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### SERVICE INFORMATION

### **PRECAUTIONS**

Precaution 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 SR 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 harnesses or harness connectors.

PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

#### **WARNING:**

- When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors with the Ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the Ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

Precaution Necessary for Steering Wheel Rotation After Battery Disconnect

INFOID:0000000005282903

#### NOTE:

- This Procedure is applied only to models with Intelligent Key system and NATS (NISSAN ANTI-THEFT SYS-TEM).
- Remove and install all control units after disconnecting both battery cables with the ignition knob in the "LOCK" position.
- Always use CONSULT-III to perform self-diagnosis as a part of each function inspection after finishing work. If DTC is detected, perform trouble diagnosis according to self-diagnostic results.

For models equipped with the Intelligent Key system and NATS, an electrically controlled steering lock mechanism is adopted on the key cylinder.

For this reason, if the battery is disconnected or if the battery is discharged, the steering wheel will lock and steering wheel rotation will become impossible.

If steering wheel rotation is required when battery power is interrupted, follow the procedure below before starting the repair operation.

### **OPERATION PROCEDURE**

1. Connect both battery cables.

#### NOTE:

Supply power using jumper cables if battery is discharged.

- 2. Use the Intelligent Key or mechanical key to turn the ignition switch to the "ACC" position. At this time, the steering lock will be released.
- Disconnect both battery cables. The steering lock will remain released and the steering wheel can be rotated.
- 4. Perform the necessary repair operation.

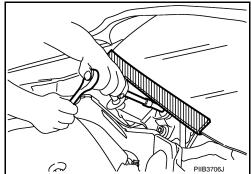
#### **PRECAUTIONS**

#### < SERVICE INFORMATION >

- 5. When the repair work is completed, return the ignition switch to the "LOCK" position before connecting the battery cables. (At this time, the steering lock mechanism will engage.)
- Perform a self-diagnosis check of all control units using CONSULT-III.

Precaution

- When removing or disassembling any part, be careful not to damage or deform it. Protect parts which may get in the way with cloth.
- When removing parts with a screwdriver or other tool, protect parts by wrapping them with vinyl or tape.
- · Keep removed parts protected with cloth.
- If a clip is deformed or damaged, replace it.
- If an unreusable part is removed, replace it with a new one.
- Tighten bolts and nuts firmly to the specified torque.
- After re-assembly has been completed, make sure each part functions correctly.
- · Remove stains in the following way.
- Water-soluble stains:
  - Dip a cloth in warm water, and squeeze tightly. After wiping the stain, wipe with a soft dry cloth.
- Oil stain:
- Dissolve a synthetic detergent in warm water (density of 2 to 3% or less), dip the cloth, then clean off the stain with the cloth. Next, dip the soft cloth in fresh water, and then squeeze it tightly. Then clean off the detergent completely. Then wipe the area with a soft dry cloth.
- Do not use any organic solvent, such as thinner or benzine.
- When performing procedures that require removal of the cowl top, cover the lower end of the windshield with a suitable protection material.



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### **PREPARATION**

### < SERVICE INFORMATION >

# **PREPARATION**

# Special Service Tool

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

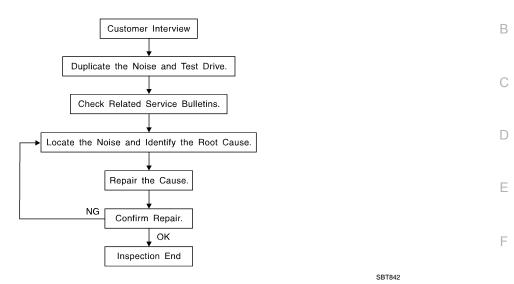
Tool number (Kent-Moore No.) Tool name		Description
 (J-39570) Chassis ear	SBT839	Locating the noise
 (J-43980) NISSAN Squeak and Rattle kit	SBT840	Repairing the cause of noise
 ( J-46534 ) Trim tool set	AWJIA0483ZZ	For removing trim

# Commercial Service Tool

INFOID:0000000005282906

Tool number (Kent-Moore No.) Tool name		Description
— (J-39565) Engine ear	SIIA0995E	Locating the noise

Work Flow INFOID:000000005282907



#### **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.

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#### < SERVICE INFORMATION >

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 CVT 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 El-7, "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.

 $73982-9E000: 45 \text{ mm} (1.77 \text{ in}) \text{ thick}, 50 \times 50 \text{ mm} (1.97 \times 1.97 \text{ in})/73982-50Y00: 10 \text{ mm} (0.39 \text{ in}) \text{ thick}, 50 \times 50 \text{ mm} (1.97 \times 1.97 \text{ in})$ 

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.

#### < SERVICE INFORMATION >

#### 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
- Instrument panel to front pillar garnish
- Instrument panel to windshield
- Instrument panel 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:

- Shifter assembly cover to finisher
- 2. A/C control unit and cluster lid C
- 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
- 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.

#### TRUNK

Trunk noises are often caused by a loose jack or loose items put into the trunk by the owner. In addition look for:

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

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

#### SUNROOF/HEADLINING

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

- Sunroof lid, rail, linkage or seals making a rattle or light knocking noise
- 2. Sun visor 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.

#### OVERHEAD CONSOLE (FRONT AND REAR)

Overhead console noises are often caused by the console panel clips not being engaged correctly. Most of these incidents are repaired by pushing up on the console at the clip locations until the clips engage. In addition look for:

- Loose harness or harness connectors.
- Front console map/reading lamp lens loose.
- 3. Loose screws at console attachment points.

#### **SEATS**

When isolating seat noise 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 holder
- A squeak between the seat pad cushion and frame
- 3. The rear seatback 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 noise 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 noise include:

- Any component installed on the engine wall
- 2. Components that pass through the engine wall
- Engine wall mounts and connectors
- 4. Loose radiator 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.

#### < SERVICE INFORMATION >

## **Diagnostic Worksheet**

INFOID:0000000005282909

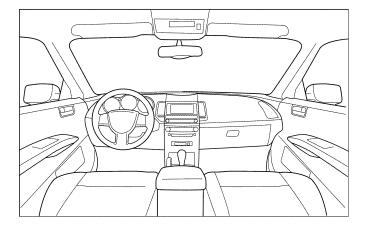
#### Dear Customer:

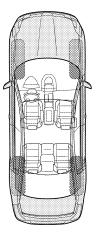
We are concerned about your satisfaction with your vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your vehicle right the first time, please take a moment to note the area of the vehicle where the squeak or rattle occurs and under what conditions. You may be asked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

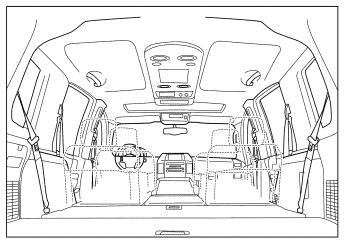
#### **SQUEAK & RATTLE DIAGNOSTIC WORKSHEET**

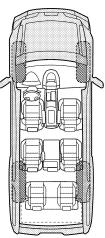
### I. WHERE DOES THE NOISE COME FROM? (circle the area of the vehicle)

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









Continue to page 2 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.

