### SUBARU

**SVX** 

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### **M** MECHANISM AND FUNCTION

#### 1. Door

#### A: GENERAL

The door shape is rounded off to improve aerodynamic characteristics and to save energy, and a large window is provided.

The door is equipped with two-piece door windows with a mid-frame. It features a plated steel sheet and wax treatment for high corrosion resistance, enhanced rigidity and safety against side collision due to a side door beam, flush-surface design with small-size window shoulder outer weather strips, and employment of a multiple seal system which prevents rain water and air leaks.

#### **B: MECHANISM**

#### 1. WINDOW REGULATOR

As the window glass moves up along the regulator guide rail and reaches a point just before the fully closed position, it encounters resistance caused by weather strips and stabilizer mechanism. This resistance prevents the window from closing completely. To avoid this situation, two push rollers are adopted on both upper and lower sides so that the slider fitted to the glass will only be pushed to one side to ensure correct positioning of the glass (side pushing mechanism).

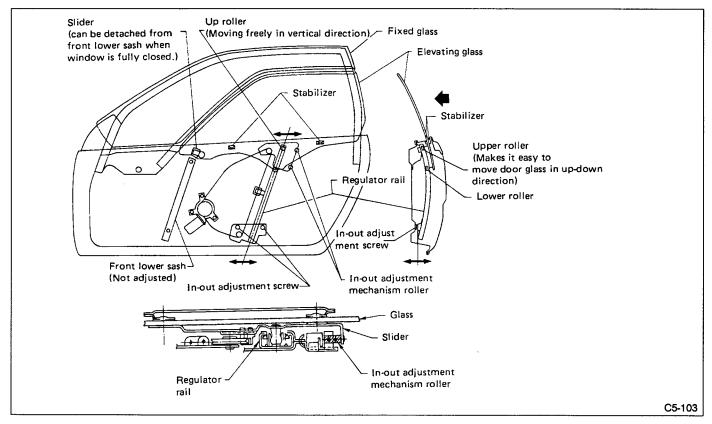


Fig. 1

# 2. OUTER HANDLE OPERATING RESISTANCE ADJUSTMENT

between the latch and outer handle.

The operating resistance of the outer handle can be adjusted by changing the length of the rod installed

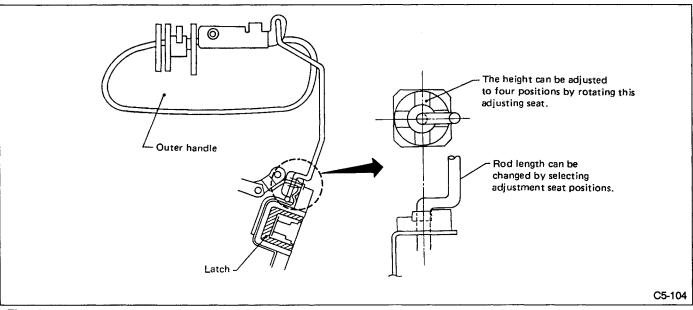


Fig. 2

#### C: CONSTRUCTION

# 1. FLUSH SURFACE AND GLASS-TO-GLASS STRUCTURE

The door glass and rear quarter glass are extended and made flush with each other by covering the pillar. Accordingly, the portion above the window shoulder is fully covered with glass.

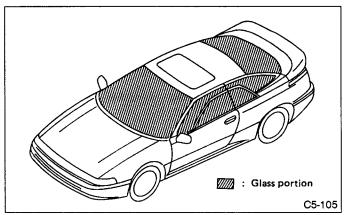


Fig. 3

#### 2. DOOR HINGE

A protruded hinge is adopted so that a wide space will open at the foot portion even when the door opening is comparatively small.

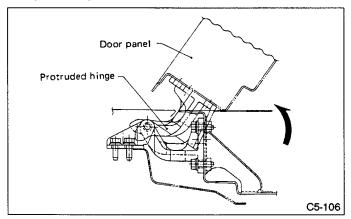


Fig. 4

A three-stage arm checker is used to insure that the door opens and closes in three steps and the checker arm operates with weak friction over the entire opening range of the door. This arrangement allows the door to stop easily in any position and improves the overall ease of door opening and closing.

	1st stage	30°
Opening door hinge degree	2nd stage	40°
203,00	3rd stage	53°

#### 3. DOOR WEATHERSTRIP

A multi-seal weatherstrip is used on each mating surface of the door and body. This weatherstrip effectively reduces the road and wind noises, and prevents water and air leaks.

#### 4. STABILIZER

A light-weight stabilizer is provided for ease of window glass regulating operation.

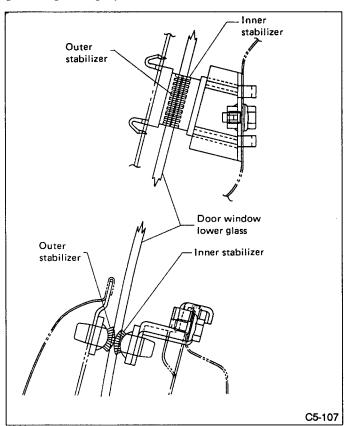


Fig. 5

#### 5. DOOR GLASS

The radius of curvature of the glass is reduced and each pillar is covered by glass so that smooth outline can be obtained at the connection between windshield and door glass, and between roof and door glass. A weatherstrip is used at the portion between the door glass and quarter glass so as to obtain a flush glass surface.

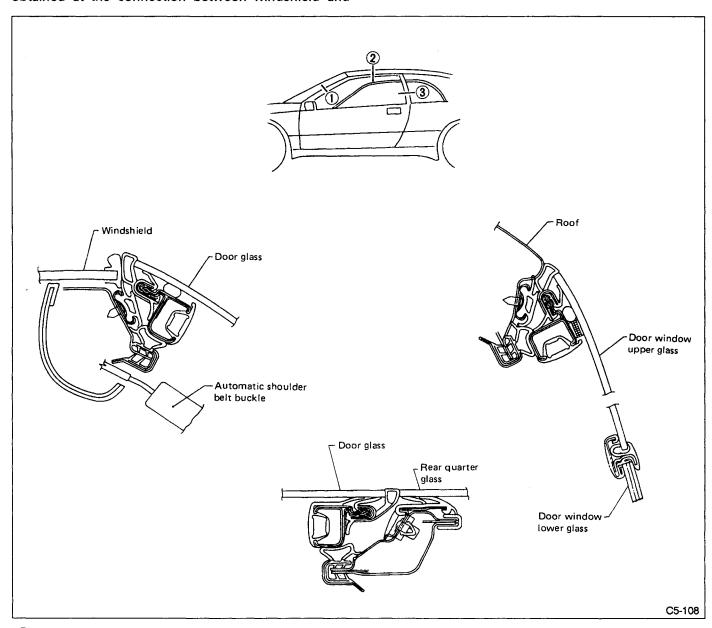


Fig. 6

#### 6. REAR QUARTER GLASS

The glass, clips, dual lock fastener, mid frame, weatherstrip and seal are made integral in the rear quarter glass for improved fitting accuracy.

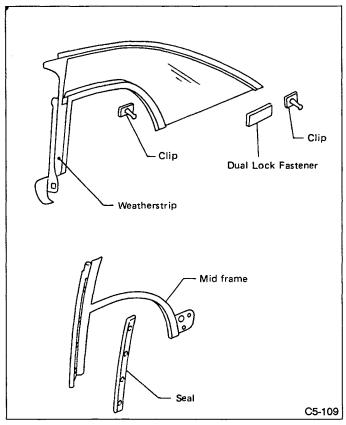


Fig. 7

The curvature of the quarter window glass at the rear pillar portion is reduced so that the rear pillar is covered with glass for a smooth surface at the joint between roof and quarter glass and between quarter glass and rear window.

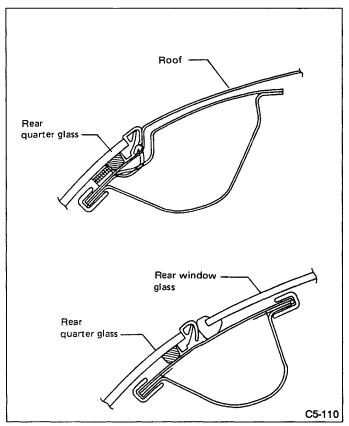


Fig. 8

#### 7. AUTOMATIC DOOR LOCK

Pressing the driver-seat door lock knob (or key plate) permits the locking and unlocking of all doors with one touch.

### 2. Window Glass

#### 1. WINDSHIELD

The windshield has been reduced to create a smooth and rounded-off vehicle outline as seen from above and from both sides. The windshield is also made flush with the door glass and roof panel to improve aerodynamic characteristics.

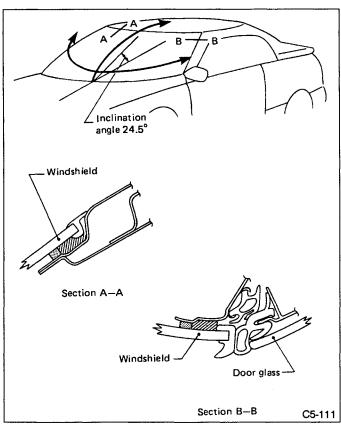


Fig. 9

The windshield is fixed by bonding, and position locating pins are used to ensure positional accuracy. A sufficiently large glass thickness is used to provide greater chipping resistance.

