

Shop Manual

FOREWORD

This shop manual is intended for use by service technicians of authorized Hyundai dealers to help them provide efficient and correct service and maintenance on Hyundai vehicle.

To ensure customer satisfaction with Hyundai products, proper service and maintenance by Hyundai technicians is essential. Consequently, it is important that service personnel fully understand the contents of this manual, which should be kept in a handy place for quick and easy reference.

All the contents of this manual, including photographs, drawings, and specifications, are the latest available at the time of printing. As modifications affecting service occur, dealers will be provided technical service bulletins or supplementary volumes. This manual should be kept carefully up-to date upon receipt of the new information.

Hyundai Motor Company reserves the right to make changes in design or to make additions to or improvements in its products without imposing any obligations upon itself to install them on its products previously manufactured.

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DEC. 1999, Printed in Korea

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Clutch System	СН
Transaxle/Transmission	TR
Driveshaft and Axle	DS
Suspension System	SS
Steering System	ST
Restraints	RT
Brake System	BR
Body (Interior & Exterior)	BD
Body Electrical System	BE
Heating, Ventilation & Air Conditioning	НА

Body (Interior & Exterior)

GENERAL	BD -2
EXTERIOR	BD -7
INTERIOR	
BUMPER	BD -37
SEAT	BD -41

GENERAL

SPECIFICATIONS

Hood	
Туре	Rear hinged, front opening type
Front door	
Construction	Front hinged, full door construction
Regulator system	Wire drum type
Locking system	Pin-fork system
Rear door	
Construction	Front hinged, full door construction
Regulator system	Wire drum type
Locking system	Pin-fork system
Tailgate	
Туре	Inner hinged, gas lifter type
Glass thickness mm (in)	
Windshield glass	5 (0.20)
Front door glass	3.2 (0.13)
Rear door glass	3.2 (0.13)
Tailgate glass	3.2 (0.13)
Seat belt	E.L.R

ESHA0010

E.L.R.: Emergency Locking Retractor

TIGHTENING TORQUE	ESHA0050		
	Nm	kgf cm	lb-ft
Front and rear doors		Bulgar en regime e-consequence in the Market and Color	
Door hinge to body	34-42	340-420	24.6-30.4
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Hood and a second secon		en e	we are a second of the second
Hood hinge to body	22-27	220-270	16-19.5
Hood hinge to hood	22-27	220-270	16-19.5
Hood latch to body	7-11	70-110	5.1-8.0
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Front seat belt upper anchor	40-55	400-550	28.9-39.8
Front seat belt retractor	40-55	400-550	28.9-39.8
Height adjuster	40-55	400-550	28.9-39.8
Second and third seat belt upper anchor	40-55	400-550	28.9-39.8
Second and third seat belt lower anchor	40-55	400-550	28.9-39.8
Second and third seat belt retractor anchor	40-55	400-550	28.9-39.8
Seat			
Front seat mounting bolts and nuts	35-55	350-550	25.4-40

SPECIAL TOOLS

ESHA0100

Tool (Number and name)	Illustration	Use
09793-21000 Door hinge adjusting wrench	ESA9010F	Adjustment, removal, and installation of the door hinge
09800-21000	ESMAUTOR	
Ornament remover		Trim removal
	ESA9010G	
09853-31000 Headlining clip remover		Removal of the headlining clip
	ESA9010H	· .
09861-31100 Sealant cut-out tool		Cutting the sealant for the windshield glass (use with 09861-31200)
	ESA9010I	
09861-31200 Sealant cutting blade		Cutting the sealant for the windshield glass (use with 09861-31100)
09861-31300 Sealant gun	ESA9010J	Application of the sealant to the windshield glass
09681-31400 Glass holder	ESA9010L	Removal and installation of the windshield glass
09681-31000 Windshield glass moulding remover	ESA9010M	Removal of the windshield glass moulding