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Briefly describe the location where the nois	se occurs	:		
II. WHEN DOES IT OCCUR? (please che Anytime 1 st time in the morning Only when it is cold outside Only when it is hot outside III. WHEN DRIVING: Through driveways Over rough roads Over speed bumps Only about mph	Af W Dr Or  IV. W Sc Cr Ra	ter sitting ou hen it is rain y or dusty co ther: HAT TYPE queak (like to	ut in the ra ning or well conditions OF NOISE ennis shoe alking on an	s on a clean floor) n old wooden floor) by rattle)
On acceleration Coming to a stop On turns: left, right or either (circle) With passengers or cargo Other: After driving miles or minu TO BE COMPLETED BY DEALERSHIP P Test Drive Notes:	☐ Tid ☐ Th ☐ Bu	ck (like a clo nump (heavy uzz (like a bu	ock second muffled kr	l hand) nock noise)
		YES	NO	Initials of person performing
Vehicle test driven with customer - Noise verified on test drive - Noise source located and repaired - Follow up test drive performed to confirm	n repair			

This form must be attached to Work Order

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## **CLIP AND FASTENER**

Description INFOID:0000000005282910

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- Clips and fasteners in EI 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		Removal: Remove by bending up with flat-bladed screwdrivers or clip remover.
	SBF302H	SBF367BA
C103		F
$\bigcirc$		Removal: Remove with a clip remover.
	SBT095	Push center pin to
C203		Push center pin to catching position. (Do not remove center pin by hitting it.)  Push  Push  Push  Push
	SBF258G	Installation: LIIA0236E
C205		Removal: K
		Finisher Clip
	MBT080A	SBF638CA
C206		N
	MBF519B	MBF520B
CE103		Removal:
		SBF147B

### **CLIP AND FASTENER**

CLIP AND FASTENER < SERVICE INFORMATION >					
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 里	Seal rubber Clip-B SBF648B	Removal:  Clip-A Finisher  Lip-B Rubber seal Flat-bladed screwdriver			
CF118	Clip-B (Grommet) Sealing washer SBF151D	Removal: Flat-bladed screwdriver Finisher Clip-B Body panel Clip-A Sealing washers SBF259G			
CG101	SBF145B	Removal:  Rotate 45° to remove.  Removal:  SBF085B			
CS101	SBF078B	Removal:  1. Screw out with a Phillips screwdriver.  2. Remove female portion with flat-bladed screwdriver.  SBF992G			

### **CLIP AND FASTENER**

### < SERVICE INFORMATION >

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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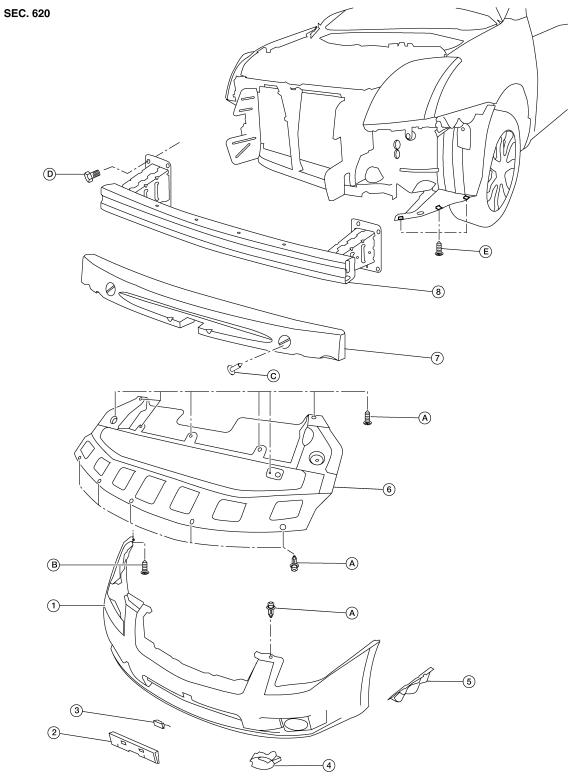
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# FRONT BUMPER

### Removal and Installation



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- 1. Front bumper fascia
- 4. Fog lamp bracket (if equipped)
- 7. Energy absorber
- 2. License plate bracket
- 5. Front bumper side retainer
- 8. Bumper reinforcement
- 3. Access cover
- 6. Engine under cover
- A. Clip C205

### **FRONT BUMPER**

#### < SERVICE INFORMATION >

- B. Upper fascia screw
- C. Clip C103

D. Bumper reinforcement bolt

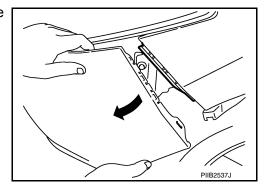
E. Lower fascia screw

#### **CAUTION:**

Bumper fascia is made of resin. Do not apply strong force to it, and be careful to prevent contact with oil.

#### REMOVAL

- 1. Remove the front grille. Refer to El-18.
- 2. Remove the screws at front edge of front fender protector RH/LH. Refer to El-21.
- Remove the clips and splash shield RH/LH. Refer to <u>El-21</u>.
- 4. Remove the clips and engine undercover.
- 5. Remove upper screws RH/LH from front bumper fascia at front fender.
- 6. Pull the outboard edge of front bumper fascia away from vehicle to disengage from the bumper side retainer.



- 7. Disconnect fog lamp harness connector RH/LH (if equipped).
- 8. Remove the front bumper fascia.
- 9. Remove the screws and fog lamp assembly RH/LH (if equipped) from bracket. Refer to <u>LT-44, "Removal and Installation, All Except SE-R"</u>.
- 10. Remove the clips and bumper energy absorber.
- 11. Remove the clips and radiator air guides.
- 12. Remove the retaining pin RH/LH at lower edge, then remove the bolts and bumper reinforcement.
- 13. Remove bumper side retainer RH/LH from front fender.

#### **INSTALLATION**

Installation is in the reverse order of removal.

