

**SECTION BT**

**CONTENTS**

<b>PRECAUTIONS</b> .....	3	<b>INSTRUMENT PANEL ASSEMBLY</b> .....	22	
Service Notice.....	3	Removal and Installation .....	22	
Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER" .....	3	<b>SIDE AND FLOOR TRIM</b> .....	29	
<b>PREPARATION</b> .....	4	Removal and Installation .....	29	
Special Service Tools .....	4	<b>DOOR TRIM</b> .....	31	
Commercial Service Tool.....	4	Removal and Installation .....	31	
<b>SQUEAK AND RATTLE TROUBLE DIAGNOSES</b> .....	5	TYPE A .....	31	
Work Flow.....	5	TYPE B .....	32	
CUSTOMER INTERVIEW .....	5	<b>ROOF TRIM</b> .....	34	
DUPLICATE THE NOISE AND TEST DRIVE .....	6	Removal and Installation .....	34	
CHECK RELATED SERVICE BULLETINS .....	6	<b>BACK DOOR TRIM</b> .....	35	
LOCATE THE NOISE AND IDENTIFY THE ROOT CAUSE .....	6	Removal and Installation .....	35	
REPAIR THE CAUSE .....	6	<b>EXTERIOR</b> .....	36	
CONFIRM THE REPAIR.....	7	Removal and Installation .....	36	
Generic Squeak and Rattle Troubleshooting .....	7	<b>FRONT SEAT</b> .....	43	
INSTRUMENT PANEL.....	7	Removal and Installation .....	43	
CENTER CONSOLE .....	7	POWER SEAT.....	44	
DOORS.....	7	MANUAL SEAT.....	45	
TRUNK .....	8	HEATED SEAT.....	46	
SUNROOF/HEADLINER .....	8	<b>REAR SEAT</b> .....	47	
SEATS.....	8	Removal and Installation .....	47	
UNDERHOOD .....	8	<b>SUNROOF</b> .....	48	
Diagnostic Worksheet.....	9	Adjustment.....	48	
<b>CLIP AND FASTENER</b> .....	11	Contents of Working.....	49	
Description .....	11	Contents of Switch Working .....	50	
<b>BODY FRONT END</b> .....	13	JAM PROTECTION.....	50	
Removal and Installation .....	13	Removal and Installation .....	50	
FRONT BUMPER ASSEMBLY .....	13	Trouble Diagnoses.....	54	
<b>BODY REAR END AND OPENER</b> .....	16	DIAGNOSTIC TABLE.....	54	
Removal and Installation .....	16	WIND DEFLECTOR .....	54	
REAR BUMPER ASSEMBLY .....	16	ADJUSTMENT.....	55	
<b>FRONT DOOR</b> .....	19	DRAIN HOSES .....	56	
Overhaul .....	19	WEATHERSTRIP .....	57	
Front Door Limit Switch Reset .....	20	LINK AND WIRE ASSEMBLY.....	57	
RESET CONDITIONS .....	20	<b>WINDSHIELD AND WINDOWS</b> .....	58	
RESET PROCEDURES.....	20	Removal and Installation .....	58	
<b>REAR DOOR</b> .....	21	REMOVAL.....	58	
Overhaul .....	21	INSTALLATION.....	58	
		WINDSHIELD .....	59	
		REAR SIDE WINDOW.....	60	

# CONTENTS (Cont'd)

<b>DOOR MIRROR</b> .....	61	Alignment .....	62
Removal and Installation .....	61	ENGINE COMPARTMENT .....	63
<b>BODY (ALIGNMENT)</b> .....	62	UNDERBODY .....	65

## Service Notice

NABT0030

- 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 installing. 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.

GI

MA

EM

LC

## Supplemental Restraint System (SRS) “AIR BAG” and “SEAT BELT PRE-TENSIONER”

NABT0023

The Supplemental Restraint System such as “AIR BAG” and “SEAT BELT PRE-TENSIONER” used along with a seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. The SRS system composition which is available to NISSAN MODEL R50 is as follows:

EC

FE

- For a frontal collision  
The Supplemental Restraint System consists of driver air bag module (located in the center of the steering wheel), front passenger air bag module (located on the instrument panel on passenger side), seat belt pre-tensioners, a diagnosis sensor unit, warning lamp, wiring harness and spiral cable.
- For a side collision  
The Supplemental Restraint System consists of side air bag module (located in the outer side of front seat), satellite sensor, side curtain air bag module (located in the headlining side of front and rear seat), diagnosis sensor unit (one of components of air bags for a frontal collision), wiring harness, warning lamp (one of components of air bags for a frontal collision).

CL

MT

AT

Information necessary to service the system safely is included in the **RS section** of this Service Manual.

TF

### **WARNING:**

- **To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, 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. For removal of Spiral Cable and Air Bag Module, see the RS section.**
- **Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified with yellow and/or orange harness connector (and with yellow harness protector or yellow insulation tape before the harness connectors).**

PD

AX

SU

BR

ST

RS

**BT**

HA

SC

EL

IDX

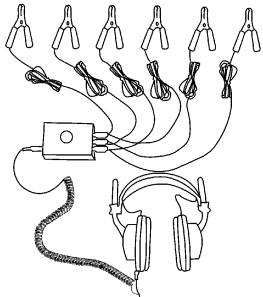
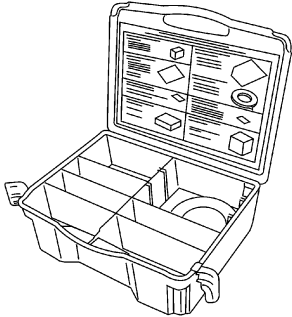
# PREPARATION

## Special Service Tools

### Special Service Tools

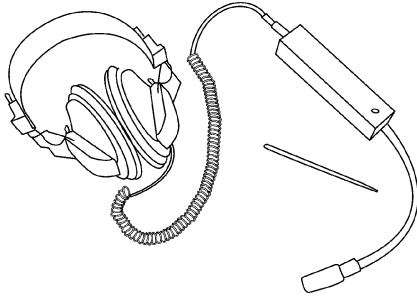
NABT0024

The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

Tool number (Kent-Moore No.) Tool name	Description
<p>— (J-39570) Chassis ear</p>	<p>Locating the noise</p>  <p>SBT839</p>
<p>— (J-43980) Nissan Squeak and Rattle kit</p>	<p>Repairing the cause of noise</p>  <p>SBT840</p>

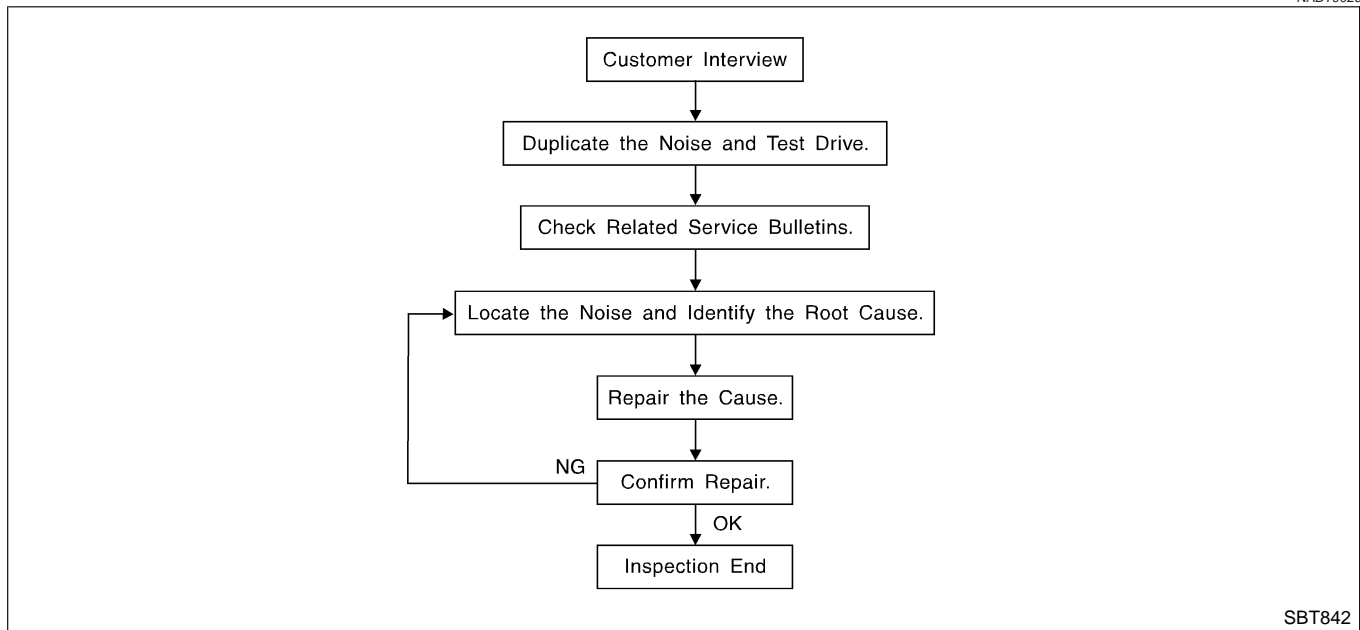
### Commercial Service Tool

NABT0025

Tool name	Description
<p>Engine ear</p>	<p>Locating the noise</p>  <p>SBT841</p>

## Work Flow

NABT0026



SBT842

### CUSTOMER INTERVIEW

NABT0026S01

Interview the customer, if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any customer's comments; refer to BT-9. This information is necessary to duplicate the conditions that exist when the noise occurs.

- The customer may not be able to provide a detailed description or the location of the noise. Attempt to obtain all the facts and conditions that exist when the noise occurs (or does not occur).
- If there is more than one noise in the vehicle, be sure to diagnose and repair the noise that the customer is concerned about. This can be accomplished by test driving the vehicle with the customer.
- After identifying the type of noise, isolate the noise in terms of its characteristics. The noise characteristics are provided so the customer, service adviser and technician are all speaking the same language when defining the noise.
- Squeak — (Like tennis shoes on a clean floor)  
Squeak characteristics include the light contact/fast movement/brought on by road conditions/hard surfaces = higher pitch noise/softer surfaces = lower pitch noises/edge to surface = chirping
- Creak — (Like walking on an old wooden floor)  
Creak characteristics include firm contact/slow movement/twisting with a rotational movement/pitch dependent on materials/often brought on by activity.
- Rattle — (Like shaking a baby rattle)  
Rattle characteristics include the fast repeated contact/vibration or similar movement/loose parts/missing clip or fastener/incorrect clearance.
- Knock — (Like a knock on a door)  
Knock characteristics include hollow sounding/sometimes repeating/often brought on by driver action.
- Tick — (Like a clock second hand)  
Tick characteristics include gentle contacting of light materials/loose components/can be caused by driver action or road conditions.
- Thump — (Heavy, muffled knock noise)  
Thump characteristics include softer knock/dead sound often brought on by activity.
- Buzz — (Like a bumble bee)  
Buzz characteristics include high frequency rattle/firm contact.
- Often the degree of acceptable noise level will vary depending upon the person. A noise that you may judge as acceptable may be very irritating to the customer.
- Weather conditions, especially humidity and temperature, may have a great effect on noise level.

# SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow (Cont'd)

## DUPLICATE THE NOISE AND TEST DRIVE

NABT0026S02

If possible, drive the vehicle with the customer until the noise is duplicated. Note any additional information on the Diagnostic Worksheet regarding the conditions or location of the noise. This information can be used to duplicate the same conditions when you confirm the repair.

If the noise can be duplicated easily during the test drive, to help identify the source of the noise, try to duplicate the noise with the vehicle stopped by doing one or all of the following:

- 1) Close a door.
  - 2) Tap or push/pull around the area where the noise appears to be coming from.
  - 3) Rev the engine.
  - 4) Use a floor jack to recreate vehicle "twist".
  - 5) At idle, apply engine load (electrical load, half-clutch on M/T model, drive position on A/T model).
  - 6) Raise the vehicle on a hoist and hit a tire with a rubber hammer.
- Drive the vehicle and attempt to duplicate the conditions the customer states exist when the noise occurs.
  - If it is difficult to duplicate the noise, drive the vehicle slowly on an undulating or rough road to stress the vehicle body.

## CHECK RELATED SERVICE BULLETINS

NABT0026S03

After verifying the customer concern or symptom, check ASIST for Technical Service Bulletins (TSBs) related to that concern or symptom.

If a TSB relates to the symptom, follow the procedure to repair the noise.

## LOCATE THE NOISE AND IDENTIFY THE ROOT CAUSE

NABT0026S04

1. Narrow down the noise to a general area. To help pinpoint the source of the noise, use a listening tool (Chassis Ear: J-39570, Engine Ear: J-39565 and mechanics stethoscope).
2. Narrow down the noise to a more specific area and identify the cause of the noise by:
  - removing the components in the area that you suspect the noise is coming from.  
**Do not use too much force when removing clips and fasteners, otherwise clips and fastener can be broken or lost during the repair, resulting in the creation of new noise.**
  - tapping or pushing/pulling the component that you suspect is causing the noise.  
**Do not tap or push/pull the component with excessive force, otherwise the noise will be eliminated only temporarily.**
  - feeling for a vibration with your hand by touching the component(s) that you suspect is (are) causing the noise.
  - placing a piece of paper between components that you suspect are causing the noise.
  - looking for loose components and contact marks.

Refer to "Generic Squeak and Rattle Troubleshooting", BT-7.

## REPAIR THE CAUSE

NABT0026S05

- If the cause is a loose component, tighten the component securely.
- If the cause is insufficient clearance between components:
  - separate components by repositioning or loosening and retightening the component, if possible.
  - insulate components with a suitable insulator such as urethane pads, foam blocks, felt cloth tape or urethane tape. A Nissan Squeak and Rattle Kit (J-43980) is available through your authorized Nissan Parts Department.

### CAUTION:

**Do not use excessive force as many components are constructed of plastic and may be damaged. Always check with the Parts Department for the latest parts information.**

The following materials are contained in the Nissan Squeak and Rattle Kit (J-43980). Each item can be ordered separately as needed.

URETHANE PADS [1.5 mm (0.059 in) thick]

Insulates connectors, harness, etc.

76268-9E005: 100 x 135 mm (3.94 x 5.31 in)/76884-71L01: 60 x 85 mm (2.36 x 3.35 in)/76884-71L02: 15 x 25 mm (0.59 x 0.98 in)

INSULATOR (Foam blocks)

Insulates components from contact. Can be used to fill space behind a panel.

73982-9E000: 45 mm (1.77 in) thick, 50 x 50 mm (1.97 x 1.97 in)/73982-50Y00: 10 mm (0.39 in) thick, 50 x 50 mm (1.97 x 1.97 in)

INSULATOR (Light foam block)

80845-71L00: 30 mm (1.18 in) thick, 30 x 50 mm (1.18 x 1.97 in)

## FELT CLOTH TAPE

Used to insulate where movement does not occur. Ideal for instrument panel applications.

68370-4B000: 15 x 25 mm (0.59 x 0.98 in) pad/68239-13E00: 5 mm (0.20 in) wide tape roll

The following materials, not found in the kit, can also be used to repair squeaks and rattles.

## UHMW (TEFLON) TAPE

Insulates where slight movement is present. Ideal for instrument panel applications.

## SILICONE GREASE

Used in place of UHMW tape that will be visible or not fit.

Note: Will only last a few months.

## SILICONE SPRAY

Use when grease cannot be applied.

## DUCT TAPE

Use to eliminate movement.

## CONFIRM THE REPAIR

Confirm that the cause of a noise is repaired by test driving the vehicle. Operate the vehicle under the same conditions as when the noise originally occurred. Refer to the notes on the Diagnostic Worksheet.

## Generic Squeak and Rattle Troubleshooting

Refer to Table of Contents for specific component removal and installation information.

## INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

1. The cluster lid A and instrument panel
2. Acrylic lens and combination meter housing
3. Instrument panel to front pillar garnish
4. Instrument panel to windshield
5. Instrument panel mounting pins
6. Wiring harnesses behind the combination meter
7. A/C defroster duct and duct joint

These incidents can usually be located by tapping or moving the components to duplicate the noise or by pressing on the components while driving to stop the noise. Most of these incidents can be repaired by applying felt cloth tape or silicon spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness.

### CAUTION:

**Do not use silicone spray to isolate a squeak or rattle. If you saturate the area with silicone, you will not be able to recheck the repair.**

## CENTER CONSOLE

Components to pay attention to include:

1. Shifter assembly cover to finisher
2. A/C control unit and cluster lid C
3. Wiring harnesses behind audio and A/C control unit

The instrument panel repair and isolation procedures also apply to the center console.

## DOORS

Pay attention to the:

1. Finisher and inner panel making a slapping noise
2. Inside handle escutcheon to door finisher
3. Wiring harnesses tapping
4. Door striker out of alignment causing a popping noise on starts and stops

Tapping or moving the components or pressing on them while driving to duplicate the conditions can isolate many of these incidents. You can usually insulate the areas with felt cloth tape or insulator foam blocks from the Nissan Squeak and Rattle Kit (J-43980) to repair the noise.

GI

MA

EM

LC

EC

FE

CL

MT

AT

TF

PD

AX

SU

BR

ST

RS

BT

HA

SC

EL

IDX

# SQUEAK AND RATTLE TROUBLE DIAGNOSES

Generic Squeak and Rattle Troubleshooting (Cont'd)

---

## TRUNK

=NABT0027S04

Trunk noises are often caused by a loose jack or loose items put into the trunk by the owner.

In addition look for:

1. Trunk lid bumpers out of adjustment
2. Trunk lid striker out of adjustment
3. The trunk lid torsion bars knocking together
4. A loose license plate or bracket

Most of these incidents can be repaired by adjusting, securing or insulating the item(s) or component(s) causing the noise.

## SUNROOF/HEADLINER

NABT0027S05

Noises in the sunroof/headliner area can often be traced to one of the following:

1. Sunroof lid, rail, linkage or seals making a rattle or light knocking noise
2. Sunvisor shaft shaking in the holder
3. Front or rear windshield touching headliner and squeaking

Again, pressing on the components to stop the noise while duplicating the conditions can isolate most of these incidents. Repairs usually consist of insulating with felt cloth tape.

## SEATS

NABT0027S06

When isolating seat noises it's important to note the position the seat is in and the load placed on the seat when the noise is present. These conditions should be duplicated when verifying and isolating the cause of the noise.

Cause of seat noise include:

1. Headrest rods and holders
2. A squeak between the seat pad cushion and frame
3. The rear seat back lock and bracket

These noises can be isolated by moving or pressing on the suspected components while duplicating the conditions under which the noise occurs. Most of these incidents can be repaired by repositioning the component or applying urethane tape to the contact area.

## UNDERHOOD

NABT0027S07

Some interior noises may be caused by components under the hood or on the engine wall. The noise is then transmitted into the passenger compartment.

Causes of transmitted underhood noises include:

1. Any component mounted to the engine wall
2. Components that pass through the engine wall
3. Engine wall mounts and connectors
4. Loose radiator mounting pins
5. Hood bumpers out of adjustment
6. Hood striker out of adjustment

These noises can be difficult to isolate since they cannot be reached from the interior of the vehicle. The best method is to secure, move or insulate one component at a time and test drive the vehicle. Also, engine RPM or load can be changed to isolate the noise. Repairs can usually be made by moving, adjusting, securing, or insulating the component causing the noise.



## Diagnostic Worksheet

GI  
NABT0028



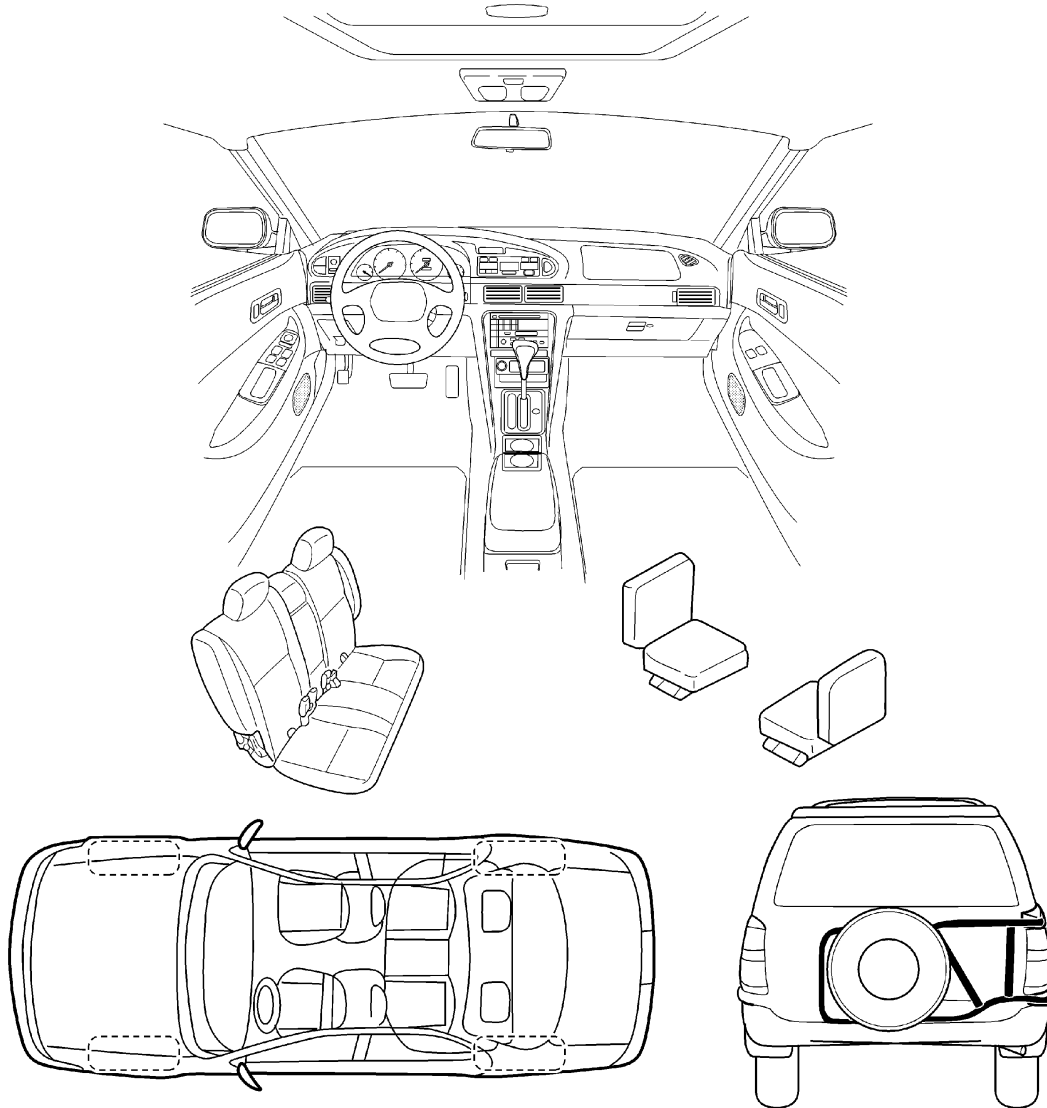
### SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

Dear Nissan Customer:

We are concerned about your satisfaction with your Nissan vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your Nissan right the first time, please take a moment to note the area of the vehicle where the squeak or rattle occurs and under what conditions. You may be asked to take a test drive with a service advisor or technician to ensure we confirm the noise you are hearing.

#### I. WHERE DOES THE NOISE COME FROM? (circle the area of the vehicle)

The illustrations are for reference only, and may not reflect the actual configuration of your vehicle.



Continue to the back of the worksheet and briefly describe the location of the noise or rattle. In addition, please indicate the conditions which are present when the noise occurs.

BT  
HA  
SC  
EL  
SBT843

GI  
MA  
EM  
LC  
EC  
FE  
CL  
MT  
AT  
TF  
PD  
AX  
SU  
BR  
ST  
RS  
BT  
HA  
SC  
EL  
IDX

# SQUEAK AND RATTLE TROUBLE DIAGNOSES

Diagnostic Worksheet (Cont'd)

## SQUEAK & RATTLE DIAGNOSTIC WORKSHEET- page 2

Briefly describe the location where the noise occurs:

---

---

---

### II. WHEN DOES IT OCCUR? (check the boxes that apply)

- |  |   |
|--|---|
| <input type="checkbox"/> anytime                             | <input type="checkbox"/> after sitting out in the sun |
| <input type="checkbox"/> 1 <sup>st</sup> time in the morning | <input type="checkbox"/> when it is raining or wet    |
| <input type="checkbox"/> only when it is cold outside        | <input type="checkbox"/> dry or dusty conditions      |
| <input type="checkbox"/> only when it is hot outside         | <input type="checkbox"/> other: _____                 |

### III. WHEN DRIVING:

- through driveways
- over rough roads
- over speed bumps
- only at about \_\_\_\_ mph
- on acceleration
- coming to a stop
- on turns : left, right or either (circle)
- with passengers or cargo
- other: \_\_\_\_\_
- after driving \_\_\_\_ miles or \_\_\_\_ minutes

### IV. WHAT TYPE OF NOISE?

- squeak (like tennis shoes on a clean floor)
- creak (like walking on an old wooden floor)
- rattle (like shaking a baby rattle)
- knock (like a knock on a door)
- tick (like a clock second hand)
- thump (heavy, muffled knock noise)
- buzz (like a bumble bee)

### TO BE COMPLETED BY DEALERSHIP PERSONNEL

Test Drive Notes:

---

---

	<u>YES</u>	<u>NO</u>	Initials of person <u>performing</u>
Vehicle test driven with customer	<input type="checkbox"/>	<input type="checkbox"/>	_____
- Noise verified on test drive	<input type="checkbox"/>	<input type="checkbox"/>	_____
- Noise source located and repaired	<input type="checkbox"/>	<input type="checkbox"/>	_____
- Follow up test drive performed to confirm repair	<input type="checkbox"/>	<input type="checkbox"/>	_____

VIN: \_\_\_\_\_ Customer Name: \_\_\_\_\_

W.O. #: \_\_\_\_\_ Date: \_\_\_\_\_

**This form must be attached to Work Order**

SBT844

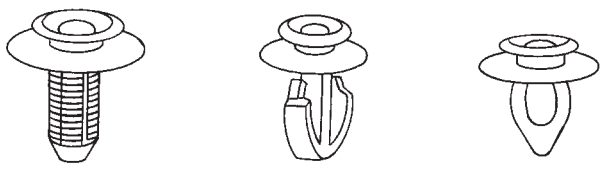

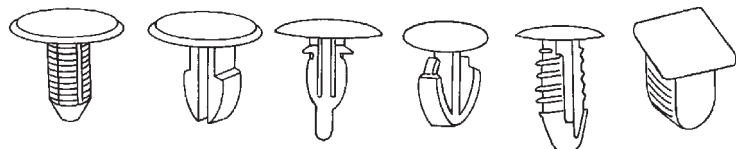
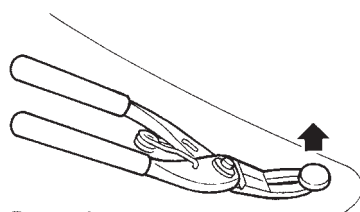
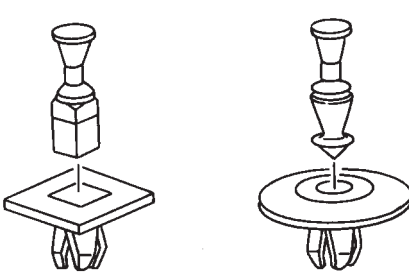
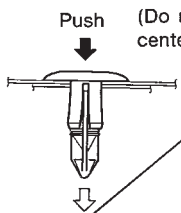
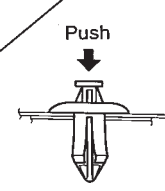
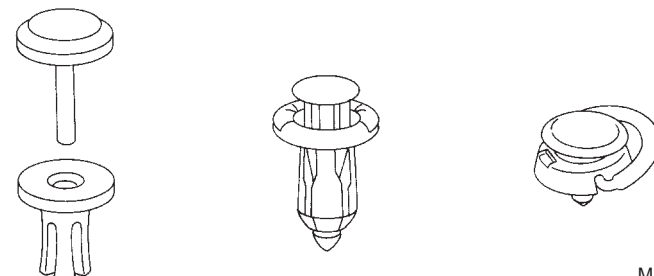
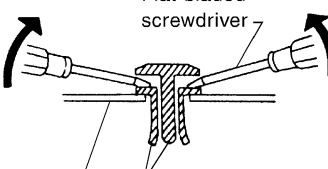
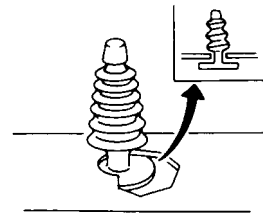
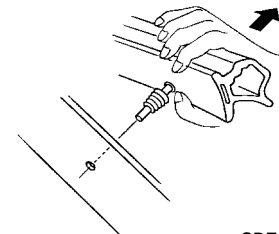
# CLIP AND FASTENER

Description

## Description

NABT0003


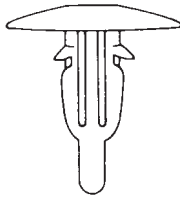
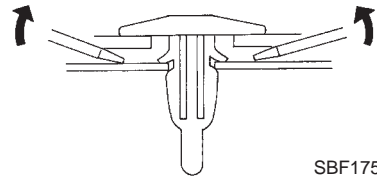

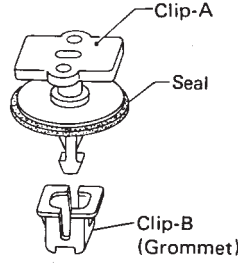
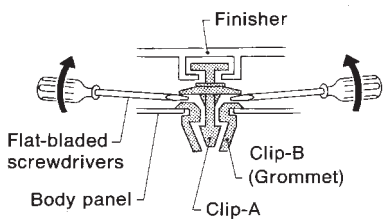

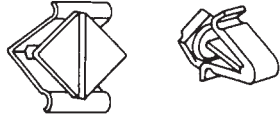
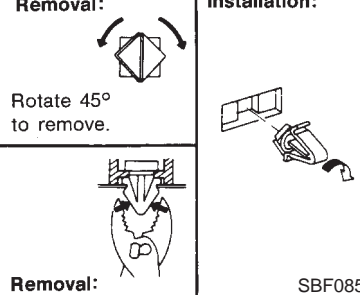

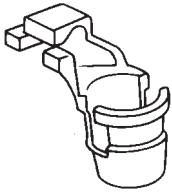
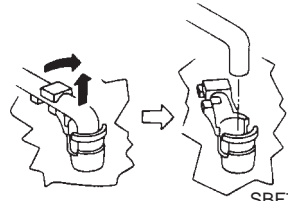

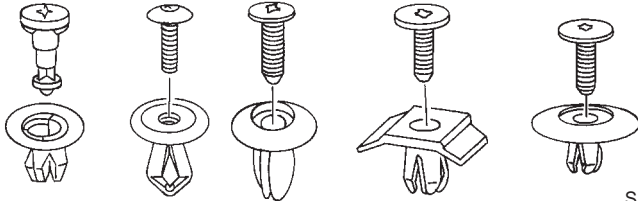
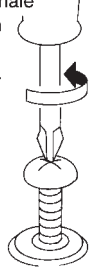
- Clips and fasteners in BT section correspond to the following numbers and symbols.
- Replace any clips and/or fasteners which are damaged during removal or installation.

