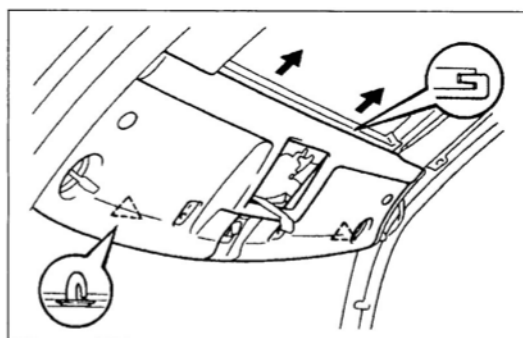
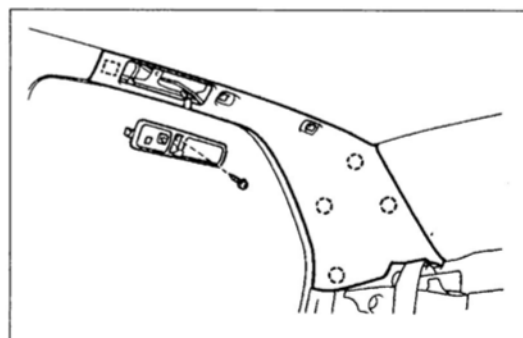
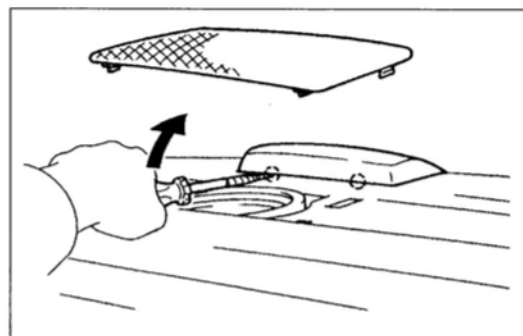


Chapter 14 Removing Windshield

1. Remove the following parts:

- (1) front seat
- (2) rear seat cushions
- (3) bolts on the lower end
of rear seat belt
- (4) back of rear seat
- (5) front door frame plate
- (6) back door frame plate
- (7) decorative side plate
of rear seat
- (8) upper parking lamp
- (9) speaker mesh guard
- (10) decorative board
of glove compartment
- (11) assistant grasp
- (12) small rear seat lighting bulb
- (13) interior roof lateral ornament
- (14) middle pillar ornament
- (15) front pillar ornament
- (16) sun shading board and holder
- (17) small illuminating light
- (18) middle sun shading boards
- (19) interior rear-view mirror
- (20) front roof lining
- (21) windshield wiper arms
- (22) sealing strips for windshield



2. Remove front door sealing strips

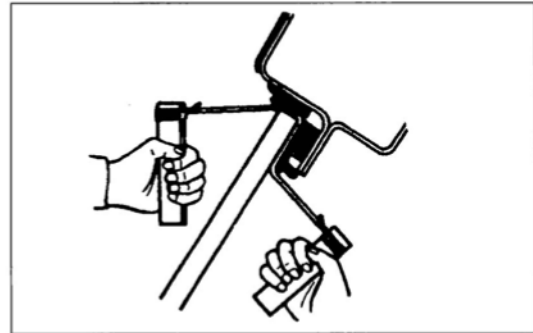
Pull out sealing strips by hand

3. Remove outside inlaid strips

Take down screws and outside inlaid strips

4. Remove the upper inlaid strips on windshield

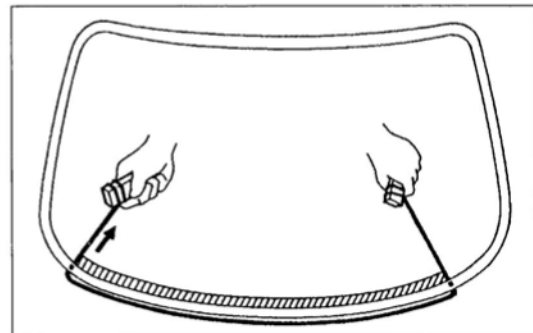
As showed in the figure: Cut off inlaid strips with knife



Attention: Do not let knife damage car body

5. Remove windshield

- (1) Lead piano wire out between car body and windshield from interior car
- (2) Bind up two wires ends with wood blocks or similar objects

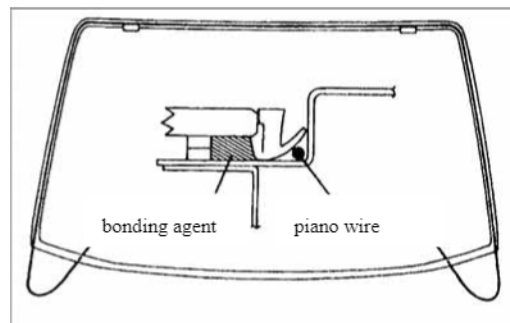


Note: Stick a piece of adhesive tape outside to prevent windshield external surface from being scratched

Attention:

(1) Do not damage paint surface, internal and external ornaments when detaching windshield

(2) To avoid the scratch on dashboard, a sheet plastic can be placed between piano string and dashboard



Drag the wire along all sides of windshield to cut off bonding agent to remove windshield

Attention: Bonding agent should be kept on car body as much as possible when cutting windshield joint