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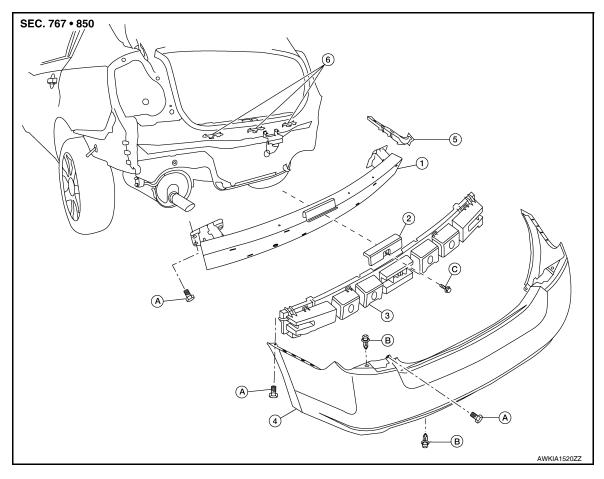
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### **REAR BUMPER**

### Removal and Installation

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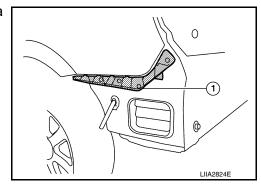
- 1. Rear bumper reinforcement
- 4. Rear bumper fascia
- A. Bolt

- 2. Energy absorber block
- 5. Rear bumper side retainer
- B. Clip C205

- 3. Energy absorbing plastic
- 6. Rear bumper upper retainer
- C. Clip C101

#### **REMOVAL**

- 1. Open trunk lid.
- 2. Release the clips and remove rear trunk plate.
- 3. Remove rear combination lamp RH/LH. Refer to LT-79.
- 4. Remove the clips, then remove rear fender protector RH/LH. Refer to EI-21.
- 5. Remove rear bumper fascia lower clips and upper screws RH/LH.
- 6. Release rear bumper side retainer (1) from rear bumper fascia pulling outward to disengage.

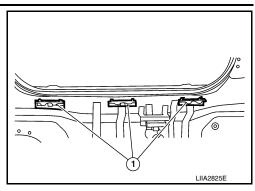


7. Remove rear bumper fascia upper clips and screws.

### **REAR BUMPER**

#### < SERVICE INFORMATION >

8. Release rear bumper upper retainer (1), then pull rear bumper fascia rearward away from vehicle.



- 9. Remove the clip and energy absorber block, then release the tabs and remove energy absorbing plastic from rear bumper reinforcement.
- 10. Remove the bolts and rear bumper reinforcement.
- 11. Release the pawls and remove the rear bumper side retainer RH/LH.

#### **INSTALLATION**

Installation is in the reverse order of removal.

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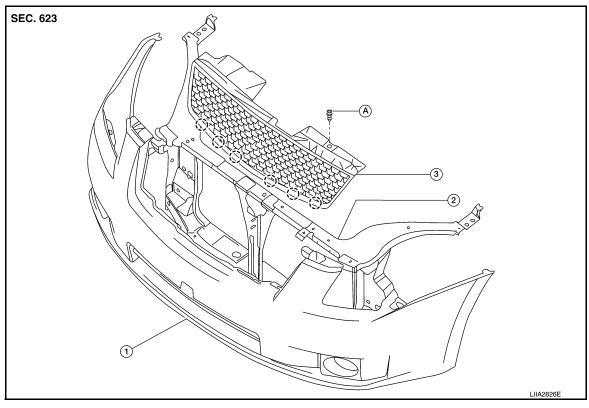
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### **FRONT GRILLE**

### Removal and Installation

INFOID:0000000005282913



- 1. Front bumper fascia
- 2. Radiator support
- 3. Front grille

A. Clip C205

( Pawl

#### **REMOVAL**

- 1. Open hood.
- 2. Remove the upper clips and release the lower pawls, then pull front grille outward to remove from front bumper fascia and radiator support.

#### **INSTALLATION**

Installation is in the reverse order of removal.

## **COWL TOP**

### Removal and Installation

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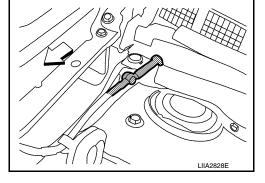
- Cowl end seal RH
- Cowl extension panel
- 7. EPT sealer
- C. Clip CE103

- 2. Cowl top seal
- Cowl top cover LH
- A. Clip C103
- D. Bolt

- 3. Cowl top cover RH
- Cowl end seal LH 6.
- B. Clip C205

#### **REMOVAL**

- 1. Remove front wiper arm RH/LH. Refer to WW-19, "Removal and Installation of Front Wiper Arms".
- 2. Disconnect washer tube.
  - ⟨□: Vehicle front
- 3. Release the clips and remove cowl top seal.
- 4. Remove the clips and cowl top cover RH/LH.



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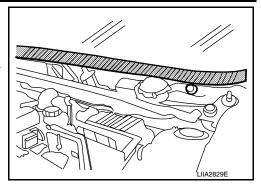
### **COWL TOP**

#### < SERVICE INFORMATION >

 Disconnect and remove the front wiper motor and linkage assembly. Refer to <u>WW-21</u>, "<u>Removal and Installation of Front</u> <u>Wiper Drive Assembly</u>".

#### **CAUTION:**

To avoid damage, make sure to cover the lower edge of windshield with suitable protection material.



6. Remove the bolts and cowl extension panel.

#### **INSTALLATION**

Installation is in the reverse order of removal.

#### NOTE:

- For wiper arm RH/LH installation and adjustment, Refer to <a href="https://www.neer.nd/www.neer.nd/www.neer.nd/www.neer.nd/www.neer.nd/www.neer.nd/www.neer.nd/www.neer.nd/ww.neer.nd/ww.neer.nd/ww.neer.nd/ww.neer.nd/ww.neer.nd/ww.neer.nd/ww.neer.nd/ww.nd/ww.neer.nd/w.neer.nd/w.neer.nd/w.neer.nd/w.neer.nd/w.neer.nd/w.neer.nd/w.neer.nd/w.neer.nd/w.neer.nd/w.neer.nd/w.neer.nd/w.neer.nd/w.neer.nd/w.neer.nd/w.neer.nd/w.neer.nd/w.neer.nd/w.neer.nd/w.ne
- Always replace EPT sealer and double-faced adhesive tape when installing cowl top cover.