Symbol No.	Shapes	Removal & Installation
C101	 <p>SBF302H</p>	<p><b>Removal:</b> Remove by bending up with flat-bladed screwdrivers or clip remover.</p>  <p>SBF367BA</p>
C103	 <p>SBT095</p>	 <p><b>Removal:</b> Remove with a clip remover.</p> <p>SBF423H</p>
C203	 <p>SBF258G</p>	<p>Push center pin to catching position. (Do not remove center pin by hitting it.)</p>  <p>Push</p>  <p>Push</p> <p><b>Installation:</b></p> <p>SBF708E</p>
C205	 <p>MBT080A</p>	<p><b>Removal:</b> Flat-bladed screwdriver</p>  <p>Clip</p> <p>Finisher</p> <p>SBF638CA</p>
CE103	 <p>SBF104B</p>	<p><b>Removal:</b></p>  <p>SBF147B</p>

GI  
MA  
EM  
LC  
EC  
FE  
CL  
MT  
AT  
TF  
PD  
AX  
SU  
BR  
BT  
HA  
SC  
EL  
IDX

# CLIP AND FASTENER

Description (Cont'd)

Symbol No.	Shapes	Removal & Installation
<p>CE117</p> 	 <p style="text-align: right;">SBF174D</p>	<p><b>Removal:</b> Remove with a flat-bladed screwdriver or pliers.</p>  <p style="text-align: right;">SBF175D</p>
<p>CF109</p> 	 <p style="text-align: right;">SBF651B</p>	<p><b>Removal:</b></p>  <p style="text-align: right;">SBF652B</p>
<p>CG101</p> 	 <p style="text-align: right;">SBF145B</p>	<p><b>Removal:</b> Rotate 45° to remove.</p> <p><b>Installation:</b></p>  <p style="text-align: right;">SBF085B</p>
<p>CR103</p> 	 <p style="text-align: right;">SBF768B</p>	<p><b>Removal:</b> Holder portion of clip must be spread out to remove rod.</p>  <p style="text-align: right;">SBF770B</p>
<p>CS101</p> 	 <p style="text-align: right;">SBF078B</p>	<p><b>Removal:</b></p> <ol style="list-style-type: none"> <li>1. Screw out with a Phillips screwdriver.</li> <li>2. Remove female portion with flat-bladed screwdriver.</li> </ol>  <p style="text-align: right;">SBF992G</p>

## Removal and Installation

NABT0004

- When removing or installing hood, place a cloth or other padding on front fender panel and cowl top. This prevents vehicle body from being scratched.
- Bumper fascia is made of plastic. Do not use excessive force and be sure to keep oil away from it.
- 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.

### FRONT BUMPER ASSEMBLY

NABT0004S01

1. Remove bolts securing left and right side combination lamps and remove the lamps. **B**
2. Remove clips securing center radiator grille and remove the center radiator grille.
3. Remove bolts securing left and right radiator grille and remove the grilles. **C**
4. Remove clips and screws securing left and right sides of fender protector.
5. Remove screws securing bumper fascia. **D**
6. Remove clips securing radiator core support lower. **E**
7. Remove clips securing bumper reinforcement.
8. Extract bumper fascia. **F**
9. Remove bolts and nuts securing bumper reinforcement. **G**
10. Extract bumper reinforcement. (When installing bumper reinforcement, remove washer tank.)

GI

MA

EM

LC

EC

FE

CL

MT

AT

TF

PD

AX

SU

BR

ST

RS

**BT**

HA

SC

EL

IDX

# BODY FRONT END

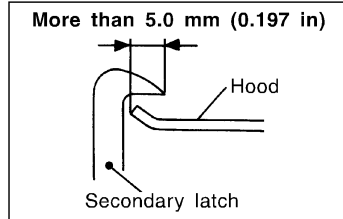
Removal and Installation (Cont'd)

## SEC. 260•261•262•620•623•630•650

### Hood lock adjustment

- Adjust hood so that hood primary lock meshes at a position 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.

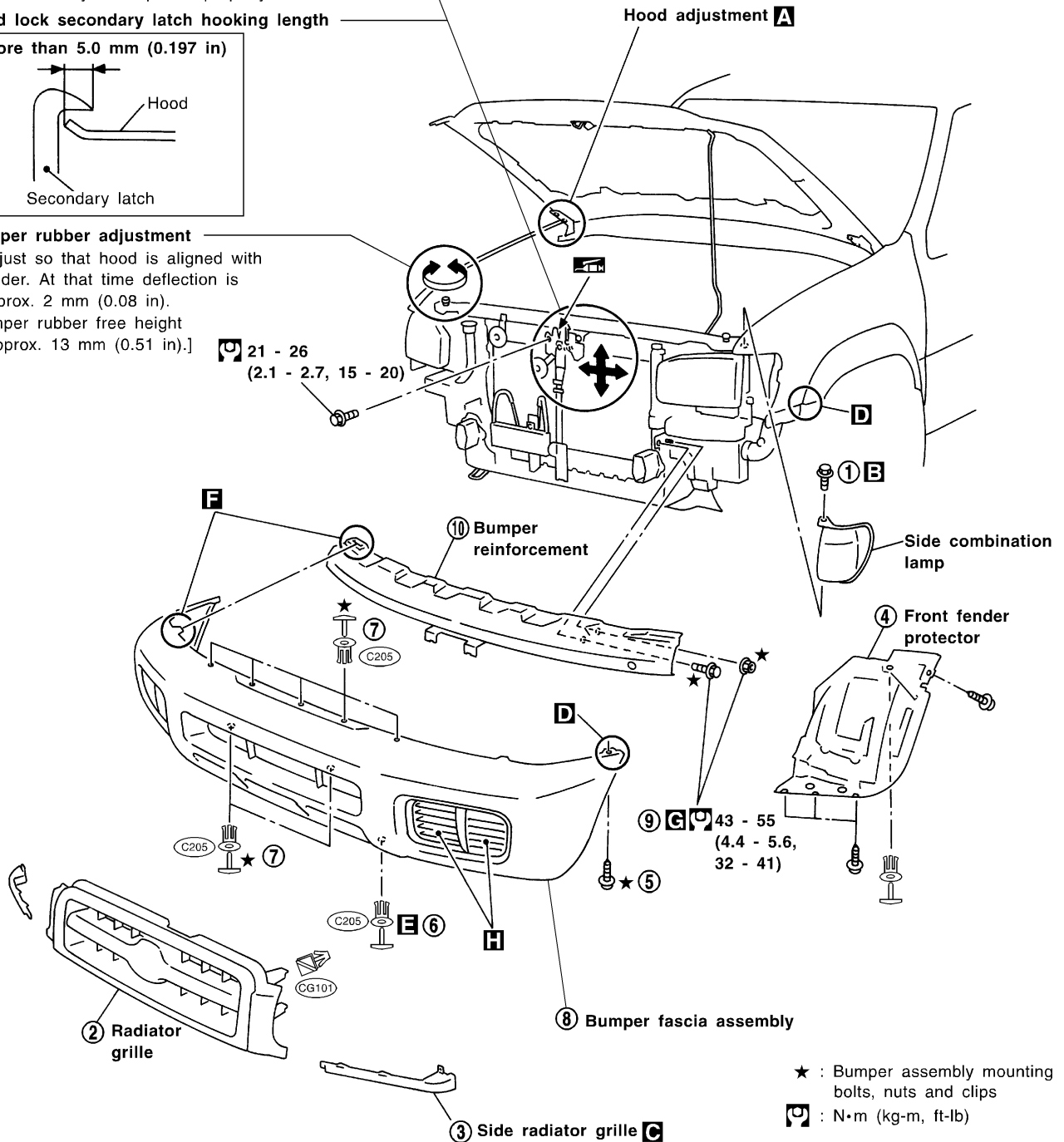
### Hood lock secondary latch hooking length



### Bumper rubber adjustment

- Adjust so that hood is aligned with fender. At that time deflection is approx. 2 mm (0.08 in).

[Bumper rubber free height is approx. 13 mm (0.51 in).]

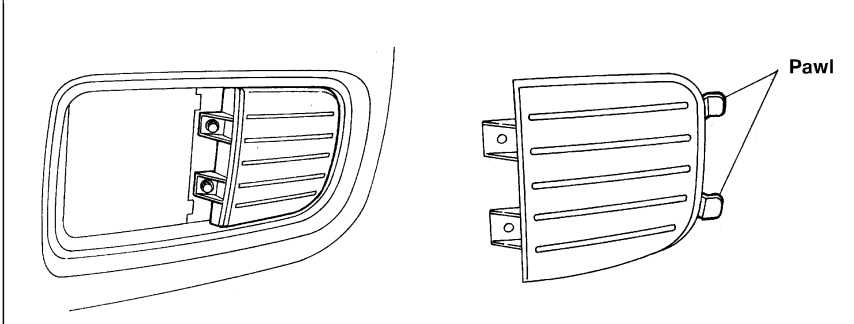
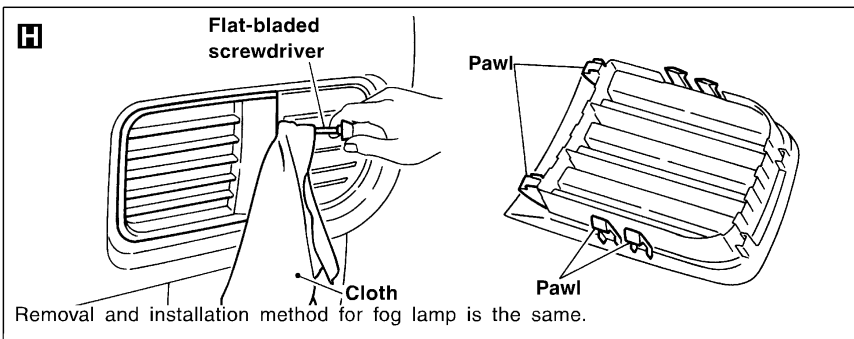
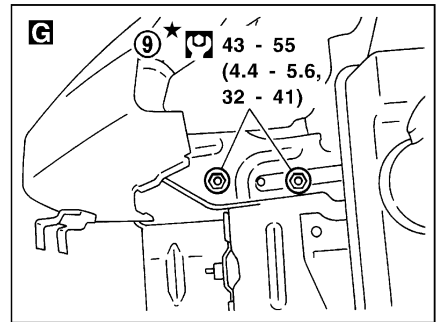
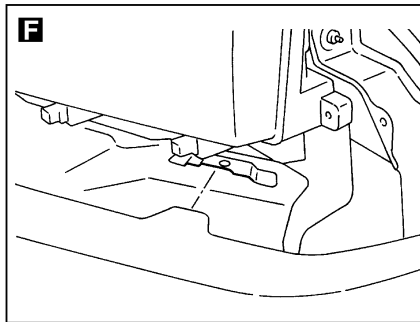
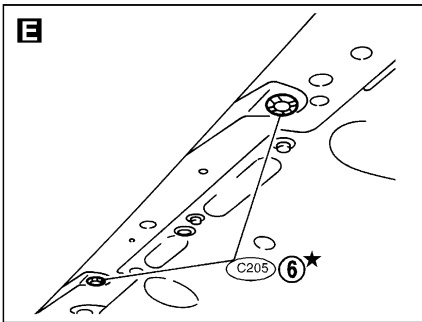
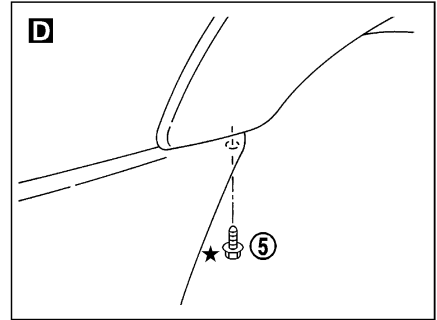
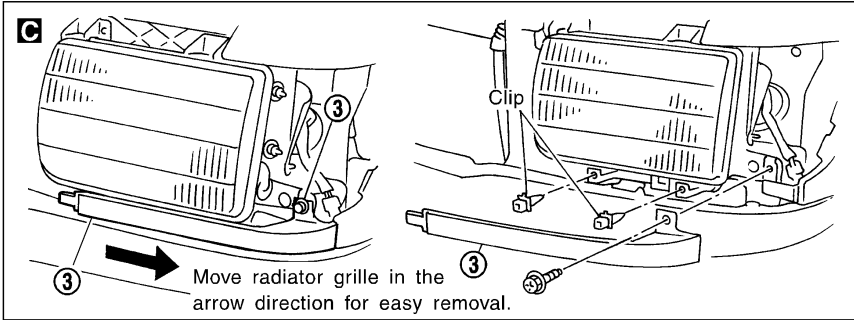
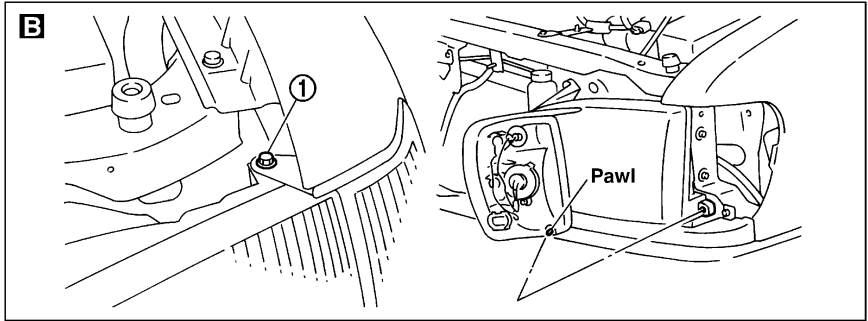
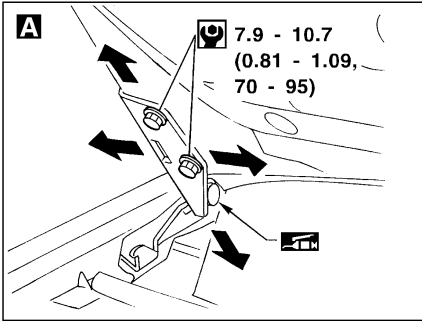


SBT699

# BODY FRONT END

Removal and Installation (Cont'd)

GI  
MA  
EM  
LC  
EC  
FE  
CL  
MT  
AT  
TF  
PD  
AX  
SU  
BR  
ST  
RS  
BT  
HA  
SC  
EL  
IDX



★ : Bumper assembly mounting bolts, nuts and clips

: N·m (kg-m, in-lb)

: N·m (kg-m, ft-lb)

SBT700

# BODY REAR END AND OPENER

Removal and Installation

## Removal and Installation

NABT0005

- Bumper fascia is made of plastic. Do not use excessive force and be sure to keep oil away from it.
- Back door lock system adjustment: Adjust lock & striker so that they are in the center. After adjustment, check back door lock operation.
- Back door hatch lock system adjustment: Adjust lock & striker so that they are in the center. After adjustment, check back door hatch lock operation.
- Opener cable: Do not attempt to bend cable using excessive force.
- After installation, make sure that back door and fuel filler lid open smoothly.

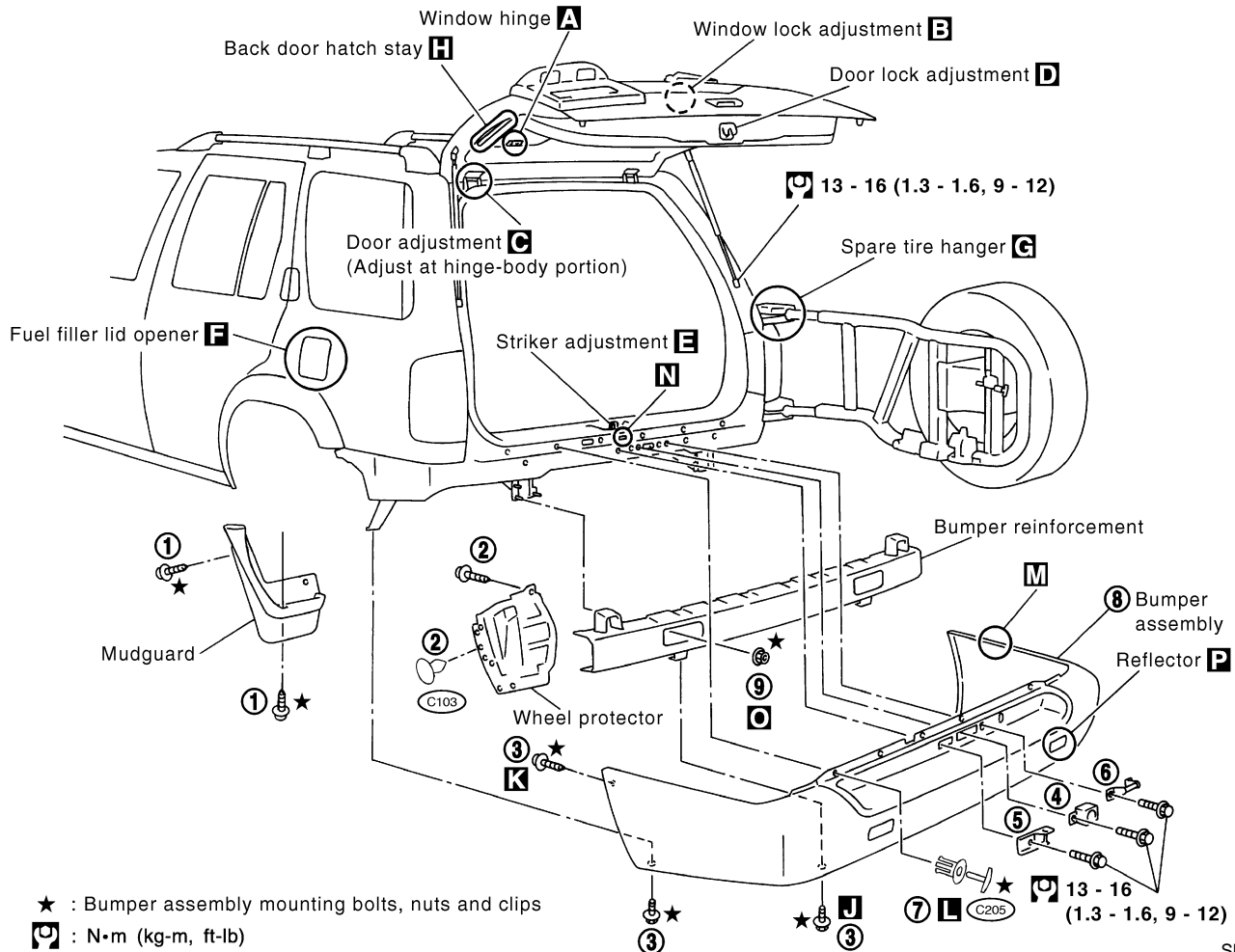
### WARNING:

- Be careful not to scratch back door stay and/or back door hatch stay when installing back door and/or back door hatch. A scratched stay may cause gas leakage.
- The contents of the back door stay and back door hatch stay are under pressure. Do not take apart, puncture, apply heat or allow fire near them.

### REAR BUMPER ASSEMBLY

NABT0005S01

1. Remove screws securing left and right mudguards and remove the mudguards.
2. Remove clips and screws securing left and right sides of wheel protector.
3. Remove bolts and screws securing lower side and side of bumper assembly. **J** **K**
4. Remove bolts securing bumper rubber assembly.
5. Remove bolts securing spare tire hanger striker assembly.
6. Remove bolts securing spare tire hanger guide assembly.
7. Remove clips from upper side of bumper assembly. **L**
8. Extract bumper assembly.
9. Remove nuts securing bumper reinforcement and remove the bumper reinforcement. **O**



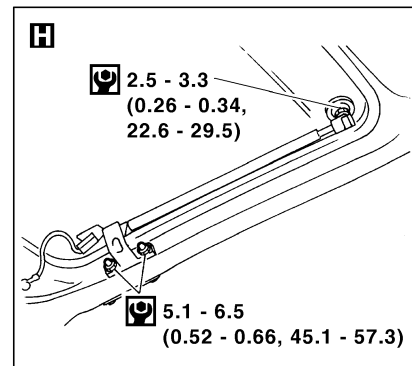
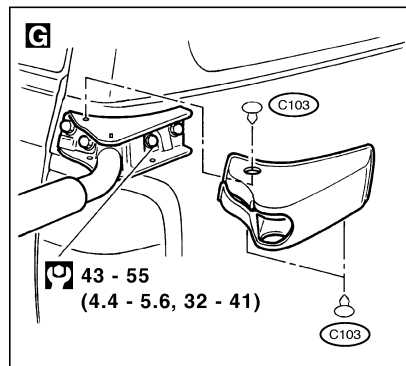
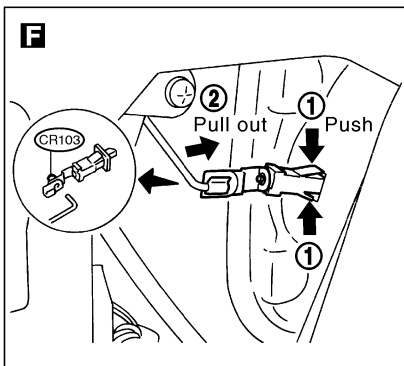
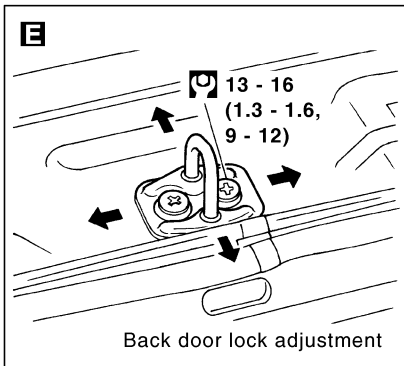
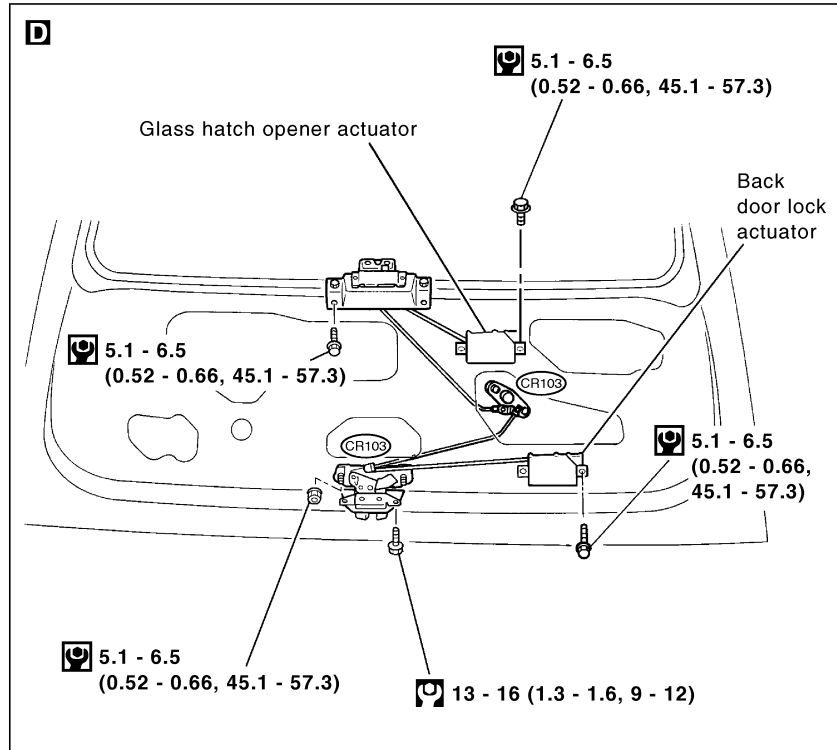
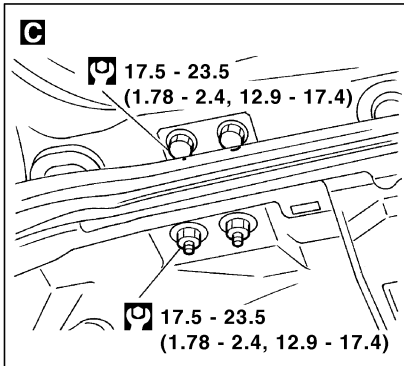
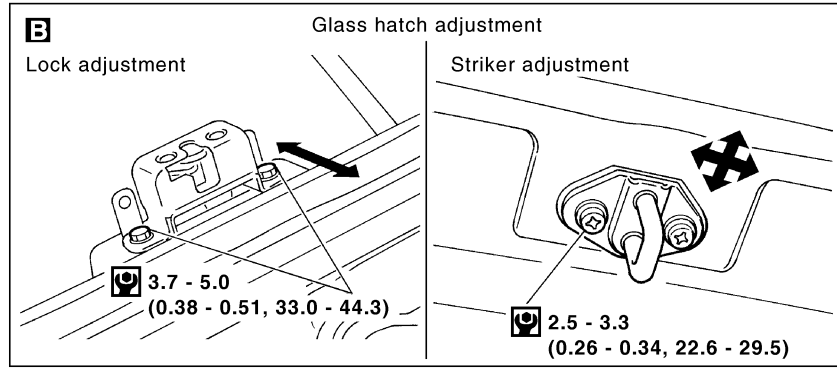
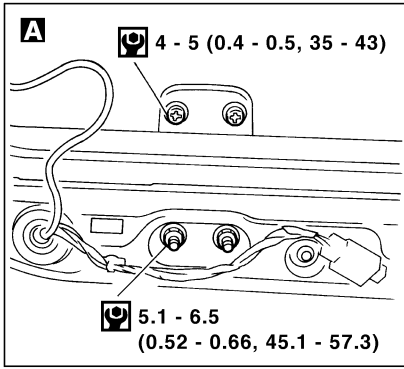
SBT297A



# BODY REAR END AND OPENER

Removal and Installation (Cont'd)

GI  
MA  
EM  
LC  
EC  
FE  
CL  
MT  
AT  
TF  
PD  
AX  
SU  
BR  
ST  
RS  
BT  
HA  
SC  
EL  
IDX



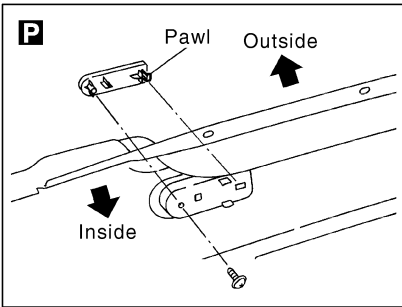
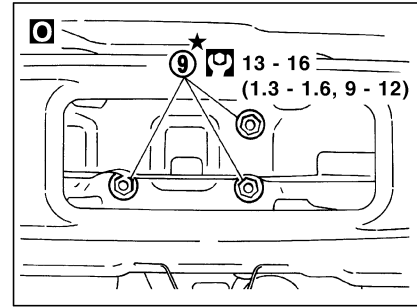
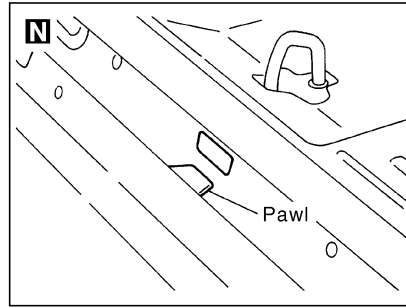
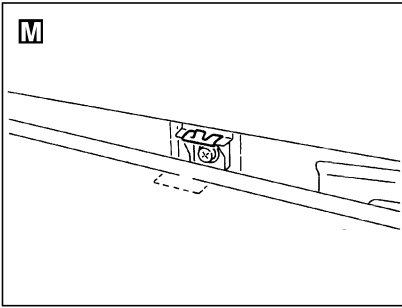
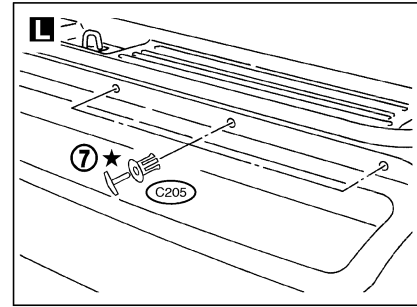
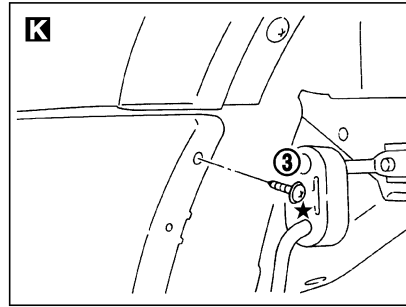
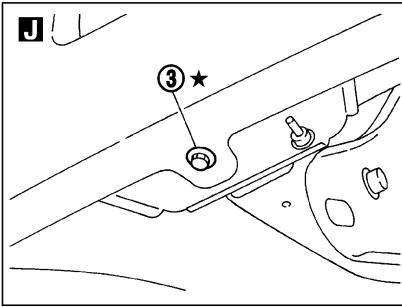
: N•m (kg-m, in-lb)

: N•m (kg-m, ft-lb)

SBT298A

# BODY REAR END AND OPENER

Removal and Installation (Cont'd)



★ : Bumper assembly mounting bolts, nuts and clips  
☐ : N·m (kg-m, ft-lb)

SBT299A

# FRONT DOOR

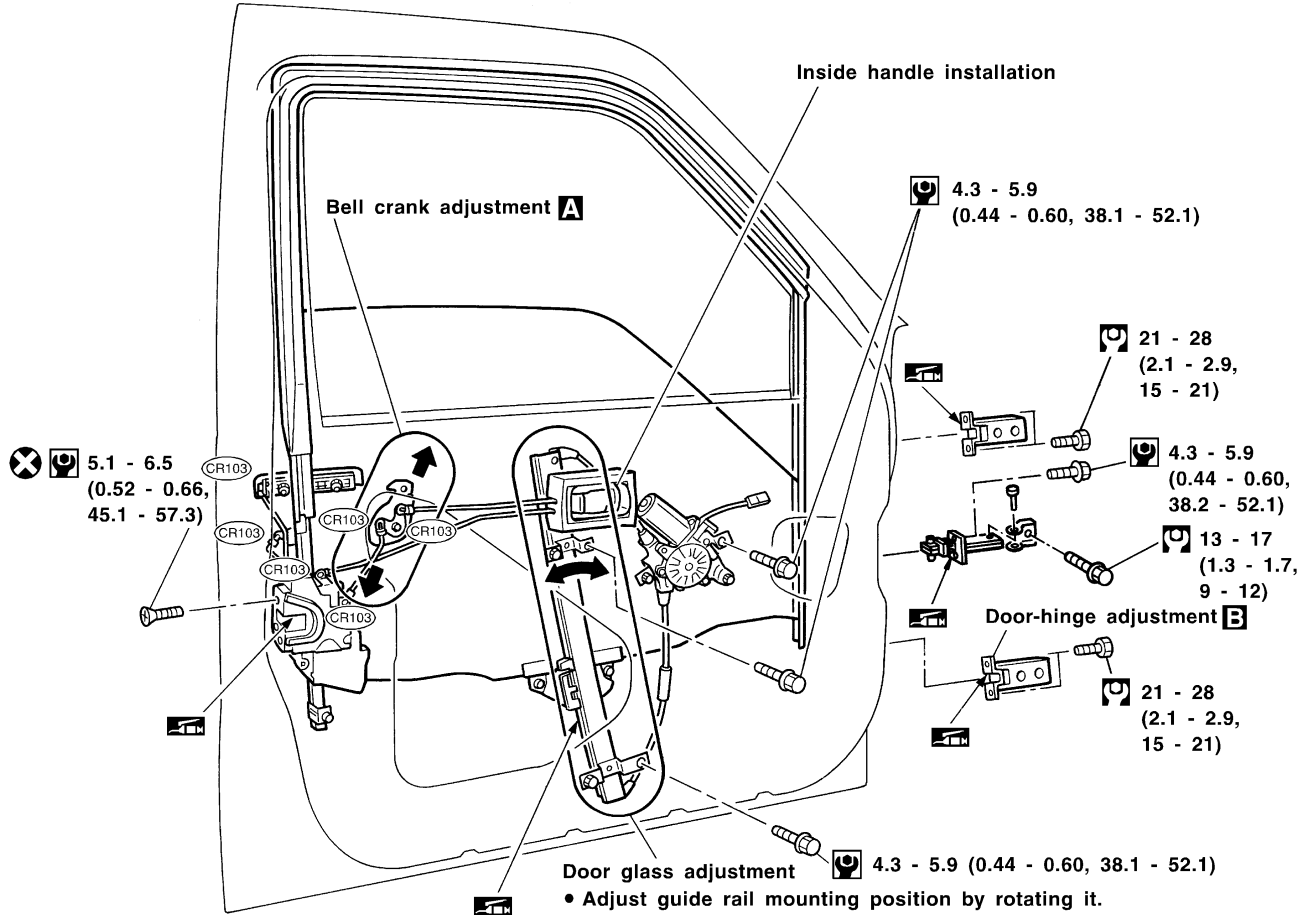
Overhaul

## Overhaul

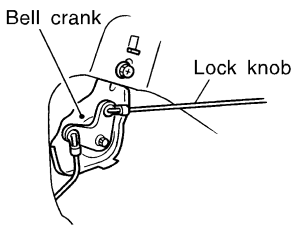
NABT0006

- For removal of door trim, refer to "DOOR TRIM" (BT-31).
- After adjusting door or door lock, check door lock operation.