TROUBLESHOOTING

ESHA0150

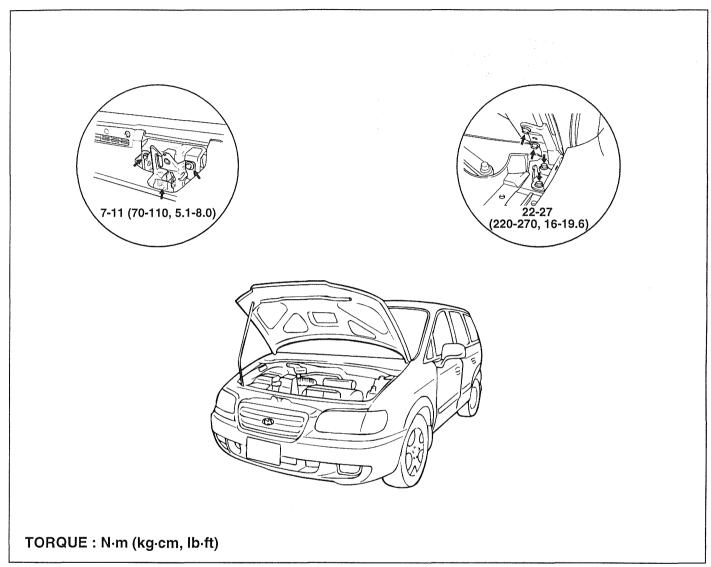
Trouble symptom	Probable cause	Remedy
Water leaks from sunroof	Dirt accumulated in drain pipe	Clear dirt inside of drain pipe
	Clogged drain pipe	Blow air into drain pipe to remove dirt
	Broken or dislocated drain pipe, defective or cracked clip	Check pipe installation and flange contact
	Deteriorated roof lid weatherstrip	Replace
	Excessive roof lid-to-body clearance and improperly fitted weatherstrip	Adjust
Wind noise	Loose or deformed deflector	Retighten or replace
Roof lid makes a noise when moved	Foreign particles lodged in guide rail	Check drive cable and guide rails for foreign particles
	Loosed guide rails and lid	Retighten
Motor runs but lid does not move or moves only halfway	Foreign particles lodged in guide rail	Check drive cable and guide rails for foreign particles
	Incorrect engagement of motor pinion with drive cable	Check for loose motor installation and damaged pinion
	Decrease in clutch slipping force of motor	Adjust
	Increased lid sliding resistance or interference of lid with drive cables, weatherstrip, etc. due to maladjustment of lid	Adjust or replace
Noise in motor (Clutch slipping noise from motor	Incorrect engagement of motor pinion with drive cable	Check pinion installation and retighten motor
when lid is fully opened or closed is not an unusual	Worn out or damaged motor pinion bearing	Replace motor assembly
noise.)	Worn out or deformed drive cable	Replace
Door glass fails to operate	Incorrect window glass installation	Adjust position
up and down	Damaged or faulty regulator arm or regulator	Correct or replace
Door does not open or close	Incorrect door installation	Adjust position
completely	Defective door check	Correct or replace
	Door hinge required grease	Apply grease
Hood does not open or close completely	Striker and latch not properly aligned	Adjust
	Incorrectly installed hood	Adjust
	Incorrect hood bumper height	Adjust
Water leak through	Defective seal	Fill with sealant
windshield and rear window	Defective flange	Correct

Trouble symptom	Probable cause	Remedy
Wind noise around door	Weatherstrip not holding firmly	Adjust fit of door
	Improperly installed weatherstrip or setting of weatherstrip setting of weatherstrip	Repair or replace
	Improperly closed door	Adjust
	Improperly fit door	Adjust
	Improper clearance between door glass and division channel	Adjust
	Deformed door	Repair or replace

EXTERIOR

HOOD

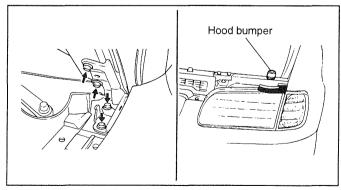
COMPONENTS ESHA0200



ESHA005C

HOOD ALIGNMENT ADJUSTMENT

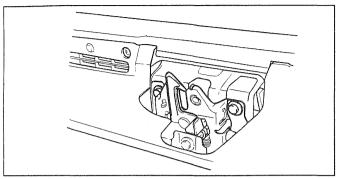
- Adjust the longitudinal and lateral positions of the hood by utilizing the holes in the hinge.
- Turn the hood bumpers either clockwise or counterclockwise to adjust the height of the hood.



