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This file was not scanned to deprive Mazda of any money – it was scanned due to the rareness of the original manuals and the overwhelming need of the RX-7 owner to have this information so that they can accurately troubleshoot problems. Perhaps if Mazda's dealerships could support the Rotary Engine it wouldn't be so necessary for the owners to do so.



Many thanks to Scott89t2 and <a href="www.1300cc.com">www.1300cc.com</a> for scanning this file.

# 1989 Mazda RX-7 Factory Service Manual

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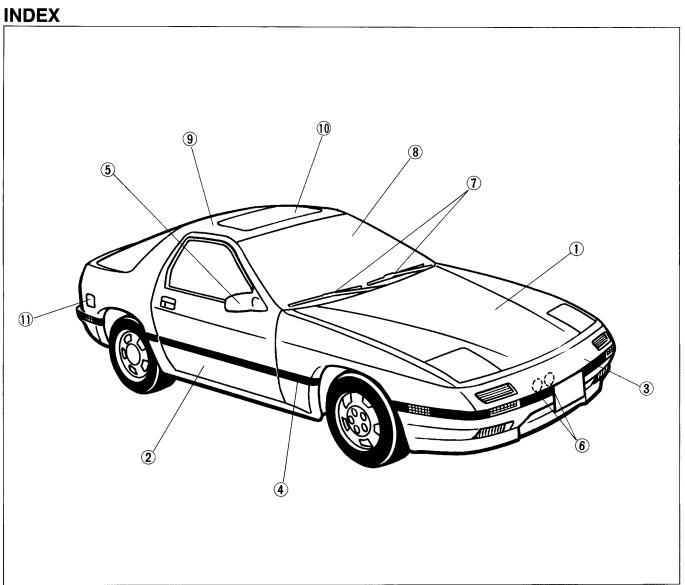
Some parts of the manual may be hard to read or see on the screen, but if you print the pages out it's perfect. Well except for the crookedness ©.

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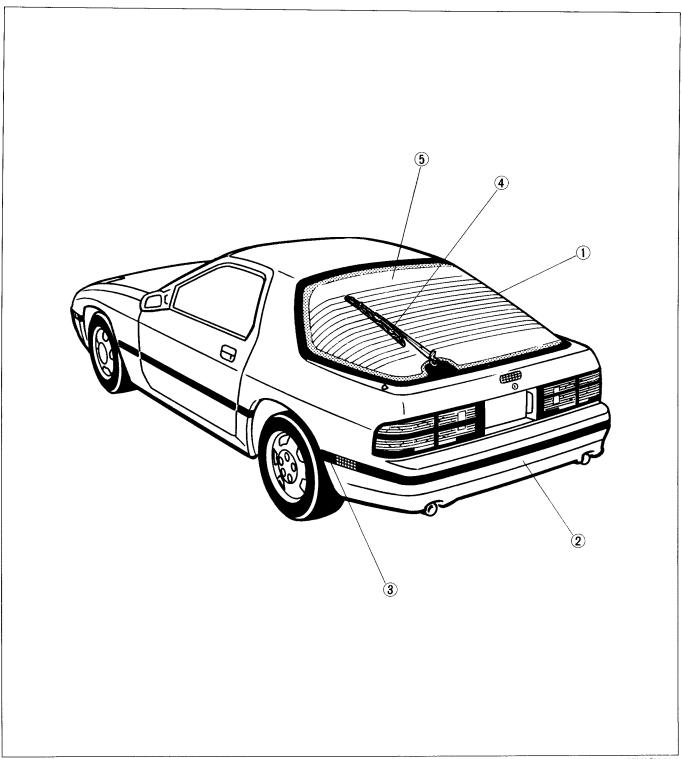
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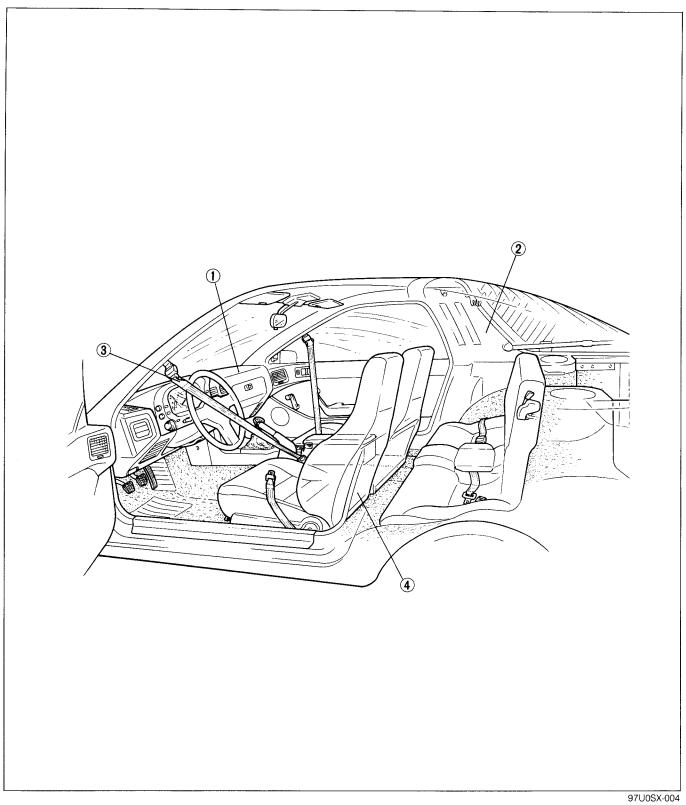


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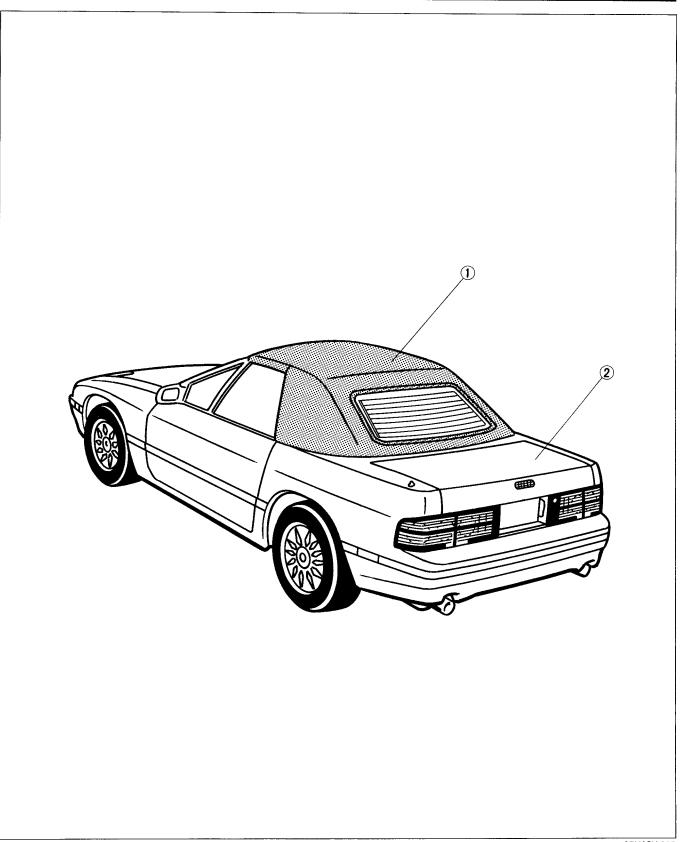
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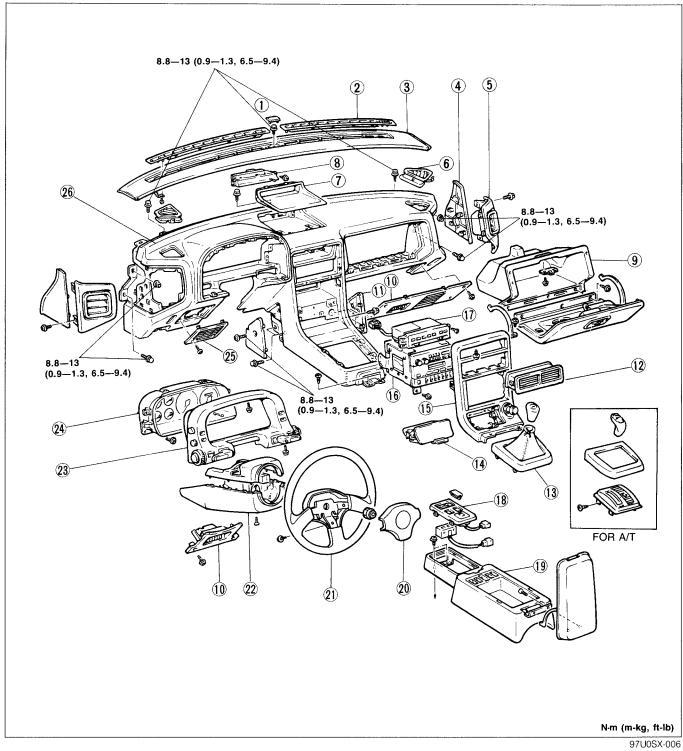
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# **INSTRUMENT PANEL**

# STRUCTURAL VIEW

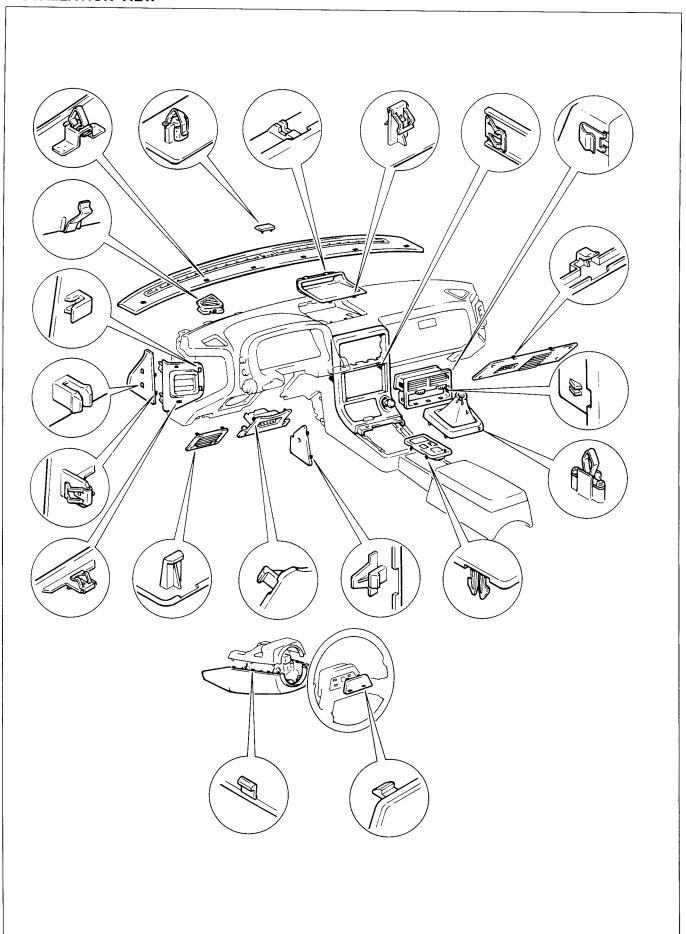


- 1. Center cap
- 2. Defroster grille (R and L)
- 3. Instrument panel garnish
- 4. Side cover (R and L)
- 5. Side panel (R and L)6. Demister grille (R and L)
- 7. Clock bezel
- 8. Clock and warning unit
- 9. Glove box

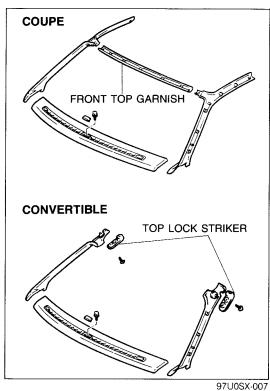
- 10. Lower panel (R and L)
- 11. Side wall (R and L)
- 12. Center louver
- 13. Boot panel
- 14. Ashtray
- 15. Center panel
- 16. Audio set
- 17. Logicon switch
- 18. Switch panel

- 19. Rear console
- 20. Steering wheel cap
- 21. Steering wheel
- 22. Column cover (upper and lower)
- 23. Cluster switch panel
- 24. Instrument cluster
- 25. Speaker grille
- 26. Instrument panel

# **INSTALLATION VIEW**



# S INSTRUMENT PANEL



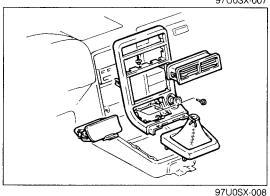
# REMOVAL

# **Instrument Panel Garnish**

- 1. Remove the front top garnish (coupe), top lock strikers (convertible), and front pillar trims.
- 2. Remove the center cap and the screw.
- 3. Lift up the instrument garnish with defroster grilles attached, and pull out.

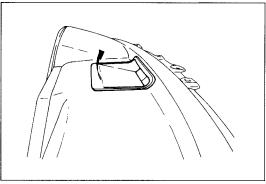
# Caution

If the front pillar trims are not removed before the instrument garnish, the front pillar trim may be damaged when the garnish is removed.



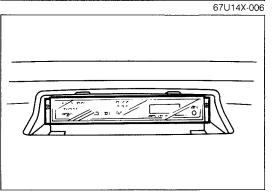
# **Center Panel**

- 1. Remove the boot panel, ashtray, and center louver.
- 2. Remove the center panel attaching screws (4), and then detach the center panel from the instrument panel.
- 3. Remove the cigarette lighter illumination bulb unit and the cigarette lighter connector.
- 4. Remove the center panel.

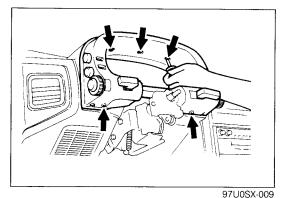


# **Clock and Warning Unit**

1. Pry the clock bezel upward, then remove it.



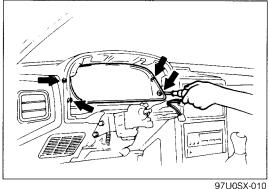
- 2. Remove the clock and warning unit attaching screws.
- 3. Pull the clock and warning unit forward, and disconnect the connector.



# **Cluster Switch Panel**

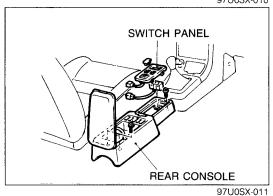
- 1. Remove the cluster switch panel attaching screws (5).
- 2. Disconnect the switch connectors and remove the cluster switch panel.





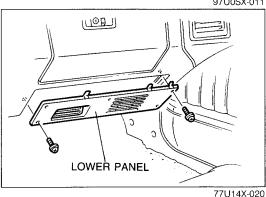
Instrument cluster

- 1. Remove the instrument cluster attaching screws (4), and pull out the instrument cluster.
- 2. Disconnect the instrument cluster connectors and speedometer cable.
- 3. Remove the instrument cluster.



# **Rear Console**

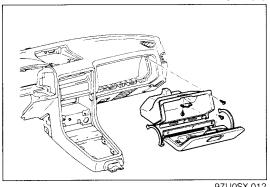
- 1. Remove the switch panel with a protected screwdriver.
- 2. Disconnect the AAS (coupe), headrest speaker (convertible), and remote control mirror switch connectors.
- 3. Remove the rear console attaching screws (4), and then remove the rear console.



**Lower Pannel** 

- 1. Remove the lower panel attaching screws (5).
- 2. Disconnect the front speaker unit connectors.
- 3. Remove the heater ducts, and then remove the lower panel.



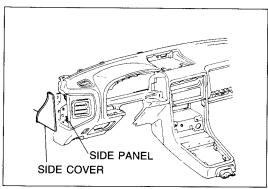


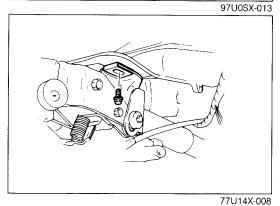
**Glove Box** 

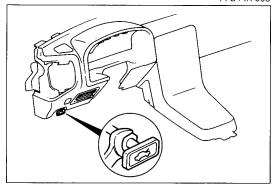
- 1. Open the glove box, and remove the glove box attatching
- 2. Remove the glove box light bulb and glove box.
- 3. Remove the side wall attaching screw (1), and the side wall with a protected screwdriver.

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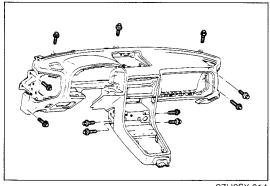
# **INSTRUMENT PANEL**







77U14X-009



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# Side Cover

- 1. Remove the side cover with a protected screwdriver.
- 2. Remove the side panel attaching screw (1), and remove the side panel.

# **Instrument Panel**

1. Remove the tilt steering shaft bolts (2).

2. Remove the hood release lever nut, and remove the hood release lever.

- 3. Remove the instrument panel attaching bolts (11).
- 4. Disconnect the ignition switch connectors and other con-
- 5. Carefully remove the instrument panel.

# **INSTALLATION**

1. Install in the reverse order of removal.

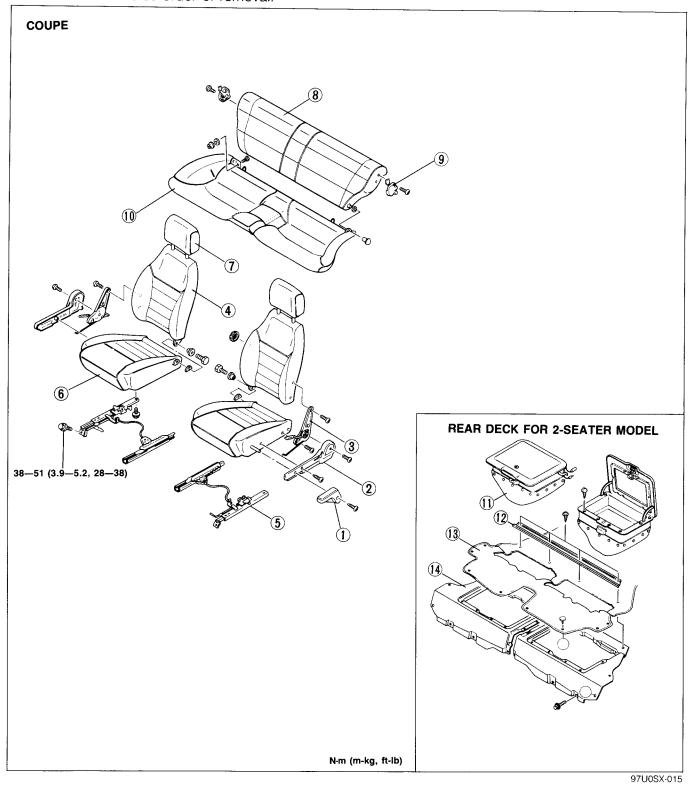
# **Tightening torque:**

8.8—13 Nm (0.9—1.3 m-kg, 6.5—9.4 ft-lb)

# **SEAT**

# **REMOVAL AND INSTALLATION**

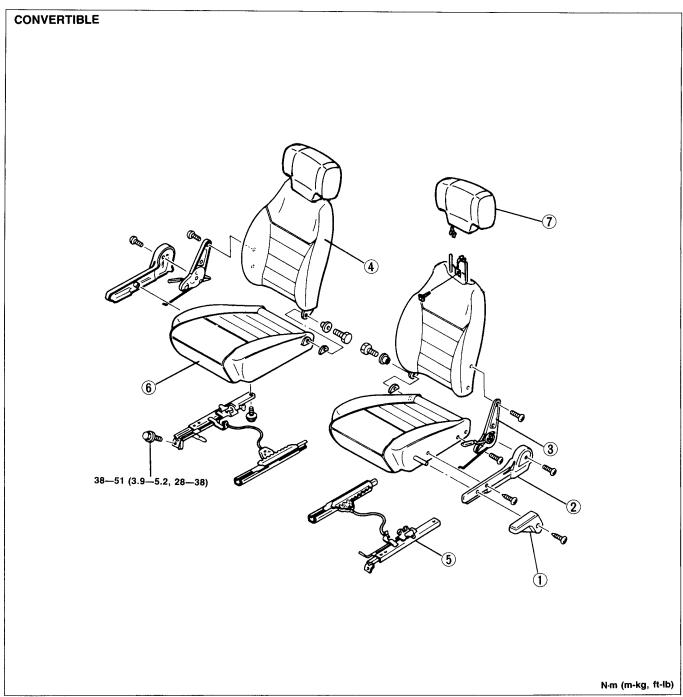
- 1. Remove in the order shown in the figure.
- 2. Install in the reverse order of removal.



- 1. Lever
- 2. Knuckle cover
- 3. Reclining knuckle
- 4. Seat back
- 5. Adjuster

- 6. Seat cushion
- 7. Headrest
- 8. Rear seat back
- 9. Seat back lock
- 10. Rear seat cushion
- 11. Storage box
- 12. Mat set plate 13. Cargo space mat
- 14. Rear deck

# SEAT



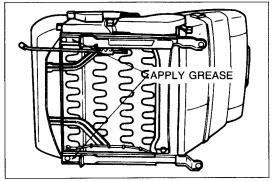
97U0SX-016

- 1. Lever
- 2. Knuckle cover
- 3. Reclining knuckle
- 4. Seat back
- 5. Adjuster

- 6. Seat cushion
- 7. Headrest (with speaker)



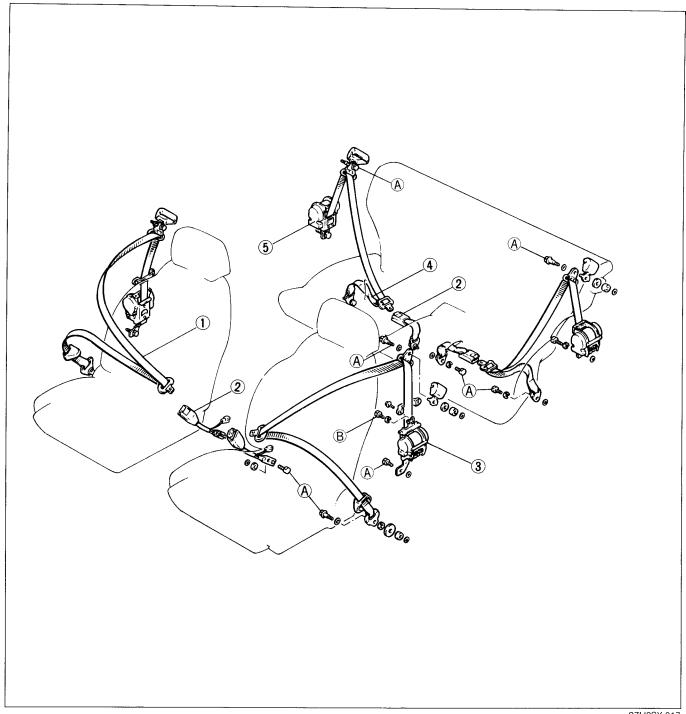
- a) Check that the seat adjuster lever and reclining knuckle move smoothly.
- Apply grease to the moving parts.
  b) Check the adjustment lever for wear.
- c) Check the front seat mounting bolts for looseness.