SEC. 800•803•805•998

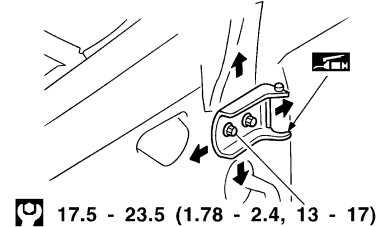


### A Bell crank adjustment

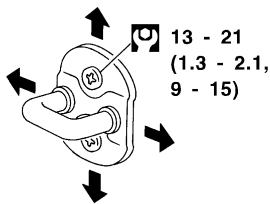


Lock door after setting door lock assembly and inside handle in position. Move bell crank in direction of arrow (shown in figure at left) to take up knob free play, and secure with bolts.

### B Door-hinge adjustment



### Striker adjustment



: N•m (kg-m, in-lb)

: N•m (kg-m, ft-lb)

SBT512-A

GI  
MA  
EM  
LC  
EC  
FE  
CL  
MT  
AT  
TF  
PD  
AX  
SU  
BR  
ST  
RS  
BT  
HA  
SC  
EL  
IDX

# FRONT DOOR

## Front Door Limit Switch Reset

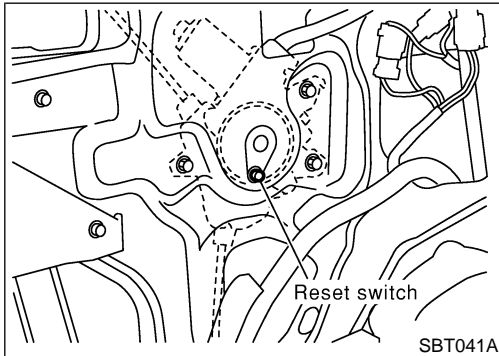
NABT0029

### RESET CONDITIONS

NABT0029S01

After each of the following operations are performed, reset the limit switch (with built-in motor).

- Regulator removal and installation
- Removal of motor from regulator
- Operation of regulator as a single unit
- Door glass removal and installation
- Glass run removal and installation



### RESET PROCEDURES

NABT0029S02

After installing parts, proceed as follows:

1. Close the door window completely.
2. Press the reset switch and open the door window completely.
3. Release the reset switch. After making sure the reset switch has returned to the original position, close the door window completely.
4. The limit switch is now reset.

#### **CAUTION:**

**Be sure to manually open or close the door window. (Do not use the automatic open-close procedures.)**

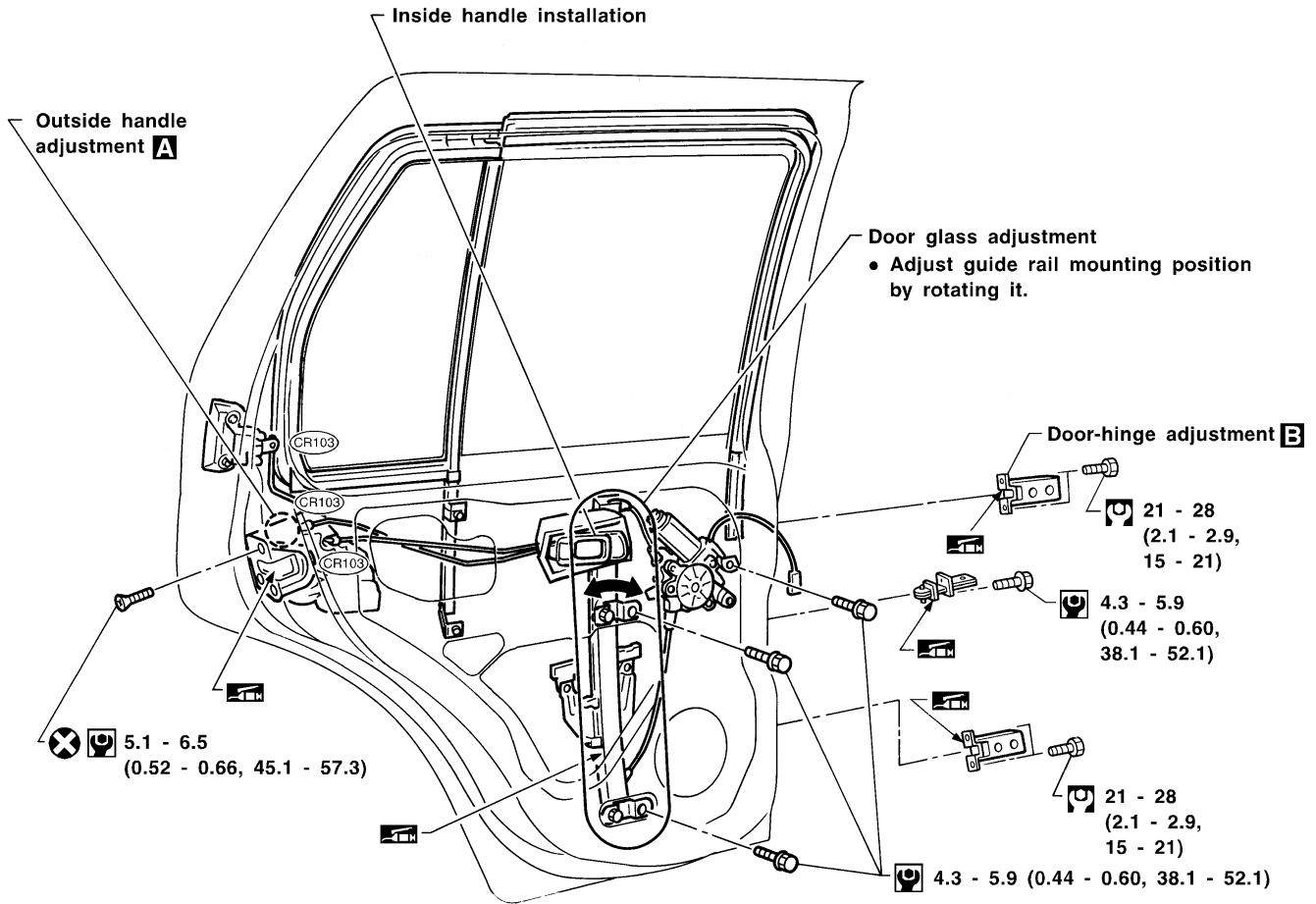
# REAR DOOR

Overhaul

## Overhaul

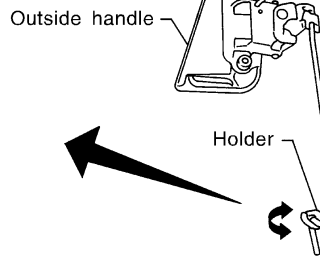
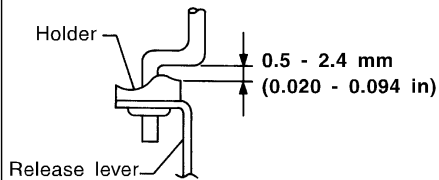
NABT0007

SEC. 820•823•825

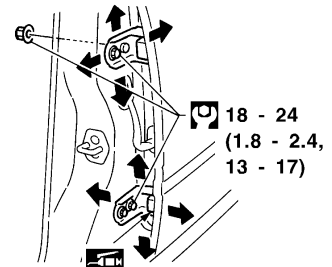


### **A** Outside handle adjustment

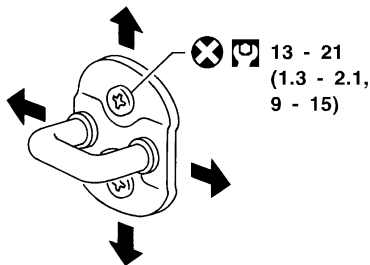
Turn holder until the clearance between holder & rod is the specified value.



### **B** Door-hinge adjustment



### Striker adjustment



: N•m (kg-m, in-lb)

: N•m (kg-m, ft-lb)

SBT736

GI  
MA  
EM  
LC  
EC  
FE  
CL  
MT  
AT  
TF  
PD  
AX  
SU  
BR  
ST  
RS  
BT  
HA  
SC  
EL  
IDX

# INSTRUMENT PANEL ASSEMBLY

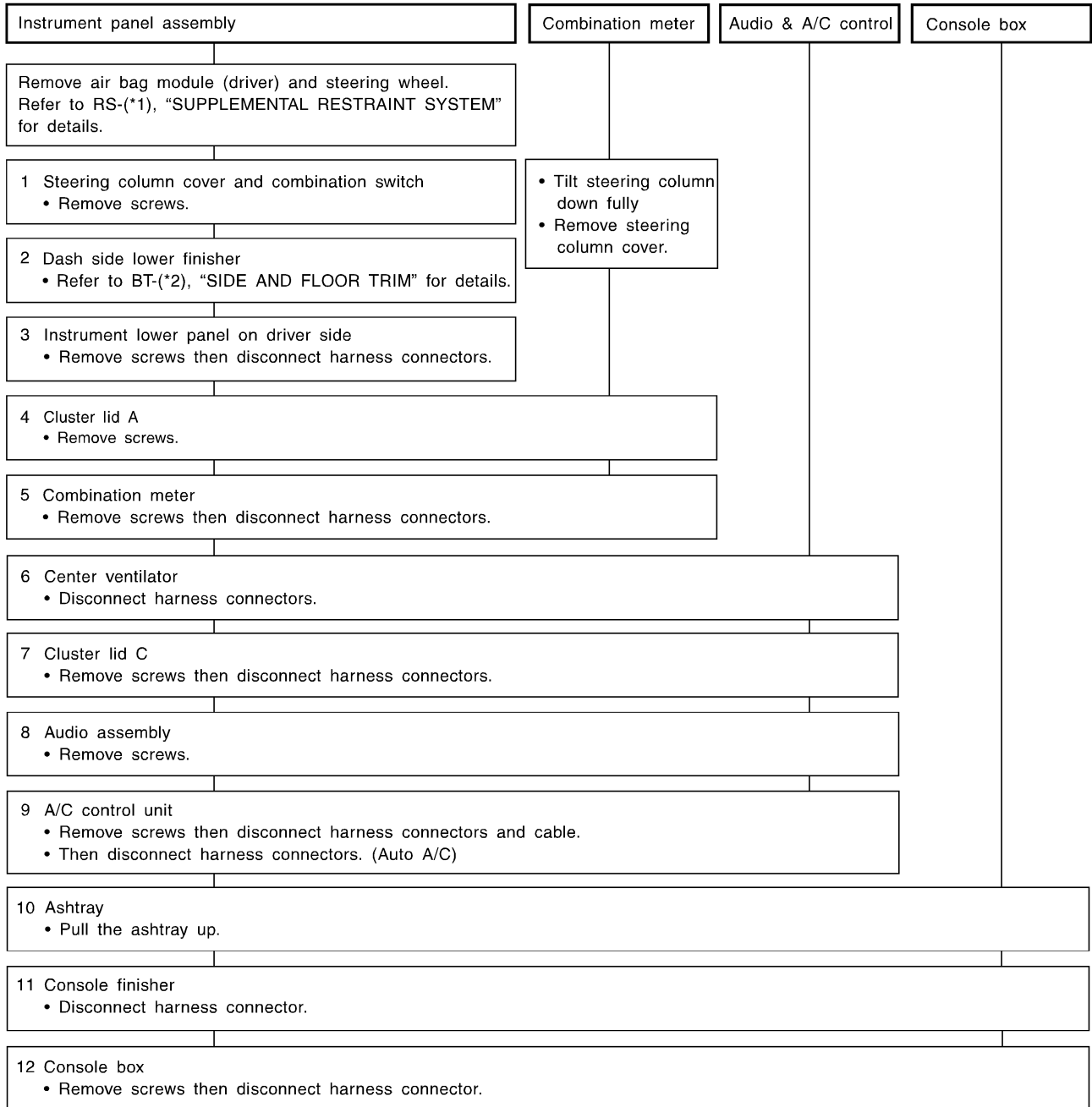
Removal and Installation

## Removal and Installation

NABT0008

### CAUTION:

- Lock the CD changer unit mechanism (models with CD changer). Refer to EL-201, "LOCKING CD CHANGER UNIT MECHANISM".
- Disconnect both battery cables in advance.
- Disconnect air bag system line in advance.
- Never tamper with or force air bag lid open, as this may adversely affect air bag performance.
- Be careful not to scratch pad and other parts.



SBT302A

\*1 RS-18

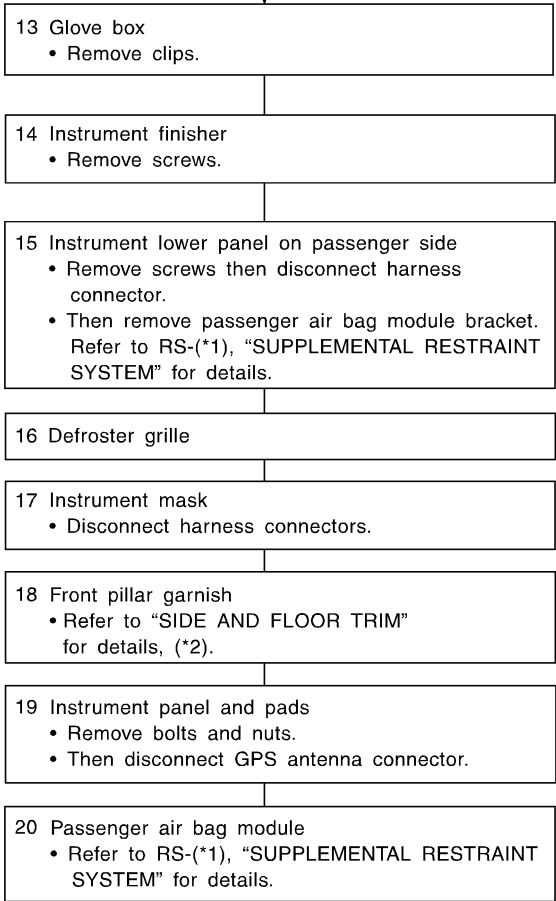
\*2 BT-29

# INSTRUMENT PANEL ASSEMBLY

Removal and Installation (Cont'd)

GI  
MA  
EM  
LC  
EC  
FE  
CL  
MT  
AT  
TF  
PD  
AX  
SU  
BR  
ST  
RS  
BT  
HA  
SC  
EL  
IDX

Ⓐ



SBT026A

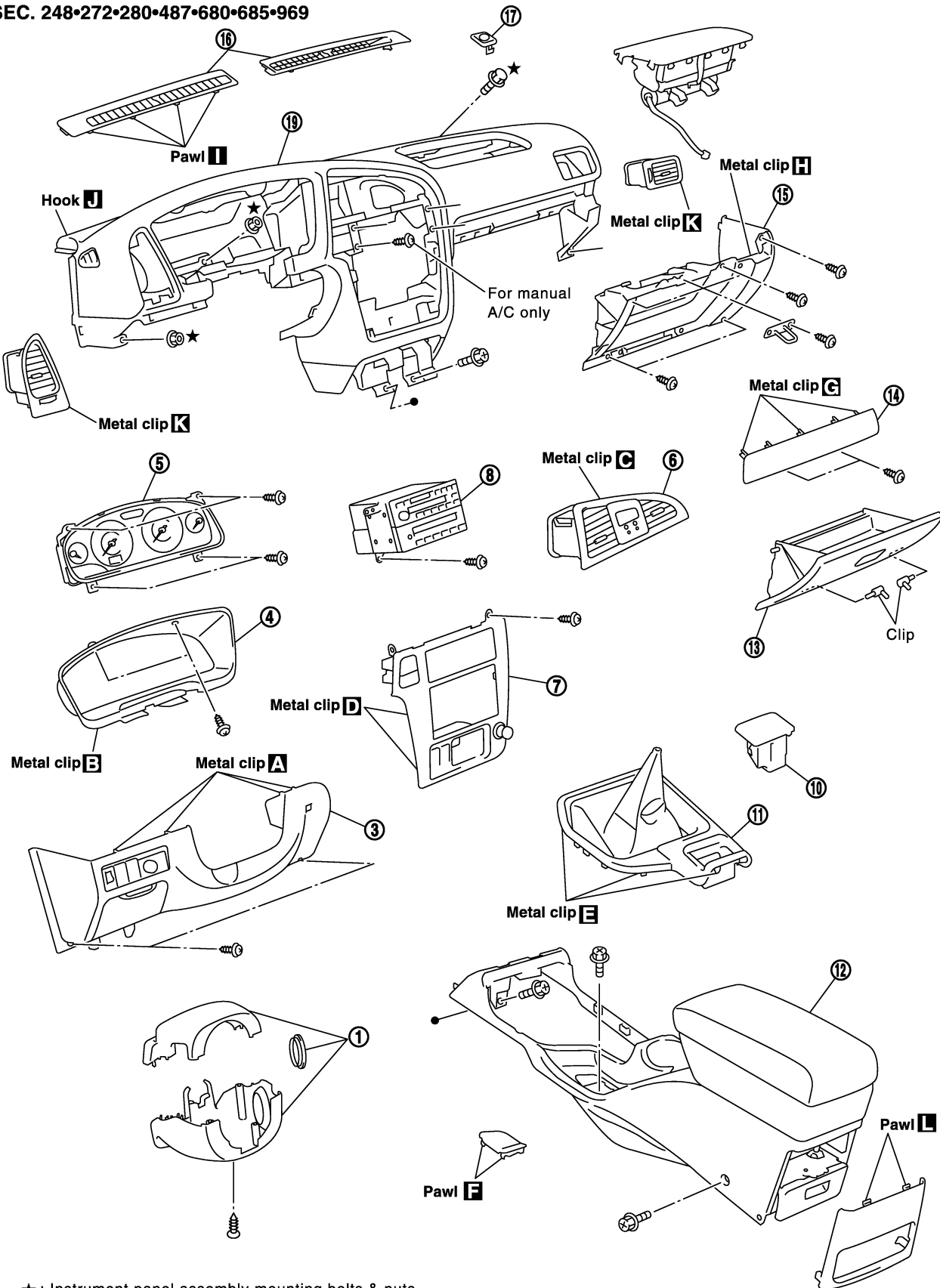
\*1 RS-20

\*2 BT-29

# INSTRUMENT PANEL ASSEMBLY

Removal and Installation (Cont'd)

SEC. 248•272•280•487•680•685•969



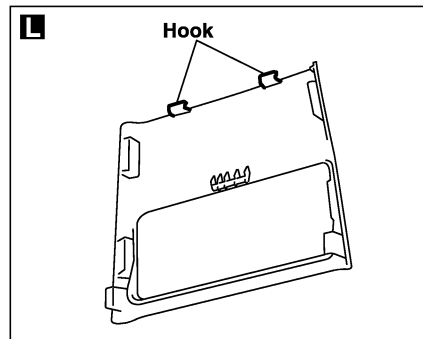
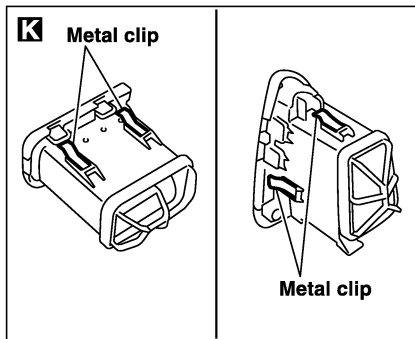
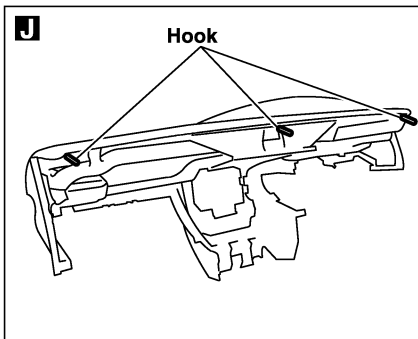
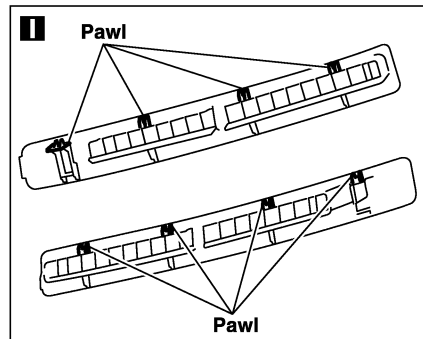
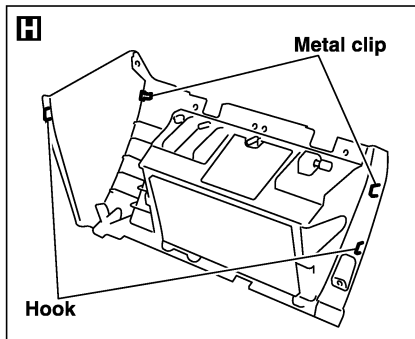
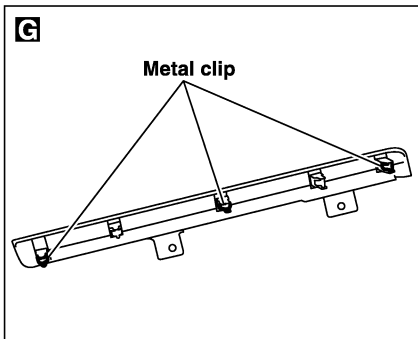
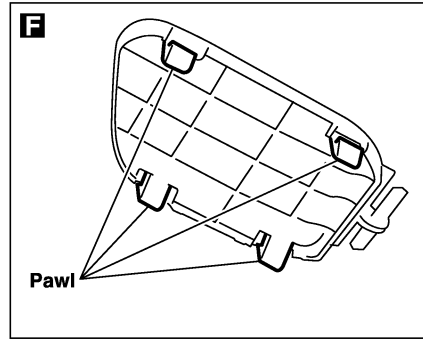
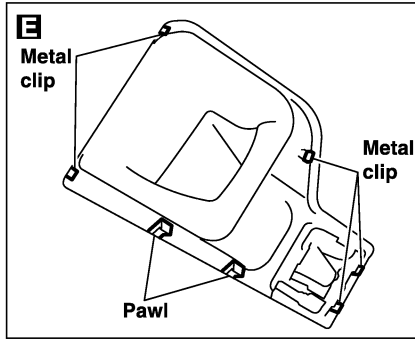
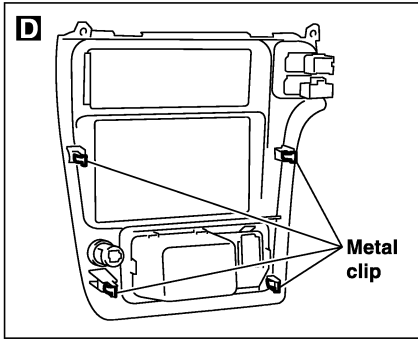
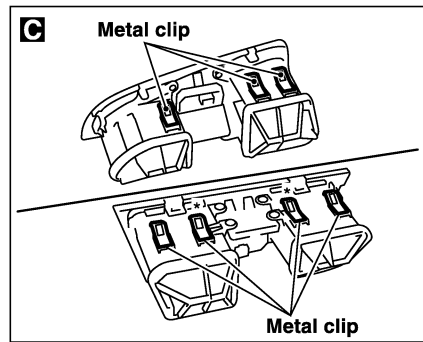
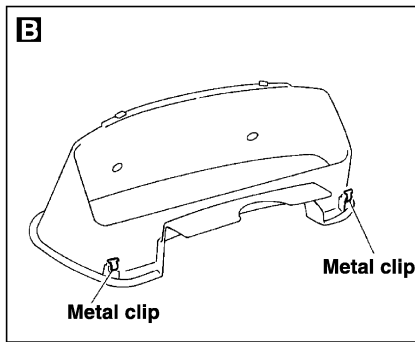
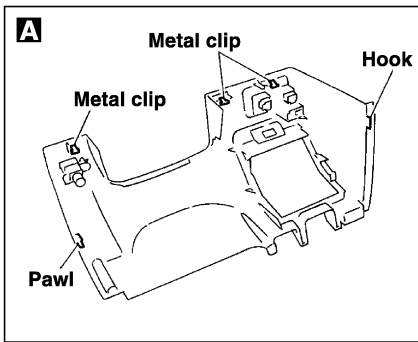
★ : Instrument panel assembly mounting bolts & nuts

SBT300A



# INSTRUMENT PANEL ASSEMBLY

Removal and Installation (Cont'd)

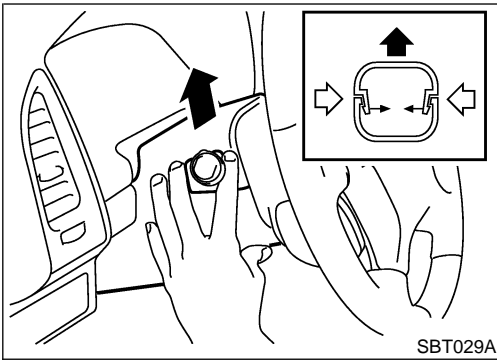


GI  
MA  
EM  
LC  
EC  
FE  
CL  
MT  
AT  
TF  
PD  
AX  
SU  
BR  
ST  
RS  
BT  
HA  
SC  
EL  
IDX

SBT301A

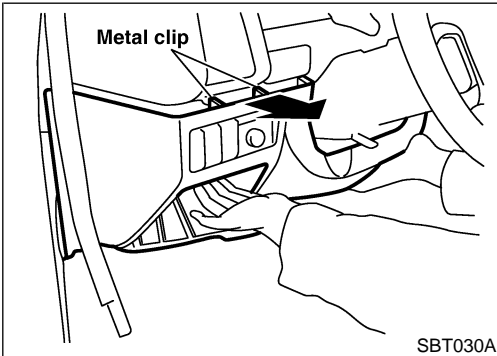
# INSTRUMENT PANEL ASSEMBLY

Removal and Installation (Cont'd)



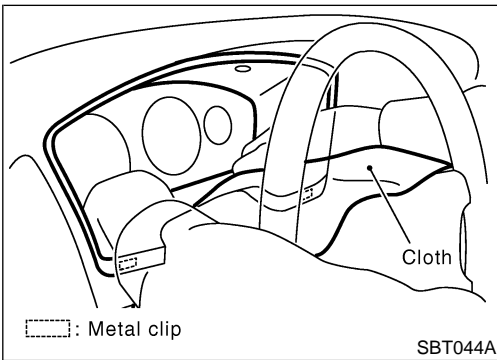
## Steering column cover

After removing the screws, release the pawls by pressing on the upper cover where it meets (the bottom cover) from both sides.



## Instrument lower panel on the driver side

Open the pocket after removing the screws. Hold the opening and the bottom and pull out horizontally.

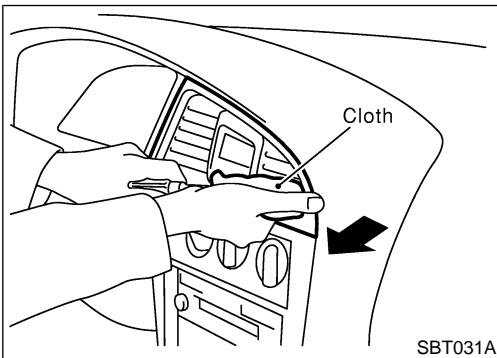


## Cluster lid A

After removing the screws, hold the bottom and pull out.

**CAUTION:**

Cover the surroundings with a cloth to prevent damage.

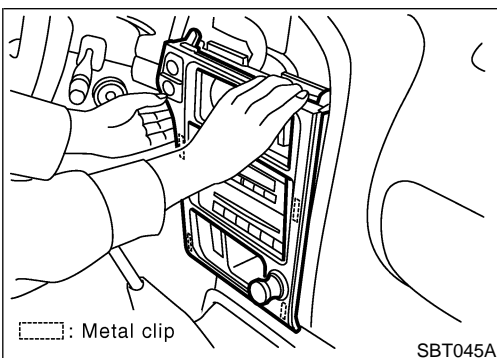


## Center ventilator

Hook a cloth-covered flat-bladed screwdriver into the right-side groove section, and pull out.

**CAUTION:**

To prevent the screwdriver from slipping and causing damage to the surface, pull out while applying pressure on the screwdriver towards the right.

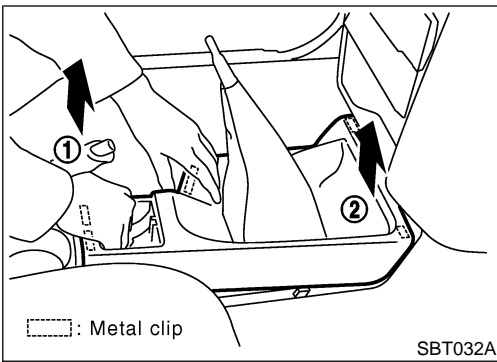


## Cluster lid C

After removing the screws, place hands on the metal clip section, and pull forward to remove the metal clips.

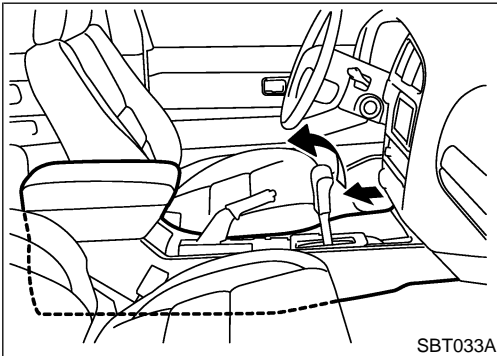
# INSTRUMENT PANEL ASSEMBLY

Removal and Installation (Cont'd)



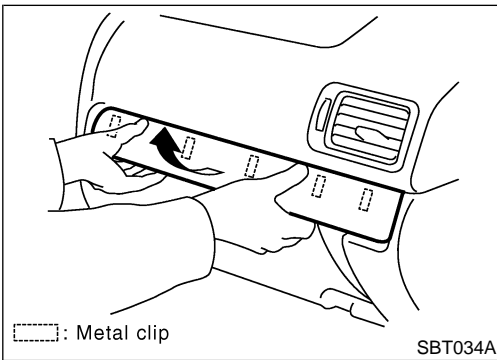
## Console finisher

- 1) After removing the ashtray, place hands on the opening and pull out in an upward direction to remove the clips at the back.
- 2) Hold the front of the finisher, pull out in an upward direction and remove the clips at the front.



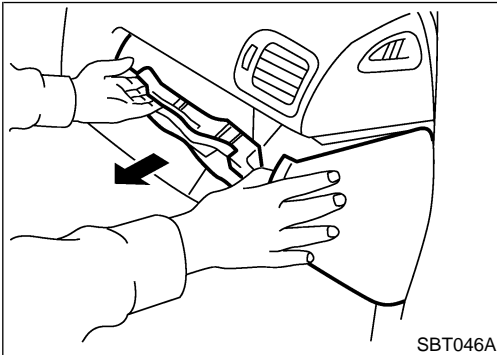
## Console box

- 1) Pull up the parking brake lever.
  - 2) Remove the screws, pull the console towards the back of the car until it is free of the instrument panel, lift up the front and remove.
- It will be easier to remove if the parking brake lever is pulled up for more than 10 notches.