ESHA005A

Loosen the bolts holding the hood latch.

4. Adjust the alignment of the hood striker and the hood latch by adjusting the horizontal and vertical position of the latch and the height of the hood.

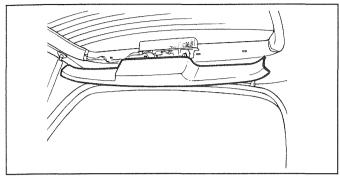


ESHA005B

TAILGATE

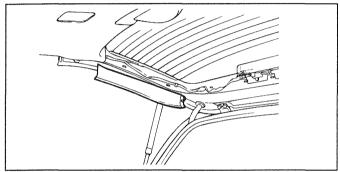
REMOVAL AND INSTALLATION ESHA0300

1. Remove the upper trim from the tailgate frame.



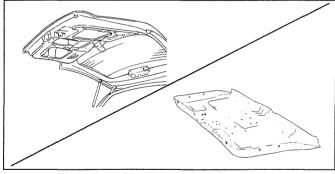
ESHA010A

2. Remove the side trim from the tailgate frame.



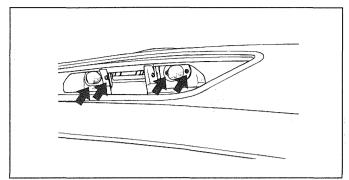
ESHA010B

3. Remove the tapping screw and the trim grip and then the tailgate trim panel.



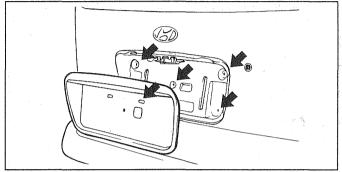
ESHA010C

4. Remove the license lamp



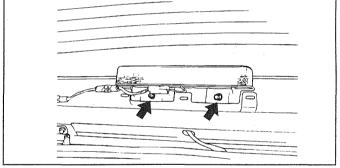
ESHA010E

5. Remove the back panel molding.



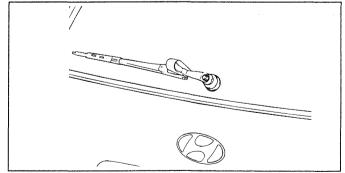
ESHA010F

6. Remove the high mounted stop lamp.

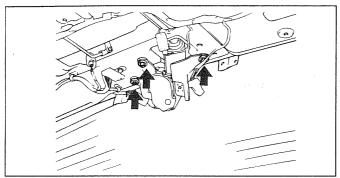


ESHA010H

7. Remove the rear wiper motor.

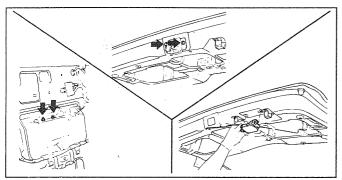


ESHA010I

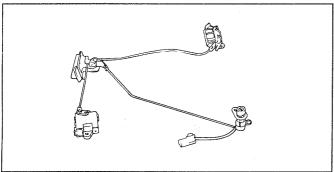


ESHA010

8. Remove the tailgate outside handle, the tailgate actuator, the tailgate latch, and the key cylinder.



ESHA010G



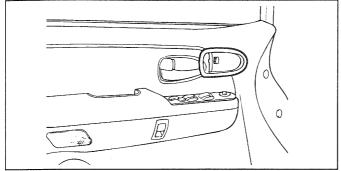
ESHA010M

- 9. Remove the tailgate lifter.
- 10. Installation is the reverse of the removal process.