# **FENDER PROTECTOR**

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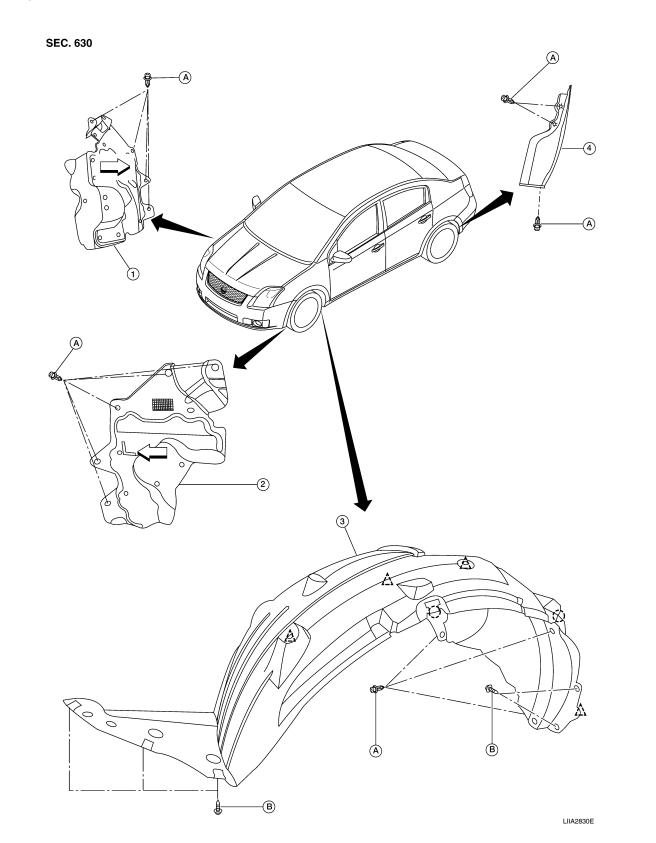
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1. Splash shield RH

2. Splash shield LH

3. Front fender protector

Revision: January 2010 El-21 2010 Sentra

### **FENDER PROTECTOR**

### < SERVICE INFORMATION >

4.	Rear fender protector	A.	Clip C205	B.	Plastic screw
<u> </u>	Clip C205	(_)	Pawl	$\Diamond$	Vehicle front

### Removal and Installation

INFOID:0000000005282916

#### FRONT FENDER PROTECTOR

Removal

Remove the screws and clips, then remove front fender protector.

Installation

Installation is in the reverse order of removal.

SPLASH SHIELD

Removal

Remove the clips and splash shield.

Installation

Installation is in the reverse order of removal.

REAR FENDER PROTECTOR

Removal

Remove the clips and rear fender protector.

Installation

Installation is in the reverse order of removal.

### **MUDGUARD**

### Removal and Installation

SEC. 767

- 1. Front fender protector
- 4. Mudguard rear (if equipped)
- A. Screw

- 2. Mudguard center
- 5. Mudguard center bracket rear
- B. Clip C205

- Mudguard front (if equipped)
- 6. Body outer sill reinforcement
- C. Grommet

### **REMOVAL**

- 1. Remove the screws and mudguard front (if equipped).
- 2. Remove the screws and mudguard rear (if equipped).
- 3. Remove the clips and screws, then remove mudguard center from body outer sill reinforcement.
- 4. Remove the screws and mudguard center bracket rear.
- 5. Using a trim stick, carefully lift the mudguard center away from the adhesive backed foam tape.
- 6. Release the adhesive backed foam tape from the body surface

#### INSTALLATION

Installation is in the reverse order of removal.

#### NOTE:

Revision: January 2010 El-23 2010 Sentra

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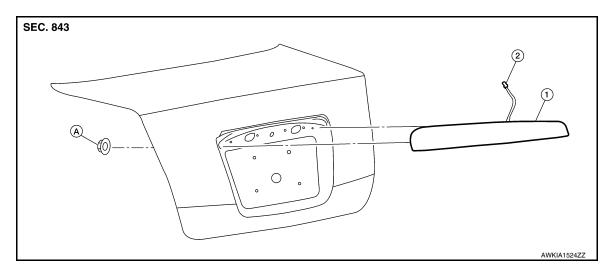
### **MUDGUARD**

### < SERVICE INFORMATION >

- Before installing mudguard center, clean the surface where it will be mounted with isopropyl alcohol or equivalent to degrease the surface.
- Before installing, be sure there are no gaps or waves in the adhesive backed foam tape where the surfaces meet.

### LICENSE LAMP FINISHER

### Removal and Installation



1. License lamp finisher

- Trunk opener request switch (if equipped)
- A License lamp finisher nut

#### **REMOVAL**

- 1. Open trunk and remove trunk lid finisher. Refer to El-44.
- 2. Remove license lamp finisher nuts.
- 3. Disconnect trunk opener request switch connector (if equipped), then remove license lamp finisher.

#### **INSTALLATION**

Installation is in the reverse order of removal.

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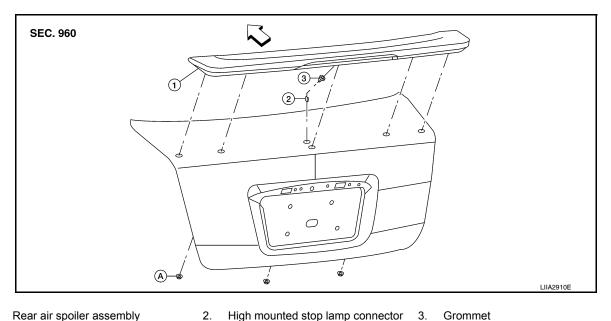
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### REAR AIR SPOILER

### Removal and Installation

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- Rear air spoiler assembly
- High mounted stop lamp connector

Α. Nut Vehicle front

#### Removal

- Remove trunk lid finisher. Refer to El-44.
- Disconnect high mounted stop lamp connector.
- Remove the rear air spoiler nuts.then using a trim stick carefully release lift the rear air spoiler from the gaskets.
- Using a trim stick, carefully pry upward to release the foam tape (gasket) from trunk lid surface. **CAUTION:**

Use care not to damage painted surfaces during removal of, or releasing adhesive backed foam

Release the high mounted stop lamp connector and grommet from trunk lid, then remove rear air spoiler.

#### Installation

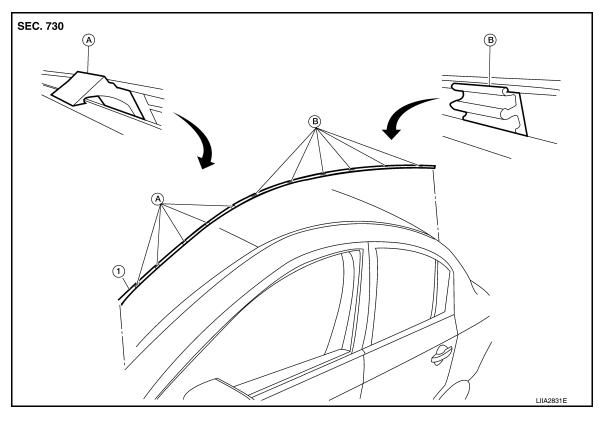
Installation is in the reverse order of removal.

#### NOTE:

- Before installing rear air spoiler, clean the surface where it will be mounted with isopropyl alcohol or equivalent to degrease the surface.
- Before installing, be sure there are no gaps or waves in the foam tape (gasket) where the surfaces meet.
- During installation, be sure grommet of high mounted stop lamp harness is fully seated into trunk lid opening prior to final rear air spoiler placement.

### **ROOF SIDE MOLDING**

### Removal and Installation



1. Roof side molding

- A. Roof side molding front clip
- B. Roof side molding rear clip

#### **REMOVAL**

- 1. Using a suitable tool, release the rearward most roof side molding rear clip.
- 2. Lift up back edge of roof side molding and release remaining clips working forward.
- 3. Release roof side molding front clips, then remove roof side molding.

