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PRECAUTIONS

PRECAUTIONS PFP:00001

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

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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. 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.

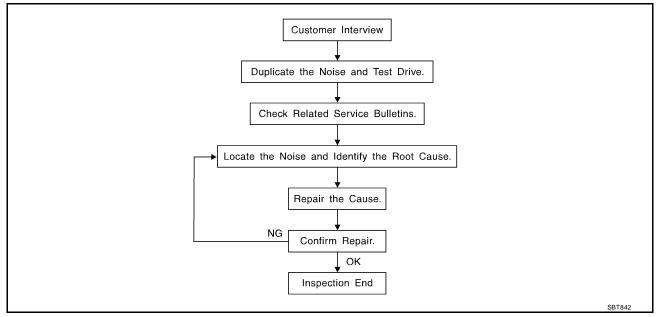
PREPARATION

PREPARATION			PFP:00002
pecial Service Tools			EIS0000P
he actual shapes of Kent-Moore tools	s may differ from those of spec	ial service tools illustrated here.	
Tool number (Kent-Moore No.) Tool name		Description	
 (J-39570) Chassis ear		Locating the noise	
	SIIA0993E		
(J-43980) Nissan Squeak and Rattle kit		Repairing the cause of noise	
	SIIA0994E		
ommercial Service Tools			EIS0000Q
Tool name		Description	
Engine ear (J-39565)		Locating the noise	
	SIIA0995E		

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Work Flow



CUSTOMER INTERVIEW

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 EI-9, "Diagnostic Worksheet" . 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 bumblebee)
 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.

DUPLICATE THE NOISE AND TEST DRIVE

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:

- Close a door.
- Tap or push/pull around the area where the noise appears to be coming from.
- Rev the engine.
- Use a floor jack to recreate vehicle "twist".
- At idle, apply engine load (electrical load, half-clutch on M/T model, drive position on A/T model).
- 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

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

- 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 fasteners 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 EI-6, "Generic Squeak and Rattle Troubleshooting".

REPAIR THE CAUSE

- 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.

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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

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

INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

- 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 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 upper/lower 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
- Wiring harnesses tapping
- Door striker out of alignment causing a popping noise on starts and stops

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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.		
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TRUNK

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
- 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

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
- 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.

SFATS

When isolating seat noises it is 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:

- 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

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
- Components that pass through the engine wall
- 3. Engine wall mounts and connectors
- 4. Loose radiator mounting pins
- 5. Hood bumpers out of adjustment
- 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

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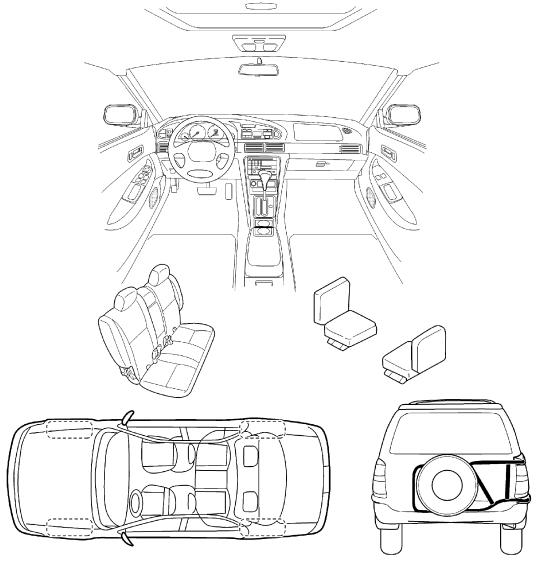
SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

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.

SBT843

SQUEAK & RATTLE DIAGNOSTIC WORKSHEET- page 2 Briefly describe the location where the noise occurs: II. WHEN DOES IT OCCUR? (check the boxes that apply) □ anytime ☐ after sitting out in the sun ☐ 1st time in the morning □ when it is raining or wet ☐ dry or dusty conditions ☐ only when it is cold outside ☐ only when it is hot outside ☐ other: IV. WHAT TYPE OF NOISE? III. WHEN DRIVING: ☐ 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 ☐ knock (like a knock on a door) ☐ on acceleration ☐ tick (like a clock second hand) ☐ coming to a stop ☐ thump (heavy, muffled knock noise) □ buzz (like a bumble bee) ☐ on turns : left, right or either (circle) ■ with passengers or cargo other: ___ ☐ after driving ____ miles or ____ minutes TO BE COMPLETED BY DEALERSHIP PERSONNEL **Test Drive Notes:** Initials of person YES NO performing Vehicle test driven with customer - Noise verified on test drive - Noise source located and repaired - Follow up test drive performed to confirm repair VIN: Customer Name: W.O. #: _____ Date: ____

This form must be attached to Work Order

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CLIP AND FASTENER

CLIP AND FASTENER PFP:76906

Description

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Clips and fasteners in EI section correspond to the following numbers and symbols.

