I BODY

# SECTION ENTERIOR C

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# PRECAUTIONS

# PRECAUTIONS

**Service Notice** 

- When removing or installing various parts, place a cloth or padding on 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.

# Precautions for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the SRS and SB section of this Service Manual.

#### 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/INFINITI 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 SRS 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 by yellow and/or orange harness connectors.

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# PREPARATION

# PREPARATION Special Service Tools

PFP:00002

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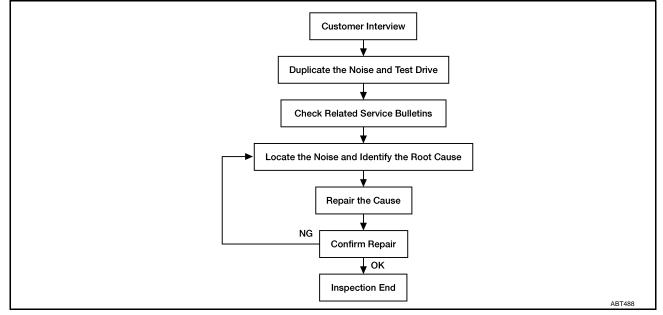
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The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

Tool number (Kent-Moore No.) Tool name		Description	
	AAAAAA	Locating the noise	
	ZFP		
	SBT839		
 (J-43980)		Repairing the cause of noise	
NISSAN Squeak and Rattle kit			
	SBT840		
commercial Service Too	ls	EIS	5001EG
Tool name (Kent-Moore No.)		Description	
Engine ear (J-39565)		Locating the noise	
	SILADOOSE		

SIIA0995E

Squeak and Rattle Trouble Diagnoses



#### **Customer Interview**

Interview the costumer, 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 customers comments; refer to <u>EI-8</u>, "<u>DIAGNOSTIC WORKSHEET</u>". This information is necessary to duplicate the conditions that exist when the noise occurs.

- The customer may not be able to provide a detail description or 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 costumer is concerned about. This can be accomplished by test driving the vehicle with the costumer.
- 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 sound / something repeating / often brought on by driver action.
- Tick-(Like a clock second hand)
- Tick characteristics include light contact of light material / loose components / can be caused by driver action on 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 costumer.

#### EI-4

EIS001ER

• Weather conditions, especially humidity and temperature, may have a great effect on noise level.	
Duplicate the Noise and Test Drive	A
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 locations of the noise. This information can be used to duplicate the same conditions when you confirm the repair.	В
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.	С
<ol> <li>Tap or push / pull around the area where the noise appears to be coming from.</li> <li>Rev the engine.</li> </ol>	
<ol> <li>Use a floor jack to recreate vehicle "twist".</li> </ol>	D
5. At idle, apply engine load (electric 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 rubber hammer.	E
• 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.	F
Check Related Service Bulletins	
After verifying the customer concern or symptom, check ASSIST for Technical Service Bulletins (TSBs) related to that concern or symptom.	G
If a TSB relates to the symptom, follow the procedure to repair the noise.	G
Locate the Noise and Identify the Root Cause	
<ol> <li>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).</li> </ol>	Η
2. Narrow down the noise to a more specific area and identify the cause of the noise by:	
<ul> <li>Removing the components in the area that you suspect the noise is coming from.</li> </ul>	EI
<ul> <li>Do not use too much force when removing clips and fasteners, otherwise clips and fasteners can be bro- ken or lost during the repair, resulting in the creation of new noise.</li> </ul>	
<ul> <li>Tapping or pushing/pulling the component that you suspect is causing the noise.</li> </ul>	J
<ul> <li>Do not tap or push/pull the component with excessive force, otherwise the noise will be eliminated only temporarily.</li> </ul>	
<ul> <li>Feeling for a vibration with your hand by touching the component(s) that you suspect is (are) causing the noise.</li> </ul>	K
Placing a piece of paper between components that you suspect are causing the noise.	
Looking for loose components and contact marks.	L
Refer to EI-6, "GENERIC SQUEAK AND RATTLE TROUBLESHOOTING"	
Refer to Generic Squeak and Rattle Troubleshooting.	N
Repair the Cause	
<ul> <li>If the cause is a loose component, tighten the component securely.</li> </ul>	
If the cause is insufficient clearance between components:	
<ul> <li>Separate components by repositioning or loosening and retightening the component, if possible.</li> </ul>	

 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 material are contained in the NISSAN Squeak and Rattle Kit (J-43980) Each item can be ordered separately as needed.
- URETHANE PADS (1.5 mm thick)
- insulates connectors, harness, etc.

- 76268–9E005: 100 x 135 mm / 76884–71L01: 60 x 85 mm / 76884–71L02: 15 x 25 mm
- INSULATOR (foam blocks)
- Insulates components from contact. Can be used to fill space behind a panel.
- 73982–9E000: 45 mm thick, 50 x 50 mm / 73982–50Y00: 10 mm thick, 50 x 50 mm
- INSULATOR (Light foam block)
- 80845–71L00: 30 mm thick, 30 x 50 mm
- FELT CLOTH TAPE
- Used to insulate where movement does not occur. Ideal for instrument panel applications.
- 68370–4B000: 15 x 25 mm pad / 68239–13E00: 5 mm 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

#### **Instrument Panel**

Most incidents are caused by contact and movement between:

- 1. The 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 harness 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 silicone 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 harness behind audio and A/C control unit
- 4. Console lid to console bin.