1. Installation of Windshield

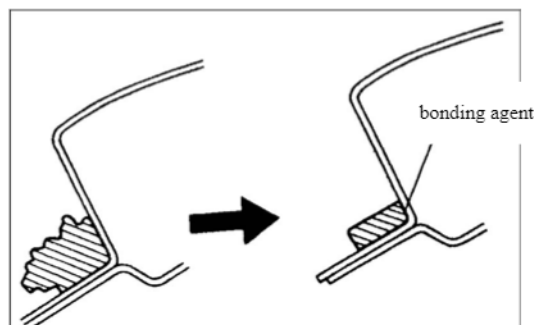
(1) No touch on windshield surface
after cleaning

(2) Cut roughness off bonding agent sticking
to car body with knife

Note: Keep bonding agent on car body
as much as possible

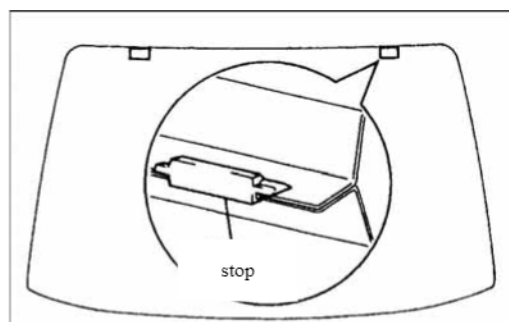
(3) Clean the cutting surface of
bonding agent with a rag soaked in cleaning liquid

Note: Even though all of bonding agent is completely removed, car body surface must
be cleaned



2. Remove block stop:

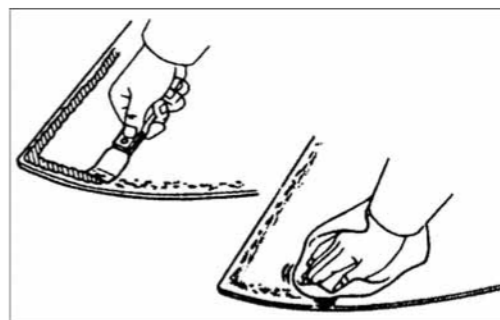
Remove block stop with knife



3. Clean the removed windshield

(1) Remove the bonding agent stuck
on windshield with scraper

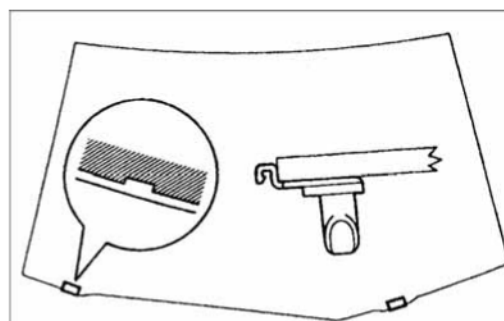
(2) Clean windshield with cleaning
liquid



**Attention: Do not touch windshield
after cleaning**

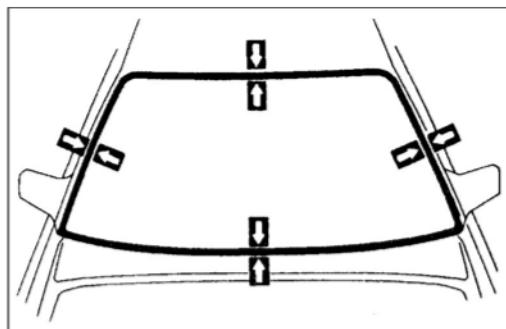
4. Replace clamps if necessary

- (1) Remove stops with knife
- (2) Take down used clamps
- (3) Put new clamps on



5. Position windshield

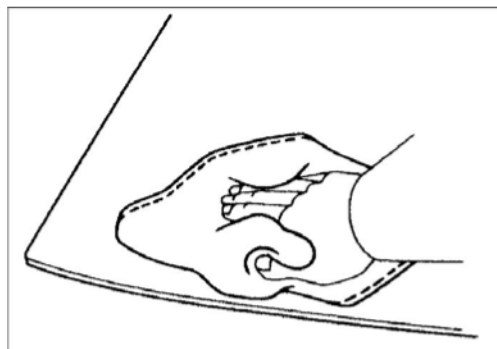
- (1) Put windshield in right place
- (2) Make reference marks on windshield and car body
- (3) Remove windshield



6. Clean the joint surface of windshield

Clean the black dirt with clean liquid on the joint surface of windshield periphery

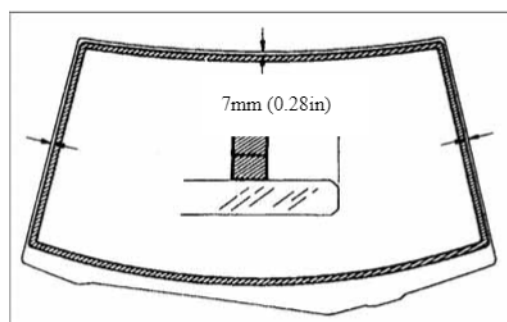
Attention: Do not touch windshield surface after cleaning



7. Install water-resisting chips

As showed in the drawing, fix water-resisting chips with double-side adhesive tape