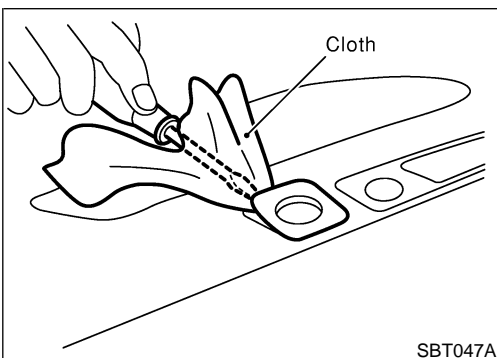
## Instrument finisher

Remove the screws and pull up.



## Instrument lower panel on the passenger side

After removing the screws, hold both sides and pull out horizontally.



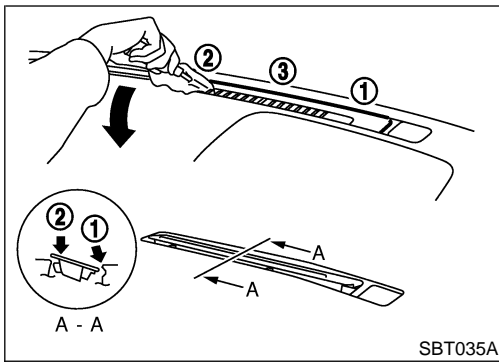
## Instrument mask

Insert a cloth-covered flat-bladed screwdriver, and remove by lifting up.

GI  
MA  
EM  
LC  
EC  
FE  
CL  
MT  
AT  
TF  
PD  
AX  
SU  
BR  
ST  
RS  
BT  
HA  
SC  
EL  
IDX

# INSTRUMENT PANEL ASSEMBLY

Removal and Installation (Cont'd)



## Defroster grille

### REMOVAL

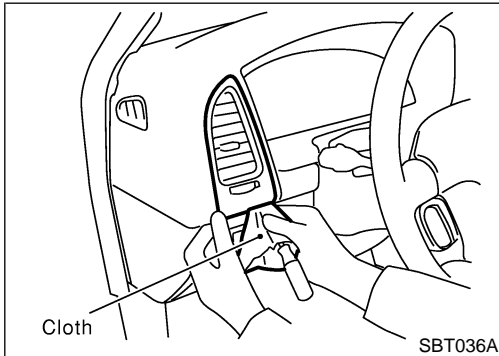
Insert a cloth-covered flat-bladed screwdriver into the grilles of the outside, center and central grilles, respectively, lift up the front of the grilles and remove.

### INSTALLATION

After inserting the front section, insert the rear section (pawls) to attach.

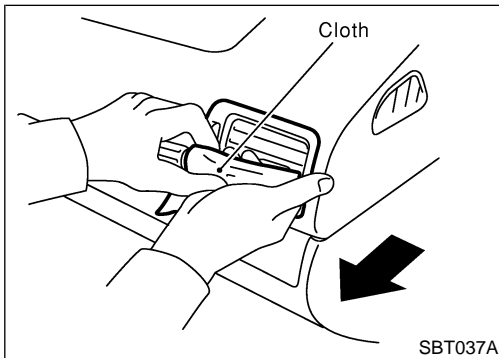
### CAUTION:

Confirm that the pawls at the rear are securely attached.



## Side ventilator-left

Insert a cloth-covered flat-bladed screwdriver into the lower section, and pull out forward.



## Side ventilator-right

Insert a cloth-covered flat-bladed screwdriver into the corner of the lower section, and pull out forward. (Securely press the screwdriver against the ventilator.) Or, after removing the Instrument lower panel, push the ventilator out from the back.

## Side defroster grille

After removing the side ventilator, reach in with hands from the opening, push on the pawls from behind the grille, and remove by pushing out.

## Removal and Installation

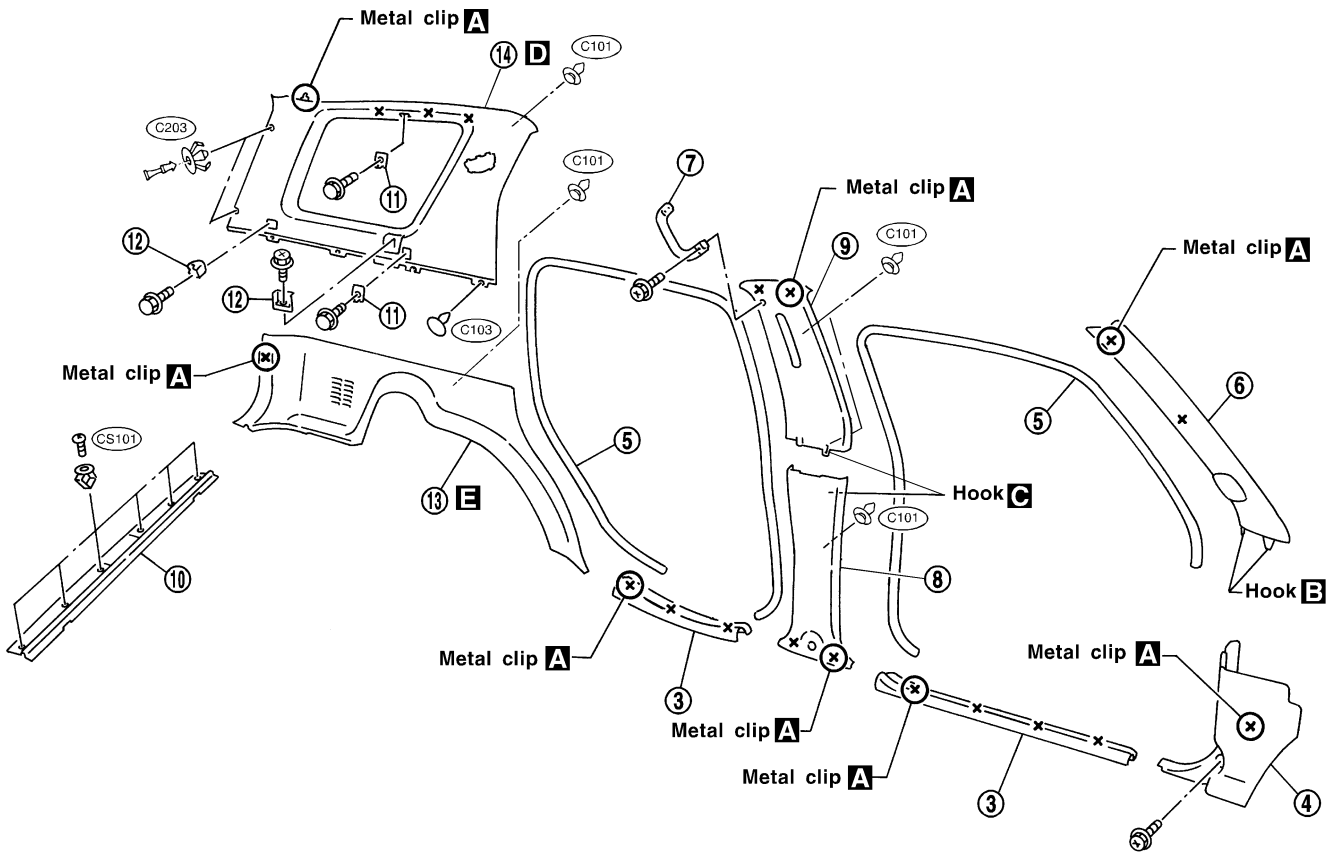
NABT0009

**CAUTION:**

Wrap the tip of flat-bladed screwdriver with a cloth when removing metal clips from garnishes.

1. Remove front and rear seats. Refer to "FRONT SEAT" and "REAR SEAT" for details, BT-43, BT-47.
2. Remove front and rear seat belts. Refer to RS-3, "SEAT BELT" for details.
3. Remove front and rear kicking plates.
4. Remove dash side lower finishers.
5. Remove front and rear body side welts.
6. Remove front pillar garnishes. **B**
7. Remove center assist grips.
8. Remove center pillar lower garnishes. **C**
9. Remove center pillar upper garnishes. **C**
10. Remove rear gate kicking plate.
11. Remove rear net hooks.
12. Remove tonneau cover assembly and rear parcel holder.
13. Remove rear side lower garnishes. **E**
14. Remove rear side upper garnishes. **D**

SEC. 678•738•769•799•849

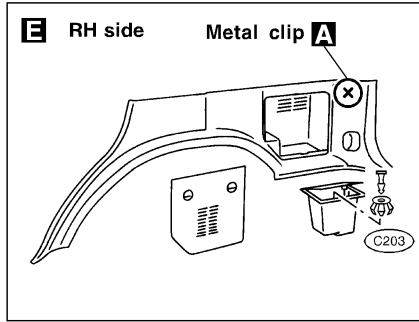
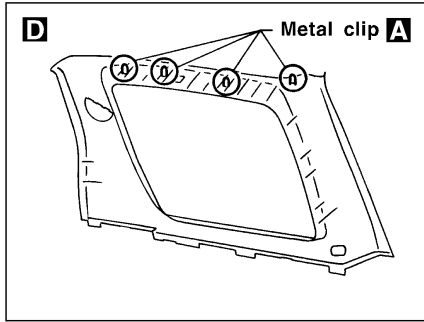
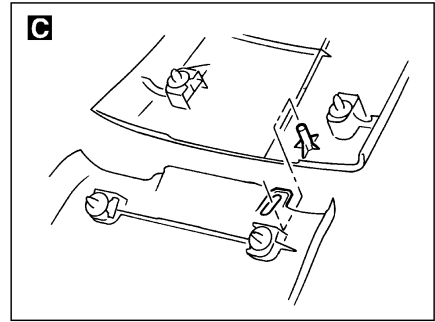
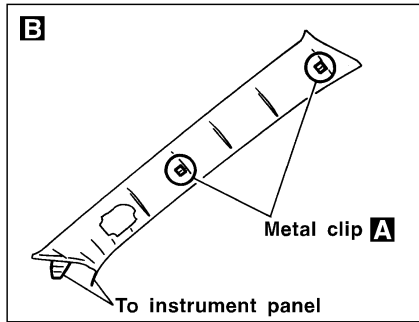
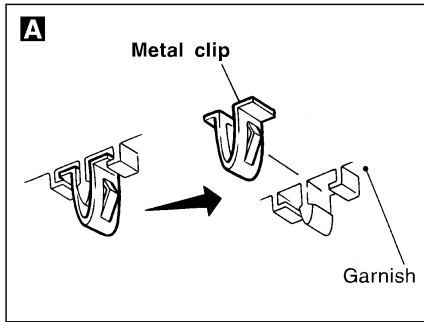


SBT694

GI  
MA  
EM  
LC  
EC  
FE  
CL  
MT  
AT  
TF  
PD  
AX  
SU  
BR  
ST  
RS  
BT  
HA  
SC  
EL  
IDX

# SIDE AND FLOOR TRIM

Removal and Installation (Cont'd)



SBT728

# DOOR TRIM

Removal and Installation

## Removal and Installation

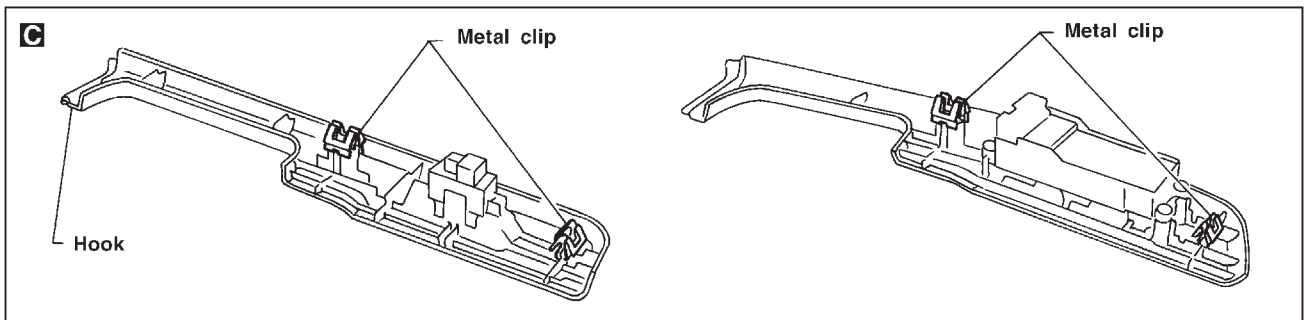
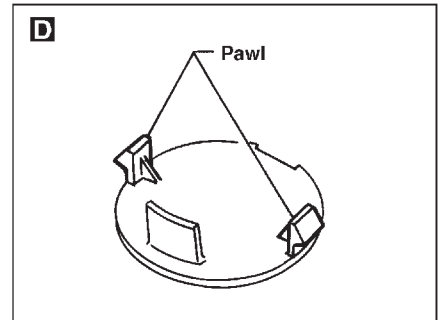
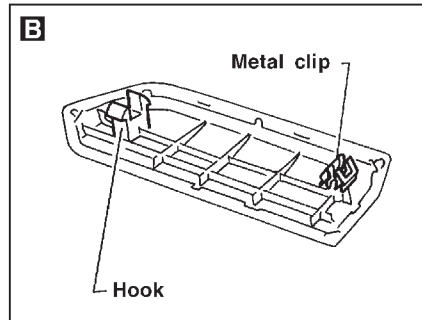
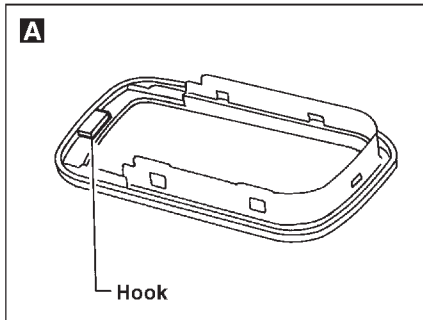
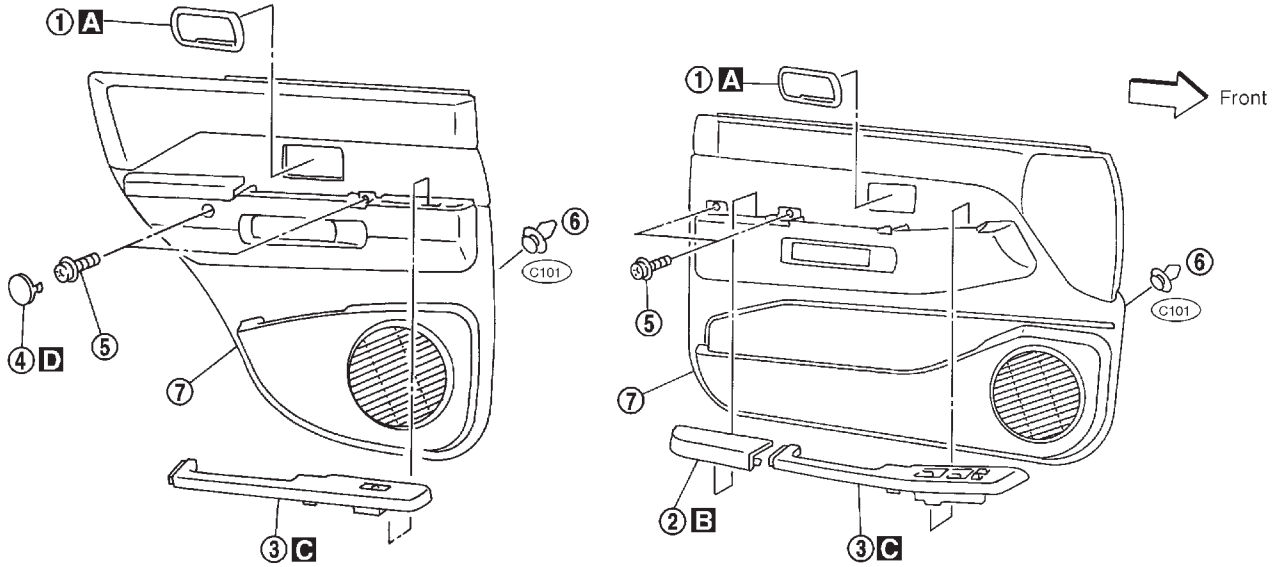
NABT0010

NABT0010S01

### TYPE A

1. Remove inside handle escutcheon. **A**
2. Remove door armrest. (Front door only) **B**
3. Remove power window switches, then disconnect the connectors. **C**
4. Remove door finisher cover. (Rear door only) **D**
5. Remove bolts securing door finisher.
6. Remove clips securing door finisher.
7. Lift out door finisher.

SEC. 251•809•828



SBT207

GI  
MA  
EM  
LC  
EC  
FE  
CL  
MT  
AT  
TF  
PD  
AX  
SU  
BR  
ST  
RS  
BT  
HA  
SC  
EL  
IDX

# DOOR TRIM

Removal and Installation (Cont'd)

## TYPE B

=NABT0010S02

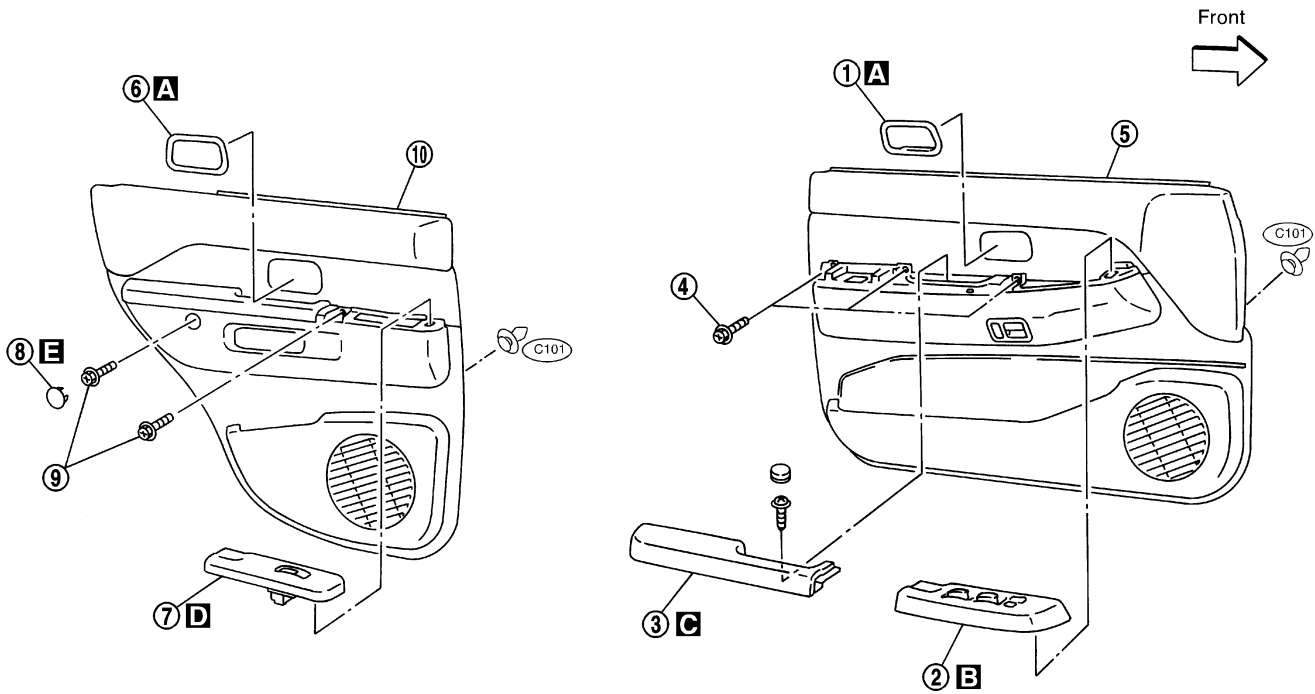
### Front Door Trim

1. Remove inside handle escutcheon. **A**
2. Remove power window switch, then disconnect the connectors. **B**
3. Remove door armrest. **C**
4. Remove bolts securing door finisher.
5. Pull on door finisher to remove clips from door panel and remove door finisher, then disconnect glass hatch and fuel lid opener switch connector.

### Rear Door Trim

6. Remove inside handle escutcheon. **A**
7. Remove power window switch, then disconnect the connector. **D**
8. Remove door armrest cap. **E**
9. Remove bolts securing door finisher.
10. Pull on door finisher to remove clips from door panel and remove door finisher.

SEC. 251•809•828

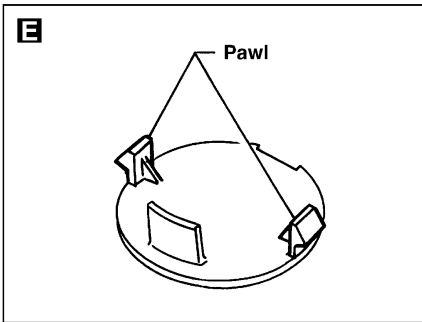
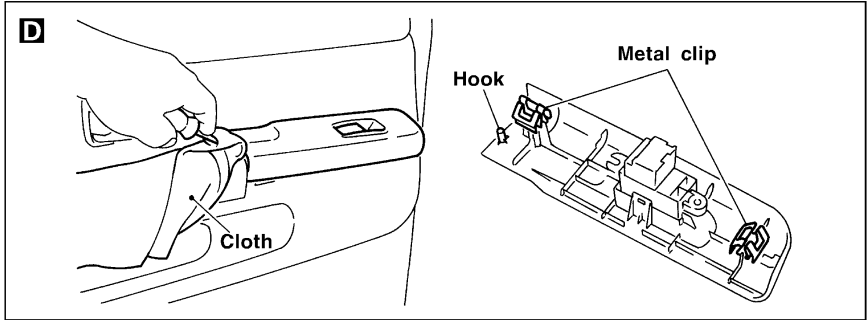
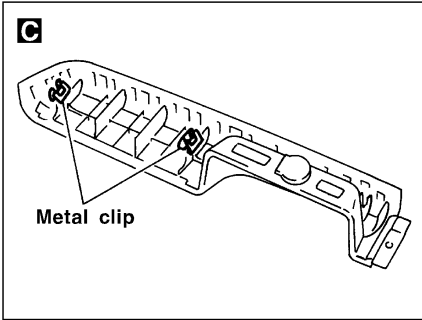
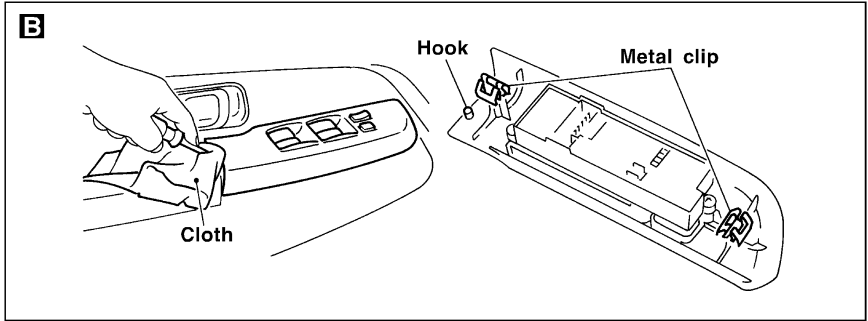
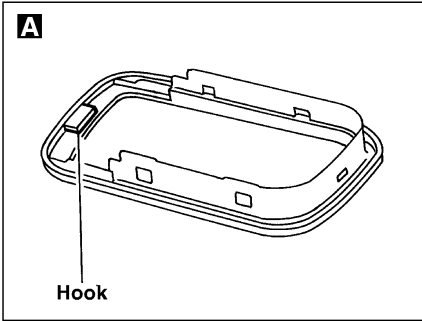


SBT696



# DOOR TRIM

Removal and Installation (Cont'd)



GI  
MA  
EM  
LC  
EC  
FE  
CL  
MT  
AT  
TF  
PD  
AX  
SU  
BR  
ST  
RS  
**BT**  
HA  
SC  
EL  
IDX

SBT697

# ROOF TRIM

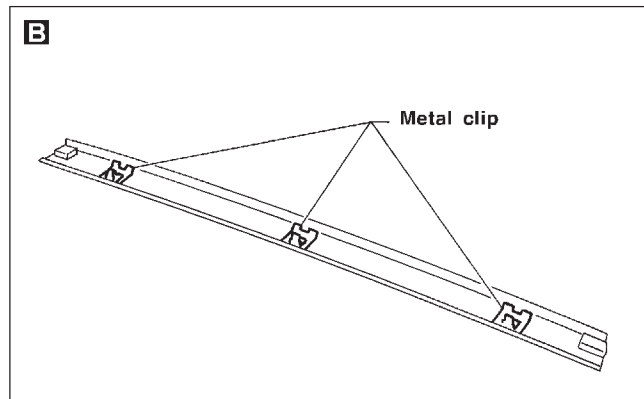
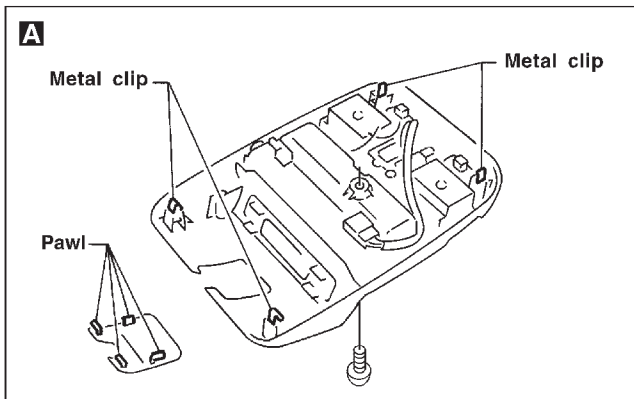
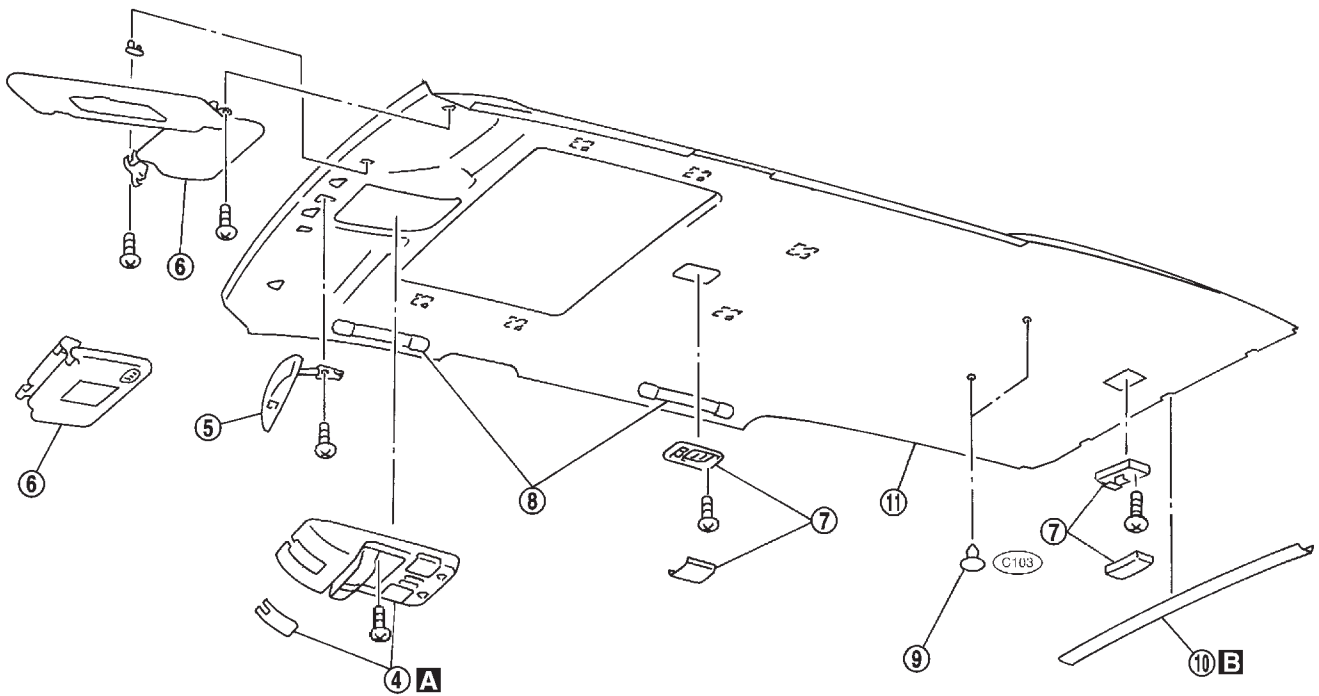
Removal and Installation

## Removal and Installation

NAB70011

1. Remove front and rear seats. Refer to "FRONT SEAT" and "REAR SEAT" for details, BT-43, BT-47.
2. Remove front and rear seat belts. Refer to RS-3, "SEAT BELTS" for details.
3. Remove body side trim. Refer to "SIDE AND FLOOR TRIM" for details, BT-29.
4. Remove roof console assembly. **A**
5. Remove inside mirror assembly.
6. Remove sun visors.
7. Remove interior lamp assembly and luggage room lamp assembly.
8. Remove assist grips.
9. Remove clips securing headlining.
10. Remove rear roof garnish. **B**
11. Remove headlining from vehicle through either back door.

SEC. 264•738•963•964•970



SBT487

# BACK DOOR TRIM

Removal and Installation

## Removal and Installation

GI  
NABT0012

1. Remove back door grip.
2. Remove back door finisher assembly.
3. Remove high-mounted stop lamp.
4. Remove back door upper finisher assembly.