67U14X-009

# **SEAT BELT**

# STANDARD SHOULDER BELT **Structural View**



97U0SX-017

- 1. Front seat belt
- 2. Buckle
- 3. Retractor (E.L.R.)

- 4. Rear seat belt (For Coupe)
- 5. Rear retractor (E.L.R.)

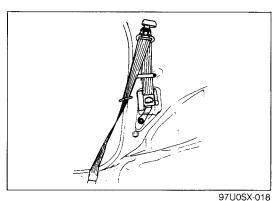
# Caution

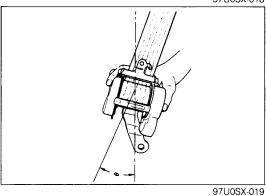
Do not disassemble the buckles or retractors.

# **Tightening torque:**

A: 38—78 N·m (3.9—8.0 m-kg, 28—58 ft-lb) B: 4.9 N·m (50 cm-kg, 43 in-lb)

# S SEAT BELT





# Inspection

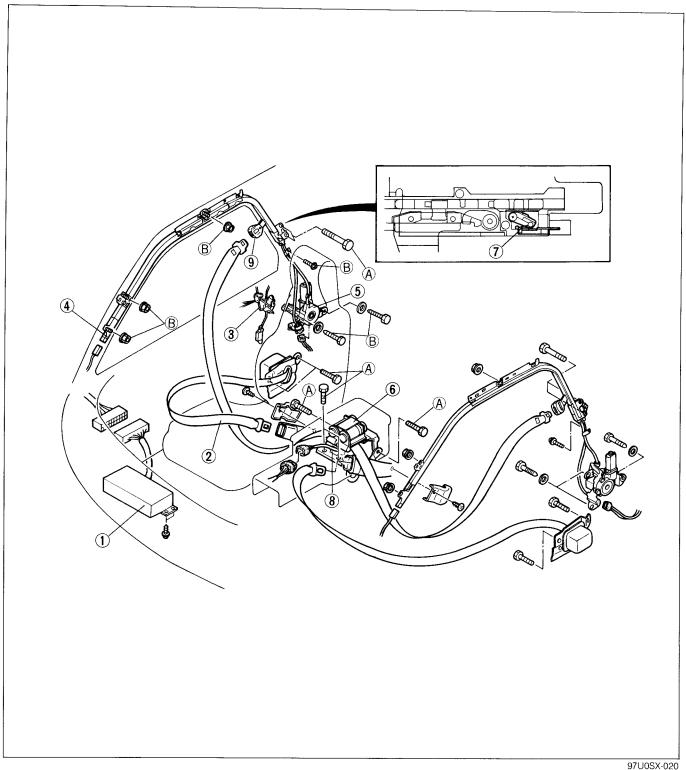
- 1. Check that the belt can be pulled out smoothly and that it moves smoothly when worn.
- 2. Check the webbing for scars, tears, wear, and deformation of the fittings.

# Warning Do not disassemble the buckle or ELR assembly.

- 3. Verify that the retractor locks when quickly pulling the belt.
- 4. Remove the retractor.
- 5. Hold the retractor as it is installed.
- 6. Slowly incline the retractor while pulling out the belt.
- 7. Verify that the retractor locks at **approx. 30 degrees** inclination.

# Caution Do not disassemble the ELR assembly.

# **PASSIVE SHOULDER BELT** Structural View



- 1. Passive shoulder belt control unit
- 2. Lap belt
- 3. Door catch switch (in door lock assembly)
- 4. Limit switch (Front)
- 5. Passive shoulder belt motor

- 6. Passive shoulder belt retractor
- 7. Limit switch (Rear)
- 8. Passive shoulder belt warning switch (in shoulder belt retractor)
- 9. Buckle

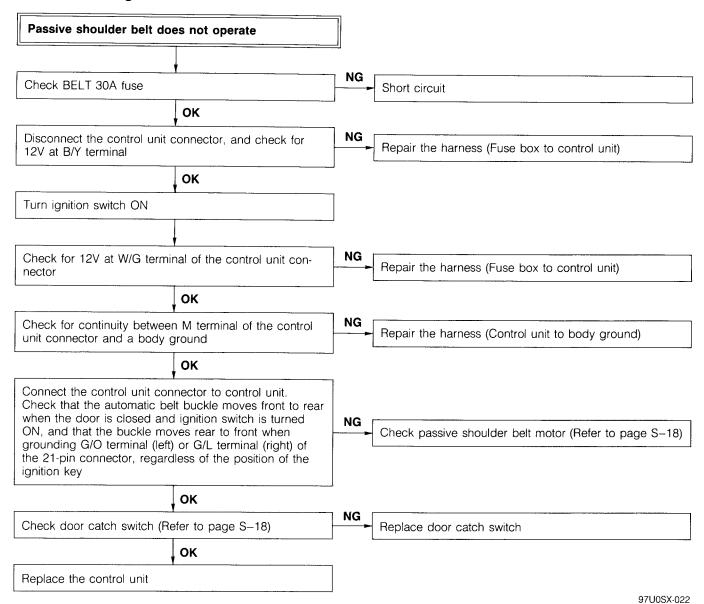
**Tightening torque:** 

A: 38—78 Nm (3.9—8.0 m-kg, 28—58 ft-lb) B: 7.8—11 Nm (80—110 cm-kg, 69—95 in-lb)

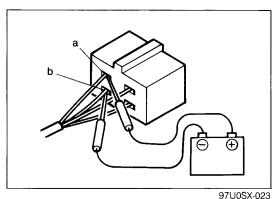
# S SEAT BELT

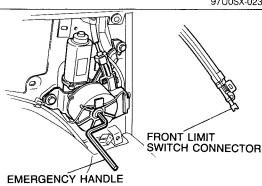
# **Circuit Diagram** шŒ F-75 LIMIT SWITCH FRONT (R. H) (F) SEAT BELT WARNING (IN THE WARNING & AUTO CLOCK SYSTEM) (Z-82) (F) (IN THE UPU) B Y/G IN-03 LIMIT SWITCH REAR (L, H) B X 8 (F) F-74 PASSIVE SHOULDER BELT CONTROL UNIT (F) G L/Y \* B/Y G/H B LG/W \* B/L m Œ WARNING DH2-10 DOOR CATCH SWITCH (DH2) mŒ ٩ 6/0 Ş(£) **E** LIMIT SWITCH (REAR) (R.H.) & PASSIVE SHOULDER BELT MOTOR (R.H) ည်ဖ ωŒ DR1-10 DOOR CATCH SWITCH (DR1) MOTOR (R. H) & LIMIT SWITCH REAR (R. H) (F) REAR (R. H) (F) шŒ 6/0 B ŞŒ B 5 ωŒ ŒŒ H-41 RETHACTOR SWITCH (R) ()...POWER WIMGOW & DOOR LOCK KEY SYLINDER ILLUMI 87. (R) FR-01 (F) LIMIT SWITCH (REAR) (L.H.) & PASSIVE SHOULDER BELT MOTOR (L.H.) B/G (64m) Y/R 6Y/B (6/B BR/M L/W B/Y L/R L G 6/B LG/R % LG/BBR/B 6/R B GY R/B L (FRONT) LG/BLG/W ⇒e0-NI R-40 PASSIVE SHOULDER BELT MOTOR & LIMIT SWITCH FRONT (L, H) (R) (H2) 6/0 (0R1) DR1-10\* DOOR CATCH % FDR1-01 B 1/8 œŒ

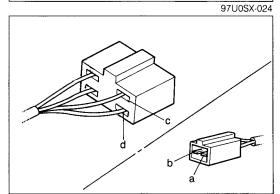
# **Troubleshooting**

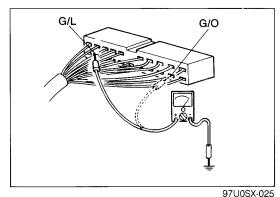


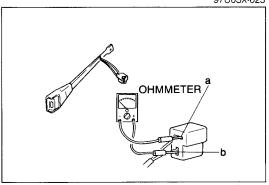
S-17











97U0SX-026

# Inspection

# Passive shoulder belt motor

- 1. Remove the front and center pillar trim and disconnect the passive shoulder belt motor connector.
- 2. Connect 12V to terminal a and ground terminal b. Verify that the motor rotates in the forward direction (release).
- 3. Reverse the above connection, and check that the motor rotates in the rearward direction (lock).

# Caution

Do not operate the motor for an extended period of time.

# Limit switch

- 1. Remove the front and center pillar trim and disconnect the passive shoulder belt motor connector, and disconnect the limit switch connector.
- 2. Check continuity between the limit switch terminals with each condition using the emergency handle.

Limit swit	ch	Front		Rear		
Seat belt position		а	b	С	d	
Released (Front)		<del></del>	-0			
Released and Locked						
Locked (Rear)				0-	<u> </u>	

O-: Indicates continuity

# Door catch switch

- 1. Disconnect the passive shoulder belt control unit 21 pin connector.
- 2. Check continuity between the G/L wire and G/O wire and a body ground with each condition.

Dear position	Le	eft	Right		
Door position	G/L	Ground	G/O	Ground	
Open	0-		0	<del></del> 0	
Closed					

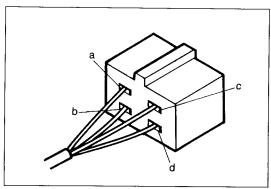
O-O: Indicates continuity

# **Buckle switch (Lap belt)**

- 1. Disconnect the buckle switch connector.
- 2. Check continuity of the switch with an ohmmeter.

Lap belt Term	inal a	b
Unfastened	0	
Fastened		

O: Indicates continuity



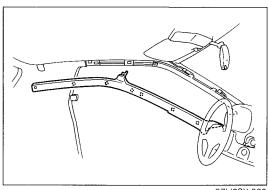
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- Seat belt warning switch1. Remove the passive shoulder belt retractor connector.2. Check continuity between the terminals when the passive shoulder belt it at rear the lock position.

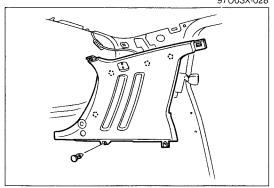
Terminal		Left	side	Right side		
Seat belt position		а	b	С	d	
Locked	Belt fastened	0-	$\overline{}$	0-		
	Belt unfastened					

O-O: Indicates continuity

# **SEAT BELT**



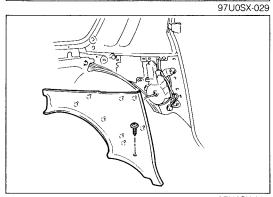
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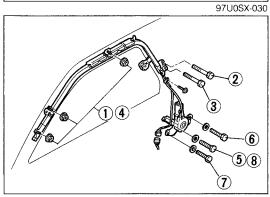
2. Remove the B pillar trim.

1. Remove the front pillar trim.

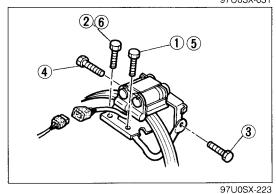
Removal



3. Remove the quarter trim.



97U0SX-031



4. Remove the mounting bolts.

5. Remove the passive shoulder belt motor and rail.

# Installation

Install in the reverse order of removal.

# Note

- (a) The passive shoulder belt motor and rail install in the order shown in the figure.
  - ① ⑤ ......tighten temperarily 2 3 4 6 7 8 ..... tighten completely
- (b) The passive shoulder belt retractor install in the order shown in the figure.
  - 1 2 ..... tighten temperarily 3 4 5 6 ..... tighten completely

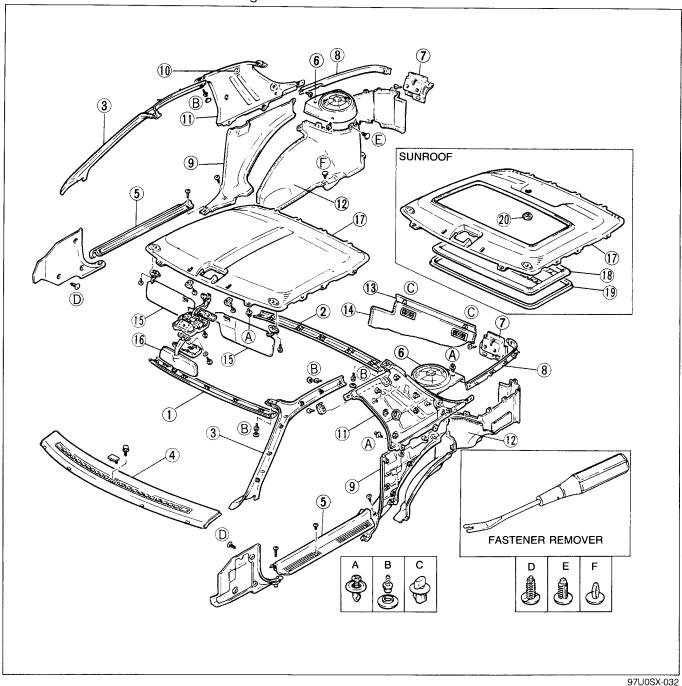
## Caution

Before the new rail is installed, disconnect the negative battery cable surely. If not remove the battery cable, the shoulder belt does not operate. In this case, disconnect the battery cable and reconnect the cable. The system operates properly.

# **HEADLINER, GARNISH, AND TRIM**

# REMOVAL AND INSTALLATION

Remove and install as shown in the figure.



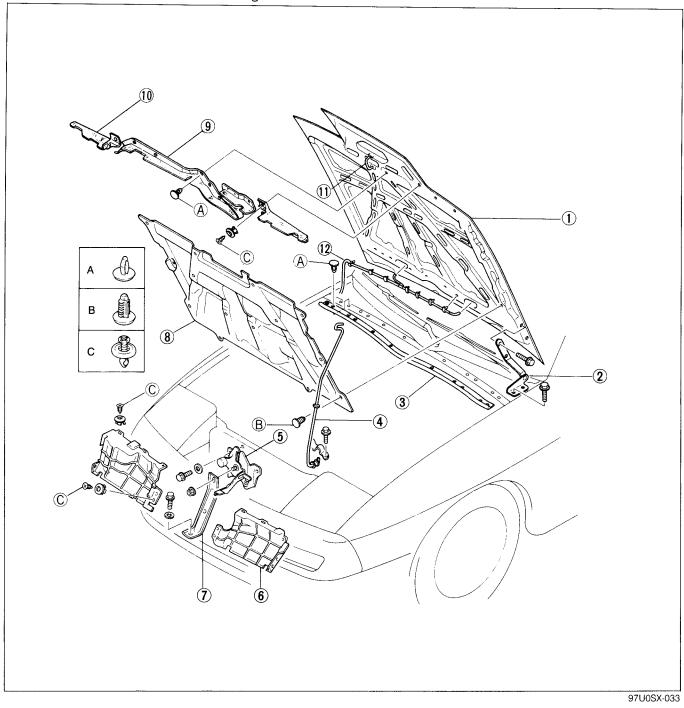
- 1. Front top garnish
- 2. Rear top garnish
- 3. Front pillar trim (R and L)
- 4. Instrument panel garnish
- 5. Scuff plate (R and L)
- 6. Speaker grille (R and L)
- 7. Lock cover (R and L)
- 8. Upper trunk side trim (R and L)
- 9. Quarter trim (R and L)
- 10. Coat hanger (R and L)
- 11. B pillar trim (R and L)
- 12. Lower trunk side trim (R and L)
- 13. Upper end trim
- 14. Lower end trim
- 15. Sunvisor (R and L)
- 16. Rearview mirror
- 17. Headliner
- 18. Inner trim
- 19. Seaming welt
- 20. Motor hole cover

Use a fastener remover like the one shown in the figure to remove the "D", "E", and "F" type fasteners.

# **HOOD AND HOOD LOCK**

# REMOVAL AND INSTALLATION

Remove and install as shown in the figure.



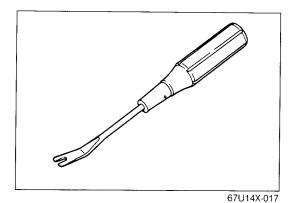
- 1. Hood panel
- 2. Hinge (R and L)
- 3. Cowl seal rubber
- 4. Hood stay

- 5. Hood lock
- 6. Upper duct cover (R and L)
- 7. Lock brace
- 8. Insulator

- 9. Front seal rubber
- 10. Headlight protector (R and L)
- 11. Striker
- 12. Windshield washer hose

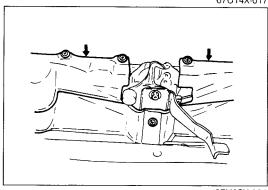
# Caution

- a) Do not replace steel hoods with aluminum hoods without replacing the hood hinges, as aluminum hoods need electrically insulated hinges to prevent electrolytic corrosion.
- b) Two types of hood locks are used; one for aluminum hoods and one for steel hoods. The strengths of the locks are different due to the weight of the hoods. Use only the proper lock for the respective hood.



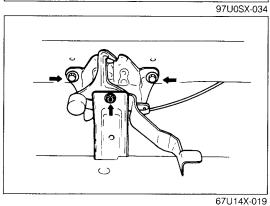
# Note

Use a fastener remover like the one shown in the figure to remove the "A" and "B" type fasteners.



ADJUSTMENT Hood Lock

1. Remove the upper duct cover.

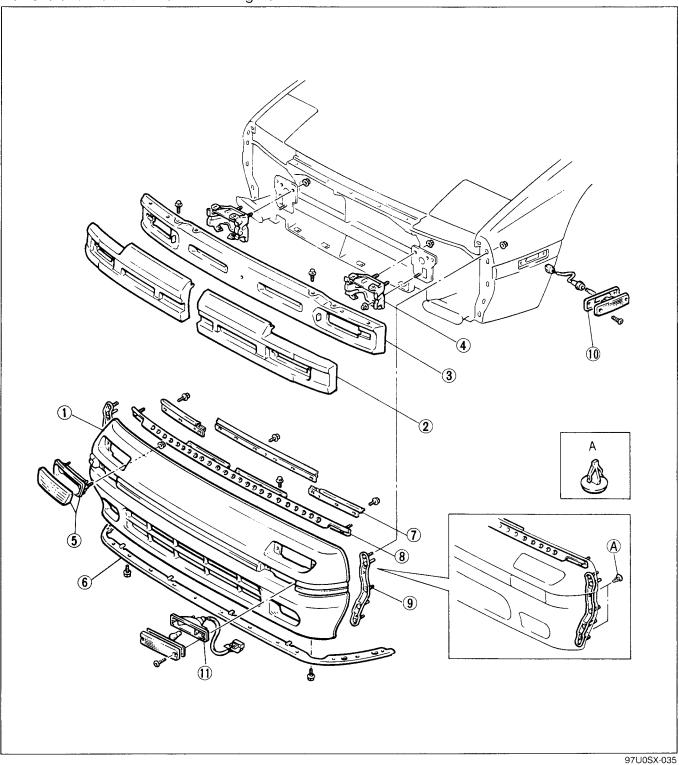


2. Loosen the lock attaching bolts and nuts to adjust the hood lock.

# FRONT BUMPER

# **REMOVAL AND INSTALLATION**

Remove and install as shown in the figure.



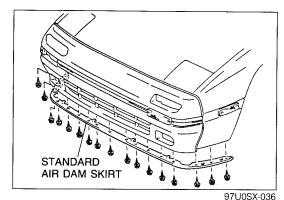
- 1. Fascia

- Energy-absorbing foam (R and L)
   Bumper reinforcement
   Bumper stay (R and L)
   Passing port window cover (R and L)
- 6. Front airdam skirt
- 7. Upper set plate (3)

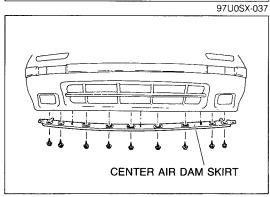
- 8. Retainer
- 9. Side set plate (R and L)
  10. Front-side marker light
  Bulb: 3.8 W (194)
- 11. Front combination light

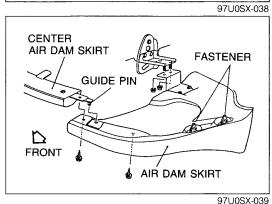
Bulb: Turn signal/Parking light

27/8 W (1157)



# FRONT BOLTS PLATE CLIPS





# FRONT AIR DAM SKIRT Installation

- 1. Jack up the front of the vehicle and support it with safety stands.
- 2. Remove the standard air dam skirt.

# Note

Do not reuse the seventeen (17) screws attaching the air dam skirt.

3. Remove the seal plate from the right and left sides as the figure shows.

# Note

Keep the seal plate, bolts, and clips because they are reused.

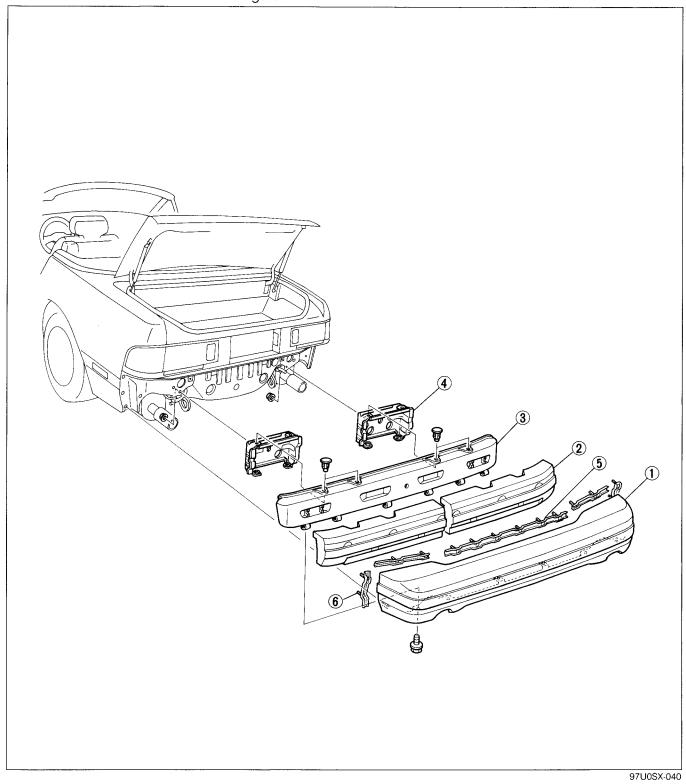
4. Install the center air dam skirt using the screws supplied in the kit.

- 5. Install the right and left air dam skirts.
- 6. Attach the seal plates which was removed previously.

# **REAR BUMPER**

# **REMOVAL AND INSTALLATION**

Remove and install as shown in the figure.

