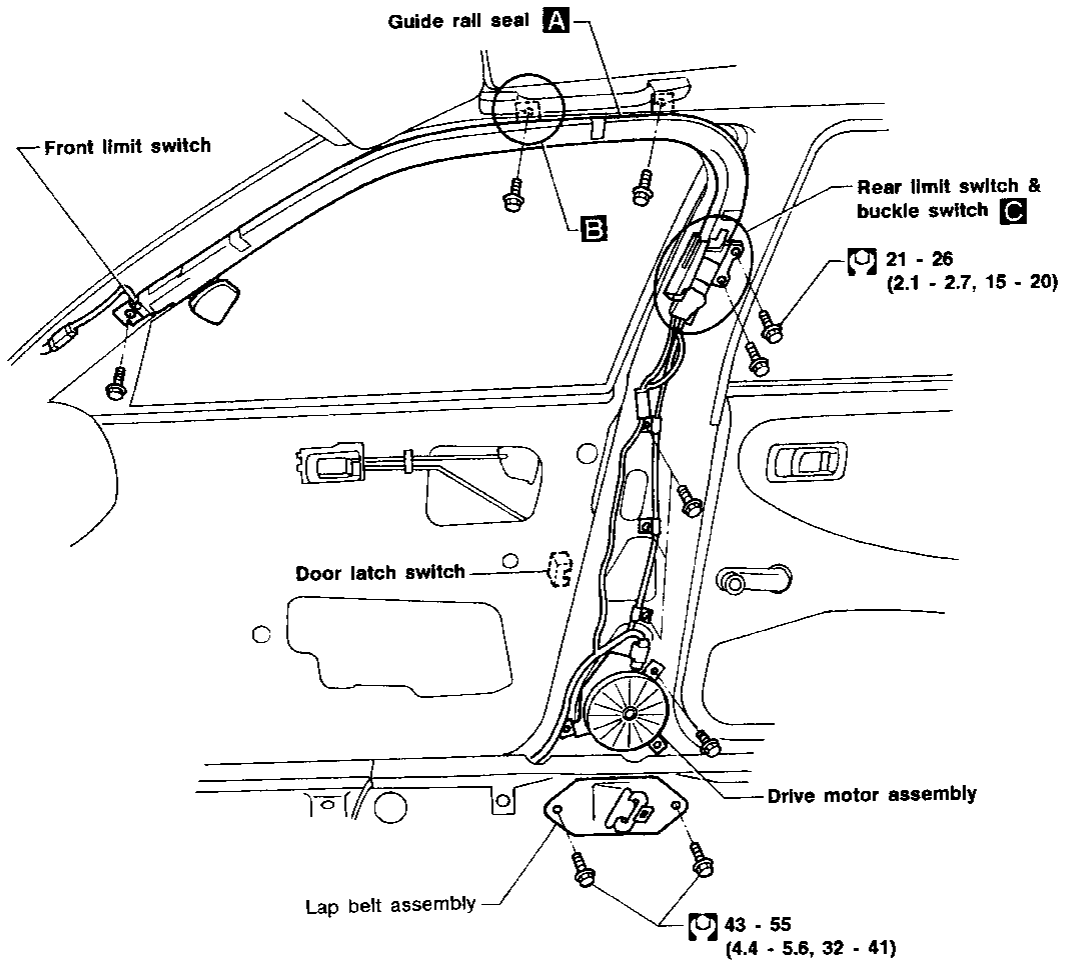
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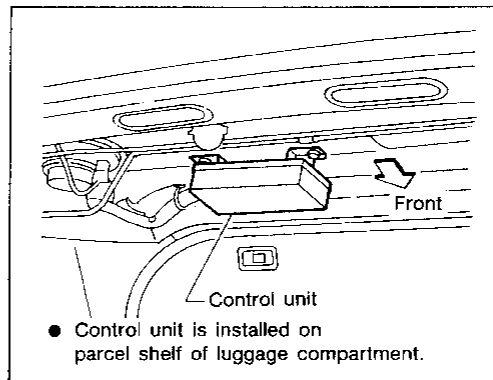
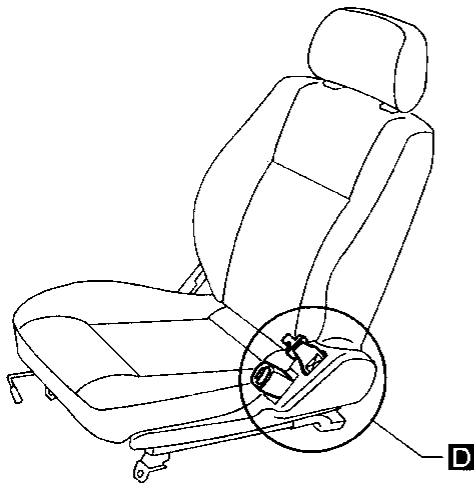
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Unit Location



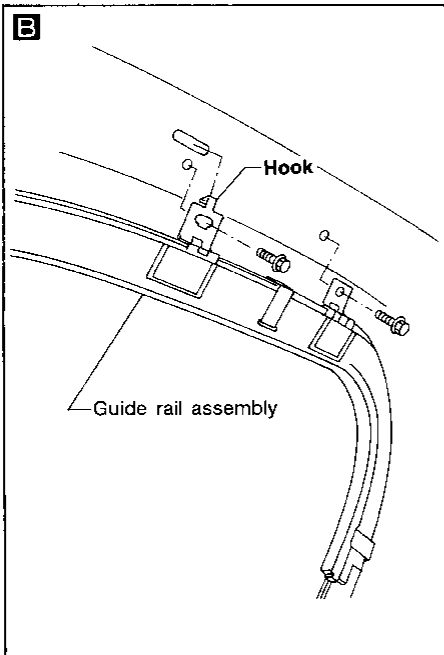
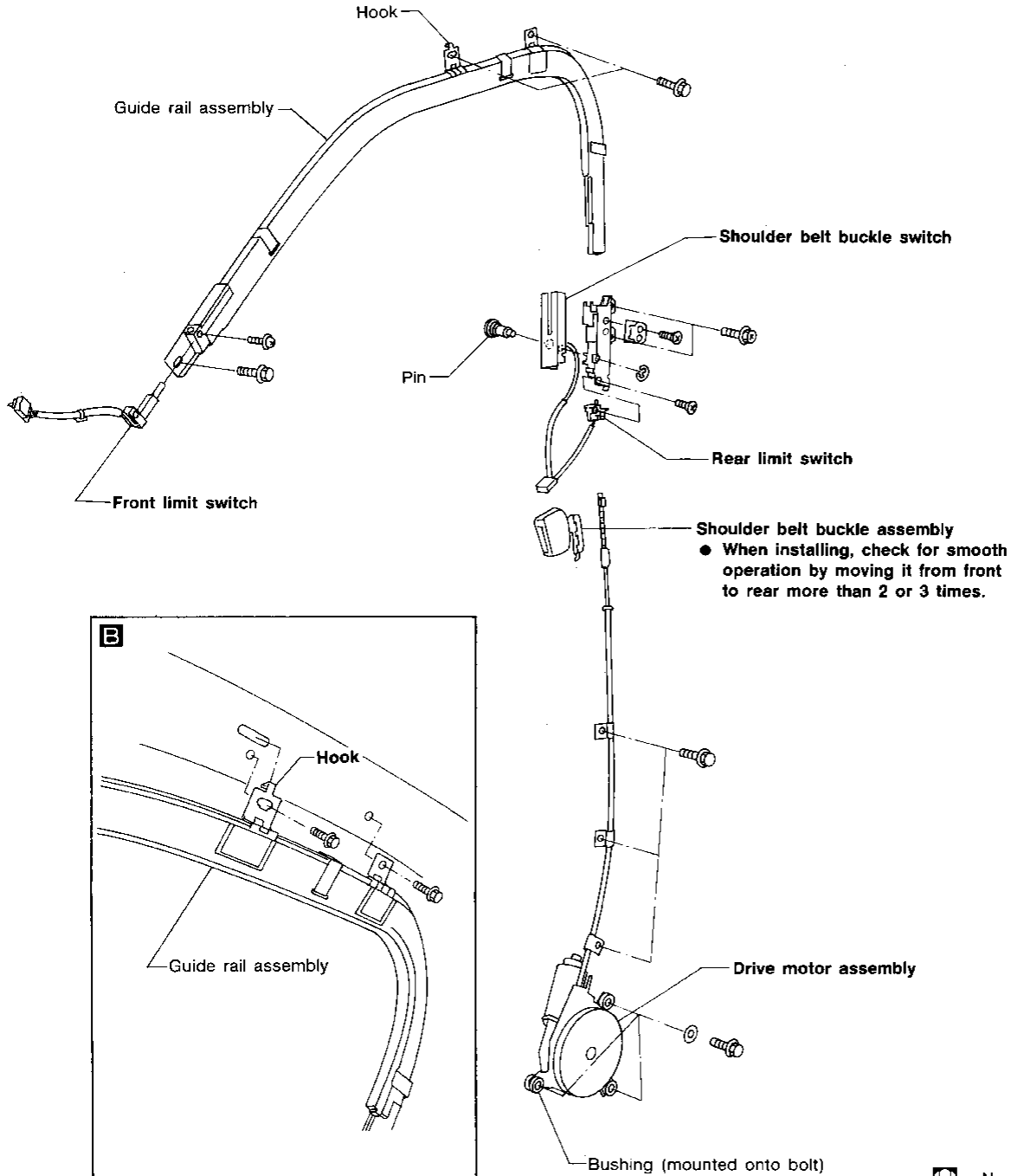
: N·m (kg-m, ft-lb)



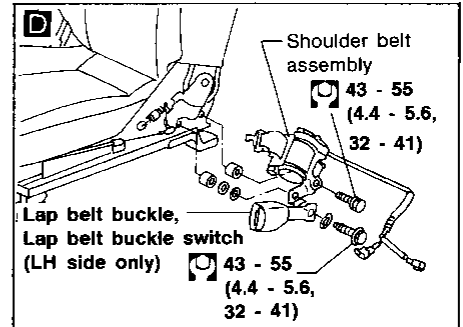
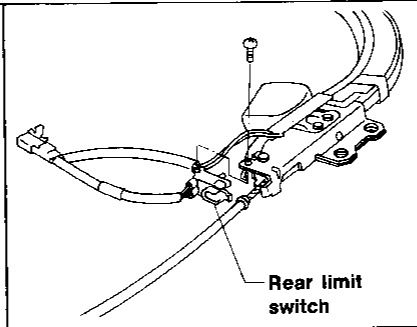
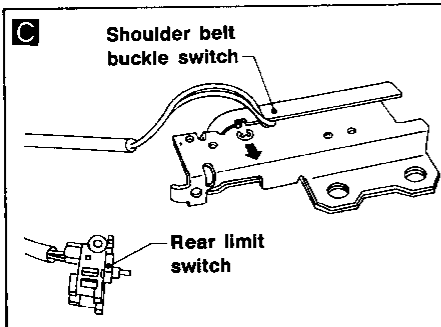
2-POINT MOTORIZED AUTOMATIC SEAT BELT SYSTEM — 4-door Sedan

Unit Location (Cont'd)

A



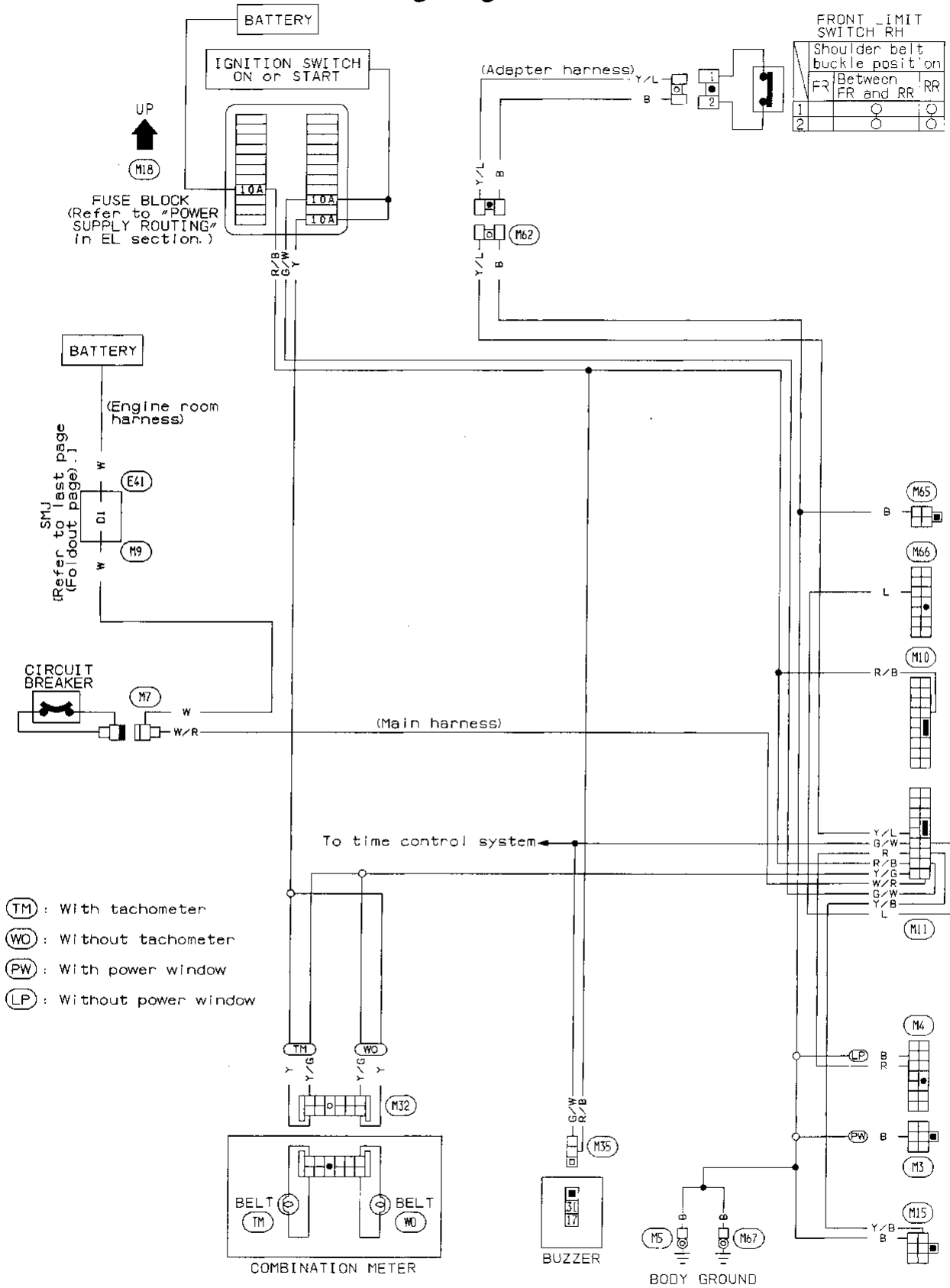
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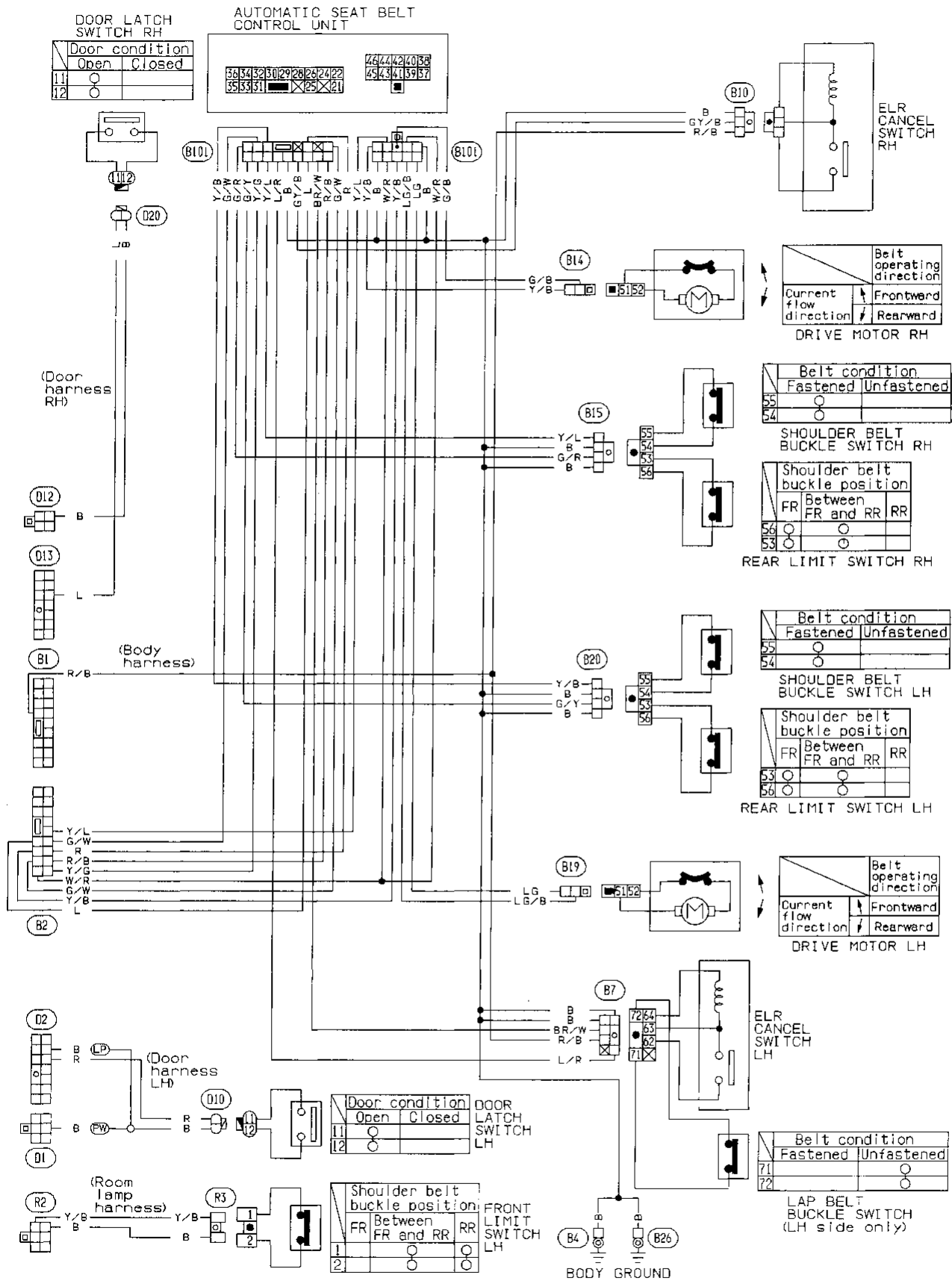
2-POINT MOTORIZED AUTOMATIC SEAT BELT SYSTEM — 4-door Sedan

Wiring Diagram



2-POINT MOTORIZED AUTOMATIC SEAT BELT SYSTEM — 4-door Sedan

Wiring Diagram (Cont'd)



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2-POINT MOTORIZED AUTOMATIC SEAT BELT SYSTEM — 4-door Sedan

Description

FUNCTION

Shoulder belt buckle is mainly operated while ignition switch is "ON".

Condition (A): Ignition switch is "ON".

When door is opened, shoulder belt buckle is moved forward and when door is closed, buckle is moved rearward.

Condition (B): Ignition switch is "OFF".

When door is opened, shoulder belt buckle is moved forward. When the door is closed, buckle will remain in this position.

(Voltage of output signal is approximate value.)

| | | | | | | | | | | | | | | | | | |
|----------------------|--|-------|-------|---------------|----------------------|------|---------------|----------------------|-------|---------------|----------------------|------|------|---------------|----------------------|-------|-------|
| Input signal | Ignition switch | OFF | OFF | ON | ON | ON | ON | ON | ON | ON | ON | ON | OFF | OFF | OFF | OFF | OFF |
| | Door latch switch | OFF | ON | OFF | OFF | OFF | ON | ON | ON | OFF | OFF | OFF | OFF | ON | ON | ON | OFF |
| | Front limit switch | OFF | OFF | OFF | ON | ON | ON | ON | OFF | OFF | ON | ON | ON | ON | ON | OFF | OFF |
| | Rear limit switch | ON | ON | ON | ON | OFF | OFF | ON | ON | ON | ON | OFF | OFF | OFF | ON | ON | ON |
| Output signal | Drive motor power source for frontward operation | 0V | 0V | 0V | 0V | 0V | 12V | 12V | 0V | 0V | 0V | 0V | 0V | 12V | 12V | 0V | 0V |
| | Drive motor power source for rearward operation | 0V | 0V | 12V | 12V | 0V | 0V | 0V | 0V | 12V | 12V | 0V | 0V | 0V | 0V | 0V | 0V |
| Shoulder belt buckle | Function | Stop | Stop | Start to move | Moving | Stop | Start to move | Moving | Stop | Start to move | Moving | Stop | Stop | Start to move | Moving | Stop | Stop |
| | Position | Front | Front | Front | Between Front & Rear | Rear | Rear | Between Front & Rear | Front | Front | Between Front & Rear | Rear | Rear | Rear | Between Front & Rear | Front | Front |

TIMER (Ignition switch either "ON" or "OFF")

If limit switch does not operate (when accomplishing frontward operation, front limit switch can not be turned "OFF" or when accomplishing rearward operation, rear limit switch can not be turned "OFF"), control unit will continue to supply power to drive motor for 15 seconds.

QUICK WARNING (Ignition switch "ON")

If front limit switch is not turned "OFF" after accomplishing frontward operation, control unit will stop supplying power 15 seconds later and warning lamp will flash and chime will operate rapidly for approximately 6 seconds.

REAR LOCK (Fail safe operation)

If quick warning functions twice successively while ignition switch is "ON", shoulder belt buckle will move to rear position and will remain in the rear position. This function is canceled when the ignition switch is "OFF".

SHOULDER BELT LOCKING CANCELLER (Ignition switch "ON" or "OFF")

The shoulder belt retractor does not lock belt length when moving the seat position front-rear adjusting lever (Seat slide switch is turned on). While ignition switch is "ON", the system warning lamp also glows. This system can be operated independently of "Automatic Seat Belt System".

Contents

| | |
|---|-------|
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| Preliminary Check | BF-56 |
| Main Power Supply and Ground Circuit Check | BF-59 |
| Harness Layout | BF-60 |
| Circuit Diagram for Quick Pinpoint Check | BF-61 |
| Diagnostic Procedure 1 (Check motor circuit and stop signals.)..... | BF-62 |
| Diagnostic Procedure 2 (Check door latch switch circuit.)..... | BF-64 |
| Diagnostic Procedure 3 (Check front limit switch circuit.) | BF-65 |
| Diagnostic Procedure 4 (Check rear limit switch circuit.)..... | BF-66 |
| Diagnostic Procedure 5 (Check shoulder belt buckle switch circuit.) | BF-68 |
| Diagnostic Procedure 6 (Check lap belt switch circuit.)..... | BF-69 |
| Diagnostic Procedure 7 (Check warning buzzer circuit) | BF-71 |
| Diagnostic Procedure 8 (Check warning lamp circuit.) | BF-72 |
| Diagnostic Procedure 9 (Check shoulder belt locking canceler circuit.)..... | BF-73 |
| Electrical Components Inspection | BF-74 |

Since left and right component parts are basically the same, harness layout and methods for electrical components inspection are shown for one side only.

For those methods enclosed by double rectangles, component parts on both sides must be checked.

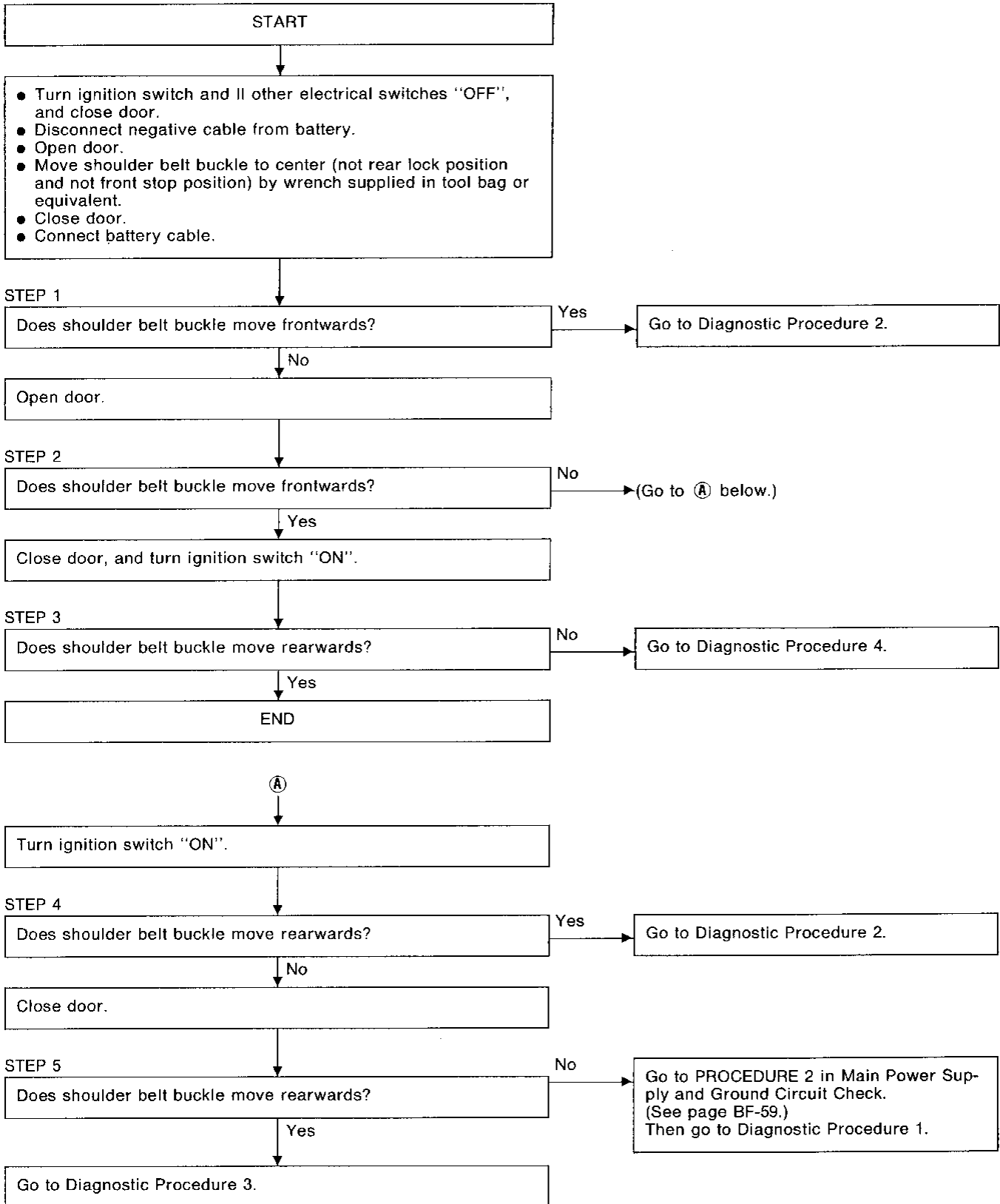
Symptom Chart

| Procedure | Reference page | SYMPTOM | | | | | | | | |
|--|----------------------|------------------------|-----------------------------|---|---|---|---|---|---|---|
| Electrical Components Inspection | BF-75 | Seat slide switch | | | | | | | ○ | |
| | BF-74 | Drive motor assembly | ○ | ○ | | | | | | |
| | BF-74 | RH side | Shoulder belt buckle switch | ○ | | | | | ○ | |
| | BF-74 | | Door latch switch | ○ | | ○ | ○ | | | |
| | BF-74 | | Rear limit switch | ○ | ○ | ○ | | ○ | | |
| | BF-74 | | Front limit switch | ○ | ○ | | ○ | | ○ | |
| | BF-75 | | Seat slide switch | | | | | | ○ | ○ |
| | BF-75 | Lap belt buckle switch | ○ | | | | | ○ | | |
| | BF-74 | LH side | Drive motor assembly | ○ | ○ | | | | | |
| | BF-74 | | Shoulder belt buckle switch | ○ | | | | | ○ | |
| | BF-74 | | Door latch switch | ○ | | ○ | ○ | | | |
| | BF-74 | | Rear limit switch | ○ | ○ | ○ | | ○ | | |
| | BF-74 | | Front limit switch | ○ | ○ | | ○ | | ○ | |
| | — | Warning chime | ○ | | | | | | ○ | |
| | — | Warning lamp | ○ | | | | | | ○ | |
| | Diagnostic Procedure | BF-73 | Procedure 9 | | | | | | | ○ |
| | | BF-72 | Procedure 8 | | | | | | ○ | |
| | | BF-71 | Procedure 7 | | | | | | ○ | |
| | | BF-69 | Procedure 6 | | | | | | ○ | |
| | | BF-68 | Procedure 5 | | | | | | ○ | |
| BF-66 | | Procedure 4 | ○ | ○ | ○ | | ○ | | | |
| BF-65 | | Procedure 3 | ○ | ○ | | ○ | | ○ | | |
| BF-64 | | Procedure 2 | | | ○ | ○ | | | | |
| BF-62 | | Procedure 1 | ○ | ○ | | | | | | |
| Main Power Supply and Ground Circuit Check | BF-59 | Procedure 2 | | ○ | | | | | | |
| | BF-59 | Procedure 1 | ○ | | | | | | | |
| Preliminary Check | BF-57 | Procedure 2 | | | | | | ○ | | |
| | BF-56 | Procedure 1 | | ○ | ○ | ○ | | | | |