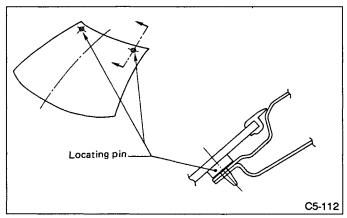


Fig. 10

#### 2. REAR WINDOW GLASS

The rear window glass angle is also reduced, and the roof panel and rear quarter window are made flush to provide a smooth outline with improved aerodynamic characteristics.

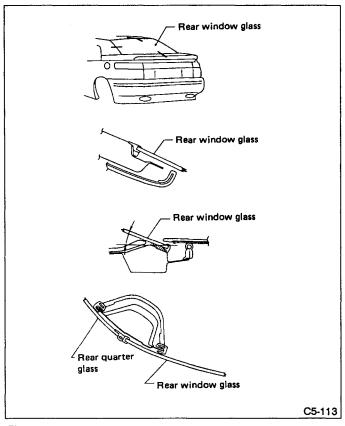
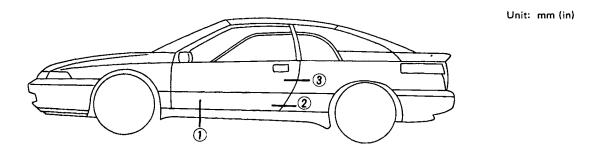
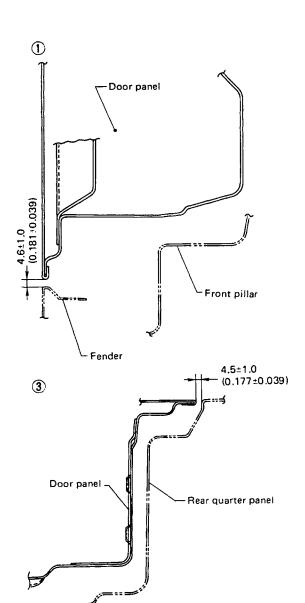


Fig. 11

# S SERVICE DATA

## 1. Door Alignment





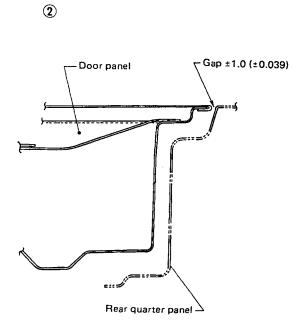


Fig. 12

C5-114

# **C** COMPONENT PARTS

## 1. Door

#### 1. DOOR PANEL & TRIM

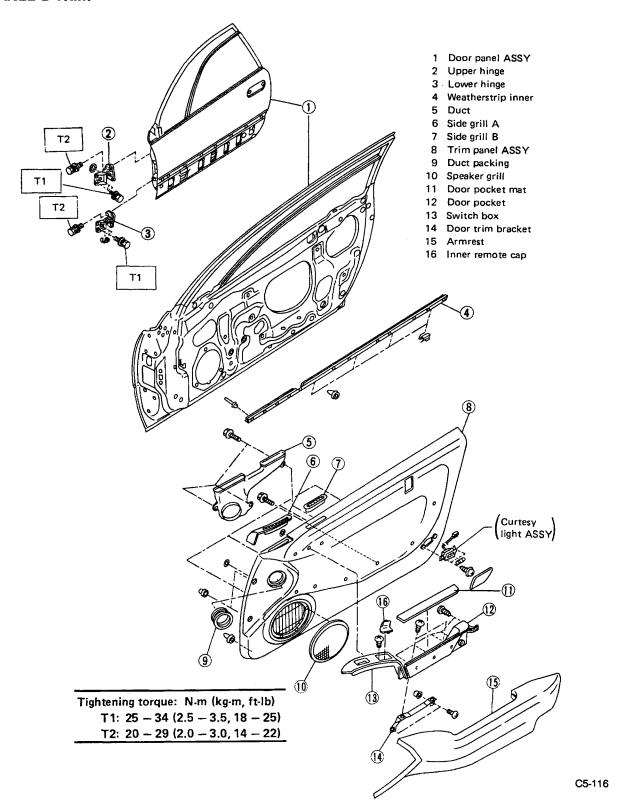


Fig. 13

#### 2. DOOR INNER PARTS

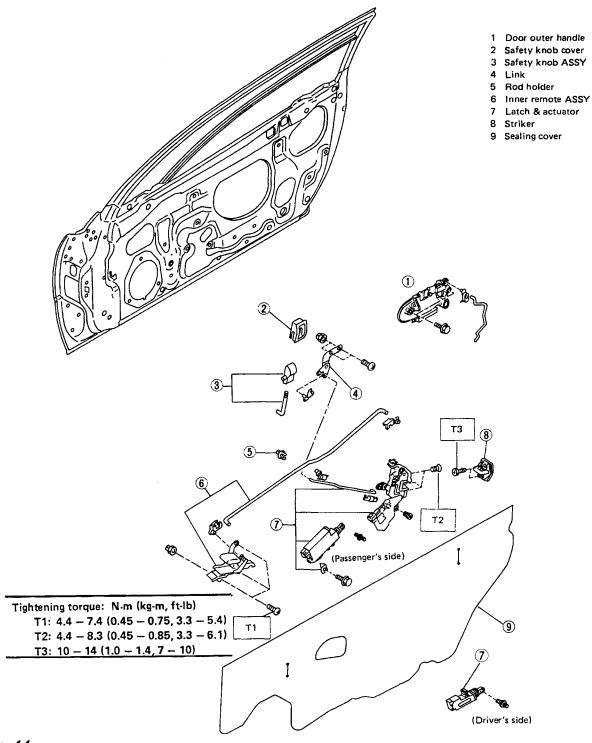
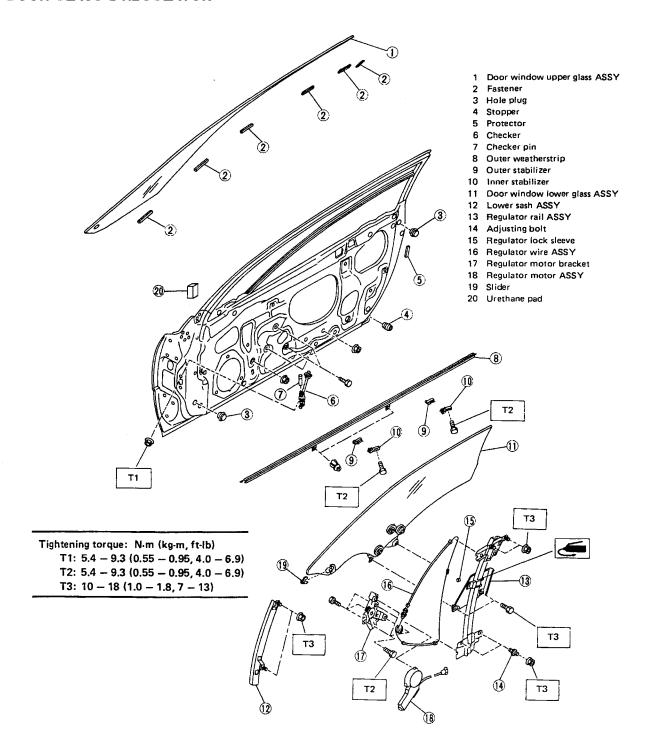