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

#### Doors

Pay attention to the:

1. Finisher an inner panel making a slapping noise

2. Inside handle escutcheon to door finisher	
3. Wiring harnesses tapping	А
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 or insulator foam blocks from the NISSAN Squeak and Rattle Kit (J-43980) to repair the noise.	В
Trunk	0
Trunk noises are often caused by a loose jack or loose items put into the trunk by the owner. In addition look for:	С
1. Trunk lid bumpers out of adjustment	D
2. Trunk lid striker out of adjustment	D
3. The trunk lid torsion bars knocking together	
4. A loose license plate or bracket	Е
Most of these incidents can be repaired by adjusting, securing, or insulating the items(s) or components(s) causing the noise.	
Sunroof and Headliner	F
Noises in the sunroof and 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	G
2. Sunvisor shaft shaking in the holder	0
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.	Η
Seats	
When isolating seat noises it's important to note the position the seat in and the load placed on the seat when the noise is present.	EI
These conditions should be duplicated when verifying and isolating the cause of the noise. Causes of seat noise include:	
1. Headrest rods and holders	J
<ol> <li>A squeak between the seat pad cushion and frame</li> </ol>	
3. The rear seat back lock and bracket	Κ
These noises can be isolated by moving or pressing on the suspected components while duplicating the con-	
ditions under which the noise occurs. Most of these incidents can be repaired by repositioning the component	
or applying urethane tape to the contact area.	L
Underhood	
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:	M
1. Any components 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 can not 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.

Repair can usually be made by moving, adjusting, securing, or insulating the component causing the noise.

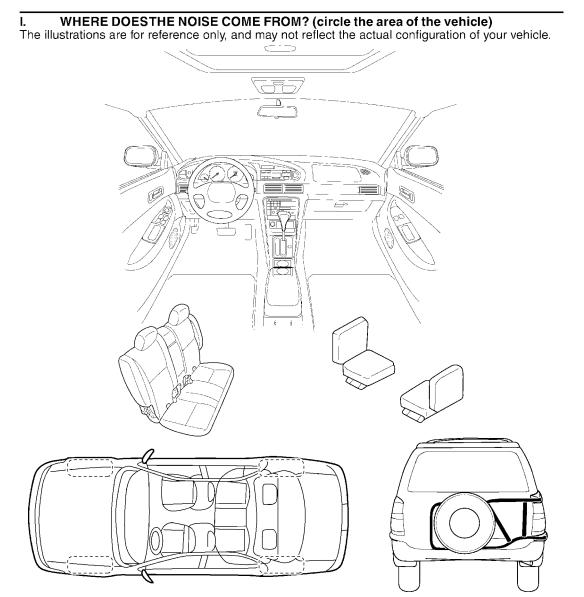
#### **DIAGNOSTIC WORKSHEET**



#### 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.



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.

Briefly describe the location where	he noise occurs:
II. WHEN DOES IT OCCUR? (cho	eck the boxes that apply)
anytime	$\Box$ after sitting out in the sun
1 <sup>st</sup> time in the morning	when it is raining or wet
only when it is cold outside	dry or dusty conditions
only when it is hot outside	□ other:
III. WHEN DRIVING:	IV. WHAT TYPE OF NOISE?
through driveways	squeak (like tennis shoes on a clean floor)
over rough roads	□ creak (like walking on an old wooden floor)
over speed bumps	rattle (like shaking a baby rattle)
only at about mph	$\Box$ knock (like a knock on a door)
on acceleration	tick (like a clock second hand)
$\Box$ coming to a stop	thump (heavy, muffled knock noise)
$\Box$ on turns : left, right or either (circle)	🖵 buzz (like a bumble bee)
with passengers or cargo	
□ other:	uteo.
after driving miles or min	ules
TO BE COMPLETED BY DEALERSI	IIP PERSONNEL
Test Drive Notes:	
	Initials of person
	<u>YES</u> <u>NO</u> performing
Vehicle test driven with customer	· · · · · · · · · · · · · · · · · · ·
<ul> <li>Noise verified on test drive</li> </ul>	