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Preliminary Check

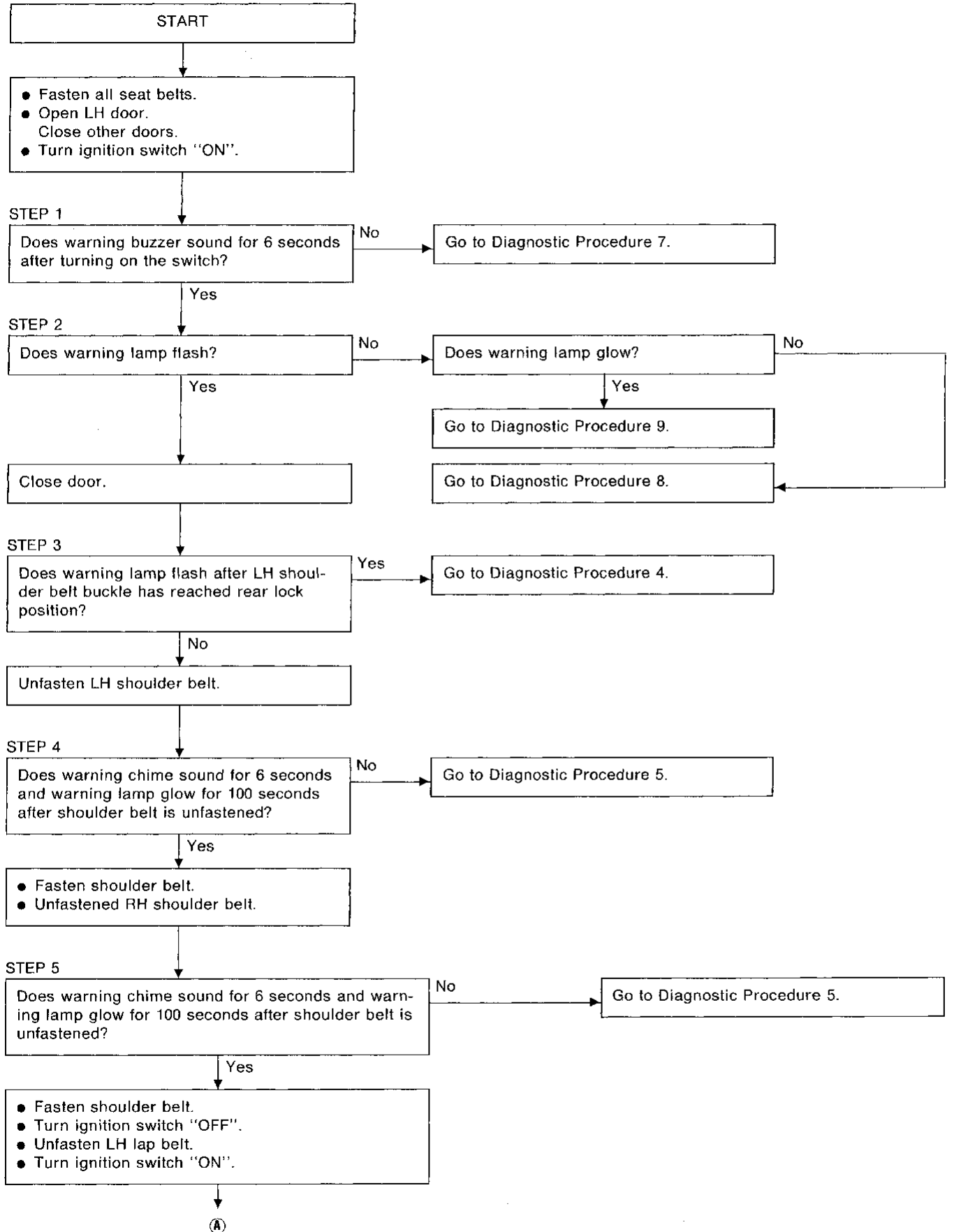
PROCEDURE 1



2-POINT MOTORIZED AUTOMATIC SEAT BELT SYSTEM — Trouble Diagnoses

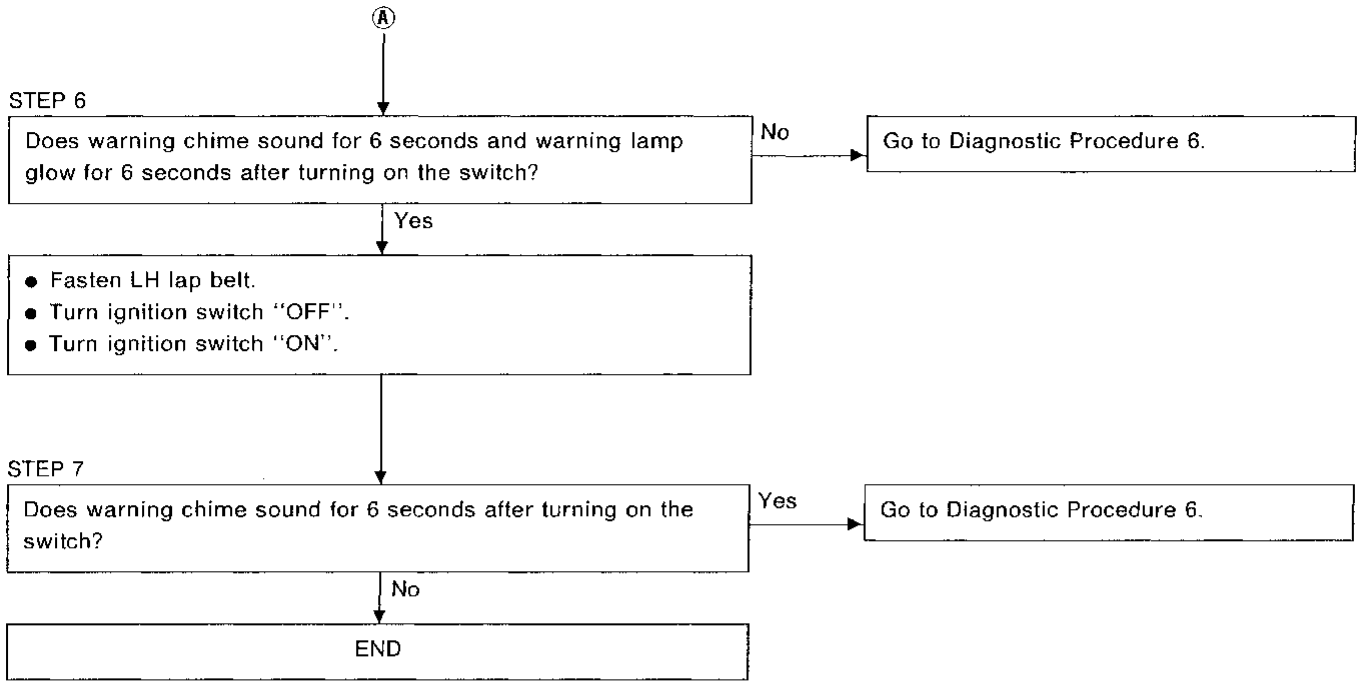
Preliminary Check (Cont'd)

PROCEDURE 2

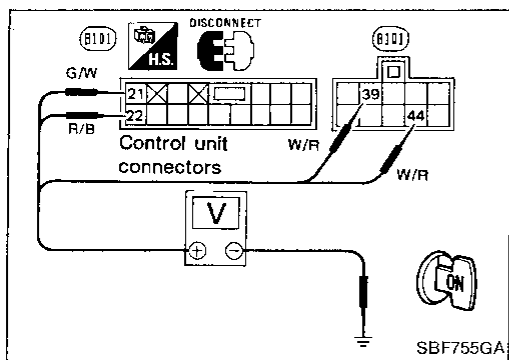


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2-POINT MOTORIZED AUTOMATIC SEAT BELT SYSTEM — Trouble Diagnoses
Preliminary Check (Cont'd)



2-POINT MOTORIZED AUTOMATIC SEAT BELT SYSTEM — Trouble Diagnoses



Main Power Supply and Ground Circuit Check PROCEDURE 1

Main power supply

| Terminals | Battery voltage existence condition | |
|-------------|-------------------------------------|---------------------------------|
| | Ignition switch "ON" | Other than ignition switch "ON" |
| ②1 - Ground | Yes | No |
| ②2 - Ground | Yes | Yes |
| ③9 - Ground | Yes | Yes |
| ④4 - Ground | Yes | Yes |

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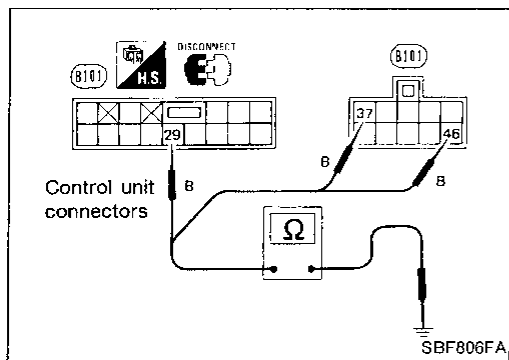
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Ground circuit

| Terminals | Continuity |
|-------------|------------|
| ②9 - Ground | Yes |
| ③7 - Ground | Yes |
| ④6 - Ground | Yes |

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PROCEDURE 2

Power supply for motor drive

| | Terminals | Battery voltage existence |
|---------|-------------|---------------------------|
| LH side | ③9 - Ground | Yes |
| RH side | ④4 - Ground | Yes |

ST

BF

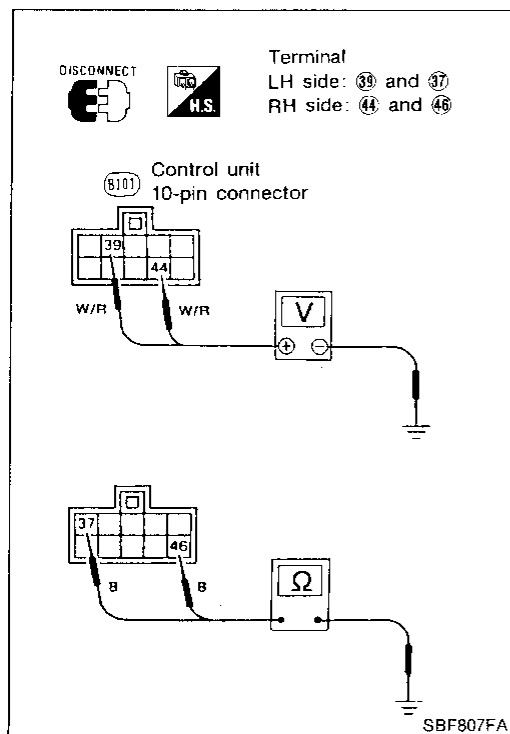
Ground circuit for motor drive

| | Terminals | Continuity |
|---------|-------------|------------|
| LH side | ③7 - Ground | Yes |
| RH side | ④6 - Ground | Yes |

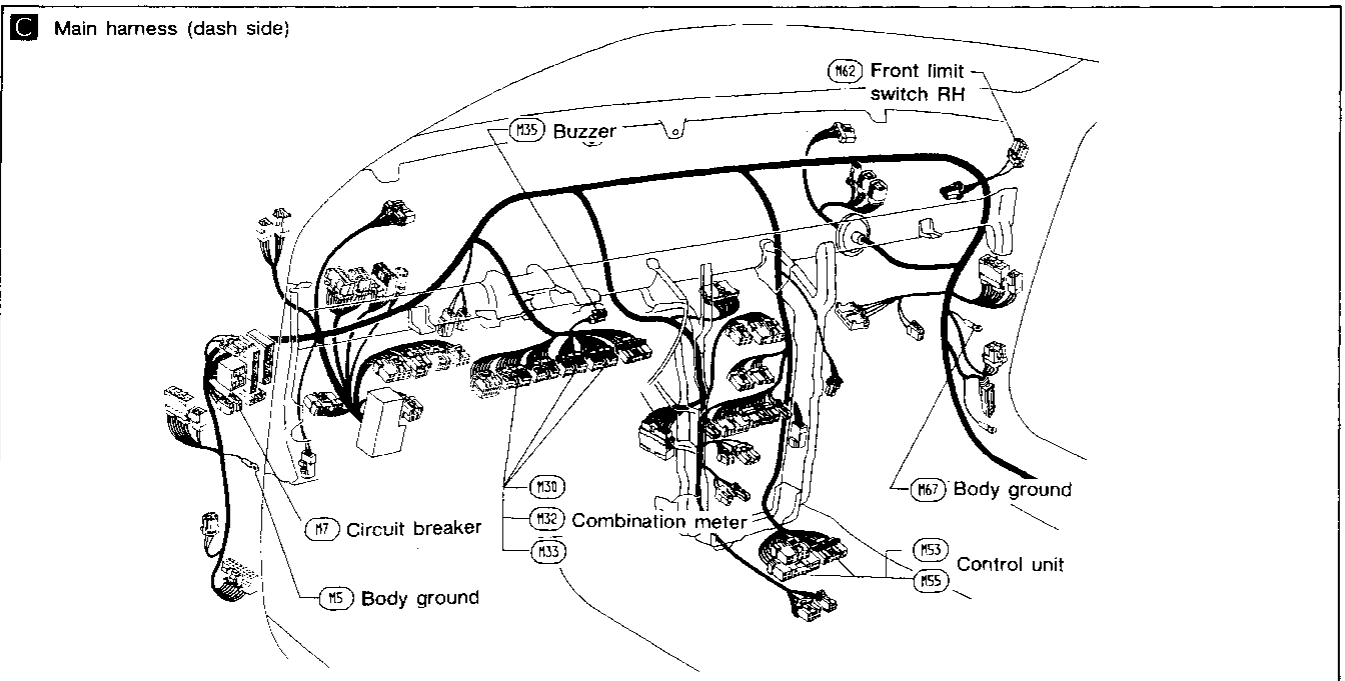
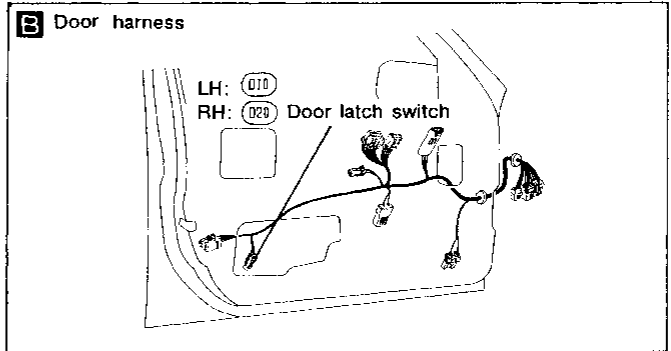
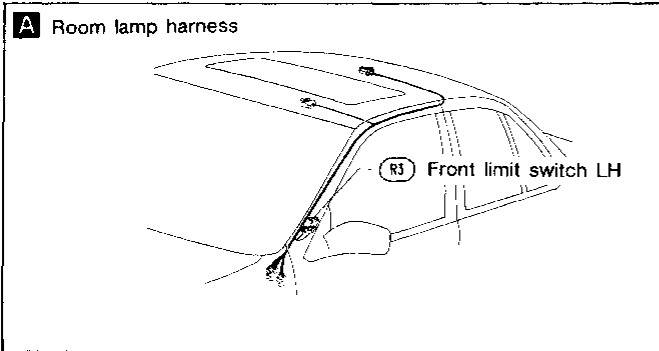
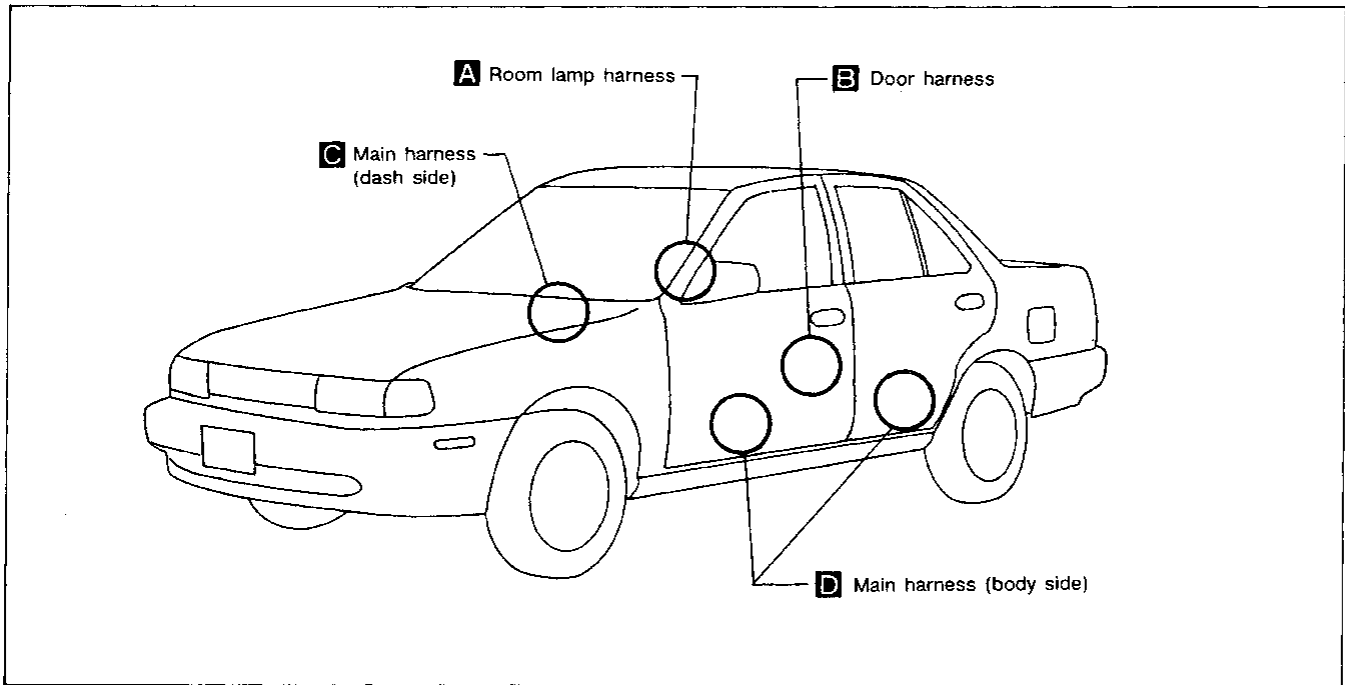
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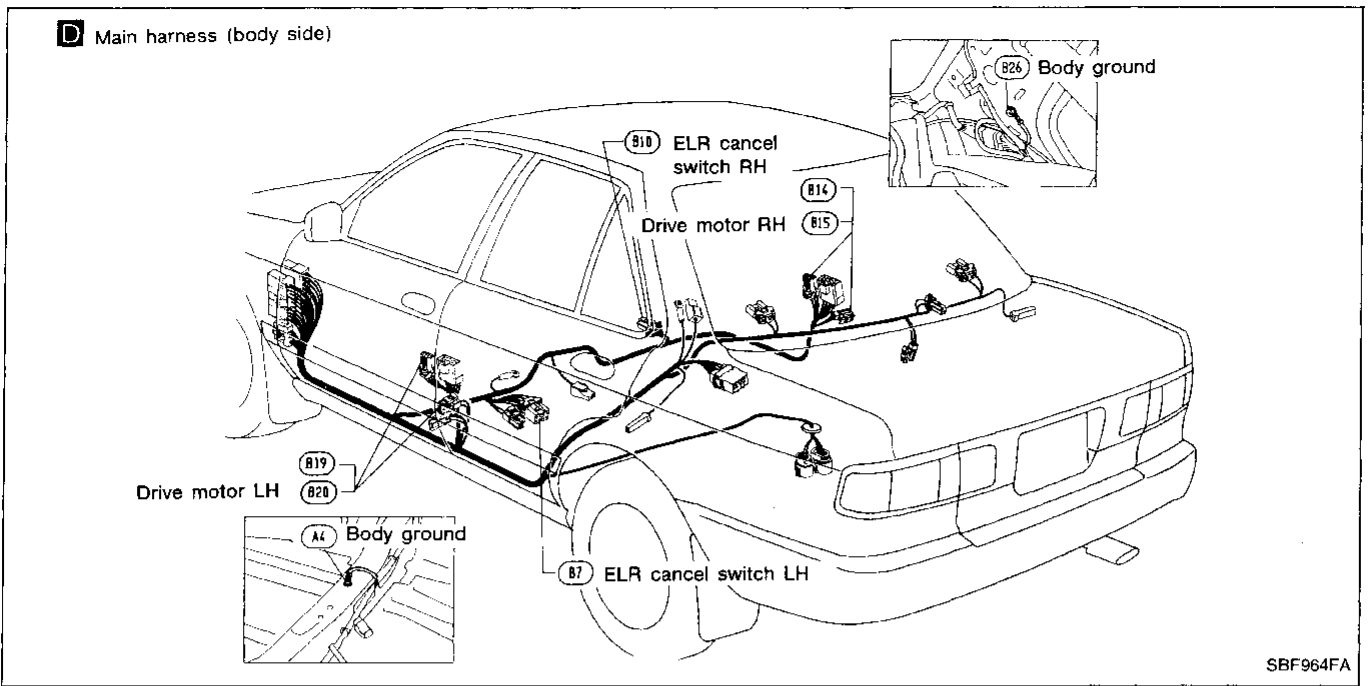


Harness Layout

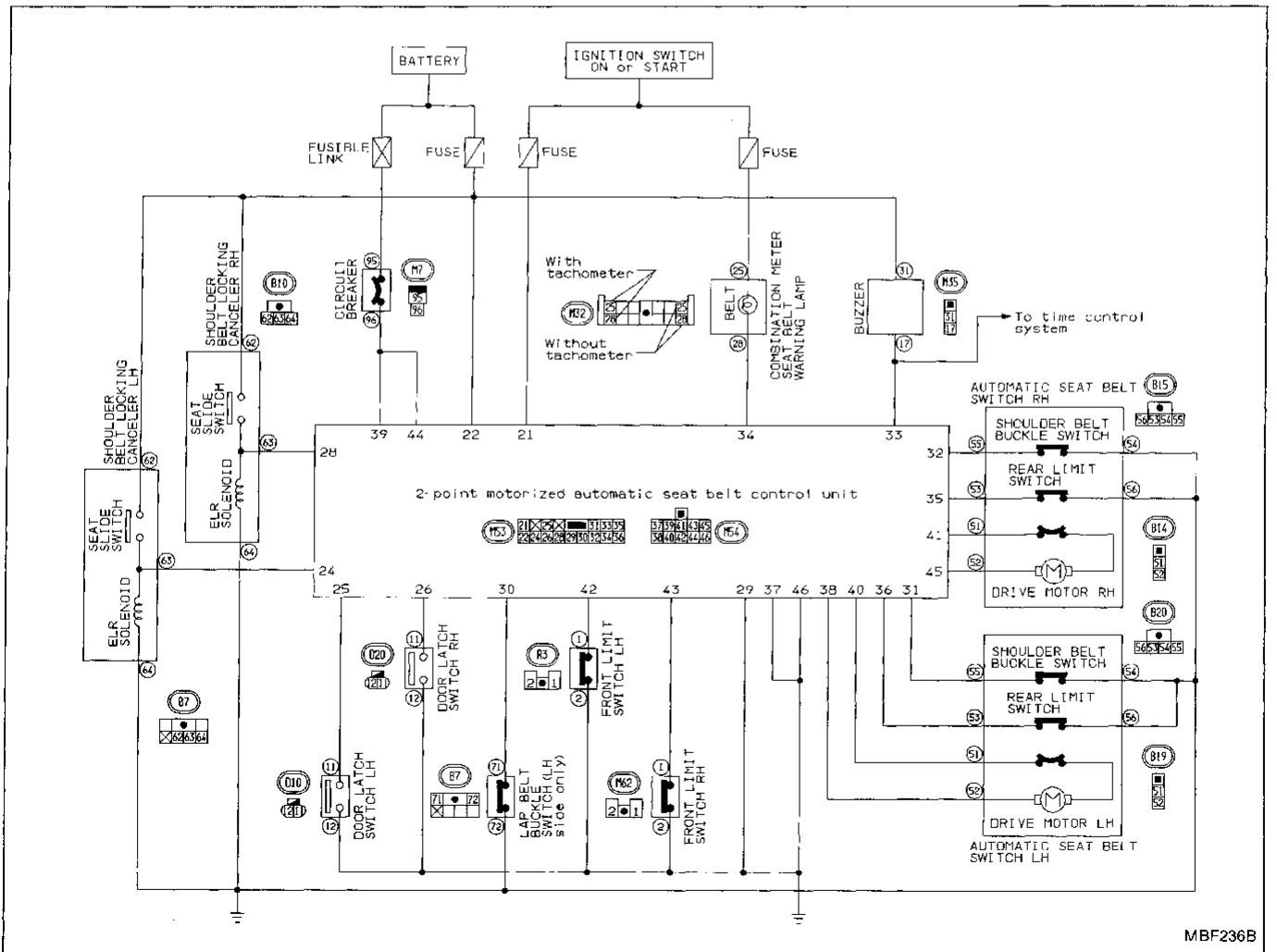


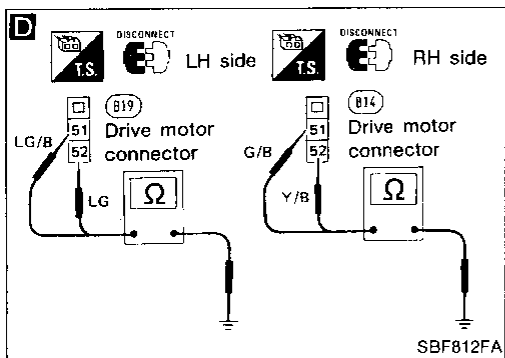
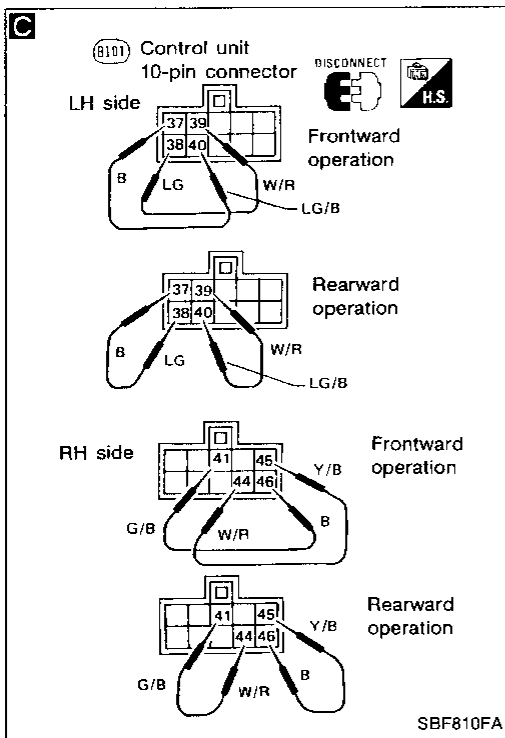
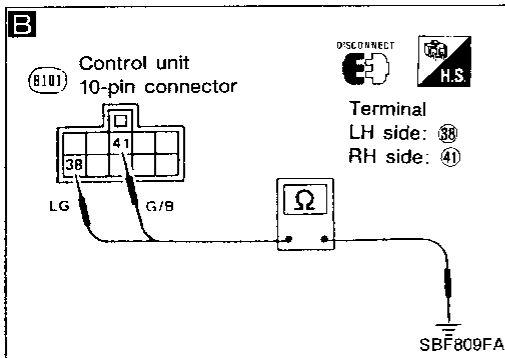
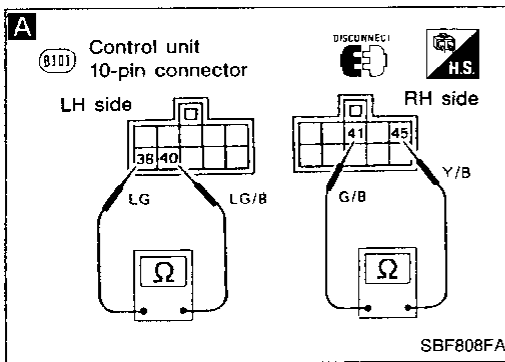
2-POINT MOTORIZED AUTOMATIC SEAT BELT SYSTEM — Trouble Diagnoses

Harness Layout (Cont'd)

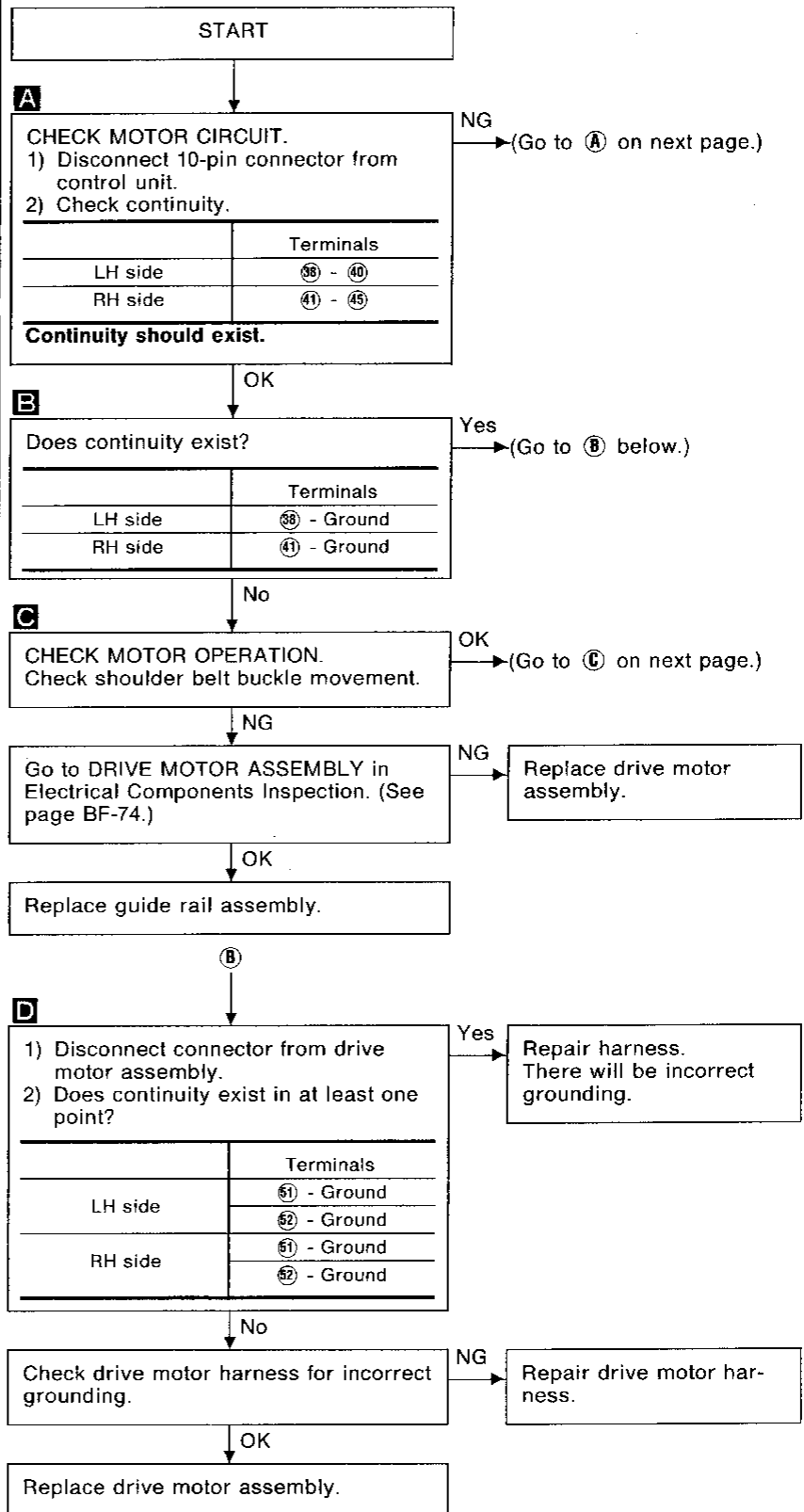


Circuit Diagram for Quick Pinpoint Check



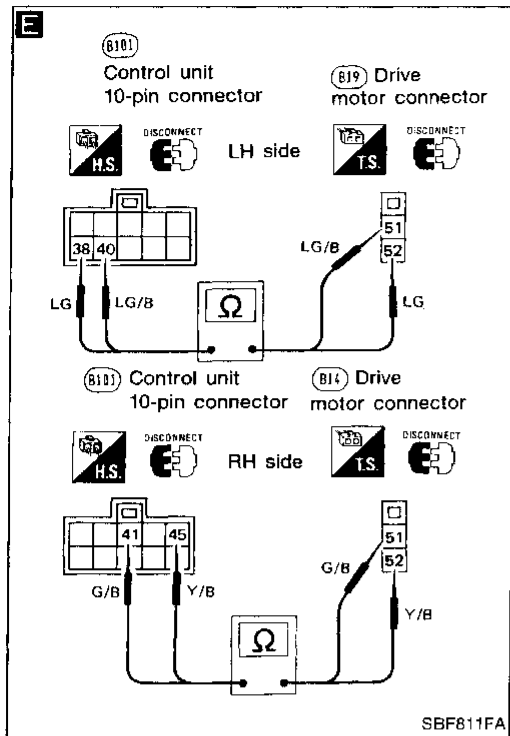


Diagnostic Procedure 1



2-POINT MOTORIZED AUTOMATIC SEAT BELT SYSTEM — Trouble Diagnoses

Diagnostic Procedure 1 (Cont'd)



A

E

1) Disconnect connector from drive motor assembly.
2) Check continuity.

| | Terminals |
|---------|-----------|
| LH side | 38 - 52 |
| | 40 - 51 |
| RH side | 41 - 51 |
| | 45 - 52 |

Continuity should exist.