Fig. 14

C5-117

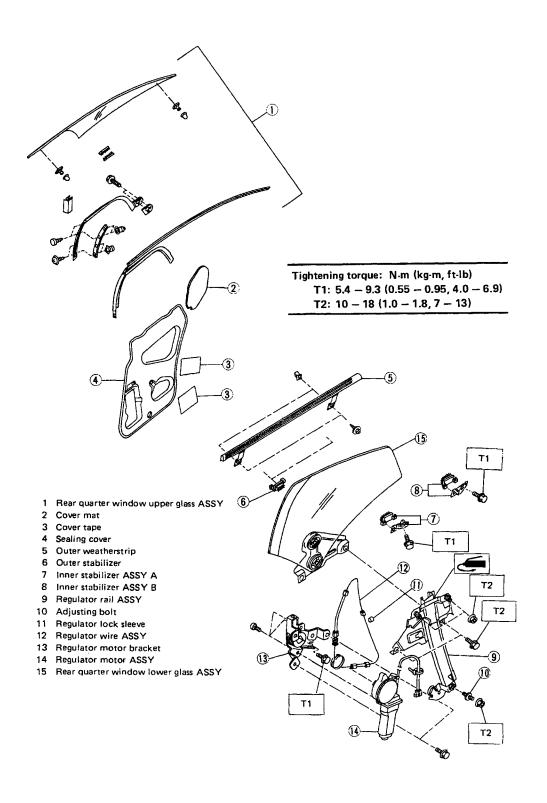
#### 3. DOOR GLASS & REGULATOR



C5-118

Fig. 15

### 2. Rear Quarter Window



C5-119

Fig. 16

## 3. Window Glass

### 1. WINDSHIELD

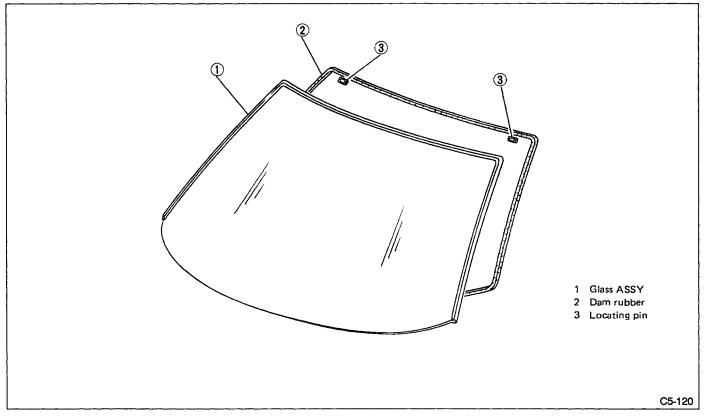


Fig. 17

#### 2. REAR WINDOW GLASS

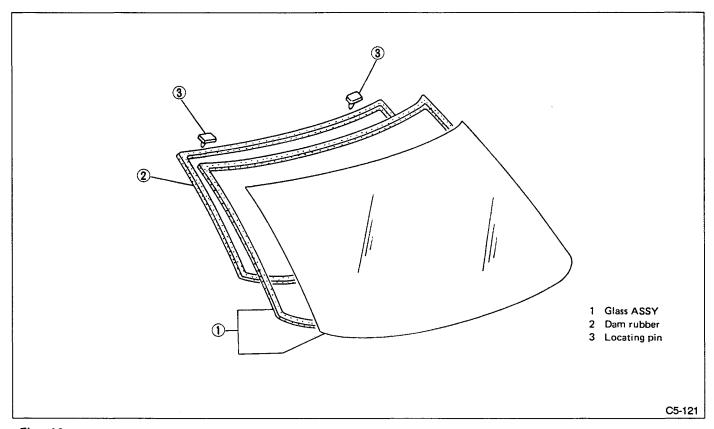
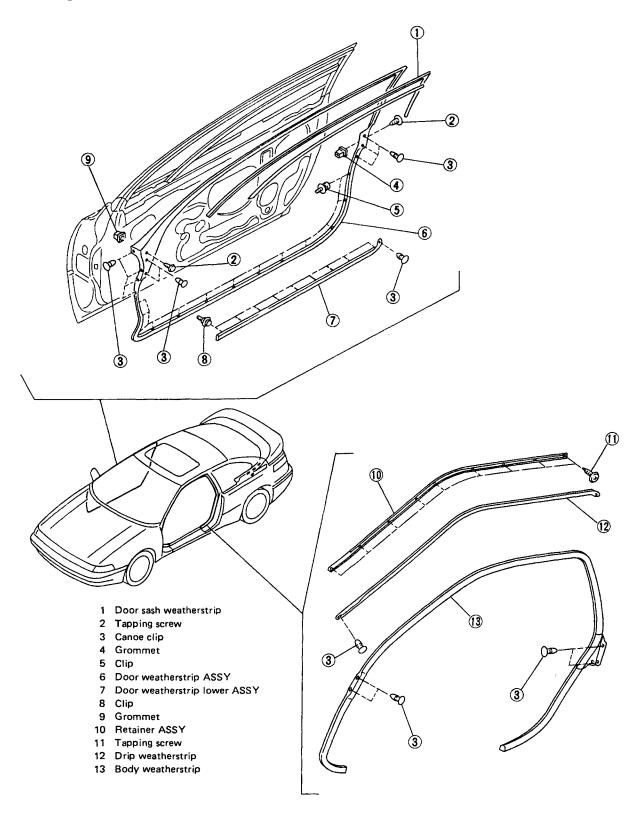


Fig. 18

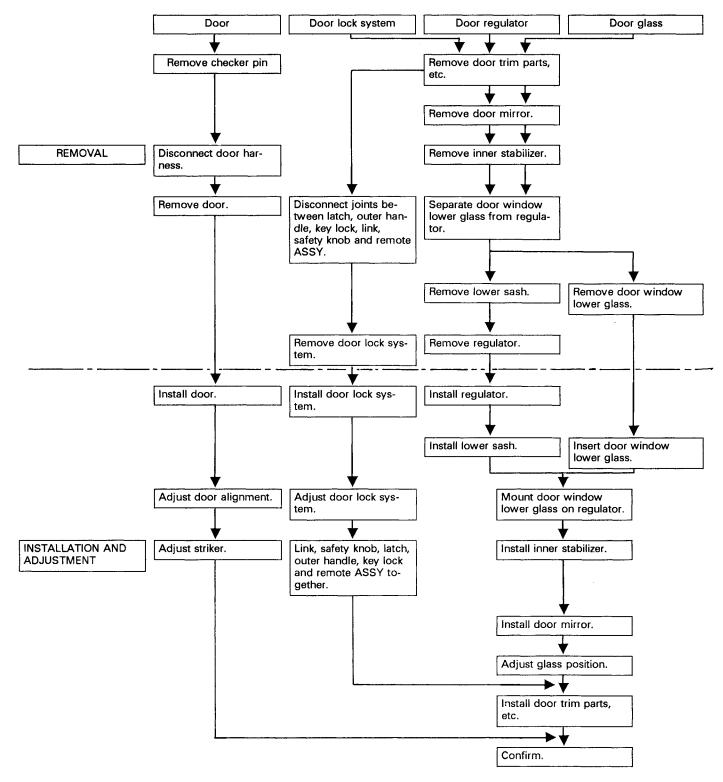
# 4. Sealing Parts



C5-122

# W SERVICE PROCEDURE

# 1. Procedure Chart for Removing and Installing Door and Related Parts



This flowchart shows the main procedures for removing and installing the door and its related parts. For details, refer to the text.

### 2. Door and Hinge

The method described below involves removing and installing. There is another method of removal and installation in which the front fender is first removed.

The hinges may be removed and installed with the front fender removed. But the method of removal and installation is described below and should be performed after removing the door itself.

#### A: REMOVAL

- a. Be sure to use two persons to perform this operation.
- b. Be careful not to damage door and body.
- 1) Open front hood and disconnect battery minus terminal, and then open the door.
- 2) Place a cloth or a wood block under door to prevent damage, and support it with a jack.

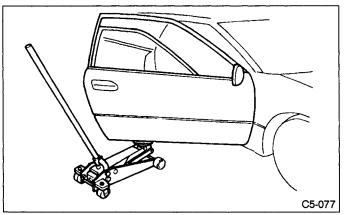


Fig. 20

3) Remove checker pin by driving it upward using a hammer covered with a cloth.

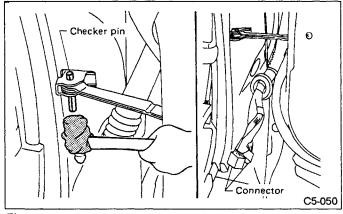


Fig. 21

- 4) Remove front pillar lower trim and disconnect harness connectors.
- 5) Remove hinges by loosening mounting bolts (M8) off of door, and remove door from body.

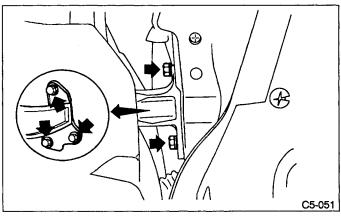


Fig. 22

- a. Work carefully to avoid damaging door.
- b. Disconnect harness first.

#### **B: INSTALLATION**

- 1) Install door itself to hinges with bolts kept after removal.
- 2) Connect harness connectors.
- 3) Install checker pin.

Apply grease to moving parts of door hinges.

#### C: ADJUSTMENT

- 1) Using DOOR HINGE WRENCH (925610000), loosen bolts securing upper and lower hinges to body, and adjust fore-and-aft and vertical alignment of door.
- 2) Loosen screw (which is tightened to specified torque) one complete rotation, and adjust opening/closing direction of door using a hammer covered with a cloth.

Be careful not to damage striker.

Hinge tightening torque (body side):

25 — 34 N·m (2.5 — 3.5 kg-m, 18 — 25 ft-lb)

Hinge tightening torque (door side):

20 — 29 N·m (2.0 — 3.0 kg-m, 14 — 22 ft-lb) Striker tightening torque:

10 — 14 N·m (1.0 — 1.4 kg-m, 7 — 10 ft-lb)

### 3. Trim Panel

#### A: REMOVAL

1) Remove inner remote cap.

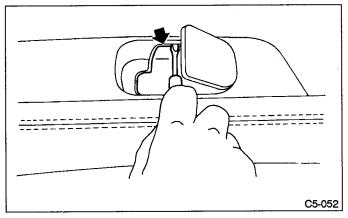


Fig. 23

2) Remove screws securing trim to door panel. (Concerning 2 bolts, peel door pocket mat off.)

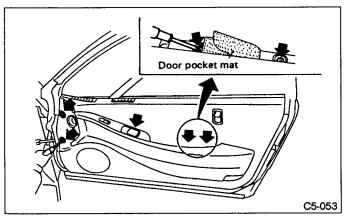


Fig. 24

3) Disengaging square and the other clips from door panel, remove trim panel.

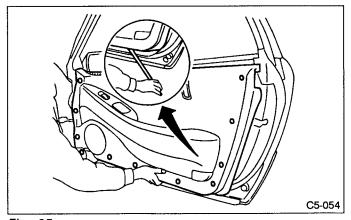


Fig. 25

Be careful not to break clip by applying undue force.

4) Disconnect harness connectors.

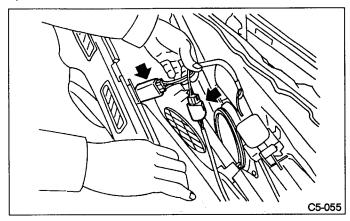


Fig. 26

#### **B: INSTALLATION**

Installation is in the reverse order of removal.

### 4. Sealing Cover

#### A: REMOVAL

- 1) Remove trim panel.
- 2) Remove harness cover tape adhering sealing cover, and remove trim bracket.

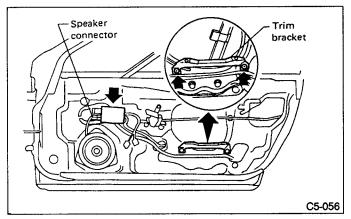


Fig. 27

- 3) Remove sealing cover and sealer with a spatula.
- a. Be careful not to break sealing cover because it may break if sealer is removed forcefully.
- b. Detach sealing cover in one quick motion so that sealer is left on the cover side.