FRONT DOOR

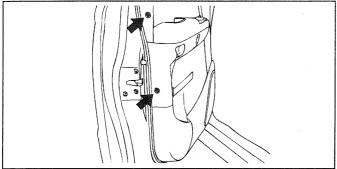
REMOVAL AND INSTALLATION ESHA0350

1. Loosen the screw holding the handle inside door.



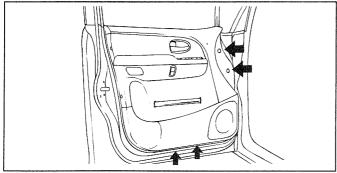
ESHA015A

2. Remove the tapping screw cap and loosen the tapping screws.



ESHA015B

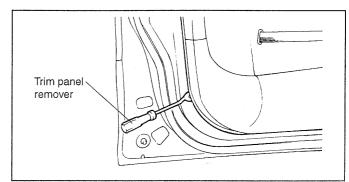
3. Loosen the screws holding the door trim panel.



ESHA015C

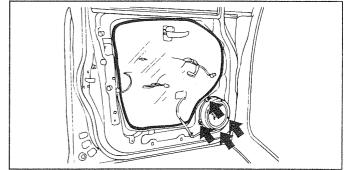
4. Insert a trim panel remover between the trim fasteners and the door trim panel to pry off.

Disconnect the wire connectors from the front door.



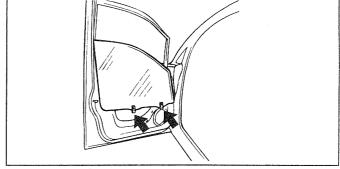
ESHA015D

5. Remove the front speaker and the door trim seal.



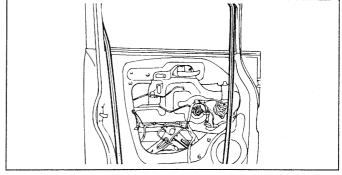
ESHA015E

Remove the front door glass from the front door module.



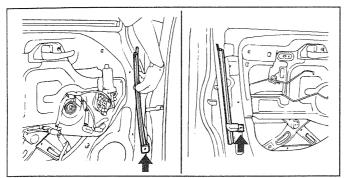
ESHA015F

7. Remove the front door window glass run.



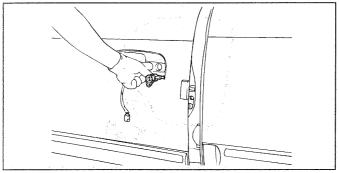
ESHA015G

8. Remove the front channel and the rear channel from the front door.



ESHA015H

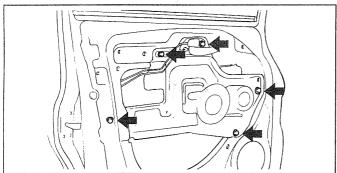
9. Remove the door key cylinder.



ESHA015J

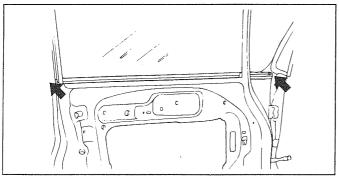
10. Loosen the bolts holding the handle outside front door, the latch, and the door lock actuator.

Remove the wire harness and the front door module.



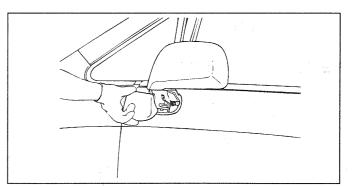
ESHA015K

11. Remove the weather strip outside door belt.



ESHA015L

12. Remove the outside rear view mirror.



ESHA015M

13. Installation is the reverse of the removal process.

When installing the door trim seal, butyl tape should not be placed over the area when installing the door trim fastener.