NG → Repair harness.

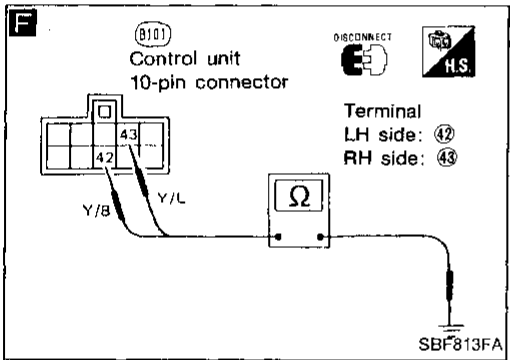
OK

Check drive motor harness for open circuit.

NG → Repair drive motor harness.

OK

Replace drive motor.



C

F

CHECK STOP SIGNAL.

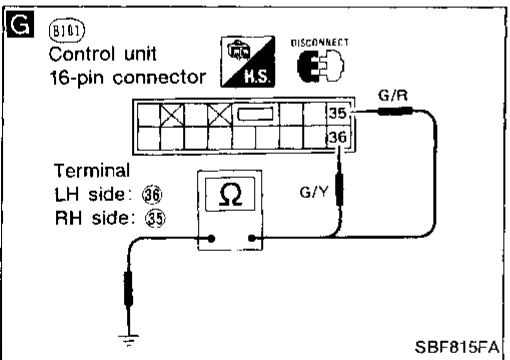
1) Move shoulder belt buckle to center (not rear lock position and not front).
2) Check continuity.

| | Terminals |
|---------|-------------|
| LH side | 42 - Ground |
| RH side | 43 - Ground |

Continuity should exist.

NG → Go to Diagnostic Procedure 3 and return to next step.

OK



G

1) Disconnect 16-pin connector from control unit.
2) Check continuity.

| | Terminals |
|---------|-------------|
| LH side | 36 - Ground |
| RH side | 35 - Ground |

Continuity should exist.

NG → Go to Diagnostic Procedure 4 and return to next step.

OK

Is this the second time?

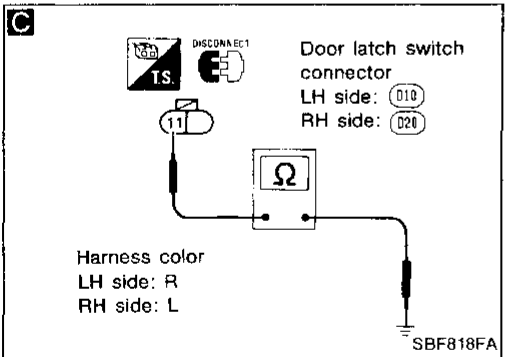
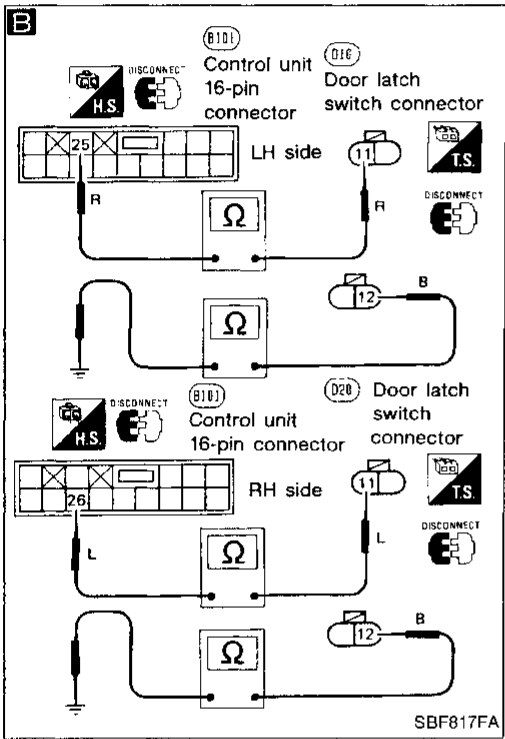
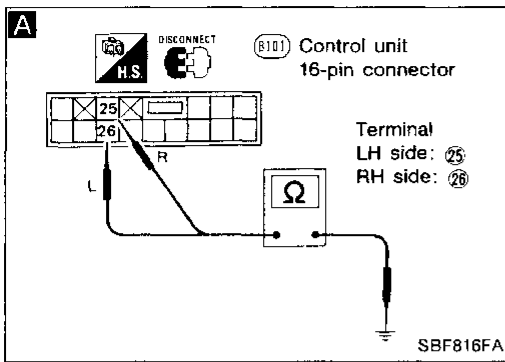
Yes → Replace control unit.

No

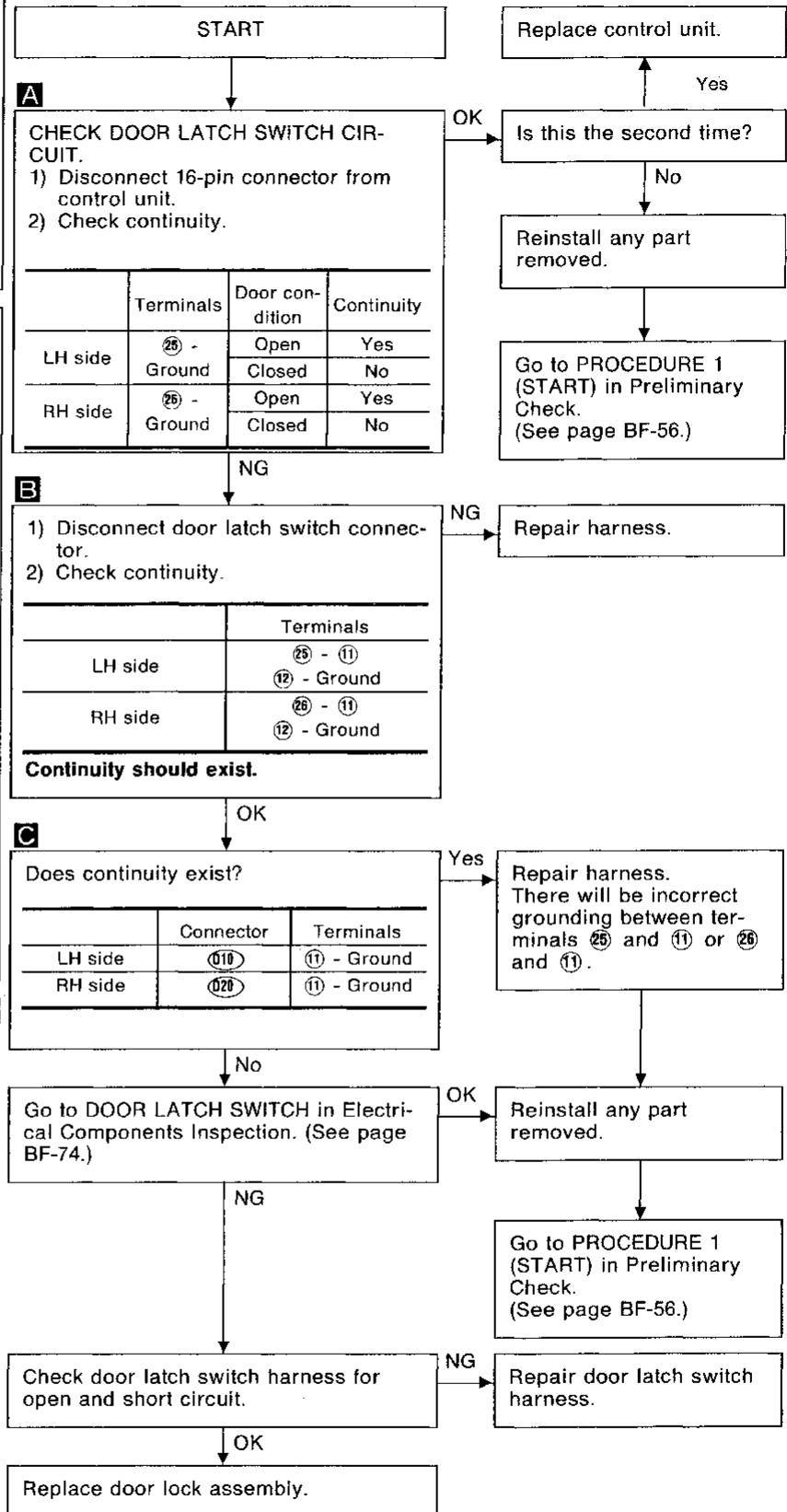
Reinstall any part removed.

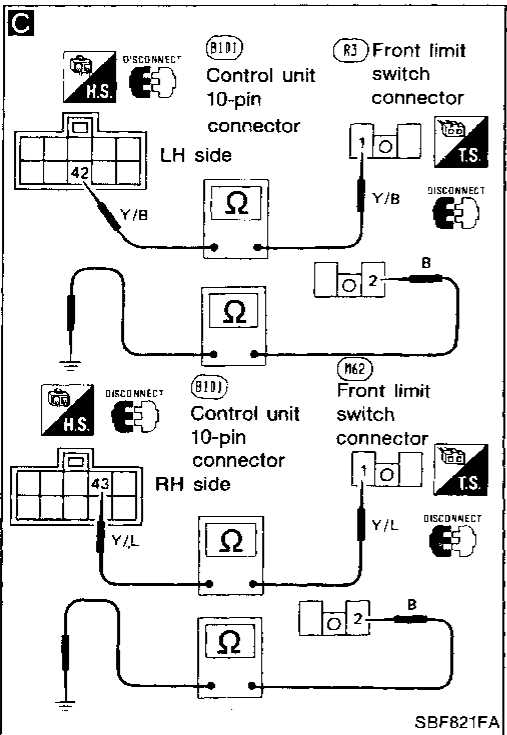
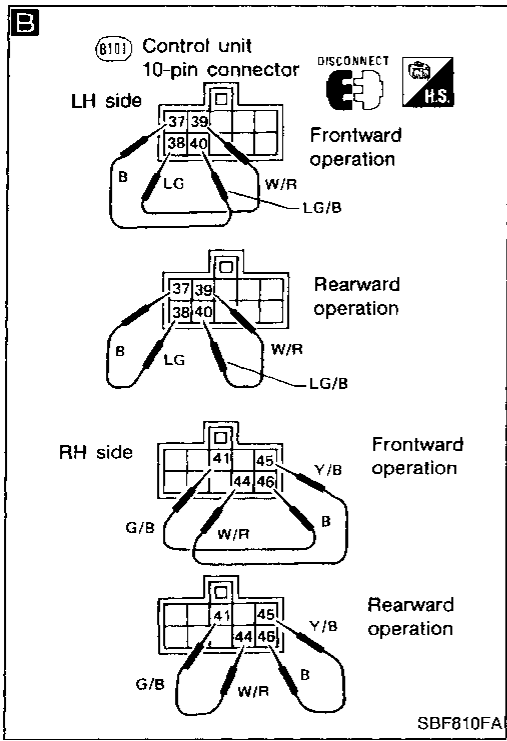
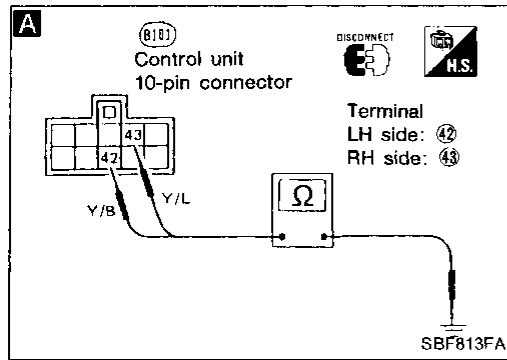
Go to PROCEDURE 1 (START) in Preliminary Check.
(See page BF-56.)

2-POINT MOTORIZED AUTOMATIC SEAT BELT SYSTEM — Trouble Diagnoses



Diagnostic Procedure 2





Diagnostic Procedure 3

START

A

CHECK FRONT LIMIT SWITCH CIRCUIT.

1) Disconnect 10-pin connector from control unit.

2) Check continuity.

OK → (Go to **B** below.)

| | Terminals | Shoulder belt buckle position | Continuity |
|---------|-------------|-------------------------------|------------|
| LH side | 42 - Ground | At front | No |
| | | Not at front | Yes |
| RH side | 43 - Ground | At front | No |
| | | Not at front | Yes |

B Check drive motor for operation.

NG

C

1) Disconnect connector from front limit switch.

2) Check continuity.

NG → Repair harness.

| | Terminals |
|---------|------------|
| LH side | 42 - ① |
| | ② - Ground |
| RH side | 43 - ① |
| | ② - Ground |

Continuity should exist.

OK

(Go to **A** on next page.)

②

Is this the second time?

Yes → Replace control unit.

No

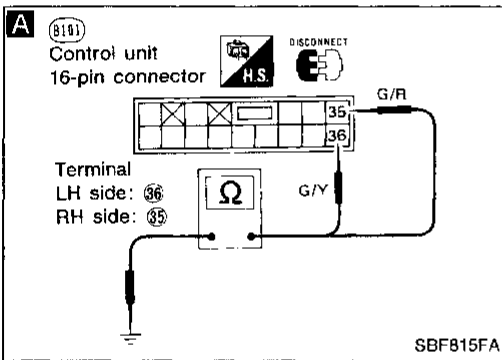
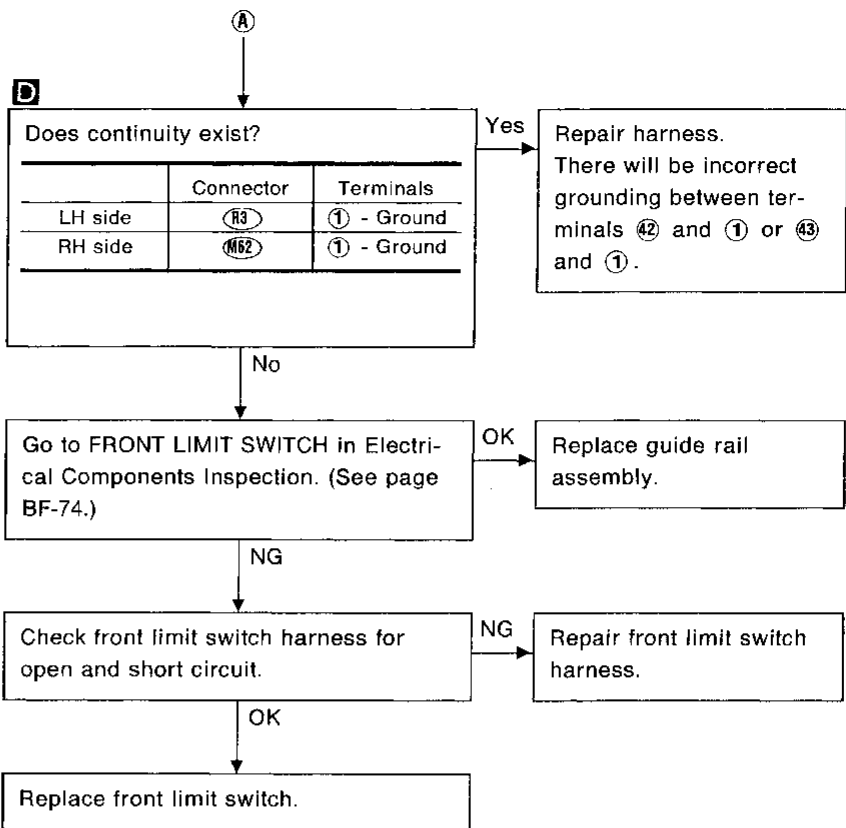
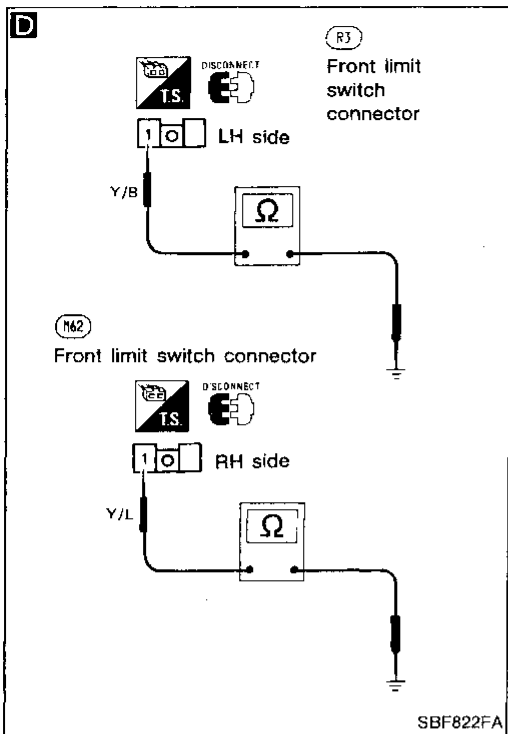
Reinstall any part removed.

Go to PROCEDURE 1 (START) in Preliminary Check. (See page BF-56.)

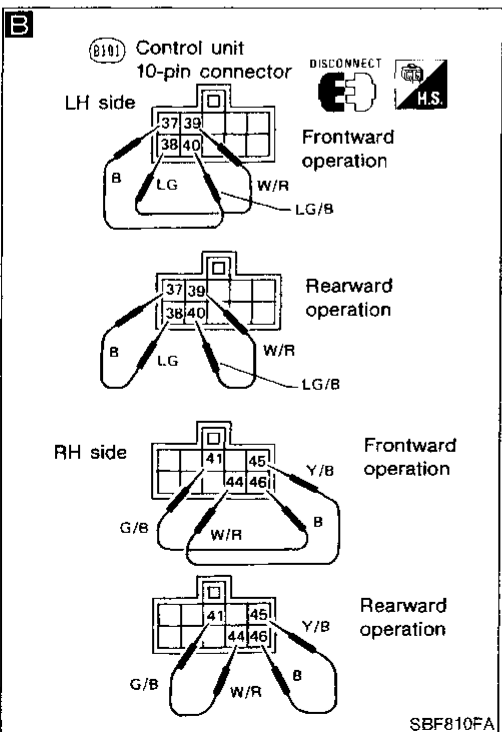
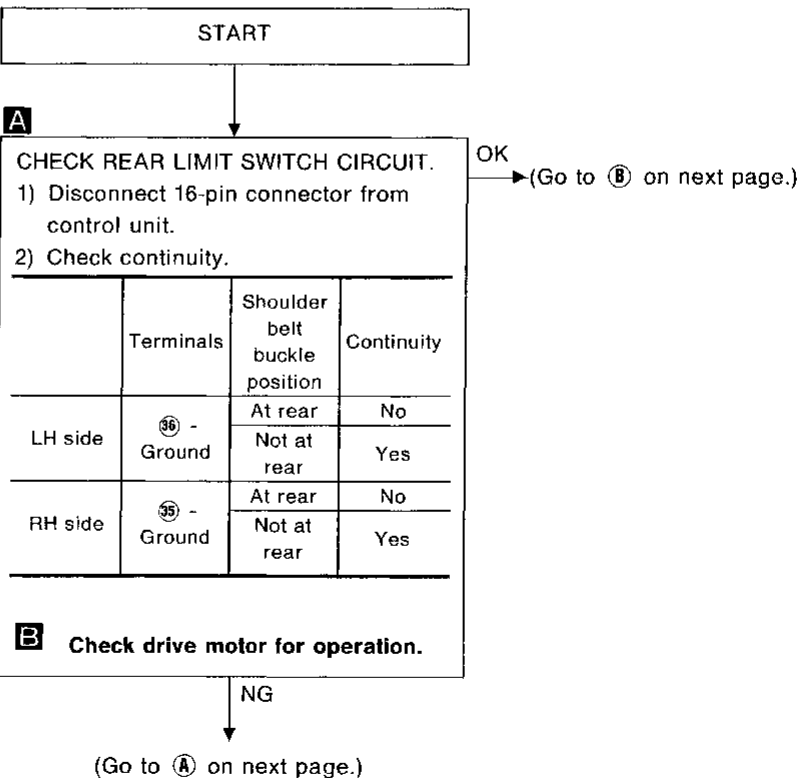
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2-POINT MOTORIZED AUTOMATIC SEAT BELT SYSTEM — Trouble Diagnoses

Diagnostic Procedure 3 (Cont'd)

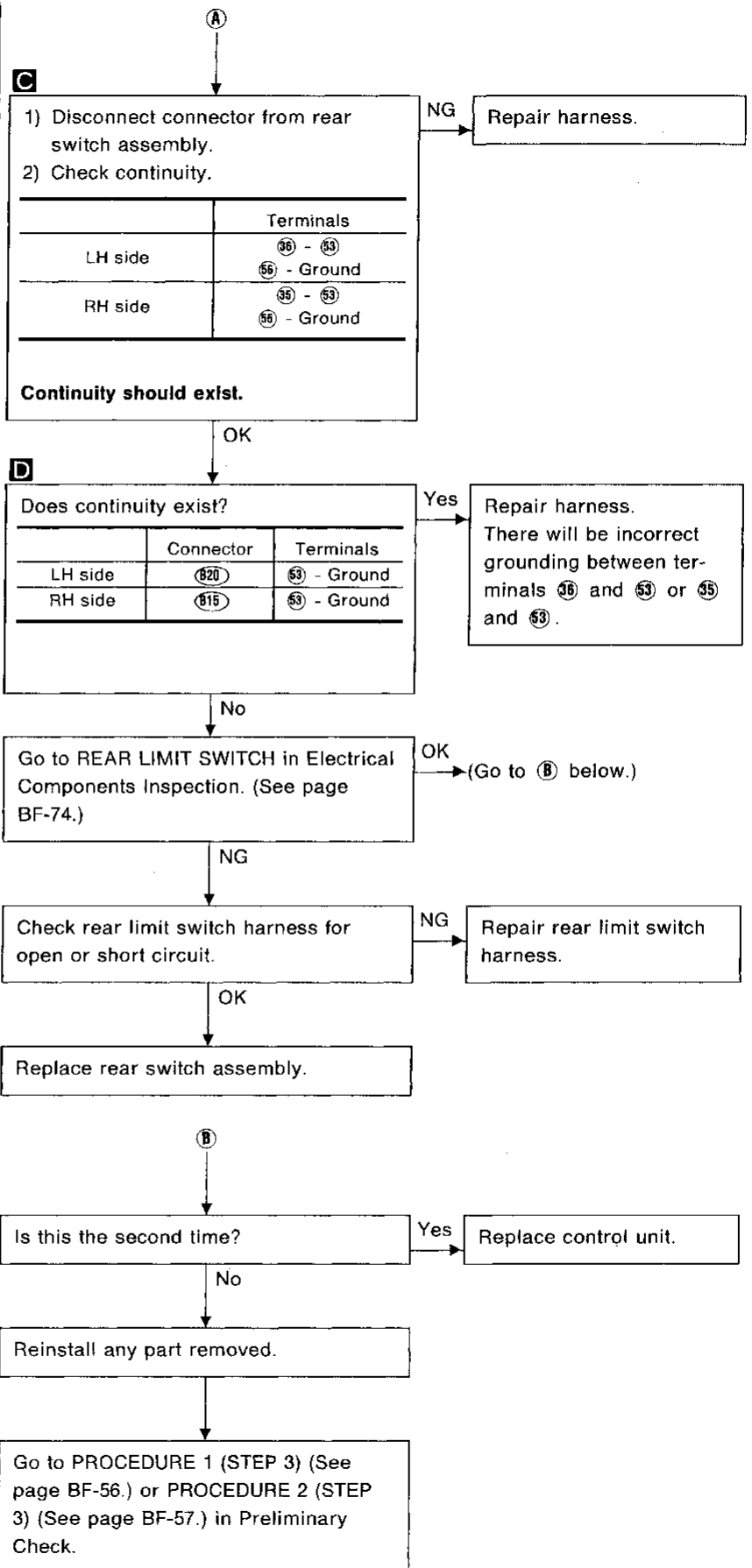
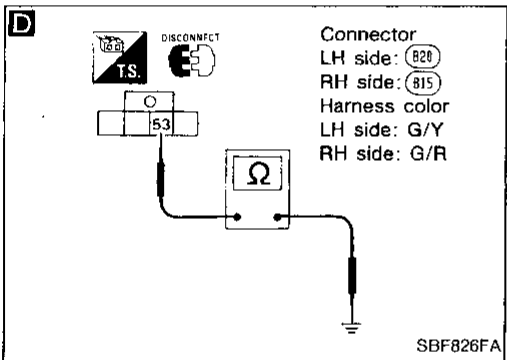
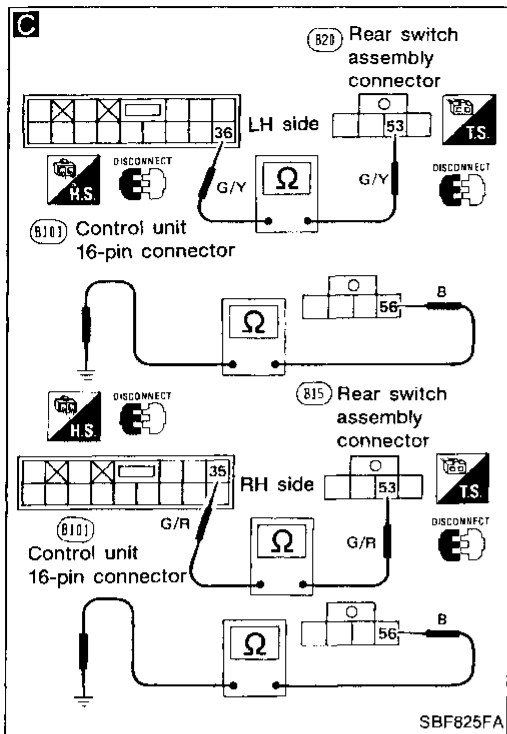


Diagnostic Procedure 4



2-POINT MOTORIZED AUTOMATIC SEAT BELT SYSTEM — Trouble Diagnoses

Diagnostic Procedure 4 (Cont'd)