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

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

- Noise source located and repaired

- Follow up test drive performed to confirm repair

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

# **CLIP AND FASTENER**

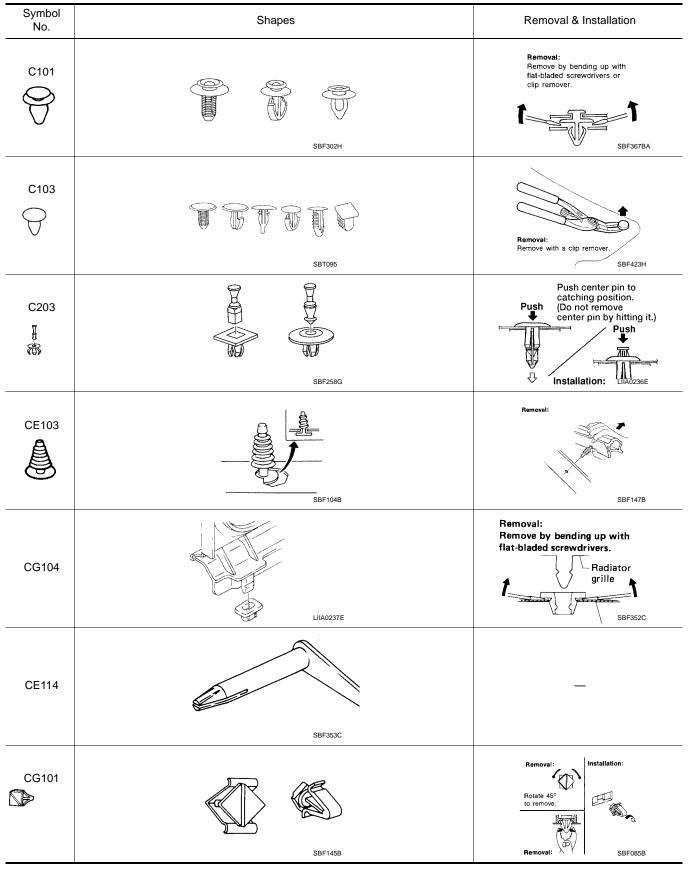
# **CLIP AND FASTENER**

PFP:76906

# Description

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• Replace any clips and/or fasteners which are damaged during removal or installation.



# **CLIP AND FASTENER**

Symbol No.	Shapes	Removal & Installation
CR103		Removal: Holder portion of clip must be spread out to remove rod.
	SBF768B	SBF770B
CS101		Removal: 1. Screw out with a Philips screwdriver. 2. Remove female portion with fait-bladed
	SBF078B	SBF992G

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# **BODY FRONT END**

# **BODY FRONT END**

# **Removal and Installation**

- When removing or installing hood, place a cloth or other padding on hood. 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

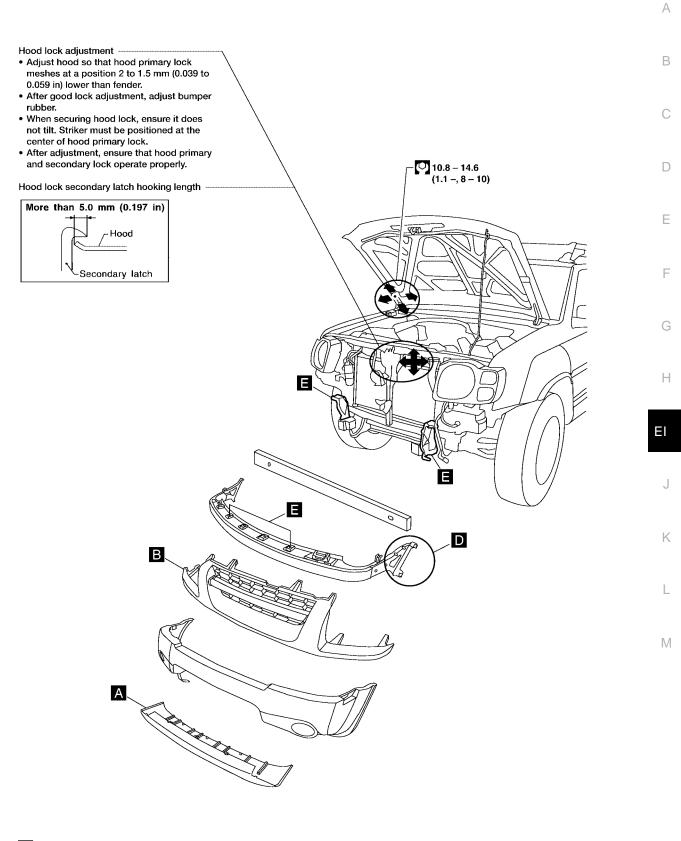
- 1. Remove clips securing front grille and remove the front grille.
- 2. Remove the side marker lamps.
- 3. Remove bolts securing left and right bumper stays.
- 4. Remove the lower grille opening trim.
- 5. Remove bolts securing left and right bumper side brackets.
- 6. Remove the front fascia.
- 7. Remove bolts securing left and right bumper from bumper brackets.
- 8. Remove bumper assembly.

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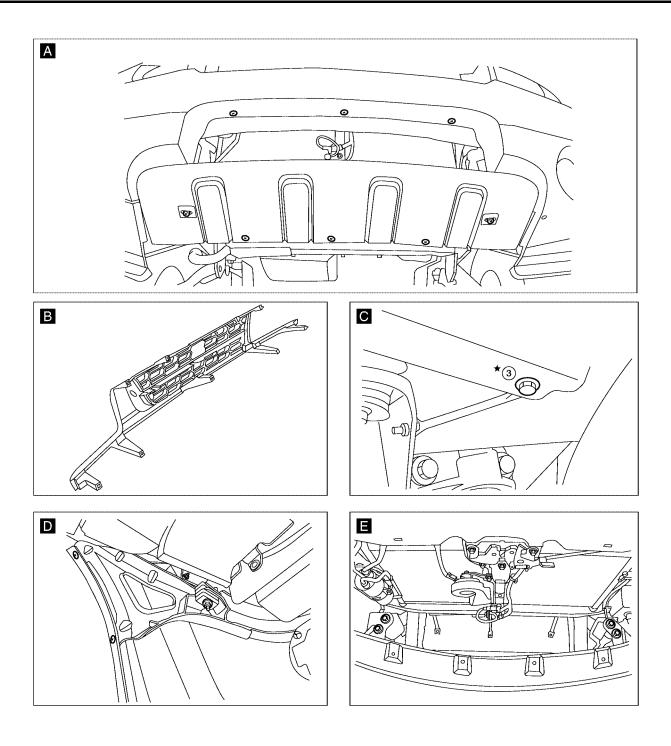
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# **BODY FRONT END**