Attention: Do not touch windshield surface after cleaning

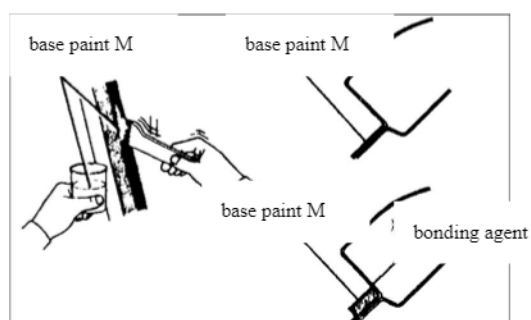


8. Coat a layer of base paint M on the joint surface of car body

Brush a layer of base paint M onto the joint surface of car body

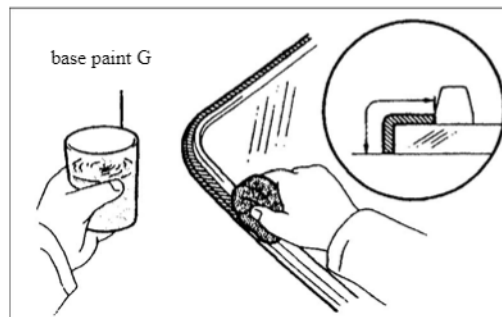
Attention:

- (1) Wait for base coating layer to dry over 3 minutes
- (2) No coating on bonding agent
- (3) Never reserve unsealed base paint M for later use



9. Coat a layer of base paint G on the contact surface of windshield

- (1) Coat a layer of base paint G with brush or sponge on windshield periphery and joint surface
- (2) Clear base paint with a clean rag before drying



Attention:

- (1) Leave base paint layer dry for 3 minutes at least
- (2) No coating on bonding agent
- (3) Never reserve unsealed base paint G for later use

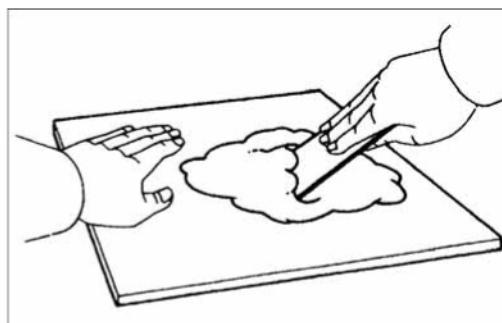
10. Mix bonding agent

Attention:

A. Ensure the fixation of inlaid strip to finish within the applicable duration of bonding agent

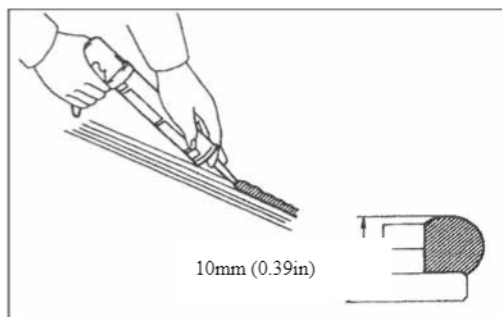
B. Mixing bonding agent must be completed within 5 minutes

- (1) Clean glass plate and oil loam scraper thoroughly with solvent
- (2) Fully mix 500g principal agent with 75g hardening agent with scraper on glass plate or similar object



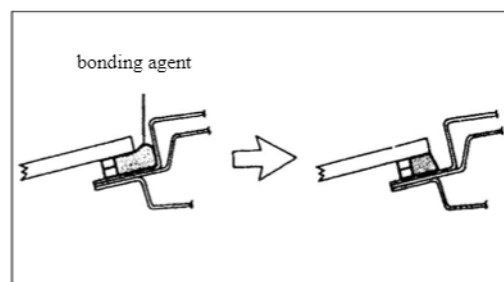
11. Apply bonding agent

- (1) Cut off the Note of tubular pot and fill bonding agent in the pot
- (2) Put the pot into sealing glue gun
- (3) Apply bonding agent on windshield as showed in the drawing

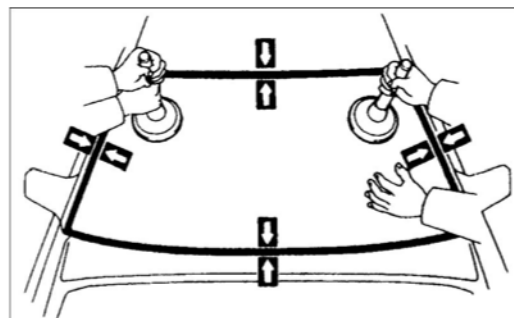


12. Install windshield

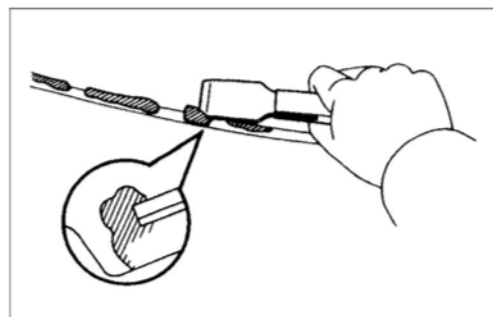
Note: Verify that water- resisting chips have been stuck on the face plate of car body as showed in the drawing