MA

EM

LC

EC

FE

CL

MT

AT

TF

PD

AX

SU

BR

ST

RS

**BT**

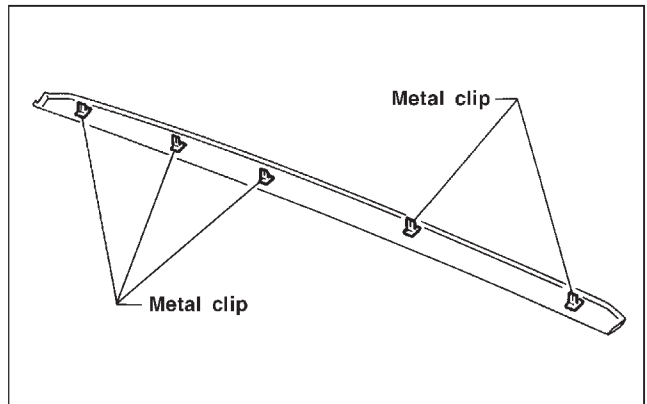
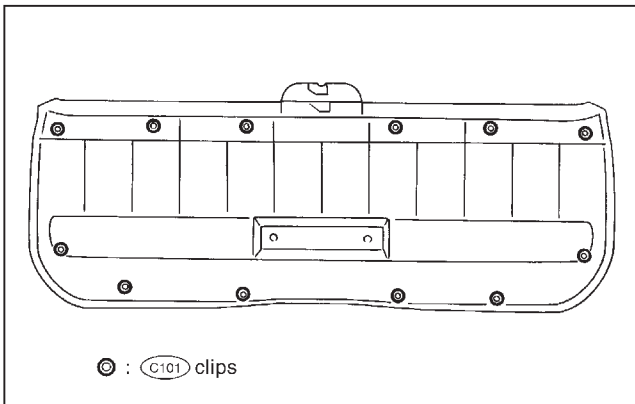
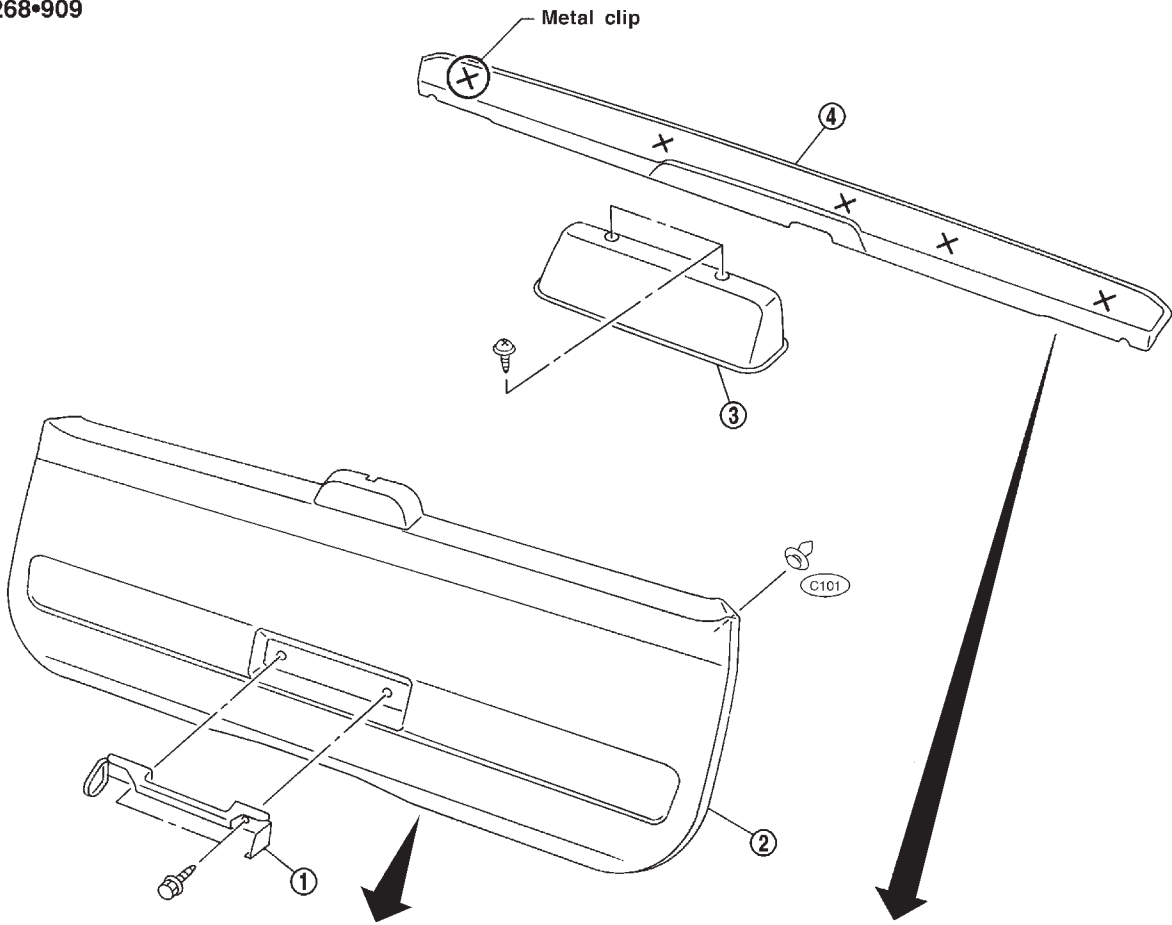
HA

SC

EL

IDX

SEC. 268•909



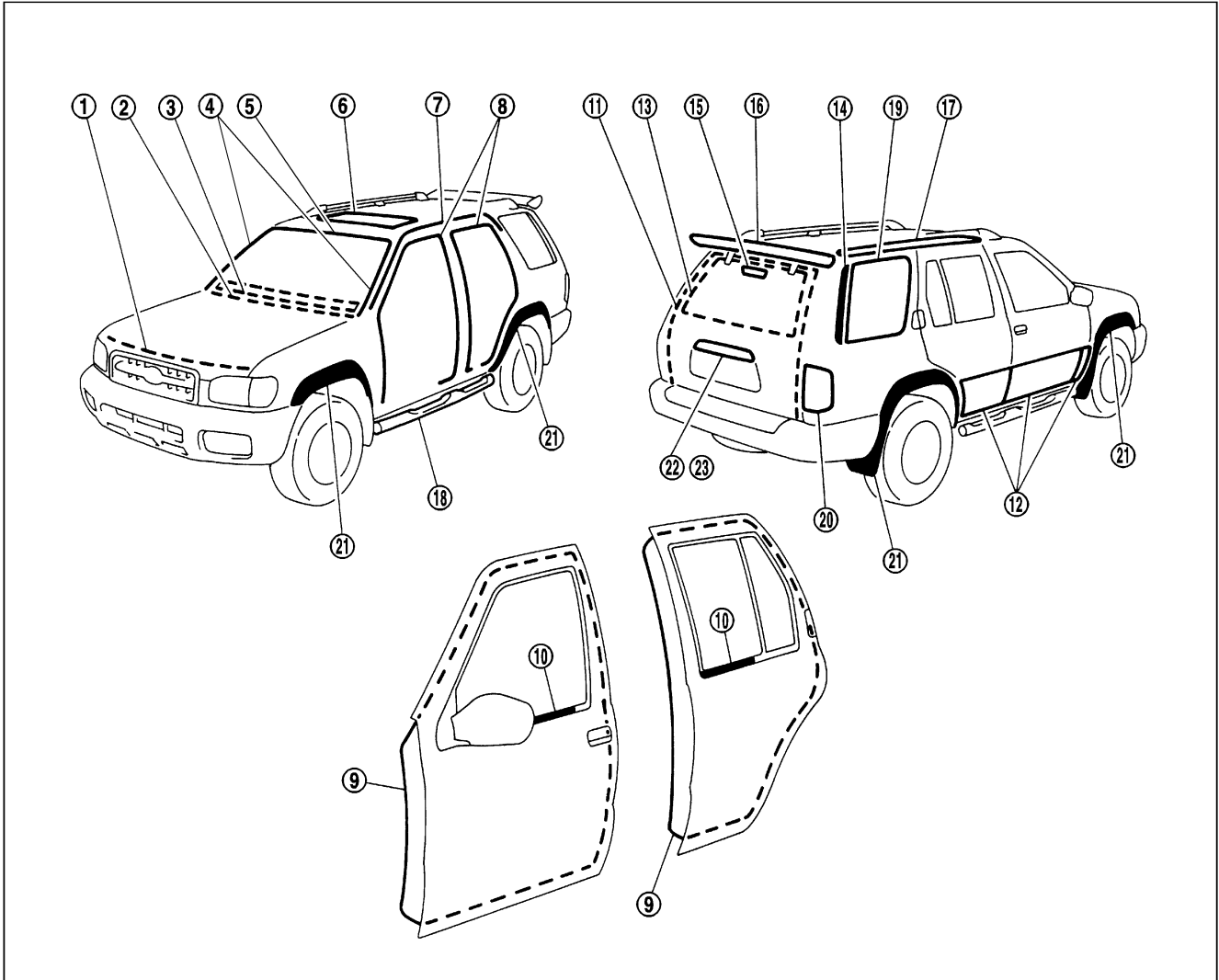
SBT223

# EXTERIOR

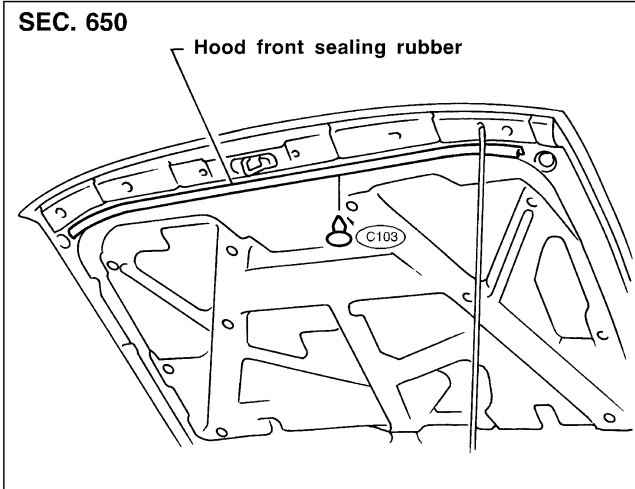
Removal and Installation

## Removal and Installation

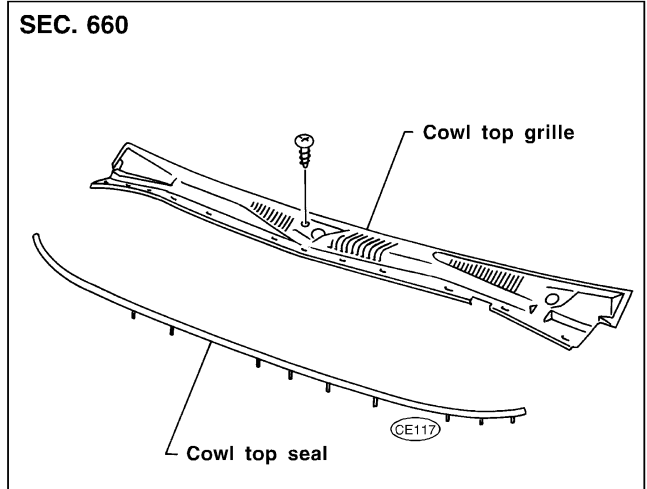
NABT0013



### ① Hood front seal



### ② ③ Cowl top seal and cowl top grille



### ④ Windshield side molding

Mounted with screws.

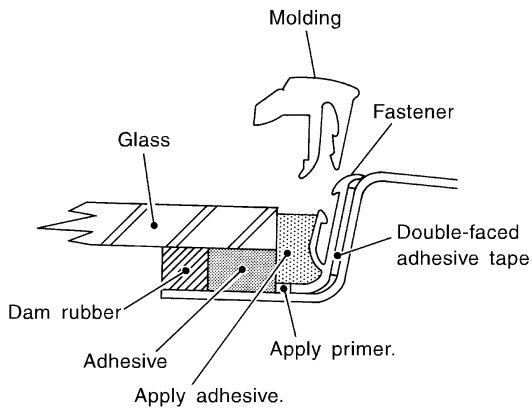
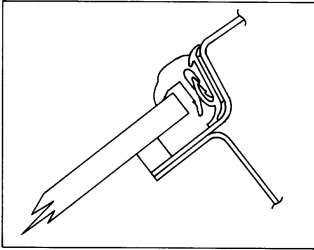
SBT729

GI  
MA  
EM  
LC  
EC  
FE  
CL  
MT  
AT  
TF  
PD  
AX  
SU  
BR  
ST  
RS  
BT  
HA  
SC  
EL  
IDX

⑤ Windshield upper molding

SEC. 720

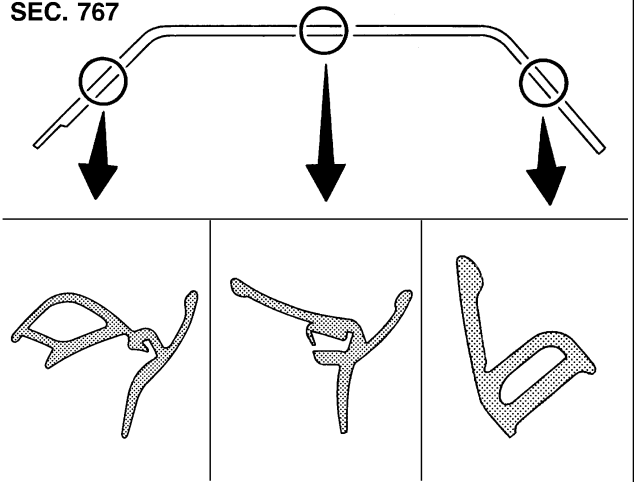
1. Cut off adhesive at glass end.
2. Remove old adhesive from panel surface.
3. Set molding fastener and apply primer to body panel, and apply adhesive to body.



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.

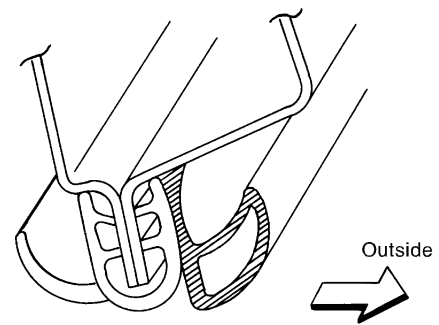
⑦ Drip weatherstrip

SEC. 767



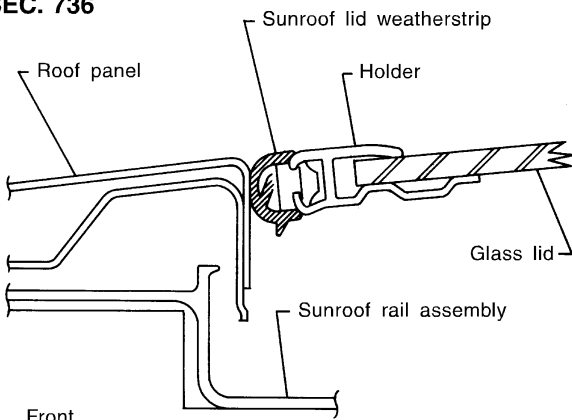
⑧ Body side welt

SEC. 769



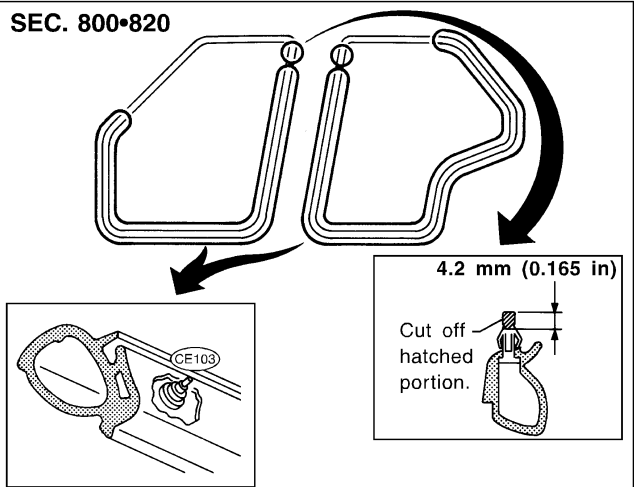
⑥ Sunroof lid weatherstrip

SEC. 736



⑨ Door weatherstrip

SEC. 800•820

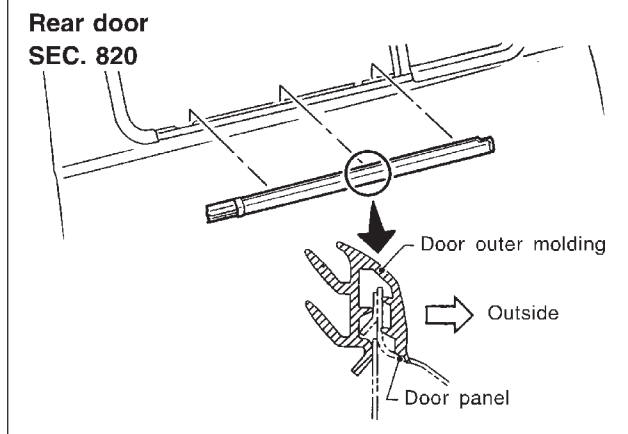
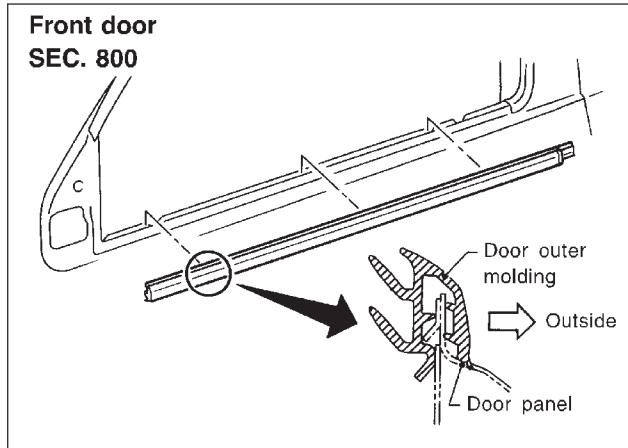


SBT730

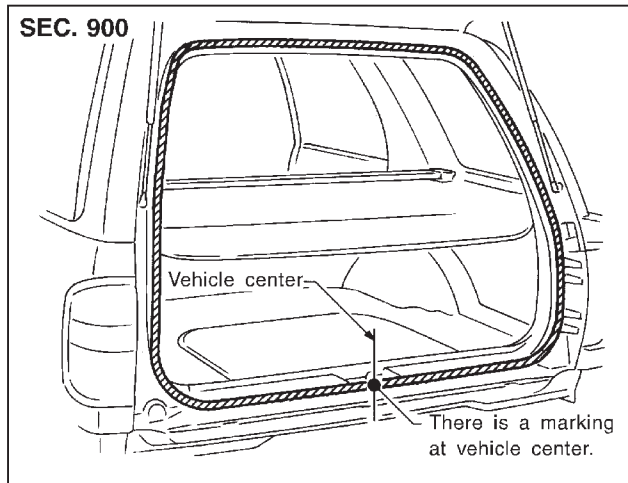
# EXTERIOR

Removal and Installation (Cont'd)

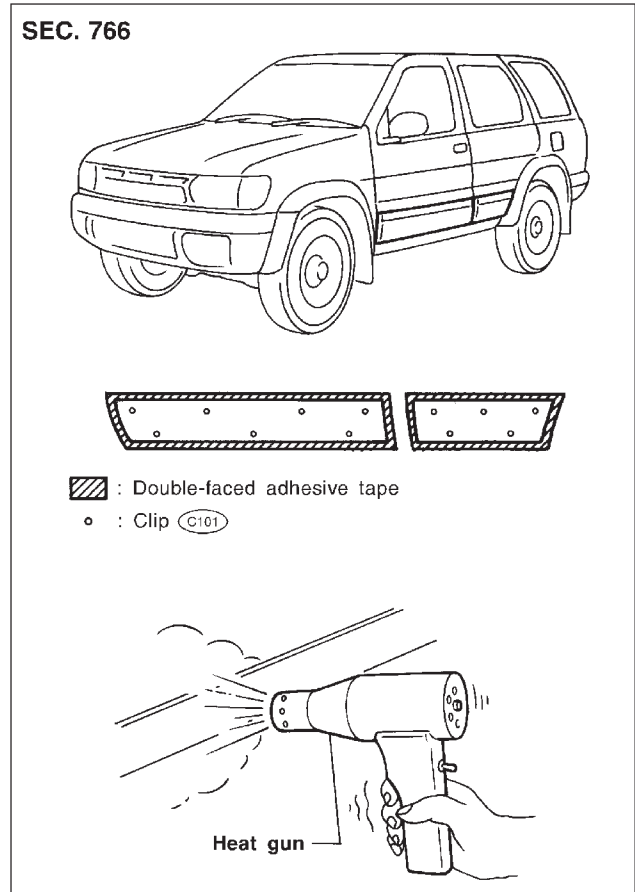
## ⑩ Door outside molding



## ⑪ Back door weatherstrip

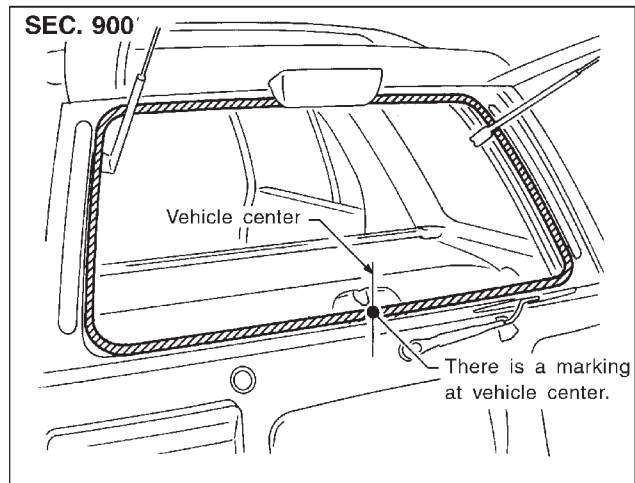


## ⑫ Side guard molding



- With a vehicle coated with Hard Clear Coat, use double-faced 3M adhesive tape Product No. 4210 or equivalent, after priming with 3M primer Product No. N-200 or C-100 or equivalent.

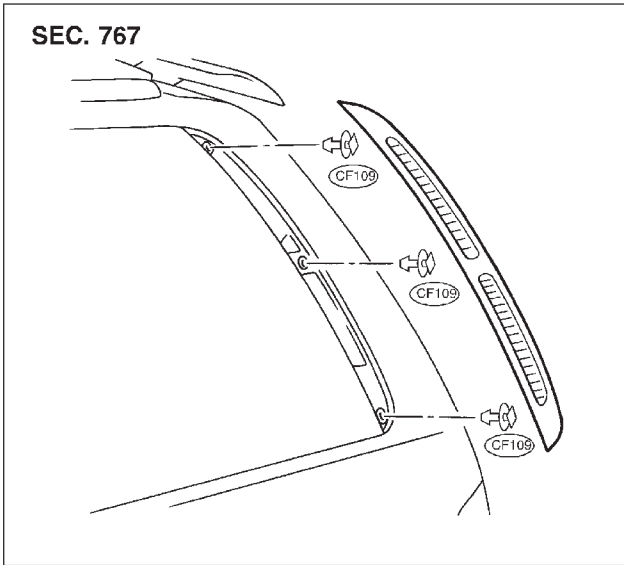
## ⑬ Back door window weatherstrip



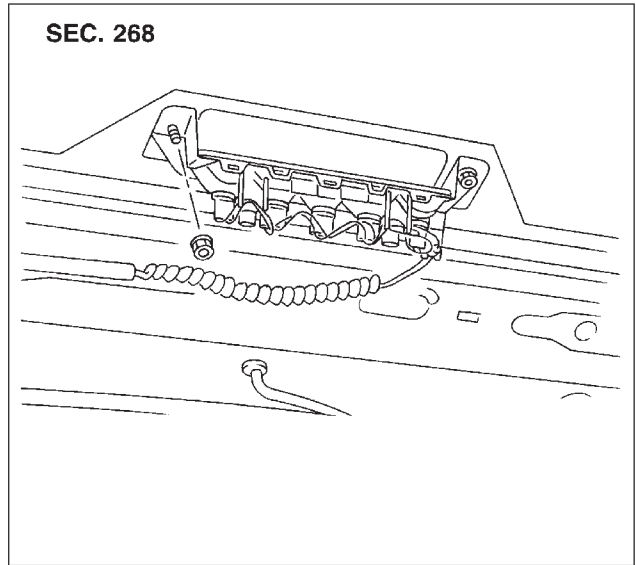
SBT490-A

GI  
MA  
EM  
LC  
EC  
FE  
CL  
MT  
AT  
TF  
PD  
AX  
SU  
BR  
ST  
RS  
BT  
HA  
SC  
EL  
IDX

## ⑭ Air outlet grille

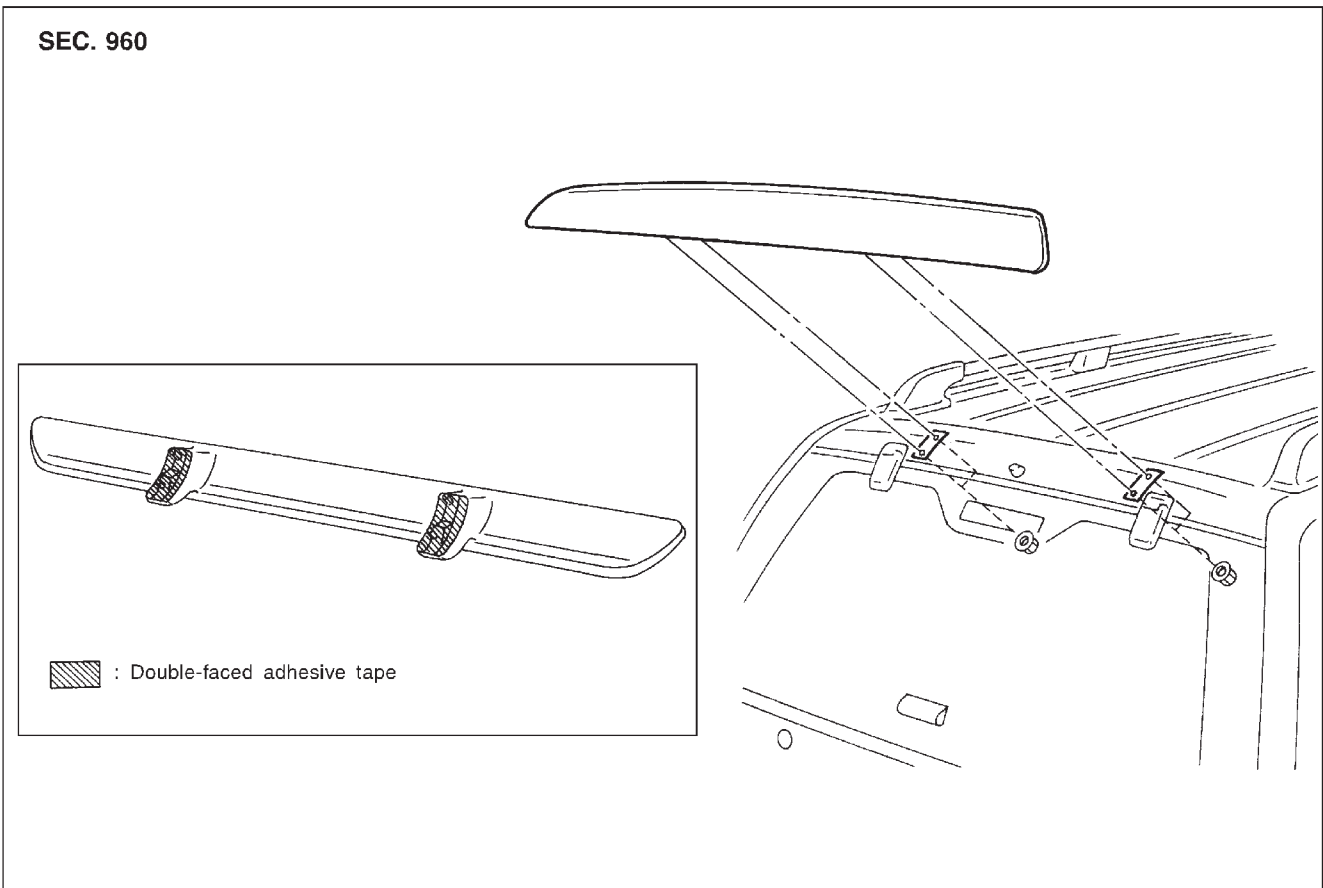


## ⑮ High-mounted stop lamp



## ⑯ Back door deflector

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



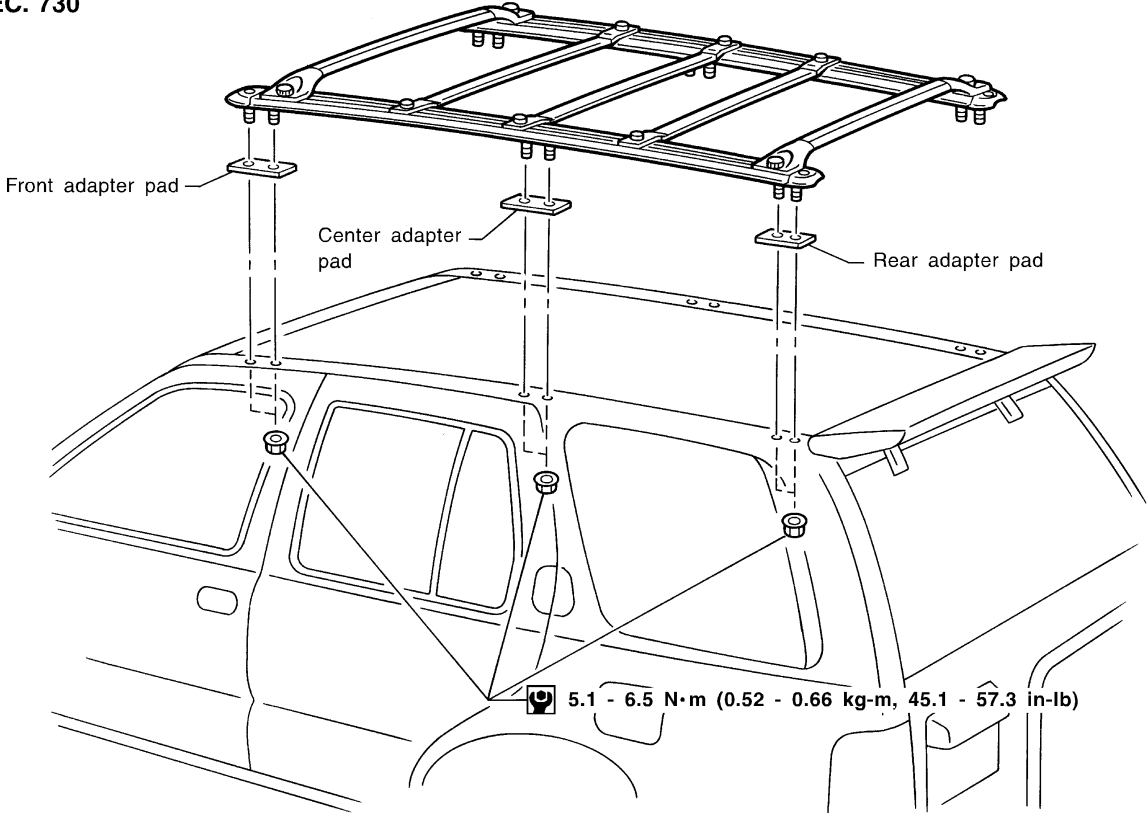
SBT491-A

# EXTERIOR

Removal and Installation (Cont'd)

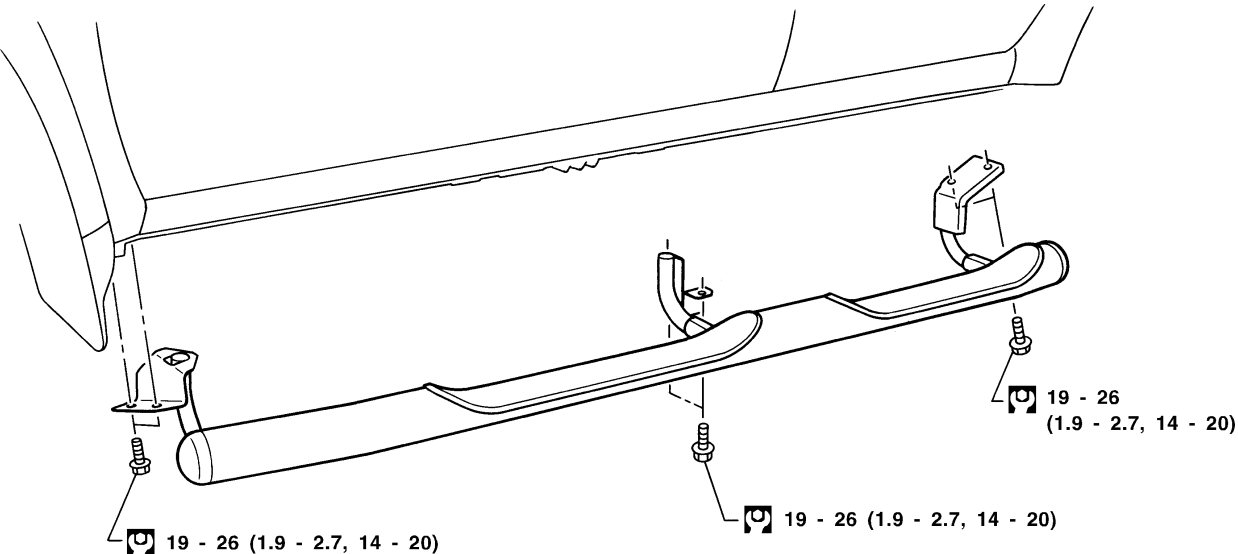
## ⑰ Roof rack

SEC. 730



## ⑱ Side step

SEC. 767



• Pipe type and board type outer steps are only different in shape. Removal and installation method for both types is the same.