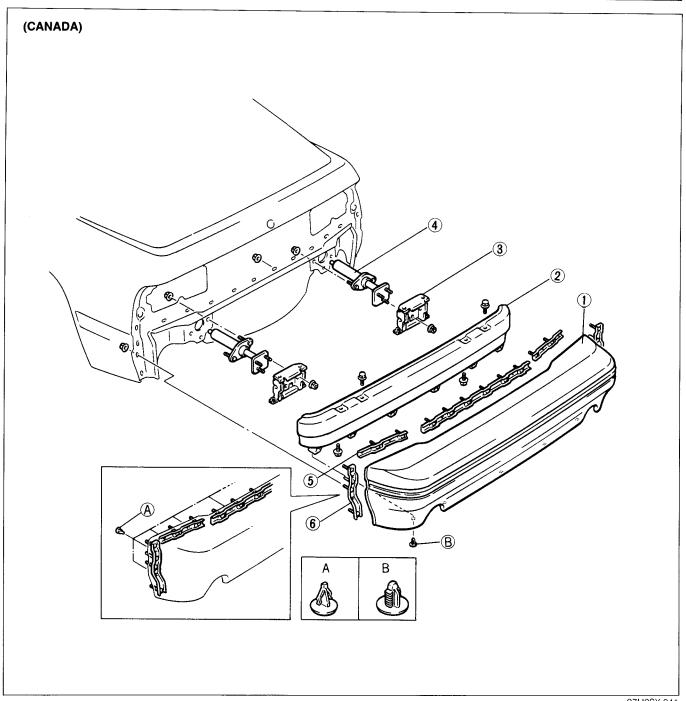


- 1. Fascia
- 2. Energy-absorbing foam (R and L)
- 3. Bumper reinforcement

- 4. Bumper stay (R and L)5. Upper set plate (3)6. Side set plate (R and L)

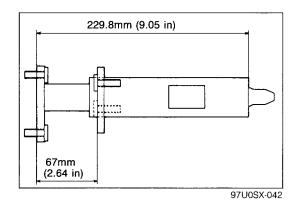
# Note

Use a fastener remover like the one shown in the figure to remove the "A" and "B" type fasteners.



97U0SX-041

- 1. Fascia
- 2. Bumper reinforcement
- 3. Bumper stay (R and L)



- 4. Shock absorber (R and L)5. Upper set plate (3)
- 6. Side set plate (R and L)

# **INSPECTION OF SHOCK ABSORBER**

- 1. Check that lengths are within specification.
- 2. Check for any oil or gas leakage.

# Warning

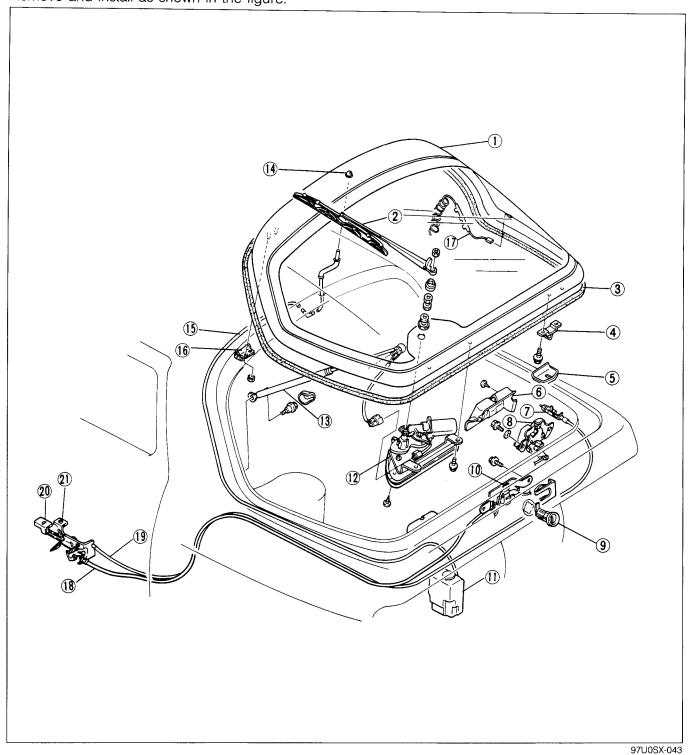
Do not disassemble the shock absorbers or expose them to fire.

S-27

# REAR HATCH, REAR WIPER, AND FUEL-LID OPENER

# REMOVAL AND INSTALLATION

Remove and install as shown in the figure.



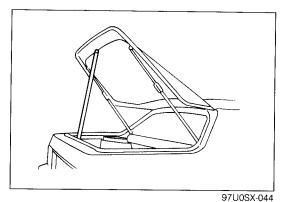
- 1. Rear hatch
- 2. Wiper arm and blade
- 3. Weatherstrip
- 4. Striker (R and L)
- 5. Striker cover
- 6. Lock cover
- 7. Fuel-lid opener unit

- 8. Lock (R and L)
- 9. Key cylinder
- 10. Opener unit
- 11. Washer tank
- 12. Wiper motor assembly13. Damper stay (R and L)
- 14. Washer nozzle

- 15. Washer hose
- 16. Rear hatch hinge (R and L)
- 17. Defroster wiring
- 18. Release wire (Rear hatch)
  19. Release wire (Fuel-lid)
  20. Release lever (Rear hatch)

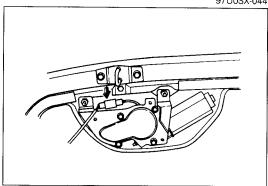
- 21. Release lever (Fuel-lid)

# REAR HATCH, REAR WIPER, AND FUEL-LID OPENER

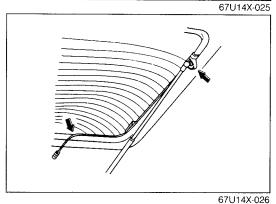


# **Removal Note** Rear glass hatch

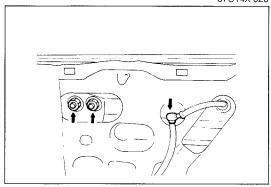
- 1. Disconnect the negative battery cable.
- 2. Open the rear hatch.
- 3. Support the rear hatch with a rod.



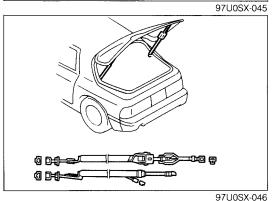
4. Disconnect the rear wiper motor connector.



- 5. Remove the rear defroster wiring from the rear hatch (R and L).
- 6. Disconnect the damper stays (R and L).
- 7. Close the rear hatch.



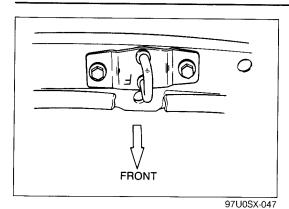
- 8. Remove the rear top garnish and headliner. (Refer to page S-21).
- 9. Disconnect the rear washer hose.
- 10. Remove the rear hatch hinge nuts (R and L).
- 11. Remove the rear hatch.



Warning

- a) Do not disassemble the damper stay because it is filled with pressurized-gas and oil.
- b) Before discarding a damper stay that is being replaced, drill a 2 or 3mm (0.079 or 0.118 in) hole at the lower end of the cylinder and allow the highpressure gas to escape. Be careful when venting it, because the gas and oil will escape with great force.

# S REAR HATCH, REAR WIPER, AND FUEL-LID OPENER

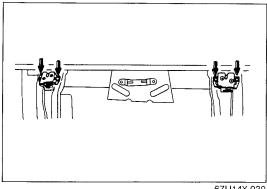


# ADJUSTMENT Rear Hatch Striker

The strikers can be adjusted forward or rearward by loosening the attaching bolts.

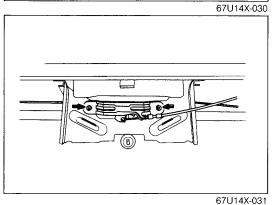
# Note

The strikers are directional with an "F" mark on them, indicating the front of the vehicle.



# Lock

1. To adjust the rear hatch locks, loosen the hatch lock attaching bolts and move the lock as required to align the rear hatch strikers.



To adjust the unlocking timing of the rear hatch locks, loosen the attaching bolts of the opener unit and move the opener unit to the right or left so that the two locks unlock simultaneously.

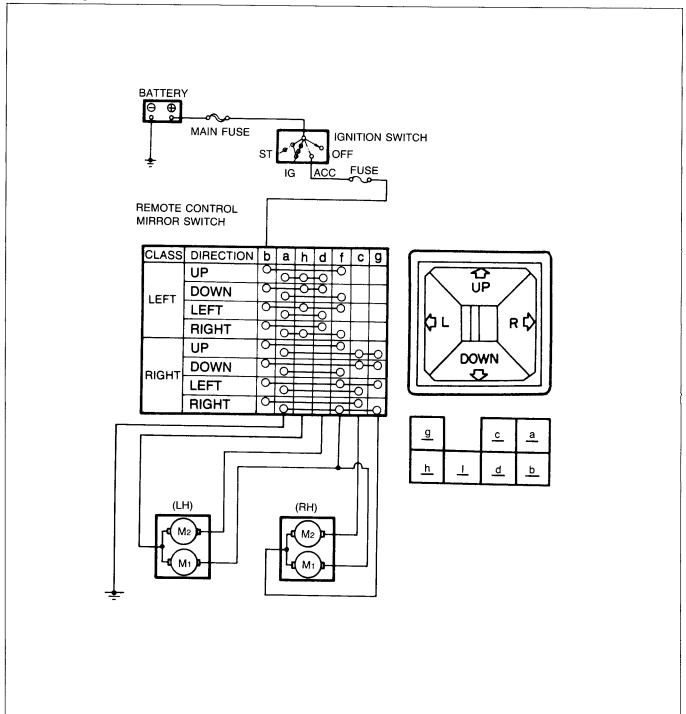
# **REMOTE CONTROL MIRRORS**

# TROUBLESHOOTING GUIDE

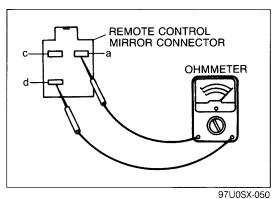
Problem	Possible Cause	Remedy	Page S-31 S-32	
Remote control mir- rors do not work	CIGAR fuse blown Defective remote control mirror switch Defective wiring	Replace fuse and check Check or repair Repair		
Only one side mirror does not work	Defective remote control mirror switch Defective remote control mirror Defective wiring or ground	Check or repair Check or repair Repair	S-32 S-32	

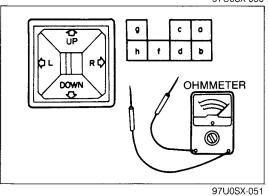
97U0SX-048

# **Circuit Diagram**



# S REMOTE CONTROL MIRRORS





# INSPECTION Remote Control Mirror

Connect an ohmmeter to the terminals of the mirror connector and check for continuity.

Terminal	Continuity
c — a	Yes
c — d	Yes
a — d	Yes

# **Remote Control Mirror Switch**

Use an ohmmeter to check the continuity of the terminals of the switch.

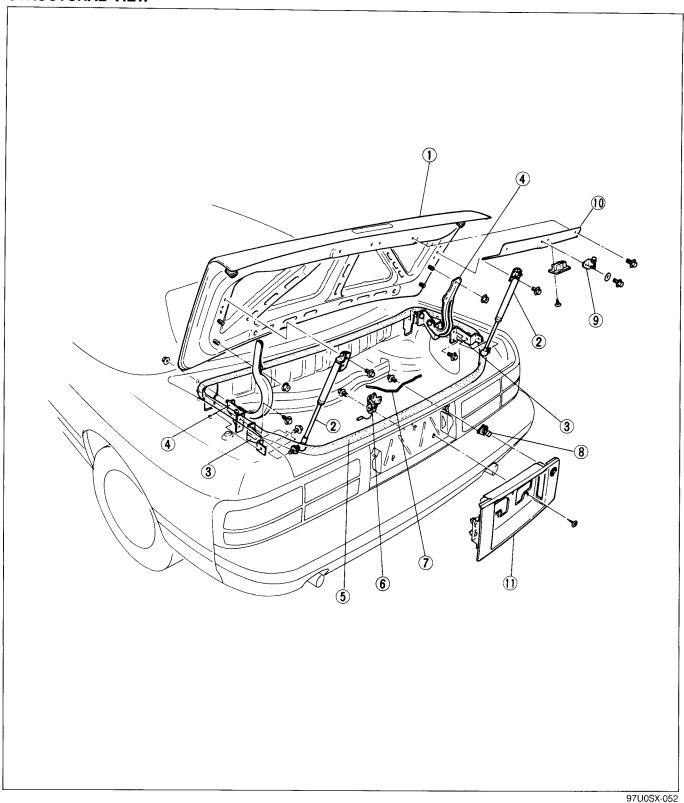
If continuity is not as specified, replace the switch.

CLASS	DIRECTION	b	а	h	d	f	С	g
LEFT	UP	0	0-	0	-0	Ю		
	DOWN	0-	0-	0	0	-0		
	LEFT	0	0-	$\phi$	0	0		
	RIGHT	0-	0-	0	0	0		
RIGHT	UP	0-	0-			0	-0-	9
	DOWN	0	0-			0	-0-	9
	LEFT	0-	0-			-0-	9	9
	RIGHT	0	0-			-0-	$\overline{}$	9

○ : Indicates continuity

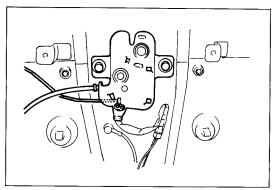
# **TRUNK LID**

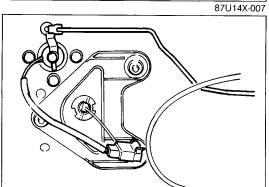
# STRUCTURAL VIEW

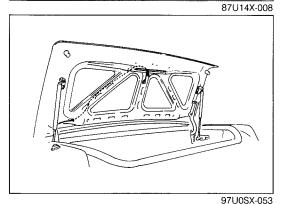


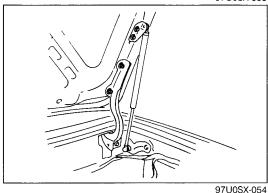
- 1. Trunk lid
- 2. Damper stay (R and L)
  3. Damper stay bracket (R and L)
  4. Trunk lid hinge (R and L)
- 5. Weatherstrip
- 6. Trunk lid opener

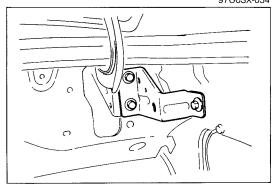
- 7. Opening rod8. Trunk lid key cylinder9. Trunk lid striker
- 10. Lock reinforcement
- 11. Rear finisher











# **REMOVAL**

# Removal of Trunk Lid Opener

- 1. Disconnect the trunk lid opener switch connector.
- 2. Remove the bolts, then remove the trunk lid opener.
- 3. Remove the opening rod and the release wire.

# Removal of Trunk Lid Key Cylinder

- 1. Disconnect the trunk lid key cylinder switch connector.
- 2. Remove the opening rod.
- 3. Remove the bolts, then remove the trunk lid key cylinder.

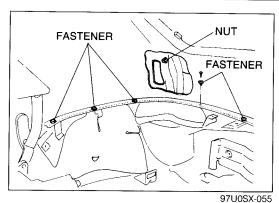
# **Removal of Wire Harness**

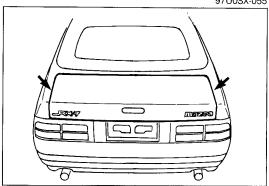
- 1. Remove the bolts, and remove the lock striker and lock reinforcement.
- 2. Disconnect the connectors of the trunk room lamp and the high-mount stoplight.
- 3. Remove the wire harness.

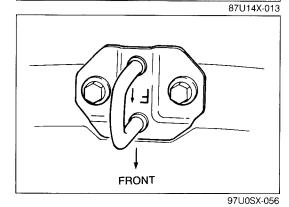
# **Removal of Trunk Lid**

- 1. Remove the damper stay installation bolts (R and L).
- 2. Remove the trunk lid installation nuts (R and L), then remove the trunk lid.

3. Remove the damper stay bracket installation bolts, then remove the damper stay bracket.







4. Remove the scuff plate and the quarter trim attaching screws, then remove the quarter trim.

5. Remove the headliner attaching fasteners (5) shown in the figure.

6. Remove the trunk lid hinge installation nut, then remove the trunk lid hinge.

## **INSTALLATION**

Install in the reverse order of removal.

## ADJUSTMENT Trunk Lid

Align the trunk lid as shown in the figure.

## **Trunk Lid Striker**

The striker can be adjusted forward or rearward by loosening the attaching bolts.

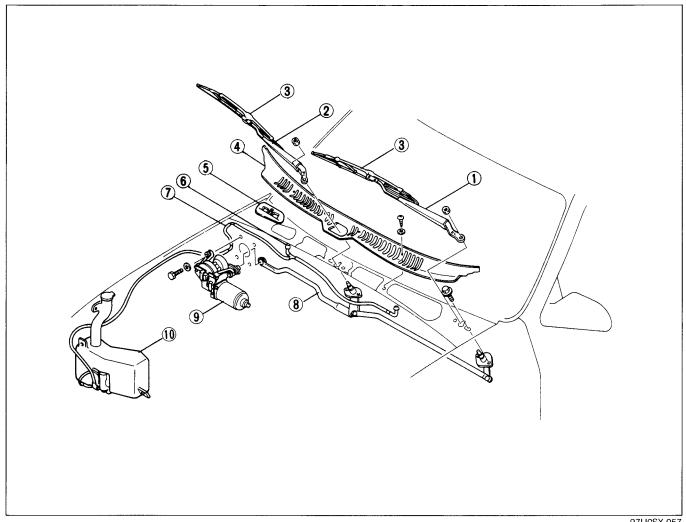
#### Note

The strikers are directional, having an "F" mark on them, indicating installation toward the front of the vehicle.

## WINDSHIELD WIPER

## **WINDSHIELD WIPER**

## STRUCTURAL VIEW



97U0SX-057

- 1. Wiper arm (driver's side)
- 2. Wiper arm (passenger's side)
- 3. Wiper blades
- 4. Cowl grille

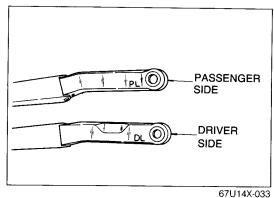
- 5. Service hole cover
- 6. Washer nozzles
- 7. Washer hoses
- 8. Link assembly

- 9. Motor assembly 10. Washer tank

## TROUBLESHOOTING GUIDE

Problem	Possible Cause	Remedy	Page
Wipers do not work	WIPER fuse blown Defective wiper motor Defective wiper switch Defective wiring or ground	Replace fuse and check Check Check Repair	S-40 S-40 T-26
Washers do not work	WIPER fuse blown Defective washer motor Defective wiper and washer switch Defective wiring	Replace fuse and check Check or replace Check Repair	S-40 S-40 T-25
Rear wiper does not work	R. WIPER fuse blown Defective rear wiper motor Defective rear wiper switch Defective wiring or ground	Replace fuse and check Check Check Repair	S-40 S-40 T-26
Rear window washer does not work	Defective washer motor Defective washer switch Defective wiring	Check or replace Check Repair	S-41 T-26

97U0SX-058



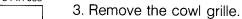
## **REMOVAL**

- 1. Disconnect the negative battery cable.
- 2. Remove the wiper arms.

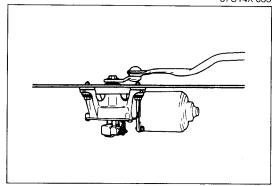
## Note

The two wiper arms are identified by the marks on

Mark "DL": for driver's side Mark "PL": for passenger's side

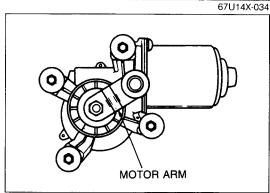


4. Disconnect the wiper link at the motor side.

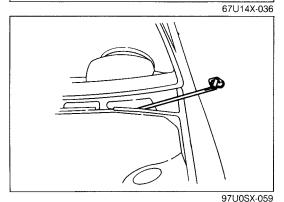


## Caution

Do not remove the motor arm unless it is necessary, as the motor arm position to the motor shaft decides the automatic stop position (lowest position of the wiper arm).



- 67U14X-035
- CONNECTOR
- 5. Disconnect the wiring connector.
- 6. Remove the wiper motor.



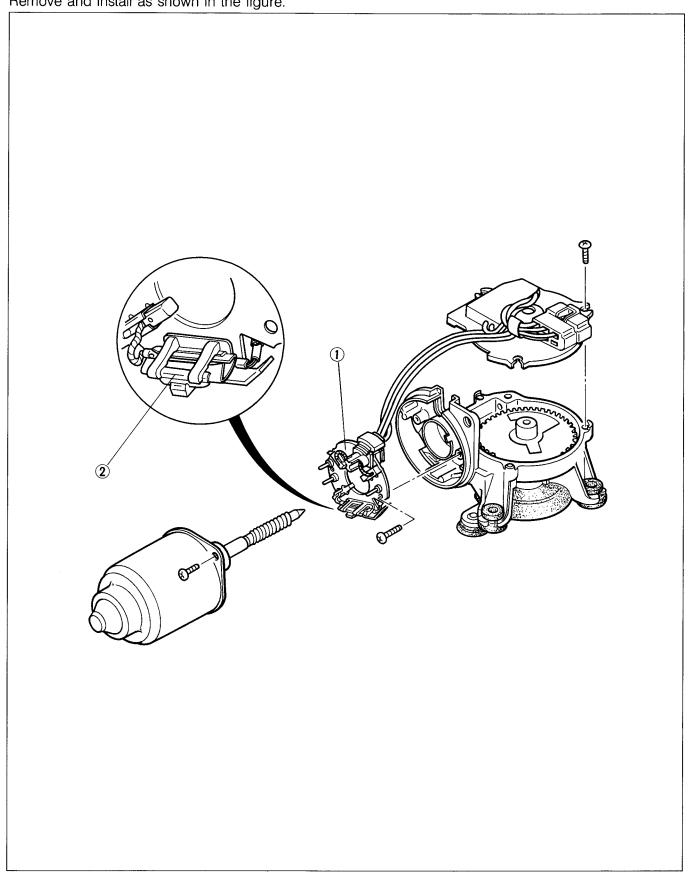
- 7. Remove the wiper link unit attaching bolts.
- 8. Take the wiper link unit out from the left side (driver's side) service hole.

## **INSTALLATION**

Install in the reverse order of removal.