#### 9. Remove the frame crossmember.



# **BODY FRONT END**



- 🖸 : N·m (kg-m, ft-lb)
- $\star$  : Bumper assembly mounting bolts

# **BODY REAR END AND OPENER**

BC	DDY REAR END AND OPENER	PFP:F2022	
Re	emoval and Installation	EIS0014A	A
•	Bumper fascia is made of plastic. Do not use excessive force and be sure to keep oil away from Back door lock system adjustment: Adjust lock and striker so that they are in the center. After a check back door lock operation.		В
RE	AR BUMPER ASSEMBLY		0
1. 2.	Remove screws securing left and right bumper side. 🖬 Remove bumper side left and right.		С
3.	Remove nuts securing rear bumper.		D
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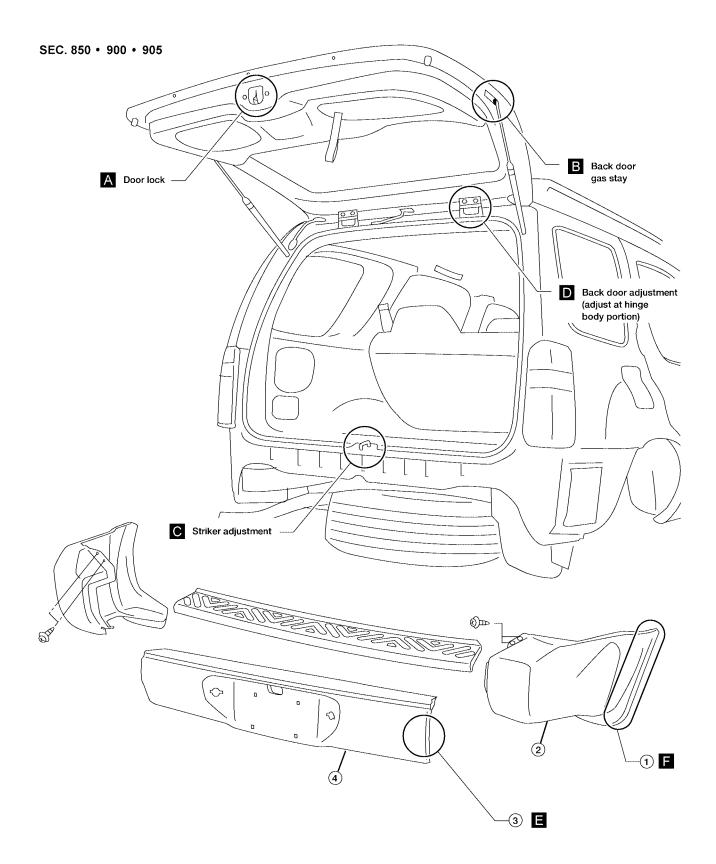
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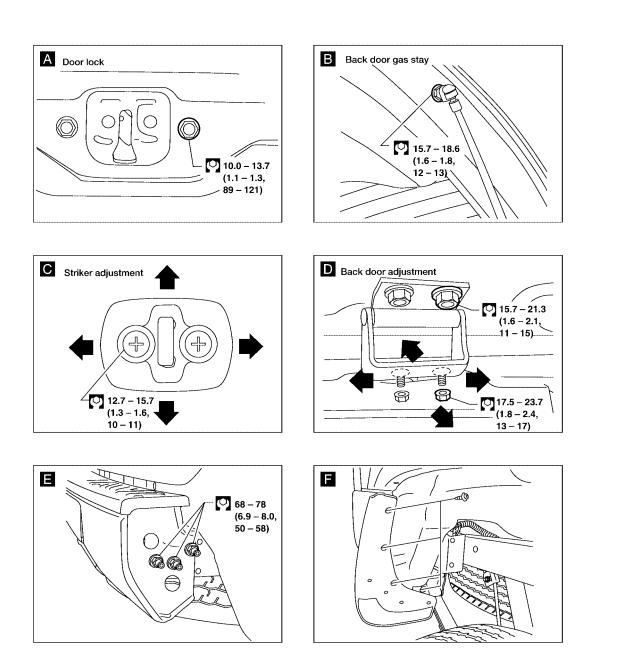
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4. Remove rear bumper.