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

Symbol No.	Shapes	Removal & Installation
C101	SBF302H	Removal: Remove by bending up with flat-bladed screwdrivers or clip remover.
C103	SBT095	Removal: Remove with a clip remover. SBF423H
C203	SBF258G	center pin by hitting it.) Push SBF708E
C205	MBT080A	Removal: Flat-bladed screwdriver Finisher Clip SBF638CA
C206	MBF519B	MBF520B
CE103		Removal:

CLIP AND FASTENER

Symbol No.	Shapes	Removal & Installation
CE107	SBF411H	Panel Flat-bladed screwdriver Molding Clip SBF767B
CE117	SBF174D	Removal: Remove by bending up with a flat-bladed screwdriver or pliers. SBF175DA
CF110	Seal rubber Clip-B SBF648B	Removal: Clip-A Finisher Finisher Clip-B Rebers seal Flat-bladed screwdriver
CF118	Clip-A Clip-B (Grommet) Sealing-washer SBF151D	Removal: Flat-bladed screwdriver Finisher Clip-B (Grommet) panel Sealing washers SBF259G
CG101	SBF145B	Removal: Rotate 45° to remove. Removal: SBF085B
CS101	SBF078B	Removal: 1. Screw out with a Phillips screwdriver. 2. Remove temale portion with flat-bladed screwdriver. SBF992G

CLIP AND FASTENER

Symbol No.	Shapes	Removal & Installation
CR103	SBF768B	Removal: Holder portion of clip must be spread out to remove rod. SBF770B
Metal Clip	WBT072	Removal:

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BODY FRONT END PFP:H5022

Removal and Installation

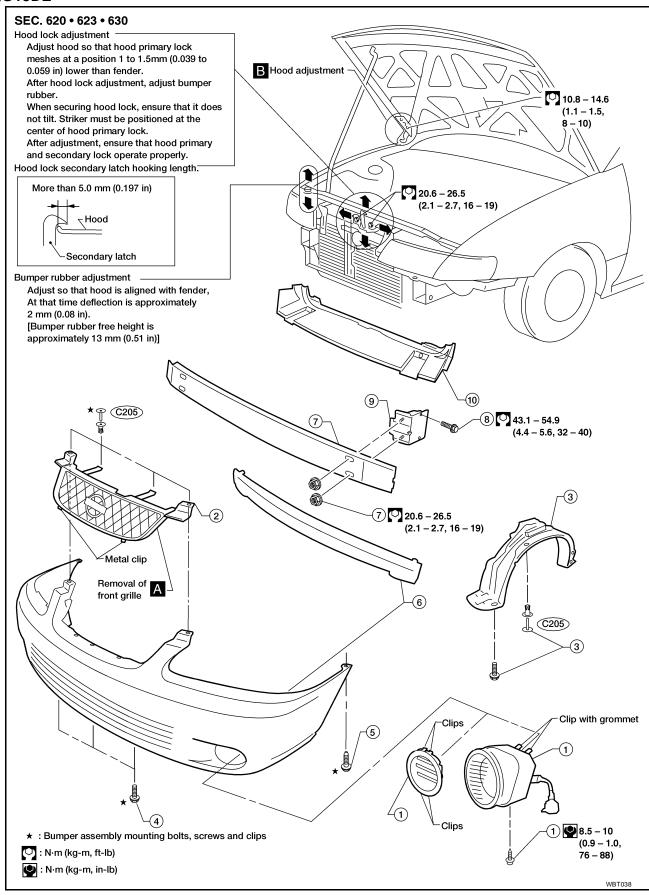
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- When removing or installing hood, place a cloth or other padding on front fender panels and cowl top. This
 prevents vehicle body from being scratched.
- Bumper fascia is made of plastic. Do not use excessive force and be sure to keep oil away from it.
- Hood adjustment: Adjust at hinge portion.
- Hood lock adjustment: After adjusting, check hood lock control operation. Apply a coat of grease to hood lock engaging mechanism.
- Hood opener: Do not attempt to bend cable forcibly. Doing so increases effort required to unlock hood.

FRONT BUMPER ASSEMBLY

- Remove screws securing left and right front fog lamps, and remove the lamps (if equipped); or remove filler trim panel.
- 2. Remove four clips C205 from the top of the front grille, pull up to unclip bottom and remove. A
- 3. Remove clips C205 and screws located on front side of fender protector at wheel opening.
- 4. Remove three bolts from the air deflector.
- 5. Remove two bolts securing lower side of front bumper fascia.
- 6. Pull off front bumper fascia and energy absorber.
- 7. Remove four nuts securing bumper reinforcement, then remove bumper reinforcement.
- 8. Remove four bolts securing front bumper side stays.
- 9. Remove front bumper side stays.
- 10. Remove the air dam if necessary.