#### **INSTALLATION**

Installation is in the reverse order of removal.

#### NOTE:

For setting a new clip A or B, use Epoxy Adhesive DP-100C made by 3M. For adhesive DP-100C application, use applicator 9170 EPX W 1:1 and mixer nozzle 9742 EPX 50ML made by 3M.

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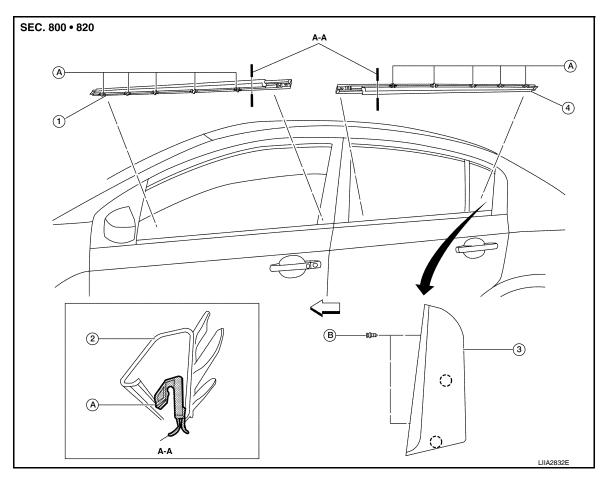
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### DOOR OUTSIDE MOLDING

Component



- 1. Front door outside molding
- 4. Rear door outside molding
- ( Pawl

- 2. Door outside molding case
- A. Door outside molding clip
- ∠ Vehicle front

3. Rear door corner cover

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B. Screw

#### Removal and Installation

#### FRONT DOOR OUTSIDE MOLDING

#### Removal

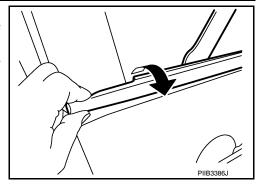
#### **CAUTION:**

- Use care while removing to avoid permanent damage to part from excessive force during removal.
- After removal, visually inspect molding; replace if deformed or damaged.
- Open front door window.
- Remove front door outside rearview mirror. Refer to <u>GW-69</u>.

### DOOR OUTSIDE MOLDING

#### < SERVICE INFORMATION >

- While pulling up on front of front door outside molding, insert a suitable tool beneath the molding case and release clip from the door top edge.
- Remove front door outside molding while pulling up after disengaging.



Installation

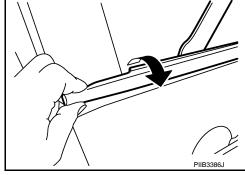
Installation is in the reverse order of removal.

#### REAR DOOR OUTSIDE MOLDING

#### Removal

#### **CAUTION:**

- Use care while removing to avoid permanent damage to part from excessive force during removal.
- After removal, visually inspect molding; replace if deformed or damaged.
- 1. Open rear door window.
- 2. Remove rear door corner cover. Follow the REAR DOOR CORNER COVER procedure.
- 3. While pulling up on rear of rear door outside molding, insert a suitable tool beneath the molding case and release clip from the door top edge.
- Remove rear door outside molding while pulling up after disengaging.



Installation

Installation is in the reverse order of removal.

#### REAR DOOR CORNER COVER

#### Removal

- 1. Open rear door and remove rear door corner cover screws.
- Using a suitable tool, release the pawls while pulling outward and remove the rear door corner cover.

#### Installation

Installation is in the reverse order of removal.

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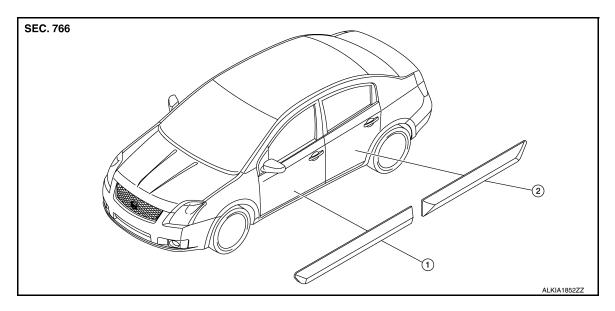
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### SIDE GUARD MOLDING

### Removal and Installation

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- 1. Front door side guard molding
- 2. Rear door side guard molding

#### Removal

#### **CAUTION:**

Never apply tack-paper adhesive remover to body panel surface finished with lacquer-based paints.

- Original side guard molding is affixed to body panel with double-faced adhesive tape.
- 1. Heat molding to between 30° and 40°C (86° to 104°F) with a heat gun.
- 2. Raise end of molding to release clips, then cut away tape to remove molding. Remove all traces of tape.

#### Installation

- On vehicles coated with Hard Clear Coat, use double-faced 3M adhesive tape Product No. 4210 or equivalent, after priming with 3M primer Product No. N200 or C-100 or equivalent.
- The repair parts are also affixed with double-faced adhesive tape.
- To re-use existing molding, clean all traces of double sided tape from the molding and apply new doublefaced tape to the molding.

#### **CAUTION:**

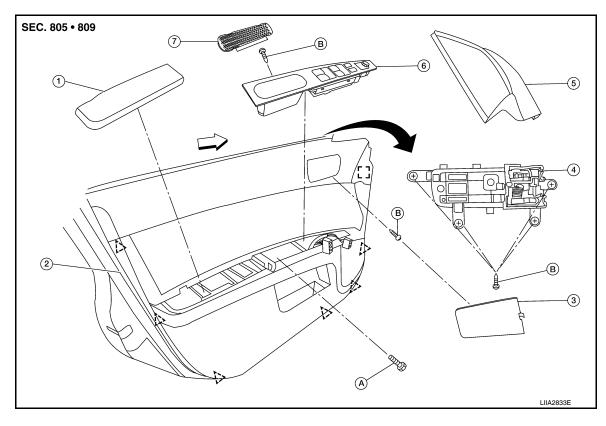
#### To secure contact, do not wash vehicle for 24 hours after installation.

- 1. Clean the panel surface with isopropyl alcohol or equivalent to degrease the surface.
- 2. Heat the panel and molding tape surface to 30° to 40°C (86° to 104°F).
- Remove the backing sheet from the tape surface.
  - Align the locating pin into the hole in the outer door.
  - · Continue aligning the pins into their corresponding holes in the outer door during installation.
- 4. Press ends by hand and use a roller to apply 5 kg-f (11 lbs-f) to press molding to door surface.
  - Apply even pressure along molding to insure proper wet out.