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# SIDE AND FLOOR TRIM

### **Removal and Installation**

CAUTION:

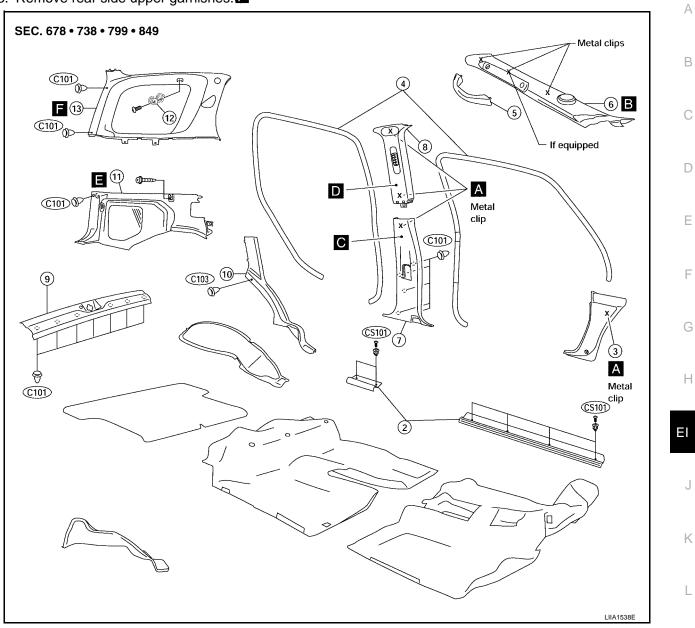
Wrap the tip of flat-bladed screwdriver with a cloth when removing metal clips from garnishes.

- 1. Remove front and rear seats. Refer to <u>SE-2, "Removal and Installation"</u> and <u>SE-3, "Removal and Installa-</u> tion".
- 2. Remove front and rear kicking plates.
- 3. Remove dash side lower finishes.
- 4. Remove front and rear body side welts.
- 5. Remove front pillar assist grips.
- 6. Remove front pillar garnishes.
- 7. Remove center pillar lower garnishes.
- 8. Remove center pillar upper garnishes.
- 9. Remove rear gate kicking plate.
- 10. Remove rear wheel well garnish.
- 11. Remove rear side lower garnishes.
- 12. Remove cargo hooks.

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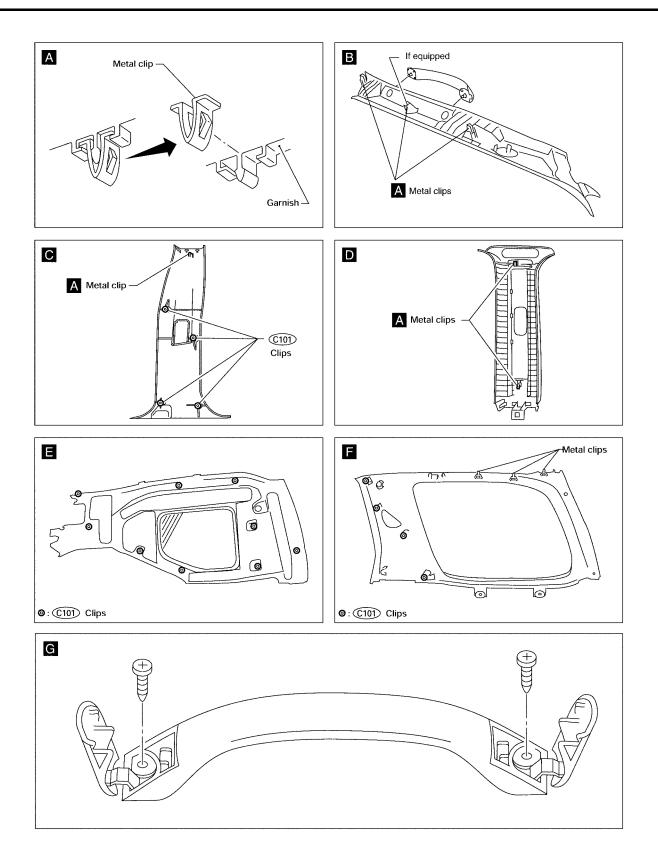
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13. Remove rear side upper garnishes.



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# SIDE AND FLOOR TRIM



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# DOOR TRIM

DC	DOR TRIM	PFP:80900	
Re	moval and Installation	EIS0014C	A
	<b>or trim (Formed type)</b> move manual window regulator handle, if equipped.		В
1.	Remove inside handle escutcheon.		
2. 3.	Remove door armrest.  B Remove screw securing door pull handle.		С
4. 5. 6.	Remove power window switch, then disconnect the connector. <b>D</b> Remove two screws. Remove clips securing door finisher.		D
7. 8.	Lift out door finisher. Remove inside escutcheon.		Е
9. 10.	Remove screw securing door pull handle. Remove clips securing door finisher.		F
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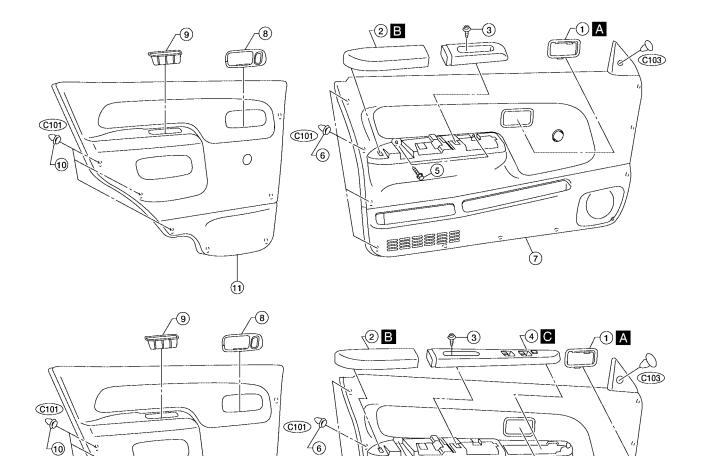
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11. Lift out door finisher.