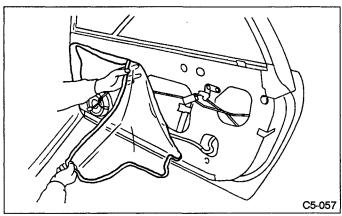


Fig. 28

4) Disconnect speaker connector.

#### **B: INSTALLATION**

- 1) Confirm that sealer is properly applied without breaks. Then install sealing cover.
- 2) When repairing or replacing sealing cover, use "Cemedine 5430L" as sealer. It may be overlaid on existing sealer.

Any breaks in sealer can cause water leakage or entry of air and dust. Be sure sealer is applied in a continuous line

#### 5. Checker

#### A: REMOVAL

- 1) Remove trim panel.
- 2) Remove sealing cover.
- 3) Apply a cloth to door and body to prevent damaging them, and remove checker pin by driving it upward.

#### Be careful not to damage door and body.

- 4) Completely close door glass.
- 5) Loosen two nuts securing checker, and take out checker through access hole in underside.

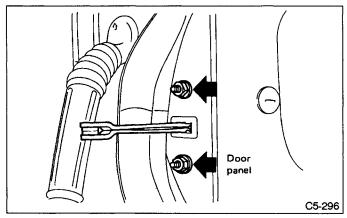


Fig. 29

#### **B: INSTALLATION**

Installation should be made in the reverse order of removal.

#### Tightening torque:

5.4 — 9.3 N·m (0.55 — 0.95 kg·m, 4.0 — 6.9 ft-lb)

### 6. Inner Remote Assembly

#### A: REMOVAL

- 1) Remove trim panel.
- 2) Remove sealing cover.
- 3) Disconnect joint between inner remote and latch, and unlatch rod holder.

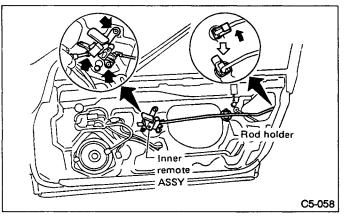


Fig. 30

- 4) Remove three screws holding remote ASSY.
- 5) Remove inner remote ASSY.

#### **B: INSTALLATION**

- 1) After passing rod through holder, attach remote ASSY to inner panel.
- 2) Latch rod holder.

#### Tightening torque (screw):

4.4 — 8.3 N·m (0.45 — 0.85 kg-m, 3.3 — 6.1 ft-lb)

### 7. Link & Safety Knob

#### A: REMOVAL

- 1) Remove trim panel.
- 2) Remove sealing cover.
- 3) Completely close door window glass.
- 4) Turn rod holder to disconnect joint between link and rod, and remove screws.

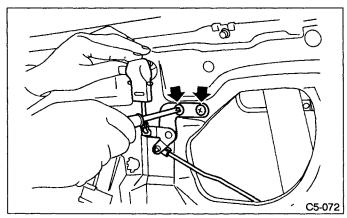


Fig. 31

5) Remove link and safety knob.

#### **B: INSTALLATION**

Installation is in the reverse order of removal.

### 8. Door Latch and Striker

#### A: REMOVAL

- 1) Remove trim panel.
- 2) Remove sealing cover.
- 3) Completely close door window glass.
- 4) Remove remote ASSY from latch.
- 5) Turn rod holder to disconnect joint between key lock ASSY and rod.

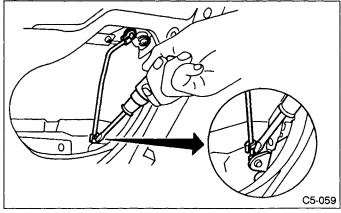


Fig. 32

- 6) Turn rod holder to disconnect joint between outer handle and rod.
- 7) Loosen screws securing latch, and remove latch through service hole.

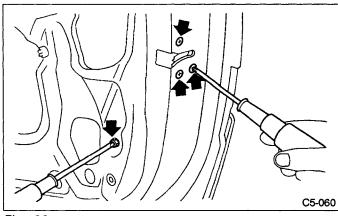


Fig. 33

8) Disconnect harness connectors.

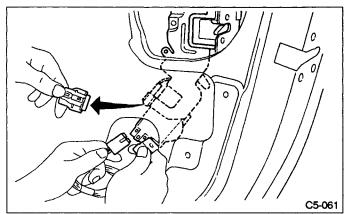


Fig. 34

#### **B: INSPECTION**

- 1) Check operation of each part.
- 2) Check each sliding part for proper lubrication.

After installation, be sure lock mechanism operates normally.

Latch tightening torque (screw):

4.4 — 8.3 N·m (0.45 — 0.85 kg-m, 3.3 — 6.1 ft-lb) Striker tightening torque (screw):

10 — 14 N·m (1.0 — 1.4 kg-m, 7 — 10 ft-lb)

#### C: INSTALLATION

Installation is in the reverse order of removal.

- a. Firmly join latch with key cylinder and outer handle.
   b. As a general rule, door latch retaining screws are not suitable for further use after removal since they are
- coated with sealing agent.

  1) If retaining screws are removed or loosened, pro-
- ceed as follows:

  2) When old retaining screws are re-used or when new screws are installed, proceed as follows:
  - (1) Remove traces of seal lock agent from screws and screw holes using sealer remover.
  - (2) Dry with compressed air.

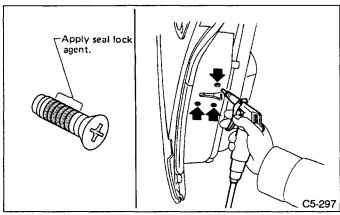


Fig. 35

3) Apply seal lock agent to screw thread area.

Seal lock agent: 0x0x0x0

#### D: ADJUSTMENT

Adjust striker installation position by loosening screws.

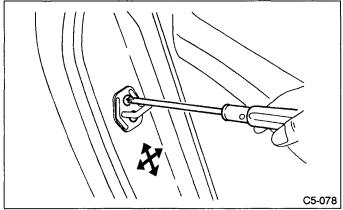


Fig. 36

### 9. Key Lock

#### A: REMOVAL

- 1) Remove trim panel.
- 2) Remove sealing cover.
- 3) Completely close door glass.
- 4) Turn rod holder to disconnect joint, and then loosen spring securing key lock.

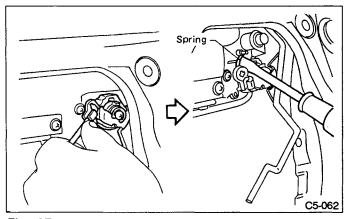


Fig. 37

5) Remove key lock from outer handle.

#### **B: INSTALLATION**

Installation is in the reverse order of removal.

Install so that key slot in key lock comes to center of hole in outer handle.

### 10. Outer Handle

#### A: REMOVAL

- 1) Remove trim panel.
- 2) Remove sealing cover.
- 3) Completely close door window lower glass. Then detach outer handle and key lock from door latch rod.
- 4) Remove blind cap covering hole and loosen nut securing outer handle, and then remove bracket from inside.

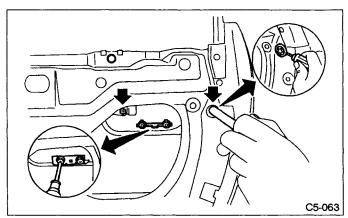


Fig. 38

5) Remove outer handle from outside.

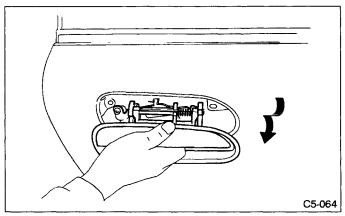


Fig. 39

Be careful not to damage door.

### 11. Stopper

#### A: INSTALLATION

Rotate stopper two turns and install it with "bead" section facing upward.

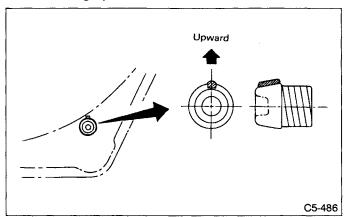


Fig. 40

# 12. Door Sash & Door Window Lower Glass

#### A: REMOVAL

- 1) Remove trim panel.
- 2) Remove sealing cover.
- 3) Remove inner remote ASSY
- 4) Completely close door window glass.
- 5) Disconnect door mirror harness connector, and remove connector holder covering hole.

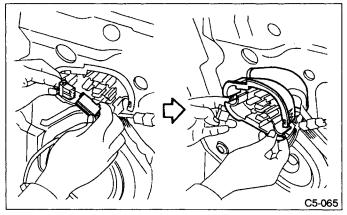
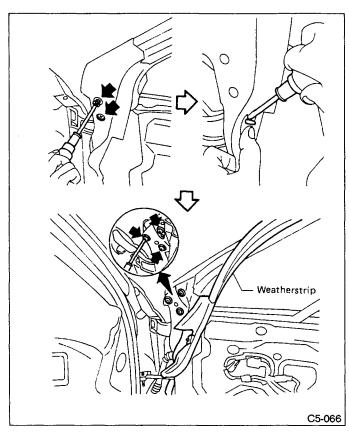


Fig. 41

6) Remove mirror cover screw and clip, and peel the part of mirror cover weatherstrip as illustrated, and then remove mirror.



Outer weatherstrip Inner stabilizer

C5-067

Fig. 42

- 7) Completely down (open) door window lower glass.
- 8) Remove inner stabilizer and outer weatherstrip.