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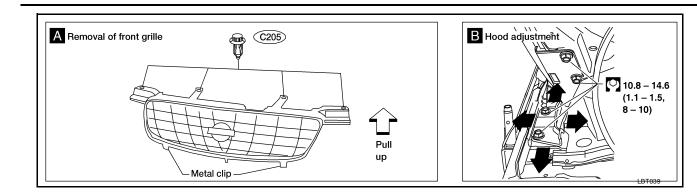
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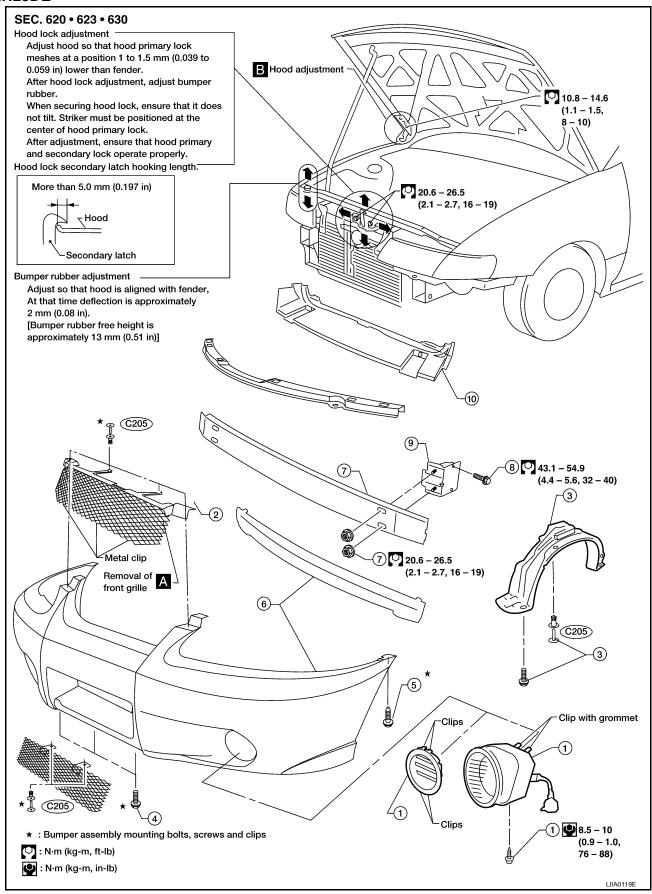
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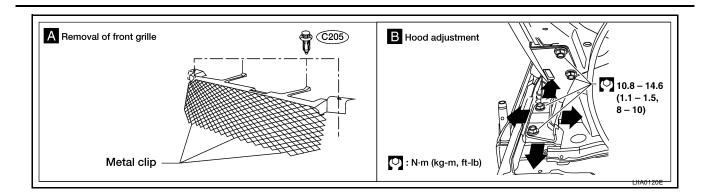
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BODY REAR END AND OPENER