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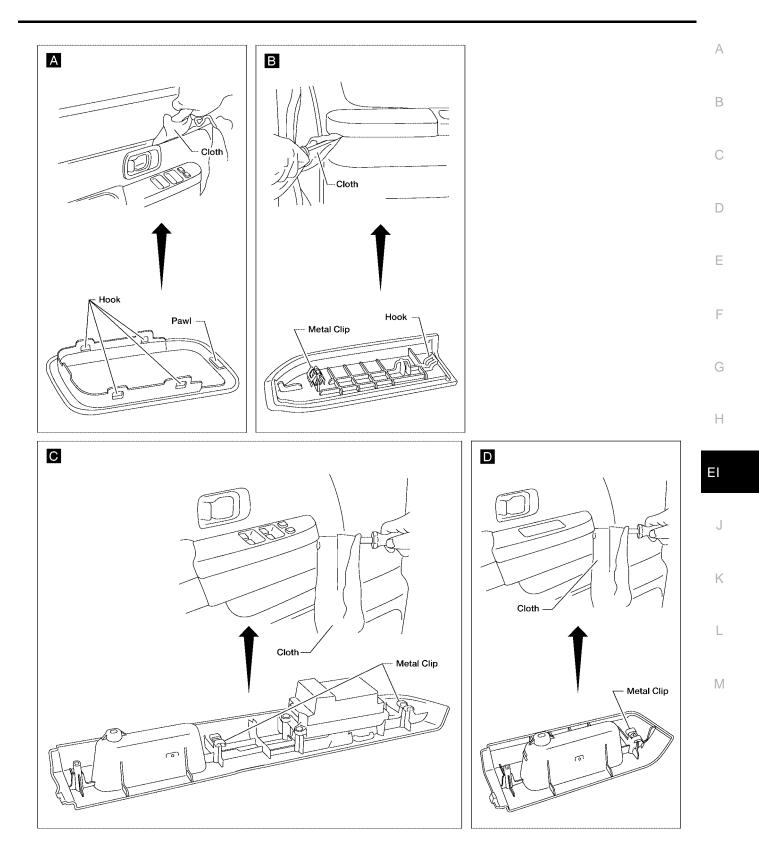
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# DOOR TRIM

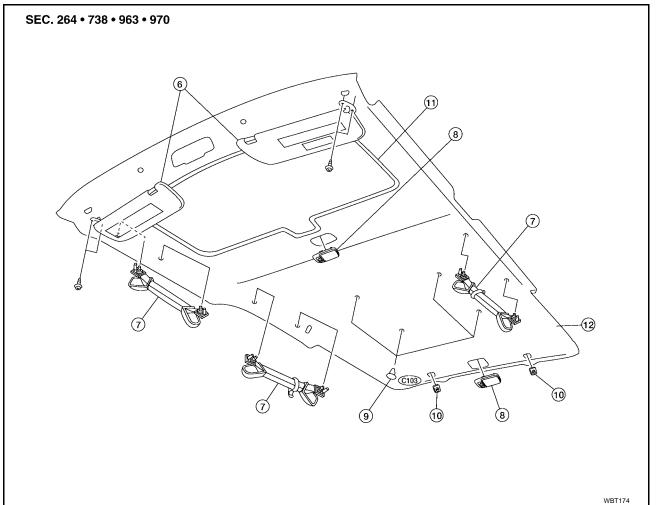


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# **ROOF TRIM**

# **Removal and Installation**

- 1. Remove the front map lamps (if equipped).
- 2. Remove front and rear seats. Refer to <u>SE-2, "Removal and Installation"</u> and <u>SE-3, "Removal and Installa-</u> tion".
- 3. Remove front and rear seat belts. Refer to <u>SB-3, "FRONT SEAT BELT"</u> and <u>SB-5, "REAR SEAT BELT"</u>.
- 4. Remove the rear roof garnish trim.
- 5. Remove body side trim. Refer to EI-18, "Removal and Installation" .
- 6. Remove sun visors.
- 7. Remove assist grips.
- 8. Remove interior lamp assembly and luggage room lamp assembly.
- 9. Remove clips securing headlining.
- 10. Remove coat hooks.
- 11. Remove sunroof welt (if equipped).
- 12. Remove headlining.
- 13. Remove roof headliner net.