- (1) When install windshield, align the reference marks on windshield and car body, then gently press in windshield towards periphery

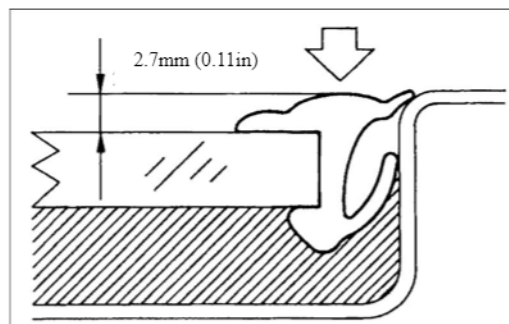


- (2) Smear windshield at periphery with bonding agent
- (3) Remove excess or spilled bonding agent with scraper
- (4) Fasten windshield until bonding agent hardened



13. Water leakage checking and maintenance

- (1) Water leakage test shall be conducted after hardening period
- (2) Block up water leaking places with sealant



14. Install upper inlaid strips on windshield

Put upper inlaid strips on car body and pat the strips by hand to tighten

15. Fix outside inlaid strips

Fix screws and outside inlaid strips

16. Fix front door sealing strips

17. Install the following parts:

- (1) front roof lining
 - (2) interior rear-view mirror
 - (3) middle sun shading boards
 - (4) small illuminating light
 - (5) sun shading boards and holder
 - (6) front pillar ornament
 - (7) middle pillar ornament
 - (8) inner roof lateral ornament
 - (9) small rear seat lighting bulb
 - (10) decorative board of glove compartment
 - (11) assistant grasp
 - (12) speaker mesh guard
 - (13) lateral ornament of rear seat at upper parking lamp
- back door frame plate
- back of rear seat

Torque: 18 N.m (185 kgf/cm, 13 lbf/in)

bolts on the lower end of rear seat belt

Torque: 43 N.m, 32 lbf/in)

rear seat cushions

front seats

Torque: 37 N/m (375 kgf/cm, 27 lbf/in)

windshield

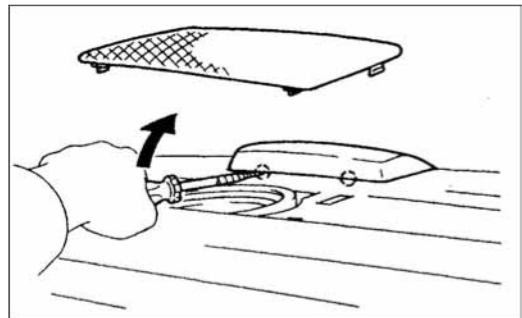
sealing strips for windshield

windshield wiper arms

Remove rear window glass

1. Remove the following parts:

rear seat cushions
bolts on the lower end of rear seat belt
back of rear seat
speaker mesh guard
upper parking lamp
decorative board of glove compartment
assistant grasp
small rear seat illuminating light
inner roof lateral ornament



2. Detach roof lining

3. Disconnect rear window connector

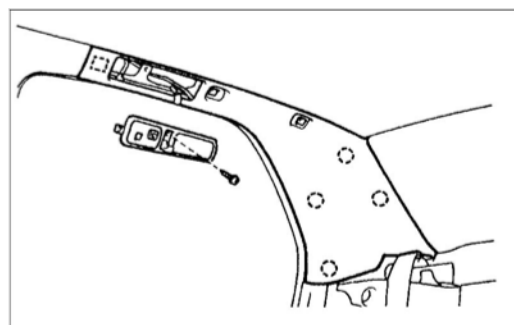
Disconnect rear window connector

4. Remove lower inlaid strips

As showed in the drawing, cut off the double-side adhesive tapes
on the two ends of inlaid strip with scraping cutter

Note: Before using, scraping cutter point shall be bandaged with adhesive tape

Prize out inlaid strips at six clamps and take the strips down



5. Remove rear window glass

Lead piano wire out between car body and glass

Bind up two wire ends with wood blocks or similar objects

Note: Do not let piano wire damage two stops

Remove the glass

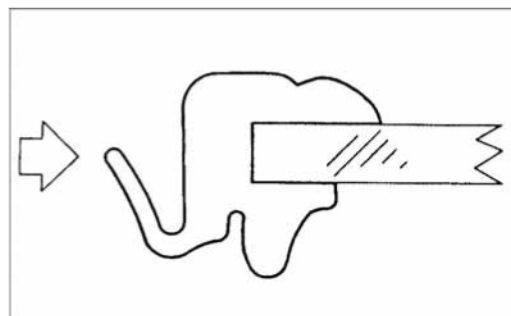
6. Remove rear window inlaid strips

Install rear window glass

1. Fixing rear window inlaid strips

Put inlaid strips on glass periphery and fix the strips by hand

Note: Rear window glass must be removed before fixing inlaid strips



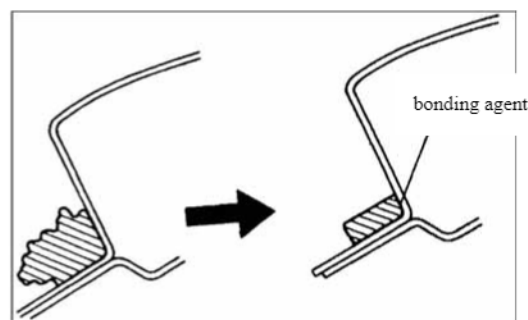
2. Clean and finish the joint surface of car body