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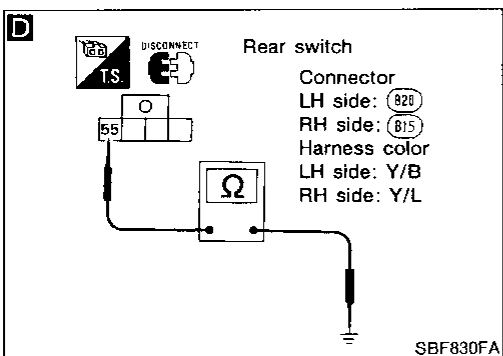
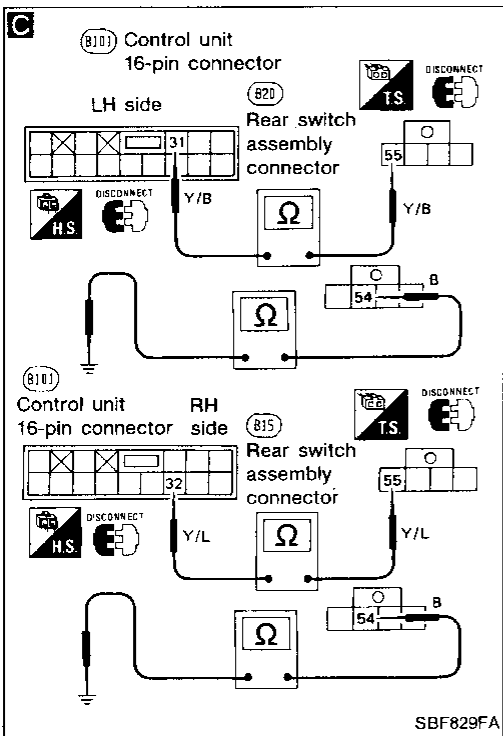
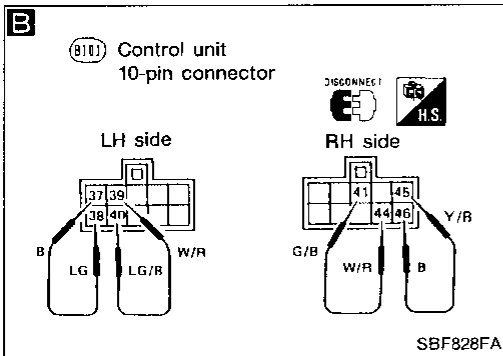
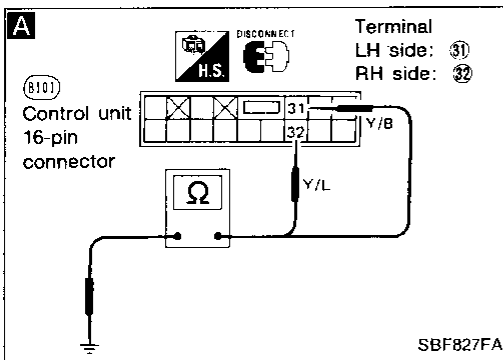
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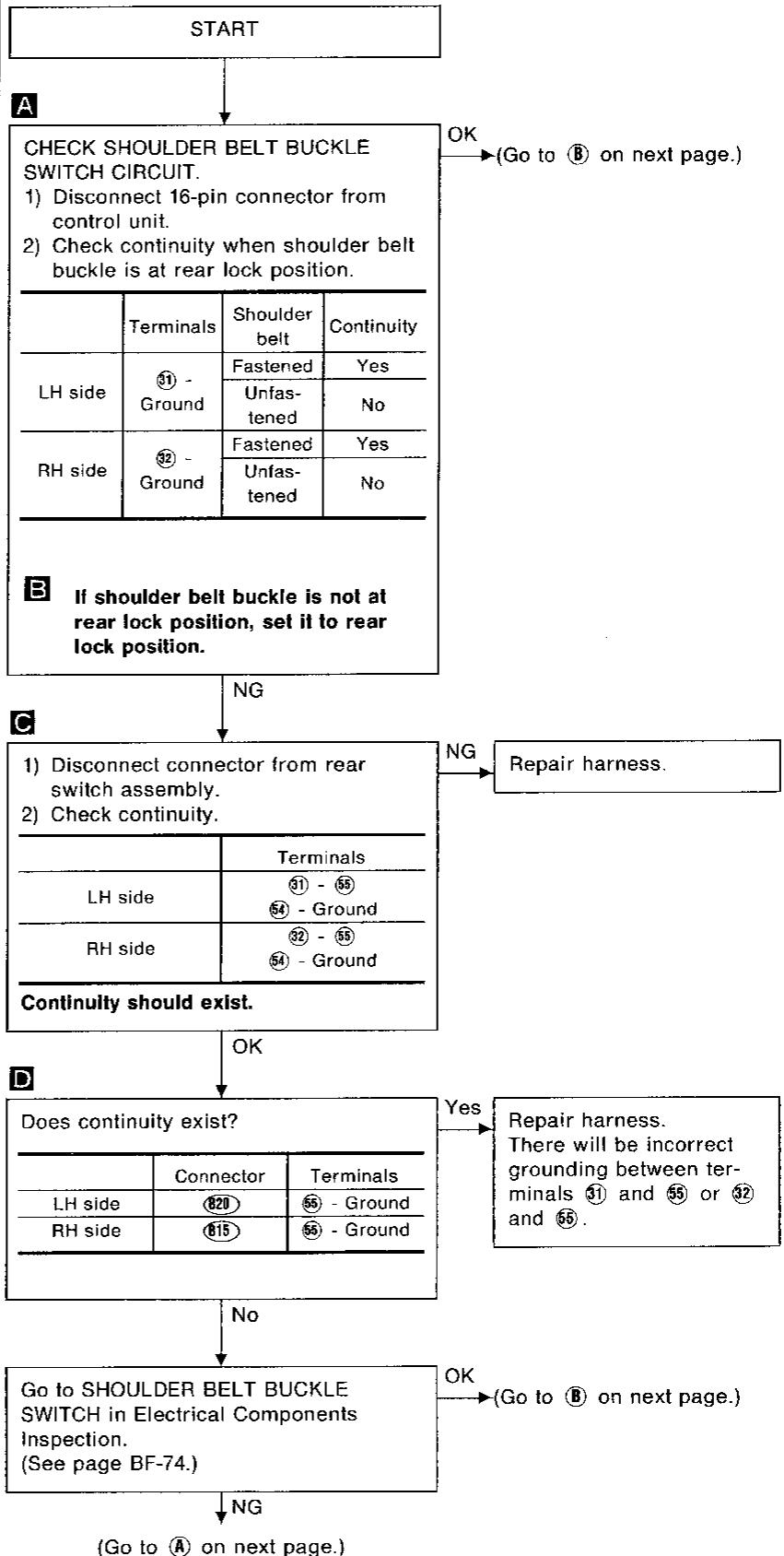
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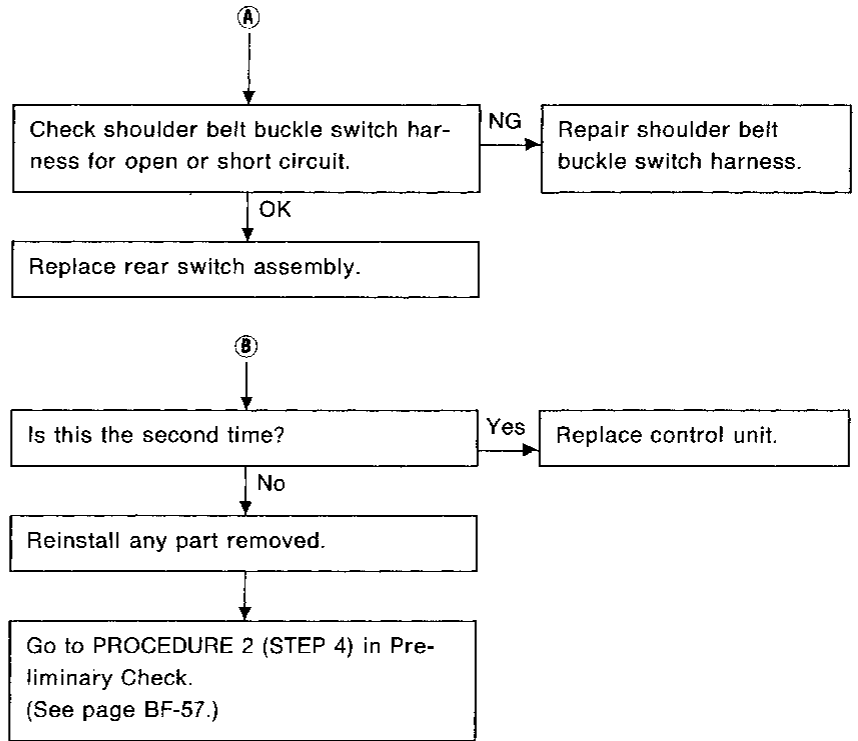


Diagnostic Procedure 5

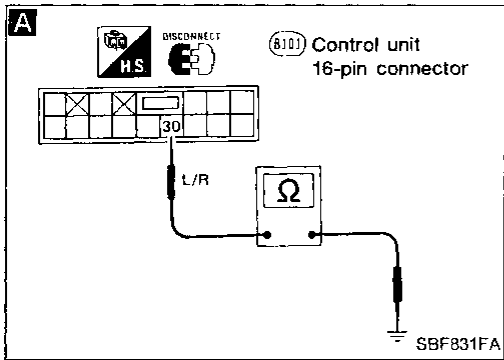


2-POINT MOTORIZED AUTOMATIC SEAT BELT SYSTEM — Trouble Diagnoses

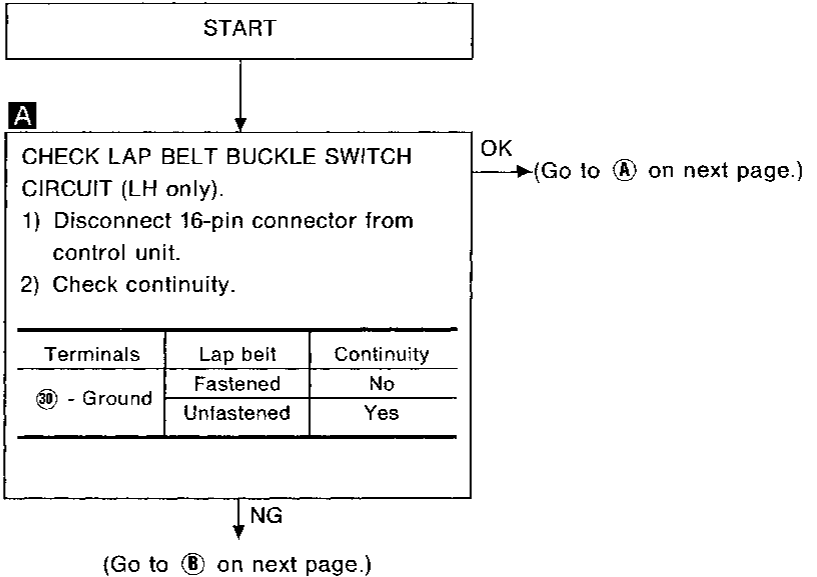
Diagnostic Procedure 5 (Cont'd)



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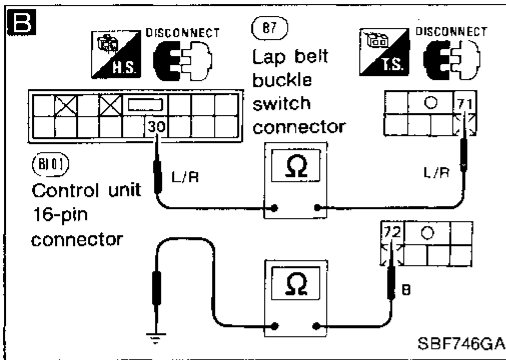


Diagnostic Procedure 6



2-POINT MOTORIZED AUTOMATIC SEAT BELT SYSTEM — Trouble Diagnoses

Diagnostic Procedure 6 (Cont'd)



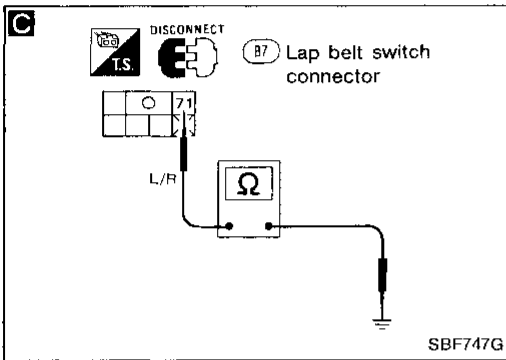
B

1) Disconnect lap belt switch connector.
2) Check continuity.

| Terminals | |
|-----------|--------|
| 30 | 71 |
| 72 | Ground |

Continuity should exist.

NG → Repair harness.



C

Does continuity exist?

| Terminals | |
|-----------|--------|
| 71 | Ground |

Yes → Repair harness. There will be incorrect grounding.

No →

Go to LAP BELT BUCKLE SWITCH in Electrical Components Inspection. (See page BF-75.)

OK → (Go to A below.)

NG →

Check lap belt buckle switch harness for open and short circuit.

NG → Repair lap belt buckle switch harness.

OK →

Replace shoulder belt buckle assembly.

→

A

Is this the second time?

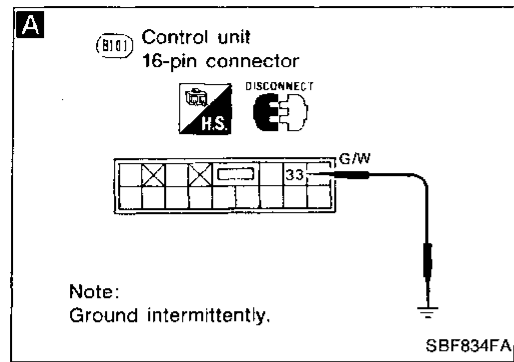
Yes → Replace control unit.

No →

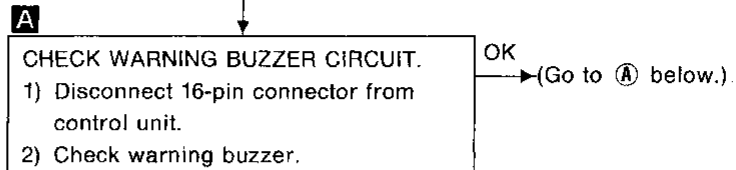
Reinstall any part removed.

→

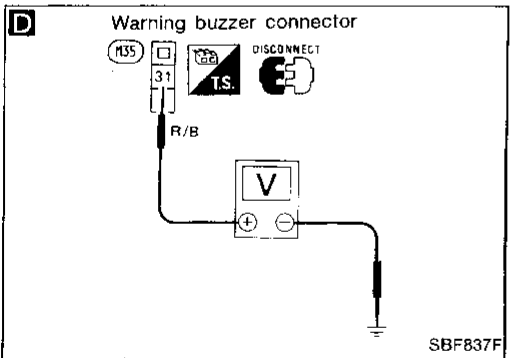
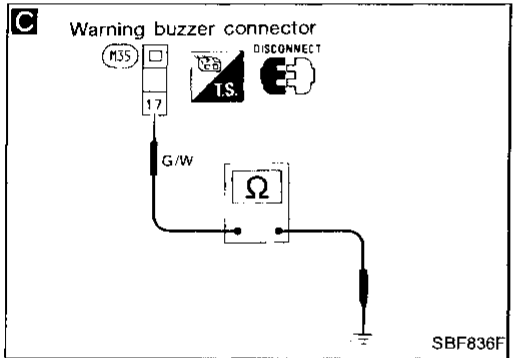
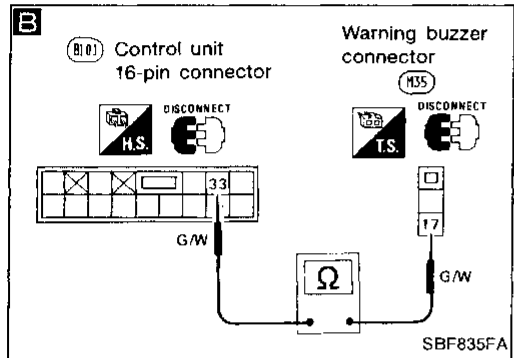
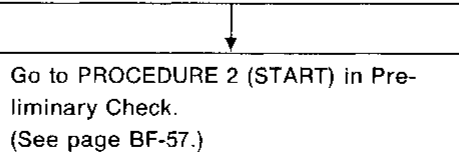
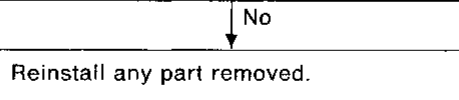
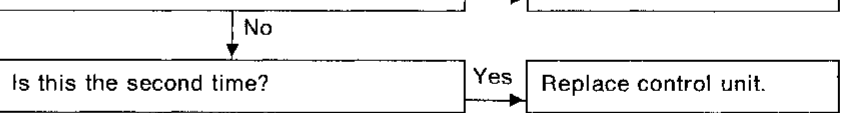
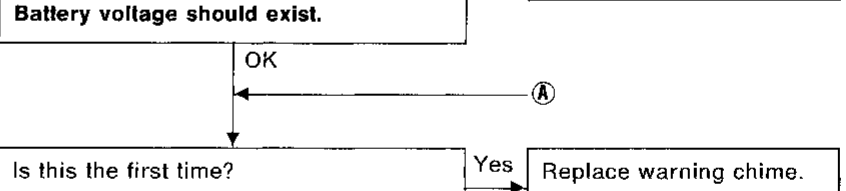
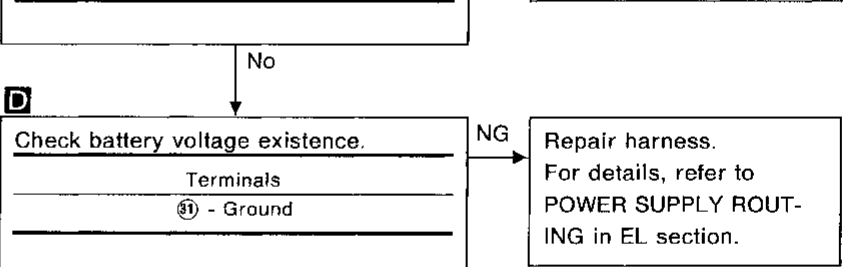
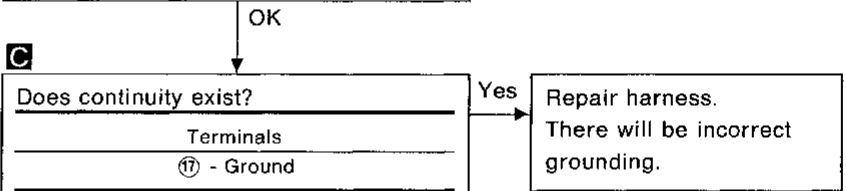
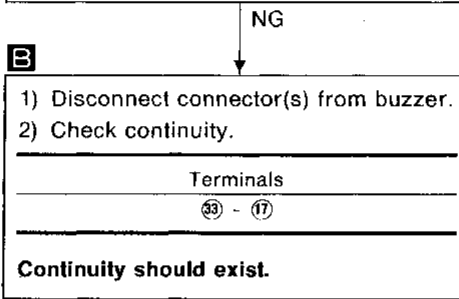
Go to PROCEDURE 2 (STEP 6) in Preliminary Check. (See page BF-58.)



Diagnostic Procedure 7

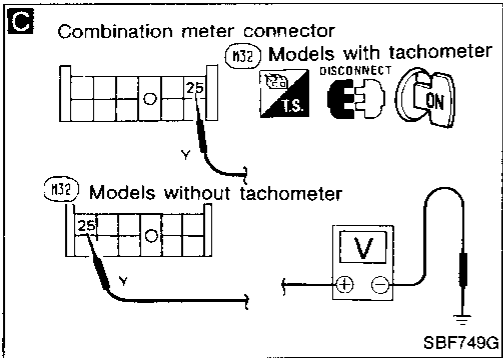
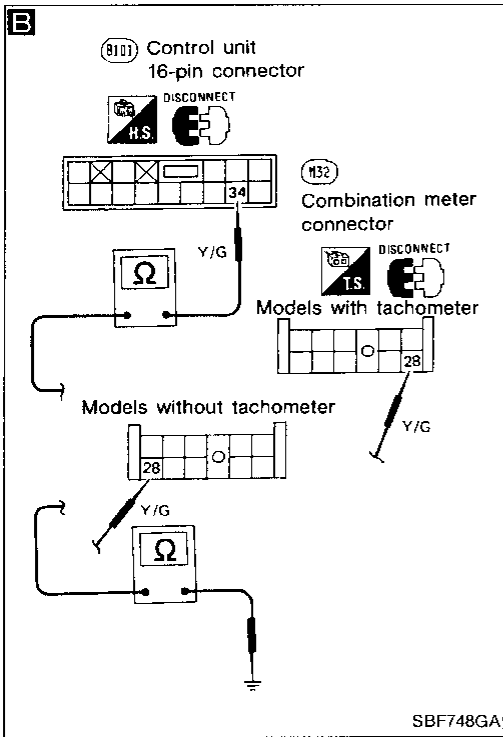
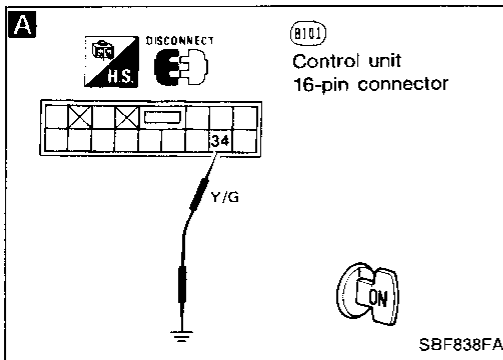


| Terminal's | Method | Result |
|-------------|------------------------|--------|
| 33 - Ground | Ground intermittently. | Sound |

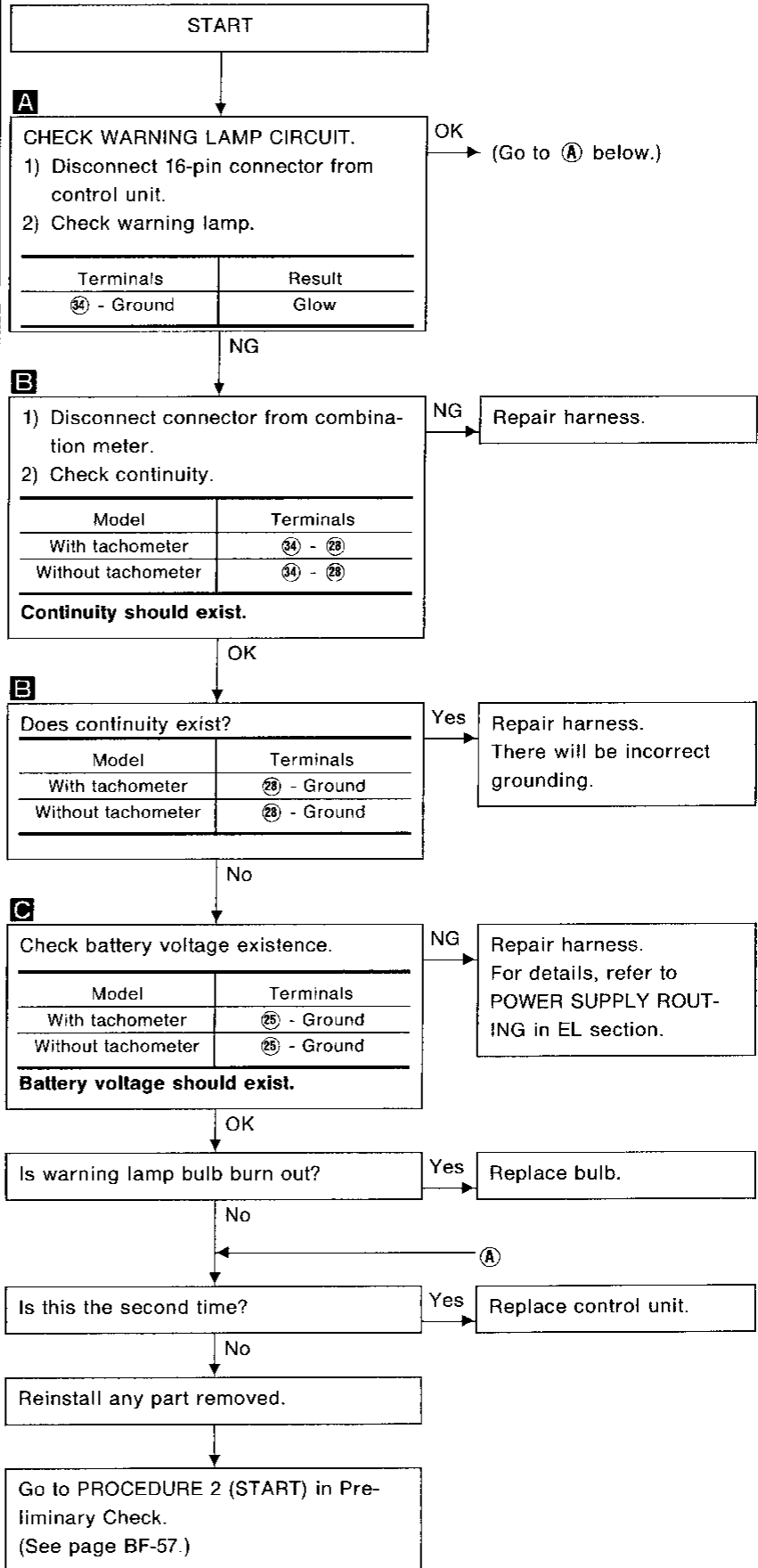


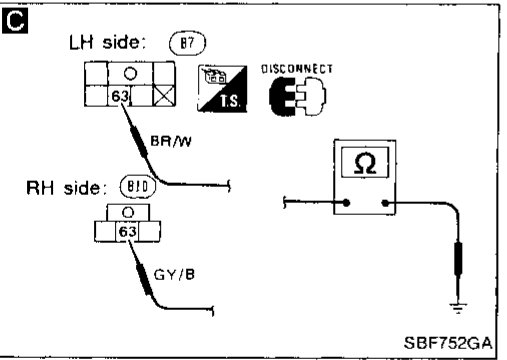
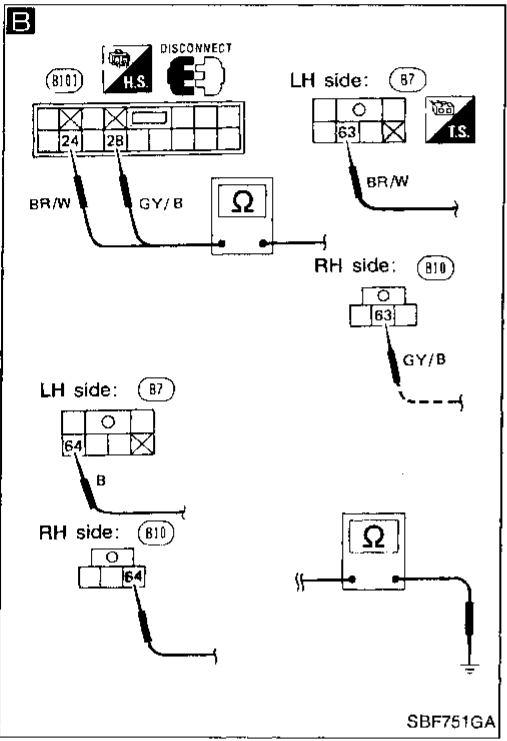
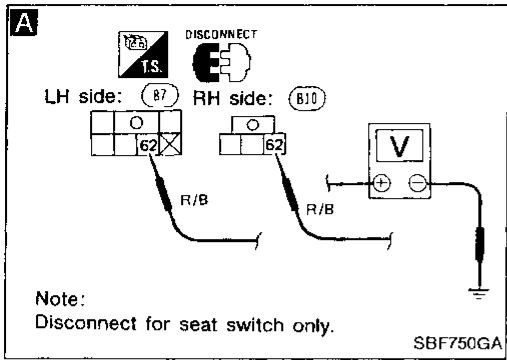
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2-POINT MOTORIZED AUTOMATIC SEAT BELT SYSTEM — Trouble Diagnoses

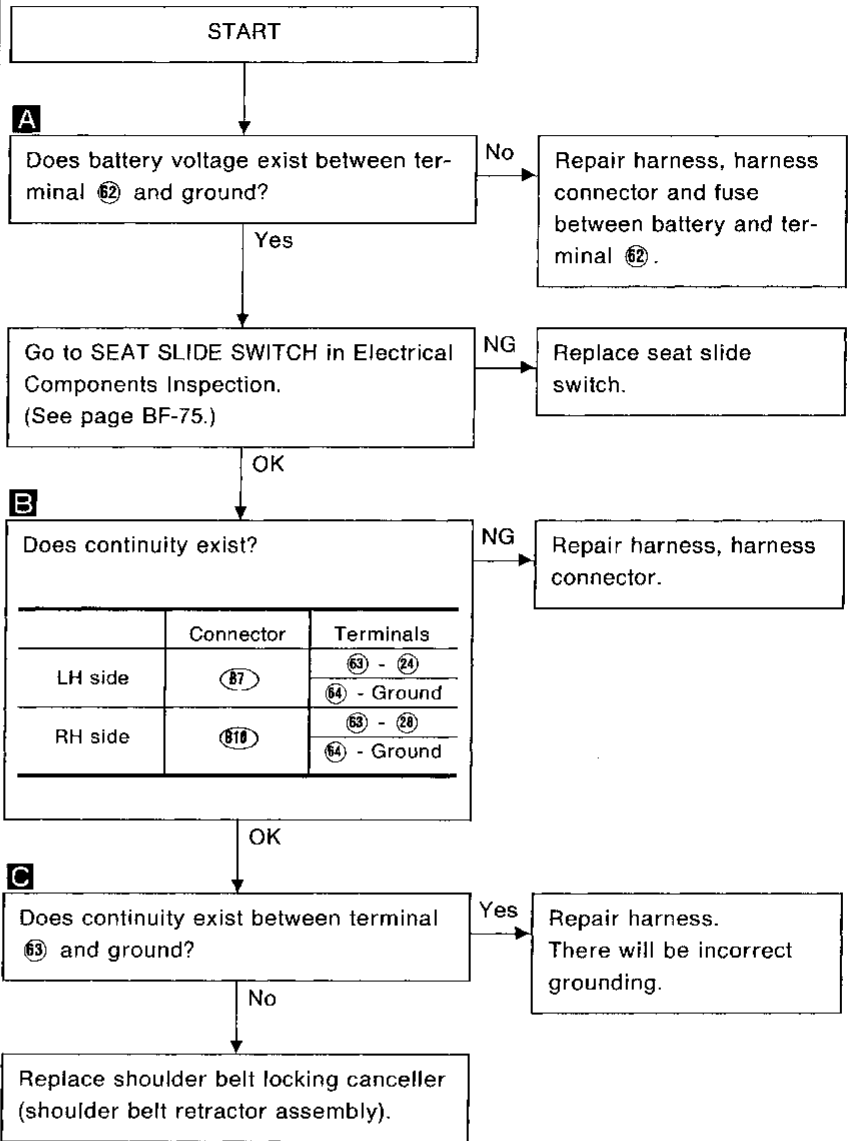


Diagnostic Procedure 8





Diagnostic Procedure 9



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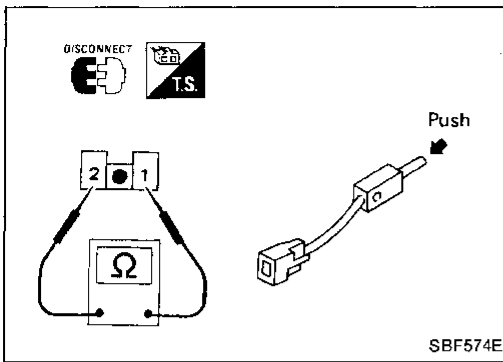
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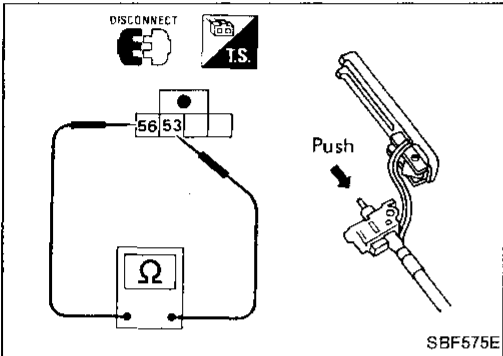
2-POINT MOTORIZED AUTOMATIC SEAT BELT SYSTEM — Trouble Diagnoses



Electrical Components Inspection

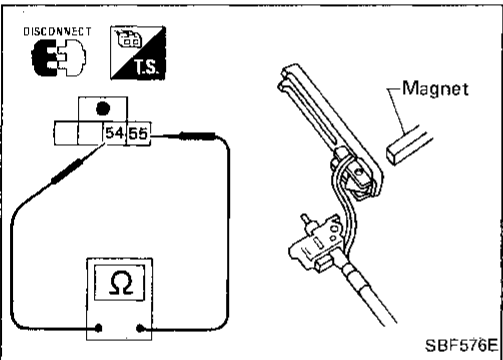
FRONT LIMIT SWITCH

| Condition | Continuity |
|-----------|------------|
| Pushed | No |
| Released | Yes |



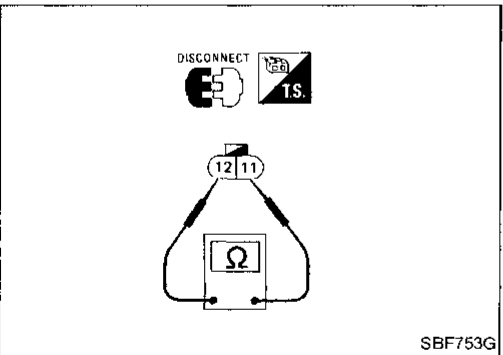
REAR LIMIT SWITCH

| Condition | Continuity |
|-----------|------------|
| Pushed | No |
| Released | Yes |



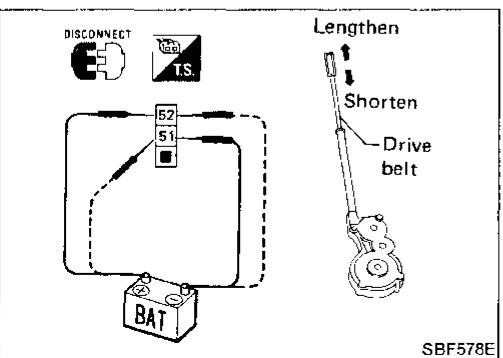
SHOULDER BELT BUCKLE SWITCH

| Condition | Continuity |
|-----------------------------------|------------|
| Move magnet toward buckle switch. | Yes |
| Move magnet away buckle switch. | No |



DOOR LATCH SWITCH (Built-into door lock assembly)

| Door condition | Continuity |
|----------------|------------|
| Open | Yes |
| Closed | No |



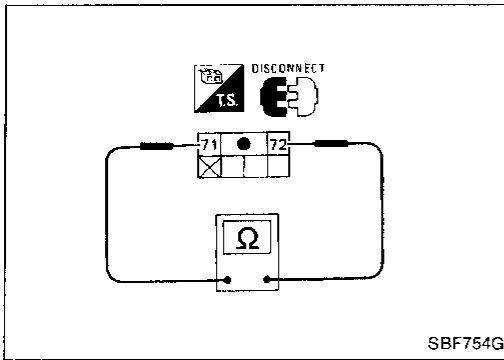
DRIVE MOTOR ASSEMBLY

| Terminals | | Drive belt operation |
|-----------|----|----------------------|
| ⊕ | ⊖ | Lengthen |
| 52 | 51 | |
| 51 | 52 | Shorten |