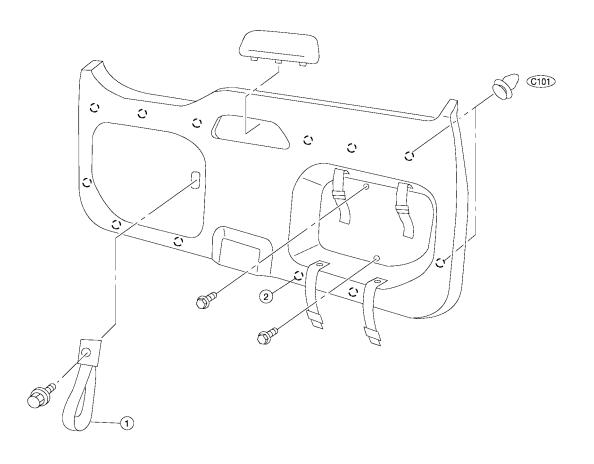
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# **BACK DOOR TRIM**

# BACK DOOR TRIM

# **Removal and Installation**

- 1. Remove back door grip.
- 2. Remove back door finisher assembly.
  - SEC. 268 909



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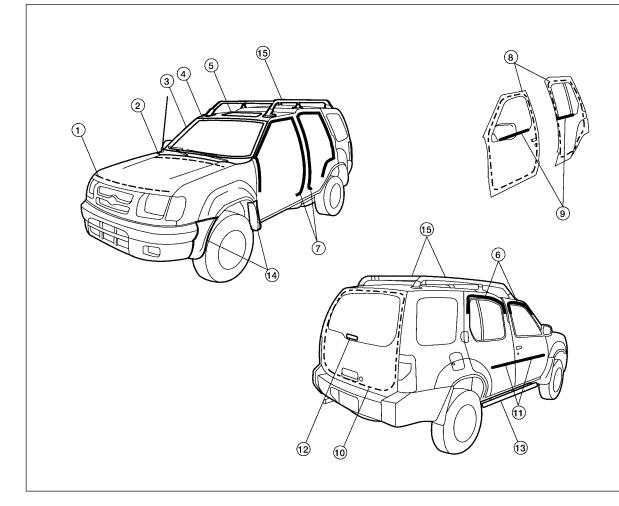
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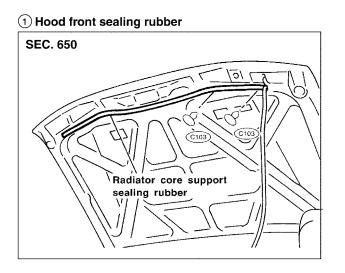
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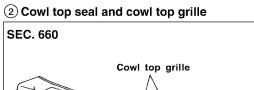
# EXTERIOR Removal and Installation

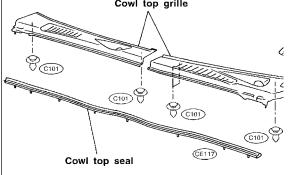
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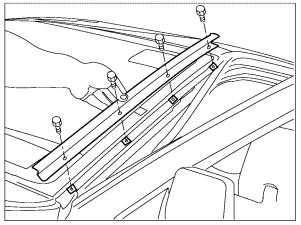




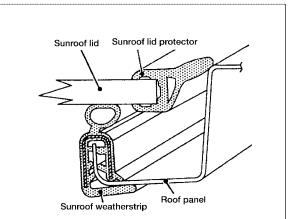




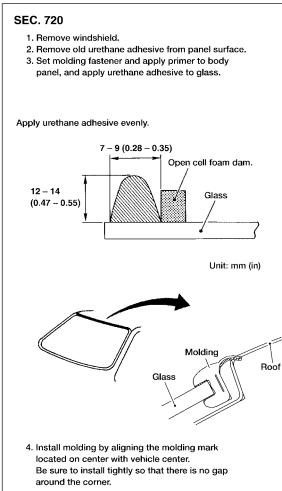
#### (3) Windshield side molding



#### **(5)** Sunroof weatherstrip and lid protector



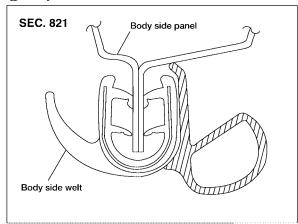
#### (4) Windshield upper molding



# SEC. 767

#### **7** Body side welt

6 Drip weatherstrip



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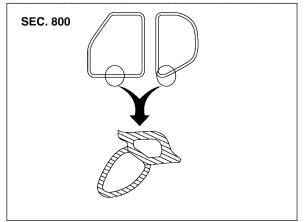
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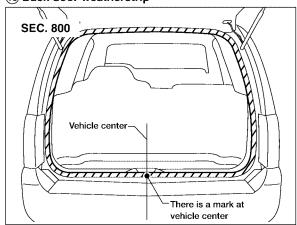
Μ