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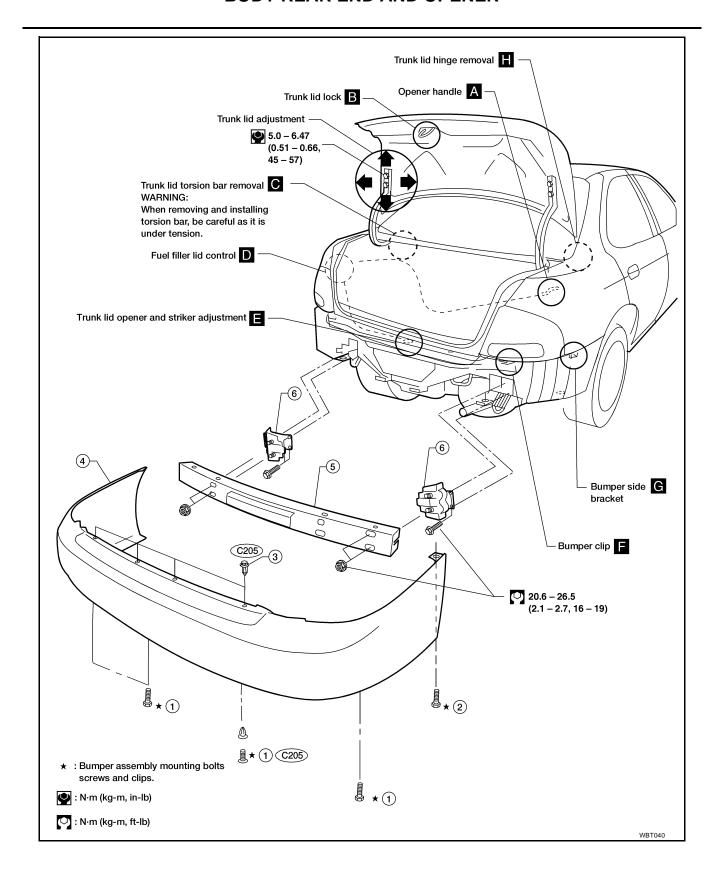
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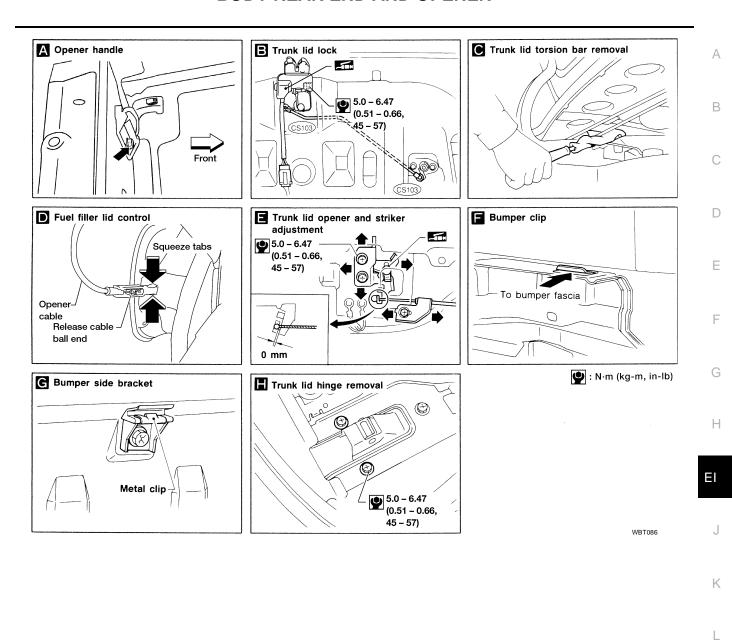
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BODY REAR END AND OPENER PFP:F2022 Removal and Installation FIS000OW When removing or installing trunk lid, place a cloth or other padding on rear fender panels. This prevents vehicle body from being scratched. Bumper fascia is made of plastic. Do not use excessive force and be sure to keep oil away from it. Trunk lid adjustment: Adjust at hinge-trunk lid portion for proper trunk lid fit. Trunk lid lock system adjustment: Adjust striker so that it is in the center of the lock. After adjustment, check trunk lid lock operation. Opener cable: Do not attempt to bend cable using excessive force. After installation, make sure that trunk lid and fuel filler lid open smoothly. REAR BUMPER ASSEMBLY 1. Remove four bolts and one clip C205 from lower side of rear bumper fascia. 2. Remove two screws from each fender side. 3. Remove four clips C205 from upper side of rear bumper fascia. 4. Pull out rear bumper fascia. 5. Remove four nuts securing bumper reinforcement, then remove bumper reinforcement. Remove four bolts securing bumper side stays, then remove bumper side stays. ΕI