Cut roughness off bonding agent sticking to car body with knife

Note: Keep bonding agent on car body as much as possible

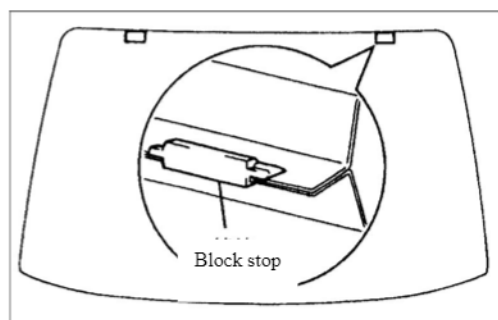
Clean the cutting surface of bonding agent with a rag soaked in cleaning liquid

Note: Even though all of bonding agent is completely removed, car body must be cleaned



3. Remove block stop:

Remove block stop by knife

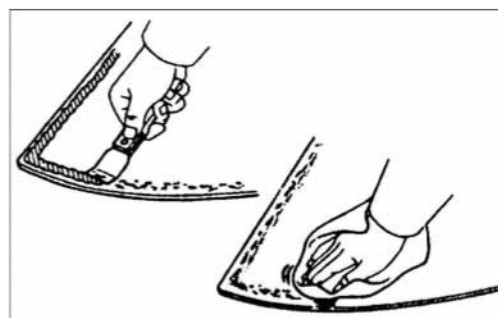


4. Clean removed glass

Remove the bonding agent stuck on glass with scraper

Remove block stop by knife

Clean glass with cleaning liquid



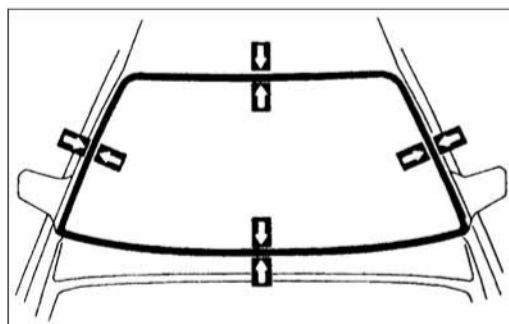
Attention: Do not touch glass after cleaning

5. Position glass

Put glass in right place

Make reference marks on glass and car body

Remove glass



6. Clean the joint surface of glass

Clean the black dirt with clean liquid
on the joint surface of glass periphery

**Attention: Do not touch glass surface
after cleaning**

Coating a layer of base paint M

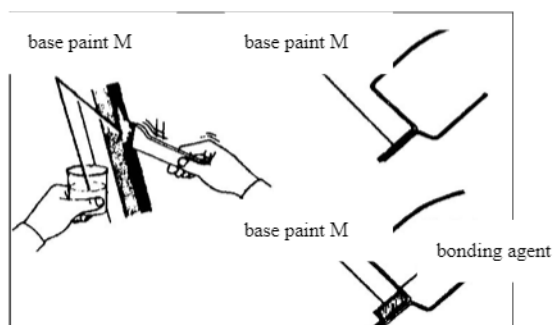
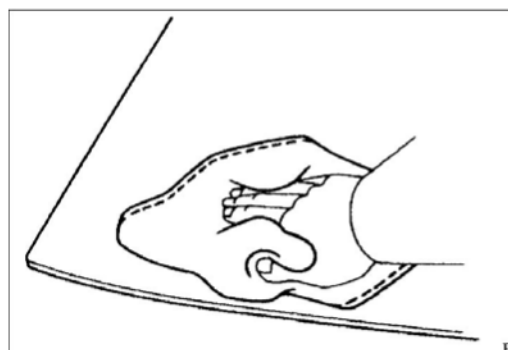
on the joint surface of car body

Brush a layer of base paint M
onto the joint surface of car body

**Attention: Leave base coating layer dry
for 3 minutes at least**

No coating on bonding agent

Never reserve unsealed base paint M for later use



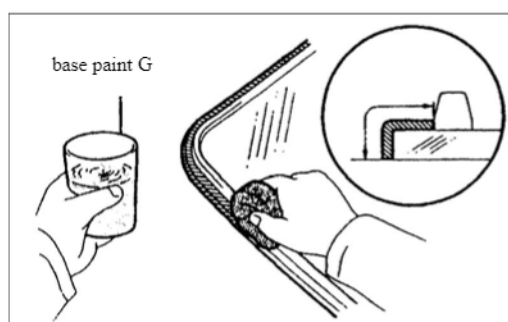
7. Coat a layer of base paint G on the joint surface of glass

Coat a layer of base paint G with brush or
sponge on glass periphery and joint surface