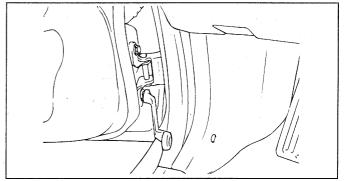
ADJUSTMENT ESHA0400

DOOR POSITION

Check for a flush fit with the body, then check for an equal gap between the front and rear, top and bottom door edges and the body. The door and body edges should also be parallel.

CAUTION

Attach protective tape to the fender edges where the hinge is installed.

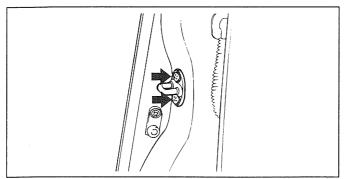


ESA9095A

DOOR STRIKER

Make sure the door is not loose, and that it latches securely without slamming. If necessary, adjust the door as follows:

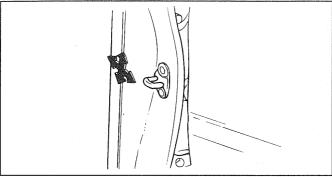
- 1. Draw a line around the striker plate for reference.
- Loosen the striker screws, and move the striker IN and OUT to make the latch fit tighter or looser. Move the striker UP and DOWN to align it with the latch opening. Then lightly tighten the screws and recheck



ESHA015N

NOTE

Hold the outside handle outward and push the door against the body to ensure the striker has a tight fit.

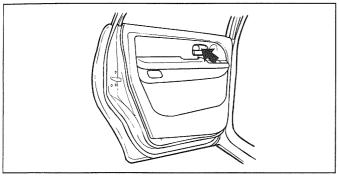


ESA9095B

REAR DOOR

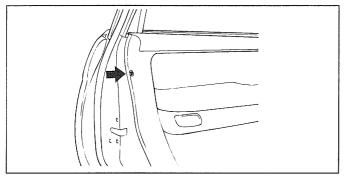
REMOVAL AND INSTALLATION ESHA0450

Loosen the screw holding the handle inside the door.



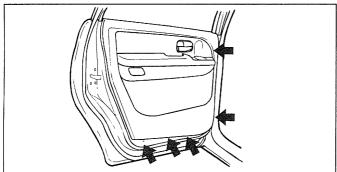
ESHA020A

Remove the tapping screw cap and then loosen the tapping screws.



ESHA020B

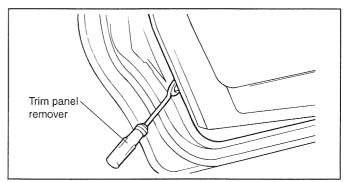
Remove the screws holding the door trim panel.



ESHA020C

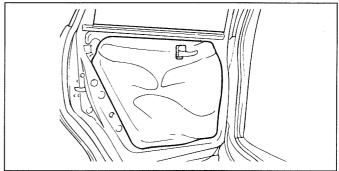
Insert a trim panel remover between the trim fasteners and the door trim panel to pry off.

Disconnect the wire connectors from the rear door.



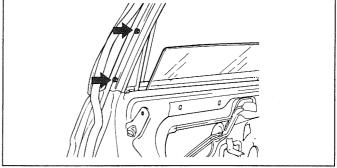
ESHA020D

Remove the door trim seal.

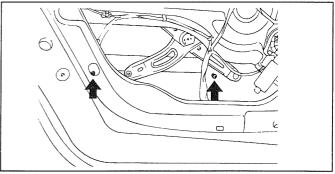


ESHA020E

Remove the delta cover from the rear door.

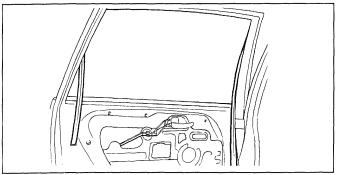


Remove the rear door glass from the rear door module.