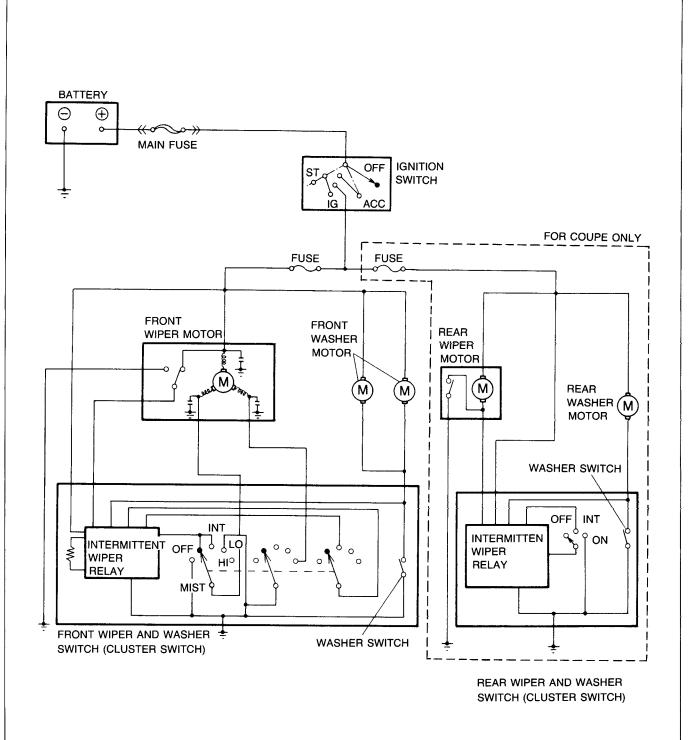
## **DISASSEMBLY AND ASSEMBLY Brush Plate Holder and Circuit Breaker**

Remove and install as shown in the figure.

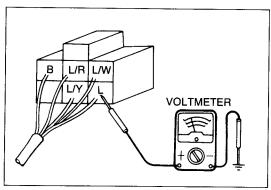


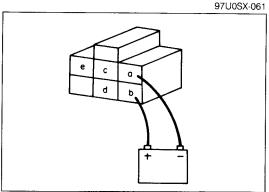
97U0SX-060

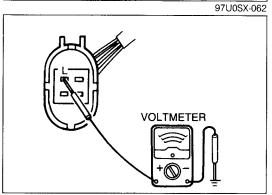
## **CIRCUIT DIAGRAM**

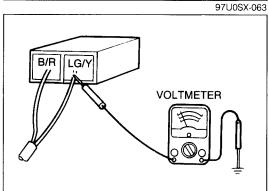


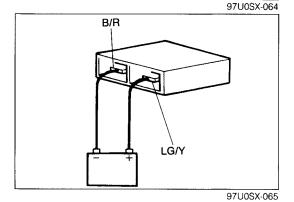
## S WINDSHIELD WIPERS











# INSPECTION Windshield Wiper Motor Checking circuit

- 1. Disconnect the connector from the wiper motor.
- 2. Using a voltmeter, measure the voltage between the (L) terminal wire (harness side) and a body ground with the ignition switch ON.
- 3. If there is no voltage, check the fuse and the wiring harness.
- 4. Using an ohmmeter, check for continuity between (B) terminal wire (harness side) and a body ground.

## Checking wiper motor

- 1. Connect the positive lead from a battery to (b) terminal wire of the motor connector.
- 2. Connect the negative lead to (a) terminal wire (motor side) of the motor connector.
- 3. Check that the motor turns at low speed.
- Connect the negative lead to (c) (motor side) of the motor connector.
- 5. Check that the motor turns at high speed.

# FRONT WIPER & WASHER SWITCH (Refer to page T-25 and 26)

# Front Window Washer Checking washer motor

- 1. Using a voltmeter, measure the voltage between the (L) terminal wire and body ground with the ignition switch ON.
- 2. If there is no voltage, check the fuse and the wiring harness.
- 3. If the (L) terminal voltage is normal, apply 12V to (a) terminal of washer motor and ground (b) terminal.
- 4. If the washer motor does not operate, replace the washer motor.

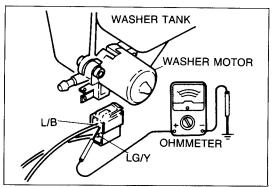
# Rear Wiper Motor Checking circuit

- 1. Using a voltmeter, measure the voltage between the (LG/Y) terminal wire and body ground with the ignition switch ON.
- 2. If there is no voltage, check the fuse or repair the wiring harness.

## Checking wiper motor

- 1. Connect the positive lead from a battery to (LG/Y) terminal wire of the motor connector.
- 2. Connect the negative lead to (B/R) terminal wire of the motor connector.
- 3. Check that the motor turns.

# REAR WIPER & WASHER SWITCH (Refer to page T-25)



97U0SX-066

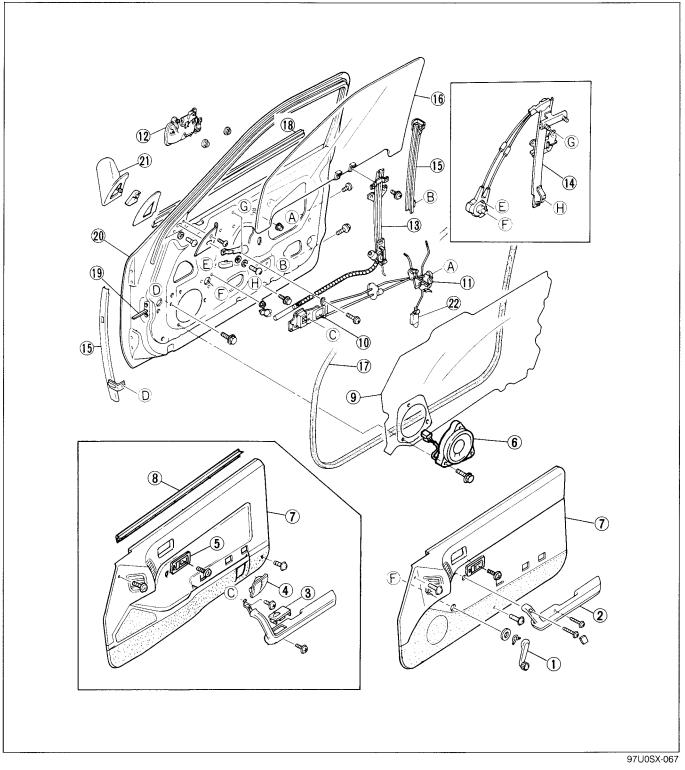
# Rear Washer Checking rear washer motor

- 1. Using a voltmeter, measure the voltage between the (LG/Y) terminal wire and a body ground with the ignition switch ON.
- 2. If there is no voltage, check the fuse or repair the wiring herness.
- 3. If the (LG/Y) terminal wire voltage is normal, connect the (L/B) terminal wire to a body ground.
- 4. If the washer motor does not operate, replace the washer motor.

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## **DOOR**

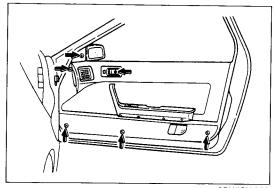
## STRUCTURAL VIEW (COUPE)



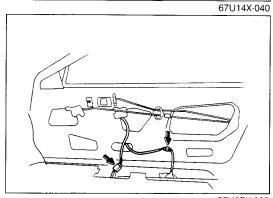
- 1. Regulator handle (manual type)
- 2. Arm rest
- 3. Power window switch
- 4. Courtesy lamp lens
- 5. Inner handle cover
- 6. Door woofer speaker
- 7. Door trim

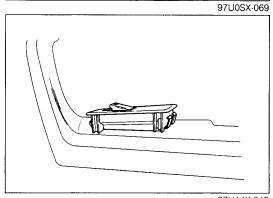
- 8. Weatherstrip (inner)
- 9. Door screen
- 10. Inner handle
- 11. Door lock assembly
- 12. Outer handle
- 13. Regulator (power type)14. Regulator (manual type)
- 15. Glass guide

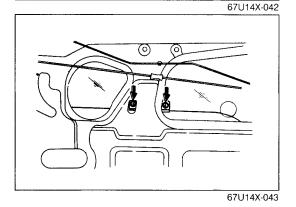
- 16. Glass
- 17. Weatherstrip
- 18. Weatherstrip (outer)
- 19. Door checker
- 20. Door
- 21. Door mirror
- 22. Door lock actuator



# 97U0SX-068







## REMOVAL

## **Door Glass and Regulator (Power Window Type)**

- 1. Remove the door mirror.
- 2. Remove the inner handle cover.
- 3. Remove the door trim attaching screws.

#### Note

For manual regulator type, remove the regulator handle.

4. Remove the arm rest attaching screws (5).

#### Note

The arm rest cannot be removed even after the screws are removed, as the arm rest is fastened to the door trim.

- 5. Pull the lower portion of the door trim out, and then lift upward.
- 6. Detach the door trim from the door.
- 7. Disconnect the connectors of the courtesy lamp and the power window switch.
- 8. Remove the door screen.

- 9. Remove the outer weatherstrip.
- 10. Remove the power window switch from the door trim.
- 11. Connect the power window switch connector.

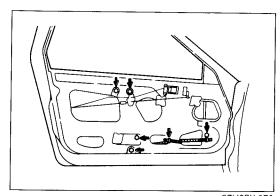
- 12. Position the glass attaching bolts at the service holes by operating the power window switch.
- 13. Disconnect the negative battery cable.

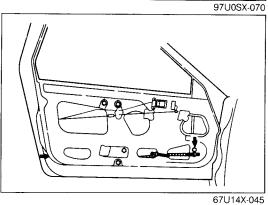
#### Note

For manual regulator type, use the regulator handle to move the glass.

14. Remove the glass attaching bolts, and then remove the glass.

# S DOOR





- 15. Disconnect the power window switch connector.16. Loosen the ball hose holding bands.17. Remove the window regulator attaching bolts, and then remove the window regulator.

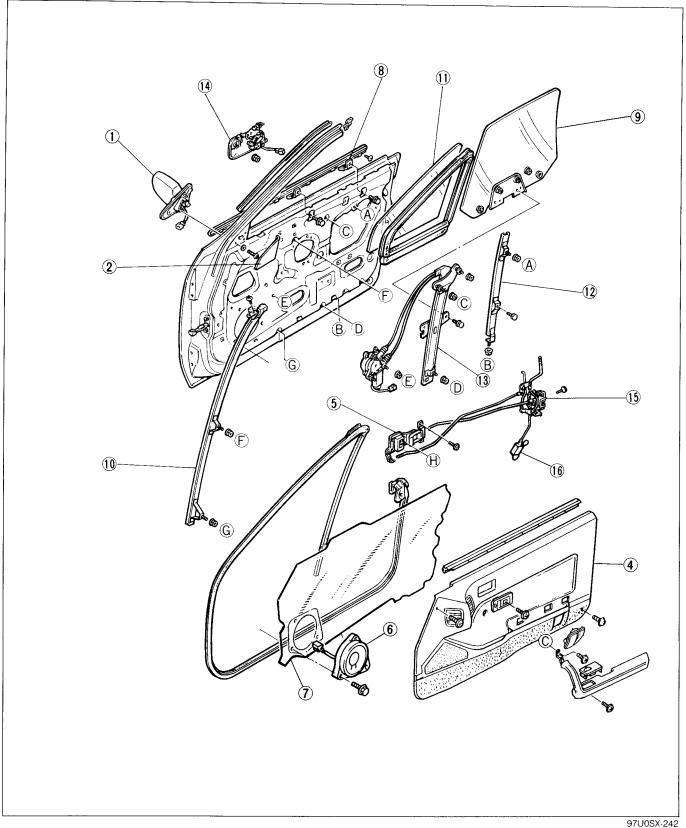
## INSTALLATION

Install in the reverse order of removal.

## **ADJUSTMENT**

Adjust the positions of the regulator and glass guides by loosening the attaching bolt so that the glass runs smoothly, and then retighten.

## STRUCTURAL VIEW (CONVERTIBLE)

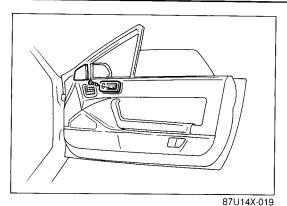


- 1. Door mirror
- 2. Sail inner garnish3. Inner handle cover
- 4. Door trim
- 5. Inner handle

- 6. Door woofer speaker
- 7. Door screen
- 8. Upper stopper 9. Door glass
- 10. Division channel
- 11. Quarter glass12. Subguide13. Regulator

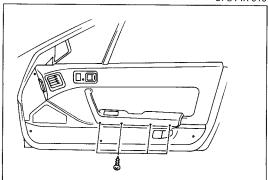
- 14. Outer handle
- 15. Door lock
- 16. Door lock actuator

## S DOOR

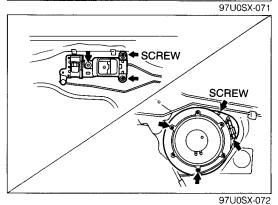


# REMOVAL Removal of Door Trim

- 1. Remove the sail inner garnish.
- 2. Remove the screws and remove the inner handle cover.

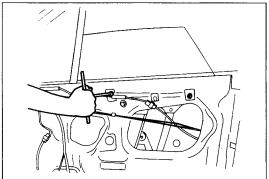


- 3. Remove the screws and fasteners, then remove the door trim.
- 4. Disconnect the power window switch and courtesy lamp connectors.

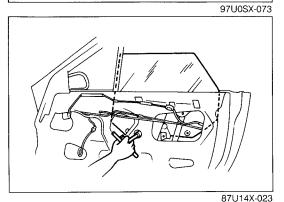


## **Removal of Door Glass**

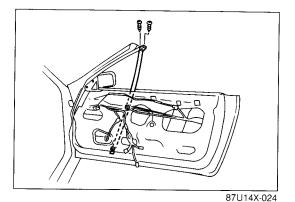
- 5. Connect the power window switch, then raise the door glass 230mm (9.06 in) from the fully open position.
- 6. Disconnect the negative battery cable and power window switch connector.
- 7. Remove the inner handle.
- 8. Disconnect the speaker connector, then remove the speaker.



- 9. Remove the nuts, then remove the upper stoppers.
- 10. Remove the weatherstrip.

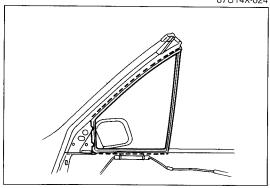


- 11. Remove the glass attaching bolts.
- 12. Remove the door glass upward.

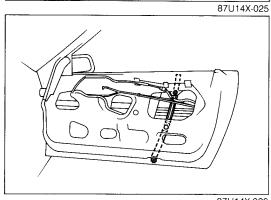


## **Removal of Quarter Glass**

13. Remove the division channel installation screws and bolts, then remove the division channel.

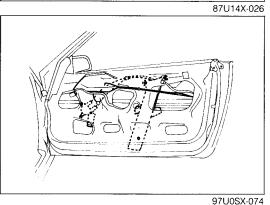


- 14. Detach the weatherstrip of the quarter glass from the corner bracket.
- 15. Remove the quarter glass backward.



## Removal of Subguide

16. Remove the subguide installation nuts, then remove the subguide.



## Removal of Regulator

- 17. Disconnect the power window motor connector.18. Remove the bolts and nuts, then remove the regulator.

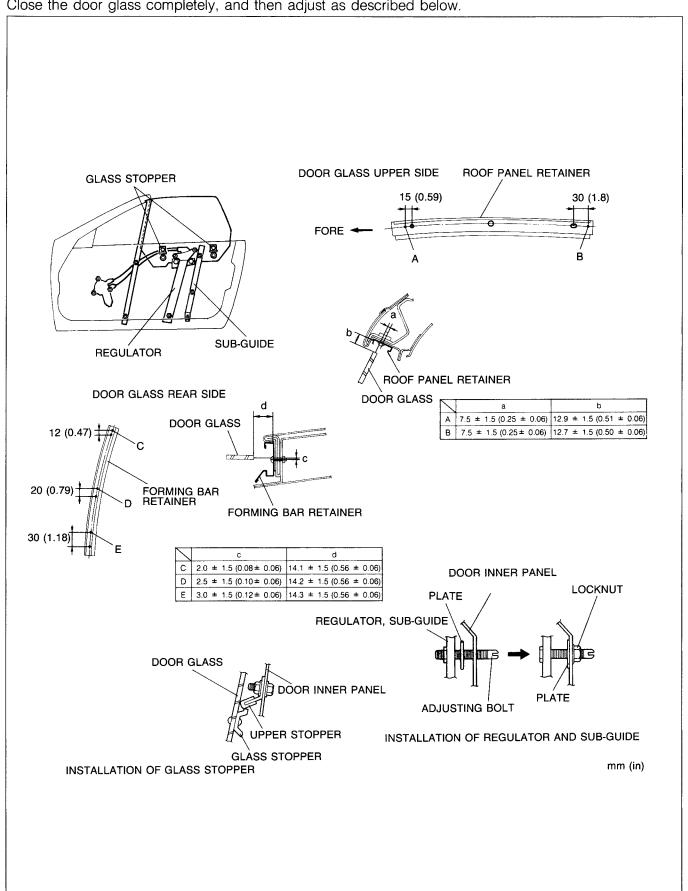
## **INSTALLATION**

Install in the reverse order of removal.

## **ADJUSTMENT**

## **Adjustment of Door Glass**

Close the door glass completely, and then adjust as described below.



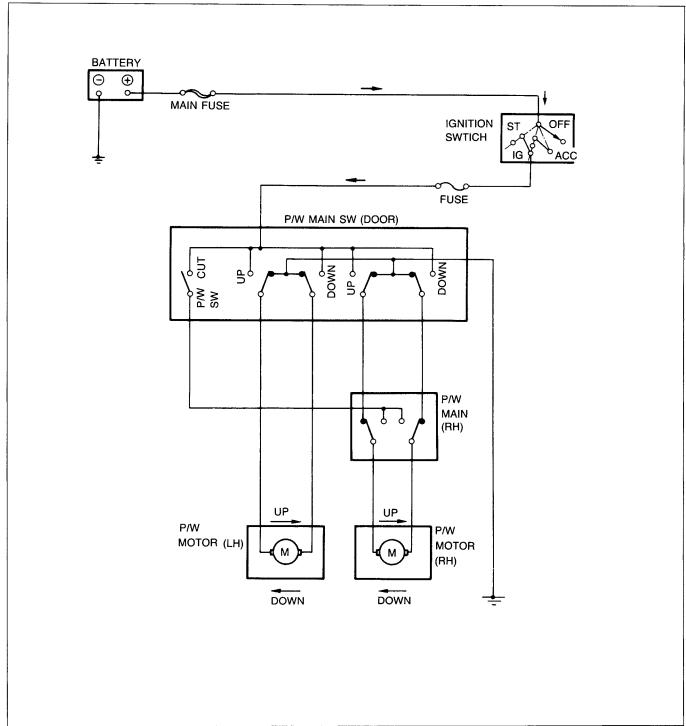
## **POWER WINDOW**

## TROUBLESHOOTING GUIDE

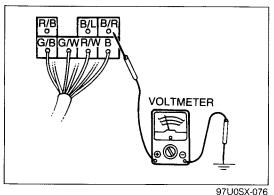
Problem	Possible Cause	Remedy	Page
Power window system does not work	POWER WINDOW fuse blown Defective power window switch Defective wiring or ground	Replace and check Check or replace Repair	S-49 S-50
Only one side win- dow does not work	Defective power window switch Defective power window motor Defective wiring	Check Check or replace Repair	S-50 S-50

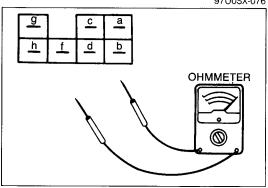
97U0SX-075

## **CIRCUIT DIAGRAM**



## S POWER WINDOW





# INSPECTION Power Window Switch Checking circuit

- 1. Disconnect the connector from the power window switch.
- 2. Using a voltmeter, measure the voltage between the (B/R) terminal and a body ground with the ignition switch ON.
- 3. If there is no voltage, check the fuse or repair the wiring harness.
- 4. Using an ohmmeter, check the ground connection between the (B) terminal and a body ground.

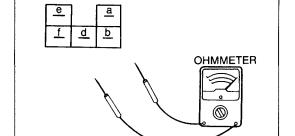
## Checking switches (Driver's side)

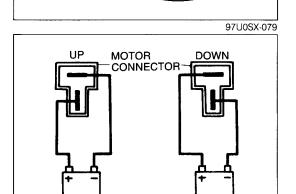
Use an ohmmeter to check for continuity of the terminals. When checking the switches, switch the power window cut switch to ON.

If continuity is not as specified, replace the power window switch.

9/00SX-0//					) . II	idicates (	Continuity	
Position	Terminal	а	b	С	d	f	g	h
	UP	0-	0	0		-0-		-0
Left switch	OFF	0	0	<del>-</del> 0		<u> </u>	<del>-</del>	<u> </u>
	DOWN	0	0-	<u> </u>				
	UP	0	<u> </u>	<del>-</del>	<u> </u>	<del>-</del>	<u> </u>	<u> </u>
Right switch	OFF	0-	0		-0-	<del></del>		0
	DOWN	0	0	<u> </u>	-0-		<u> </u>	<u> </u>
97U0SX-07					7U0SX-078			

O: Indicates continuity





Checking switches (Passenger's side)

Use an ohmmeter to check for continuity of the terminals. If continuity is not as specified, replace the power window switch.

		$\circ$	-O: Ir	ndicate	es cor	tinuity
Position	Terminal	а	b	d	е	f
	UP	0	0-		-0	
Passenger's side	OFF	0-	)	0	-0	-0
	DOWN		d		9	$\neg$

# Power Windwo Motor Checking motor

- 1. Disconnect the connector of the power window motor. Then check that the window raises and lowers when battery voltage is applied directly to the motor connector, as shown in the figure.
- 2. Replace the motor if operation is not normal.

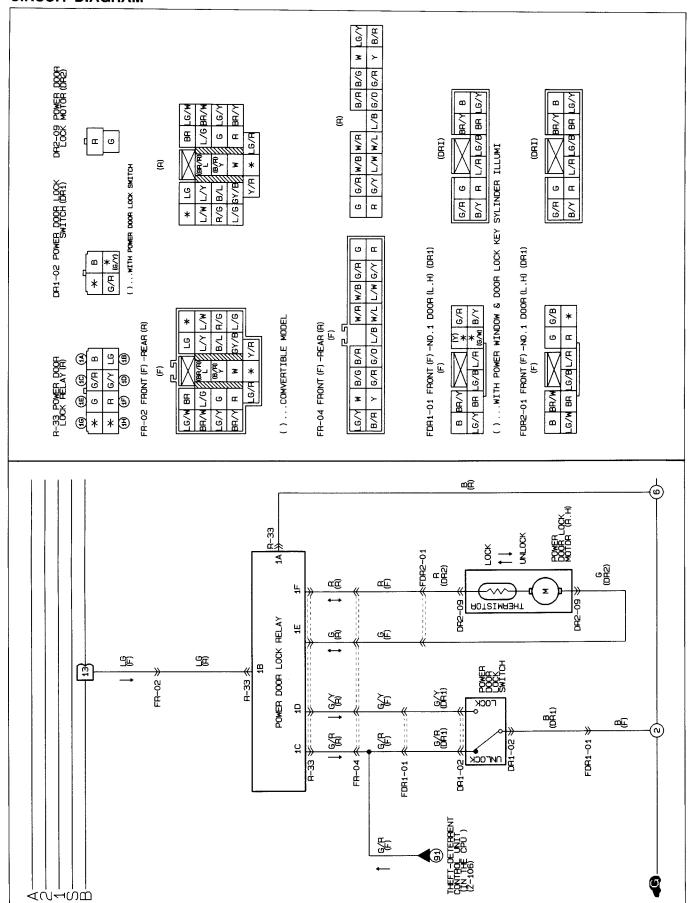
#### Caution

97U0SX-080

- a) Do not short-circuit the wiring to the body.
- b) Do not put your hand inside the door while checking.