Clear base paint with a clean rag before drying

**Attention: Leave base paint layer dry for
3 minutes at least**

No coating on bonding agent



Never reserve unsealed base paint G for later use

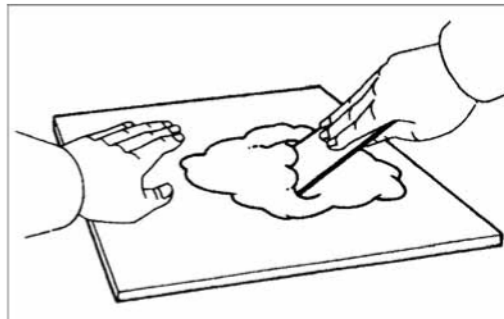
8. Mix bonding agent

Attention: Ensure the fixation of inlaid strip to finish within the applicable duration of bonding agent

Mixing bonding agent must be completed within 5 minutes

Clean glass plate and oil loam scraper thoroughly with solvent

Fully mix 500g principal agent with 75g hardening agent with scraper on glass plate or similar object

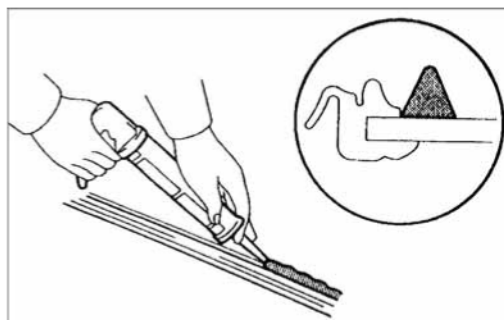


9. Applying bonding agent

Cut off the tip of tubular pot and fill bonding agent in the pot

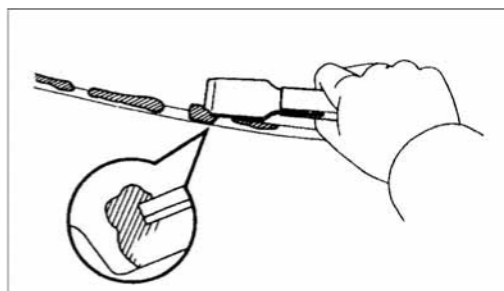
Put the pot into sealing glue gun

Apply bonding agent on glass as showed in the drawing



10. Install glass

When installing windshield, align the reference marks on glass and car body, then gently press in glass towards periphery
Smear glass at periphery with bonding agent using scraper



Remove excess or spilled bonding agent with scraper

Fasten glass until bonding agent hardened

11. Water leakage checking and maintenance

Water leakage test shall be conducted after curing time

Block up water leaking places with sealant

12. Fix lower outside filler strip on rear window

Put inlaid strips on car body and tighten the strap by patting

Attach wire connector for defroster

Install the following parts:

roof lining

inner roof lateral ornament

small rear seat illuminating light

assistant grasp

decorative board of glove compartment

upper parking lamp

speaker mesh guard

back of rear seat

Torque: 18 N.m (185 kgf/cm, 13 lbf/in)

bolts on the lower end of rear seat belt

Torque: 43 N.m (440 kgf/cm, 32 lbf/in)

rear seat cushions

When installing, the sequence is the reverse procedure of removal

Chapter 15 Wiper

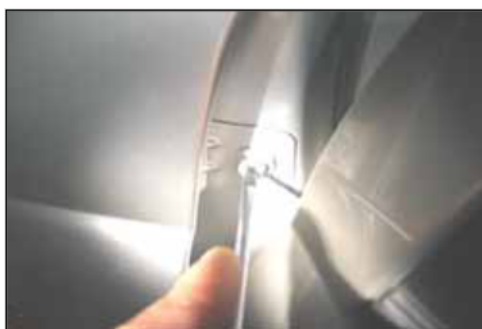
Remove front windshield wiper assembly

- (1) Pull out sealing strip
- (2) Prize up decorative plate
- (3) Loosen set bolts and take down wiper arm
- (4) Loosen ten fixing screws to get out decorative plate
- (5) Prize out link rod
- (6) Loosen six fixing nuts on the left and right sides of link rod to take down link rod assembly
- (7) Loosen four set bolts on wiper motor and take down the motor



Remove blade

Loosen seven set bolts and take down blade



Remove rear window wiper assembly



- (1) Loosen eight screws on fastener and get out decorative plate
- (2) Loosen three fixing screws on wiper motor and take down the motor



Remove jet washer

- (1) Remove front bumper
(See the chapter on removal of front bumper)
- (2) Loosen three set bolts and take down jet washer



- (3) Loosen cable plug and move out and upward to get out front and rear jet

washer motors



Remove nozzle

Pull out the nozzle upwards to take apart with the tube

When assembling, the sequence is the reverse procedure of removal.

Chapter 16 Sun -Roof

Remove sun-roof assembly

- (1) Unfasten twenty four fixing screws on sun-roof and car body



- (2) Prize up and take down the plastic protective cover on sun-roof



- (3) Get sun-roof assembly out

Check the position of sun-roof glass

Check if there is water leakage when sun-roof is completely closed

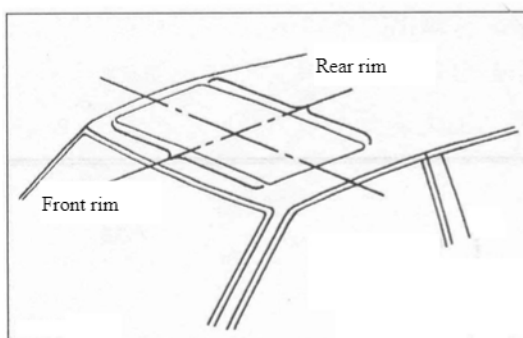
Check if there is vertical separation between sealing strip and roof sheet