### **DOOR FINISHER**

### Removal and Installation

### FRONT DOOR



- 1. Pad
- 4. Inside handle/lock assembly
- 7. Pull cup cover
- △ Clip C101

- Front door finisher
- Mirror finisher
- A. Bolt

- 3. Inside handle cover
- 6. Power window and door lock/unlock switch finisher (if equipped)
- B. Screw

#### Removal

- 1. Open front door and front door window.
- 2. Disconnect the negative battery terminal.
- 3. Remove the mirror finisher.
- 4. Release the inside handle cover pawls and remove, then remove the screw.
- 5. Release the pull cup cover pawls and remove, then remove the screw.
- 6. Insert a suitable tool into back edge of front door power window and door lock/unlock switch finisher. Gently pry upward to release the clips and remove the finisher.
  - If equipped, insert a suitable tool between door finisher and manual door window crank handle to release clip, then remove handle.

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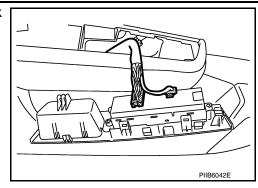
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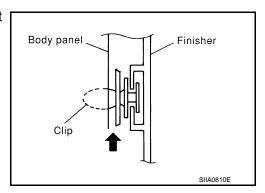
### **DOOR FINISHER**

#### < SERVICE INFORMATION >

7. Disconnect front door power window and door lock/unlock switch harness connector (if equipped).



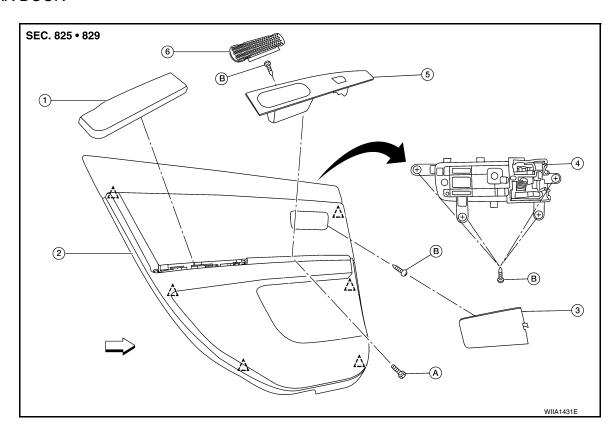
- 8. Remove the front door finisher bolt.
- 9. Release the clips and lift front door finisher upward to remove it from door body panel.



Installation

Installation is in the reverse order of removal.

#### **REAR DOOR**



- 1. Pad
- 4. Inside handle/lock assembly
- 2. Rear door finisher
- 5. Power window switch finisher (if equipped)
- 3. Inside handle cover
- 6. Pull cup cover

### **DOOR FINISHER**

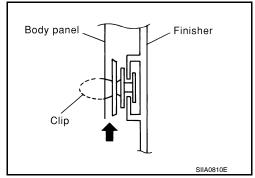
#### < SERVICE INFORMATION >

A. Bolt B. Screw Clip C101

∨ Vehicle front

#### Removal

- 1. Open rear door and rear door window.
- 2. Disconnect the negative battery terminal.
- 3. Release the inside handle cover pawls and remove, then remove the screw.
- 4. Release the pull cup cover pawls and remove, then remove the screw.
- 5. Insert a suitable tool into back edge of rear door power window switch finisher. Gently pry upward to release the clips and remove the finisher.
  - If equipped, insert a suitable tool between door finisher and manual door window crank handle to release clip, then remove handle.
- 6. Disconnect rear door power window switch harness connector (if equipped).
- Remove rear door finisher bolt.
- 8. Release the clips and lift rear door finisher upward to remove it from door body panel.



Installation

Installation is in the reverse order of removal.

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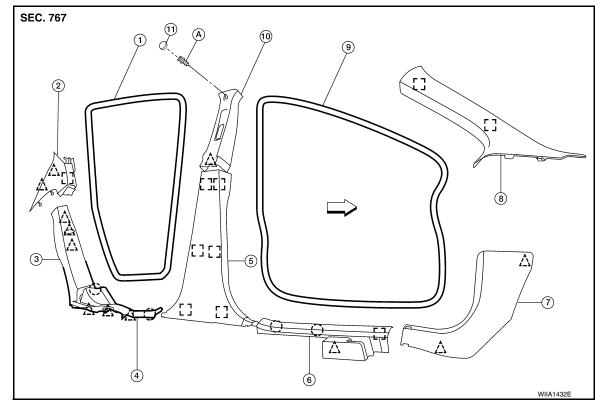
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### Removal and Installation

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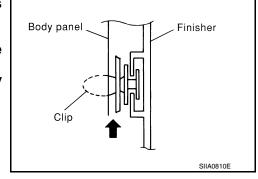
- 1. Rear body side welt
- 4. Rear kicking plate lower
- 7. Lower dash side finisher
- 10. Center pillar upper finisher
- [] Metal clip
- ⟨⇒ Vehicle front

- 2. Rear pillar finisher
- 5. Center pillar lower finisher
- 8. Front pillar finisher
- 11. Cap
- △ Clip C101

- 3. Rear kicking plate upper
- 6. Front kicking plate
- 9. Front body side welt
- A. Screw
- ( Pawl

#### **CAUTION:**

- Insert a suitable tool between panel on vehicle and clips (as indicated with arrow) to release clips.
- Use a suitable tool when removing metal clips from finishers.
- Be careful not to damage the body while prying to release clips.
- Make sure clips are properly aligned in panel holes on body when installing, then press them in completely.

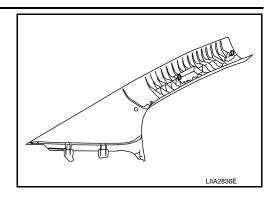


#### FRONT PILLAR FINISHER

Removal

#### < SERVICE INFORMATION >

Release the clips and remove front pillar finisher.



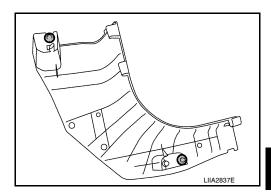
Installation

Installation is in the reverse order of removal.

#### LOWER DASH SIDE FINISHER

#### Removal

- 1. Partially remove front body side welt.
- 2. Release the clips and remove lower dash side finisher.



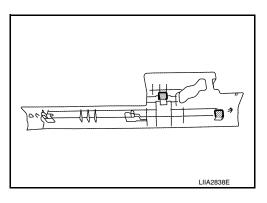
Installation is in the reverse order of removal.

#### FRONT KICKING PLATE

#### Removal

Installation

- 1. Partially remove front body side welt.
- 2. Release the clips and remove front kicking plate.



Installation

Installation is in the reverse order of removal.

#### REAR KICKING PLATE UPPER

#### Removal

1. Partly remove rear body side welt.

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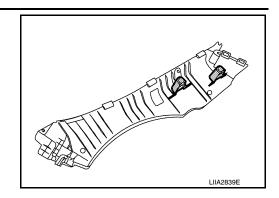
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#### < SERVICE INFORMATION >

Release the clips and remove rear kicking plate upper.