9) Move door window lower glass connecting section to center working hole of door panel.

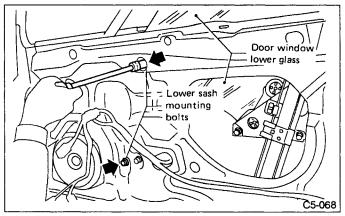


Fig. 44

Fig. 43

- 10) Remove speaker, and then remove lower sash. (Unnecessary for glass removal.)
- 11) Remove the bolts (which is fixed to regulator rail ASSY), and separate door window lower glass from inside of the door.

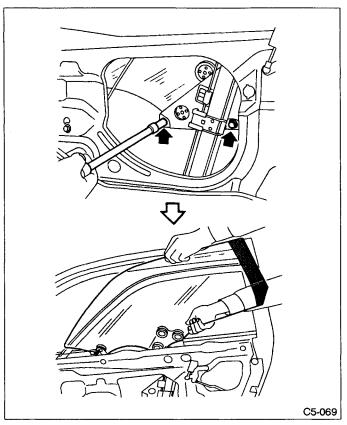


Fig. 45

#### **B: INSTALLATION**

Installation is in the reverse order of removal.

Lower sash tightening torque:

5.4 — 9.3 N·m (0.55 — 0.95 kg-m, 4.0 — 6.9 ft-lb)

### 13. Door Window Regulator

#### A: REMOVAL

For both doors, removal of the window regulator is not mandatory.

- 1) Remove trim panel.
- 2) Remove sealing cover.
- 3) Remove door window lower glass.
- 4) Disconnect regulator motor harness connector and regulator wire from clip, and then loosen nuts and remove regulator rail ASSY with regulator motor and wire.

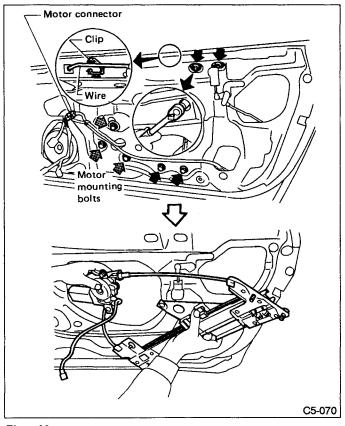


Fig. 46

5) Loosen wire adjusting screw, and unhook claws at the center and both ends of regulator rail ASSY, then separate motor and wire after loosening the wire.

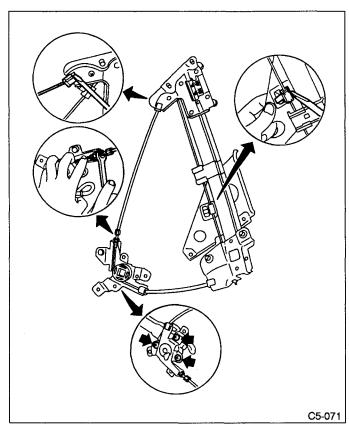


Fig. 47

#### **B: INSTALLATION**

Installation is in the reverse order of removal.

Regulator tightening torque:

10 — 18 N·m (1.0 — 1.8 kg-m, 7 — 13 ft-lb)

#### C: ADJUSTMENT

Using regulator mounting nut, adjust the installation position of regulator, and adjust the door window glass protrusion by turning adjusting screw.

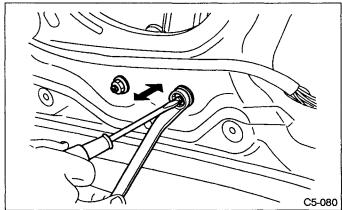


Fig. 48

### 14. Door Weatherstrip

#### A: REMOVAL

1) Remove checker pin and detach checker from body and detach weatherstrip from door panel with clip.

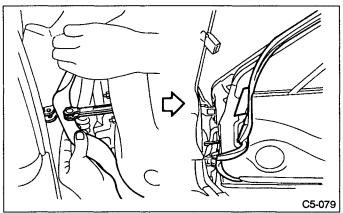


Fig. 49

2) Remove weatherstrip from door panel ditch around door panel.

#### **B: INSTALLATION**

Installation is in the reverse order of removal.

Install weatherstrip into door panel ditch firmly.

# 15. Rear Quarter Window Lower Glass

#### A: REMOVAL

1) Remove rear quarter trim panel.

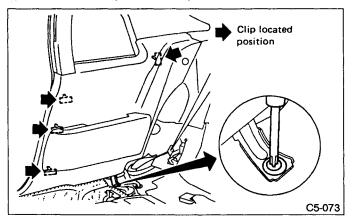


Fig. 50

- 2) Disconnect regulator motor connector.
- 3) Remove cover tape, and remove sealing cover with sealing mat.

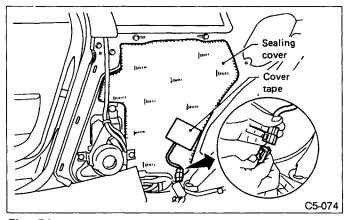


Fig. 51

- 4) Completely down (open) rear quarter window lower glass.
- 5) Remove inner stabilizers.
- 6) Move rear quarter window glass connecting section to center of the working hole.
- 7) Remove two bolts, and remove rear quarter lower window glass from outside of vehicle.

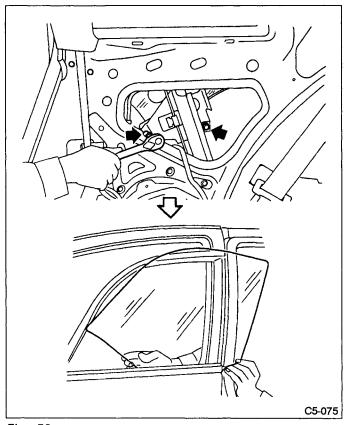


Fig. 52

#### **B: INSTALLATION**

Installation is in the reverse order of removal.

# 16. Rear Quarter Window Regulator

#### A: REMOVAL

- 1) Remove rear seat.
- 2) Remove rear quarter trim panel.
- 3) Remove sealing cover.
- 4) Remove rear quarter window lower glass.
- 5) Remove regulator rail ASSY with regulator motor and wire.

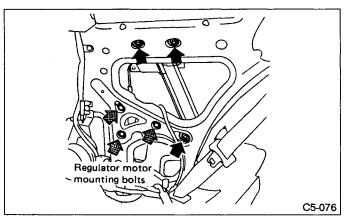


Fig. 53

6) Separate the motor and wire from regulator rail ASSY in the same manner as the door window regulator.

#### **B: INSTALLATION**

Installation is in the reverse order of removal.

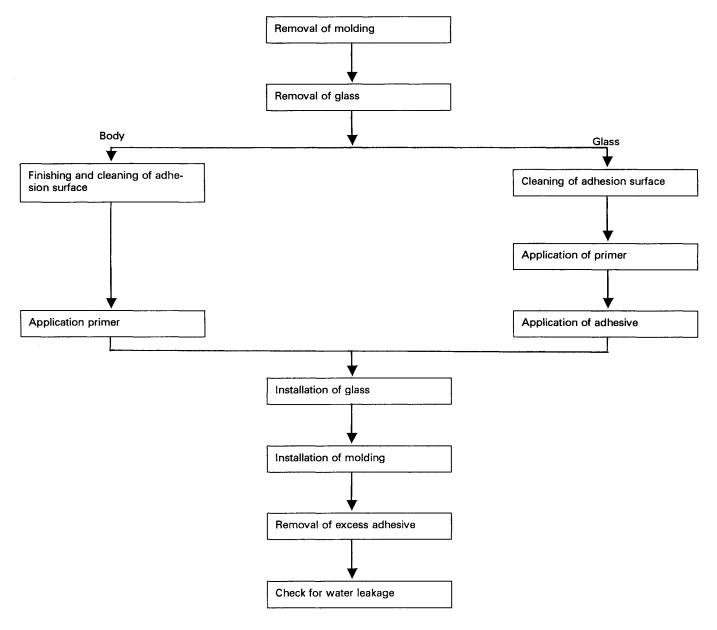
Regulator tightening torque: 10 — 18 N·m (1.0 — 1.8 kg-m, 7 — 13 ft-lb)

#### C: ADJUSTMENT

Adjustment method is same as the door window regulator.

## 17. Removal and Installation of Adhesion Type Window Glass

#### 1. PROCEDURES OF REMOVAL AND INSTALLATION



#### 2. MATERIALS REQUIRED FOR APPLICATION

	<del></del>					
Description	Remarks					
Repair adhesive set						
<ul> <li>Cartridge of single-liquid ure- thane adhesive</li> <li>Primer for glass and body</li> </ul>	Sunstar No. 580 or Essex Chemical Corp's Urethane E Sunstar No. 435-580					
Hot knife (or piano wire)	For cutting adhesive agent					
Sealant gun	For applying adhesive					
Suction cups	For holding glass					
Putty knife	For finishing adhesion surface and cutting spacer					
Sponge	For applying primer					
Gauze or cloth	For cleaning					
Alcohol or white gasoline	For cleaning adhesion surface					
Таре	For preventing damage to painted surface					
Retaining fitting and plate	For installing door upper glass & rear quarter upper glass					

### 18. Windshield

#### A: REMOVAL

The following procedure for the front windshield can also be applied to other window glass.

- 1) Remove wiper arm.
- 2) Remove front fender rubber seal, cowl panel and front pillar cover.
- 3) Remove molding.
- 4) Remove glass.
  - (1) Put protective tape on body to prevent damage.
  - (2) Apply soapy water to the surface of the adhesive agent so the knife blade slides smoothly.
  - (3) Remove excess adhesive agent using putty knife.