BODY REAR END AND OPENER



BODY REAR END AND OPENER



WINDSHIELD MOLDING

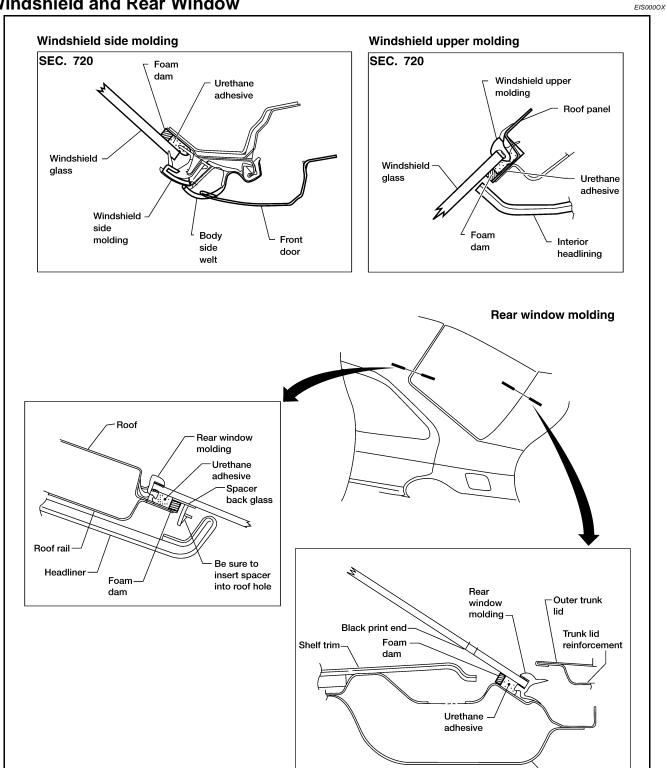
WINDSHIELD MOLDING

PFP:72700

Parcel shelf

WBT114

Windshield and Rear Window



EXTERIOR PFP:AAAAA

Removal and Installation

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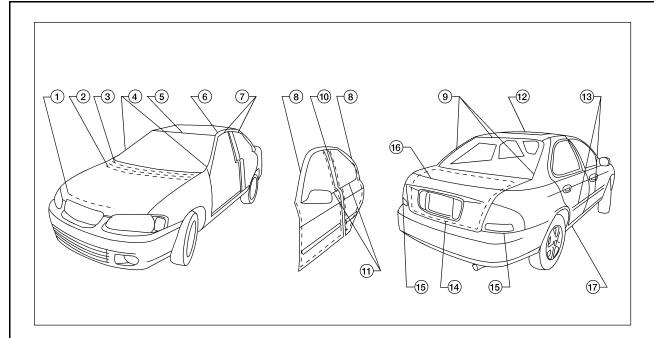
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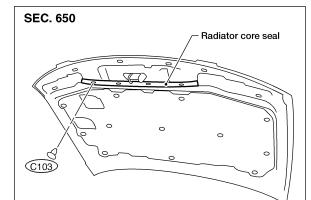
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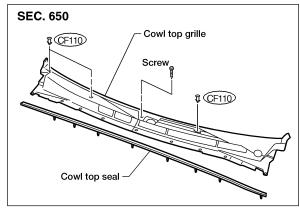
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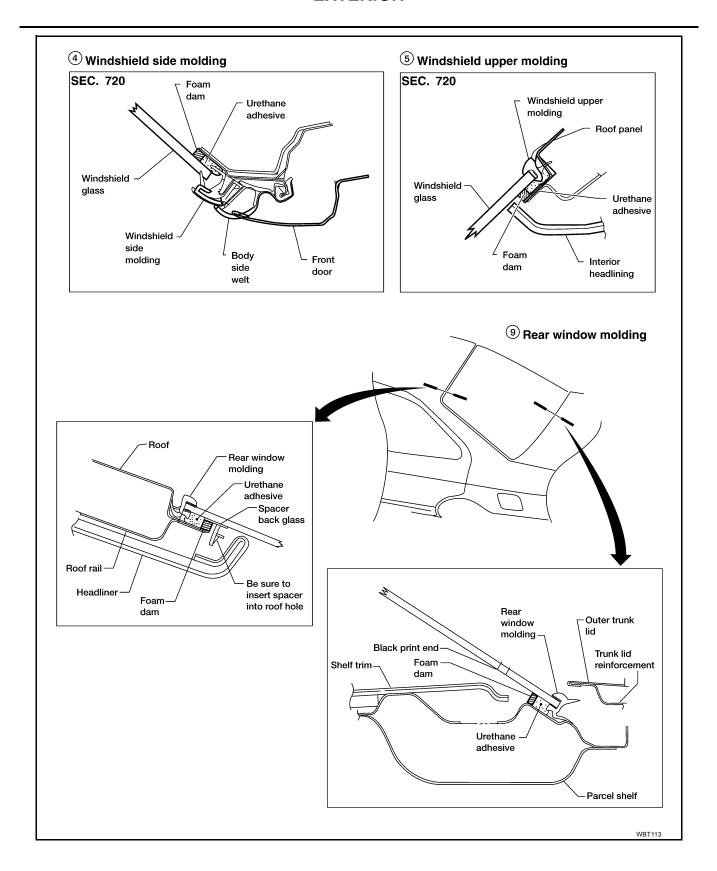
1 Hood front seal