## **POWER DOOR LOCK**

## **CIRCUIT DIAGRAM**



# S POWER DOOR LOCK

## **TROUBLESHOOTING**

Power	door	lock	inoperative	

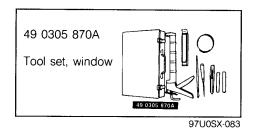
No.	Procedure	Result	Action if incorrect
1	Check fuse.	Fuse OK	Repair harness before replacing fuse
2	Check voltage  R-33 connector  Ground LG	12V	Repair harness. (Fuse - Door lock relay)
3	Check voltage  R-33 connector  Ground B	OV	Repair harness (Ground circuit)
4	Remove R-33 connector Check door lock switch continuity  Condition R-33 connector B G/Y G/R Lock O O	O——— indicates continuity	Repair harness (Door lock switch - Door lock relay) or replace door lock switch
5	Check motor operation by applying voltage to motor  DR-17 connector 12V 0V G R R G	→ Lock → Unlock	Repair harness (Motor - Relay) or replace motor
			97LI0SY 083

97U0SX-082

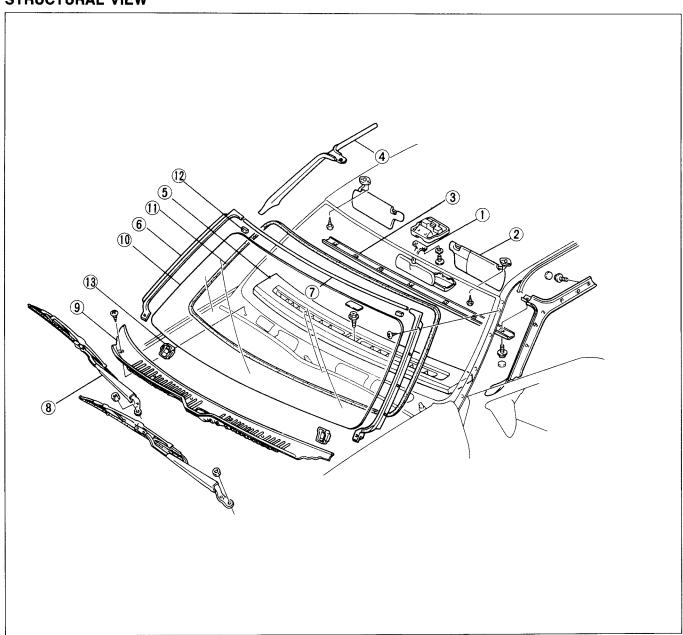
Replace door lock relay

## **WINDSHIELD**

## **PREPARATION SST**



## STRUCTURAL VIEW



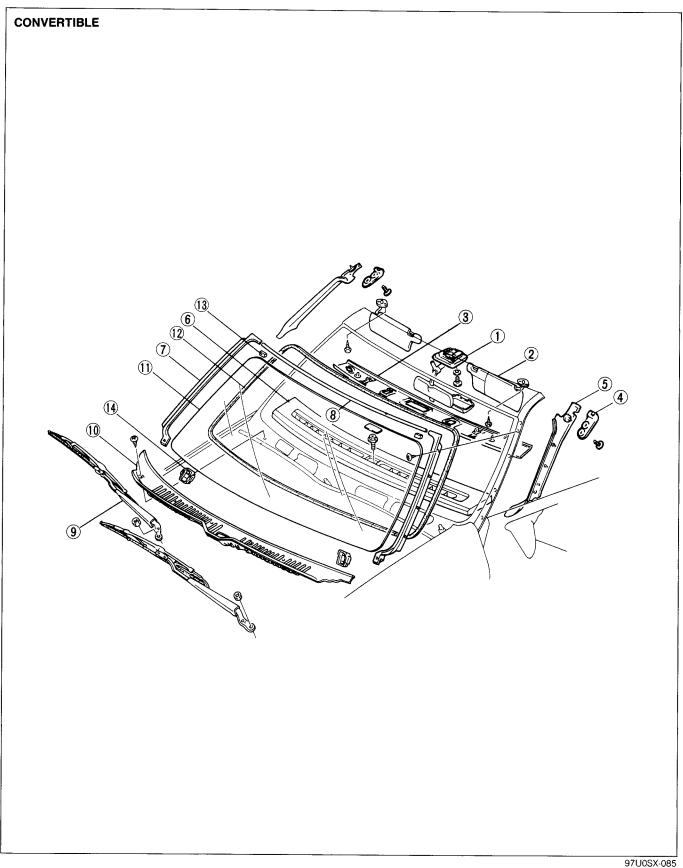
- 1. Rearview mirror
- 2. Sunvisor
- 3. Front top garnish
- 4. Front pillar trim

- 5. Instrument panel garnish6. Front pillar garnish
- 7. Upper molding 8. Wiper arms

- 9. Cowl grille 10. Windshield
- 11. Dam
- 12. Upper spacer
- 13. Lower spacer

97U0SX-084

## WINDSHIELD

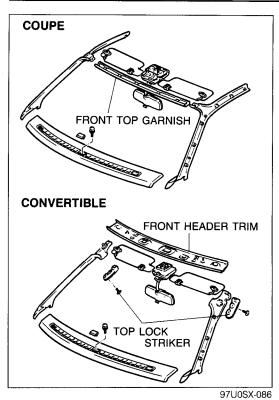


- 1. Rearview mirror
- 2. Sunvisor
- 3. Front header trim
- 4. Top lock striker
- 5. Front pillar trim

- 6. Instrument panel garnish7. Front pillar garnish8. Upper molding

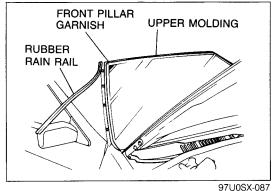
- 9. Wiper arm
- 10. Cowl grille

- 11. Windshield
- 12. Dam
- 13. Upper spacer14. Lower spacer

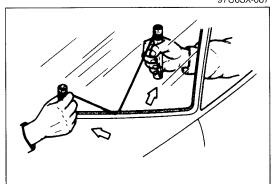


## **REMOVAL**

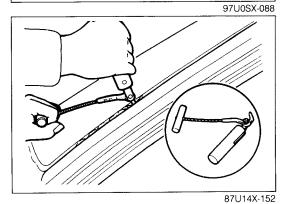
- 1. Remove the rearview mirror, sunvisors, and top lock strikers (convertible).
- 2. Remove the front top garnish (coupe), front header trim (convertible), front pillar trim, and instrument panel garnish.



- 3. Remove the front pillar garnish and upper molding.
- 4. Remove the wiper arms and cowl grille.



- 5. Make a hole in the sealant with the awl.
- 6. Pass the end of a piece of the piano wire through the hole, and attach a bar to each end.
- 7. Two people should hold the bars, one inside and one outside the vehicle, and then "saw" the sealant from around the glass.
- 8. Remove the glass from the body.

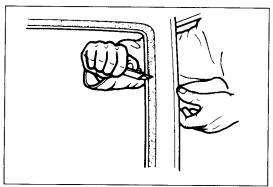


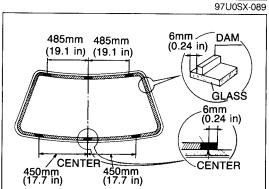
Note

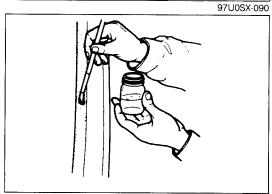
- a) Cut along the border between the glass and the sealant.
- b) If too much heat develops, the piano wire may break, so cool it occasionally or do not work on one place too long.
- c) If the glass is not to be reused, a tool like that shown in the figure is faster than piano wire.

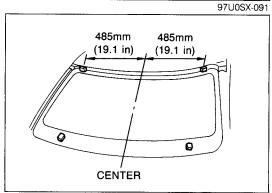
Insert the blade in the sealant, pull on the bars, and cut the sealant.

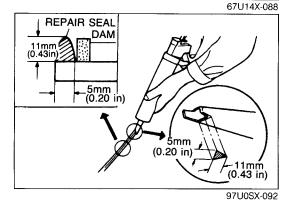
## S WINDSHIELD











## **INSTALLATION**

1. Use the razor knife to trim the sealant on the body. Leave a layer of about 1 or 2mm (0.04 to 0.08 in) thick.

### Note

If some of the sealant flakes off, use new sealant to patch it.

- Carefully clean and remove any grease from a 5 cm (1.9 in) wide area around the perimeter of the glass and the remaining bond on the body.
- 3. Attach the dam around the glass, about **5mm (0.2 in)** from the edge.

#### Note

Be sure the dam is straight and set securely.

4. Use the brush to apply a coat of primer to the adhesion surfaces around the glass and the body where the glass will adhere, and allow it to dry for 10 minutes or more.

## Note

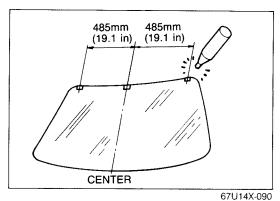
Be sure no dust, moisture, or grease gets on the primered surface, and do not touch them.

Attach the spacers where shown in the figure, using adhesive for the upper spacers and inserting the lower spacers.

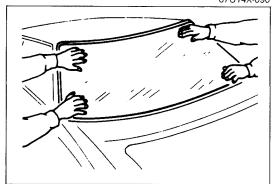
6. After the primer dries, apply a bead of repair seal to a height of **11mm (0.43 in)** around the glass, using the sealant gun.

#### Note

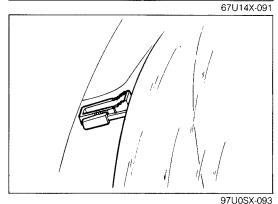
- a) With the repair seal cartridge prepared as shown in the figure, use a piece of wire to break through the seal film, and then apply the seal.
- b) If necessary, smooth the repair seal to correct any irregularities.



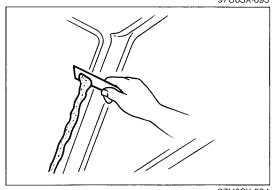
7. Make three alignment marks on the upper edge of the glass as shown in the figure.



8. Mount the glass onto the body so that the marks on the glass align with the upper spacers.



- 9. Raise the glass up until the upper edge of the glass is stopped by the upper spacers.
- 10. Affix the glass by pushing the lower spacers against the lower edge of the glass.

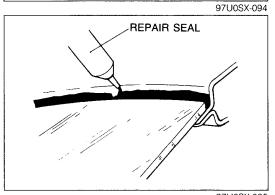


11. Leave the doors and the windows open until the repair seal becomes somewhat hardened.

## Repair seal hardening time

	Temperature	Surface	Base
Ī	5°C (41°F)	Approx. 90 min	12 hours
ſ	20°C (68°F)	Approx. 60 min	4 hours
	35°C (95°F)	Approx. 10 min	2 hours

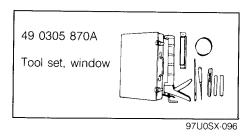
- 12. Remove excess or add repair seal where necessary.
- 13. Install the front pillar garnish and upper molding.
- 14. Check for water leakage. If leaks are found, remove the molding and fill the leaking area with the **repair seal** (B001 77 739).
- 15. Install the instrument garnish, front pillar trims, front top garnish (coupe), front header trim (convertible), sunvisors, rearview mirror, and top lock strikers (convertible).



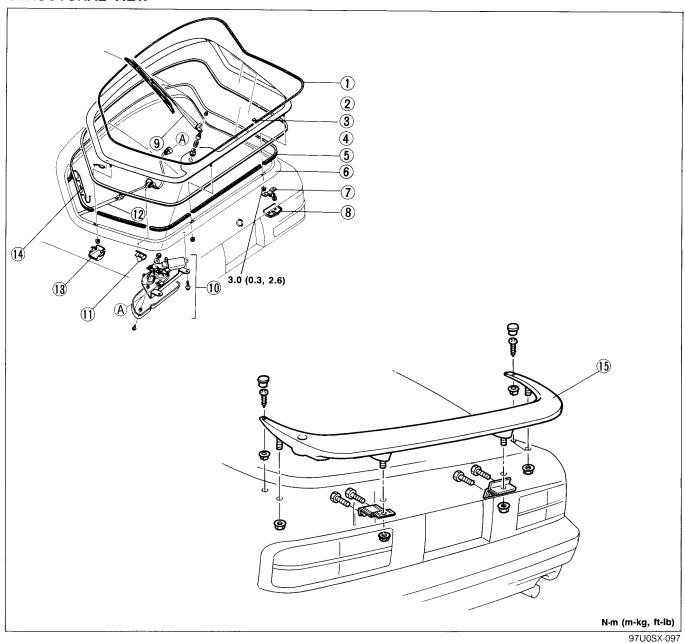
# S REAR HATCH GLASS AND REAR SPOILER

## **REAR HATCH GLASS AND REAR SPOILER**

## **PREPARATION** SST



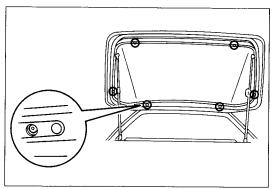
## STRUCTURAL VIEW



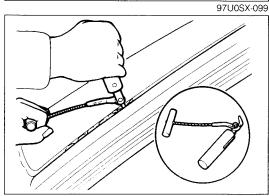
- 1. Molding
- 2. Rear hatch glass
- 3. Molding joint
- 4. Dam
- 5. Seaming welt

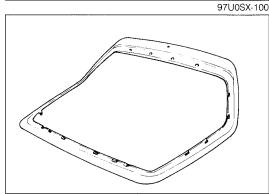
- 6. Rear hatch sash
- 7. Striker (R and L)
- 8. Striker cover (R and L)
- 9. Wiper arm and blade
- 10. Wiper motor assembly
- 11. Stay connector cover
- 12. Damper stay (R and L) 13. Wiring connector cover
- 14. Defroster wiring (R and L)
- 15. Rear spoiler

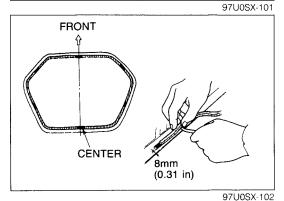




# 97U0SX-098







## **REMOVAL**

- 1. Remove the wiper arm and blade.
- 2. Remove the wiper motor assembly.
- 3. Remove the defroster wiring and covers.
- 4. Remove the seaming welt.
- 5. Remove the damper stays and covers.
- 6. Remove the molding and molding joint.
- 7. Remove the attaching nuts (6) of the glass.
- 8. Make a hole in the sealant using the awl.
- 9. Pass the end of a piece of the piano wire through the hole, and attach a bar to each end.
- 10. Two people should hold the bars, one inside and one outside the vehicle, and "saw" the sealant from around the glass.
- 11. Remove the glass from the sash.

## Note

- a) Cut along the border between the glass and the sealant.
- b) If too much heat develops, the piano wire may break, so cool it occasionally or do not work on one place too long.
- c) If the glass is not to be reused, a tool like that shown in the figure is faster than piano wire.

Insert the blade in the sealant, pull the bars, and cut the sealant.

## **INSTALLATION**

- 1. Remove the rear hatch sash from the body.
- 2. Use the razor knife to trim the sealant on the sash. Leave a layer about 1 or 2mm (0.04 to 0.08 in) thick.

#### Note

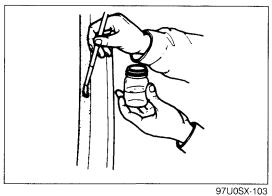
If some of the sealant flakes off, use new sealant to patch it.

- 3. Carefully clean and remove any grease from a **5 cm (1.97 in)** wide area around the perimeter of the glass and the remaining bond on the sash.
- 4. Attach the dam around the glass about **8mm (0.31 in)** from the edge.

#### Note

Be sure the dam is straight and set securely.

## REAR HATCH GLASS AND REAR SPOILER

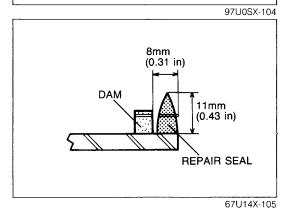


Note Be sure no dust, moisture, or grease gets on the primered surfaces, and do not touch them.

Use the brush to apply a coat of primer to the adhesion surfaces around the glass and on the sash where the glass will adhere, and allow it to dry for 10 minutes or more.

97005X-103

6. After the primer dries, apply a bead of repair seal to a height of **11mm (0.43 in)** around the glass using a sealant gun.



Note

If necessary, smooth the repair seal to correct any irregularities.



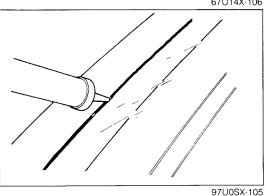
7. Install the sash onto the glass.

#### Note

The correct position of the sash on the glass is determined by the stud bolts on the glass.

8. Tighten the stud bolt nuts.

Tightening torque: 3 N⋅m (30 cm-kg, 26 in-lb)



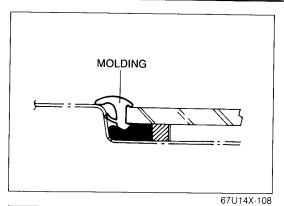
9. Allow the glass and sash to set until the repair seal becomes somewhat hardened.

## Repair seal hardening time

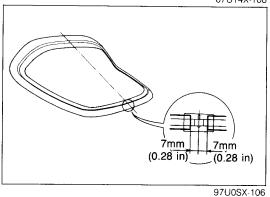
Temperature	Surface	Base
5°C (41°F)	Approx. 90 min	12 hours
20°C (68°F)	Approx. 60 min	4 hours
35°C (95°F)	Approx. 10 min	2 hours

10. Remove the excess or add repair seal where necessary.

## REAR HATCH GLASS AND REAR SPOILER



11. Install the molding, starting at the rear center of the rear hatch.



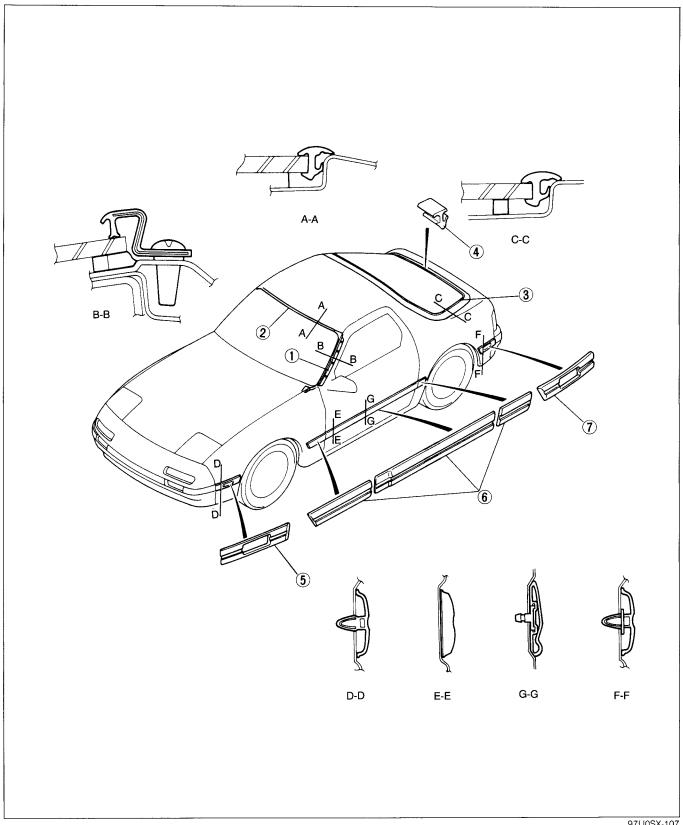
Note Cut off the extra length of molding, as in the figure.

- 12. Install the molding joint.
- 13. Install the seaming welt.
- 14. Install the rear hatch onto the body.
- 15. Install the damper stays and covers.
- 16. Install the defroster wiring and covers.
- 17. Install the wiper motor assembly.
- 18. Install the wiper arm and blade.
- 19. Check for water leakage.

## S MOLDING

## **MOLDING**

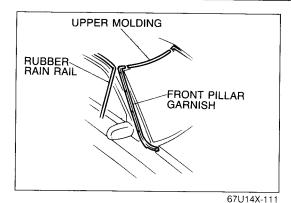
## STRUCTURAL VIEW



97U0SX-107

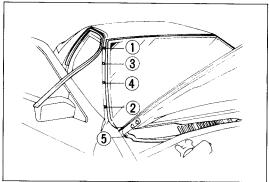
- Front pillar garnish
   Upper molding
   Rear hatch molding
- 4. Molding joint

- 5. Front protector molding6. Side protector molding
- 7. Rear protector molding



## FRONT PILLAR GARNISH Removal

- 1. Remove the front half of the rubber rain rail.
- 2. Remove the right side front pillar garnish.
- 3. Remove the upper molding.
- 4. Remove the left side front pillar garnish.

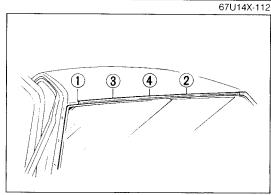


## Installation

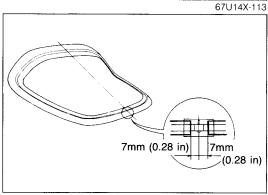
Install in the reverse order of removal.

#### Note

a) Tighten the attaching screws in the order shown in the figure.



b) Push in the upper molding in the order shown in the figure.



## REAR HATCH MOLDING

### Removal

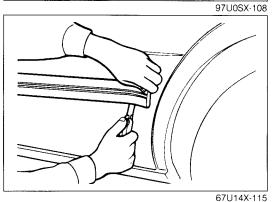
- 1. Remove the molding joint.
- 2. Remove the rear hatch molding, starting at one end.

#### Installation

Install in the reverse order of removal.

### Note

Cut away the extra length of molding as in the figure.



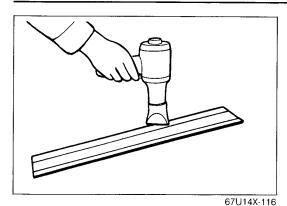
## SIDE PROTECTOR MOLDING (STICK-ON TYPE) Removal

- 1. Being careful not to scratch the body, use a knife to cut away the molding from the body.
- 2. Cut away any adhesive remaining on the body or the molding.

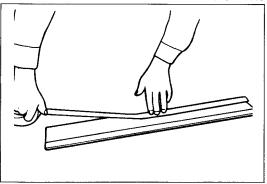
#### Note

Remove as much adhesive as possible without damaging the surface.