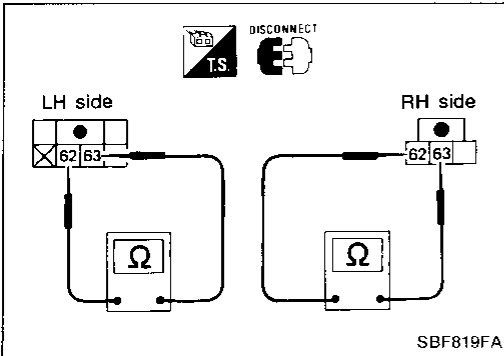
2-POINT MOTORIZED AUTOMATIC SEAT BELT SYSTEM — Trouble Diagnoses

Electrical Components Inspection (Cont'd)

LAP BELT BUCKLE SWITCH (Built-into lap belt buckle for LH side)



| Condition | Continuity |
|------------|------------|
| Fastened | No |
| Unfastened | Yes |

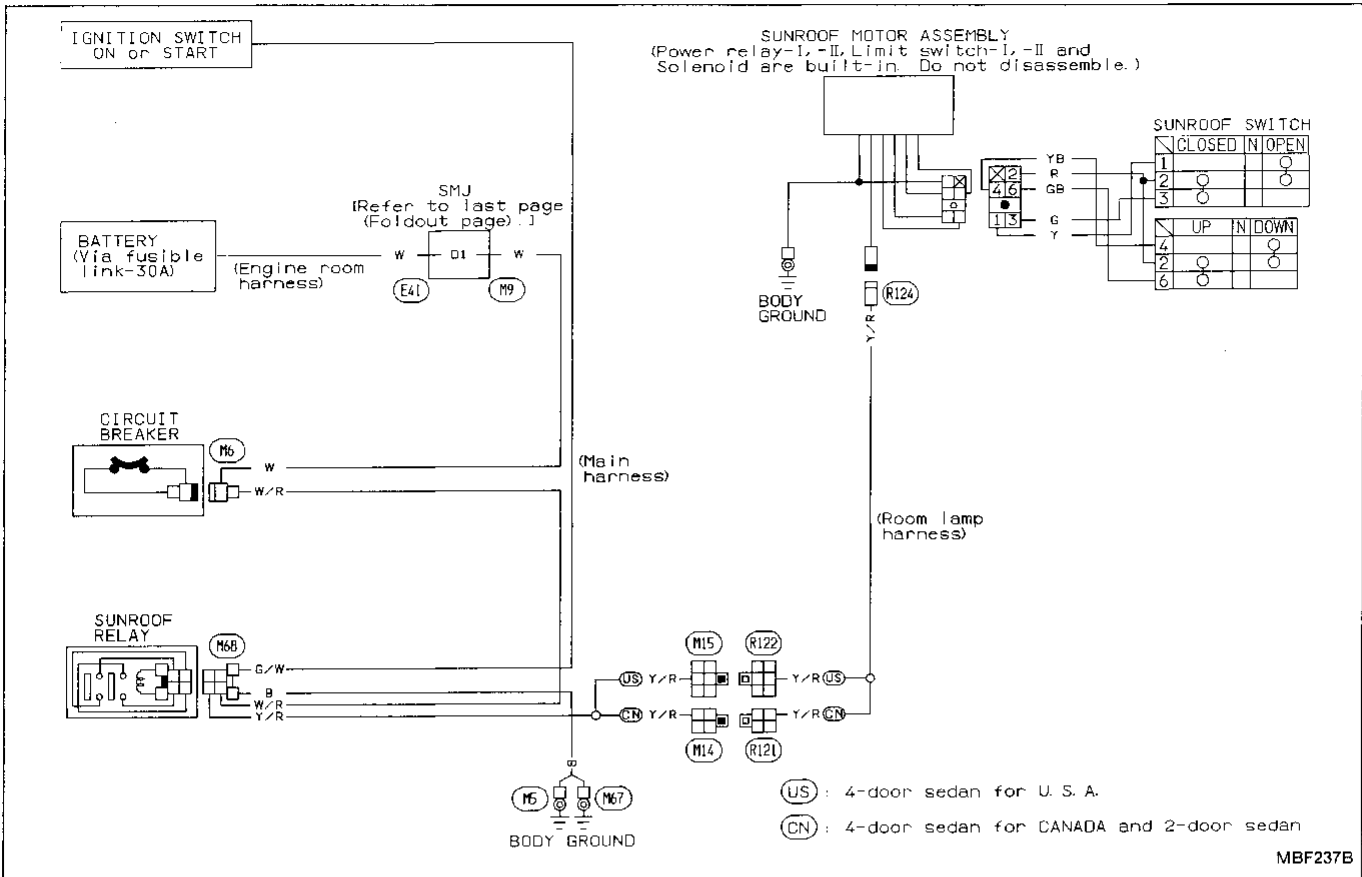


SEAT SLIDE SWITCH (Seat slide inside rail)

| Condition | Continuity |
|---|------------|
| Move seat front-rear adjusting lever | Yes |
| Release seat front-rear adjusting lever | No |

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Wiring Diagram



Electric Sun Roof

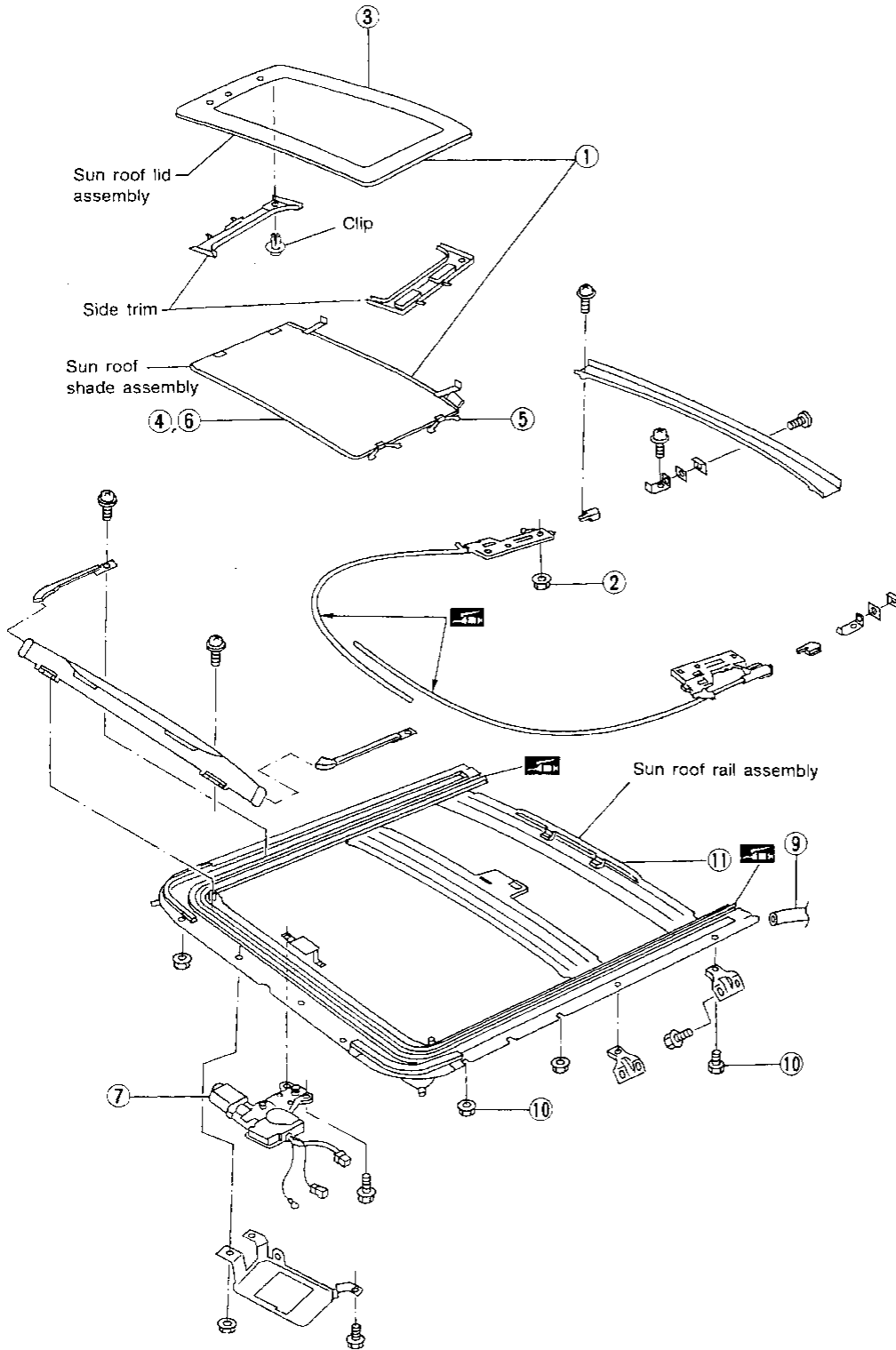
- After any adjustment, check sun roof operation and lid alignment.
- Handle finisher plate and glass lid with care so not to damage it.
- It is desirable for easy installation to mark each point before removal.

REMOVAL — Sun roof assembly

- ① Fully close or tilt up sun roof lid assembly. Fully open sun roof shade assembly. Remove clips and side trim.
- ② Close sun roof lid, and remove the six nuts from the back of the sun roof lid.
- ③ Lift out sun roof away from roof.
- ④ Pull sun roof shade forward.
- ⑤ Remove the four shade locks located beside sun roof shade.
- ⑥ Remove sun roof shade.
- ⑦ Remove sun roof motor assembly.
- ⑧ Disconnect interior lamp harness.
- ⑨ Disconnect front and rear drain hoses.
- ⑩ Remove nuts and bolts securing sun roof rails.
- ⑪ Remove sun roof rail assembly.

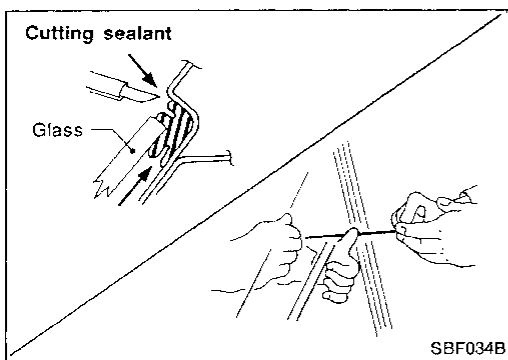
SUN ROOF

Electric Sun Roof (Cont'd)



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WINDSHIELD AND WINDOWS



REMOVAL

After removing moldings, remove glass.

CAUTION:

Be careful not to scratch glass when removing.

INSTALLATION

- Use genuine Nissan Sealant kit or equivalent. Follow instructions furnished with it.
- After installation, the vehicle should remain stationary until sealant hardens.

WARNING:

Keep heat and open flames away as primers are flammable.

CAUTION:

Advise the user of the fact that vehicle should not be driven on rough roads or surfaces until sealant has properly vulcanized.

- Do not use sealant which is past its usable term.
- Do not leave cartridge unattended with its cap open.
- Keep primers and sealant in a cool, dry place. Ideally, they should be stored in a refrigerator.
- Molding must be installed securely so that it is in position and leaves no gap.

Windshield and Rear Window

Body side

- Install spacer to panel.

Windshield
370 (14.57)

Rear window
500 (19.69)

Glass side

Install dam rubber.

Windshield
Rear window

Vehicle center
8 (0.31)

Vehicle center
8 (0.31)

Dam rubber
8 (0.31)

Joint portion
8 (0.31)

Joint portion
8 (0.31)

Apply sealant evenly.

7 - 8 (0.28 - 0.31)

12 - 15 (0.47 - 0.59)

8 (0.31)

Dam rubber

Glass

Unit: mm (in)

- Install molding fastener — Windshield
When installing it, heat body panel and fastener to approx. 30 to 40°C (86 to 104°F).

Upper & side molding fasteners

Fastener

Panel

Double-faced adhesive tape

MBF224B

REPAIRING WATER LEAKS FOR WINDSHIELD AND WINDOWS

Leaks can be repaired without removing and reinstalling glass.

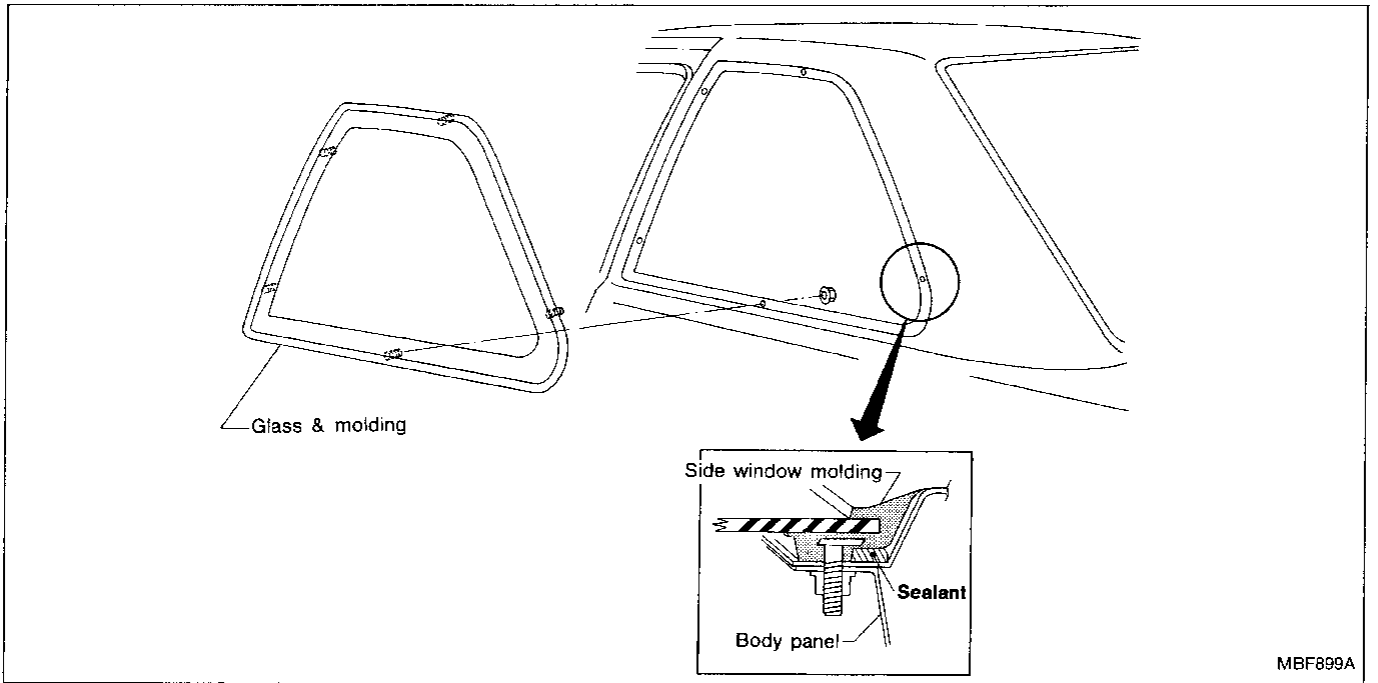
If water is leaking between caulking material and body or between glass and caulking material, determine the extent of the leak by applying water while pushing glass outward.

To stop the leak, apply primer (if necessary) and then sealant to the leak point.

WINDSHIELD AND WINDOWS

Rear Side Window

2-DOOR SEDAN



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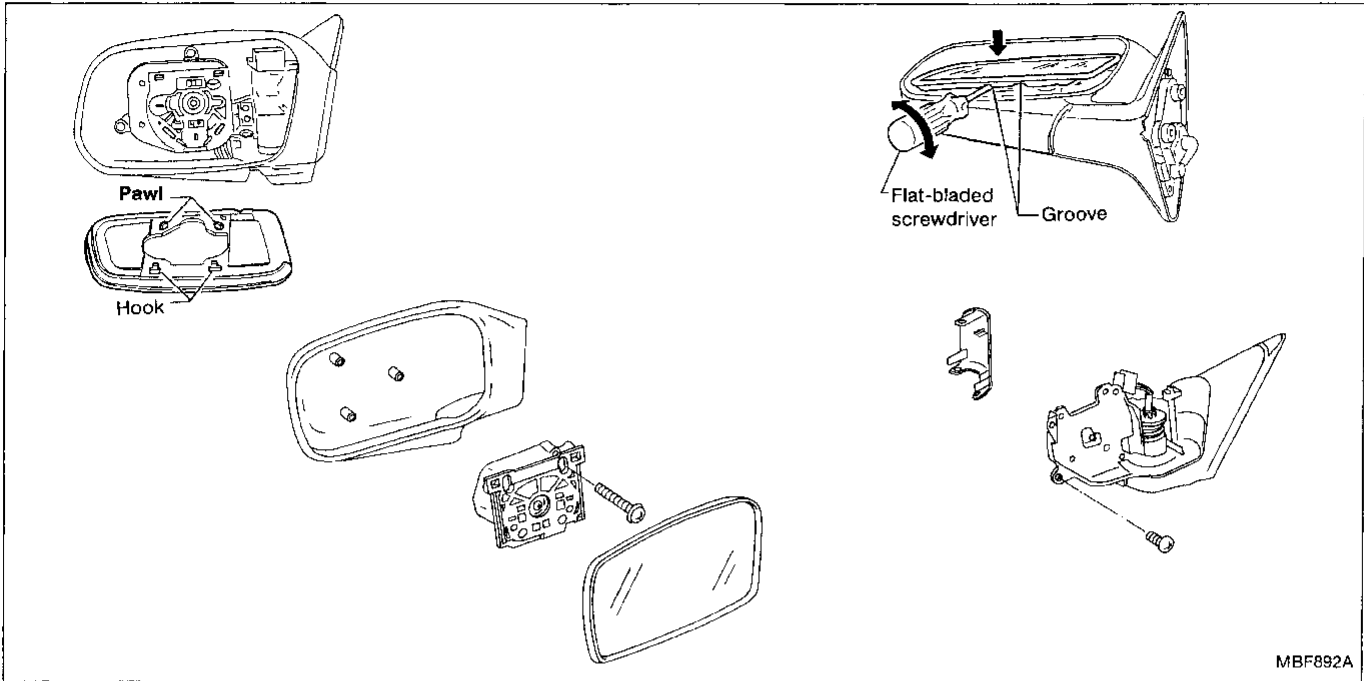
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MIRROR

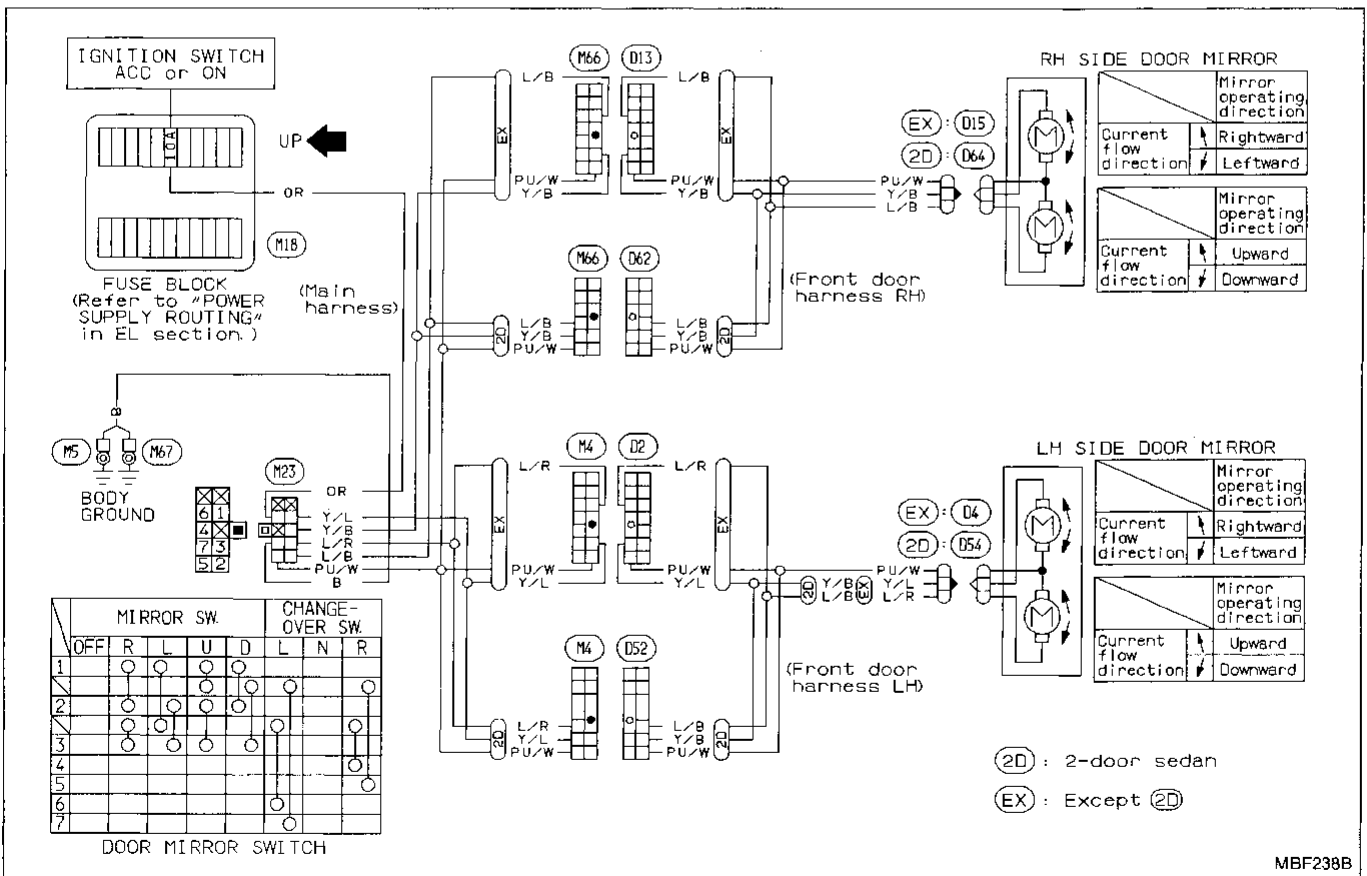
Door Mirror

REMOVAL

- Wrap flat-bladed screwdriver with a cloth to prevent scratching rear of door mirror. Do not insert screwdriver too far.



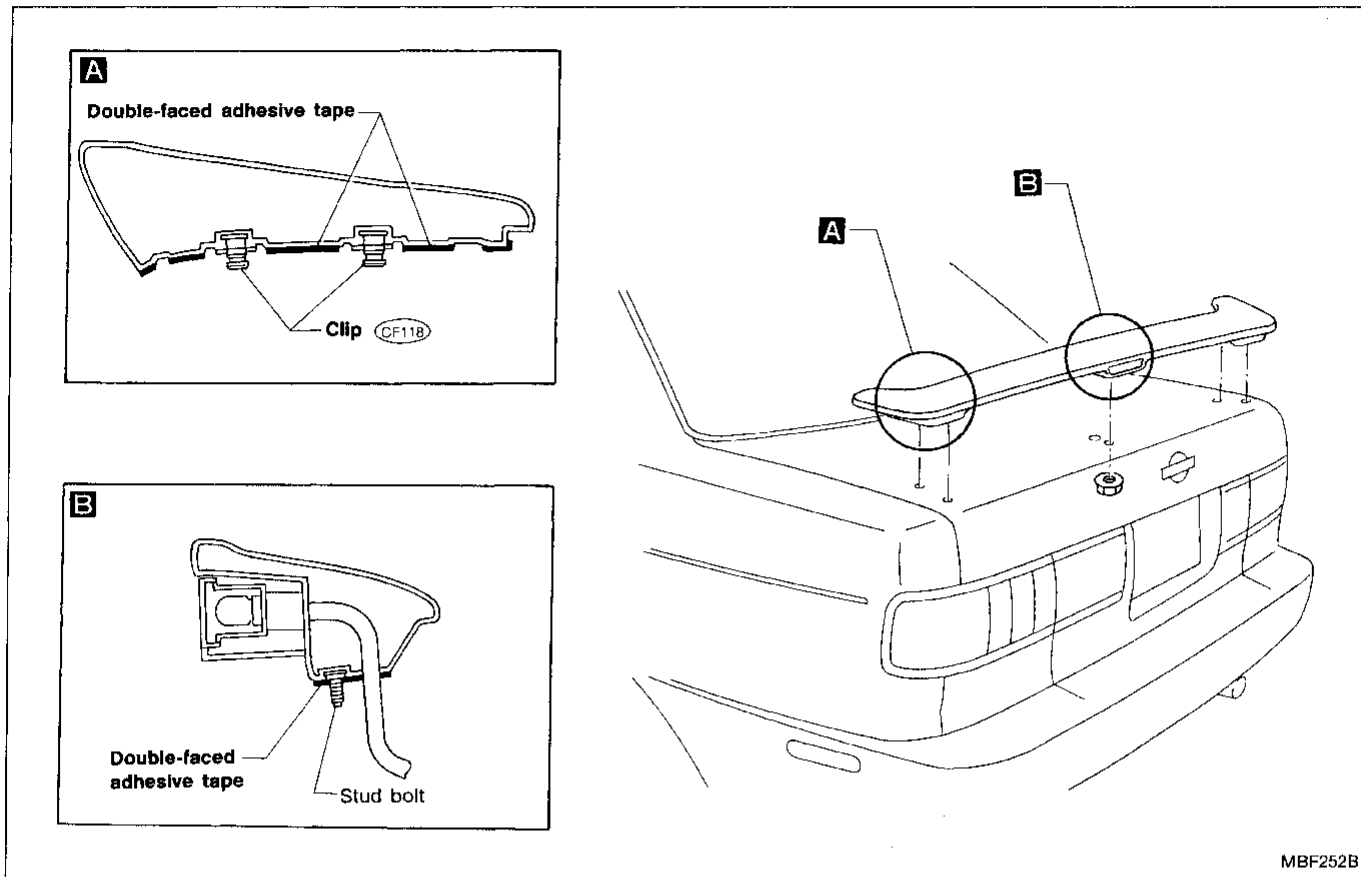
WIRING DIAGRAM



REAR AIR SPOILER

- When installing, make sure that there are not gaps or waves at ends of air spoiler.
- Before installing spoiler, clean and remove oil from surface where spoiler will be mounted.

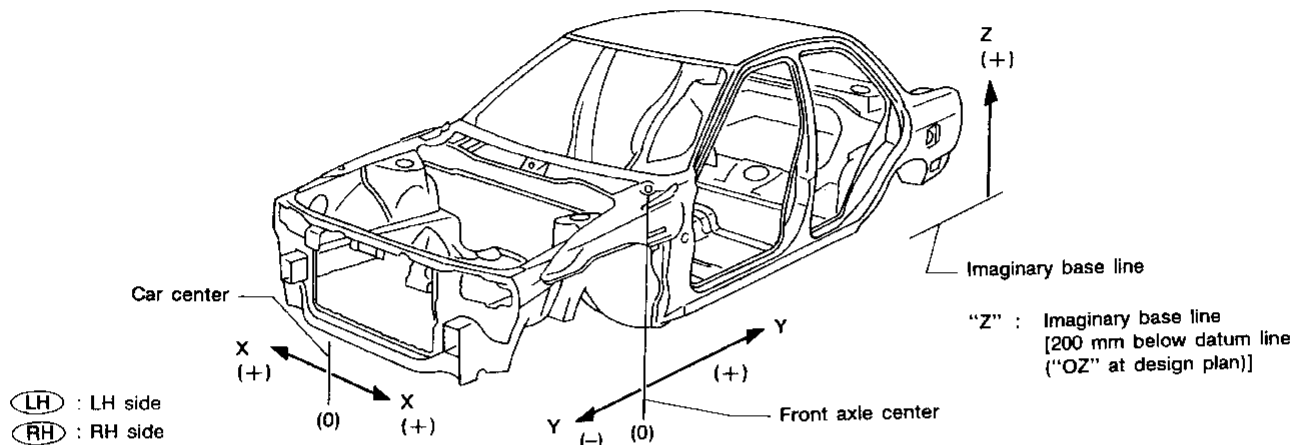
REAR AIR SPOILER



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BODY ALIGNMENT

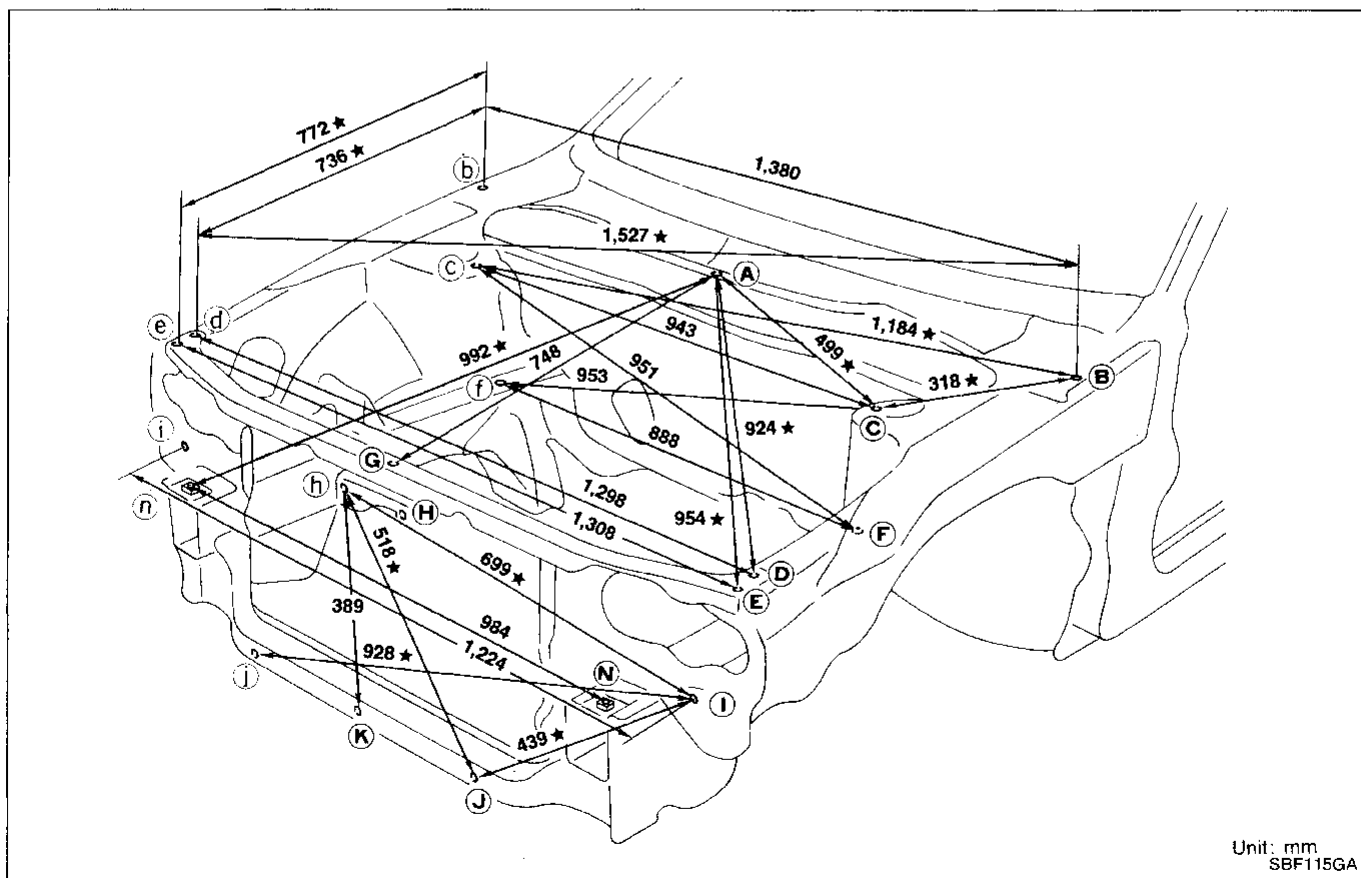
- All dimensions indicated in figures are actual ones.
- When a tram tracking gauge is used, adjust both pointers to equal length and check the pointers and gauge itself to make sure there is no free play.
- When a measuring tape is used, check to be sure there is no elongation, twisting or bending.
- Measurements should be taken at the center of the mounting holes.
- An asterisk (*) following the value at the measuring point indicates that the measuring point on the other side is symmetrically the same value.
- The coordinates of the measurement points are the distances measured from the standard line of "X", "Y" and "Z".