Front rim:

$0 \pm 1.0 \text{ mm}$ ($0 \pm 0.039 \text{ in}$)

Rear rim:

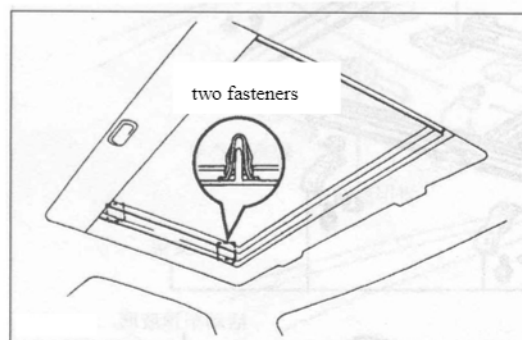
$0 \pm 1.0 \text{ mm}$ ($0 \pm 0.039 \text{ in}$)



Sun-roof adjustment

1. Remove sun-roof ornaments

Sun-roof ornaments on left and right sides must be firstly removed before adjustment



Note: The ornaments will be repositioned after adjustment

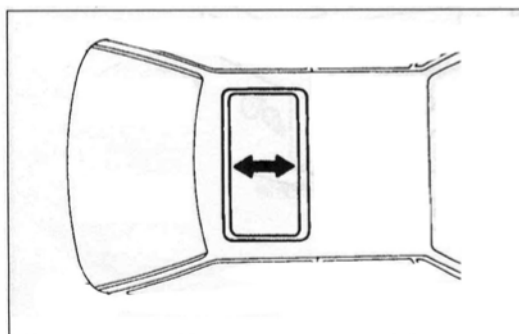
2. Upper and lower position adjustment

Tighten or Loosen bolts with torque screw driver to regulate vertical separation

Clearance: $0 \pm 2.0 \text{ mm}$ ($0 \pm 0.079 \text{ in}$)

3. Front and back side adjustment

Loosen the fixing nuts on sun-roof and shift sun-roof bracket forward and backward to adjust

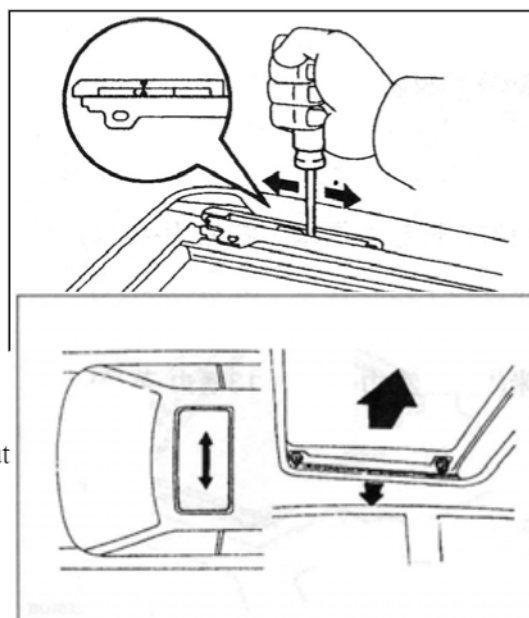


As showed in the drawing:

Make link rod slide forward and

backward to align two marks

Slide by hand bracket to front terminal

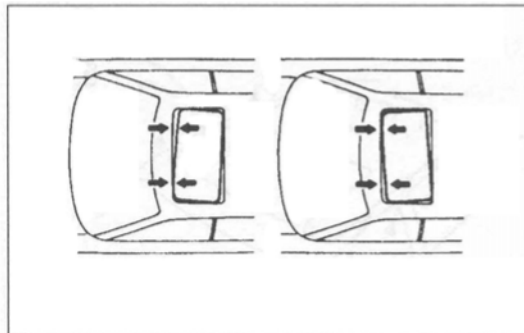


4. Left and right side adjustment

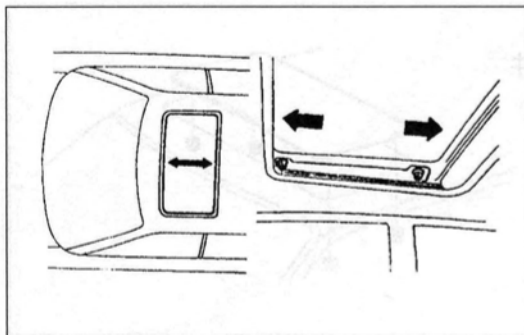
Loosen the fixing nuts at rear bearers on sun-roof and shift sun-roof left and right to adjust

5. Clearance adjustment

(clearance between left side and right side)



Loosen fixing nuts to readjust sun-roof to correct position



When assembling, the sequence is the reverse procedure of removal.