: N·m (kg-m, ft-lb)

SBT492-B



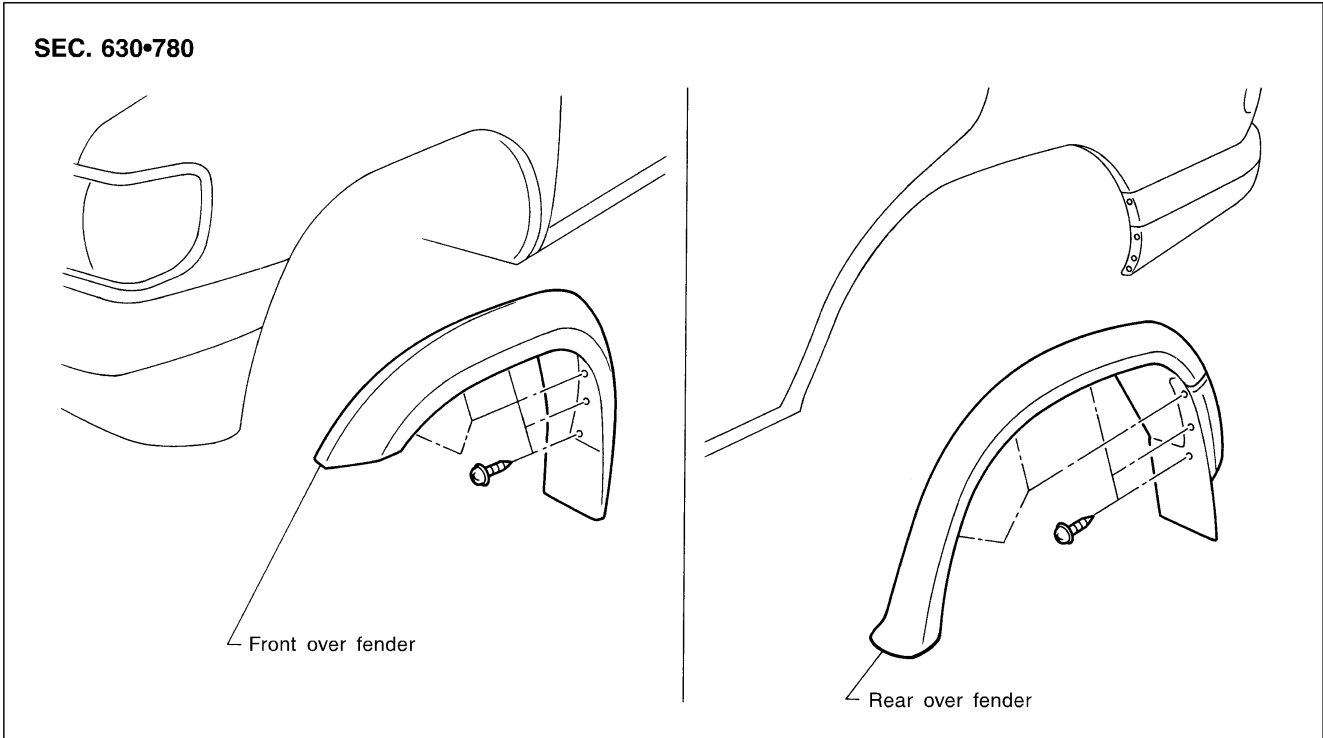
⑱ **Rear side window molding**

Refer to the applicable sections on the preceding pages.

⑳ **Rear combination lamp**

Rear combination lamps are installed with nuts.

㉑ **Over fender**

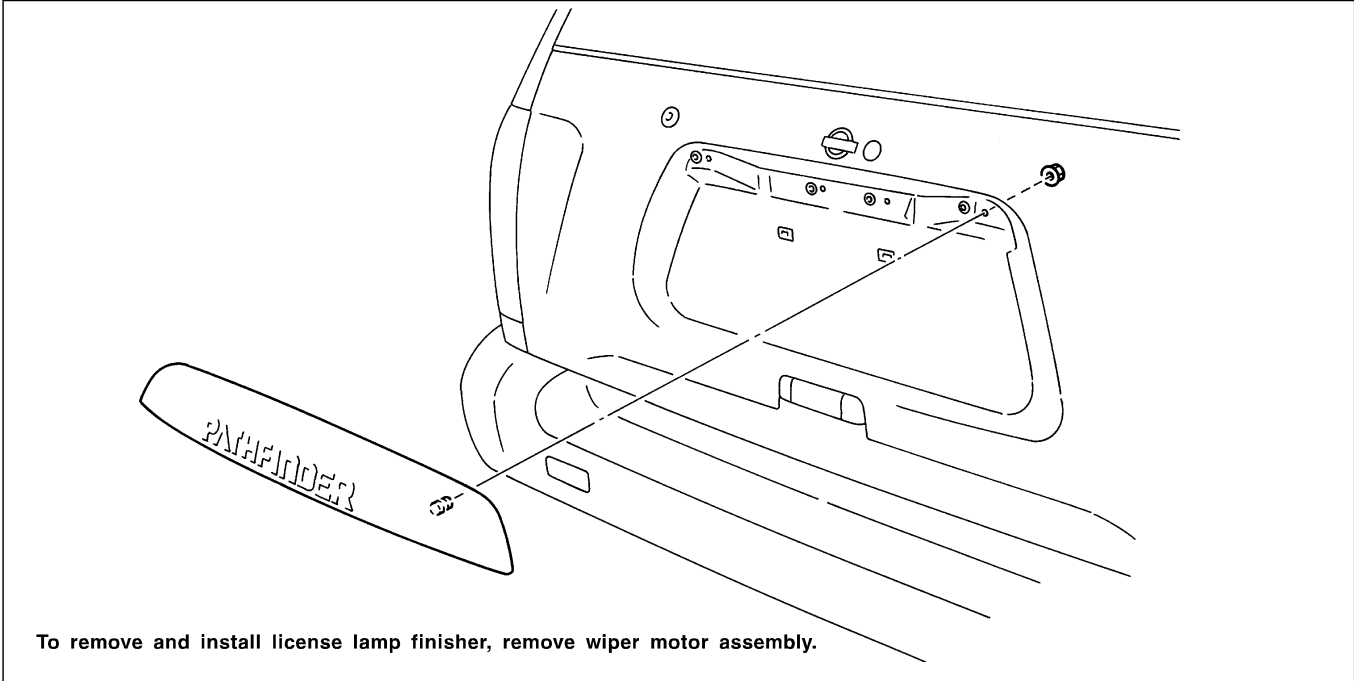


GI  
MA  
EM  
LC  
EC  
FE  
CL  
MT  
AT  
TF  
PD  
AX  
SU  
BR  
ST  
RS  
**BT**  
HA  
SC  
EL  
IDX

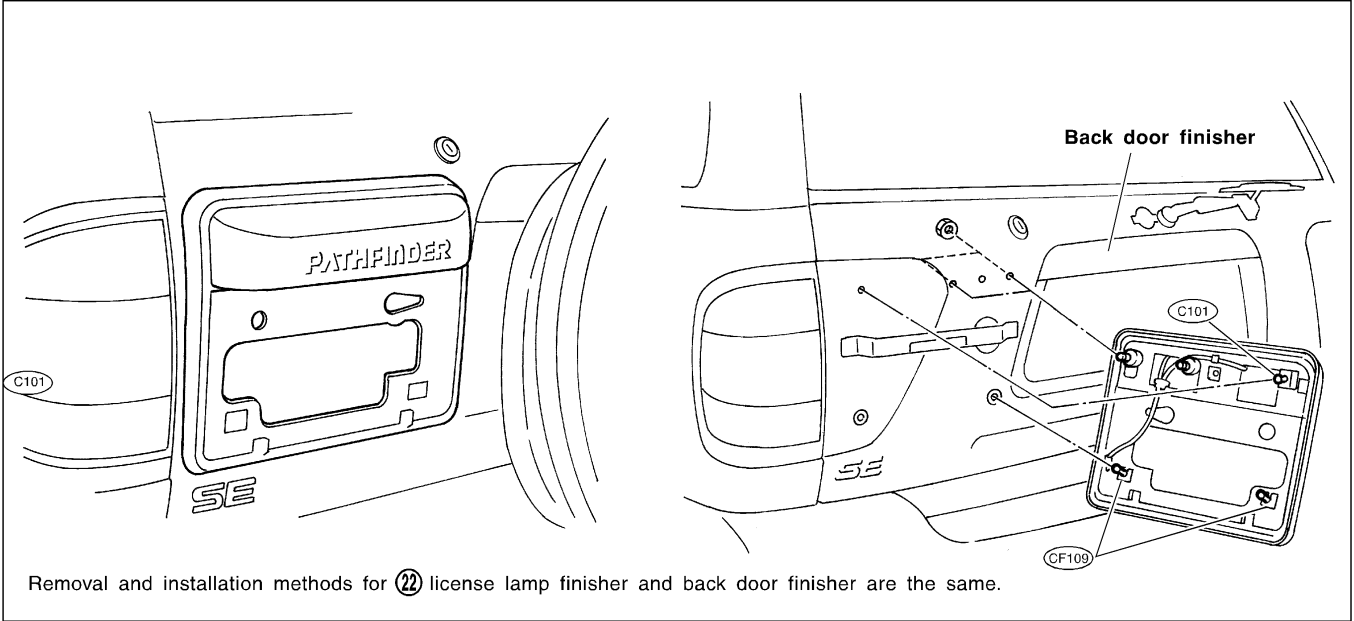
# EXTERIOR

Removal and Installation (Cont'd)

## 22 License lamp finisher (Without spare tire hanger models)



## 23 License lamp finisher (With spare tire hanger models)



SBT731

## Removal and Installation

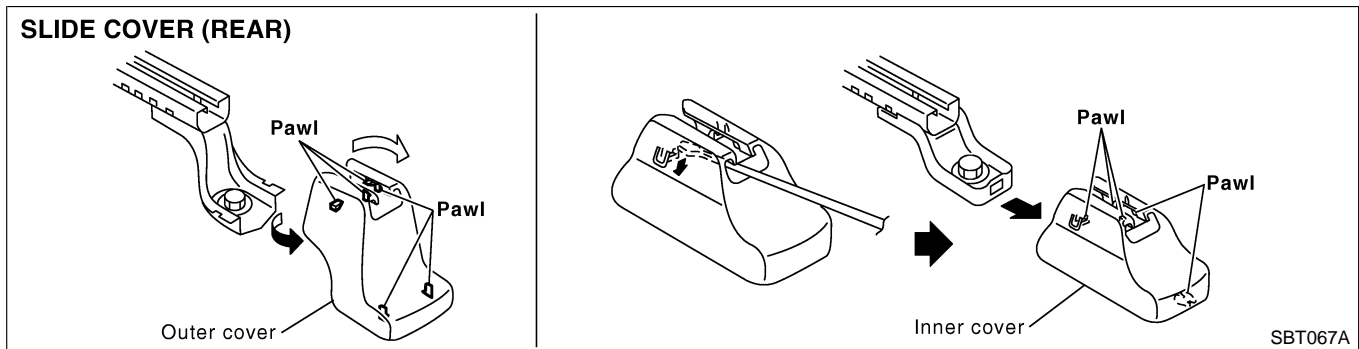
NABT0014

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

★ For Wiring Diagram, refer to EL-215, "POWER SEAT".

**CAUTION:**

- Before removing the front seat, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.
- When checking the power seat circuit for continuity using a circuit tester, do not confuse its connector with the side air bag module connector. Such an error may cause the air bag to deploy.
- Do not drop, tilt, or bump the side air bag module installed in the seat. Always handle it with care.
- Disconnect the side air bag, power seat switch, and heated seat harness connectors from under the seat before removing the seat.
- Disconnect the side air bag harness connector before removing the seat back. (Refer to RS-22, "Side Air Bag Module".)



GI  
MA  
EM  
LC  
EC  
FE  
CL  
MT  
AT  
TF  
PD  
AX  
SU  
BR  
ST  
RS  
BT  
HA  
SC  
EL  
IDX

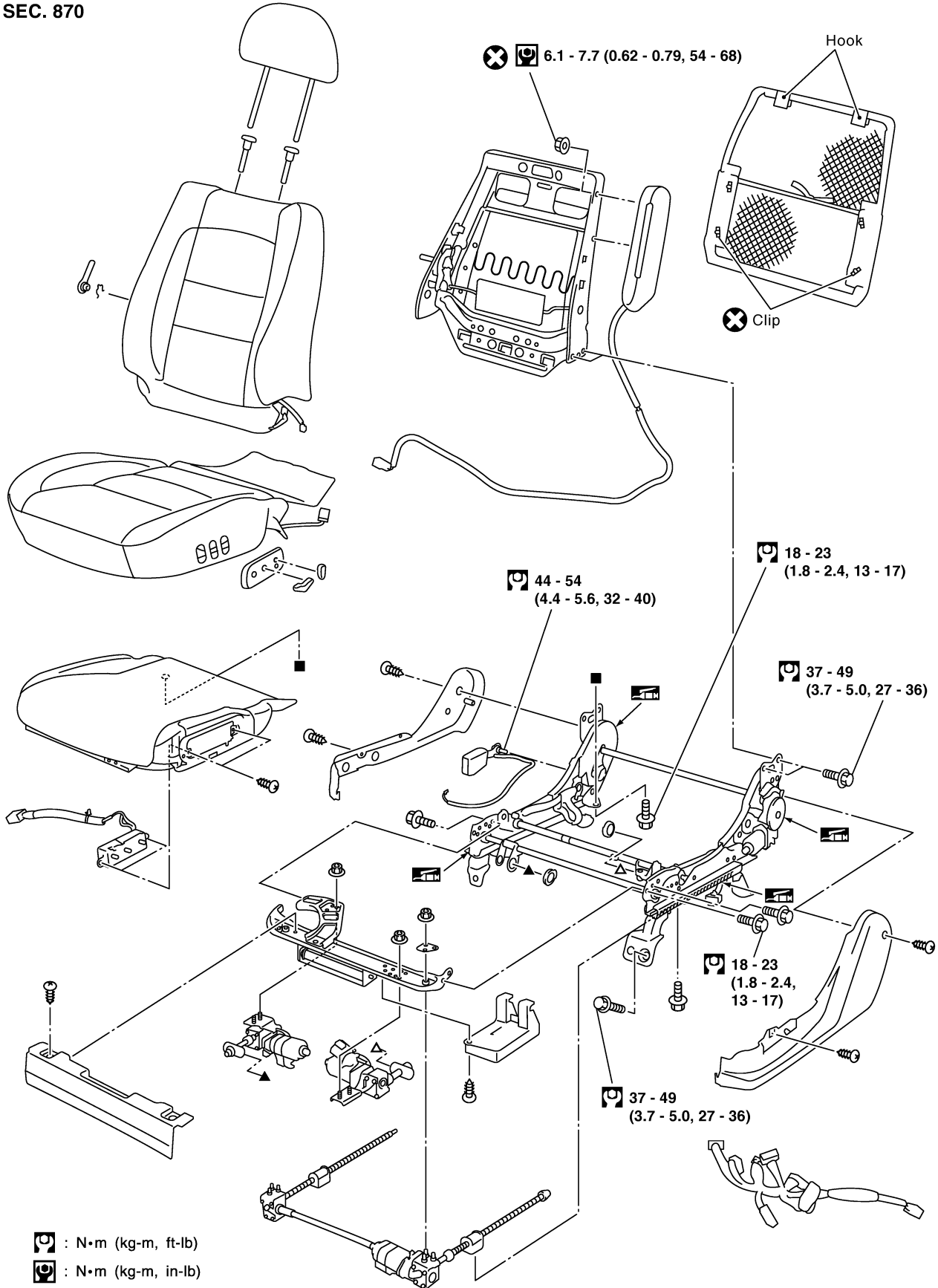
# FRONT SEAT

Removal and Installation (Cont'd)

## POWER SEAT

=NABT0014S01

SEC. 870



SBT019A

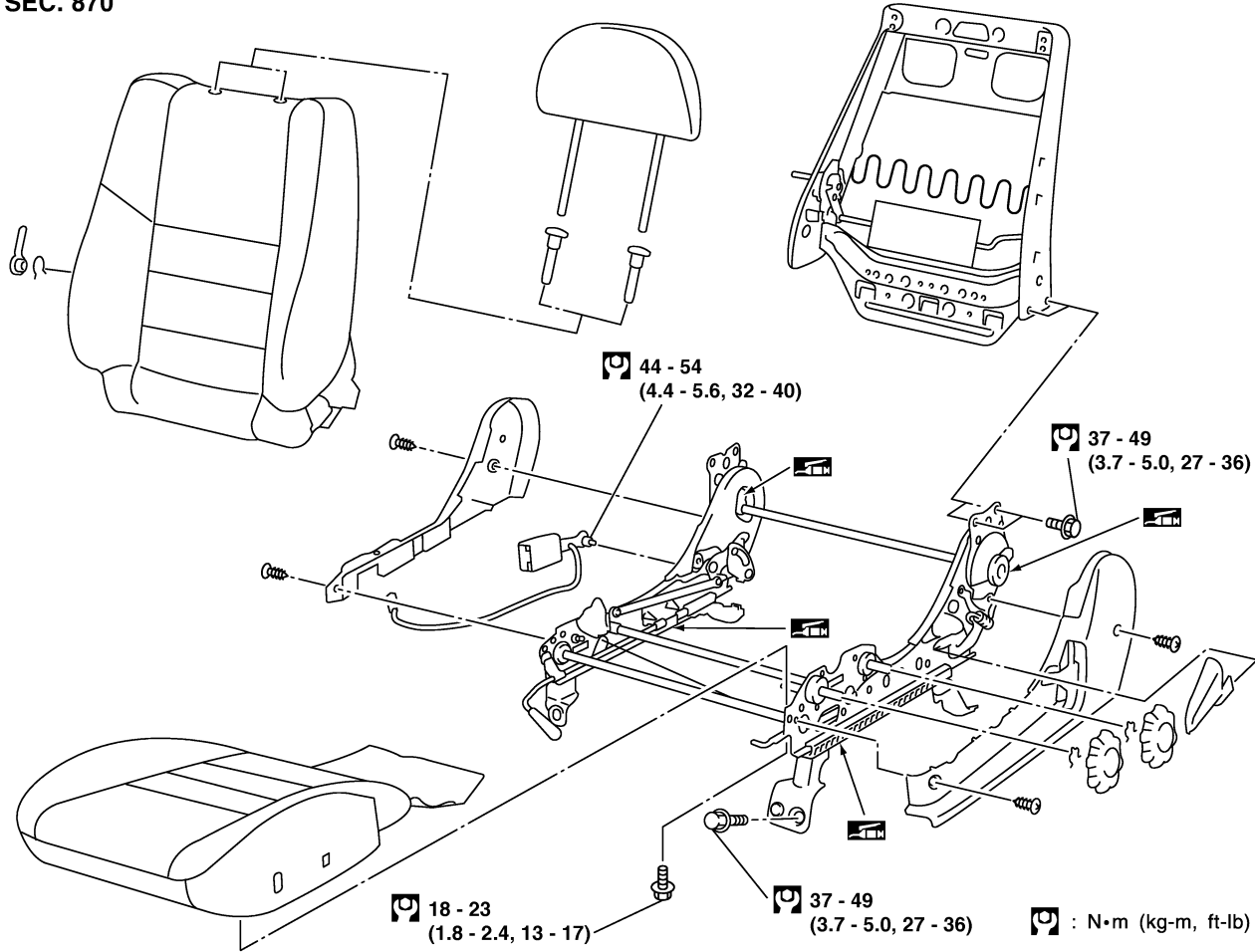
# FRONT SEAT

Removal and Installation (Cont'd)

## MANUAL SEAT

SEC. 870

NABT0014S02



SBT020A

GI  
MA  
EM  
LC  
EC  
FE  
CL  
MT  
AT  
TF  
PD  
AX  
SU  
BR  
ST  
RS  
BT  
HA  
SC  
EL  
IDX

# FRONT SEAT

*Removal and Installation (Cont'd)*

---

## HEATED SEAT

=NABT0014S03

- When handling seat, be extremely careful not to scratch heating unit.
  - To replace heating unit, seat trim and pad should be separated.
  - Do not use any organic solvent, such as thinner, benzene, alcohol, gasoline, etc. to clean trims.
- ★ **For Wiring Diagram, refer to EL-217, "HEATED SEAT".**

# REAR SEAT

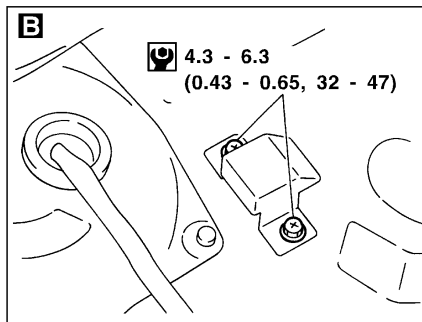
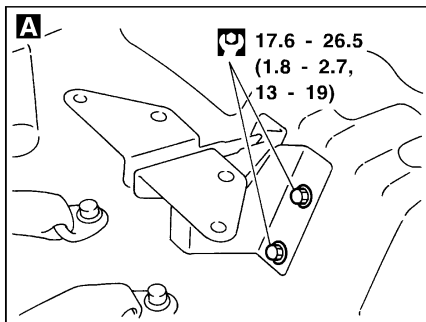
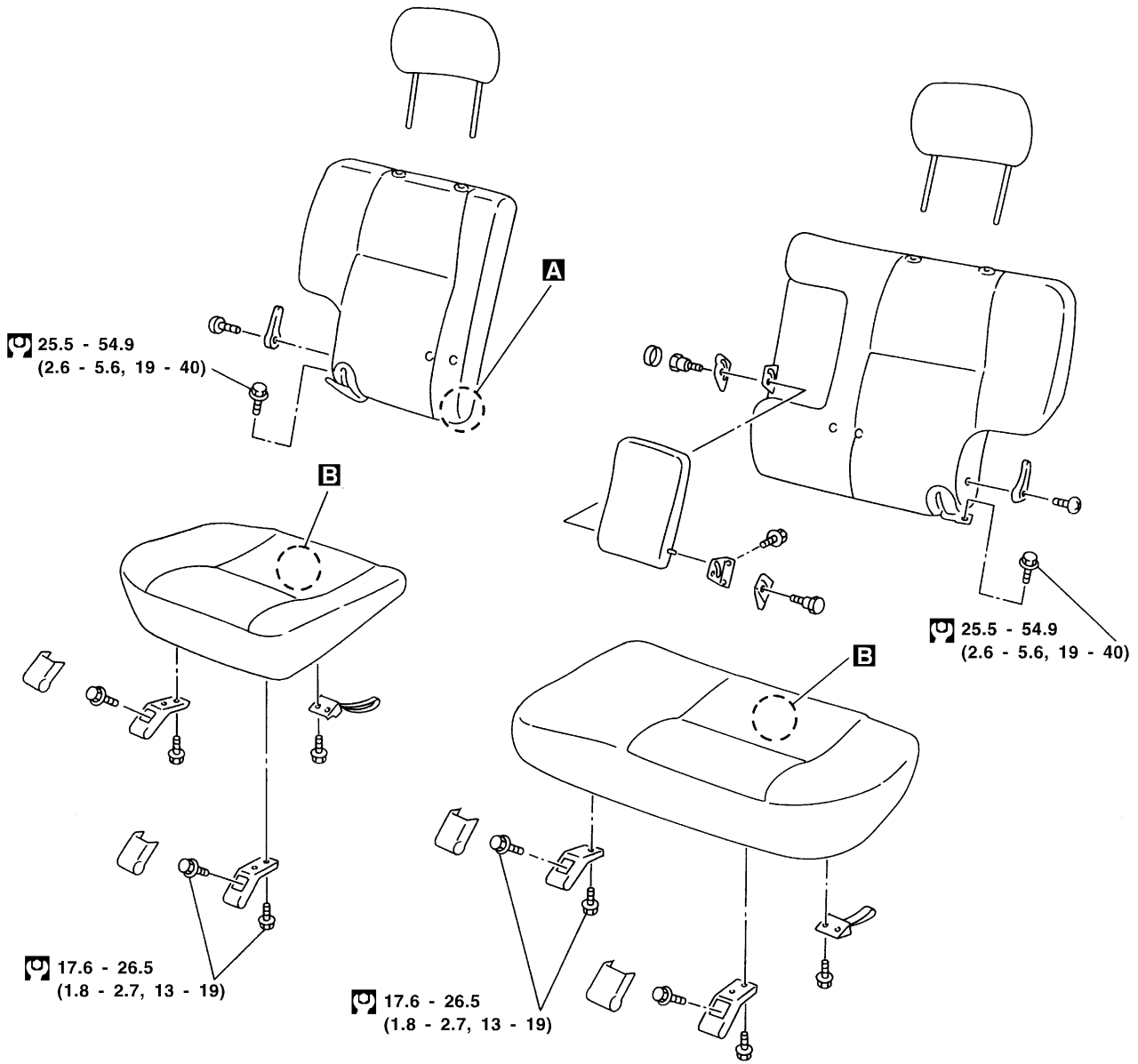
Removal and Installation

## Removal and Installation

NABT0015

SEC. 870

GI  
MA  
EM  
LC  
EC  
FE  
CL  
MT  
AT  
TF  
PD  
AX  
SU  
BR  
ST  
RS  
BT  
HA  
SC  
EL  
IDX



: N·m (kg-m, in-lb)  
 : N·m (kg-m, ft-lb)

SBT190-B

# SUNROOF

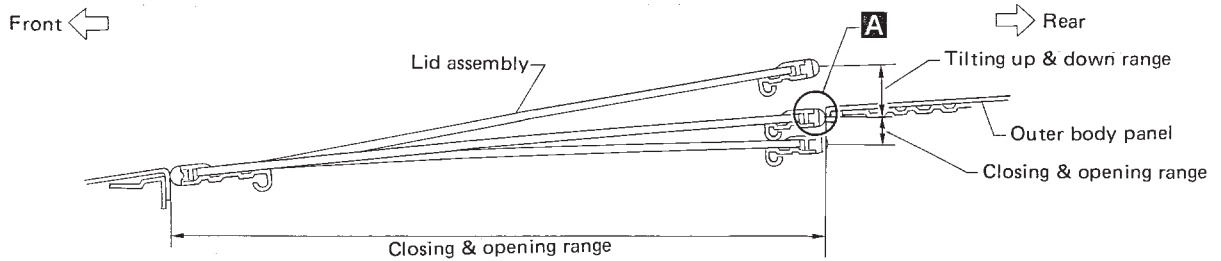
Adjustment

## Adjustment

NABT0016

**Install motor & limit SW assembly and sunroof rail assembly in the following sequence:**

1. Arrange equal lengths of link and wire assemblies on both sides of sunroof opening.
2. Connect sunroof connector to vehicles harness.
3. Set lid assembly to fully closed position **A** by operating OPEN switch and TILT switch. After the lid has closed all the way, keep pushing the tiling switch toward tilt DOWN for more than 1 second.
4. Fit outer side of lid assembly to the surface of roof on body outer panel.
5. Press TILT-UP switch to check lid assembly for normal tilting.
6. Check sunroof lid assembly for normal operations (tilt-up, tilt-down, open, and close).



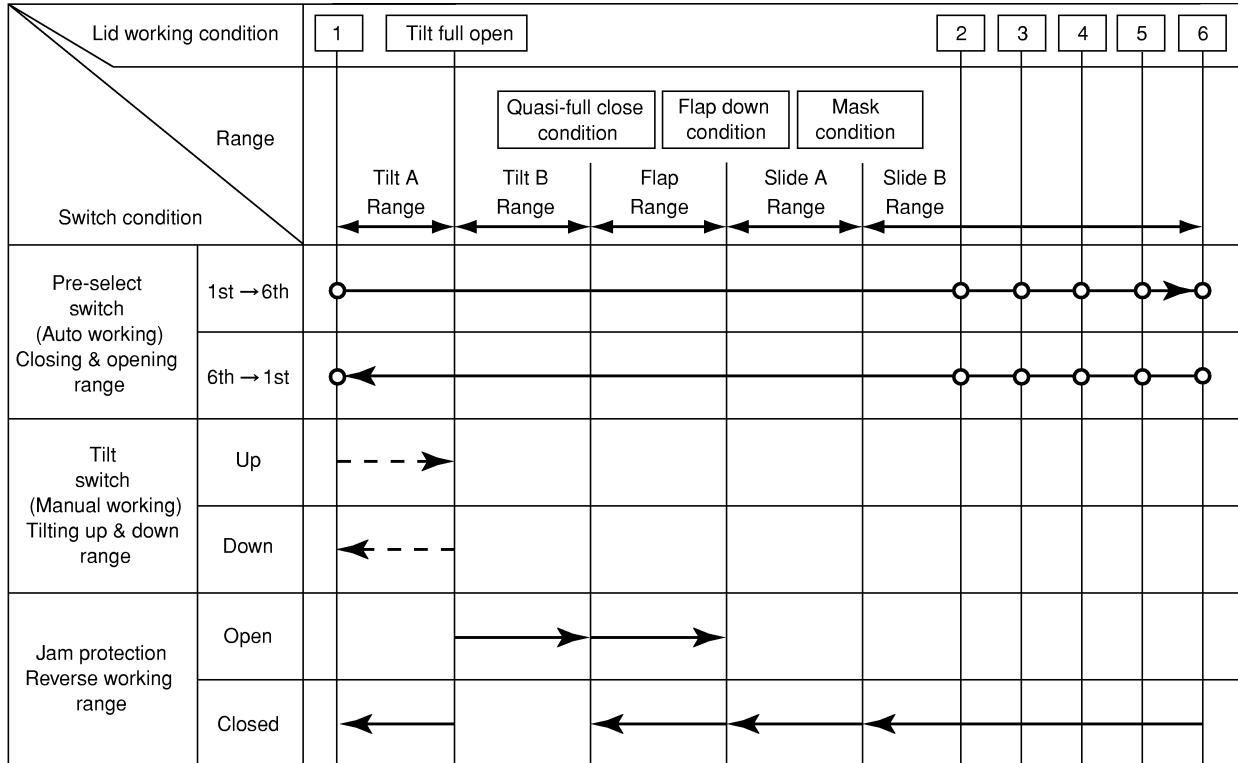
SBF920F



## Contents of Working

=NABT0034

GI  
MA  
EM  
LC  
EC  
FE  
CL  
MT  
AT  
TF  
PD  
AX  
SU  
BR  
ST  
RS  
BT  
HA  
SC  
EL  
IDX



- Pre-select switch is set at 6th level.
- 1st level: Closed
- 6th level: Full open

SBT254A

Condition	Tilt		Pre-select	
	Manual		Auto	
Ignition (timer)	Normal working	Reverse working	Normal working	Reverse working
ON	○	X	○*1	○
OFF	X	X	X	X*2

○: Working

X: Not working

\*1: Auto doesn't work if the position is not at the initial starting position.

\*2: The motor keeps moving in reverse motion until finishing the reverse working.

# SUNROOF

## Contents of Switch Working

=NABT0035

Priority of each switch is as follows.