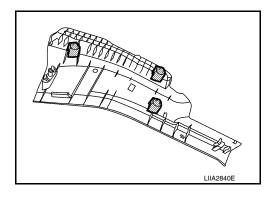
#### Installation

Installation is in the reverse order of removal.

#### REAR KICKING PLATE LOWER

#### Removal

- 1. Partially remove rear body side welt.
- 2. Release the clips and remove rear kicking plate lower.



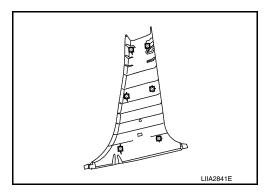
#### Installation

Installation is in the reverse order of removal.

#### CENTER PILLAR LOWER FINISHER

#### Removal

- 1. Remove front kicking plate. Follow the FRONT KICKING PLATE procedure.
- 2. Remove rear kicking plate lower. Follow the REAR KICKING PLATE LOWER procedure.
- 3. Partially remove both front and rear body side welts.
- 4. Release the clips and remove center pillar lower garnish.



#### Installation

Installation is in the reverse order of removal.

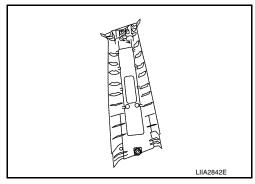
### CENTER PILLAR UPPER FINISHER

#### Removal

1. Remove center pillar lower finisher. Follow the CENTER PILLAR LOWER FINISHER procedure.

#### < SERVICE INFORMATION >

- 2. Remove front seat belt shoulder anchor. Refer to <u>SB-4.</u> "Removal and Installation of Front Seat Belt".
- 3. Remove the access cover, then remove the screw.
- 4. Partially remove front and rear body side welts.
- 5. Release the clip, then remove center pillar upper finisher.



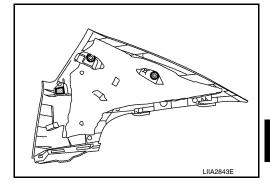
#### Installation

Installation is in the reverse order of removal.

#### REAR PILLAR FINISHER

#### Removal

- 1. Remove rear seat cushion and rear seatback. Refer to <u>SE-19</u>.
- 2. Partially remove rear body side welt.
- 3. Release the clips and remove rear pillar finisher.



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#### Installation

Installation is in the reverse order of removal.

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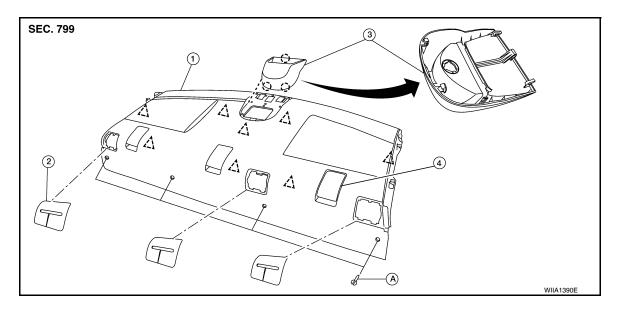
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### REAR PARCEL SHELF FINISHER

### Removal and Installation

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- 1. Rear parcel shelf finisher 2.
- Rear seat belt escutcheon 3.
- . High mounted stop lamp (except SE-R models)

- 4. Anchor cover
- A. Clip C103
- △ Clip C101

#### **REMOVAL**

- 1. Fold rear seat cushion and seat back into forward most position.
- 2. Remove rear seat belt lower anchor bolts. Refer to SB-6, "Removal and Installation of Rear Seat Belt".
- Release the tabs and remove the rear seat belt escutcheon RH/LH/Center.
- Remove rear kicking plate lower RH/LH, rear kicking plate upper RH/LH, and rear pillar finisher. Refer to EI-34.
- For all models (except SE-R):
  - 1. Release the clips and remove the high mounted stop lamp from the rear parcel shelf finisher.
  - 2. Rotate lamp and remove, then remove high mounted stop lamp.
- 6. Remove the clips and rear parcel shelf finisher.

#### **INSTALLATION**

Installation is in the reverse order of removal.

### **FLOOR TRIM**

#### Removal and Installation

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- Floor carpet hook
- 4. Center floor spacer RH
- 7. Floor trim

- 2. Center floor spacer LH
- 5. Front floor spacer RH
- A. Clip C101

- 3. Rear floor spacer
- 6. Front floor spacer LH

### **REMOVAL**

- 1. Disconnect both the negative and positive battery terminals, then wait at least three minutes.
- 2. Remove front seat RH/LH and rear seat cushion. Refer to <u>SE-14</u> and <u>SE-19</u>.
- 3. Remove floor console and bracket. Refer to IP-12, "Removal and Installation".
- 4. Remove parking brake control. Refer to PB-5.
- Remove center console lower finisher RH/LH and disconnect connector. Refer to <u>IP-12, "Removal and Installation"</u>.

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#### **FLOOR TRIM**

#### < SERVICE INFORMATION >

- 6. Remove front kicking plate RH/LH, center pillar lower finisher RH/LH, and both upper and lower rear kicking plates RH/LH. Refer to <u>EI-34</u>.
- 7. Remove front seat belt lower anchor RH/LH. Refer to SB-4, "Removal and Installation of Front Seat Belt".
- 8. Remove diagnosis sensor unit. Refer to SRS-44.
- 9. Remove floor carpet hook.
- 10. Remove instrument panel stay RH/LH. Refer to IP-12, "Removal and Installation".
- 11. Remove push pin clips, then pull out floor trim through door opening.
- 12. Remove floor spacer RH/LH/Rear.

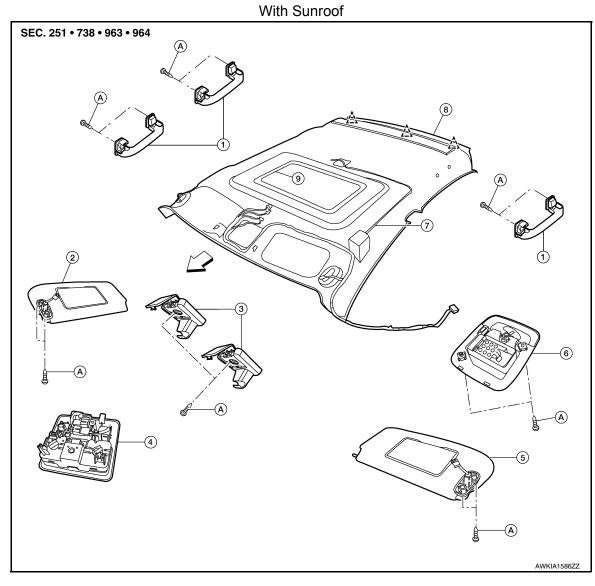
#### **INSTALLATION**

Installation is in the reverse order of removal.