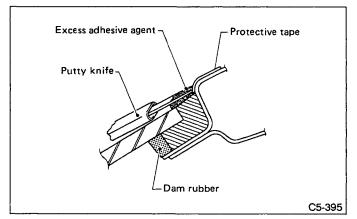


Fig. 54

(4) Scribe a line on adhesive agent using putting knife (to facilitate movement of putty knife during subsequent operation).

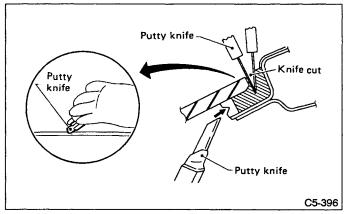


Fig. 55

(5) Cut off adhesive agent using hot knife and remove windshield.

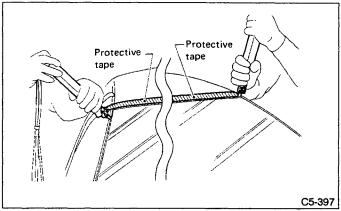


Fig. 56

#### **B: INSTALLATION**

1) Scrape adhesive agent until a layer of adhesive agent is equally maintained in 1 — 2 mm (0.04 — 0.08 in) thickness around entire perimeter.

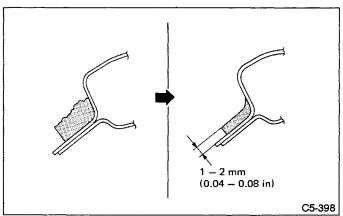


Fig. 57

Take extra care not to cause damage to body paint.

- 2) Cleaning body surface.
  - (1) Thoroughly remove chips, dirt and dust from body surface.

- (2) Clean body wall surface and upper surface of layer of adhesive with a solvent such as alcohol or white gasoline.
- 3) Positioning glass.
  - (1) Mount glass on body.
  - (2) Adjust position of glass so that gap between body and glass is uniform on all sides.
  - (3) Align protrusion of glass and locating pin with body panel.
- 4) Cleaning glass.
  - (1) Dismount glass from body.
  - (2) Clean surface of glass to be adhered with alcohol or white gasoline.
- 5) Application of primer.
  - (1) Using a sponge, apply primer to part of glass to be adhered.
  - (2) Apply primer to part of body to be adhered.

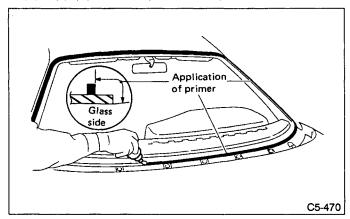


Fig. 58

- a. Primer is hard to wipe off of body paint, instrument panel, inner trim, etc. So put masking around these areas for protection.
- b. After application, let 1st primer dry spontaneously for about 10 minutes.
- c. Do not touch primer-coated surface under any circumstances.
- 6) Application of adhesive.
  - (1) Cut nozzle tip of cartridge as shown in figure below.
  - (2) Open cartridge and put it into a gun with nozzle attached.
  - (3) Apply adhesive uniformly to all sides of adhesion surface while operating gun along glass end face.

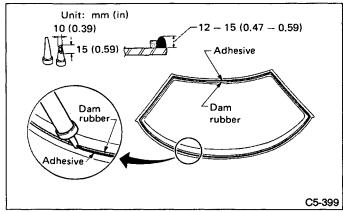


Fig. 59

- 7) Installation of glass.
  - (1) Hold glass with rubber suction cups.
  - (2) Mount glass on body with locating pin and protruded portion aligned.
  - (3) Stick them fast by pressing all sides lightly.

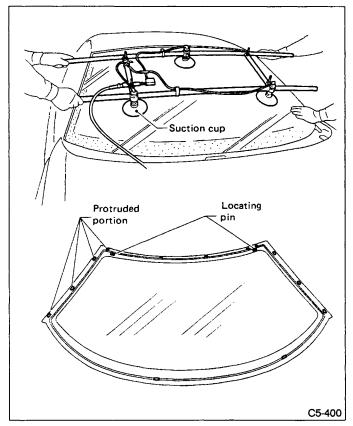


Fig. 60

- (4) Press-fit moldings.
- (5) Remove overflowing adhesive with a spatula, and clean with alcohol or white gasoline.
- 8) Water leakage test.

Test for water leakage about one hour after installation.

- a. Move vehicle very gently.
- b. Do not squirt strong hose stream on vehicle.
- 9) Spontaneous drying.

After completing all operations, leave vehicle alone for 24 hours.

When delivering vehicle to user, tell him that vehicle should not be subjected to heavy shocks for at least three days.

10) Install cowl panel, fender rubber seal and wiper arm.

#### 19. Rear Window Glass

#### A: REMOVAL

- 1) Disconnect connector from rear defogger terminal.
- 2) Remove weatherstrip located between rear quarter window and rear window and remove glass in same manner as in windshield.

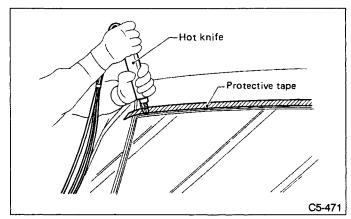


Fig. 61

#### **B: INSTALLATION**

1) Install glass and weatherstrip in same manner as in windshield.

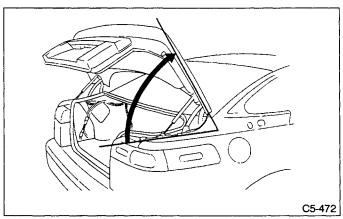


Fig. 62

Install glass with trunk lid opened at approximately 45° (as shown in figure above).

- 2) After installation, test for water leakage after about one hour, and leave vehicle alone for 24 hours.
- 3) Make rear defogger connections.

### 20. Upper Door Glass

#### A: REMOVAL

1) Cut off mid-frame molding.

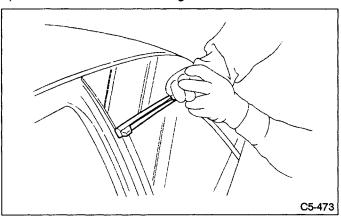


Fig. 63

2) Remove adhesive agent using putty knife and remove upper door glass.

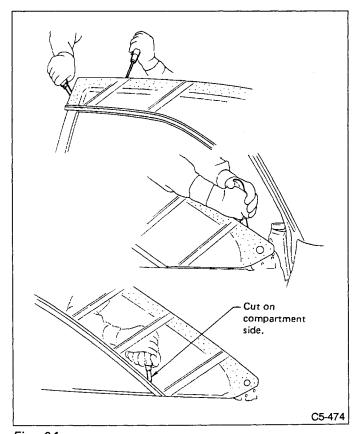


Fig. 64

#### **B: INSTALLATION**

1) Finish surface of adhesive layer on door (panel). Using a putty knife, etc., cut layer of adhesive stick firmly to door and finish it into a smooth surface.

#### Be careful not to damage door finish.

- 2) Cleaning of door surface.
  - (1) Remove chips, dirt and dust from door surface.
  - (2) Clean door wall surface and upper surface of adhesive layer with a solvent such as alcohol or white gasoline.
- 3) Cleaning glass
  - (1) Remove dirt and dust from surface of glass to be adhered.
  - (2) Clean surface of glass to be adhered with alcohol or white gasoline.
- 4) Application of primer
  - (1) Using a sponge, apply primer to surface of glass to be adhered.
  - (2) Apply primer to surface of door to be adhered.
- a. If primer has dropped on door finish, it is hard to wipe it off. So protect with masking.
- b. Primer must not project from black frame of glass.
- c. After applying primer, let it dry spontaneously for about 10 minutes.
- 5) Mark Velcro<sup>(R)</sup> positions on door corresponding with Velcro<sup>(R)</sup> positions on door glass and attach Velcro<sup>(R)</sup> on door.

Left and right door glass designs are symmetrically opposite. After one glass is properly marked with Velcro<sup>(R)</sup> positions, invert and place it on the other door glass and mark positions of Velcro<sup>(R)</sup> to be attached.

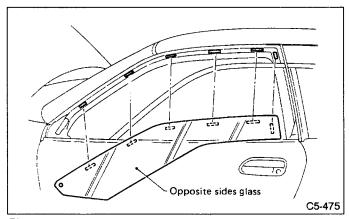


Fig. 65

- 6) Application of adhesive
  - (1) Cut nozzle tip as shown in figure below.
  - (2) Open cartridge and put it into a gun with nozzle attached.
  - (3) Apply adhesive uniformly to all sides of adhesion surface while operating gun along door end face.

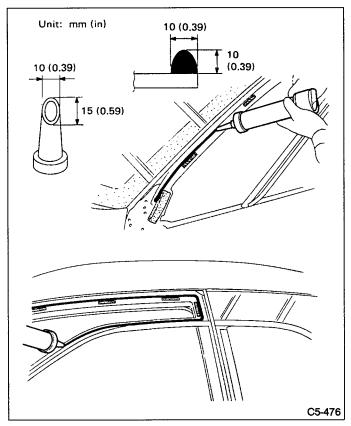


Fig. 66

- 7) Installation of glass.
  - (1) Align glass using Velcro<sup>(R)</sup> positions as a guide, then press glass against door panel.

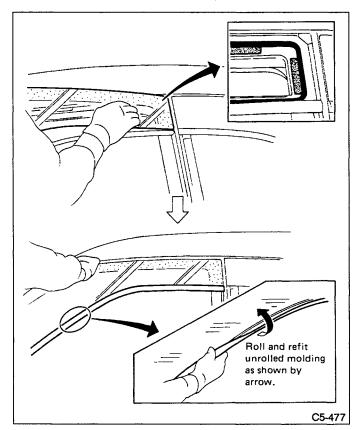


Fig. 67

(2) Move glass in direction of arrow so that middle weatherstrip is 8 mm (0.31 in) wide over entire length.