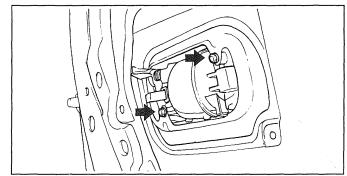
ESHA020G

8. Remove the rear door glass run.



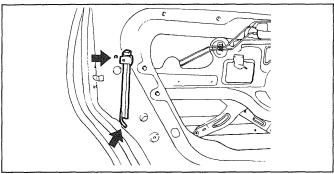
ESHA020H

12. Remove the rear door outside handle.



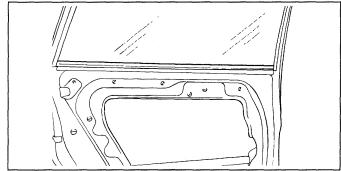
ESHA020J

9. Remove the rear panel from the rear door.



ESHA020I

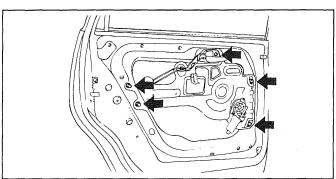
13. Remove the weather strip outside rear door belt.



ESHA020M

10. Disconnect the rod from the outside handle.

Remove the latch and the wire harness and the rear door module.

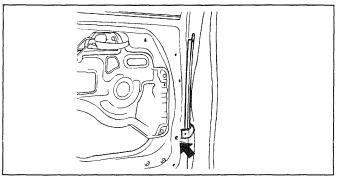


ESHA020K

14. Installation is the reverse of the removal process.

When installing the door trim seal, butyl tape should not be placed over the area installing the door trim fastener.

11. Remove the rear door front panel.



ESHA020L

ADJUSTMENT ESHA0500

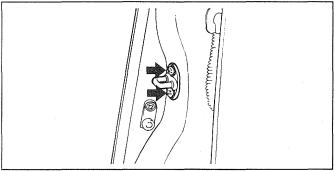
DOOR POSITION

Check for a tight fit with the body, then check for an equal gap between the front and rear, top and bottom door edges and the body. The door and body edges should also be parallel.

DOOR STRIKER

Make sure the door is not loose, and that it latches securely without slamming. If necessary, adjust the door as follows:

- 1. Draw a line around the striker plate for reference.
- Loosen the striker screws, and move the striker IN and OUT to make the latch fit tighter or looser. Move the striker UP and DOWN to align it with the latch opening. Then lightly tighten the screws and recheck.



ESHA015N

BODY SIDE MOLDINGS

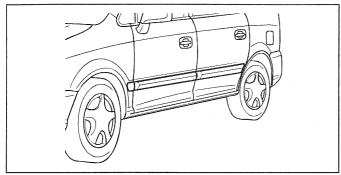
REMOVAL AND INSTALLATION ESHA0550

WAISTLINE MOLDING

Beginning from either end, remove the waistline molding using the special tool (09800–21000) from the front and rear doors.

CAUTION

Take care not to scratch or bend the door moldings.



ESHA025C

ROOF SIDE GARNISH ESHA0600

 Remove the roof side garnish by using a flat bladed screwdriver.

CAUTION

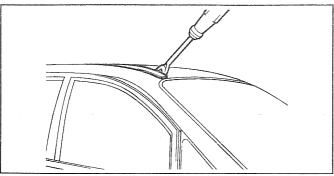
When prying with a flat bladed screwdriver, wrap it with protective tape to prevent damage.

In order not to scratch the body and roof side garnish, use protective tape on the body.

- 2. Pull the roof side garnish up, then remove the roof side garnish.
- 3. Installation is the reverse of the removal process.