		Tilt switch		Slide switch (Pre-select)	
		Up	Down	Open	Close
Tilt A range	Tilting up/down & sliding open/close	Motor stop	←	Follow switch input	←
	Reverse turning	Reverse turn continued	←	Reverse turn continued	←
Tilt B range	Sliding open	Operate to tilt full open and stop	←	Follow switch input	←
	Sliding close	After continued operation, stop at tilt full open position	←	Follow switch input	←
	Reverse turning	Reverse turn continued	←	Reverse turn continued	←
Flap range	Sliding open	After continued operation, stop at flap down position	←	Follow switch input	←
	Sliding close	Operate to flap down position and stop	←	Follow switch input	←
	Reverse turning	Reverse turn continued	←	Reverse turn continued	←
Slide range	Sliding open	Motor stop	←	Follow switch input	←
	Sliding close	Motor stop	←	Follow switch input	←
	Reverse turning	Reverse turn continued	←	After reverse turn, continued, follow switch input	Reverse turn continued

## JAM PROTECTION

NABT0035S01

Reverse working is as follows.

	Operation direction	Reverse turn distance
Tilt A range	Open operation	Tilt full open position
Tilt B & flap range	Open operation	Tilt full open position
Flap range	Close operation	Flap down position
Slide A range	Close operation	125 mm (4.92 in) min.
Slide B range	Close operation	125 mm (4.92 in) min. (*1)

(\*1): Full open position [In case of reverse start position, full open position is within 125 mm (4.92 in).]

### CAUTION:

Don't pinch a foreign object or your body on purpose.

## Removal and Installation

NABT0017

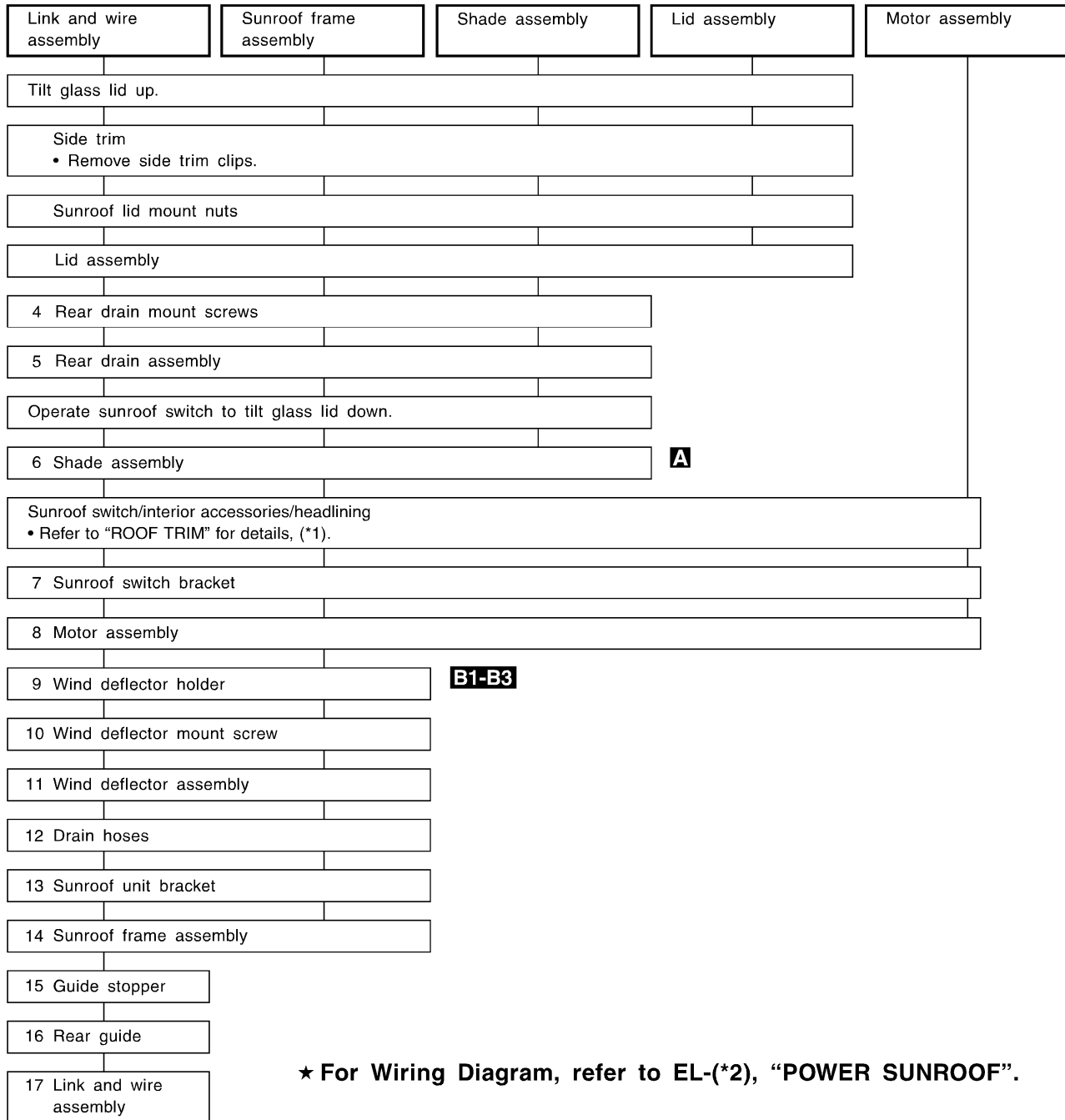
- After any adjustment, check sunroof operation and lid alignment.
- Handle finisher plate and glass lid with care so not to cause damage.
- It is desirable for easy installation to mark each point before removal.

### CAUTION:

- Always work with a helper.
- Before removal, fully close the glass lid assembly, then after removal, do not move motor assembly.

# SUNROOF

Removal and Installation (Cont'd)



★ For Wiring Diagram, refer to EL-(\*2), "POWER SUNROOF".

SBT515-D

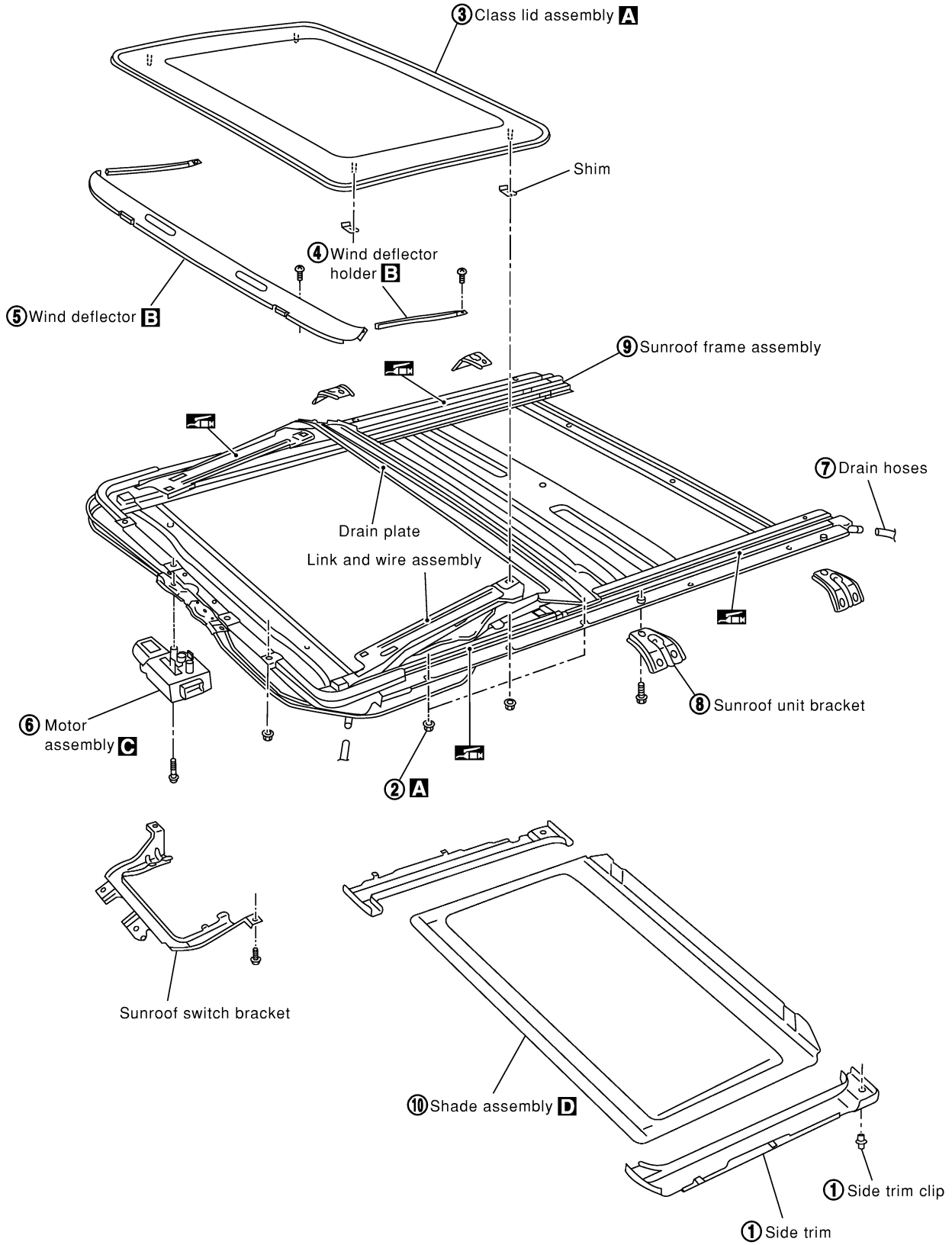
\*1 BT-34

\*2 EL-208

GI  
MA  
EM  
LC  
EC  
FE  
CL  
MT  
AT  
TF  
PD  
AX  
SU  
BR  
ST  
RS  
BT  
HA  
SC  
EL  
IDX

# SUNROOF

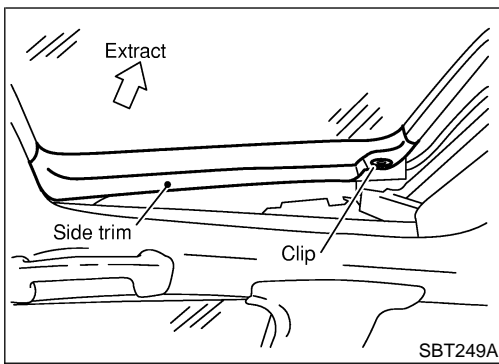
Removal and Installation (Cont'd)



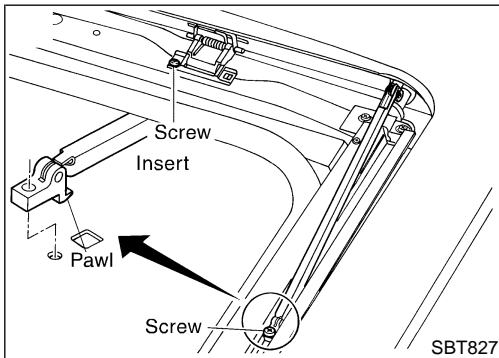
SBT252A

# SUNROOF

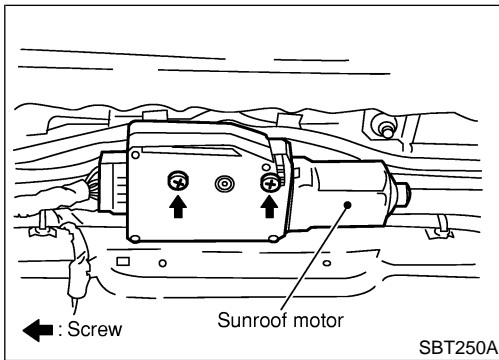
Removal and Installation (Cont'd)



**A** Record the number of shims placed between glass lid assembly and link and wire assembly. Remove securing nuts and glass lid assembly.



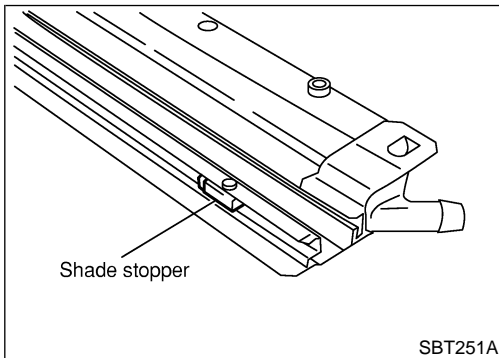
**B** Remove screws from left and right sides of each wind deflector holder. Extract pawls through rail holes, then remove left and right sides of wind deflector holder. Remove screws from front end of sunroof unit. Extract pawls through frame holes, then remove wind deflector from frame assembly.



**C**

**CAUTION:**

- Before removing sunroof motor, make sure that sunroof is fully closed.
- After removing sunroof motor, never attempt to rotate sunroof motor as a single unit.
- Power supply to the motor is off when removing sunroof motor and vehicle harness or battery. Initialize at starting position.



**D** Remove shade stoppers (2 points) from rear end of sunroof frame assembly. Remove sun shade from rear end of sunroof frame assembly.

GI  
MA  
EM  
LC  
EC  
FE  
CL  
MT  
AT  
TF  
PD  
AX  
SU  
BR  
ST  
RS  
BT  
HA  
SC  
EL  
IDX

# SUNROOF

Trouble Diagnoses

## Trouble Diagnoses DIAGNOSTIC TABLE Sunroof is malfunctioning

=NABT0018

NABT0018S01

Procedure		Malfunctioning item
1. Check power supply. (*1) OK	NG	Replace battery.
2. Is the position initialized at starting position? Yes	No	Initialize the sunroof switch.
3. Check sunroof switch. ● Is correct voltage value or resistance value at each position? ● Does occur chattering? OK	NG	Replace the sunroof switch.

Replace sunroof motor.

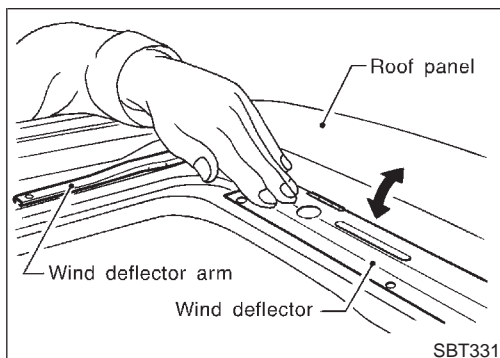
\*1: If voltage between terminal 1 (Input voltage) and terminal 8 (ground) of sunroof motor is less than approx. 8V, do not operate.

### NOTE:

For diagnosing electric problem, refer to EL-211, "POWER SUN-ROOF".

		Check items (Components)				
		Wind deflector	Adjustment	Drain hoses	Weatherstrip	Link and wire assembly
	Reference page	BT-54	BT-55	BT-56	BT-57	BT-57
Symptom	Excessive wind noise	1	2		3	
	Water leaks		1	2	3	
	Sunroof rattles		1	4	2	3
	Excessive operation noise		1		2	3

The numbers in this table mean checking order.



### WIND DEFLECTOR

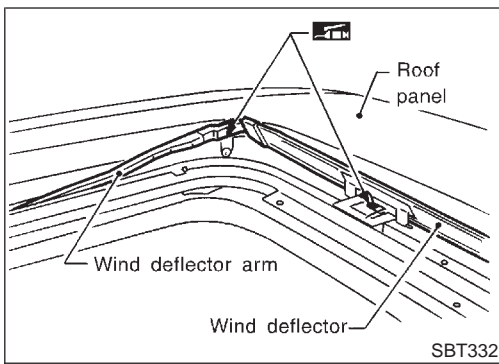
NABT0018S02

1. Open lid.
2. Check visually for proper installation.
3. Check to ensure a proper amount of petroleum jelly has been applied to wind deflector connection points; apply if necessary.

BT-54

# SUNROOF

Trouble Diagnoses (Cont'd)

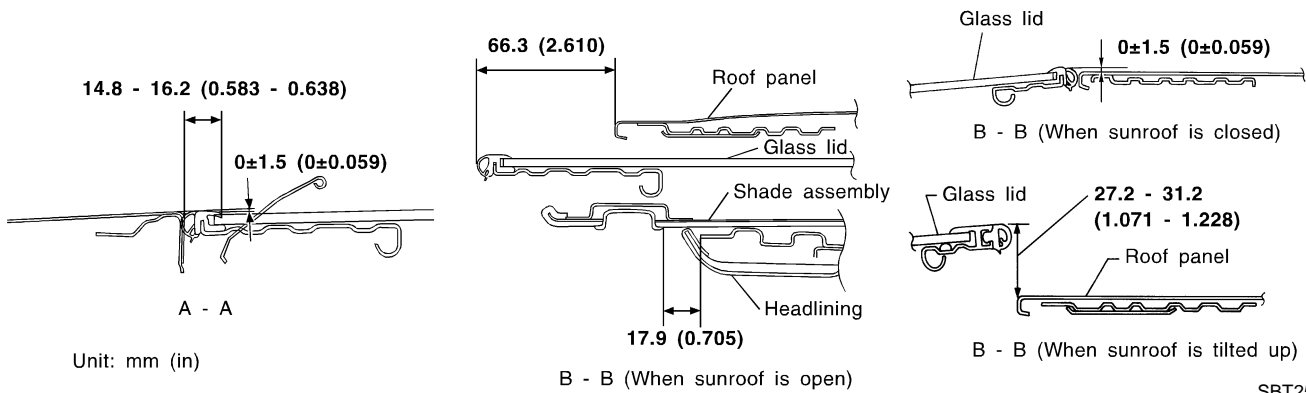
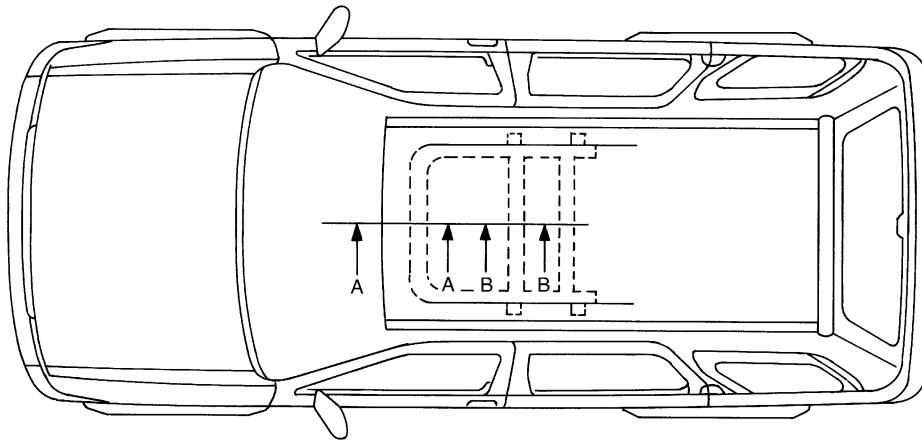


4. Check that wind deflector is properly retracted by hand. If it is not, remove and visually check condition. (Refer to removal procedures, BT-50.) If wind deflector is damaged, replace with new one. If wind deflector is not damaged, re-install properly.

## ADJUSTMENT

NABT0018S03

### SEC. 736



If any gap or height difference between glass lid and roof is found, check glass lid fit and adjust as follows:

### Gap Adjustment

NABT0018S0301

1. Open shade assembly.
2. Tilt glass lid up then remove side trim.
3. Loosen glass lid securing nuts (3 each on left and right sides), then tilt glass lid down.
4. Adjust glass lid from outside of vehicle so it resembles "A-A" as shown in the figure above.
5. Tilt glass lid up and down until it is adjusted to "B-B" (When sunroof is closed) as shown in the figure above.
6. After adjusting glass lid, tilt glass lid up and tighten nuts.
7. Tilt glass lid up and down several times to check that it moves smoothly.

GI  
MA  
EM  
LC  
EC  
FE  
CL  
MT  
AT  
TF  
PD  
AX  
SU  
BR  
ST  
RS  
BT  
HA  
SC  
EL  
IDX

# SUNROOF

Trouble Diagnoses (Cont'd)

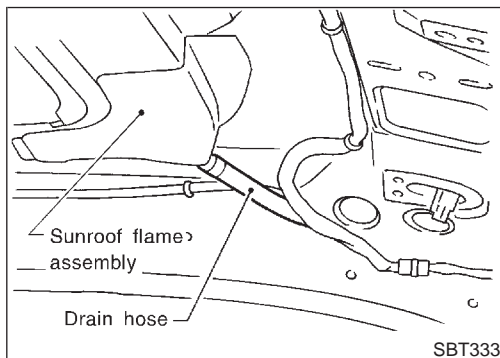
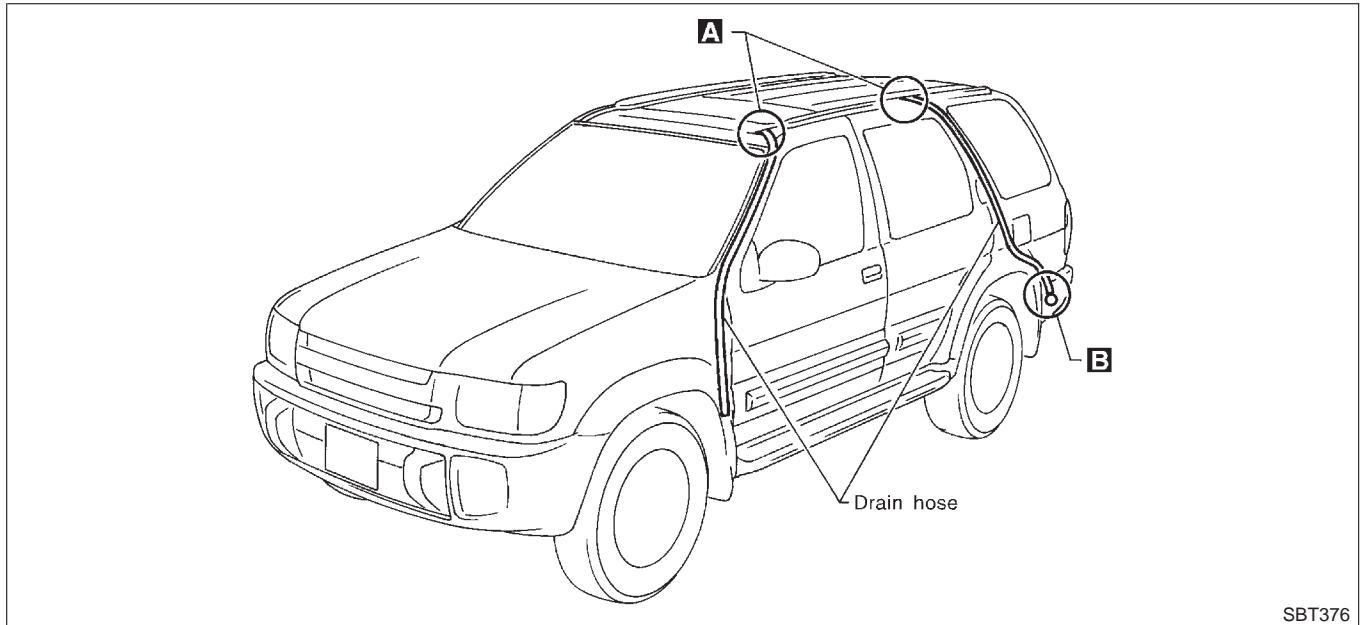
## Height Difference Adjustment

NABT0018S0302

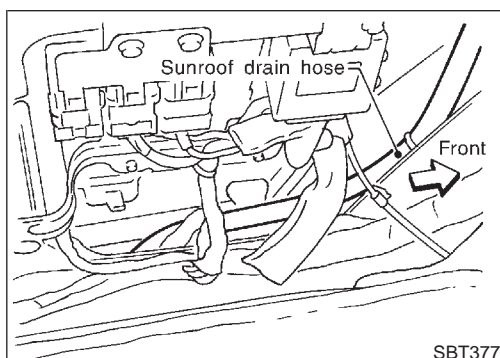
1. Tilt glass lid up and down.
2. Check height difference between roof panel and glass lid to see if it is as "A-A" as shown in the figure above.
3. If necessary, adjust it by using one of following procedures.
  - Adjust by adding or removing adjustment shim(s) between glass lid and link assembly.
  - If glass lid protrudes above roof panel, add shim(s) or plain washer(s) at sunroof mounting bracket or stud bolt locations to adjust sunroof installation as required.

## DRAIN HOSES

NABT0018S04



1. Remove headlining to access drain hose connections. (Refer to "Removal and Installation" in "ROOF TRIM", BT-34, for detail.)
2. Check visually for proper connections, damage or deterioration. **A** (The figure shows only the front side.)



3. If leakage occurs around luggage room, remove luggage room side trim and check connecting area. Check for proper connection, damage or tear. **B**
4. Remove drain hoses and check visually for any damage, cracks, or deterioration.
5. Pour water into drain hoses and find damaged portion.
  - If any damaged portion is found at each step, replace the damaged part.



## WEATHERSTRIP

NABT0018S05

- In the case of leakage around glass lid, close glass lid and pour water over glass lid to find damaged or gap portion, remove glass lid assembly. (Refer to removal procedures, BT-50, for details.)
- Check weatherstrip visually for any damage, deterioration, or flattening.
- If any damage is found, replace weatherstrip.

### CAUTION:

Do not remove weatherstrip except when replacing, or filling up butyl seal.

## LINK AND WIRE ASSEMBLY

NABT0018S06

### NOTE:

Before replacing a suspect part, carefully ensure it is the source of noise being experienced.

1. Visually check to determine if a sufficient amount of petroleum jelly has been applied to wire or rail groove. If not, add petroleum jelly as required.
2. Check wire for any damage or deterioration. If any damage is found, remove rear guide (refer to removal procedures, BT-50 for details), then replace wire.

GI

MA

EM

LC

EC

FE

CL

MT

AT

TF

PD

AX

SU

BR

ST

RS

**BT**

HA

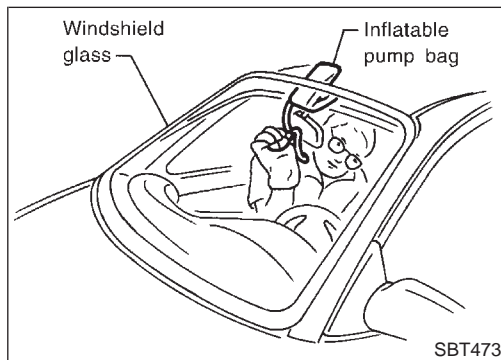
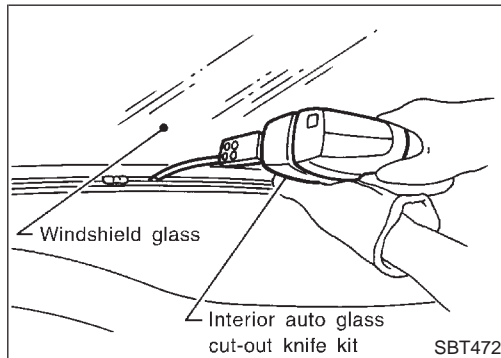
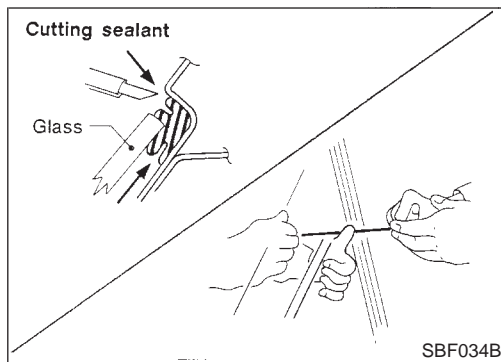
SC

EL

IDX

# WINDSHIELD AND WINDOWS

## Removal and Installation



## Removal and Installation

NABT0019

### REMOVAL

NABT0019S01

After removing moldings, remove glass using piano wire or power cutting tool and an inflatable pump bag.

#### WARNING:

When cutting the glass from the vehicle, always wear safety glasses and heavy gloves to help prevent glass splinters from entering your eyes or cutting your hands.

#### CAUTION:

- Be careful not to scratch the glass when removing.
- Do not set or stand the glass on its edge. Small chips may develop into cracks.

### INSTALLATION

NABT0019S02

- Use a genuine Nissan Urethane Adhesive Kit or equivalent and follow the instructions furnished with it.
- While the urethane adhesive is curing, open a door window. This will prevent the glass from being forced out by passenger compartment air pressure when a door is closed.
- The molding must be installed securely so that it is in position and leaves no gap.
- Inform the customer that the vehicle should remain stationary until the urethane adhesive has completely cured (preferably 24 hours). Curing time varies with temperature and humidity.

#### WARNING:

- Keep heat and open flames away as primers and adhesive are flammable.
- The materials contained in the kit are harmful if swallowed, and may irritate skin and eyes. Avoid contact with the skin and eyes.
- Use in an open, well ventilated location. Avoid breathing the vapors. They can be harmful if inhaled. If affected by vapor inhalation, immediately move to an area with fresh air.
- Driving the vehicle before the urethane adhesive has completely cured may affect the performance of the windshield in case of an accident.

#### CAUTION:

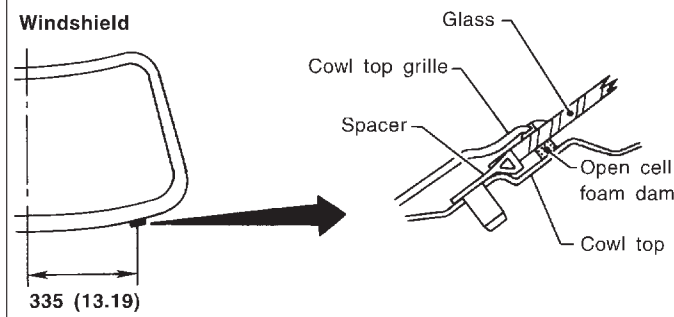
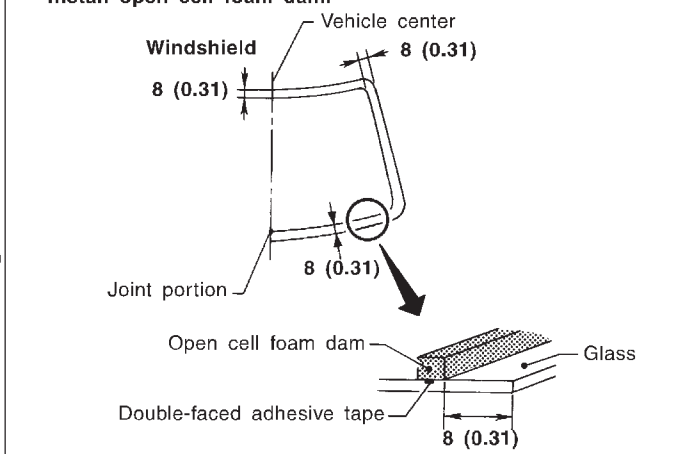
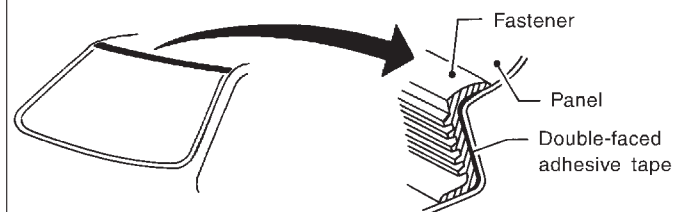
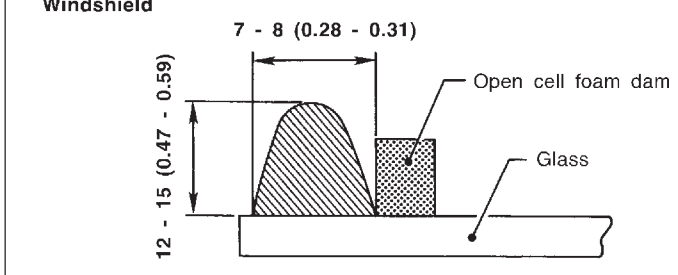
- Do not use an adhesive which is past its usable term. Shelf life of this product is limited to six months after the date of manufacture. Carefully adhere to the expiration or manufacture date printed on the box.
- Keep primers and adhesive in a cool, dry place. Ideally, they should be stored in a refrigerator.
- Do not leave primers or adhesive cartridge unattended with their caps open or off.
- The vehicle should not be driven for at least 24 hours or until the urethane adhesive has completely cured. Curing time varies depending on temperature and humidities. The curing time will increase under higher temperatures and lower humidities.