WBT175

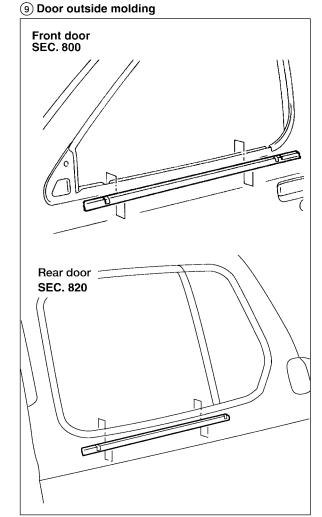
#### (8) Door weatherstrip

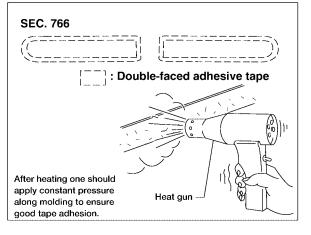


10 Back door weatherstrip

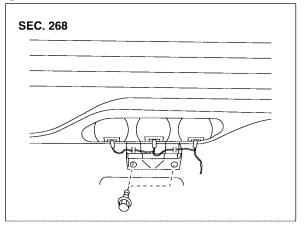


#### 11 Side guard molding

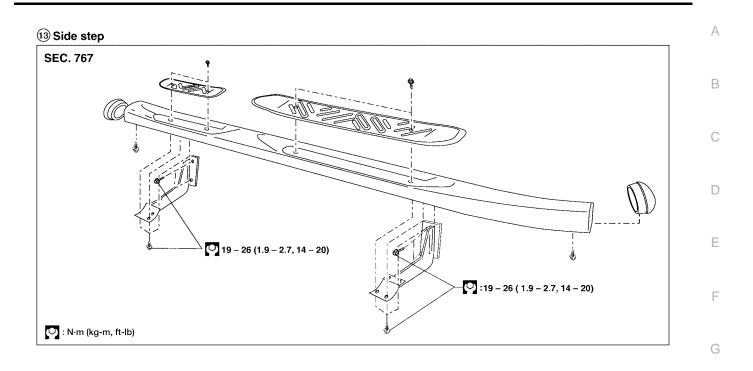




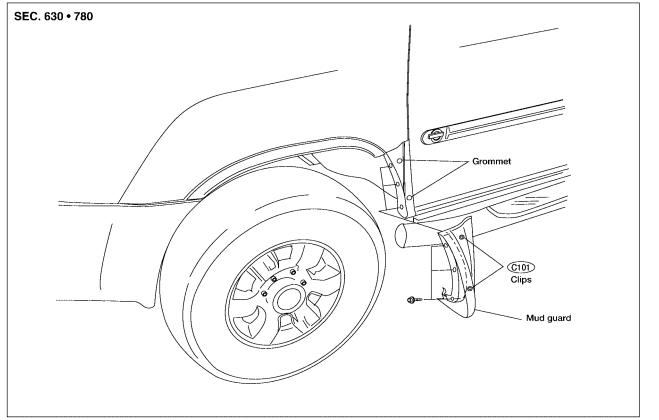
#### 12 High-mounted stop lamp



WBT176



#### 14 Over fender



WBT177

Н

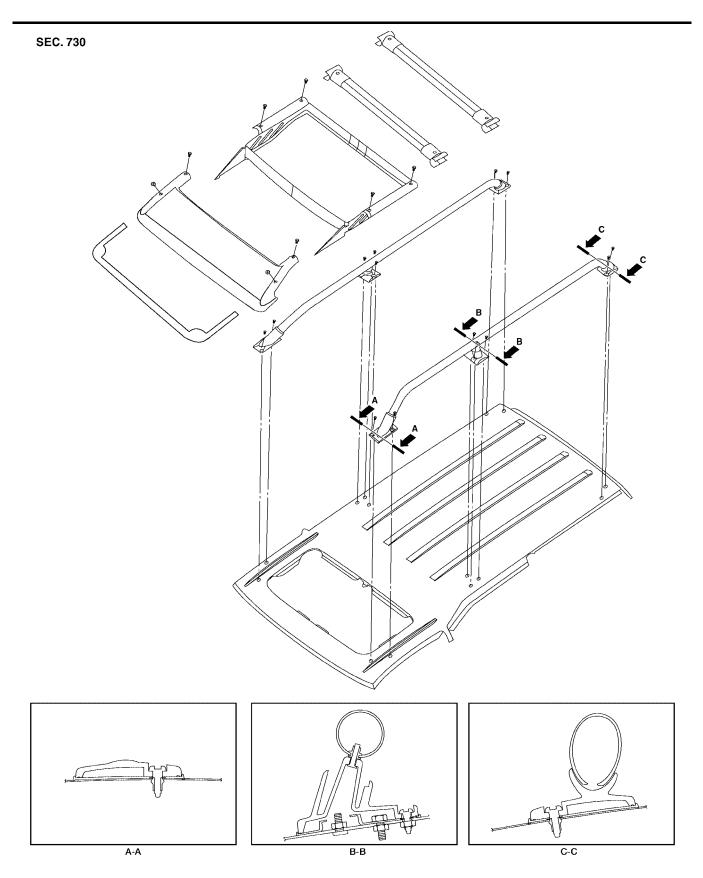
ΕI

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LIIA1537E

# CAB AND REAR BODY

Α

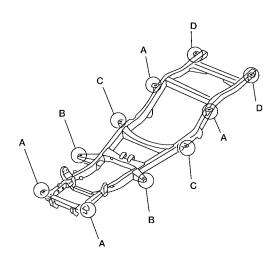
19 – 25

(1.9 – 2.6, 14– 19)

# **Body Mounting**

When removing, be sure to replace bolts and nuts (sealant applied bolts or self-lock nuts are used for all mounting).

SEC. 930



В

C 31 - 42 (3.2 - 4.3, 23 - 31)

PFP:93020

EIS0014G

А

В

С

D

Е

F

Н

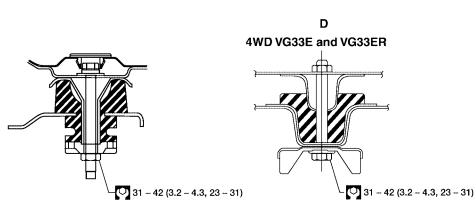
E١

J

Κ

L

Μ



: N·m (kg-m, ft-lb)

WBT178