## **S** MOLDING

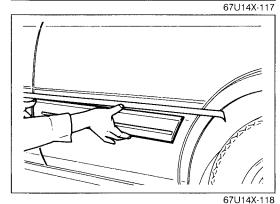


3. If the "hot melt" (adhesive) is hard to remove, use a blow dryer to soften it.



## Installation

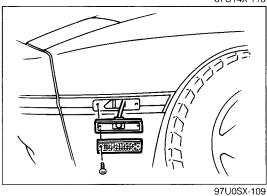
- 1. Remove any grease from the body and molding surfaces.
- 2. Use masking tape to mark the installation location on the body.
- 3. Attach two-sided molding tape to the molding adhesion surface.



4. Align the molding on the body and attach it securely.

#### Note

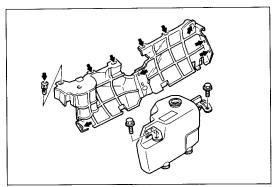
The adhesion strength is decreased below 20°C (68°F), so it is best to warm the body surface beforehand, if necessary.



# FRONT AND REAR PROTECTOR MOLDINGS (SNAP-IN TYPE)

## Removal and Installation

- 1. Remove the light.
- 2. Remove the molding by compressing the installation fasteners with pliers and pulling the molding outward.

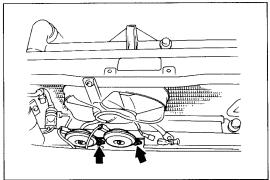


## **HORN**

## **REMOVAL**

- 1. Remove the coolant reservoir tank.
- 2. Remove the upper duct cover from the shroud upper plate.

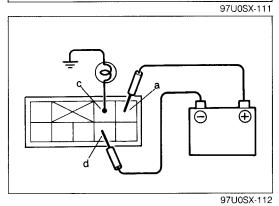




3. Remove the horn.

## **INSTALLATION**

Install in the reverse order of removal.

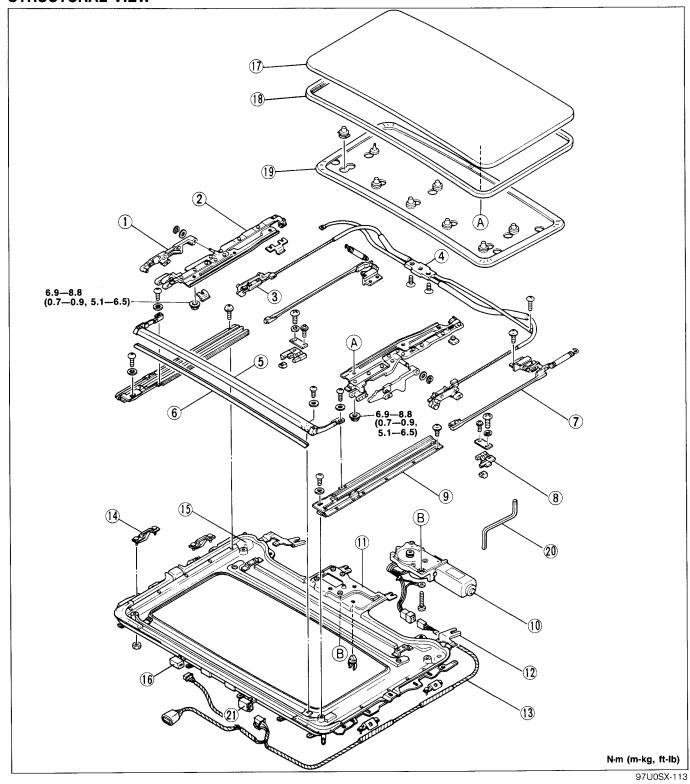


INSPECTION

- Horn Relay (in CPU)1. Apply 12V to the A terminal of the CPU (B connector 8 PIN) and connect the C terminal to the ground.
- 2. Confirm that the test lamp come on when connecting between the B terminal and the ground.

## **SLIDING SUNROOF**

## STRUCTURAL VIEW

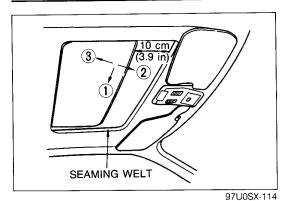


- 1. Lifter
- 2. Lower panel
- 3. Slider
- 4. Drive unit
- 5. Wind deflector
- 6. Seal
- 7. Shutter assembly

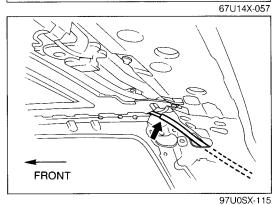
- 8. Cable holder
- 9. Guide rail
- 10. Motor assembly11. Motor bracket
- 12. Rear header
- 13. Harness assembly
- 14. Set bracket

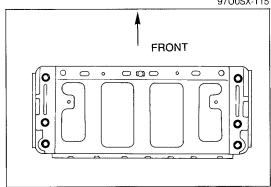
- 15. Frame assembly 16. Relay No.1

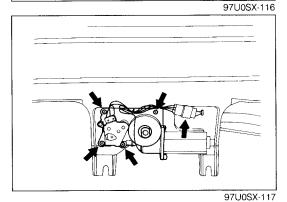
- 17. Outer panel18. Weatherstrip
- 19. Inner trim
- 20. Emergency handle
- 21. Relay No.2



# OUTER PANEL FRONT INNER TRIM







## **REMOVAL**

- 1. Open the outer panel about 100mm (3.9 in).
- 2. Remove the headliner opening seaming welt.
- 3. Remove the inner trim;
  - (1) Pull down the front.
  - (2) Pull the trim forward.
  - (3) Remove the trim, lifting it up about out of the vehicle.

## Note

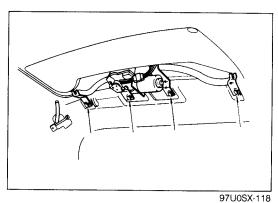
The inner trim rear is inserted into the outer panel as shown in the figure.

- 4. Remove the front pillar trim, the quarter pillar trim and rear top garnish.
- 5. Remove the headliner.
- 6. Disconnect the drain hoses.

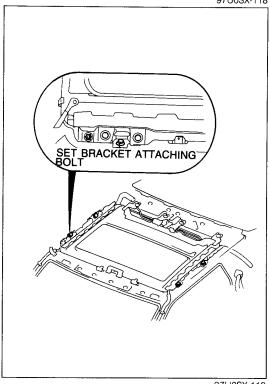
- 7. Close the sunroof with the emergency handle.
- 8. Disconnect the wire connectors.
- 9. Remove the outer panel by removing the outer panel fixing nuts (6).

10. Remove the motor bracket attaching bolts.

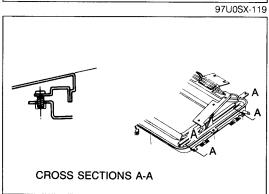
## S SLIDING SUNROOF



11. Remove the rear header attaching bolts.



- 12. Remove the set bracket attaching bolts.
- 13. Supporting the lower unit, remove the height adjusting nuts (4) and take the lower unit down.

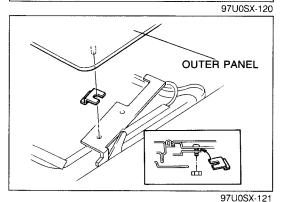


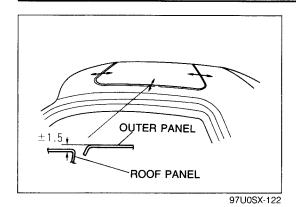
## **INSTALLATION**

1. Attach the lower unit to the roof using the height adjusting nut (4) temporarily.

2. Install the outer panel with the front shims (2) and the rear shims (2) between the lower panel and the outer panel.

Tightening torque: 6.9—8.8 N·m (0.7—0.9 m-kg, 5.1—6.5 ft-lb)





3. Adjust the sunroof height using the height adjusting nuts.

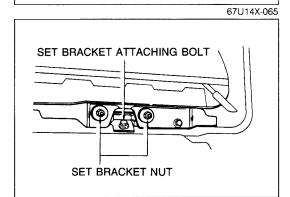
Height difference around circumference: 1.5mm (0.06 in) max.



SET BRACKET SET BRACKET NUT SET BRACKET ATTACHING BOLT IXING BRACKET

4. Loosen the set bracket nuts.

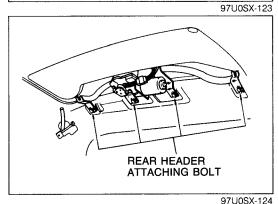
5. Adjust the set bracket positions so that the holes of the set bracket agree with those of the fixing brackets of the body.



6. Attach the set brackets to the fixing brackets using the set bracket attaching bolts.

**Tightening torque:** 7.8—11 N·m (0.8—1.1 m-kg, 5.8—8.0 ft-lb)

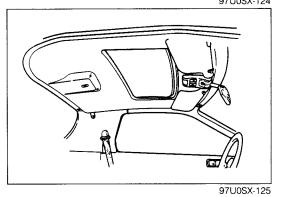
7. Tighten the set bracket nuts.



8. Tighten the rear header attaching bolts.

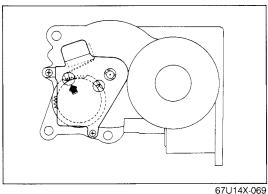
**Tightening torque:** 7.8—11 N·m (0.8—1.1 m-kg, 5.8—8.0 ft-lb)

9. Tighten the motor bracket attaching bolts.



10. Install the remaining parts. Refer to the removal procedures.

## **SLIDING SUNROOF**



## REPLACEMENT OF MOTOR ASSEMBLY

- 1. Tilt up the sunroof.
- 2. Remove the motor assembly.
- 3. Set the timing gear of the new motor assembly in the tilt-up position, as shown in the figure.
- 4. Install the new motor assembly.

### Note

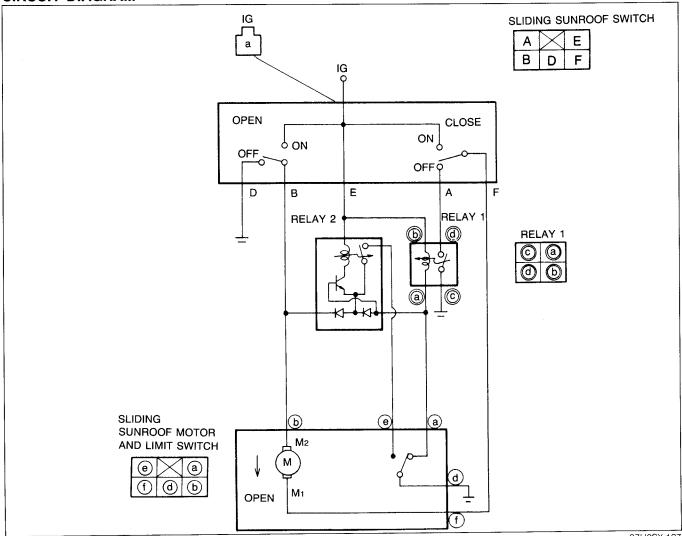
The position of the timing gear can be checked through the check hole of the motor assembly. If the position of the timing gear is not in the tilt-up position, adjust the gear position using the emergency handle.

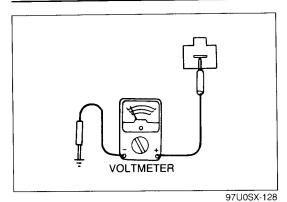
## TROUBLESHOOTING GUIDE

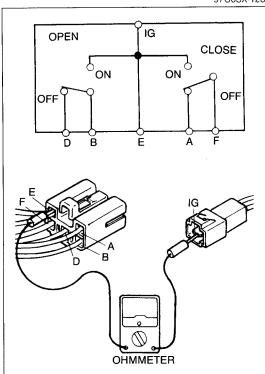
Problem	Possible cause	Remedy	page
Sunroof system does not work	SUNROOF fuse blown Defective sunroof switch	Replace fuse and check Check and repair	S-70 S-71
Sunroof does not tilt	Defective limit switch	Check and repair	S-71

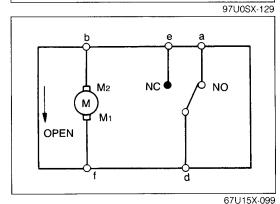
97U0SX-126

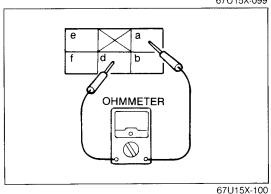
## **CIRCUIT DIAGRAM**











# INSPECTION Sliding Sunroof Switch Checking circuit

- 1. Disconnect the connector from the sliding sunroof switch.
- 2. Turn the ignition switch to ON.
- 3. Using a voltmeter, measure the voltage.

.....12V

4. If there is no voltage, check the fuse or repair the wiring harness.

Checking sliding sunroof switch

- 1. Disconnect the connector from the sliding sunroof switch
- 2. Using an ohmmeter, check for continuity at the terminals.

○──○: Indicates continuity

	IG	Α	В	D	E	F
OFF	0		0	0	<u> </u>	
Open	0-	0-			<u> </u>	<u> </u>
Close	<u> </u>		0		<del>-</del> 0-	0

3. If there is no continuity, replace the sliding sunroof switch.

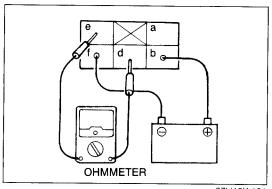
### Sliding Sunroof Motor and Limit Switch

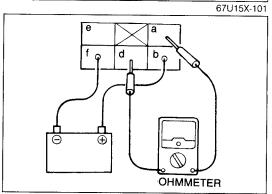
- 1. Disconnect the connector from the sliding sunroof motor.
- 2. Using an ohmmeter, check for continuity at the connector as follows.

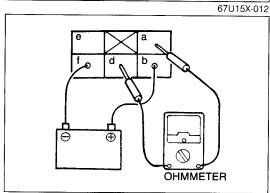
### When closed

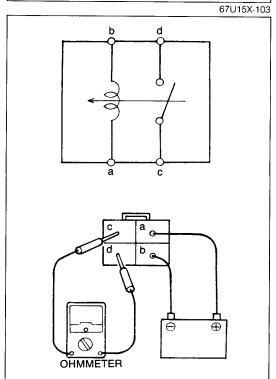
3. Check for continuity between (a) terminal and (d) terminal

# S SLIDING SUNROOF









### When tilted up

4. Check for continuity between (d) terminal and (e) terminal.

### When closed

5. Check for continuity between (a) terminal and (d) terminal.

### When open

Check for continuity between (a) terminal and (d) terminal.

# Relay 1

## Checking relay 1

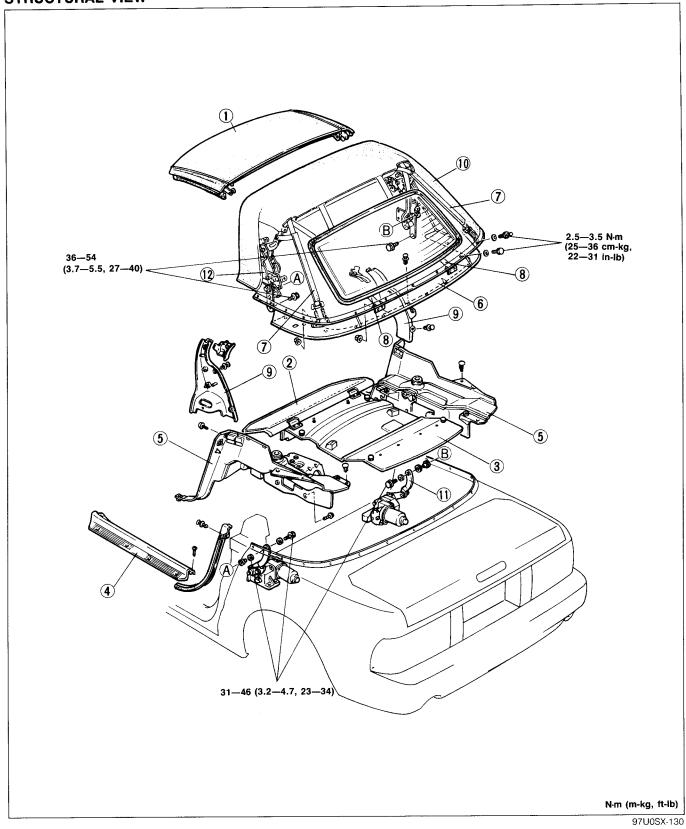
- 1. Disconnect the connector from relay 1.
- 2. Using an ohmmeter, check for continuity at the terminals.

O-O: Indicates continuity

Bat	tery	Continuity			
(+)	(–)	а	b	С	d
a	b			0-	

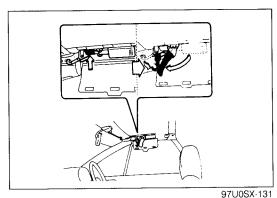
3. If there is no continuity, replace the relay.

### STRUCTURAL VIEW



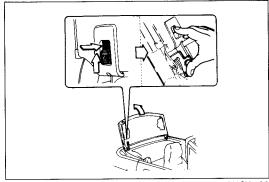
- 1. Roof panel
- 2. Windblocker
- 3. Spare tire cover
- 4. Scuff plate

- 5. Quarter trim
- 6. Headliner
- 7. Corner belt A
- 8. Rear window belt C
- 9. Link cover
- 10. Top fabric
- 11. Motor link
- 12. Forming bar assy

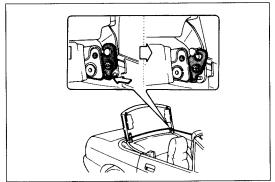


# 97005X-131

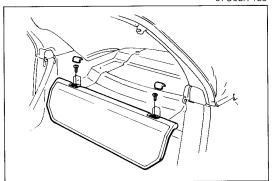
87U14X-040



97U0SX-132



97U0SX-133



87U14X-042

### REMOVAL Roof Panel

- 1. Pull the sunvisors down.
- 2. Push the unlock tab and release the right and left top lock

### Note

Perform this operation with two people.

3. Remove the right and left hinge covers with a screwdriver.

### Note

Lower the convertible top fully.

4. Push in on the hinge lock on the driver's side and slide it upward.

### Note

Perform the next step with two people.

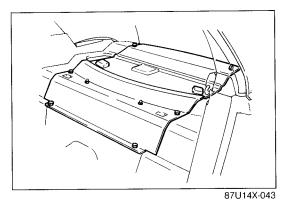
5. Push the hinge release levers and release the right and left hinges latch. Left off the roof panel.

### Windblocker

Remove the screws and remove the windblocker from the spare tire cover.

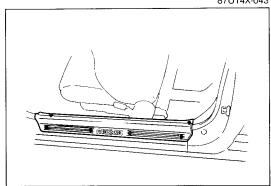
### Note

Raise the convertible top completely.



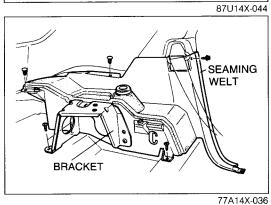
### **Spare Tire Cover**

Remove the fasteners; then remove the spare tire cover and spare tire.



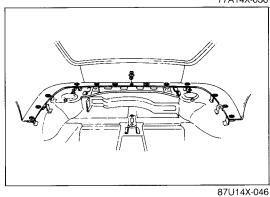
### **Scuff Plate**

Remove the fasteners and remove the scuff plate.



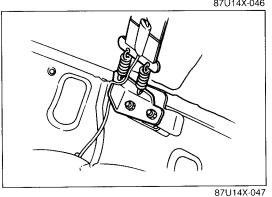
### Quarter trim

- 1. Remove the bolts and the bracket.
- 2. Remove the fastener and the seaming welt.
- 3. Remove the screws and fasteners, then the quarter trim.



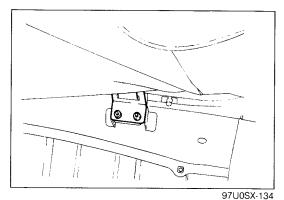
### Headliner

Remove the fasteners, then the headliner from the body.



### Corner Belt A

Turn up the headliner; then remove corner belt A from the body.

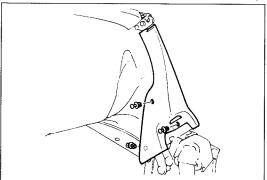


### Rear Window Belt B

Turn up the headliner; then remove rear window belt B from the body.

### **Defog Harness Connectors**

Remove the defog harness connectors at the body side.

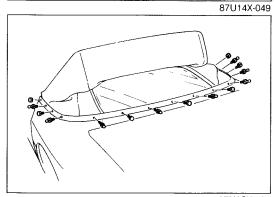


### Link Cover

Remove the fasteners, then the link cover from forming bar A.

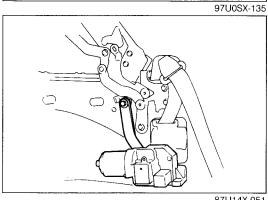
### Note

Lower the convertible top half-way.



### Top fabric

Remove the hooks, fasteners, bolts, and nuts, then the top fabric from the body.

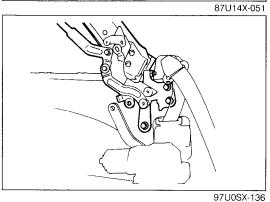


### **Motor Link**

Remove the bolt, then the motor link to forming bar A from the body.

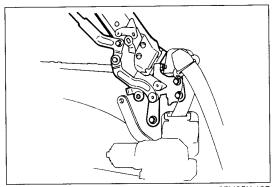
### Caution

Support the top by hand to prevent it from dropping.

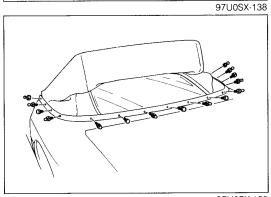


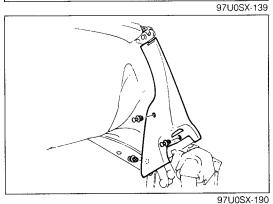
### **Convertible Top**

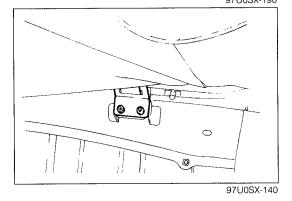
Remove the bolts, then the forming bar assembly from the body. Remove the convertible top.



# 97U0SX-137







INSTALLATION

**Convertible Top** 

Install the forming bar assembly to the body with the fasteners.

Tightening torque:

36—54 Nm (3.7—5.5 m-kg, 27—40 ft-lb)

Note

Perform this operation with two people.

**Motor Link** 

Install the motor link to the forming bar assembly with the bolt.

**Tightening torque:** 

31—46 N·m (3.2—4.7 m-kg, 23—34 ft-lb)

**Top Fabric** 

Install the top fabric to the body with the hooks, bolts, and nuts.

**Tightening torque:** 

Hook, bolt: 2.5—3.5 N⋅m

(25-36 cm-kg, 22-31 in-lb)

Nut : 4.2—6.2 N·m

(43—63 cm-kg, 37—55 in-lb)

**Link Cover** 

Install the link cover to forming bar A with the clips.

**Defog Harness Connector** 

Note

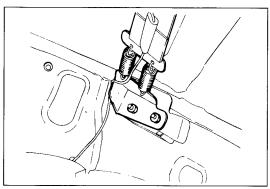
Raise the convertible top completely.