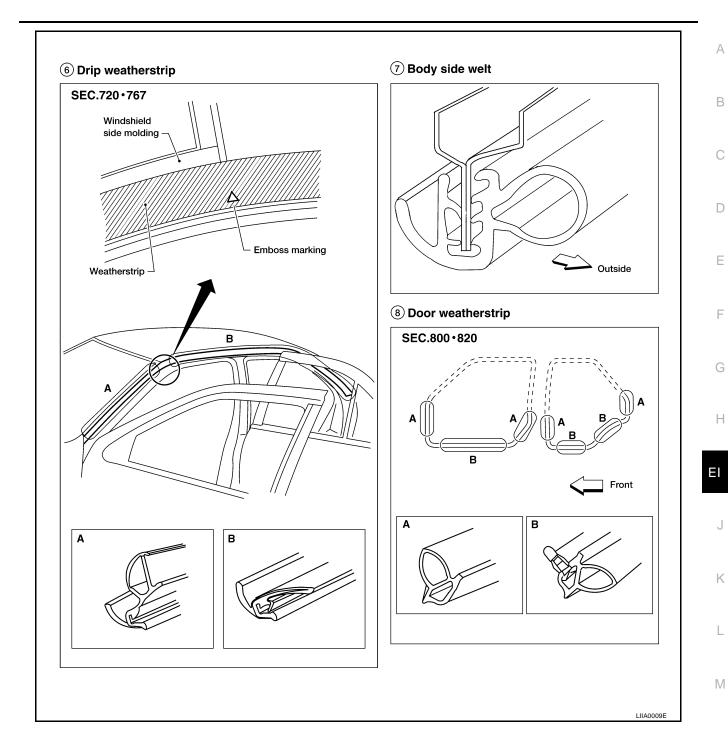


② ③ Cowl top seal and cowl top grille



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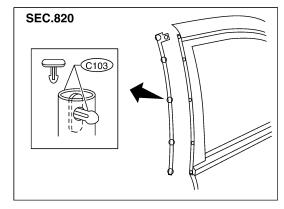
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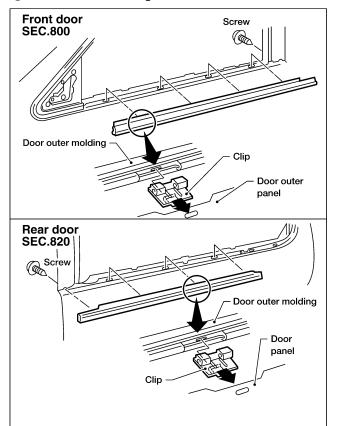
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10 Rear door parting seal



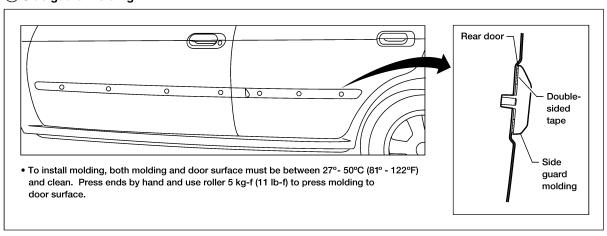
11 Door outside molding



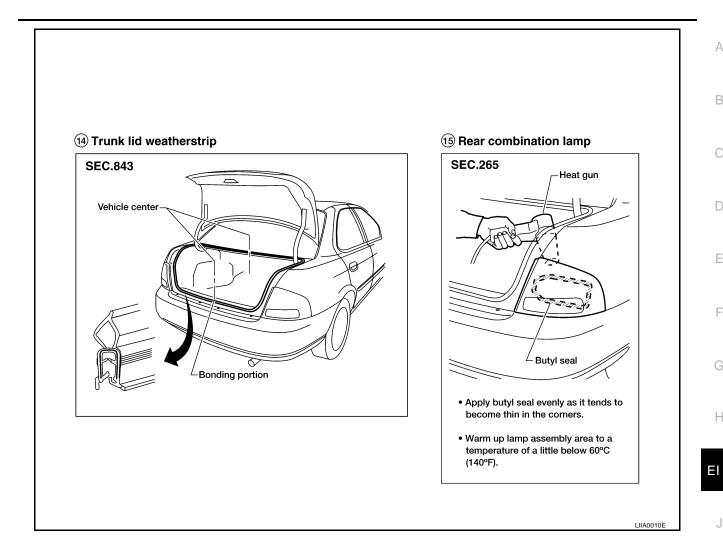
12 Sunroof lid weatherstrip

Sunroof weatherstrip is part of the glass lid and must be replaced as an assembly.