SBF874G

Engine Compartment

MEASUREMENT

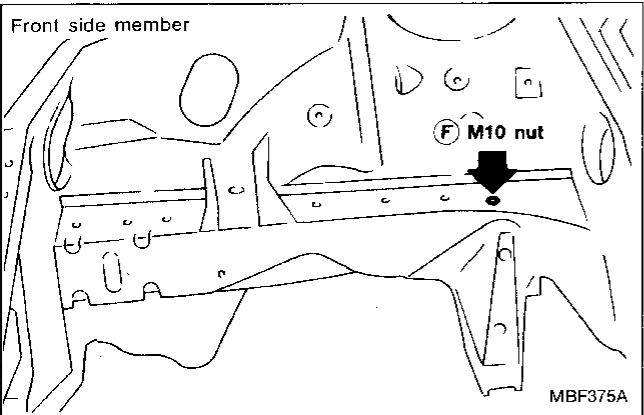
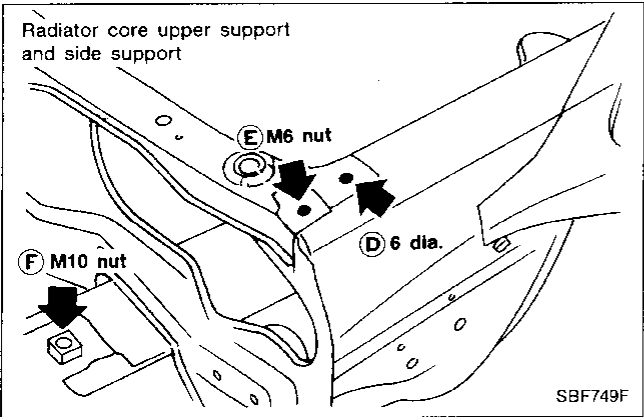
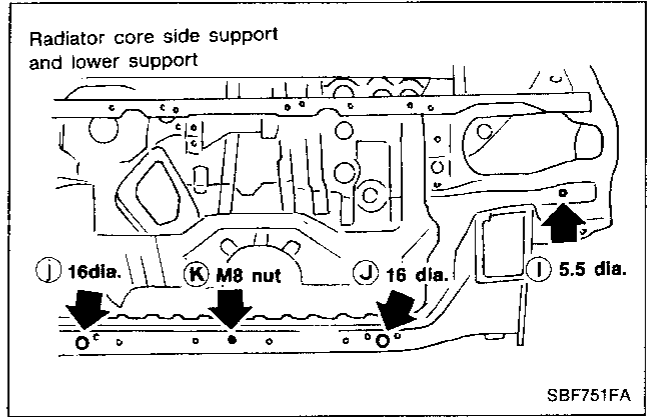
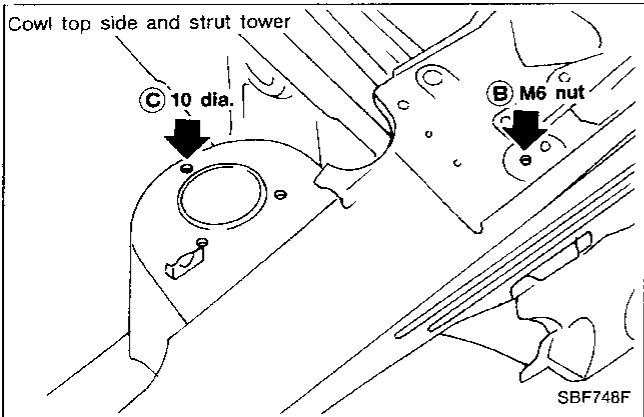
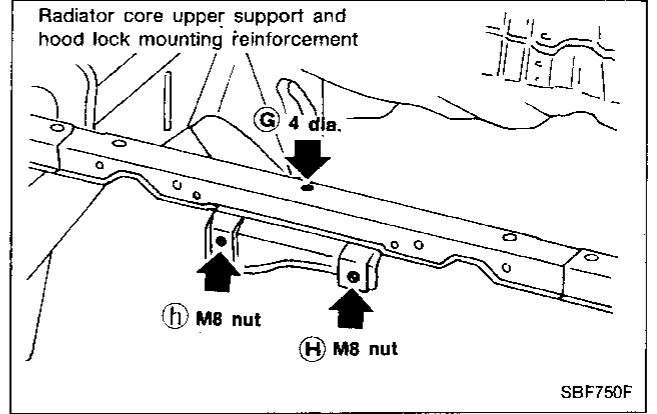
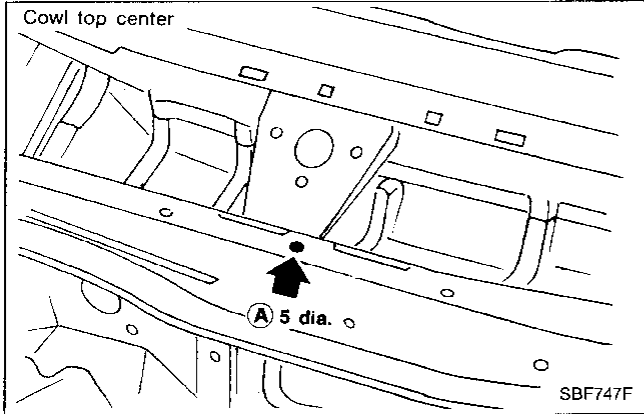


BODY ALIGNMENT

Engine Compartment (Cont'd)

MEASUREMENT POINTS

Unit: mm



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BODY ALIGNMENT

Underbody (Cont'd)

MEASUREMENT POINTS

Front side member and front extension

Coordinates:

(A), (a)
X: 250
Y: -632
Z: 225

(B), (b)
X: 492
Y: -450
Z: 355

(C), (c)
X: 406
Y: 64
Z: 173

(D), (d)
X: 432
Y: 338
Z: 128

(E), (e)
X: 395
Y: 515
Z: 129.2

Rear side member and rear extension

Coordinates:

(F), (f)
X: 393.5
Y: 1,460
Z: 126.9

(K), (k)
X: 190
Y: 2,459
Z: 194.8

(M)
X: 470
Y: 2,911
Z: 339.6

(G), (g)
X: 600
Y: 1,930
Z: 227.5

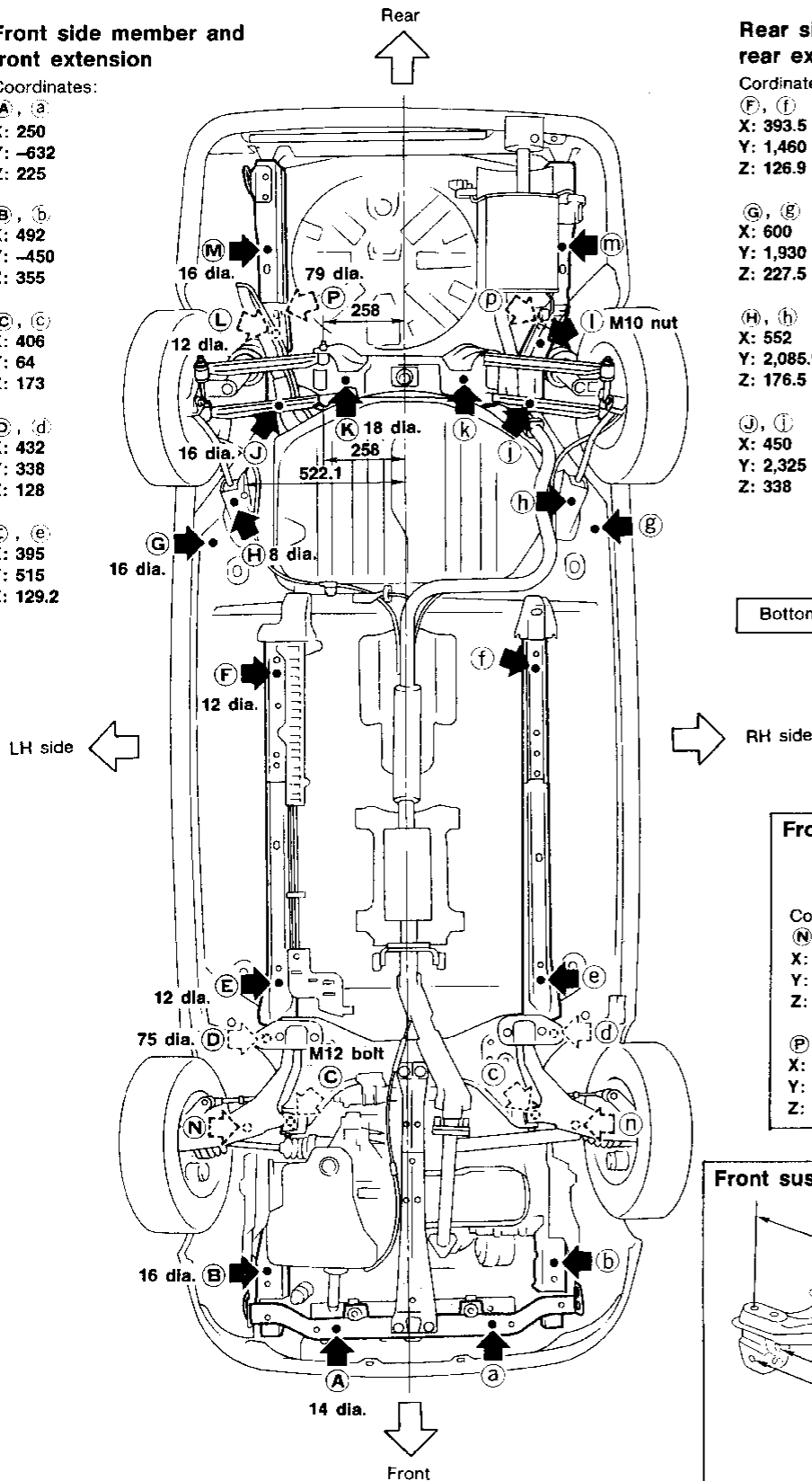
(L)
X: 438.3
Y: 2,567
Z: 338

(m)
X: 539
Y: 2,911
Z: 339.6

(H), (h)
X: 552
Y: 2,085.9
Z: 176.5

(I)
X: 461.2
Y: 2,528.8
Z: 338

(J), (j)
X: 450
Y: 2,325
Z: 338



Bottom view of vehicle

Front and rear strut tower centers

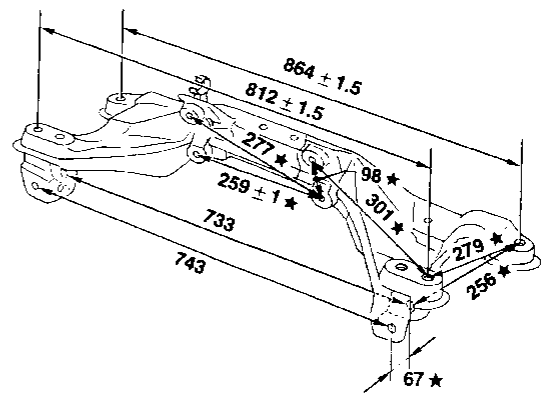
Coordinates:

(N), (n)
X: 525.2
Y: 17.5
Z: 754.2

Front: (N), (n) 75 dia.
Rear: (P), (p) 79 dia.

(P), (p)
X: 565.3
Y: 2,496
Z: 778.5

Front suspension member



Unit: mm

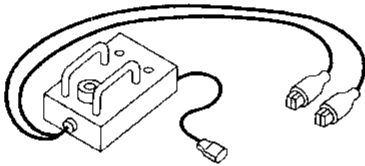
SBF118GA

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

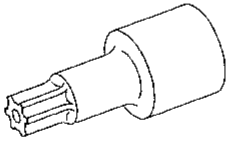
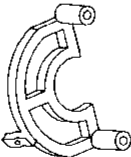
Precautions for SRS "Air Bag" Service

- Do not use a circuit tester to check SRS circuits.
- Before servicing the SRS, turn ignition switch "OFF", disconnect battery ground cable and wait for at least 10 minutes.
For approximately ten minutes after the cables are removed, it is still possible for the air bag to inflate. Therefore, do not work on any air bag system connectors or wires until at least ten minutes have passed.
- SRS sensors must always be installed with their arrow marks " ← " facing the front of the vehicle for proper operation. Also check sensors for cracks, deformities or rust before installation and replace as required.
- The spiral cable must be aligned with the neutral position since its rotations are limited. Do not attempt to turn steering wheel or column after removal of steering gear.
- Handle air bag module carefully. Always place it with the pad side facing upward.
- After removing any SRS parts, discard old bolts and replace with new ones. Conduct self-diagnosis to check entire SRS for proper function.
- If front of vehicle is damaged in a collision, always check the crash zone sensor and the wiring harness.

Special Service Tool

| Tool number (Kent-Moore No.) Tool name | Description | |
|--|--|-----------------------------|
| KV99106400 (J38381) Deployment tool |  | Disposing of air bag module |
| | NT219 | |

Commercial Service Tools

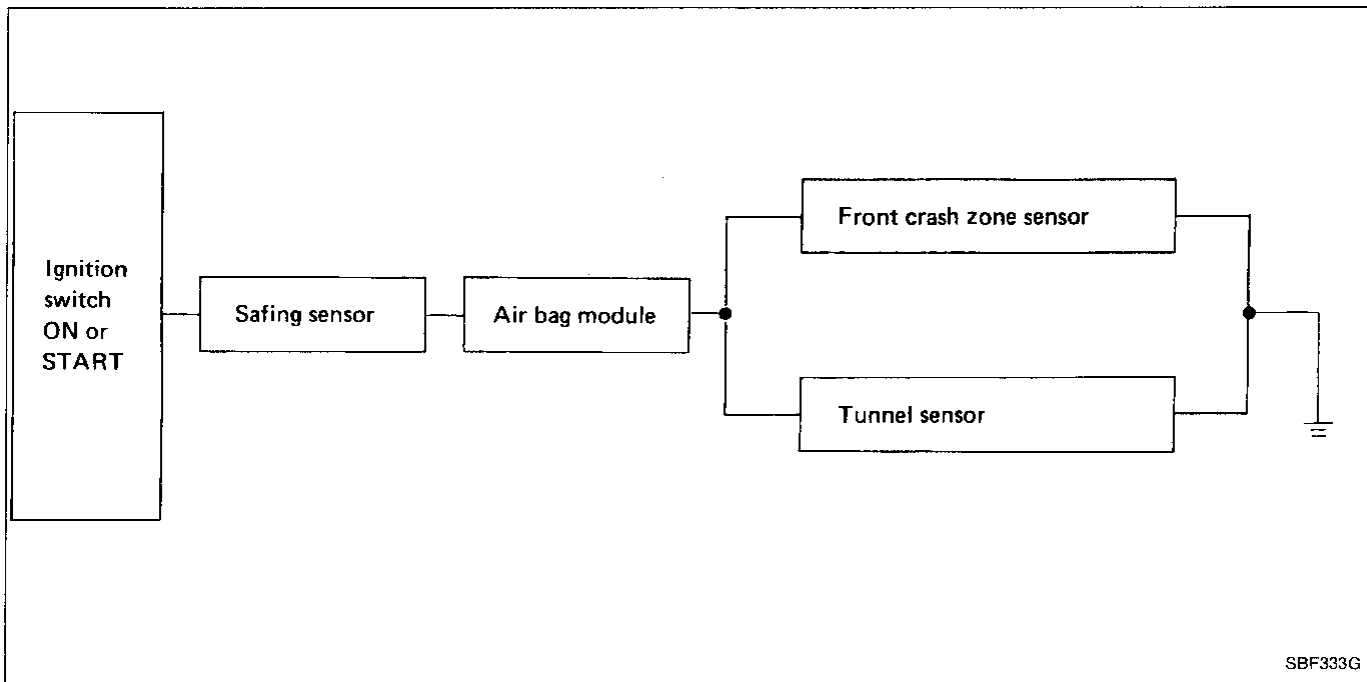
| Tool name | Description | |
|----------------------|---|---|
| Special torx bit |  | Use for special bolts (tamper resistant screw) |
| | NT220 | |
| Spiral cable stopper |  | Avoiding unexpected spiral cable rotation |
| | NT221 | |

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Description

The air bag deploys when any of the two sensors (front crash zone sensor or tunnel sensor) and the safing sensor simultaneously activate while the ignition switch is "ON".

| Ignition | Crash zone sensor | Tunnel sensor | Safing sensor | Air bag signal |
|----------|-------------------|---------------|---------------|----------------|
| | Front | | | |
| ON | ON | | ON | ON |
| ON | | ON | ON | ON |



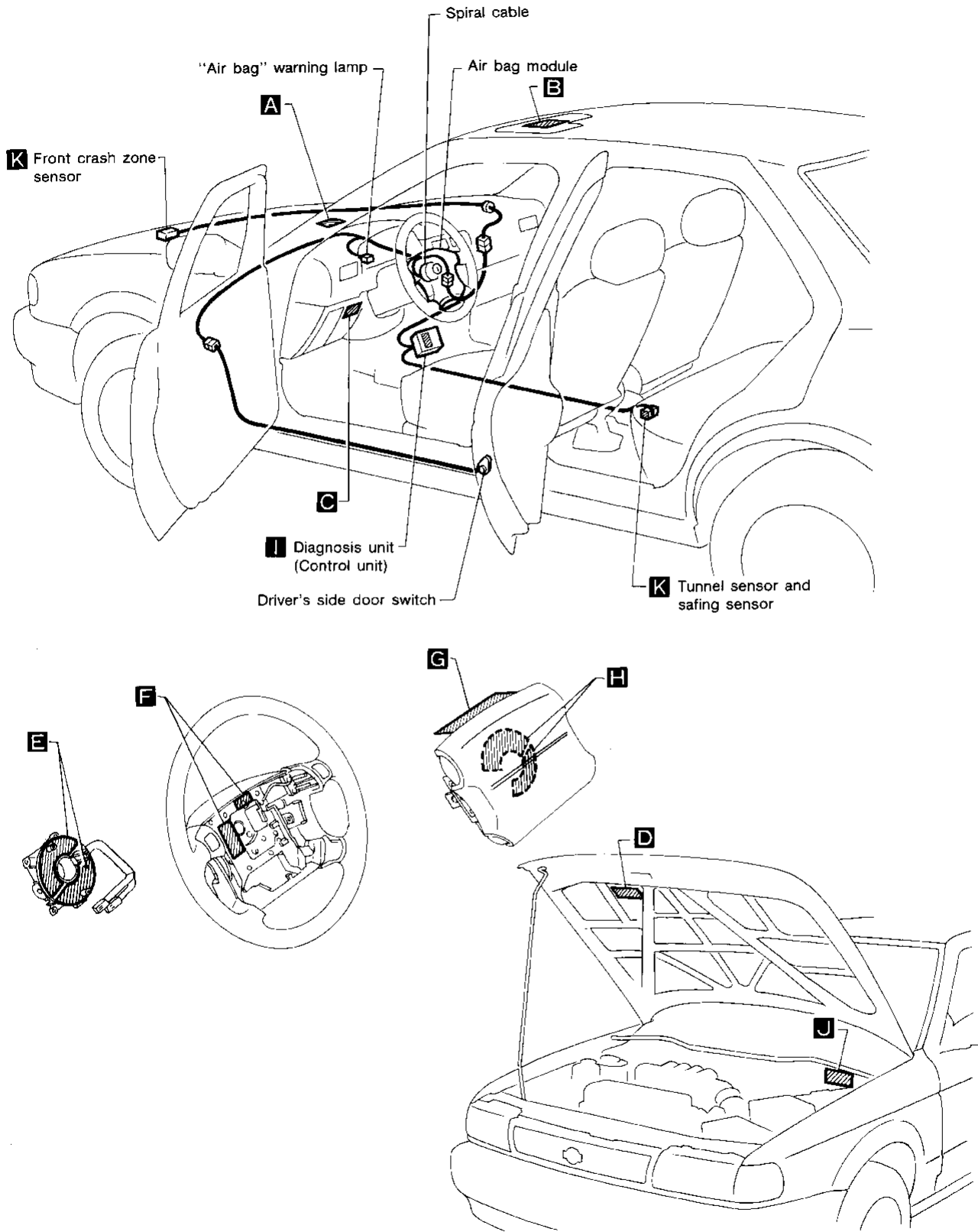
Self-diagnosis

The diagnosis unit (control unit) diagnoses the SRS circuit. When the ignition key is in the "ON" or "START" position, the "AIR BAG" warning lamp will illuminate for about 7 seconds and then turn off. This means that the system is operational.

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

SRS Component Parts Location



SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Caution Labels

The CAUTION LABELS are important when servicing air bags in the field. If they are dirty or damaged, replace them with new ones.

A

DRIVER-AIRBAG

B

INFORMATION SRS AIRBAG

- THIS CAR IS EQUIPPED WITH A DRIVER AIR BAG AS A SUPPLEMENTAL RESTRAINT SYSTEM (S.R.S.) TO REDUCE INJURY TO THE DRIVER IN A FRONTAL COLLISION.
- THE SYSTEM IS DESIGNED TO SUPPLEMENT THE ACCIDENT PROTECTION PROVIDED BY THE DRIVER'S SEAT BELT. BUT IT IS NOT A SUBSTITUTE FOR THE BELT SYSTEM.
- ALWAYS WEAR YOUR SEAT BELT WHEN THE CAR IS IN USE.
- THE SYSTEM MUST BE INSPECTED 10 YEARS AFTER DATE OF MANUFACTURE, AS NOTED ON THE CERTIFICATION LABEL LOCATED ON THE LEFT FRONT DOOR.
- THE "AIRBAG" LAMP WILL LIGHT MOMENTARILY WHEN THE IGNITION KEY IS TURNED TO THE "ON" OR "START" POSITION. THIS MEANS THE SYSTEM IS OPERATIONAL.
- HOWEVER, IF ANY OF THE FOLLOWING CONDITIONS OCCUR, THE SYSTEM MUST BE SERVICED:
 1. THE "AIR BAG" LAMP DOES NOT GO ON AS DESCRIBED ABOVE.
 2. THE "AIRBAG" LAMP FLASHES INTERMITTENTLY OR REMAINS ON.
 3. ANY PORTION OF THE FRONT END OF THE CAR IS DAMAGED.
 4. THE AIR BAG HAS DEPLOYED.
- SEE YOUR OWNER'S MANUAL FOR DETAILS ABOUT THE FUNCTIONING, SERVICE, AND DISPOSAL PROCEDURES FOR THE SYSTEM.

C

NOTICE SRS AIRBAG

- THIS CAR IS EQUIPPED WITH A DRIVER AIR BAG AS A SUPPLEMENTAL RESTRAINT SYSTEM (S.R.S.)
- IT IS DESIGNED TO SUPPLEMENT THE SEAT BELT.
- ALWAYS WEAR YOUR SEAT BELT.

D

WARNING SRS AIRBAG

- THIS CAR IS EQUIPPED WITH A DRIVER AIR BAG AS A SUPPLEMENTAL RESTRAINT SYSTEM (S.R.S.)
- ALL S.R.S. ELECTRICAL WIRING AND CONNECTORS ARE COLORED YELLOW.
- DO NOT USE ELECTRICAL TEST EQUIPMENT ON THESE CIRCUITS.
- TAMPERING WITH OR DISCONNECTING THE S.R.S. WIRING AND CONNECTORS COULD RESULT IN ACCIDENTAL DEPLOYMENT OF THE AIR BAG OR MAKE THE SYSTEM INOPERATIVE, WHICH MAY RESULT IN SERIOUS INJURY.

E

CAUTION SRS AIRBAG

- BEFORE ASSEMBLY;
 - LINE UP THE FRONT WHEELS STRAIGHT AHEAD.
 - ALIGN THE ARROW WITH THE YELLOW MARK ON THE SIDE GEAR.
 - READ SERVICE MANUAL.
- NO SERVICEABLE PARTS INSIDE.
- DO NOT DISASSEMBLE OR TAMPER.

F

WARNING SRS AIRBAG

- BEFORE MOUNTING STEERING WHEEL;
- MAKE SURE THAT THE FRONT WHEELS ARE IN STRAIGHT-AHEAD POSITION.
 - ALIGN THE ARROW WITH THE YELLOW MARK ON THE SIDE GEAR. (SPIRAL CABLE)
 - READ SERVICE MANUAL.

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Caution Labels (Cont'd)

G

WARNING

SRS AIRBAG

- THIS AIRBAG MODULE CANNOT BE REPAIRED.
- USE DIAGNOSTIC INSTRUCTIONS TO DETERMINE IF THE UNIT IS OPERATIONAL.
- IF NOT OPERATIONAL, REPLACE AND DISPOSE OF THE ENTIRE UNIT AS DIRECTED IN THE INSTRUCTIONS.
- UNDER NO CIRCUMSTANCES SHOULD A DIAGNOSIS BE PERFORMED USING ELECTRICALLY POWERED TEST EQUIPMENT OR PROBING DEVICES.
- TAMPERING OR MISHANDLING CAN RESULT IN PERSONAL INJURY.
- STORE THE REMOVED AIRBAG MODULE WITH THE PAD SURFACE UP.
- FOR SPECIAL HANDLING OR STORAGE REFER TO SERVICE MANUAL.

I

CAUTION SRS AIRBAG

- NO SERVICEABLE PARTS INSIDE.
- DO NOT DISASSEMBLE OR TAMPER.
- DO NOT DROP; KEEP DRY.
- WHILE REMOVED, STORE IN A CLEAN AND DRY AREA.

J

CAUTION SRS AIRBAG

- TO AVOID DAMAGING THE S.R.S. SPIRAL CABLE, WHICH COULD MAKE THE SYSTEM INOPERATIVE, REMOVE THE STEERING WHEEL BEFORE REMOVING THE STEERING LOWER JOINT.

H

DANGER POISON

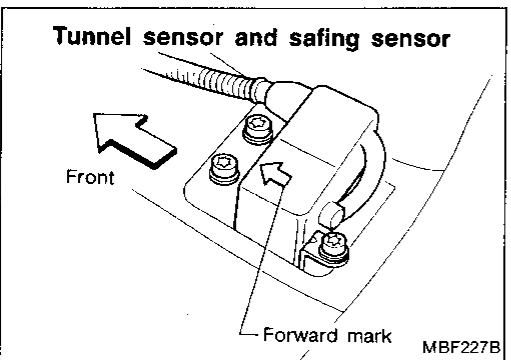
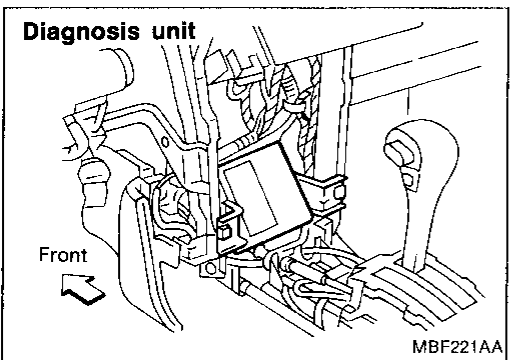
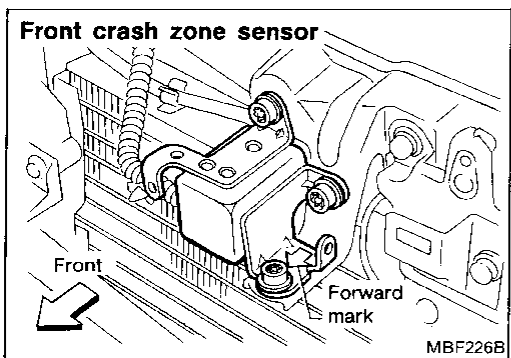
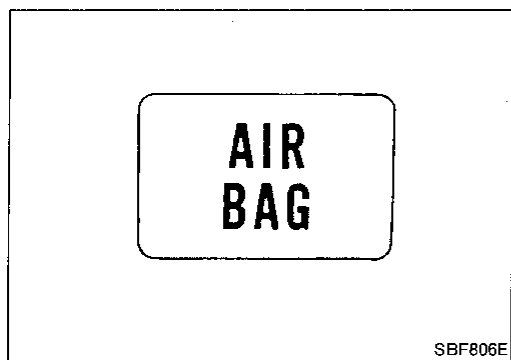
- KEEP OUT OF THE REACH OF CHILDREN.
- CONTAINS SODIUM ACID AND POTASSIUM NITRATE.
- CONTENTS ARE POISONOUS AND EXTREMELY FLAMMABLE.
- CONTACT WITH ACID, WATER OR HEAVY METALS MAY PRODUCE HARMFUL AND IRRITATING GASES OR EXPLOSIVE COMPOUNDS.
- DO NOT DISMANTLE, INCINERATE, OR BRING INTO CONTACT WITH ELECTRICITY OR STORE AT TEMPERATURES EXCEEDING 200°F.
- FIRST AID: IF CONTENTS ARE SWALLOWED, INDUCE VOMITING;
 - FOR EYE CONTACT, FLUSH EYES WITH WATER FOR 15 MINUTES
 - IF GASES FROM ACID OR WATER CONTACT ARE INHALED, SEEK FRESH AIR
 - IN EVERY CASE, GET PROMPT MEDICAL ATTENTION
- FOR ADDITIONAL INFORMATION, SEE MATERIAL SAFETY DATA SHEET (MSDS) FOR THIS PRODUCT.

K

WARNING

SRS AIRBAG

- DO NOT DISASSEMBLE OR TAMPER.
- DISMANTLING AND INSTALLATION SHOULD ONLY BE PERFORMED BY TRAINED PERSONNEL.