NOTE

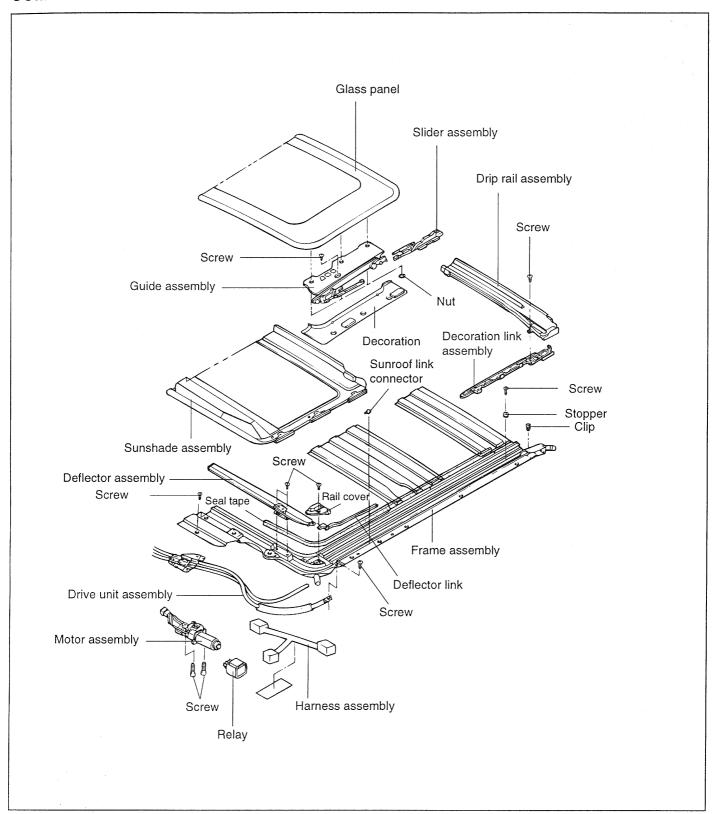
If necessary, replace any damaged clips.



ESHA025B

SUN ROOF

COMPONENTS ESHA0650



ESHA065A

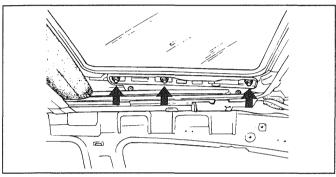
REMOVAL ESHA0700

- To remove the sunroof, first remove the following parts:
 - 1) Overhead console lamp.
 - 2) Sunvisor and grip handle.
 - 3) Pillar trims.
- 2. Remove the decoration cover and the glass panel.

Tightening torque

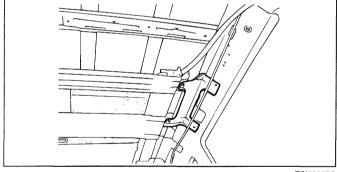
Glass panel mounting nuts:

4-6 Nm (40-60 kg·cm, 2.9-4.4 lb·ft)



ESA9011K

3. Disconnect the drain hose.



ESHA027A

4. Loosen the bolts and nuts holding the sunroof and then remove the sunroof assembly.

Tightening torque

Sunroof mounting bolts:

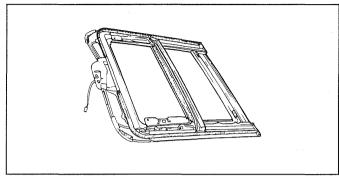
7-11 Nm (70-110 kg·cm, 5.1-8.0 lb·ft)

Sunroof mounting nuts:

4-6 Nm (40-60 kg·cm, 2.9-4.4 lb·ft)

NOTE

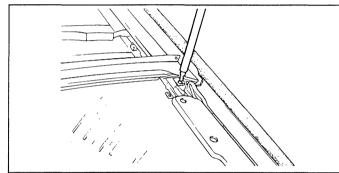
When removing the sunroof assembly, carefully pull out the sunroof assembly to avoid damage to the other parts.



ESA9011B

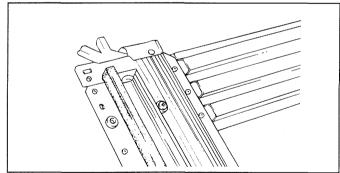
DISASSEMBLY ESHA0750

Remove the drip rail.



ESA9011C

2. Remove the stopper.



ESA9011D