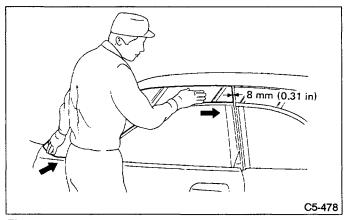


Fig. 68

- a. After properly positioning glass, press it against door panel.
- b. Working inside compartment, apply adhesive agent along upper side of midframe and on glass (as shown by arrow) using spatula.

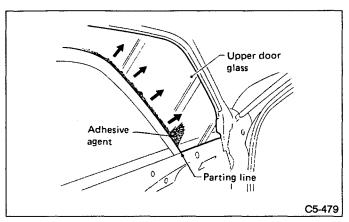


Fig. 69

- c. Allow adhesive agent to dry completely, then scrape off.
- d. Scribe parting line between midframe and applied adhesive agent using spatula.
- 8) Hold door glass on midframe using clamping tool and two plastic pads (one attached on outside of compartment and the other on inside).

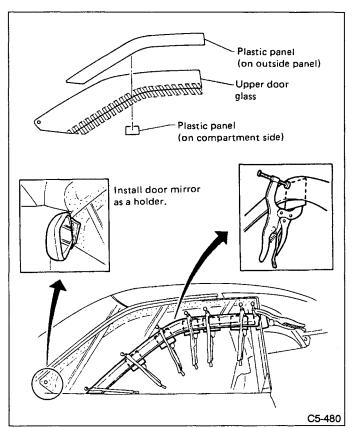


Fig. 70

9) Spontaneous drying.

After completing all operations, leave vehicle alone for 24 hours.

When delivering vehicle to user, tell him that vehicle should not be subjected to heavy shocks for at least three days.

### 21. Rear Quarter Upper Glass

#### A: REMOVAL

- 1) Remove rear quarter garnish.
- 2) Remove weatherstrip between rear window glass and rear quarter window.
- 3) Remove screws and clips securing rear quarter upper glass assembly.

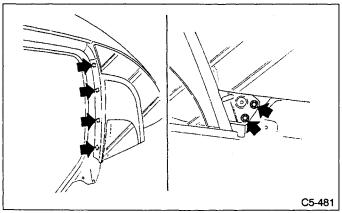


Fig. 71

4) Remove adhesive agent using putty knife, then remove rear quarter upper glass assembly.

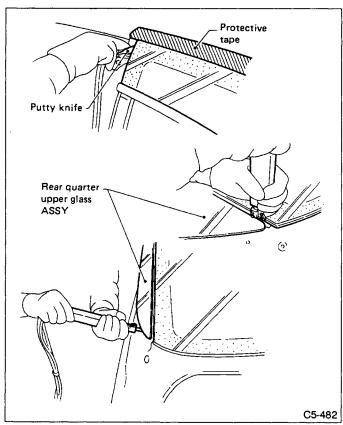


Fig. 72

#### **B: INSTALLATION**

 Finish surface of adhesive layer on body.
 Using a putty knife, etc., cut layer of adhesive stick firmly to body and finish it into a smooth surface.

#### Be careful not to damage body finish

- 2) Cleaning of body surface.
  - (1) Remove chips, dirt and dust from body surface.
  - (2) Clean body wall surface and upper surface of adhesive layer with a solvent such as alcohol or white gasoline.
- 3) Cleaning glass
  - (1) Remove dirt and dust from surface of glass to be adhered.
  - (2) Clean surface of glass to be adhered with alcohol or white gasoline.
- 4) Application of primer
  - (1) Using a sponge, apply primer to surface of glass to be adhered.
- a. If primer has dropped on body finish, it is hard to wipe it off. So protect with masking.
- b. Primer must not project from black frame of glass.
- c. After applying primer, let it dry spontaneously for about 10 minutes.
- 5) Attach Velcro<sup>(R)</sup> to body panel using Velcro<sup>(R)</sup> positions on glass as a guide.

Determine Velcro<sup>(R)</sup> positions on the other glass by inverting rear quarter upper glass with Velcro<sup>(R)</sup> positions already marked.

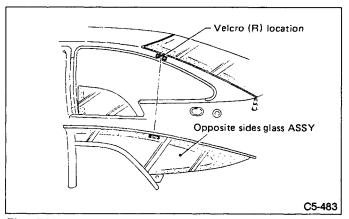


Fig. 73

- 6) Application of adhesive
  - (1) Cut nozzle tip as shown in figure below.
  - (2) Open cartridge and put it into a gun with nozzle attached.
  - (3) Apply adhesive uniformly to all sides of adhesion surface while operating gun along glass end face.

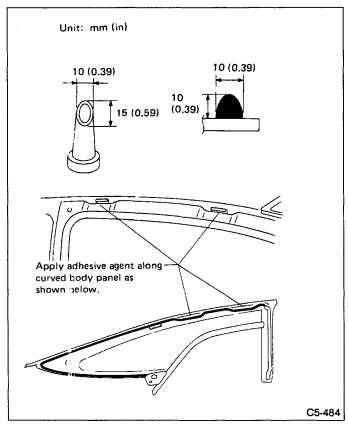


Fig. 74

- 7) Installation of glass ASSY.
  - (1) Firmly press glass assembly against body panel while aligning it with body panel at Velcro<sup>(R)</sup>, concave and convex positions.

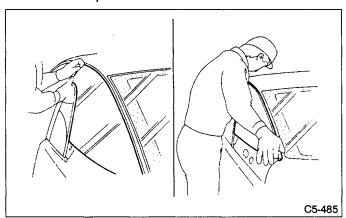


Fig. 75

Ensure that weatherstrip is approximately 8 mm (0.31 in) wide over its entire length, as in upper door glass installation.

(2) Install screws and clips to secure rear quarter upper glass assembly.

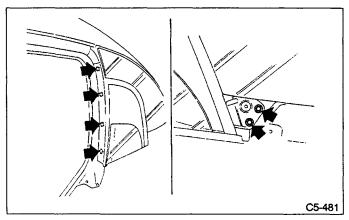


Fig. 76

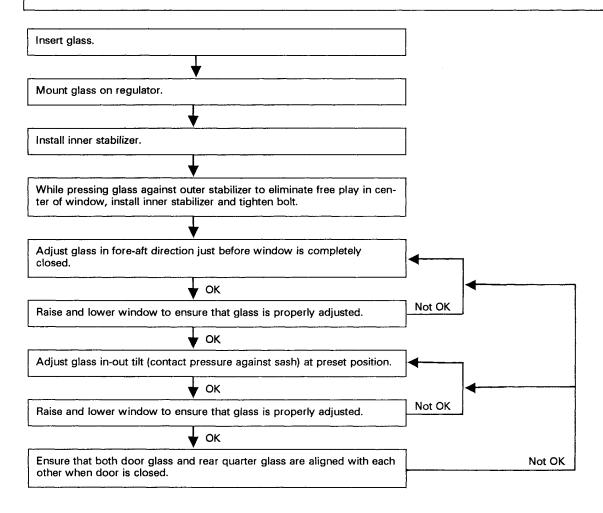
8) Spontaneous drying.

After completing all operations, leave vehicle alone for 24 hours.

When delivering vehicle to user, tell him that vehicle should not be subjected to heavy shocks for at least three days.

### 22. Door & Rear Quarter Glass Adjustment

#### A: PROCEDURE CHART FOR ADJUSTING DOOR & REAR QUARTER LOWER GLASS



#### **B: ADJUSTMENT POINTS**

#### 1. DOOR GLASS

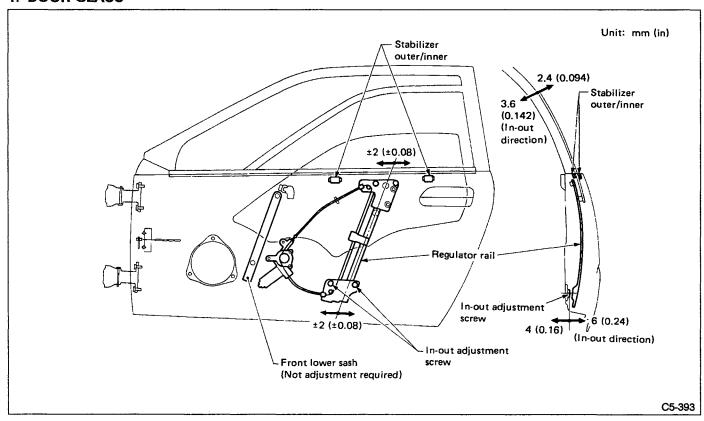


Fig. 77

#### 2. REAR QUARTER GLASS

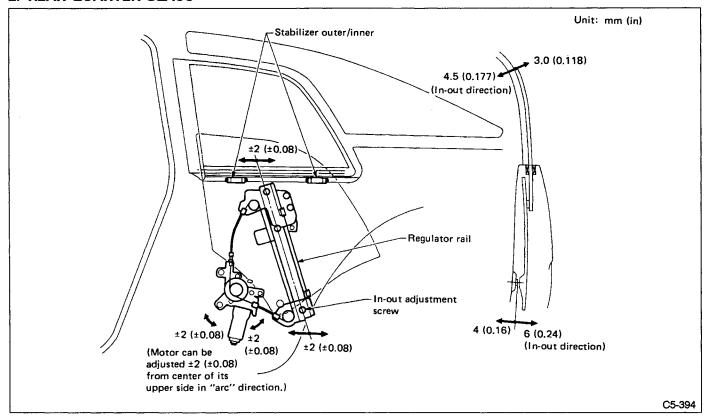


Fig. 78

#### C: ADJUSTMENT PROCEDURE

#### 1. INNER STABILIZER ADJUSTMENT

1) Set upper edges of door glass and rear quarter glass at half-open position as shown in figure below.