Maintenance Items

1. Check "AIR BAG" warning lamp
When the ignition key is in the "ON" or "START" position, the "AIR BAG" warning lamp will illuminate for about 7 seconds and then turn off. This means that the system is operational.

2. Visually check SRS components

(1) Sensors

- Check sensors to ensure the arrow marks face the front of the vehicle.
- Check body and sensor brackets for deformities or rust.
- Check sensor case for dents, cracks, deformities or rust.
- Check sensor harness for binds, connector for damage, and terminals for deformities.

(2) Diagnosis (Control) unit — Airbag

- Check case and bracket for dents, cracks or deformities.
- Check connectors for damage, and terminals for deformities.

(3) Main harness

- Check connectors for poor connections.
- Check harnesses for binds, connectors for damage, and terminals deformities.

(4) Spiral cable

- Visually check lock (engagement) pins and combination switch for damage.
- Check connectors, flat cable and protective tape for damage.
- Check steering wheel for noise, binds or difficult operation.

(5) Steering wheel

- Check harness (built into steering wheel) and connectors for damage, and terminals for deformities.
- Install air bag module to check fit or alignment with steering wheel.
- Check steering wheel for excessive free play.

(6) Air bag module

- Remove air bag module from steering wheel. Check harness cover and connectors for damage, terminals for deformities, and harness for binds.
- Install air bag module to steering wheel to check fit or alignment with the wheel.

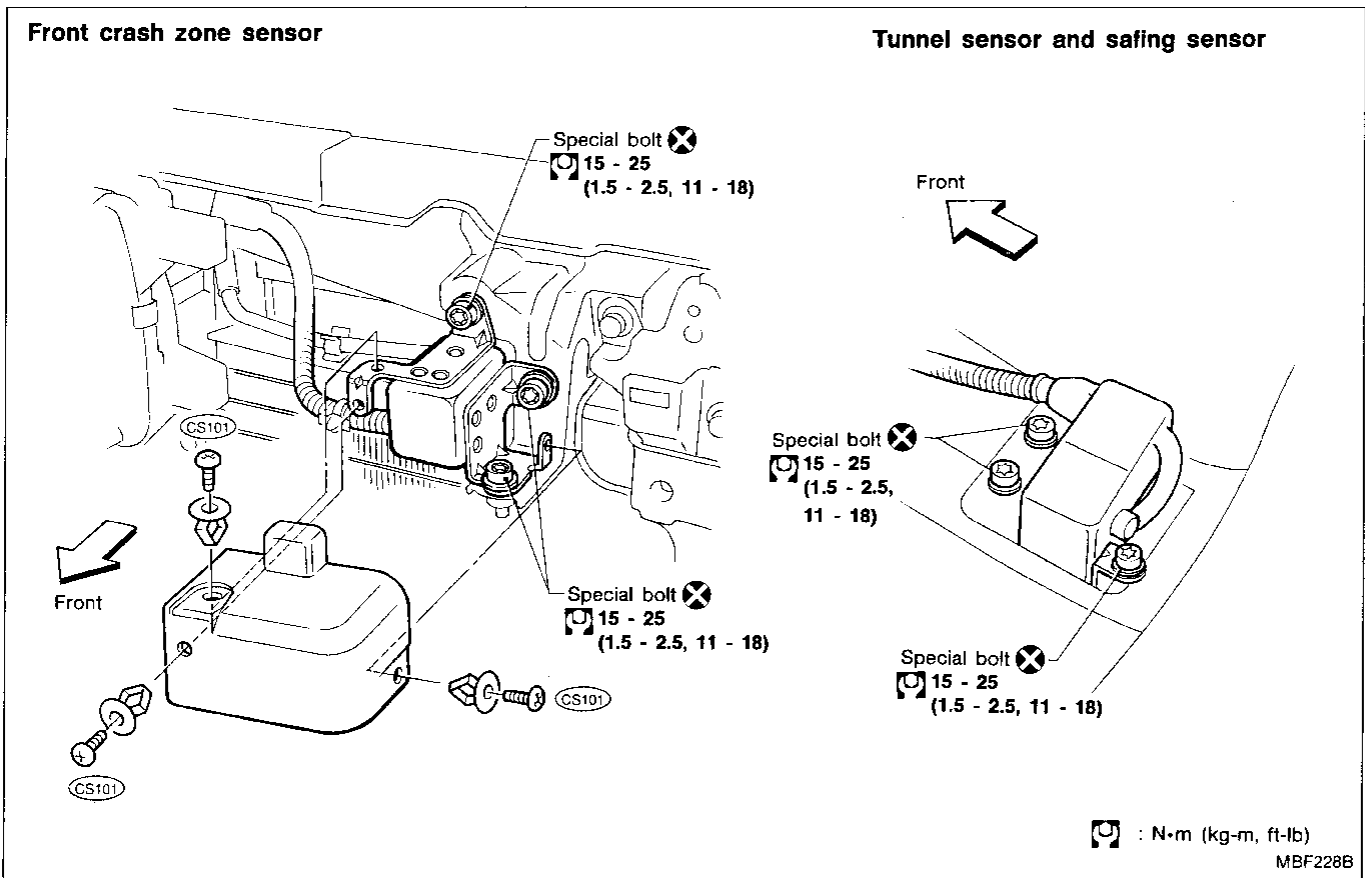
CAUTION:

Replace previously used screws with new ones.

Removal and Installation — Diagnosis (Control) Unit and Sensors

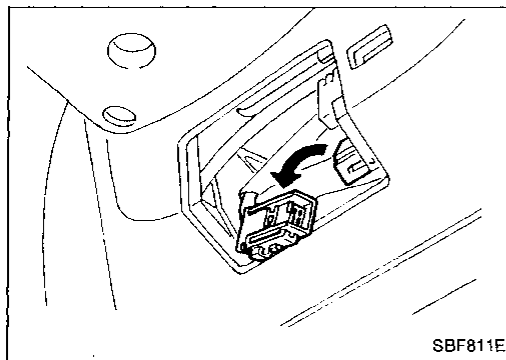
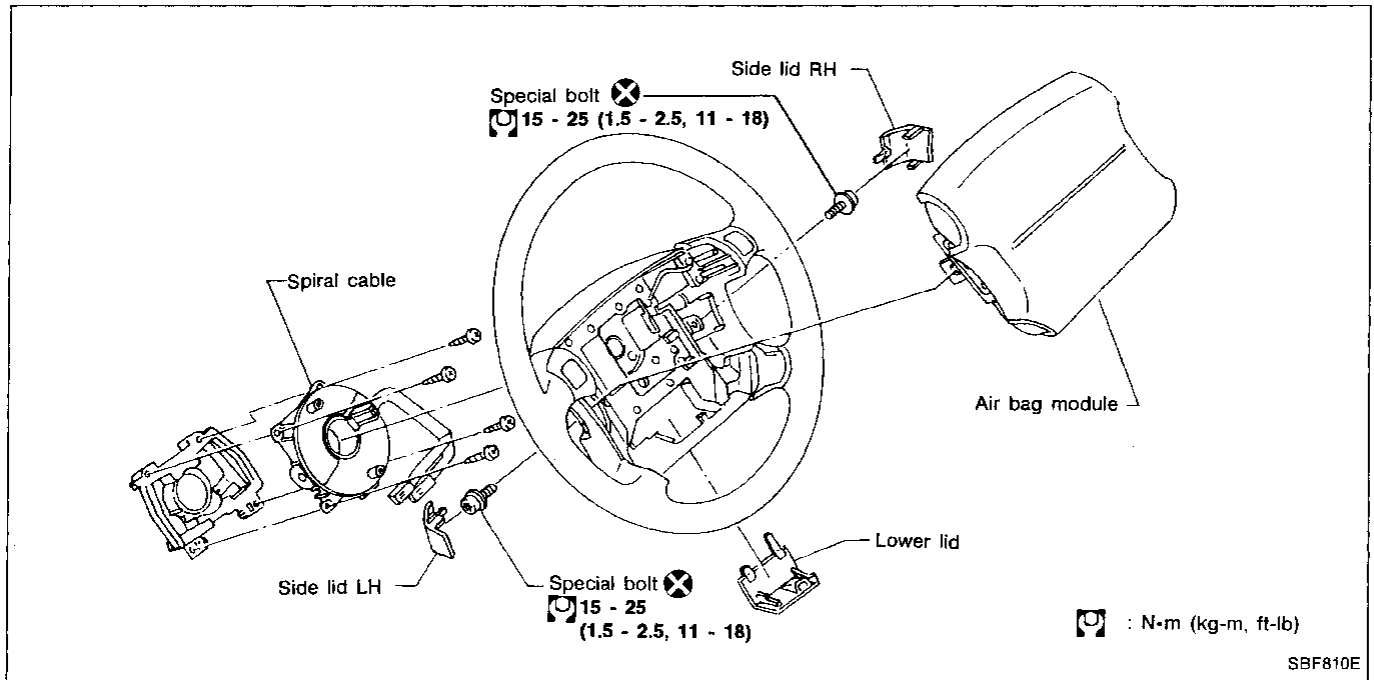
CAUTION:

- Before servicing SRS, turn the ignition switch off, disconnect battery ground cable and wait for at least 10 minutes.
- The special bolts are coated with bonding agent. Discard old ones after removal; replace with new ones.
- Check all sensors for proper installation.
- Check all sensors to ensure they are free of deformities, dents, cracks or rust. If they show any visible signs of damage, replace them with new ones.
- Check sensor brackets to ensure they are free of deformities or rust.



SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

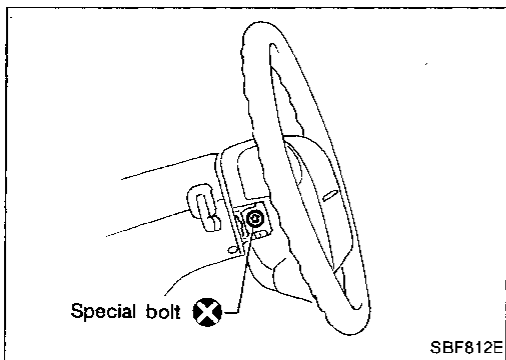
Removal — Air Bag Module and Spiral Cable



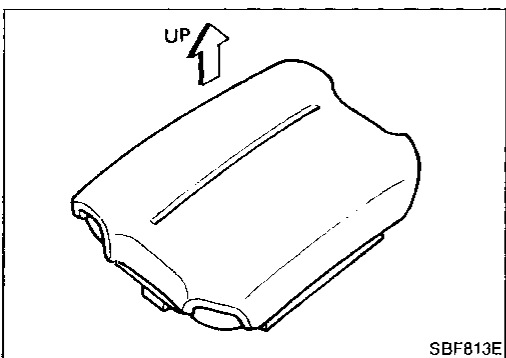
CAUTION:

Before servicing SRS, turn the ignition switch off, disconnect battery ground cable and wait for at least 10 minutes.

1. Remove lower lid from steering wheel, and disconnect air bag module connector.



2. Remove side lid. Using the T50H torx bit, remove left and right special bolts. Air bag module can then be removed.

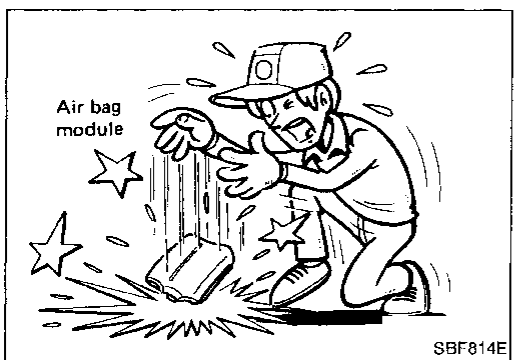


CAUTION:

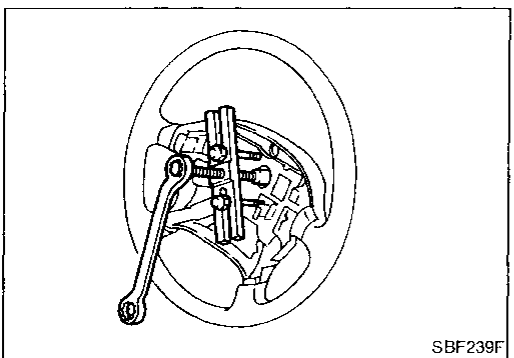
- Always place air bag module with pad side facing upward.
- Do not attempt to disassemble air bag module.
- The special bolts are coated with bonding agent. Discard old ones after removal; replace with new ones.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

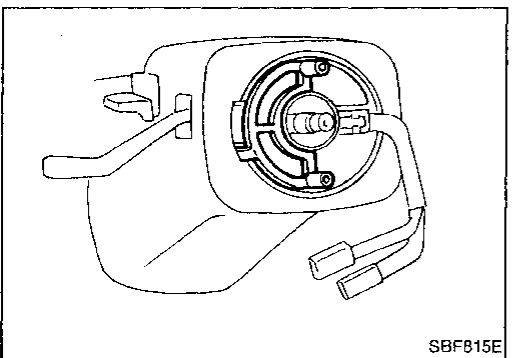
Removal — Air Bag Module and Spiral Cable (Cont'd)



- Do not drop or impact air bag module. If any portion is deformed or cracked, replace the module.
- Do not expose the air bag module to temperatures exceeding 100°C (212°F).
- Do not allow oil, grease or water to come in contact with the air bag module.



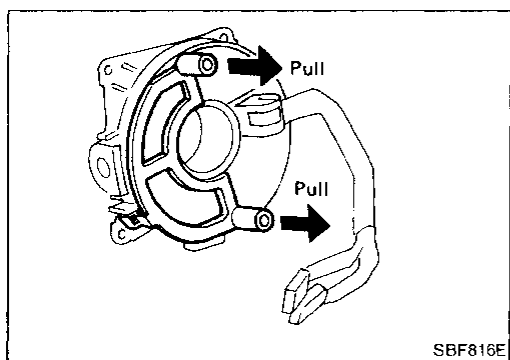
3. Set steering wheel in the neutral position.
4. Disconnect horn connector and remove nuts.
5. Using steering wheel puller, remove steering wheel. Be careful not to over-tighten puller bolt on steering wheel.



6. Attach spiral cable to stopper.
7. Remove steering column cover.
8. Disconnect connector and remove the four screws. The spiral cable can then be removed.

Installation — Air Bag Module and Spiral Cable

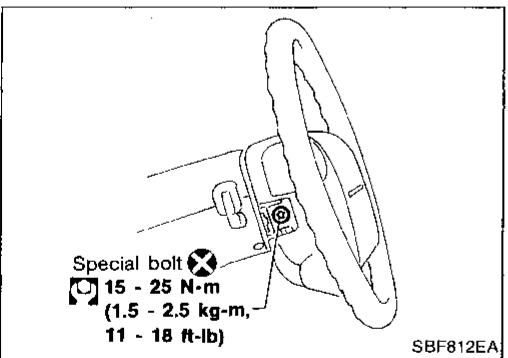
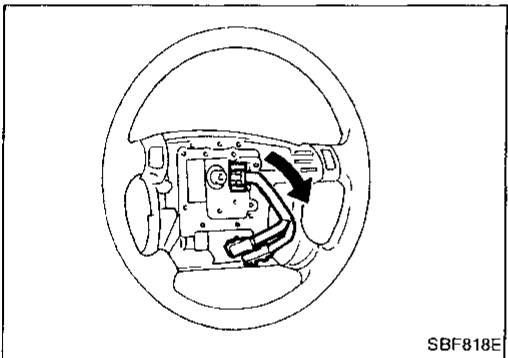
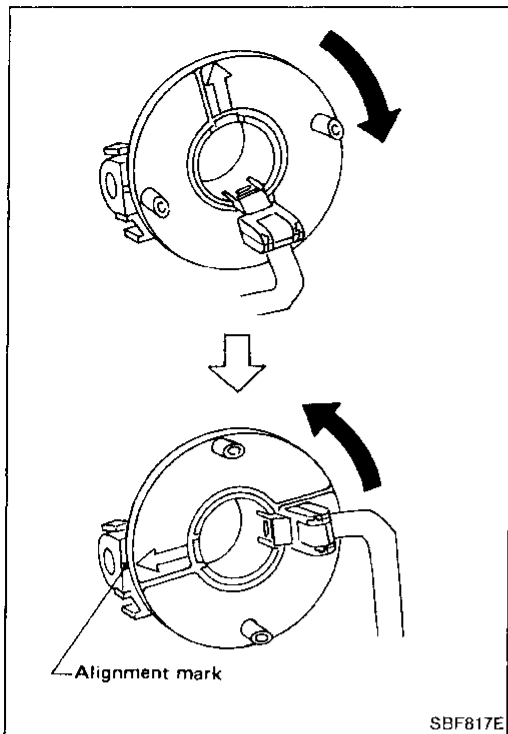
1. Connect spiral cable connector and tighten with screws. Install steering column cover.



2. Remove stopper by pulling two pin guides.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Installation — Air Bag Module and Spiral Cable (Cont'd)



- Alignment of spiral cable with neutral position
If stopper is not used, align spiral cable with neutral position as follows:
Turn spiral cable clockwise until it catches stopper. Then, back spiral cable off approximately two turns until yellow alignment mark appears on left gear. Align arrow mark "↶" of spiral cable with this yellow mark.

3. Install steering wheel setting spiral cable pin guides, and pull spiral cable through.
4. Connect horn connector and engage spiral cable with pawls in steering wheel.
5. Tighten nuts.
6. Position air bag module and tighten with new special bolts.
7. Connect air bag module connector.
8. Install all lids.

9. Conduct self-diagnosis to ensure entire SRS operates properly. (Use CONSULT or warning lamp check.)

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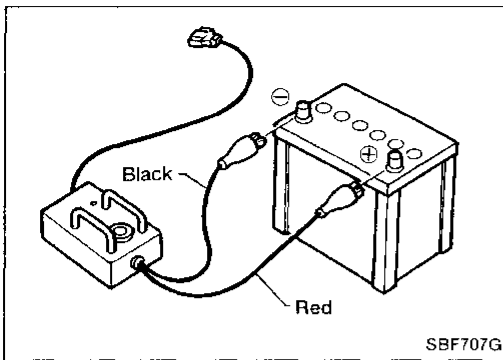
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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)



Scrapping the Air Bag

Before scrapping an air bag module or a vehicle equipped with an SRS air bag, be sure to deploy air bag.

CONNECTING TO BATTERY

- Place the vehicle outdoors in such a way that it is surrounded on all sides by at least 6 m (20 ft) of open space.
- Use a voltmeter to make sure the vehicle battery is fully charged.

CAUTION:

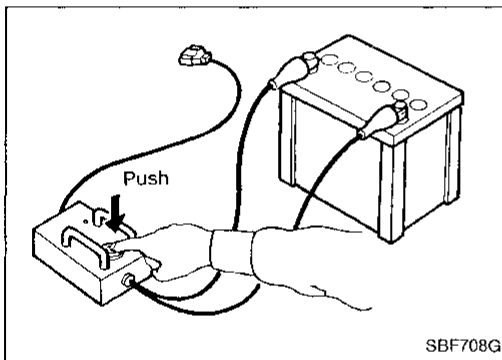
The battery must show voltage of 9.6V or more.

Remove the battery from the vehicle and place it on dry wood blocks approximately 5 m (16 ft) away from the vehicle.

- Wait 10 to 12 minutes after the vehicle battery is disconnected before proceeding.
- Connect deployment tool to the battery.

CAUTION:

Make sure the polarity is correct. The right side lamp in the tool, marked "deployment tool power", should glow with a green light. If the right side lamp glows red, reverse the connections to the battery.



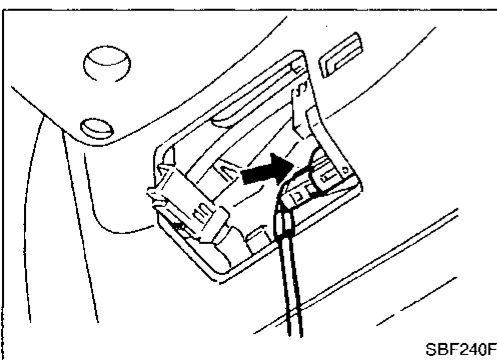
DEPLOYMENT TOOL CHECK

Press the deployment tool switch to the "ON" position. The left side lamp in the tool, marked "air bag connector voltage" should illuminate. If it does not illuminate, replace the tool.

AIR BAG DEPLOYMENT TOOL LAMP ILLUMINATION CHART (Battery connected)

| Switch operation | Left side lamp, green* "AIR BAG CONNECTOR VOLTAGE" | Right side lamp, green* "DEPLOYMENT TOOL POWER" |
|------------------|---|--|
| OFF | OFF | ON |
| ON | ON | ON |

*: If this lamp glows red, the tool is connected to the battery incorrectly. Reverse the connections and make sure the lamp glows green.



CONNECTING TO AIR BAG

- Remove lower lid from steering wheel and disconnect air bag module connector.
- Connect deployment tool connector.

CAUTION:

Make sure the deployment tool is disconnected from the battery before you make this connection.

- Reconnect the battery cable to the prepared battery.
- The lamp on the right side of the tool, marked "deployment tool power", should glow green, not red.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Scrapping the Air Bag (Cont'd)

DEPLOYMENT

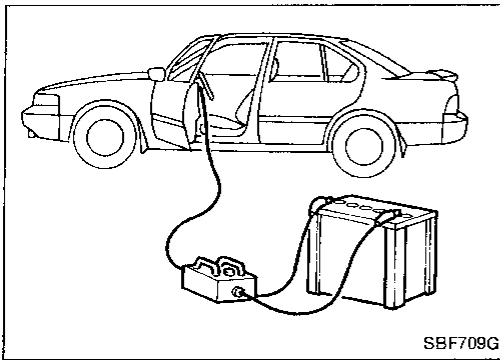
Press the button on the deployment tool. The left side lamp on the tool, marked "air bag connector voltage", will illuminate and the air bag will deploy.

DISPOSAL

- Remove steering wheel side lids. Use the special "torx" bit to remove the air bag module from the steering wheel. Place it into a sealed vinyl bag for disposal.

CAUTION:

- When deploying air bag, ensure vehicle is empty.
- No poisonous gas is produced upon air bag deployment. However, be careful not to inhale gas since it irritates throat and can cause choking.
- Due to heat, leave air bag module unattended for more than 30 minutes after air bag deployment.
- Do not attempt to disassemble air bag module.
- Air bag module can not be re-used.
- Never apply water to a deployed air bag module.
- Be sure to wear gloves when handling a deployed air bag module.



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Contents

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USING THE WARNING LAMP BF-102

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 SYMPTOM: Warning lamp flashes.

Diagnostic Procedure 2 BF-105

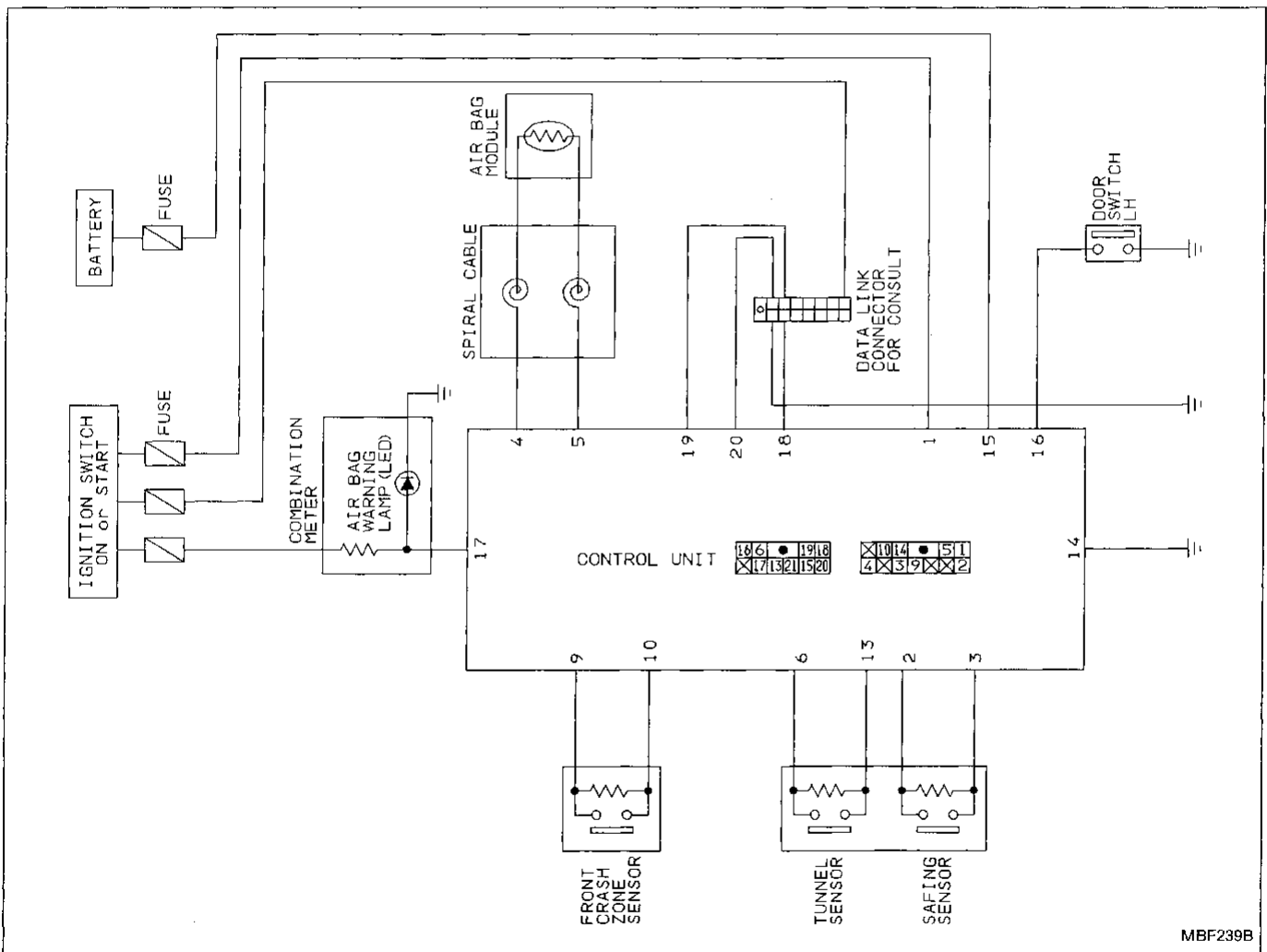
 SYMPTOM: Warning lamp does not come on.

Diagnostic Procedure 3 BF-106

 SYMPTOM: Warning lamp does not go off.

Collision Diagnosis BF-107

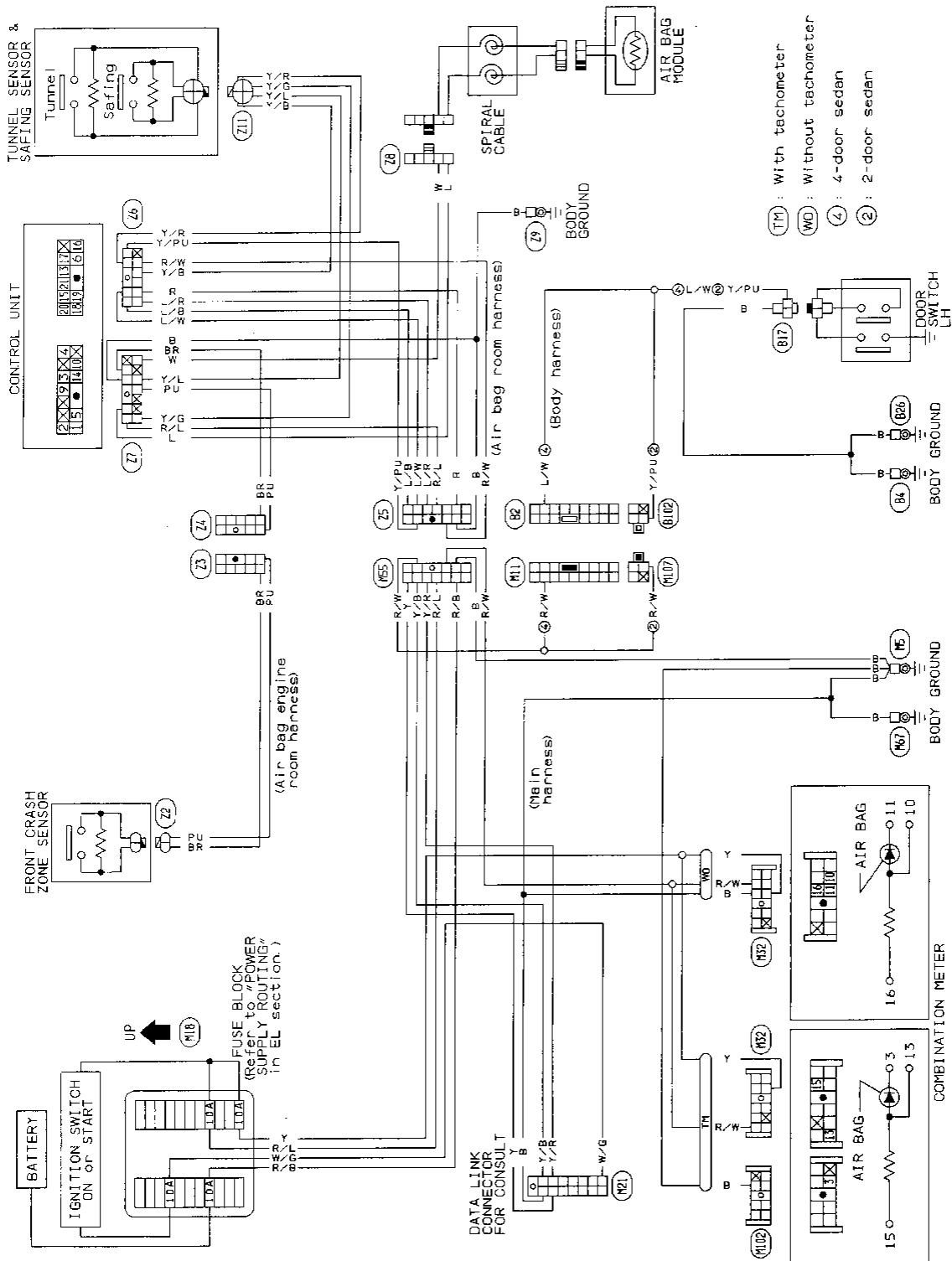
Schematic



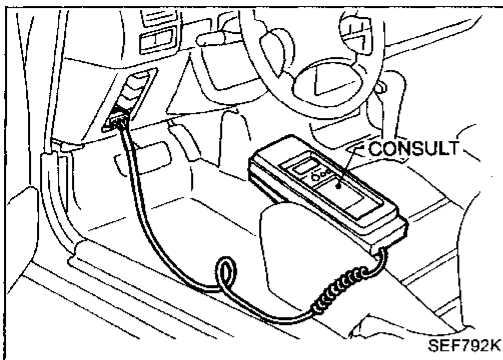
Wiring Diagram

CAUTION:

- Do not use a circuit tester to check SRS "Air Bag" harness connectors. The wiring harness and connectors have yellow outer insulation for easy identification.
- Do not attempt to repair, splice or modify the SRS "Air Bag" wiring harness. If the harness is damaged, replace it with a new one.
- Keep ground portion clean.