(13) Side guard molding



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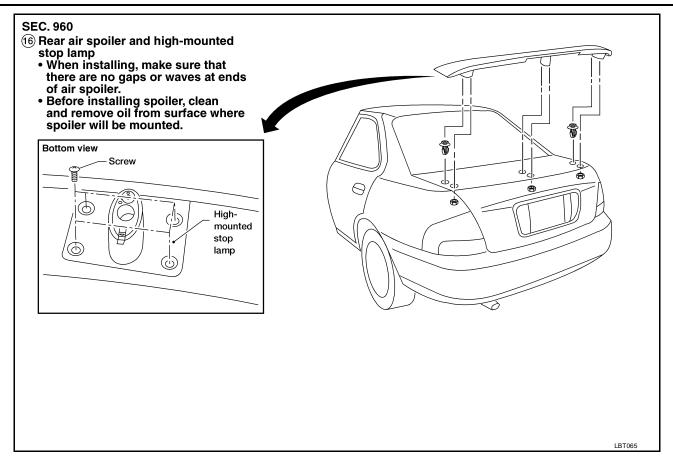
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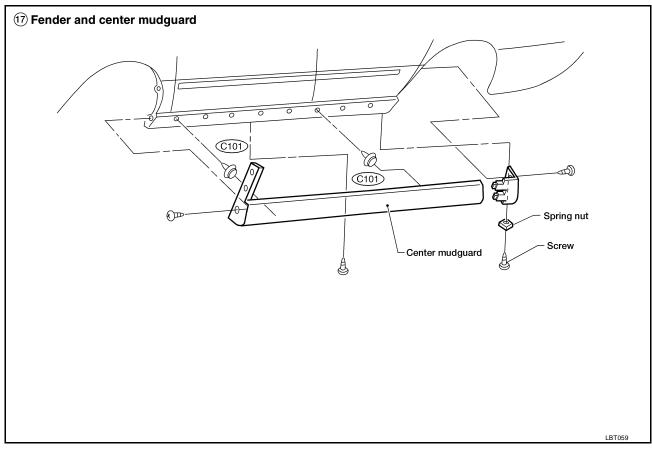
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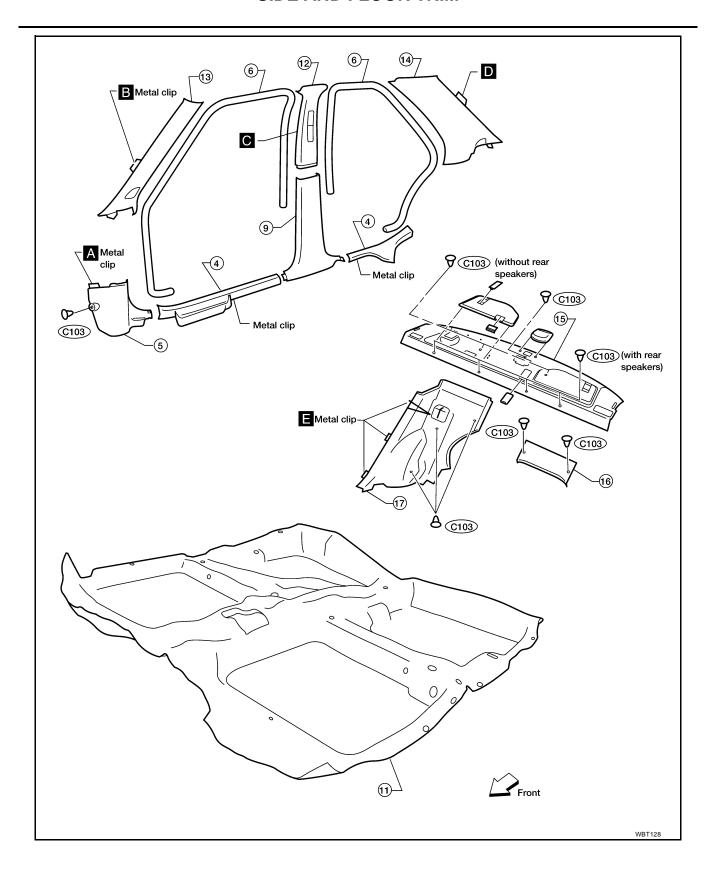