## **HEADLINING**

### Removal and Installation

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- 1. Assist grip
- 4. Map lamp assembly
- 7. Interior room lamp harness
- A. Screw

- 2. Sunvisor RH
- 5. Sunvisor LH
- 8. Headlining (with sunroof)
- △ Clip C103

- Sunvisor holder
- 6. Interior room lamp
- 9. Sunroof opening welt

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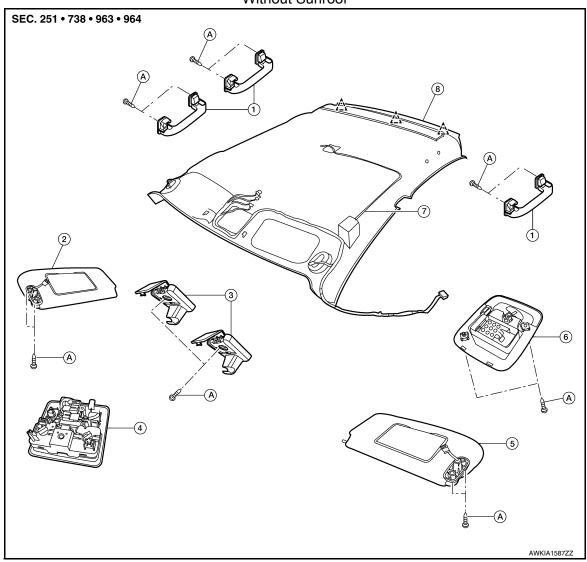
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#### Without Sunroof



- Assist grip
- 4. Map lamp assembly
- 7. Interior room lamp harness
- △ Clip C103

- 2. Sunvisor RH
- 5. Sunvisor LH
- 8. Headlining (with sunroof)
- ∠ Vehicle front

- Sunvisor holder
- 6. Interior room lamp
- A. Screw

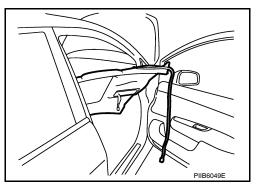
#### REMOVAL

- 1. Disconnect the negative and positive battery terminals, then wait at least three minutes.
- Recline front seatback to full down position.
- Remove front seat belt shoulder anchor RH/LH. Refer to <u>SB-4, "Removal and Installation of Front Seat Belt"</u>.
- 4. Remove center console. Refer to <u>IP-12, "Removal and Installation"</u>.
- 5. Remove front pillar finisher RH/LH. Refer to EI-34, "Removal and Installation".
- 6. Remove both center pillar upper and lower RH/LH finisher. Refer to EI-34, "Removal and Installation" and EI-34, "Removal and Installation".
- 7. Remove rear pillar finisher. Refer to EI-34, "Removal and Installation".
- 8. Disconnect room lamp harness.
- 9. Remove front and rear body side welt RH/LH. Refer to El-34.
- 10. Remove the screw, them remove assist grips.
- 11. Disconnect the connector and remove the sunvisor screws, then remove sunvisor RH/LH.
- 12. Remove the sunvisor holder screws, then remove sunvisor holder RH/LH.

### **HEADLINING**

#### < SERVICE INFORMATION >

- 13. Remove sunroof opening welt (if equipped).
- 14. Remove lens and one screw, then disconnect the connector and remove the roof map lamp assembly.
- 15. Remove lens and two screws, then disconnect the connector and remove interior room lamp.
- 16. Remove three headlining clips.
- 17. Position the headlining so the front edge goes partially through the opening of the right side front door.



18. Position the headlining so the rear edge goes through the opening of the left rear door, then remove headlining through the rear door opening.

#### **CAUTION:**

- Two technicians should be used to avoid damage when removing or replacing headlining.
- During headlining removal and installation, cover the center console finisher upper surface to prevent damage.
- Do not bend headlining when removing.

#### INSTALLATION

Installation is in the reverse order of removal.

#### **CAUTION:**

Avoid headlining damage when installing by inserting rear clips first during assembly.

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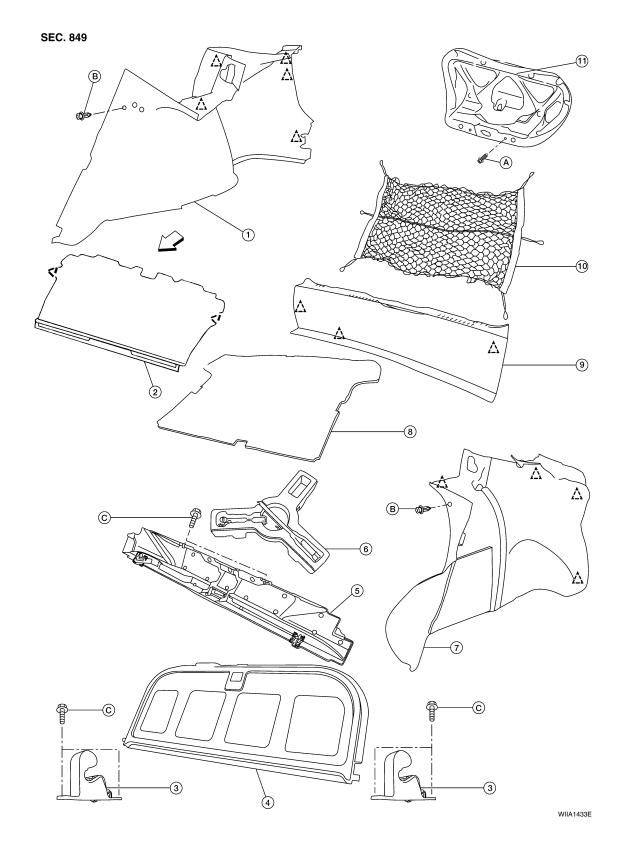
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# TRUNK ROOM TRIM & TRUNK LID FINISHER

### Removal and Installation



### TRUNK ROOM TRIM & TRUNK LID FINISHER

### < SERVICE INFORMATION >

1.	Trunk side finisher RH	2.	Trunk front finisher (if equipped)	3.	Trunk divider hinge RH (if equipped)	Α
4.	Trunk divider panel (if equipped)	5.	Trunk divider reinforcement upper (if equipped)	6.	Spare tire spacer	Б
7.	Trunk side finisher LH	8.	Trunk floor carpet	9.	Rear trunk plate	В
10.	Cargo net	11.	Trunk lid finisher	A.	Clip C205	
B.	Clip C103	C.	Screw		Metal clip	С
△``	Clip C101	$\Diamond$	Vehicle front			
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#### NOTE:

If equipped, the trunk divider reinforcement upper MUST first be removed before removing trunk side finisher panels. The trunk divider reinforcement upper MUST also be installed last, if installing trunk side finisher RH/LH panels.

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