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Self-diagnosis

USING CONSULT

The self-diagnosis results can be read by CONSULT, as follows:

1. Connect "CONSULT" to data link connector for CONSULT. (Data link connector for CONSULT is located in the fuse box.)
2. Turn ignition switch to "ON". (When CONSULT is connected, the "AIR BAG" warning lamp will be turned to present diagnosis mode.)



3. Touch "START" to operate "CONSULT".

4. Touch "AIR BAG" to choose air bag system.



5. Touch "SELF DIAG RESULTS" to read self-diagnosis results.



6. Problem codes are displayed on "SELF DIAG RESULT 1" (first page — present mode). The problem code last indicated is displayed on "SELF DIAG RESULT 2" (second page — initial mode).

7. When "PRINT" is pressed, information displayed on "SELF DIAG RESULTS 1 and 2" is printed out.



8. After repairing malfunctioning parts, press "ERASE" to clear self-diagnosis results.

- **After repairing malfunctioning parts, attempt to clear self-diagnosis results from memory.**
- **If malfunctioning parts are not completely repaired, self-diagnosis results remain stored in memory.**



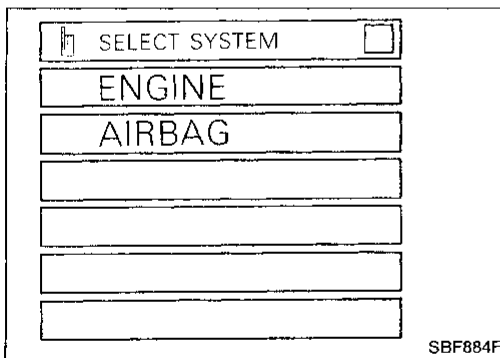
9. Push Back Key of CONSULT until SELECT SYSTEM mode appears to make "SELF-DIAGNOSIS" user mode.



10. Push the power off switch.



11. Turn off ignition switch.



TROUBLE DIAGNOSES — Supplemental Restraint System (SRS)

Self-diagnosis (Cont'd)

Self-diagnosis results

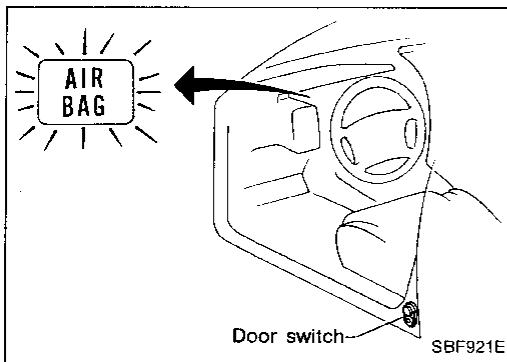
| Diagnostic item | Explanation | Repair order * Recheck SRS at each replacement. | |
|--|--|---|---------|
| NO SELF DIAGNOSTIC FAILURE INDICATED | Normal. The SRS "Air Bag" is in good order. | — | GI |
| SAFING SENSOR [OPEN/LWR-GND-SHORT] | The circuit for the safing sensor is open or the wire from the safing sensor to the diagnosis (control) unit (terminal No. 3) is shorted. | <ol style="list-style-type: none"> 1. Visually check the wiring harness connections. 2. Replace the safing sensor. (safing sensor and tunnel sensor unit) 3. Replace the diagnosis (control) unit. 4. Replace the main harness. | MA |
| SAFING SENSOR [SHORT/LWR-VB-SHORT] | Both the wires for the safing sensor are shorted or the wire from the safing sensor to the diagnosis (control) unit (terminal No. 3) is shorted to some power supply circuit. | | EM |
| AIRBAG MODULE [OPEN] | The circuit for driver's air bag module is open. (including the spiral cable) | <ol style="list-style-type: none"> 1. Visually check the wiring harness connections. 2. Replace the spiral cable. 3. Replace driver's air bag module. (Before disposing of it, it must be deployed.) 4. Replace the diagnosis (control) unit. 5. Replace the main harness. | LC |
| AIRBAG MODULE [VB-SHORT] | The circuit for driver's air bag module is shorted to some power supply circuit. (including the spiral cable) | | EF & EC |
| AIRBAG MODULE [GND-SHORT] | The circuit for driver's air bag module is shorted to ground. (including the spiral cable) | | FE |
| AIRBAG MODULE [SHORT] | The circuits for driver's air bag module are shorted to each other. | | CL |
| TUNNEL SENSOR [OPEN/UPR-VB-SHORT] | The circuit for the tunnel sensor is open or the wire from the diagnosis (control) unit (terminal No. 6) to the tunnel sensor is shorted to some power supply circuit. | <ol style="list-style-type: none"> 1. Visually check the wiring harness connections. 2. Replace the tunnel sensor. (safing sensor and tunnel sensor unit) 3. Replace the diagnosis (control) unit. 4. Replace the main harness. | MT |
| TUNNEL SENSOR [SHORT/UPR-GND-SHORT] | Both the wires for the tunnel sensor are shorted or the wire from the diagnosis (control) unit (terminal No. 6) to the tunnel sensor is shorted to ground. | | AT |
| CRASH ZONE SEN-CTR [OPEN/UPR-VB-SHORT] | The circuit for the crash zone sensor is open or the wire from the diagnosis (control) unit (terminal No. 9) to the crash zone sensor is shorted to some power supply circuit. | <ol style="list-style-type: none"> 1. Visually check the wiring harness connections. 2. Replace the crash zone sensor. 3. Replace the diagnosis (control) unit. 4. Replace the main harness. | FA |
| CRASH ZONE SEN-CTR [SHORT/UPR-GND-SHORT] | Both the wires for the crash zone sensor are shorted or the wire from the diagnosis (control) unit (terminal No. 9) to the crash zone sensor is shorted to ground. | | RA |
| DIAGNOSIS (CONTROL) UNIT | The diagnosis unit (control unit) is out of order. | <ol style="list-style-type: none"> 1. Visually check the wiring harness connections. 2. Replace the diagnosis (control) unit. 3. Replace the main harness. | BR |
| INDEFINITE FAILURES [AIR BAG] | A problem which cannot be specified occurs because more than two parts are out of order. | <ol style="list-style-type: none"> 1. Visually check the wiring harness connections. 2. Replace the diagnosis (control) unit. 3. Replace all sensors, spiral cable and air bag module. 4. Replace the main harness. | ST |
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Self-diagnosis (Cont'd)

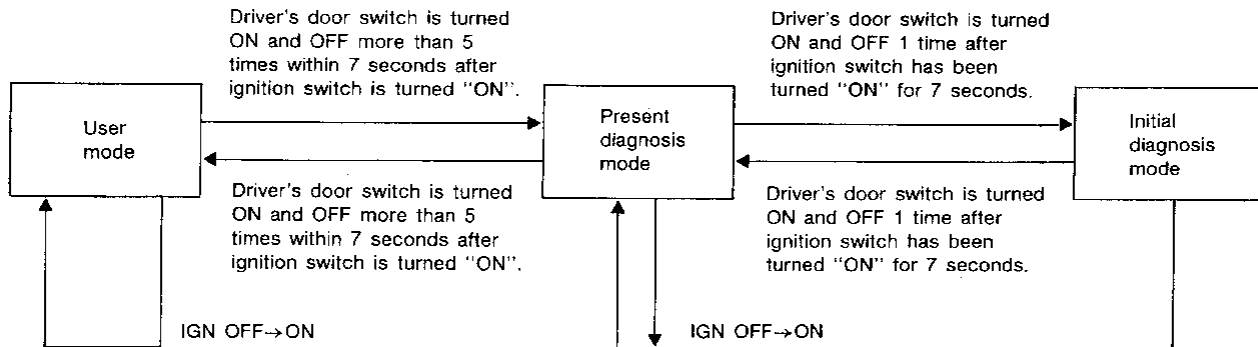
USING THE WARNING LAMP

Self-diagnosis results can be also read by using the "AIR BAG" warning lamp.

The "Air bag" warning lamp operates as shown below:



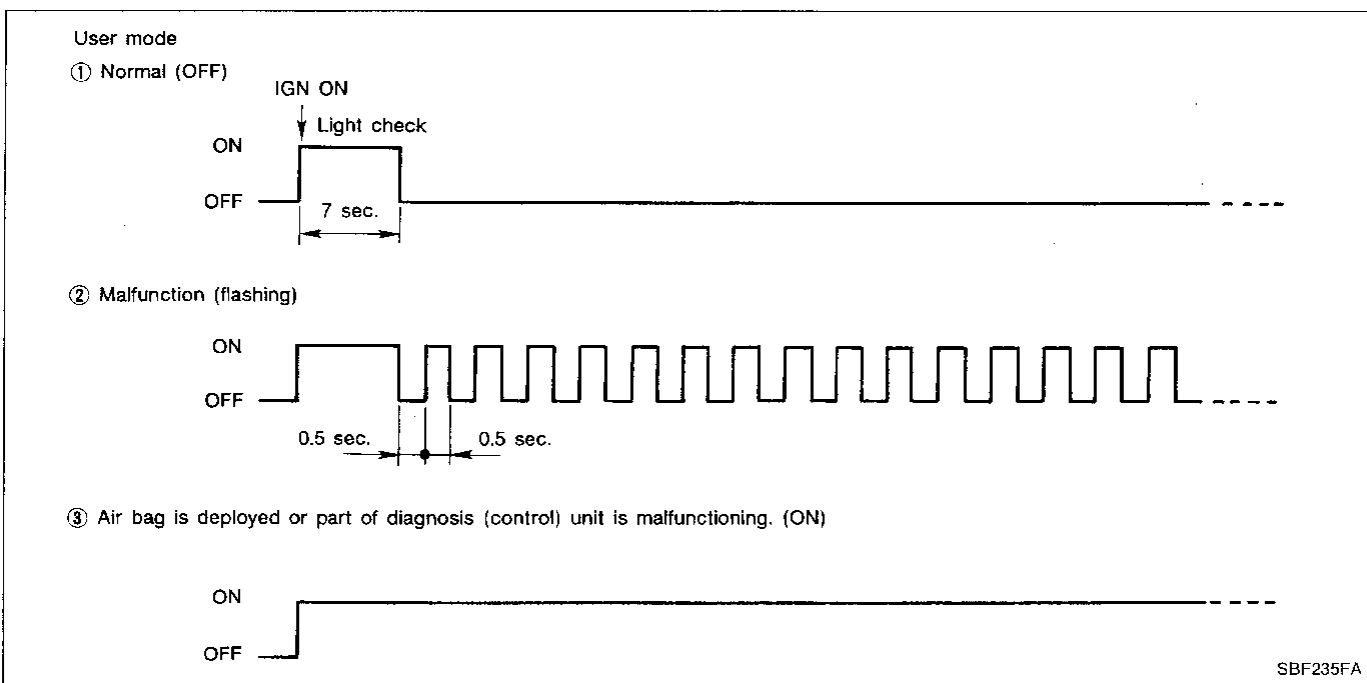
How to alternate self-diagnosis



Problem codes are displayed in present diagnosis mode (self-diagnosis result 1). The problem code last indicated is displayed in initial diagnosis mode (self-diagnosis result 2).

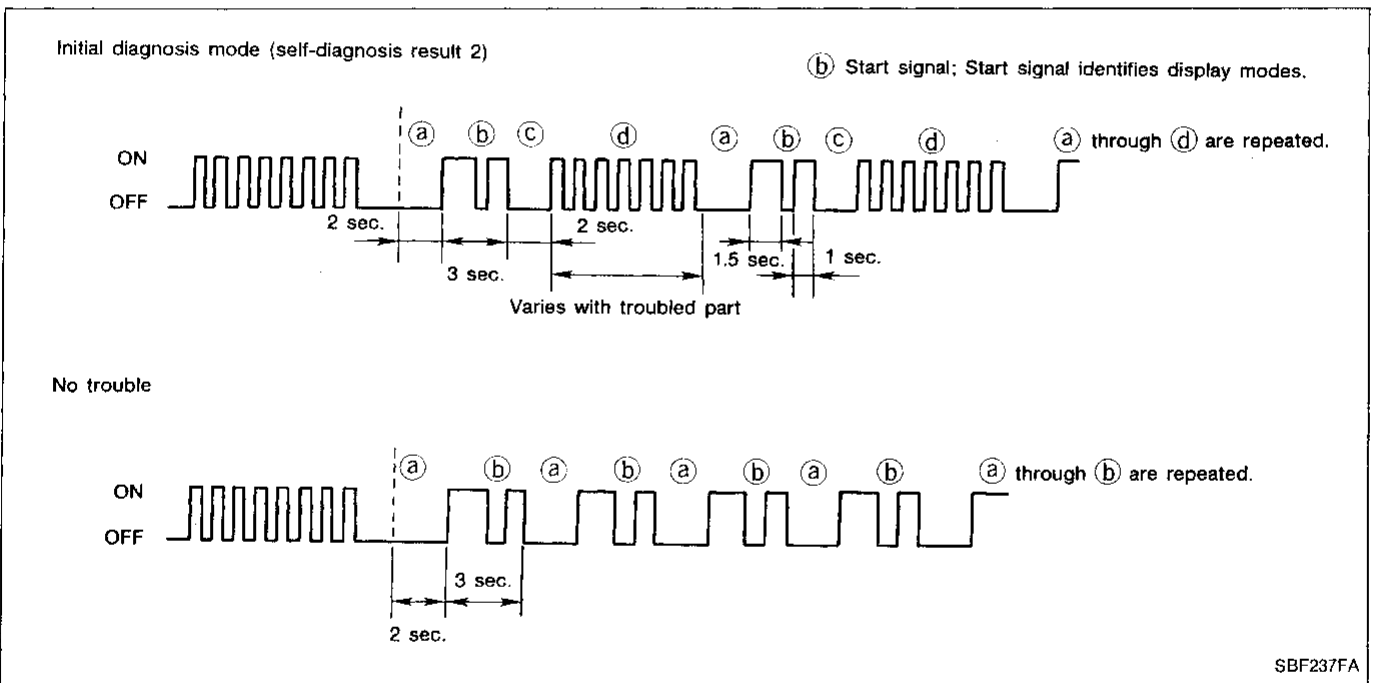
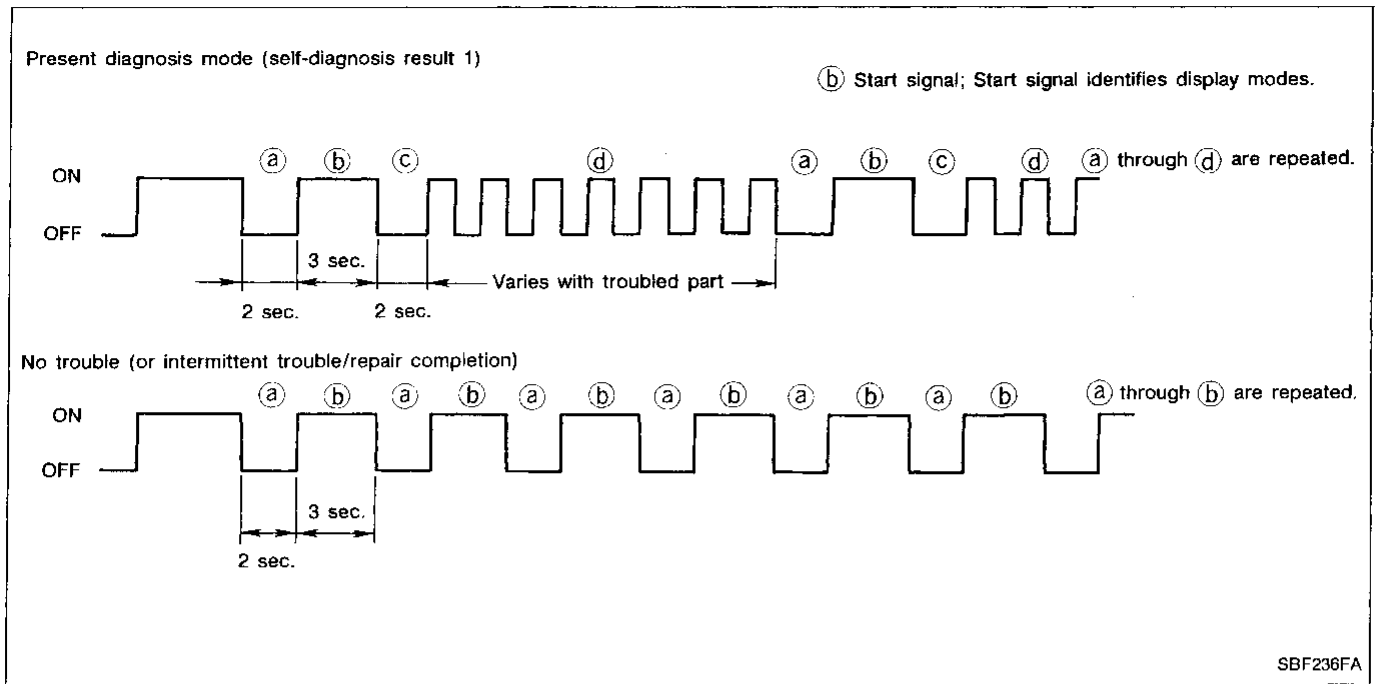
After the malfunctioning parts have been repaired and the system is returned to the user mode, the present diagnosis mode information, displayed as self-diagnosis results, is automatically cleared from memory.

- After repairing malfunctioning part, attempt to clear self-diagnosis results from memory.
- If a malfunctioning part is not completely repaired, information stored in memory will not be cleared.



TROUBLE DIAGNOSES — Supplemental Restraint System (SRS)

Self-diagnosis (Cont'd)



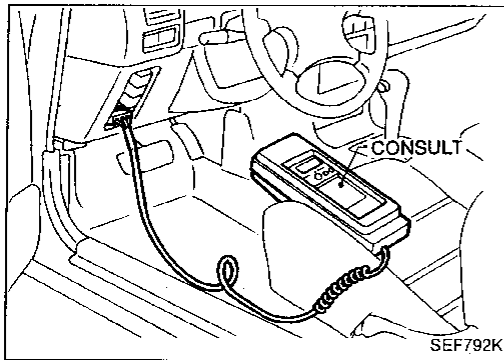
Self-diagnosis results in present- and initial-diagnosis modes can be identified by number of flashes (d). Refer to Table on next page for troubled parts.

TROUBLE DIAGNOSES — Supplemental Restraint System (SRS)

Self-diagnosis (Cont'd)

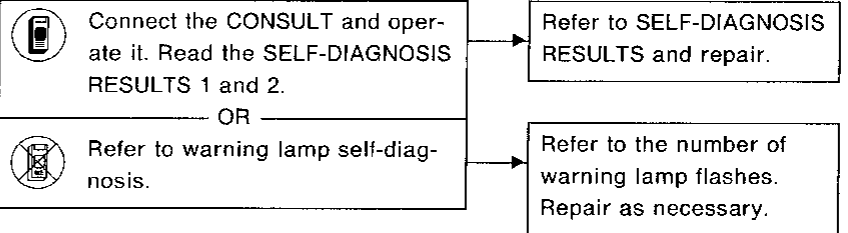
Warning lamp flashing times and repair

| Flash code ④ (# of flashes) | Explanation | Repair order * Recheck SRS at each replacement. |
|--------------------------------|---|--|
| 0 | Normal. The SRS "Air Bag" is in good order. | — |
| 1 | The circuit for the safing sensor is out of order. | <ol style="list-style-type: none"> 1. Visually check the wiring harness connections. 2. Replace the safing sensor. (safing sensor and tunnel sensor unit) 3. Replace the diagnosis (control) unit. 4. Replace the main harness. |
| 2 | The circuit for the air bag module is out of order. | <ol style="list-style-type: none"> 1. Visually check the wiring harness connections. 2. Replace the spiral cable. 3. Replace the air bag module. (Before disposing of it, it must be deployed.) 4. Replace the diagnosis (control) unit. 5. Replace the main harness. |
| 3 | The circuit for the tunnel sensor is out of order. | <ol style="list-style-type: none"> 1. Visually check the wiring harness connections. 2. Replace the tunnel sensor. (safing sensor and tunnel sensor unit) 3. Replace the diagnosis (control) unit. 4. Replace the main harness. |
| 6 | The circuit for the center crash zone sensor is out of order. | <ol style="list-style-type: none"> 1. Visually check the wiring harness connections. 2. Replace the center crash zone sensor. 3. Replace the diagnosis (control) unit. 4. Replace the main harness. |
| 7 | The diagnosis (control) unit is out of order. | <ol style="list-style-type: none"> 1. Visually check the wiring harness connections. 2. Replace the diagnosis (control) unit. 3. Replace the main harness. |
| 8 | More than two parts groups are out of order. | <ol style="list-style-type: none"> 1. See the SELF-DIAGNOSIS RESULT 2 diagnostic item [Initial], then repair it. 2. Visually check the wiring harness connections. 3. Replace the diagnosis (control) unit. 4. Replace all sensors, spiral cable and air bag module. 5. Replace the main harness. |



Diagnostic Procedure 1

SYMPTOM: Warning lamp flashes.



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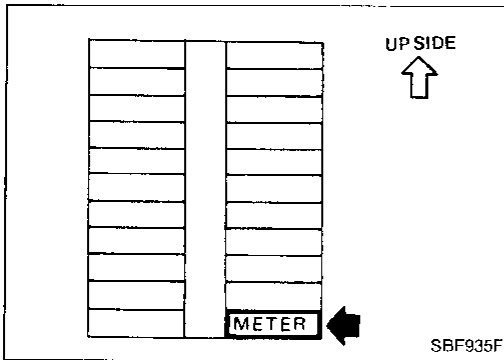
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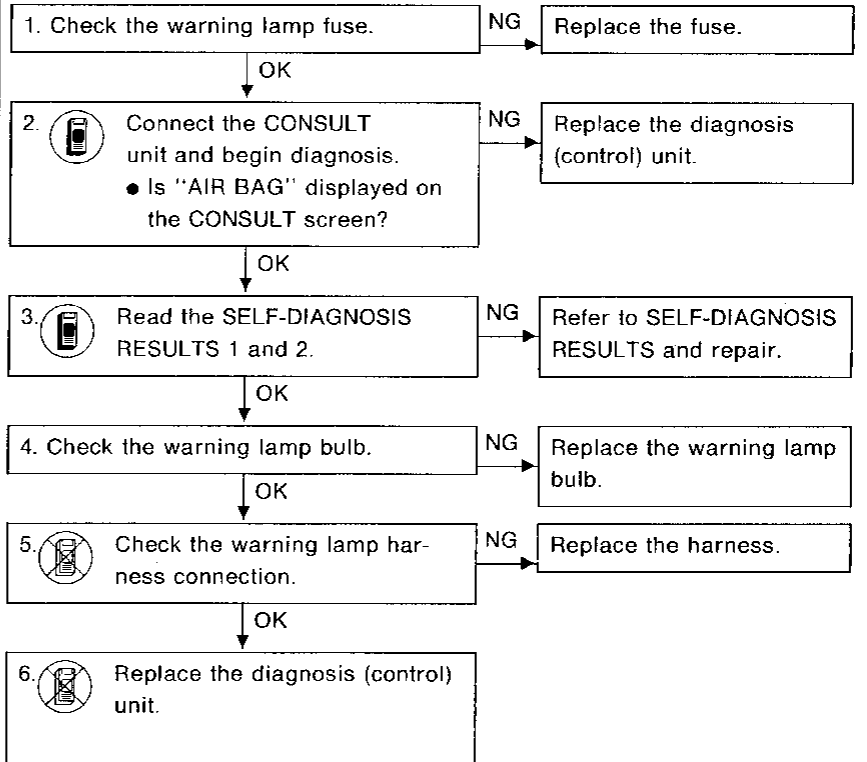
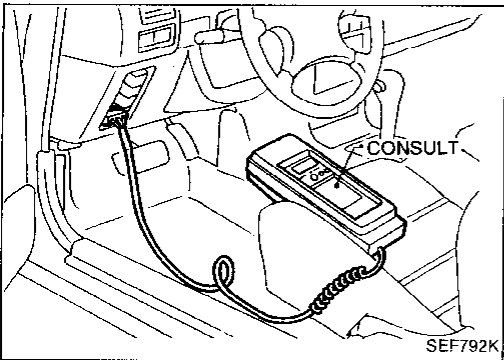
EL

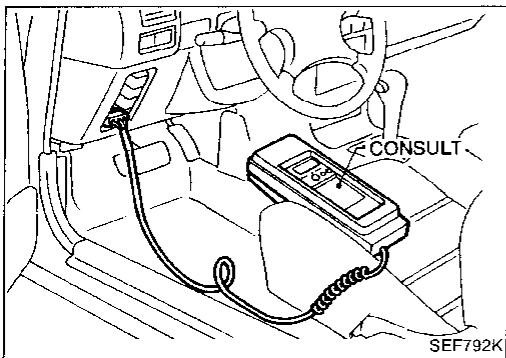
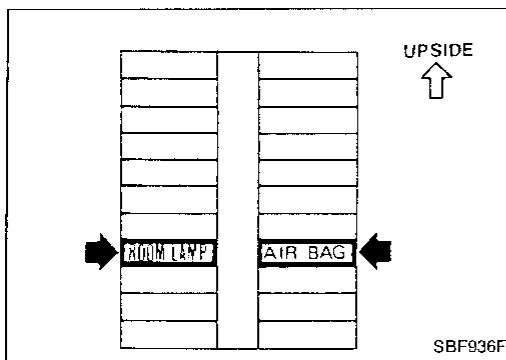
IDX



Diagnostic Procedure 2

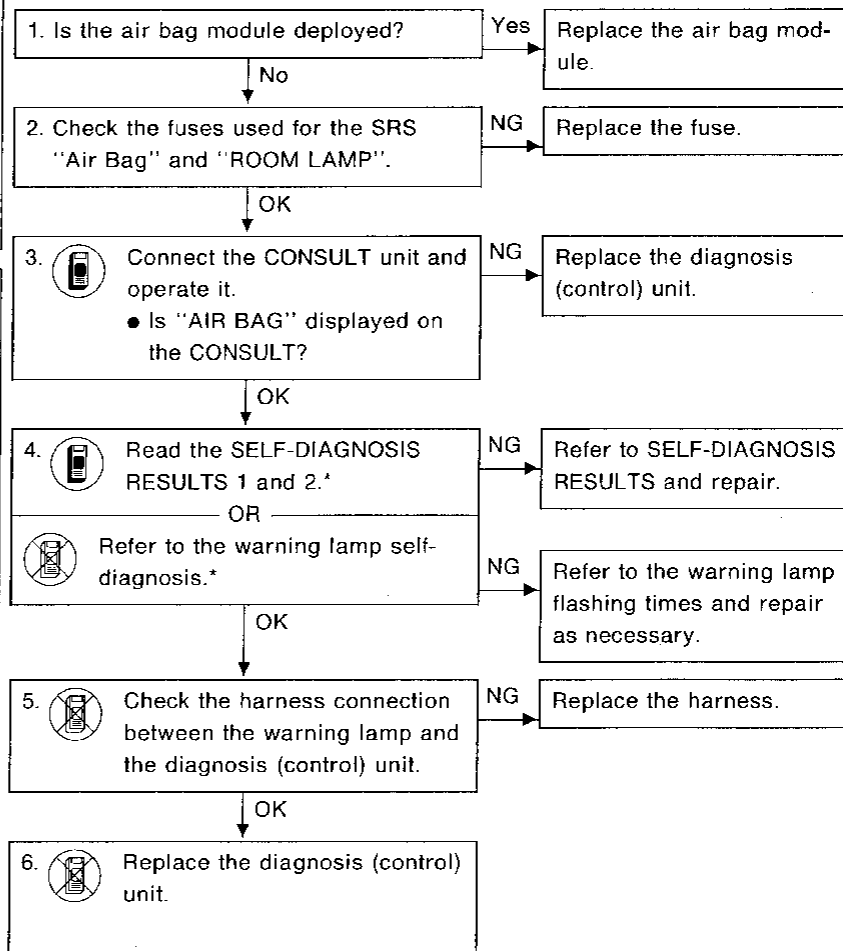
SYMPTOM: Warning lamp does not come on.





Diagnostic Procedure 3

SYMPTOM: Warning lamp does not go off.



* Recheck SRS after each replacement.

Collision Diagnosis

To repair the SRS "AIR BAG", perform the following steps.

When air bag deployed in a collision:

- ① Replace the diagnosis (control) unit. GI
- ② Remove the air bag module. MA
- ③ Check the SRS components using the table shown below:
 - If the SRS components are showing any visible damage such as dents, cracks, or deformation, replace them with new ones. EM
- ④ Conduct self-diagnosis using CONSULT or "AIR BAG" warning lamp to ensure entire SRS operates properly except open circuits of air bag module. LC
- ⑤ Install new air bag module. EF & EC
- ⑥ Conduct self-diagnosis again. FE

When air bag did not deploy in a collision:

- ① Check the SRS components using the table shown below:
 - If the SRS components are showing any visible damage such as dents, cracks, or deformation, replace them with new ones. CL
- ② Conduct self-diagnosis using CONSULT or "AIR BAG" warning lamp to ensure entire SRS operates properly. CL

SRS Inspection

| Part | Air bag deployed | Air bag did NOT deploy | |
|--------------------------|------------------------------------|---|--|
| Air bag module | REPLACE Install with new bolts. | 1. Remove air bag module. Check harness cover and connectors for damage, terminals for deformities, and harness for binding. 2. Install air bag module into the steering wheel to check fit and alignment with the wheel. VT 3. No damage found, reinstall with new bolts. AT 4. If damaged—REPLACE. Air bag must be deployed before discarding. FA | |
| Diagnosis (Control) unit | REPLACE Install with new bolts. | 1. Check case and bracket for dents, cracks or deformities. RA 2. Check connectors for damage, and terminals for deformities. BR 3. If no damage is found, reinstall with new bolts. ST 4. If damaged—REPLACE. | |
| Sensors | | 1. Check body and sensor brackets for deformities or rust. BF 2. Check sensor case for dents, cracks, scratches, deformities or rust. HA 3. Check sensor harness, connector, and terminals for binding, damage, or deformities. EL 4. If no damage is found, reinstall with new bolts. DX 5. If damaged—REPLACE. | |
| Steering wheel | | 1. Check harness (built into steering wheel) and connectors for damage, and terminals for deformities. BF 2. Install air bag module to check fit or alignment with steering wheel. HA 3. Check steering wheel for excessive free play. EL 4. If no damage is found, reinstall with new bolts. DX 5. If damaged—REPLACE. | |
| Spiral cable | | 1. Visually check lock (engagement) pins and combination switch for damage. BF 2. Check connectors, flat cable and protective tape for damage. HA 3. Check steering wheel for noise, binding or heavy operation. EL 4. If no damage is found, reinstall with new bolts. DX 5. If damaged—REPLACE. | |
| Harness and Connectors | | 1. Check connectors for poor connection, damage, and terminals for deformities. DX 2. Check harness for binding, chafing, cuts, or deformities. 3. If no damage is found, reinstall 4. Damaged—REPLACE damaged section of harness. Do not attempt to repair, splice or modify any SRS harness. | |