Rear Window Belt B

Install rear window belt B to the body with the nuts.

**Tightening torque:** 

6.9—9.8 Nm (0.7—1.0 m-kg, 5.1—7.2 ft-lb)

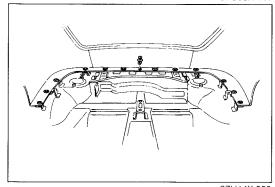


Corner Belt A

Install corner belt A to the body with the nuts.

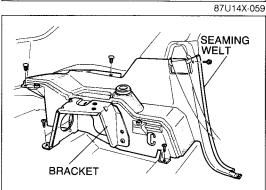
Tightening torque: 6.9—9.8 N·m (0.7—1.0 m-kg, 5.1—7.2 ft-lb)

97U0SX-141



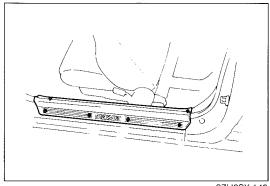
Headliner

Install the headliner to the body with the fasteners.



**Quarter Trim** 

- 1. Slide the quarter trim over the seat belt, then mount the it to the body with the clips, screws, and fasteners.
- 2. Install the bracket to the body with the bolts.
- 3. Install the seaming welt with the fastener.

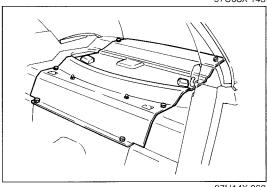


### **Scuff Plate**

Insert the scuff plate to the quarter trim, then mount it to the body with the screws.

97U0SX-143

97U0SX-142

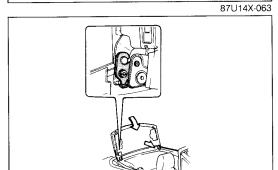


**Spare Tire Cover** 

- 1. Install the spare tire.
- 2. Install the spare tire cover with the fasteners.

### Windblocker

Install the windblocker to the spare tire cover with the screws.

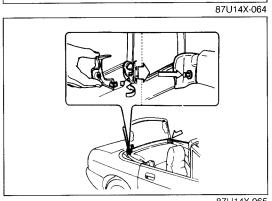


### **Roof Panel**

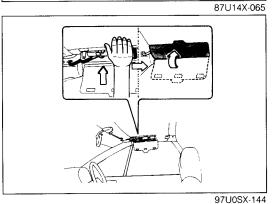
- Insert the roof panel squarely into the hinges.
   Set the hinge lock in the LOCK position.

### Note

Make sure a click is heard when setting the hinge lock in the LOCK position.



3. Install the left and right hinge covers.

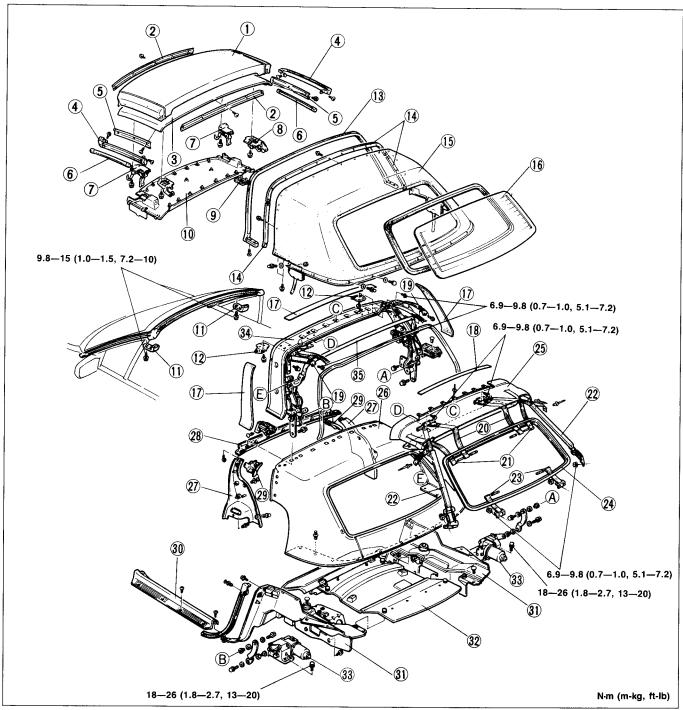


- 4. Set the top lock levers in the LOCK position.5. Raise the sunvisors to the normal position.

### Note

Never leave the roof panel unlocked.

# COMPONENTS OF CONVERTIBLE TOP Structural view

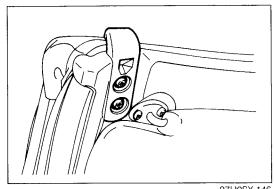


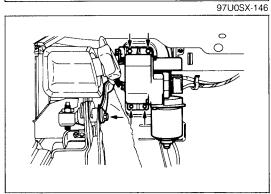
97U0SX-145

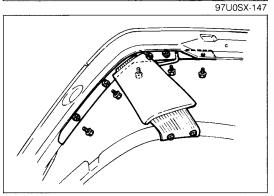
- 1. Roof panel fabric covering
- 2. Set plate
- 3. Roof panel
- 4. Weatherstrip
- 5. Retainer
- 6. Seaming welt
- 7. Top lock
- 8. Hinge lock
- 9. Hinge lock cover
- 10. Top trim
- 11. Top lock striker
- 12. Hinge lock

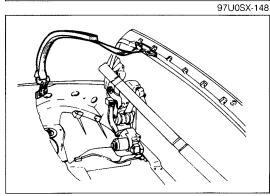
- 13. Forming bar weatherstrip
- 14. Forming bar retainer
- 15. Top fabric
- 16. Rear window glass
- 17. Spacer pad
- 18. Form plate
- 19. Corner belt B
- 20. Rear window belt A
- 21. Rear window belt B
- 22. Corner belt A
- 23. Rear window belt C
- 24. Rear window frame

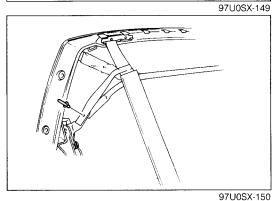
- 25. Insulator
- 26. Headliner
- 27. Link cover
- 28. Forming bar trim
- 29. Hinge cover
- 30. Scuff plate
- 31. Quarter trim
- 32. Spare tire cover
- 33. Motor
- 34. Forming bar A
- 35. Forming bar B











### **REMOVAL**

Refer to components of convertible top (page S-80).

### **INSTALLATION**

Forming Bar Assembly (Refer to page S-77) Top lock striker

Install the top lock striker with the screws.

### **Tightening torque:**

9.8—15 N·m (1.0—1.5 m-kg, 7.2—11 ft-lb)

### Motor

- Install the motor link to the forming bar assembly with the bolts.
- 2. Connect the harness connector.

### **Tightening torque:**

Bolt to install the motor:

18—26 N·m (1.8—2.7 m-kg, 13—20 ft-lb)

Motor link:

31-46 N·m (3.2-4.7 m-kg, 23-34 ft-lb)

### Corner Belt B

Install the bolts to forming bar A and the screws to forming bar B. Then install corner belt B.

### Tightening torque:

**Bolt:** 

6.9—9.8 N·m (0.7—1.0 m-kg, 5.1—7.2 ft-lb)

### Corner Belt A

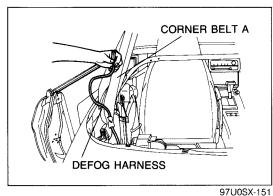
1. Install the bolts to forming bar A and the nuts to the body. Then install corner belt A.

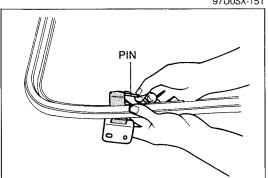
### Tightening torque:

Bolt, nut:

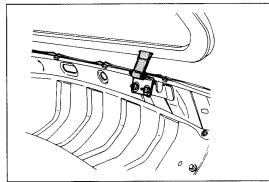
6.9—9.8 N·m (0.7—1.0 m-kg, 5.1—7.2 ft-lb)

2. Install the support belt of corner belt A to forming bar B with a riveter.

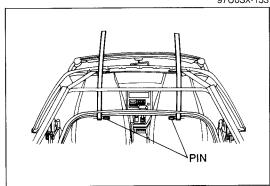




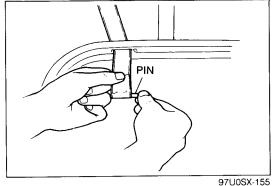
97U0SX-152



97U0SX-153



97U0SX-154



### **Defog Harness**

Install the defog harness to corner belt A.

**Tightening torque:** 

Bolt, nut:

6.9—9.8 N·m (0.7—1.0 m-kg, 5.1—7.2 ft-lb)

### **Rear Window Frame**

- 1. Pull rear window belt C through the rear window frame slot. Then insert the pin in the belt.
- 2. Pull rear window belt C to set the pin into the rear window frame.

3. Install rear window belt C to the body with the nuts.

**Tightening torque:** 

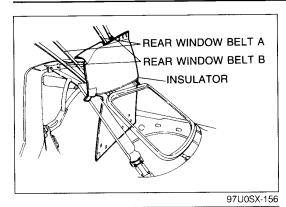
6.9—9.8 Nm (0.7—1.0 m-kg, 5.1—7.2 ft-lb)

Note

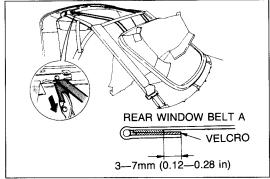
Use a helper to support the rear window frame.

- 4. Insert the pin into rear window belt A after passing it through the rear window frame slot velcro slide up.
- 5. Pull rear window belt A to set the pin into the rear window frame.

- 6. Pass rear window belt B through the rear window frame slot and insert the pin into the belt.
- 7. Pull rear window belt B to set the pin into window frame.



8. Pass both rear window belt A and rear window belt B through the insulator.



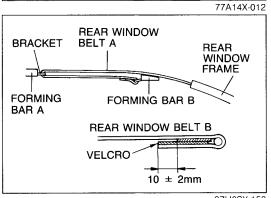
9. Pass rear window belt A under forming bar B. Then pass the belt through the brackets of forming bars A and forming bar B.

10. Pull the belt tight with pliers; then fix it with the sticking material velcro as shown in the figure.

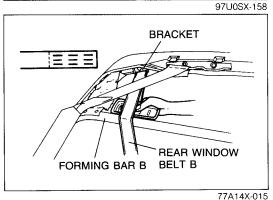
### Note

Raise the forming bar assembly completely before performing this procedure.

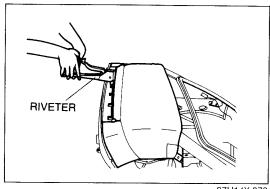
11. Staple the end of rear window belt A.



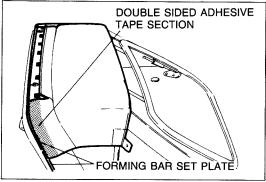
- Pass rear window belt B over forming bar B. Then pass the belt through the brackets of forming bars A and B.
   Pull the belt tight with plicage than fix it with the sticking many
- 14. Pull the belt tight with pliers; then fix it with the sticking material velcro as shown in the figure.



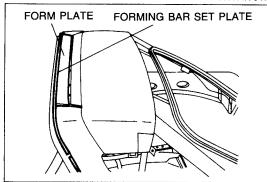
15. Staple the end of rear window belt B.



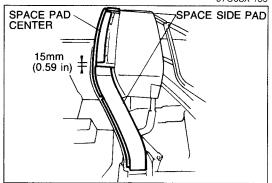
87U14X-078



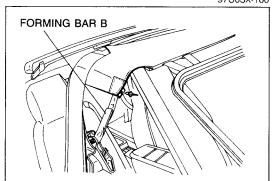
77A14X-047



97U0SX-159



97U0SX-160



87U14X-082

### insulator

1. Rivet the insulator to forming bar A beginning from the center position.

2. Install double-sided adhesive tape to the insulator upper face; then install it to forming bar A.

### Caution

Position the insulator behind the forming bar set plate.

3. Install the form plate to forming bar A. When installing, fit the adhesive section of the form plate to the forming bar set plate.

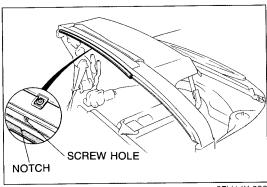
### Caution

Do not adhere the form plate forward of the forming bar set plate.

4. Adhere the spacer pad center and sides with adhesive double-side tape to forming bar A.

### Caution

- a) Do not adhere the spacer pad forward of the forming bar set plate.
- b) Position the spacer pads with 15mm (0.59 in) clearance between the center and sides.
- 5. Rivet the insulator to forming bar B.



6. Push the insulator lower face on the center of forming bar B with the notch aligned with the screw hole.





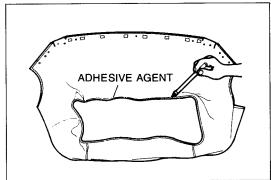
Headliner

1. Clean the rear window frame with ethyl alcohol.

2. Apply the adhesive agent (K180 W0 313) or equivalent with a brush around the rear window frame.

### Note

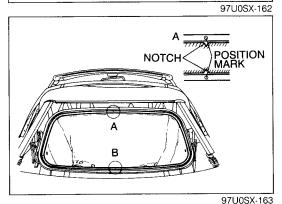
Let the adhesive agent stand for three minutes.



- 3. Clean the window opening of the headliner with ethyl alcohol.
- 4. Apply the adhesive agent with a brush to the window opening of the headliner.

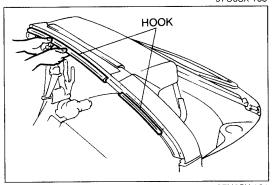
### Note

Let the adhesive agent stand for three minutes.

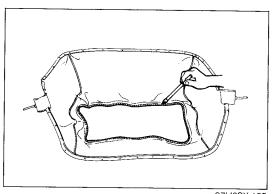


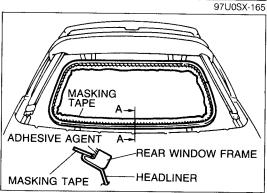
5. Align the headliner notches with the position marks on the top and bottom of the rear window frame. Install the headliner, working out from the center.

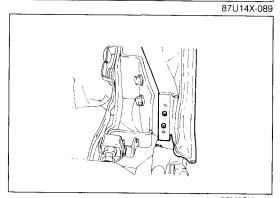
- 6. Hook the hooks of the headliner over forming bar A.
- 7. Install the headliner to the body. (Refer to page S-78.)

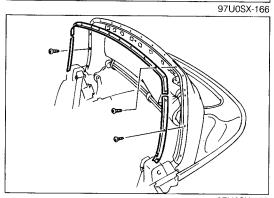


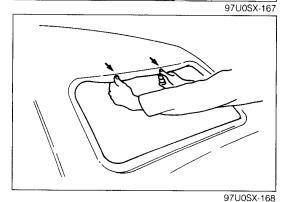
97U0SX-164











### Top fabric

- 1. Clean the rear window opening of the top fabric with ethyl alcohol.
- 2. Apply a 5 cm (2.0 in) band of adhesive agent (K180 W0 313) or equivalent along the window opening of the top fabric.

### Note

Let the adhesive agent stand for three minutes.

3. Protect the headliner with masking tape; then apply adhesive agent to the rear window frame.

### Note

Let the adhesive agent stand for three minutes.

4. Place the top fabric over the forming bar assembly. Position the ends of the top fabirc over forming bar A.

### Note

Lower the forming bar assembly fully.

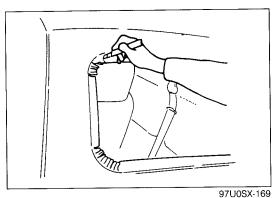
- 5. Install the top fabric to forming bar A with the screws.
- 6. Fit the front edge of the top fabric to forming bar A.

# Note Lower the forming bar assembly half-way.

- 7. Install the top fabric and the forming bar retainer to forming bar A with the screws.
- 8. Install the top fabric to the body. (Refer to page S-77.)
- 9. Pull the top fabric tightly toward the center of the window opening. Adhere it with the adhesive at the center section. Do not adhere the corners.

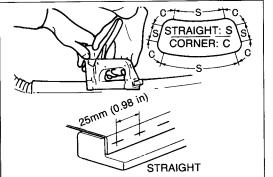
### Note

Raise the forming bar assembly completely.



10. Cut the corners of the top fabric with a razor knife. Adhere the corners to the rear window frame without creasing the material.

11. Install the top fabric to the rear window frame with a stapler.

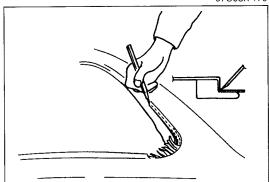


Staple space:

Straight: 25mm (0.98 in) Corner: no space

97U0SX-170

12. Cut away the excess material with a razor knife.

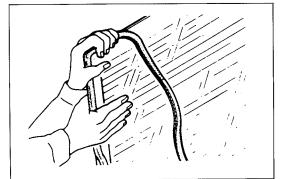


Be careful not to damage the rear window belt or the headliner.

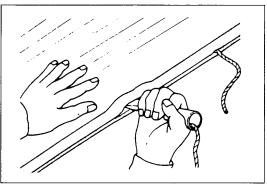
97U0SX-171 REAR WINDOW FRAME TOP FABRIC **SEALANT** HEADLINER SEÀLANT 87U14X-096

**Rear Window Glass** 

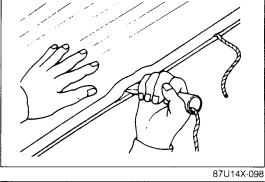
1. Lay two beads of sealant BM-5 (K120 W0 218) or equivalent into the rear window frame.

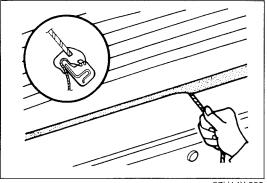


- 2. Lay glass sealer TP-33M (0208 77 732) or equivalent in the groove of the weatherstrip.
- 3. Install the weatherstrip on the rear window glass.

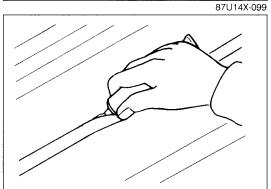


- 3. Install a rope into the weatherstrip as shown in the figure.
- 4. Apply soap suds to the weatherstrip and the body.
- 5. Set the glass and weatherstrip against the body.





- 6. Pat on the glass near the weatherstrip while pulling the rope.
- 7. Pat the rear window glass from the inside and outside by hands to check that the rear window glass is fit securely into the rear window frame.
- 8. Install the defog harness connectors.

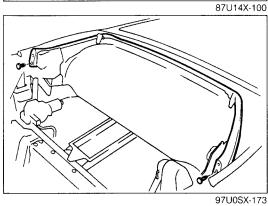


### **Inspection for Water Leaks**

Inspect for water leaks. If water leaks, wipe away the water and apply glass sealant (TP-33M) or equivalent.

### Removing Wrinkles from Headliner

Use steam to remove wrinkles. (A steamer machine will provide the best results for large wrinkles.)



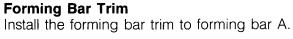
### Forming Bar Weatherstrip

Install the forming bar weatherstrip to forming bar A and the forming bar retainer with the fasteners.

# Lower the convertible top fully.

### **Link Cover**

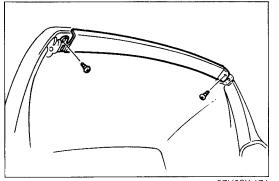
(Refer to page S-77.)



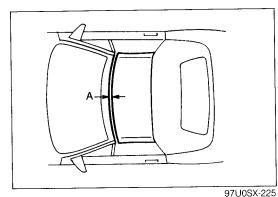


Refer to page S-78 for installation of the following parts.

- (1) Quarter trim
- (2) Scuff plate
- (3) Spare tire cover
- (4) Windblocker
- (5) Roof panel

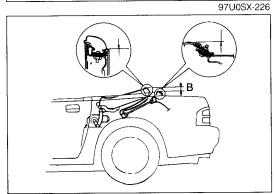


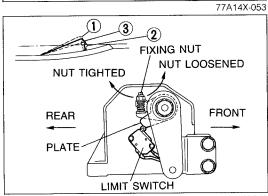
97U0SX-174

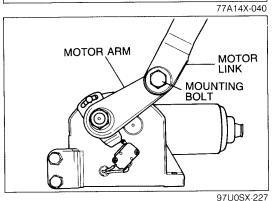


FIXING SCREW 2

FRONT
PLATE LIMIT SWITCH







**ADJUSTMENT** 

Adjustment of Limit Switch of Raise Side

Remove the following parts before adjustment.

(Refer to page S-75.)

- (1) Spare tire cover
- (2) Scuff plate
- (3) Quarter trim
- 1. Move the plate of the left motor and adjust clearance A shown in the figure.

Specification: A = 6mm (0.23 in)

- 2. Adjust the plate as shown to adjust the clearance.
  - 1 Too much
  - Too little
  - 3 Correct

Adjustment of Limit Switch of Lower Side

1. Move the plate of the right motor and adjust clearance B shown in the figure.

Specification:  $B = 0^{+10} mm \ (0^{+0.39} in)$ 

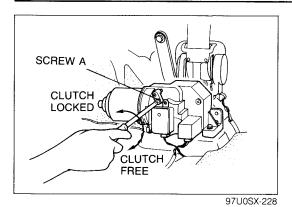
- 2. Adjust the plate as shown to adjust the clearance.
  - 1) Too much
  - 2 Too little
  - ③ Correct

**Synchronizing Motor** 

Caution

After turning screw A to raise and lower the convertible top with hand operation or when changing the motor, synchronize the motor.

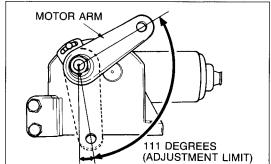
- 1. Remove the following parts before adjustment. (Refer to page S-75.)
  - (1) Spare tire cover
  - (2) Scuff plate
  - (3) Quarter trim
- 2. Remove the mounting bolt and the motor link from the motor arm.



3. Tighten the screw A.

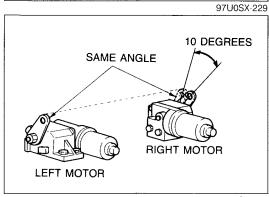
Note

Screw A tighted : Clutch free Screw A loosened: Clutch locked



7 DEGREES

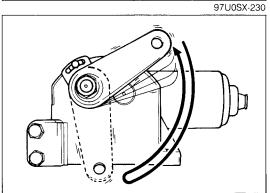
4. Set the right and left motor arms in the same position.



Note

The vertical positions of the motor arms should vary less than 10 degees from each other.

5. loosen the screw A.



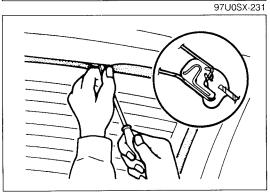
- 6. Operate on the convertible top control switch.
- 7. Synchronize the motor by rotating the motor arm.