Chapter 17 Bumper

Remove front bumper

1. Remove baffle plates

(1) Loosen three fixing screws



(2) Loosen fixing screws and
remove fasteners with unfastening
tool



2. Remove splashers

(front-left and right)

(1) Loosen three fixing screws on
splasher



(2) Detach three fasteners with

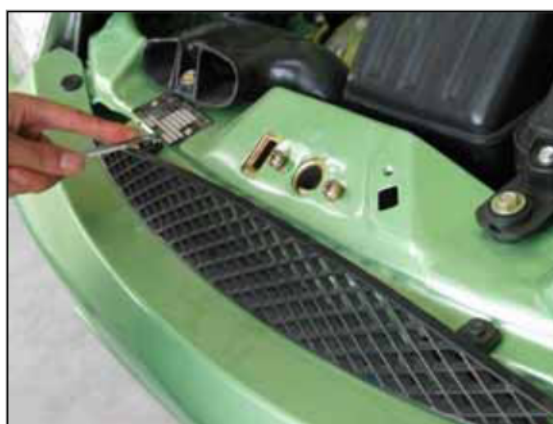




screw driver and unfastening
tool, and remove
cover sheet

3. Remove front grid

Loosen two fixing screws and
remove grid



4. Remove front bumper

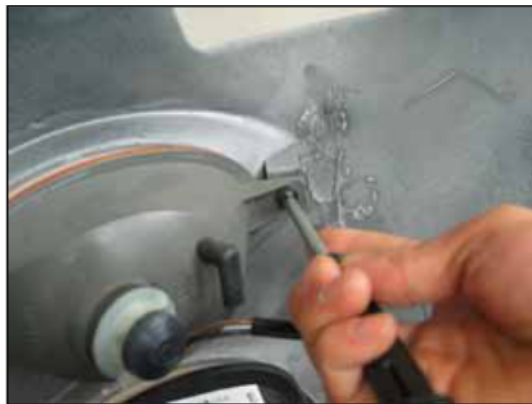
(1) Loosen four fixing screws on
inner left and right sides



- (2) Detach seven fasteners with screw driver and unfastening tool



- (3) Loosen the front screws beside the wires of fog lamp and turn signal light



5. Remove front fog light

Loosen two screws and remove front fog light

6. Remove front turn signal light

Loosen fixing screws and remove front turn signal light





**7. Remove the grid
cover on front bumper**

- (1) Loosen four screws on upper
and lower sides



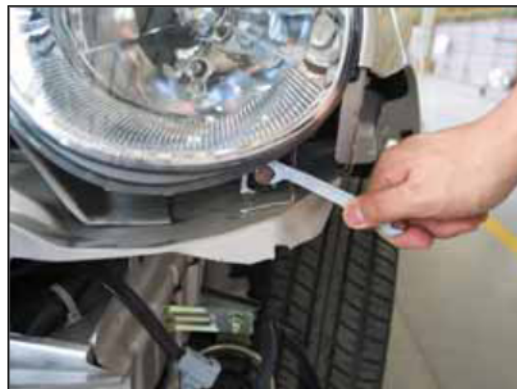
- (2) Press down protecting fasteners
and get grid cover out



8. Remove the reinforcement

rods of front bumper (left and right)

Loosen four screws on upper side and take down the reinforcement rods



Remove inner bumper

- ① Take down the bundle of fog light
- ② Loosen four fixing nuts on left and right and take down inner bumper

Remove rear bumper

- ① Loosen two fixing screws on left and right (in boot)



- ② Loosen two cross recess head screws in tail part





③ Loosen four fixing screws on left and right



④ Loosen two set bolts on lower side and remove rear bumper



Remove the small bulb on rear bumper

Loosen fixing screws and take down the small bulb



When assembling, the sequence is the reverse procedure of removal.

**Attachment:****Maintenance Specification****Torque Norm**

Fastened Parts	N-m	kgf-cm	lbf-ft
engine hood	-	-	-
hood hinge × hood	11.5	115	8.3
hood lock × body	7.8	80	69 lbf-in
hood suport × hood	22	225	16
hood suport × body	22	225	16
front door	-	-	-
power window × front door	5.5	56	49 lbf-in
door lock × front door	5.0	51	44 lbf-in
back door	-	-	-
power window × back door	5.5	56	49 lbf-in
door lock × back door	5.0	51	44 lbf-in
trunk	-	-	-
trunk hinge × trunk door	11.5	115	8.3
latch hole of trunk lock ×	-	-	-
trunk door	5.4	55	48 lbf-in
trunk door suport × trunk door hinge	22	225	16
windshield wiper × jet washer	-	-	-
motor and link rod assembly of windshield wiper × body	5.4	55	48 lbf-in
locating bolt for bar stay of auxiliary arm × motor and link rod assembly of windshield wiper	5.4	55	48 lbf-in
wiper arm and blade assembly × motor and link rod assembly of winder screen wiper	22	225	16
seat	-	-	-
front seat	-	-	-
seat back assembly × seat cushion assembly	18	185	13
rear seat	-	-	-
back of rear seat × car body	18	185	13
seat-belt	-	-	-
front seat-belt	-	-	-
shoulder belt clip × adjuster clip	43	440	32
outer seat-belt clip × front seat	43	440	32
seat-belt retractor assembly × body (upper)	7.8	80	69 lbf-in
seat-belt retractor assembly × body (lower)	43	440	32
inner front seat-belt × power seat regulator	43	440	32
manual seat regulator × body	43	440	32
rear seat-belt	-	-	-
lower end of outer back seat-belt × body	43	440	32
inner back seat-belt × body	43	440	32