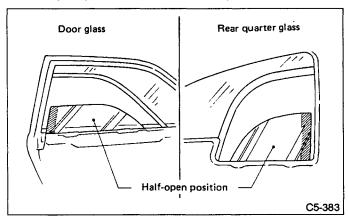


Fig. 79

2) Move inner stabilizer in either direction until glass free play is eliminated, and secure it at that position.

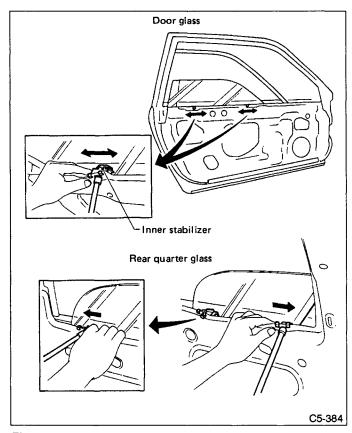


Fig. 80

#### 2. FORE-AFT GLASS ADJUSTMENT

- 1) Temporarily tighten regulator attaching nut.
- a. When new glass is used, temporarily tighten regulator attaching nut at midpoint of oblong hole.

# b. When new regulator is used, locate attaching nut at position where old regulator is retained.

2) Set upper edges of door glass and rear quarter glass approximately 5 mm (0.20 in) away from midframe, as shown in figure.

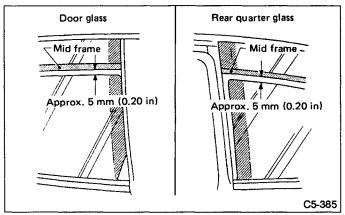


Fig. 81

3) Move lower glass until it is aligned with upper glass as shown in figure.

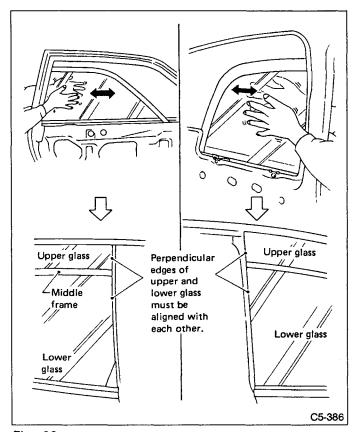


Fig. 82

- a. Lower glass can also be aligned with upper glass by moving regulator itself.
- b. Raise and lower window to ensure that lower glass is aligned with upper glass. If not aligned, re-adjust.
- c. Adjust rear quarter glass using both adjustment nut and regulator motor attaching bolts.

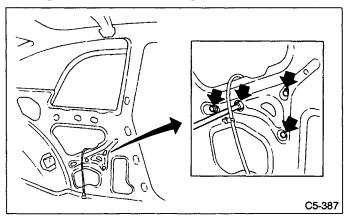


Fig. 83

4) After properly adjusting glass, tighten regulator attaching nuts.

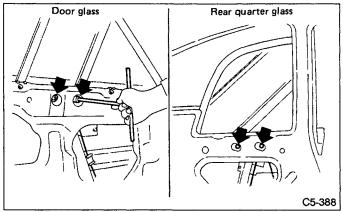


Fig. 84

5) Raise and lower window to re-check that glass is properly aligned.

If glass is out of alignment, re-adjust.

#### 3. IN-OUT TILT ADJUSTMENT

1) Lower window approximately 80 mm (3.15 in) below midframe and adjust glass tilt.

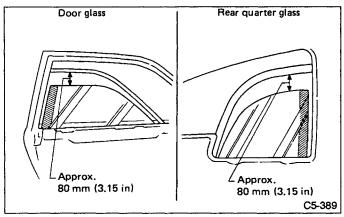


Fig. 85

2) Adjust adjustment screw so that clearance between glass and weatherstrip sash surface is 1.5 mm (0.059 in).

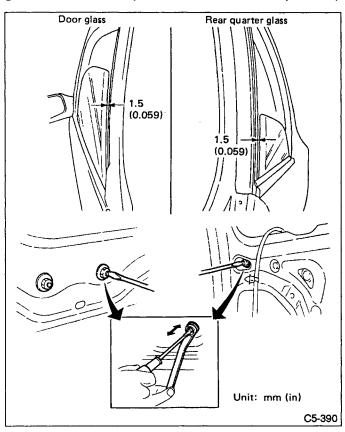


Fig. 86

- a. Close window completely to ensure that glass is in contact with weatherstrip sash surface.
- b. It is desirable for left and right adjustment screws to be adjusted by the same amount after glass adjustment.

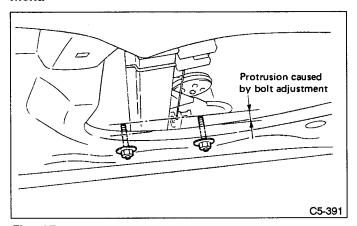


Fig. 87

- 3) Tighten adjustment nuts.
- 4) Raise and lower window to re-check that glass is properly adjusted.

If glass is out of alignment, re-adjust.

# 4. RELATIVE ADJUSTMENT OF DOOR AND REAR QUARTER GLASS

Relative position of door and rear quarter glass is correct if there is 8 mm (0.31 in) clearance at weather-strip sash.

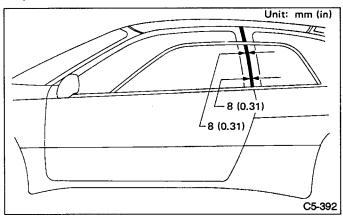
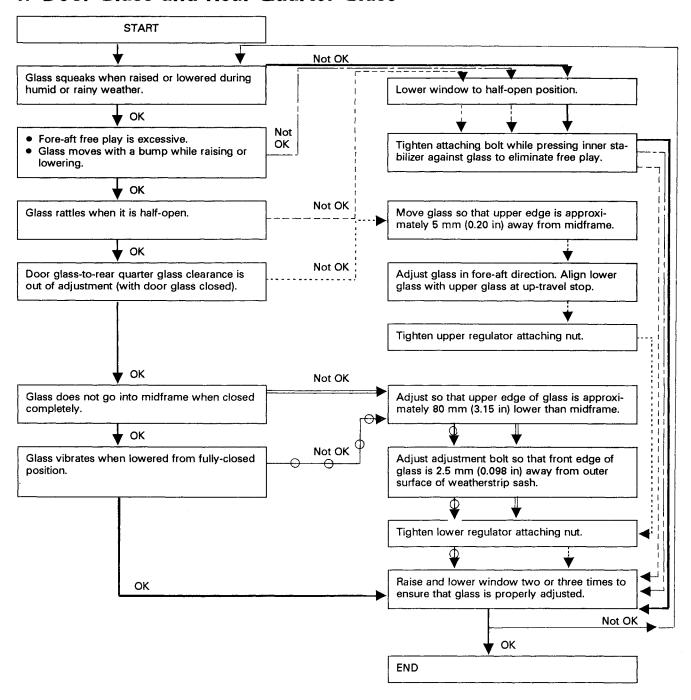


Fig. 88

### T TROUBLESHOOTING

### 1. Door Glass and Rear Quarter Glass



# 2. Door Lock System

No.	Trouble	Possible cause	Remedy
1	Door cannot be opened by outer handle (Door can be opened by inner handle)	Disconnect outer handle rod.	Connect firmly.
2	Door cannot be opened by inner handle (Door can be opened by outer handle)	Joint of upper rod is disconnected.	Connect firmly. Functionally normal.
3	Door does not open when outer or inner handle is operated with inner lock knob set to unlock position	a. Joint of lower rod is disconnected.     b. Lock is not released due to improper adjustment of lower rod.	Connect firmly. Remove rod from latch. Adjust rod so that lock knob is set in "lock" position is locked.
4	Door opens even when inner lock knob is set to lock position	<ul><li>a. Lower rod joint is separated.</li><li>b. Door is not locked due to improperly adjusted lower rod.</li></ul>	Same as a in No. 3. Same as b in No. 3.
5	Inner handle stops halfway	Contact of upper rod with inner handle mounting case.	Eliminate contact by bending upper rod properly.
6	Door cannot be locked or unlocked by key.	Joint of key lock rod is disconnected.	Connect firmly.
7	Auto door-lock switch does not act when inner lock knob is pushed.	Auto door-lock switch does not act due to improperly adjusted lower rod.	Same as b in No. 3.

### 3. Power Window

Part conditionered to be in problem  Symptom	Battery	Fuse (10A) No. 15 in fuse box	Power window circuit breaker & power window relay	Power window main switch	Power window sub- switch of each pas- senger side	Power window motor of driver side	of each pas-	Regu- lator ASSY of each window	Power supply line of main switch	Ground line	Har- ness and con- nector
All of the window does not move.	1	2	3	4					5	0	0
The window of driver side does not move.				1		2			3		0
The window of driver side does not move "AUTO" up-down.				1		2			3		0
· · · · · · · · · · · · · · · · · · ·				1	2		3	4			0
The window of each passenger side does not move.				1	2		3	4			0
does not move.				1	2		3	4			0

O: Figures in a circle refer to diagnostic procedures.