# WINDSHIELD AND WINDOWS

Removal and Installation (Cont'd)

## WINDSHIELD

NABT0019S03

<p><b>Body side</b> Install spacer to panel.</p> 	<p><b>Glass side</b> Install open cell foam dam.</p> 
<p><b>Install molding fastener.</b> When installing it, heat body panel and fastener to approx. 30 to 40°C (86 to 104°F).</p> 	<p><b>Apply urethane adhesive evenly.</b> <b>Windshield</b></p>  <p>Unit: mm (in)</p>

SBT191-A

### Repairing Water Leaks for Windshield

NABT0019S0301

Leaks can be repaired without removing and reinstalling glass. **If water is leaking between the urethane adhesive material and body or glass, determine the extent of leakage. This can be done by applying water to the windshield area while pushing glass outward.**

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

GI  
MA  
EM  
LC  
EC  
FE  
CL  
MT  
AT  
TF  
PD  
AX  
SU  
BR  
ST  
RS  
BT  
HA  
SC  
EL  
IDX

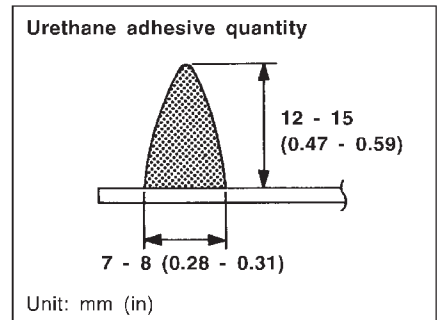
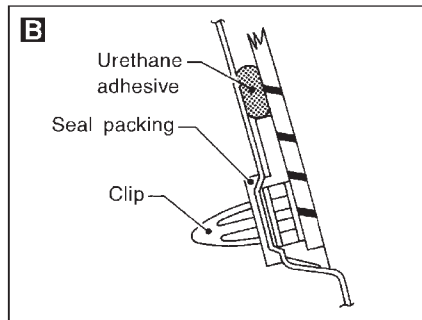
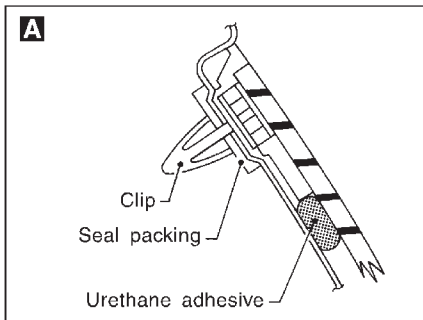
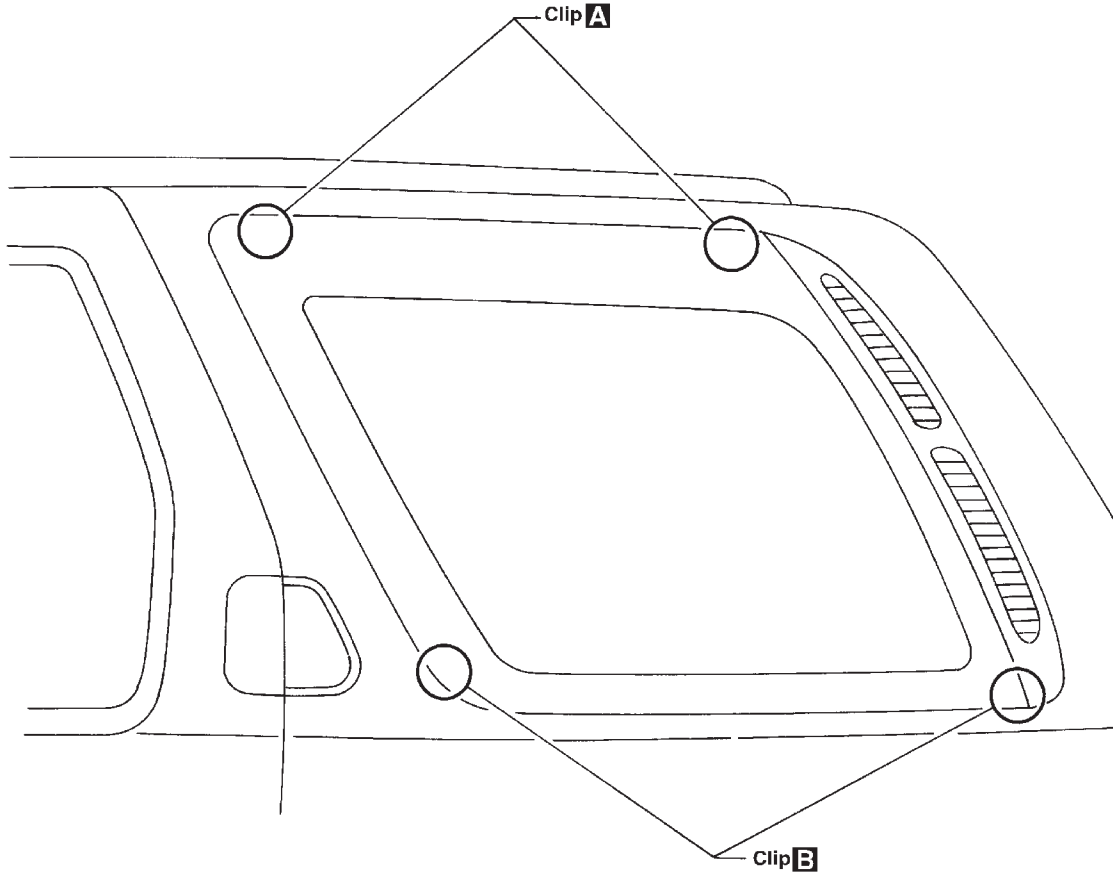
# WINDSHIELD AND WINDOWS

Removal and Installation (Cont'd)

## REAR SIDE WINDOW

NABT0019S04

SEC. 830



SBT359-A

# DOOR MIRROR

Removal and Installation

## Removal and Installation

NABT0020

### CAUTION:

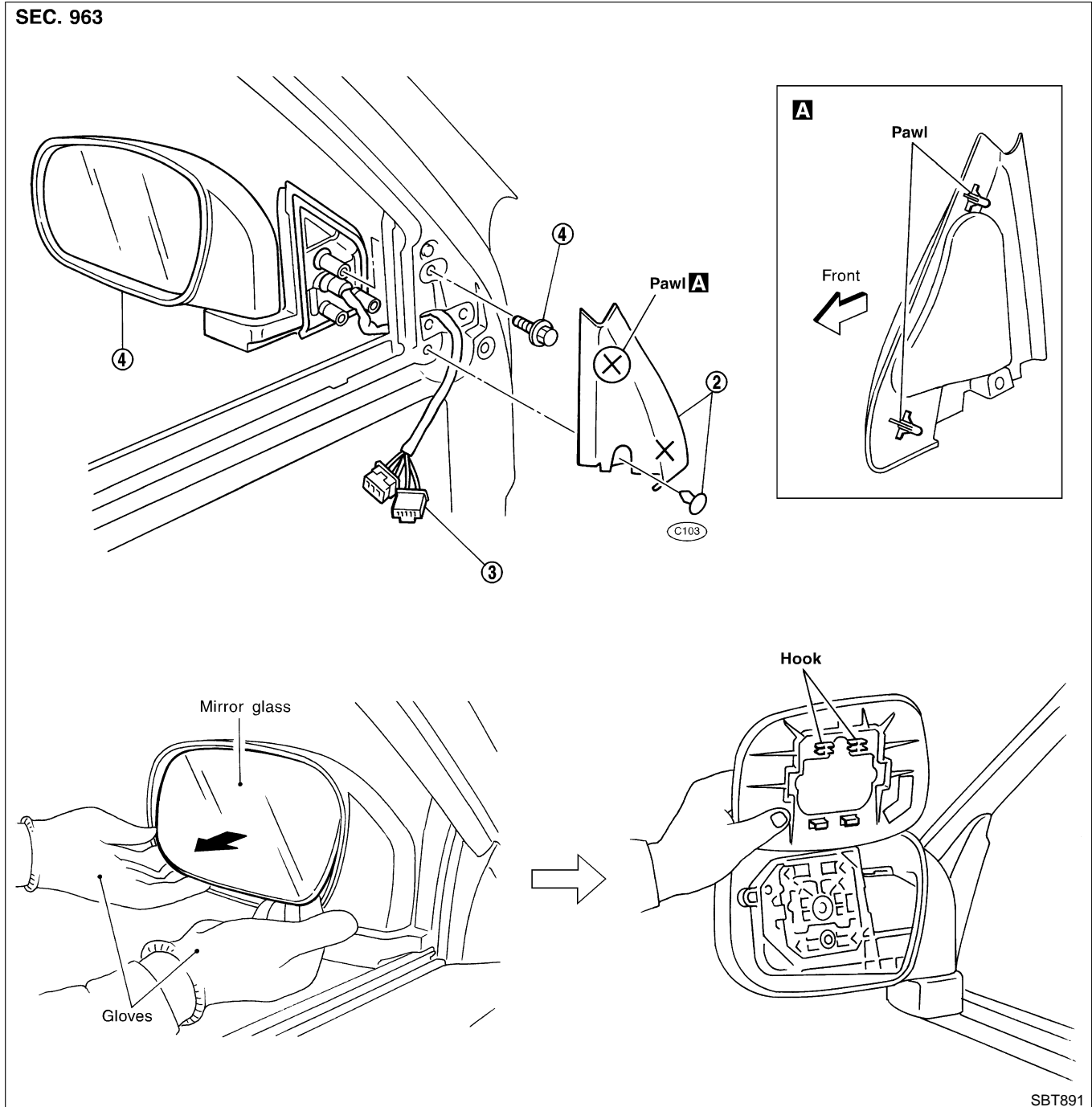
Be careful not to scratch door rearview mirror body.

★ For Wiring Diagram, refer to EL-213, "DOOR MIRROR".

1. Remove door trim. Refer to "DOOR TRIM" for details, BT-31.
2. Remove clip securing inner cover from front corner of door.
3. Disconnect door mirror harness connector.
4. Remove bolts securing door mirror, then remove door mirror assembly.

GI  
MA  
EM  
LC  
EC  
FE  
CL  
MT  
AT  
TF  
PD  
AX  
SU  
BR  
ST  
RS  
BT  
HA  
SC  
EL  
IDX

SEC. 963



SBT891

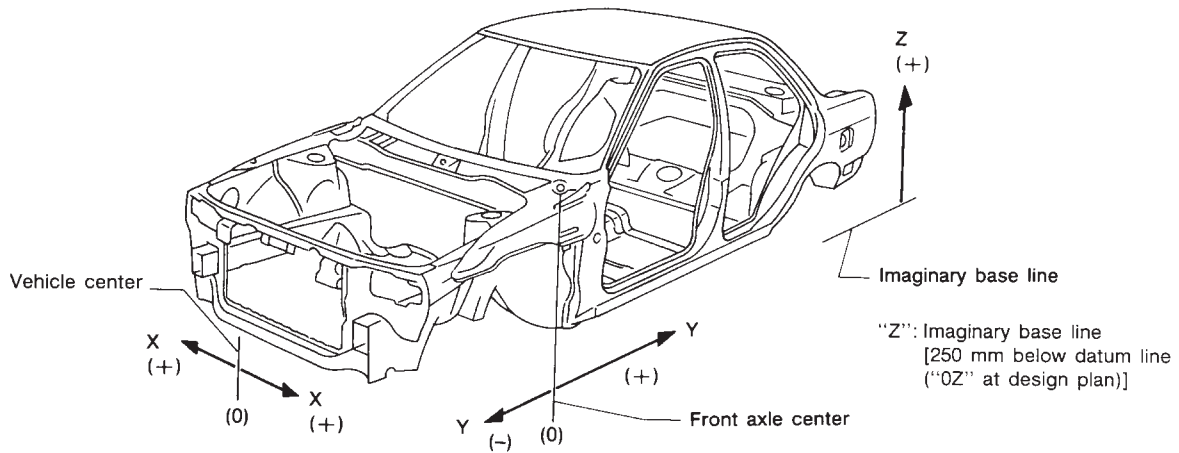
# BODY (ALIGNMENT)

Alignment

## Alignment

NABT0021

- All dimensions indicated in figures are actual ones.
- When using a tracking gauge, adjust both pointers to equal length. Then 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".



SBF874GD

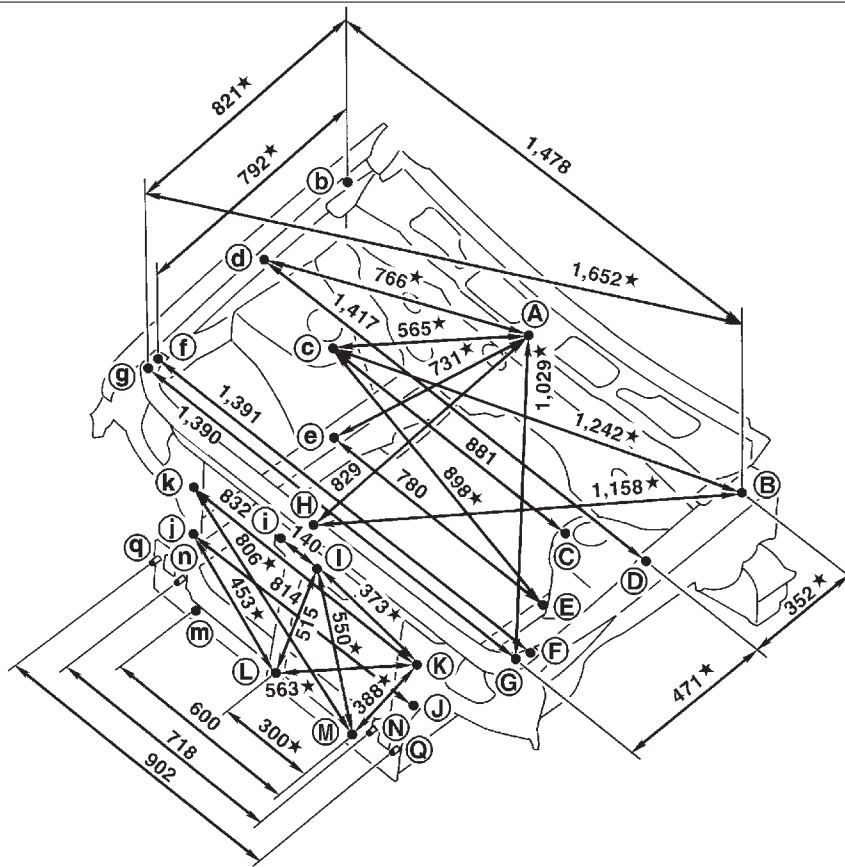
# BODY (ALIGNMENT)

Alignment (Cont'd)

## ENGINE COMPARTMENT Measurement

NABT0021S01

NABT0021S0101



Unit: mm

SBT194

- GI
- MA
- EM
- LC
- EC
- FE
- CL
- MT
- AT
- TF
- PD
- AX
- SU
- BR
- ST
- RS
- BT**
- HA
- SC
- EL
- IDX

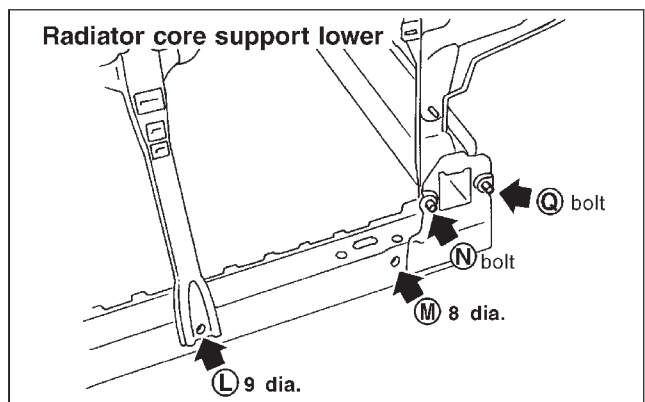
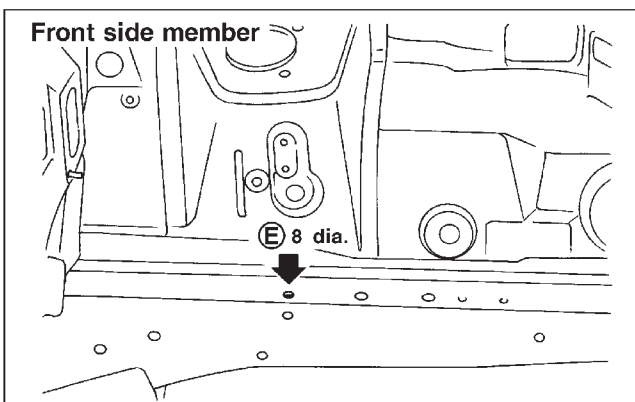
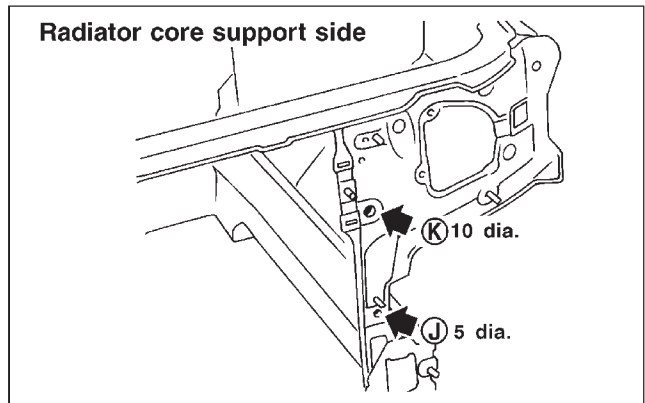
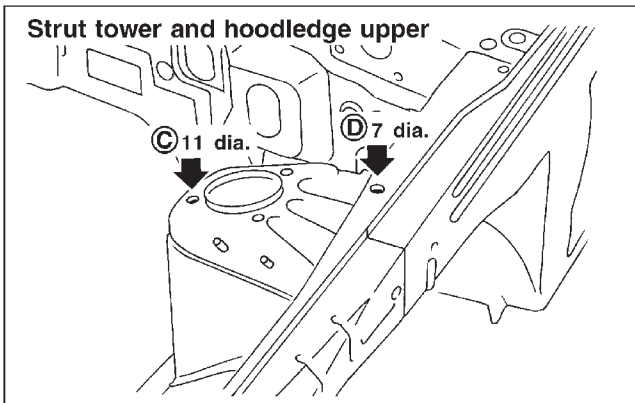
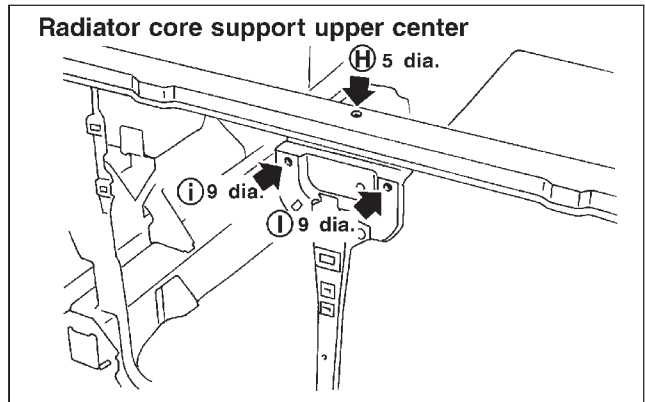
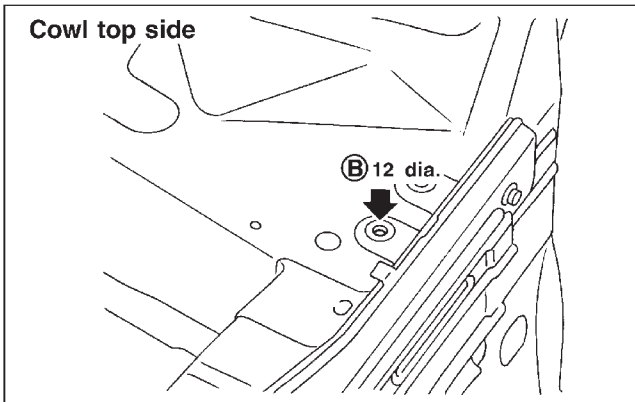
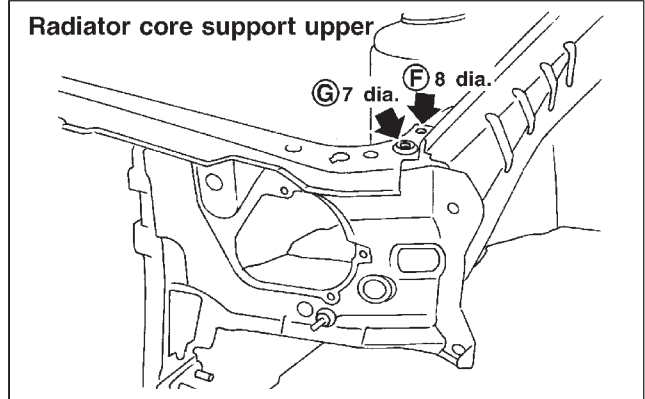
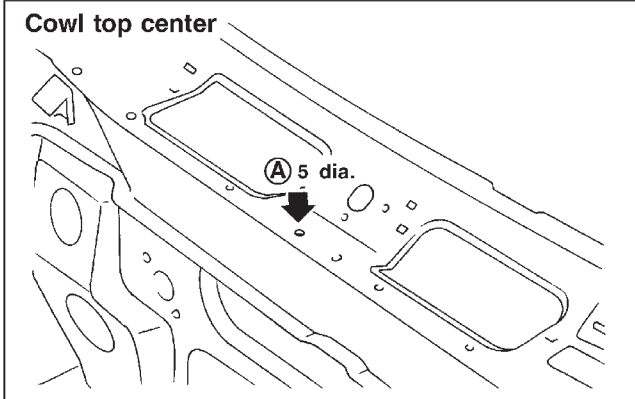
# BODY (ALIGNMENT)

Alignment (Cont'd)

## Measurement Points

NABT0021S0102

Unit: mm



SBT195



# BODY (ALIGNMENT)

Alignment (Cont'd)

## UNDERBODY Measurement

NABT0021S02

NABT0021S0201

GI

MA

EM

LC

EC

FE

CL

MT

AT

TF

PD

AX

SU

BR

ST

RS

**BT**

HA

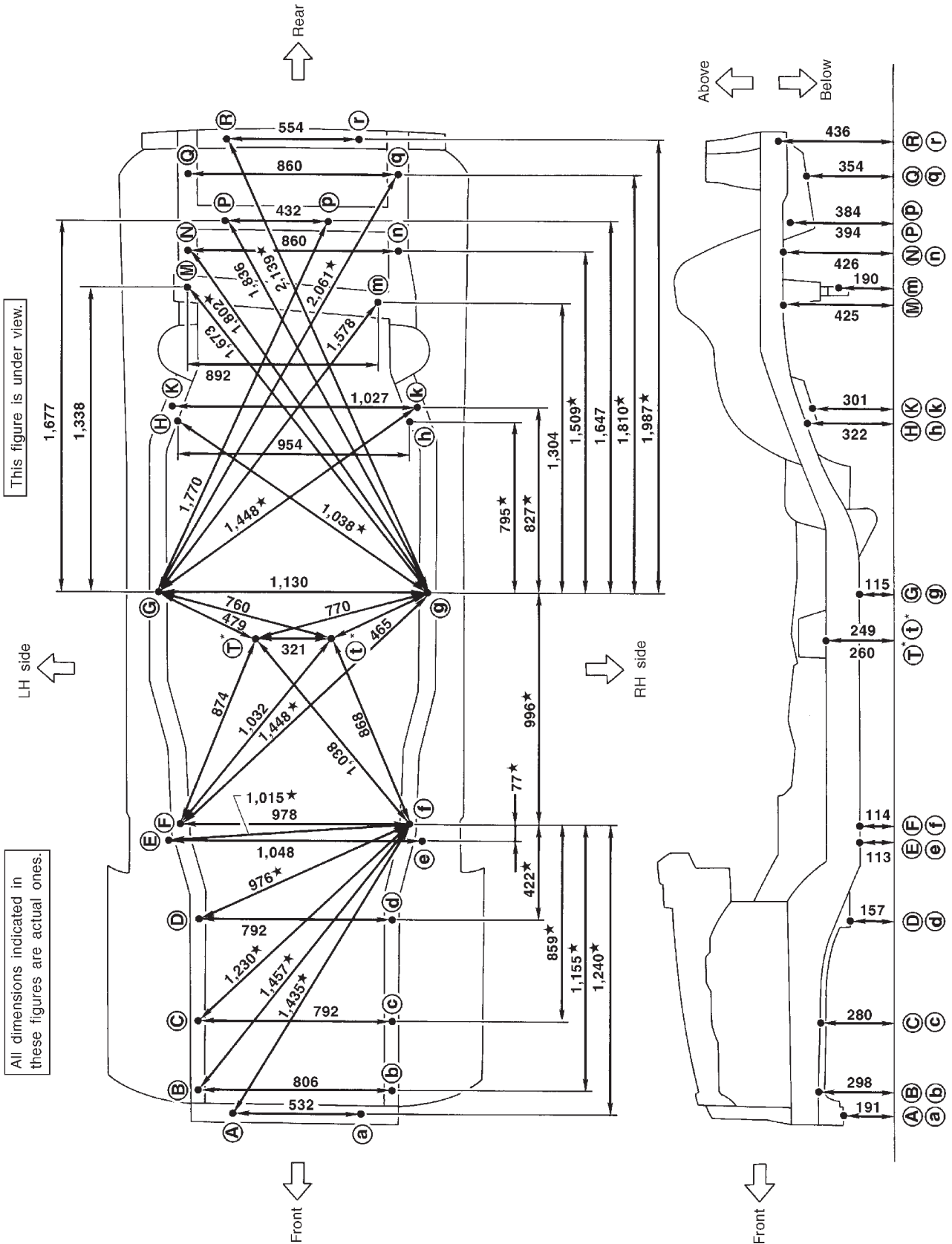
SC

EL

IDX

Unit: mm

\* : 2WD models only

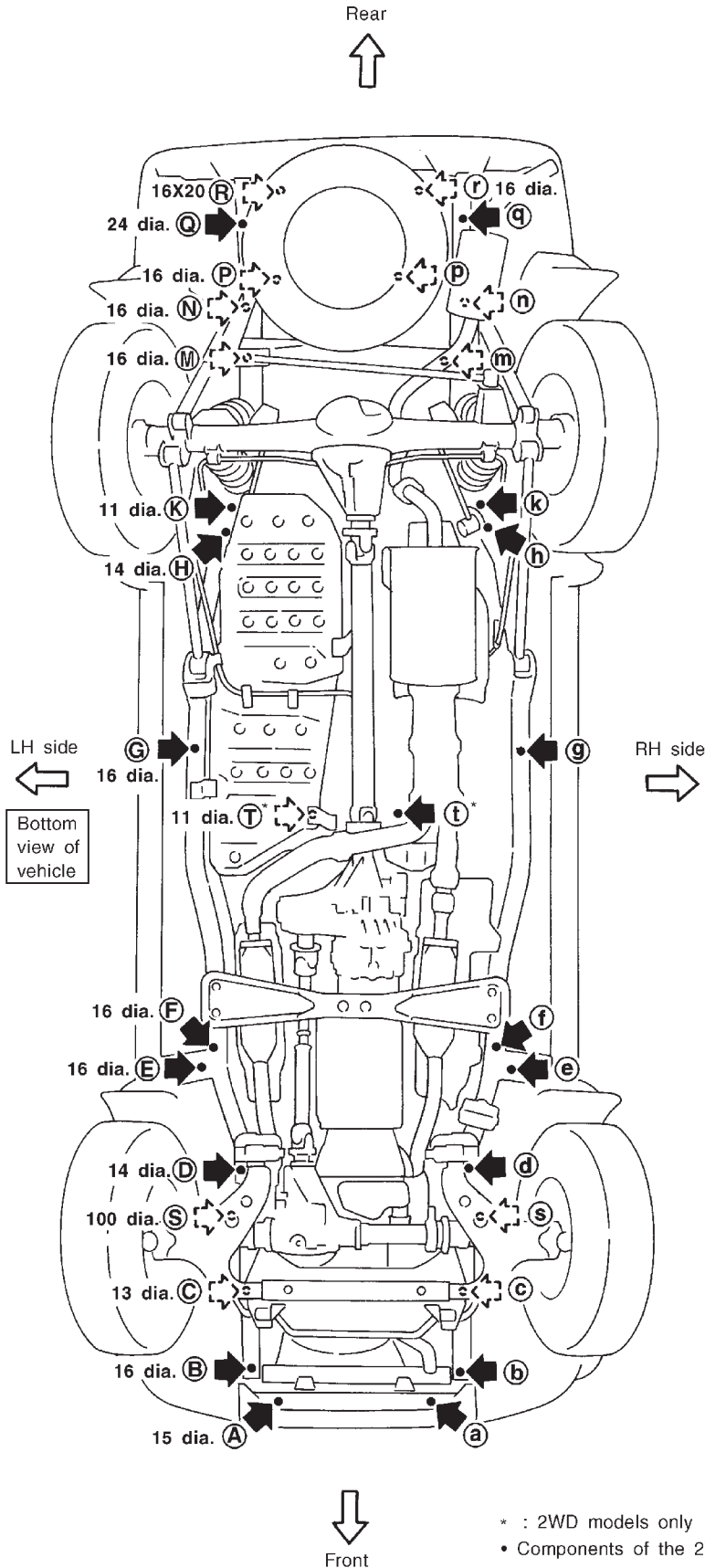


# BODY (ALIGNMENT)

Alignment (Cont'd)

NABT0021S0202

## Measurement Points



Front coordinates:

**(A), (a)**  
X: 266  
Y: -580.4  
Z: 191.4

**(B), (b)**  
X: 403  
Y: -500  
Z: 297.7

**(C), (c)**  
X: 396  
Y: -201  
Z: 279.7

**(D), (d)**  
X: 396  
Y: 228  
Z: 156.7

**(E), (e)**  
X: 524  
Y: 568  
Z: 112.7

**(F), (f)**  
X: 489  
Y: 637  
Z: 114.1

Rear coordinates:

**(G), (g)**  
X: 565  
Y: 1,630  
Z: 115

**(H), (h)**  
X: 476.9  
Y: 2,392.6  
Z: 321.9

**(K), (k)**  
X: 513.3  
Y: 2,434.5  
Z: 301.4

**(M)**  
X: 446.1  
Y: 2,960.2  
Z: 190

**(m)**  
X: -350  
Y: 2,878  
Z: 424.8

**(N), (n)**  
X: 430  
Y: 3,100  
Z: 426.2

**(P)**  
X: 290  
Y: 3,230  
Z: 394.1

**(P)**  
X: -142  
Y: 3,230  
Z: 383.6

**(Q), (q)**  
X: 430  
Y: 3,419.3  
Z: 353.6

**(R), (r)**  
X: 277  
Y: 3,570  
Z: 435.6

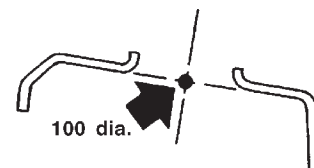
**(T)\***  
X: 154.5  
Y: 1,431  
Z: 259.6

**(t)\***  
X: -166.5  
Y: 1,431  
Z: 248.6

Unit: mm

Front strut tower center coordinates:

**(S), (s)**  
X: 499.9  
Y: 41.2  
Z: 748.9



\* : 2WD models only

• Components of the 2WD system are the same as for the 4WD.

SBT197