SIDE AND FLOOR TRIM

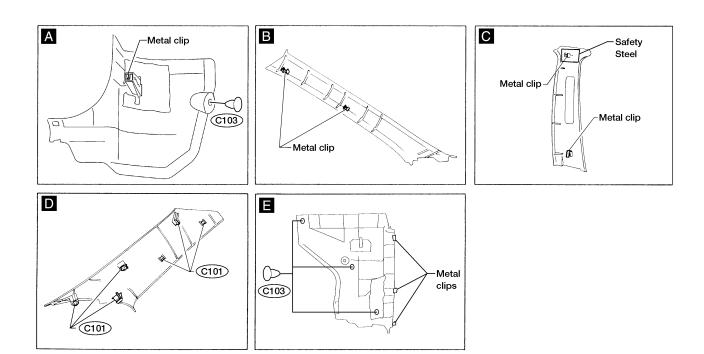
SIDE AND FLOOR TRIM PFP:76913 Α Removal and Installation FIS0000Z **CAUTION:** Wrap the tip of flat-bladed screwdriver with a cloth when removing metal clips from garnishes. В 1. Remove A/T finisher or M/T shift lever boot. Refer to IP-11, "Removal and Installation". 2. Remove the console. Refer to IP-11, "Removal and Installation". 3. Remove front and rear seats. Refer to SE-3, "Removal and Installation" (front), or SE-5, "Removal and <u>Installation</u>" (rear). 4. Remove kick plates. D 5. Remove dash side lower garnish. A 6. Remove body side welts. 7. Remove front seat belt floor anchor bolt. Refer to SB-3, "Removal and Installation". Е 8. Remove rear seat belt floor anchor bolt. Refer to SB-5, "Removal and Installation". 9. Remove center pillar lower garnish. 10. Remove adjuster cover and pillar shoulder bolt. Refer to SB-3, "Removal and Installation". F 11. Remove floor carpet. 12. Remove center pillar upper garnish. 13. Remove front pillar garnish. 14. Remove rear pillar garnish. Н 15. Remove parcel shelf. 16. Remove center rear seat back finisher. 17. Remove side rear seat back finishers. ΕI

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SIDE AND FLOOR TRIM



SIDE AND FLOOR TRIM



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DOOR FINISHER

DOOR FINISHER PFP:80900

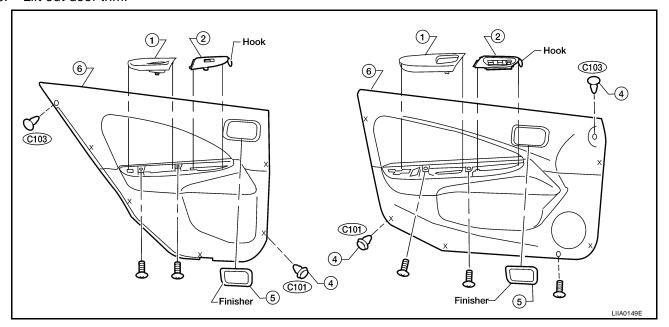
Removal and Installation

EIS000P0

CAUTION:

Wrap the tip of a flat-bladed screwdriver with cloth when prying pawls from door trim.

- 1. Remove the door pull finisher(s).
- 2. Remove power window switch(es) finisher(s), then disconnect the connector(s) (models equipped with power windows).
- Do not lift the front of the power window switch assembly.
- 3. Remove window regulator handle (models without power windows).
- 4. Remove screws and disconnect clips C101 and clips C103 from door.
- 5. Reach behind and carefully pull door trim panel from inside handle until finisher pops off.
- 6. Lift out door trim.



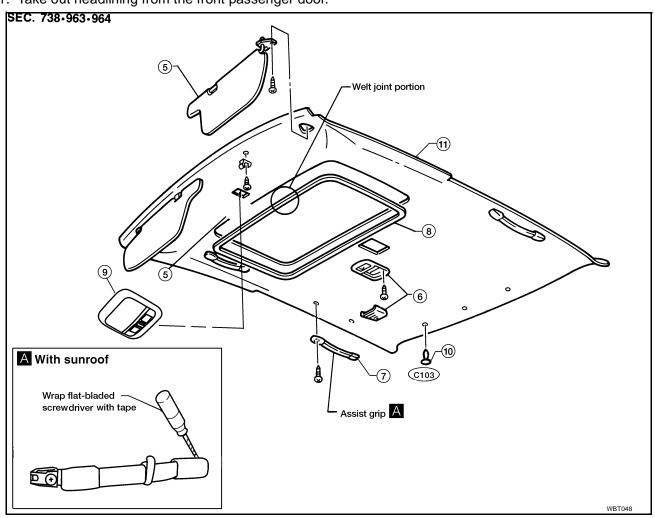
ROOF TRIM PFP:73910

Removal and Installation

CAUTION:

Disconnect both terminals from battery in advance.

- Remove driver air bag module and steering wheel. Refer to <u>SRS-40</u>, "Removal and Installation" and <u>PS-</u> 11, "STEERING WHEEL".
- 2. Fully tilt front right and left seat backs backward.
- Remove front pillar garnish, front and rear kick plates. Refer to El-29, "Removal and Installation".
- 4. Remove center pillar lower and upper garnish, and rear pillar garnish. Refer to El-29, "Removal and Installation".
- 5. Remove sun visors.
- 6. Remove interior lamp.
- 7. Remove assist grips (if equipped). A
- 8. Remove sunroof welt (if equipped) and door welts.
- 9. Remove sunroof switch (if equipped) and map lamp assembly.
- 10. Remove clips attached to roof.
- 11. Take out headlining from the front passenger door.



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TRUNK ROOM TRIM

PFP:84920

Removal and Installation