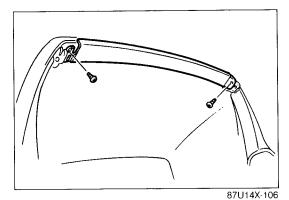
**REMOVAL OF HEADLINER** 

Refer to removal of the convertible top (pages S-74 to S-76) from the roof panel step to the defog harness connectors steps.



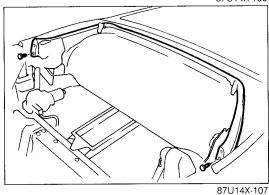
Pry the weatherstrip loose from inside the vehicle. Remove the rear window glass with the weatherstrip.





### **Forming Bar Trim**

Remove the screws and the forming bar trim from the forming bar retainer.

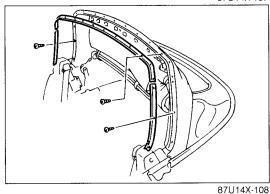


## Forming Bar Weatherstrip

Remove the fasteners and the forming bar weatherstrip from the forming bar retainer.

### Note

Lower the convertible top fully.

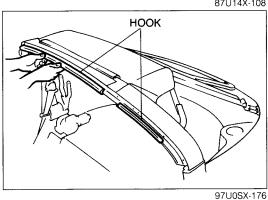


### Forming Bar Retainer

Remove the screws and the forming bar retainer from forming bar A.

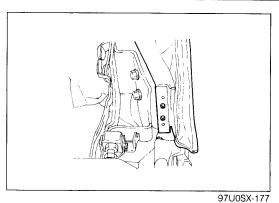
### Note

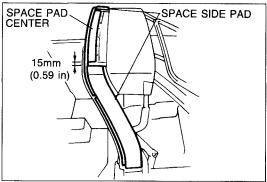
Raise the convertible top completely.



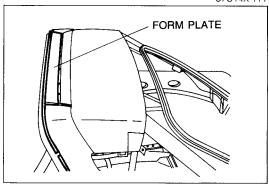
### Headliner

- 1. Unhook the headliner from forming bar A.
- 2. Remove the headliner from the body. (Refer to page S-75.)
- 3. Remove the headliner from the rear window frame.

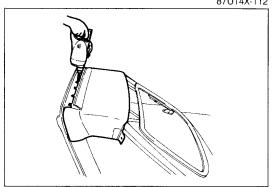




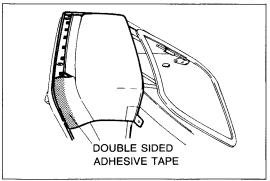
87U14X-111



87U14X-112



77A14X-041



87U14X-114

### **TOP FABRIC**

### Removal

- 1. Remove the screws and the top fabric from the forming bar.
- 2. Remove the top fabric from the body.
- 3. Remove the staples and remove the top fabric from the window frame.

### Note

Lower the top fabric fully.

### Installation

install in the reverse order of removal.

### **INSULATOR**

### Removal

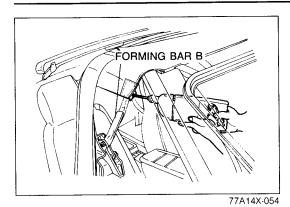
 Remove the spacer pad center and sides from forming bar A.

2. Remove the form plate from forming bar A.

3. Remove the rivets from the insulator with a drill.

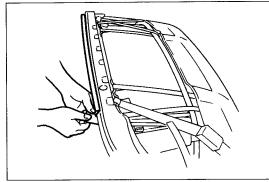
Drill size:  $\phi$ 4.5mm ( $\phi$ 0.18 in)

4. Remove the front insulator upper face from forming bar A.

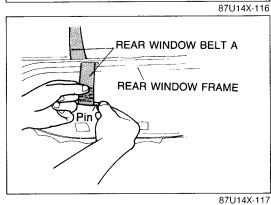


5. Remove the rivet from forming bar B with a drill.

Drill size:  $\phi$ 4.5mm ( $\phi$ 0.18 in)

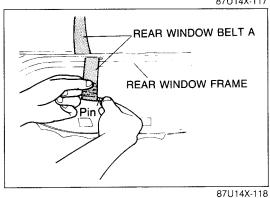


6. Remove the insulator lower face from forming bar A.



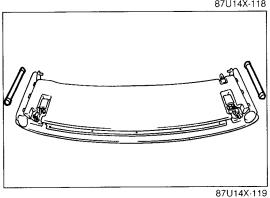
7. Remove the pin from the rear window frame; then remove the insulator.

# Note Lower the forming bar assembly half-way.



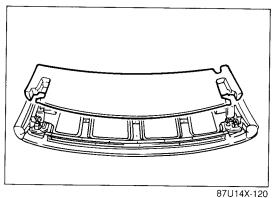
Installation

Install in the reverse order of removal.



ROOF PANEL Disassembly

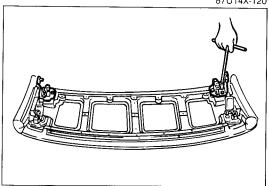
1. Seaming welt
Lift off the right and left welts.



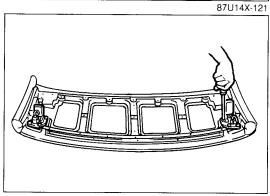
2. Top trim

Remove the clips and the top trim from the roof panel.

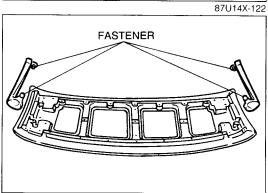
Note Set the top lock to the LOCK position.



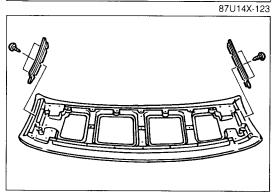
3. Hinge
Remove the bolts; then remove the right and left hinges from the roof panel.



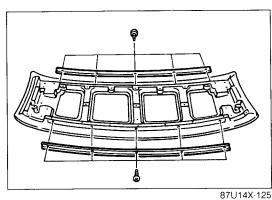
4. Top lock
Remove the screws; then remove the right and left the top locks from the roof panel.



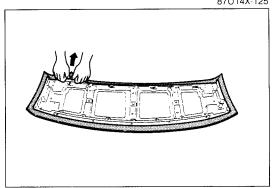
5. Weatherstrip
Remove the fasteners; then remove the right and left
weatherstrips from the roof panel.



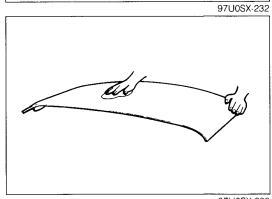
Retainer Remove the screws; then remove the right and left retainers from the roof panel.



7. Set plate
Remove the screws; then remove the front and rear set plates from the roof panel.

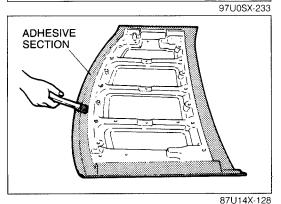


8. Roof panel fabric covering Remove the roof panel fabric covering from the roof panel.

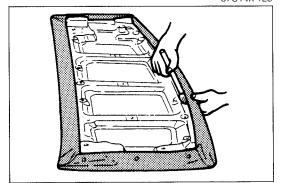


**Assembly** 

Roof panel fabric covering
 Clean the top of the roof panel with ethyl alcohol.

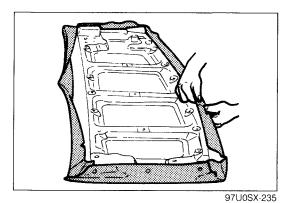


(2) Apply the adhesive agent (K180 W0 313) or equivalent to the roof panel as shown in the figure.



- (3) Clean the adhesive section of the roof panel fabric covering with ethyl alcohol.
- (4) Fold the roof cloth over the roof panel; then apply the adhesive agent to the roof panel fabric covering.

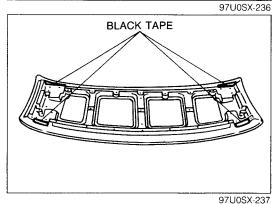
**SPATULA** 



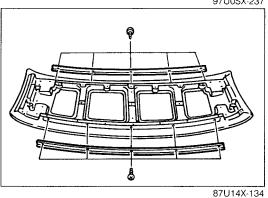
### Caution

Use care to avoid wrinkles and bubbles by applying roof panel fabric covering evenly from the center outwards.

- (5) Glue the front of the roof panel fabric covering to the roof panel beginning at the center.
- (6) Glue the rear of the roof panel fabric covering to the roof panel beginning at the center.
- (7) Glue the side of the cloth to the roof panel beginning at the center.
- (8) Press the roof panel fabric covering into place with a spatula as shown in the figure.

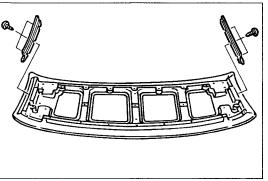


- (9) Hold the corners of the roof panel fabric covering with black tape as shown.
- (10) Cut away the excess of the roof panel fabric covering with a cutter.



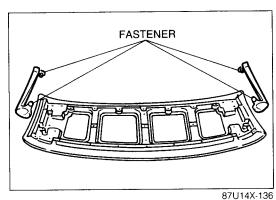
2. Set plate

Install the set plates onto the roof panel with the screws.

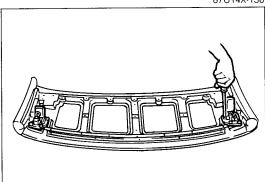


3. Retainer

Install the retainers onto the roof panel with the screws.

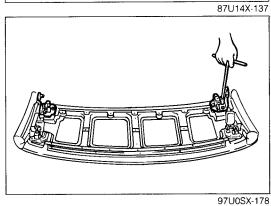


4. Weatherstrip Install the weatherstrips onto the roof panel with the fasteners.



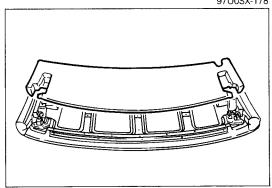
5. Top lock Install the top locks onto the roof panel with the screws.

**Tightening torque:** 4.2—6.2 N·m (43—63 cm-kg, 37—55 in-lb)

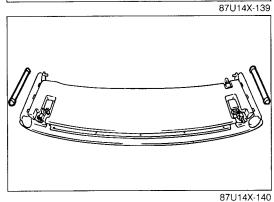


6. Hinge Install the hinges onto the roof panel with the bolts.

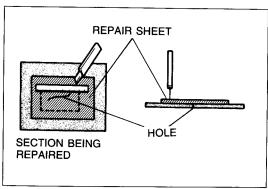
**Tightening torque:** 6.9—9.8 N·m (0.7—1.0 m-kg, 5.1—7.2 ft-lb)

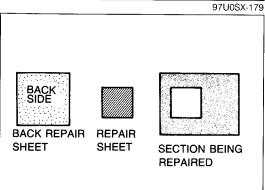


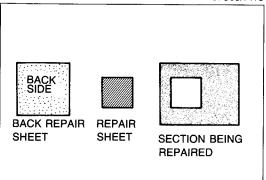
7. Top trim Install the top trim to the roof panel with the clips.

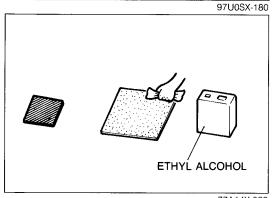


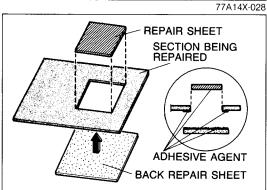
8. Seaming welt Install the seaming welts onto the roof panel.

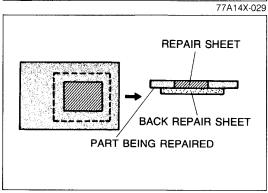












### REPAIR OF TOP FABRIC

### Note

Repair of a hole in the top fabric differs from repaing a tear in the fabric. Refer to page S-99 for tear repair.

### Repair of Hole in Top Fabric

- 1. Place the repair sheet (B2Y5 R1 211) over the damaged section; then cut both the top fabric and the repair sheet with a cutter.
- 2. Cut another piece of repair sheet larger than the first. This is a back repair sheet.
- 3. Trim the top fabric and the repair sheets with a pair of scissors.

4. Degrease the repair sheets with ethyl alcohol.

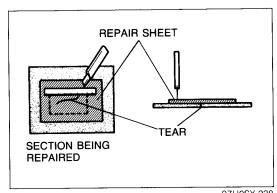
5. Apply the adhesive agent (K180 W0 313) or equivalent to the part being repaired, the repair sheet, and the back repair sheet.

### Note

Apply a substantial amount of the adhesive agent to the cloth parts.

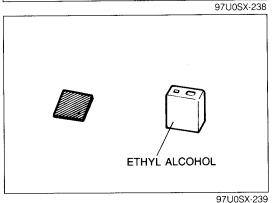
Let stand for a few minutes.

- 6. Insert the repair sheet into the section of the top fabric being repaired. Then install the back repair sheet from the underside.
- 7. Press the repair sheets firmly together.
- 8. Let the top fabric stand until the adhesive agent completely dries.

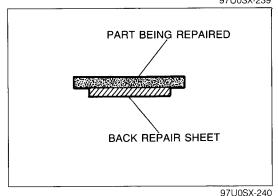


Repair of Tear in Top Fabric

1. Cut other piece of repair sheet (B2Y5 R1 211) larger than the damaged section. This is a back repair sheet.



2. Degrease the repair sheet with ethyl alcohol.



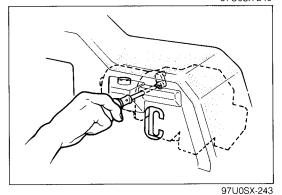
3. Apply the adhesive agent (K180 W0 313) or equivalent to the part being repaired and the back repair sheet.

### Note

Apply a substantial amount of the adhesive agent to the cloth parts.

Let stand for a few minutes.

- 4. Install the back repair sheet from the underside.
- 5. Press the repair sheets firmly together.
- 6. Let the top fabric stand until the adhesive agent completely dries.



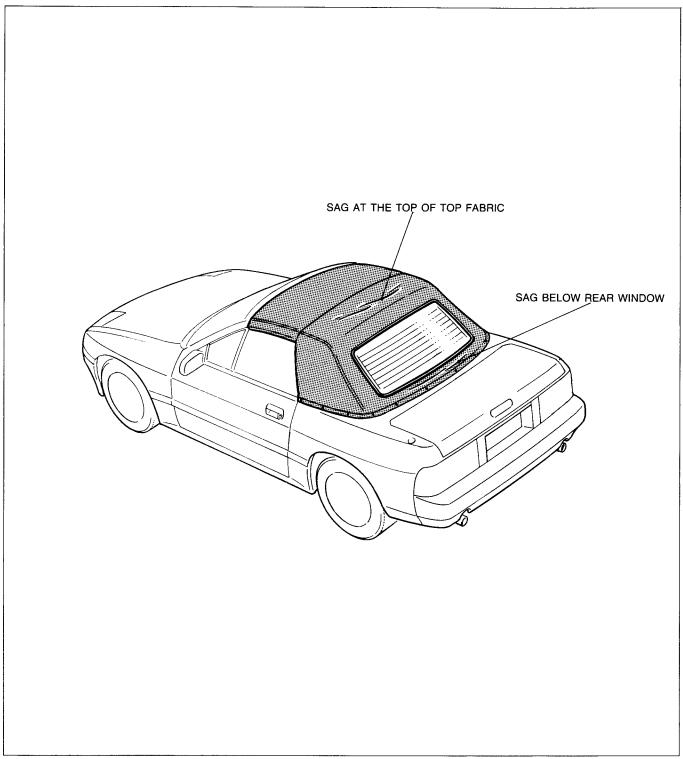
### **MALFUNCTION OF CONVERTIBLE TOP**

### Caution

If the convertible top will not work with the switch, change the convertible top to manual operation.

- 1. Tighten the screw to free the motor clutch.
- 2. Raise or lower the convertible top manually.

### **HOW TO ADJUST SAG OF THE CONVERTIBLE TOP** Structural View



97U0SX-178

### Note

When the convertible top is left in the lowered position for an extended period, it may result in sagging at the top of the top fabric and below the rear window.

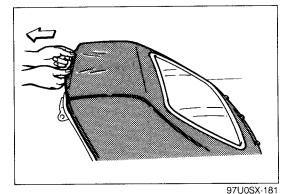
# How To Adjust Small Sag 1. Lower the headliner.

- 2. Use a steamer or steam wand to remove sags.
- 3. Allow top fabric to dry.
- 4. Reinstall headliner.

### How To Adjust Big Sag Sag at top of top fabric

- 1. Remove the roof panel. (Refer to page S-74.)
- 2. Remove the forming bar weatherstrip. (Refer to page S-91.)
- 3. Remove the forming bar retainer. (Refer to page S-91.)
- 4. Raise the convertible top fully.

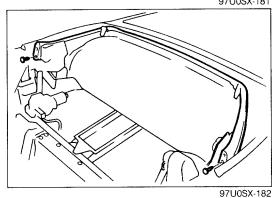
97U0SX-180



5. Pull the top fabric forward, and affix the forming bar retainer with the screws.

### Note

- a) Perform this step with two persons.
- b) To prevent wrinkling, pull the top fabric from the center outwards.

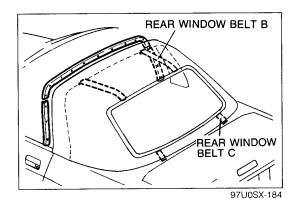


- 6. Lower and raise the top fully to verify that the sag has been removed.
- 7. Install the forming bar weatherstrip.

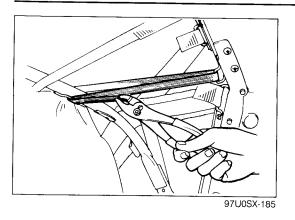
### Sag below rear window

- 1. Remove the roof panel. (Refer to page S-74.)
- 2. Remove the forming bar weatherstrip. (Refer to page S-91.)
- 3. Remove the forming bar retainer. (Refer to page S-91.)
- 4. Raise the convertible top fully.

97U0SX-183



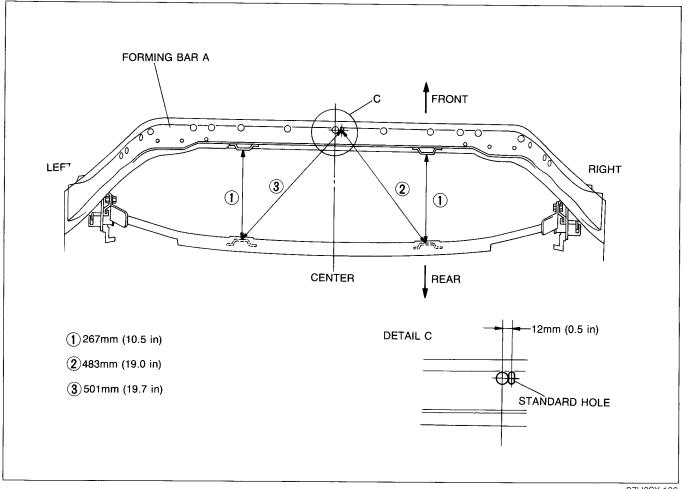
- 5. Remove the spare tire cover. (Refer to page S-75.)
- 6. Remove the headliner. (Refer to page S-75 and S-90.)
- 7. Remove the insulator lower face. (Refer to page S-93.)
- 8. Remove the top fabric. (Refer to page S-76.)



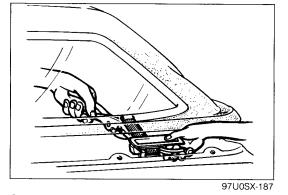
- 9. Remove the staples from rear window belts B and the stitching from rear window belts C.
- 10. Pull the end of rear window belts B with pliers to remove the sag.

# Note Perform this step with two persons.

11. Adjust the left and right rear window belts B so that they are equal length. Then staple the belts. The distance between forming bar A and B is shown below. When tightening the belts, adjust based on the specifications in the figure.



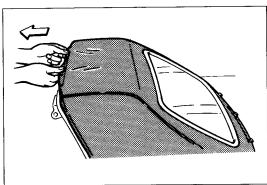
97U0SX-186



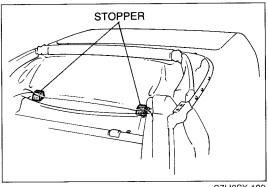
12. Pull rear window belts C from inside the vehicle with pliers until they are tight and the lengths are equal. Staple the belts from outside the vehicle to secure them.

### Note

- a) Perform this step with two persons.
- b) Be careful not to overtight the rear window belts C.



97U0SX-188



97U0SX-189

13. Pull the top fabric forward, and affix the forming bar retainer with the screws.

- a) Perform this step with two persons.
- b) To prevent wrinkling, pull the top fabric from the center outwards.
- 14. Lower and raise the top fully to verify that the sag has been
- 15. Verify that the rear window touches the stops on the spare tire cover when lowered. If not, remove the forming bar retainer and readjust the belts.
- 16. Install the forming bar weatherstrip.

### REPLACEMENT OF SEAL TAPE

When removing the top fabric from the body, be sure to use new seal tape upon installation. Do not reuse the existing seal tape.

97U0SX-190

**Necessary parts**Seal Tape A: Seal for top fabric and body Seal Tape B: Seal for top fabric and body Sealant: Sealing compound for top fabric

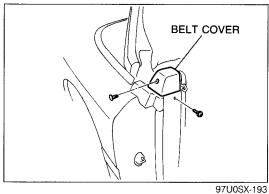
97U0SX-191

## When Replacing Seal Tape Only

### Note

- a) This operation is best performed by two persons.
- b) Remove the roof panel.
- c) Lower the convertible top fully.

97U0SX-192



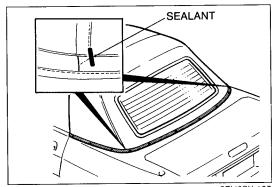
### Removal of cabin-side weatherstrips

1. Remove the fasteners and screws. Lift up the belt covers.

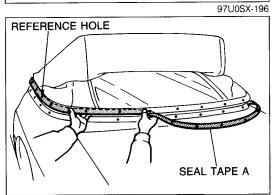
CABIN-SIDE WEATHERSTRIP SEAMING

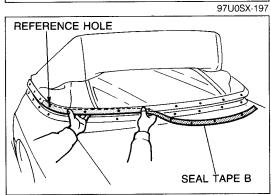
2. Remove the fasteners and screws and the cabin-side weatherstrips.

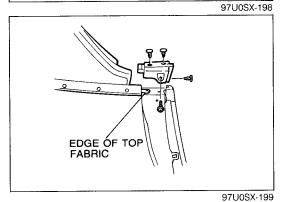
97U0SX-194



# HOOD SET PLATE BEND SEAL TAPE







Note Raise the convertible top halfway.

### Replacement of seal tape

- 1. Remove the fasteners and lift the top fabric.
- 2. Remove the seal tape from the top fabric and the body.
- 3. Apply Sealant BM.5 (K120 W0 218) to the underside of the top fabric at the points shown.
- 4. Align seal tape A (FB67 R1 235) with the third hole from the left edge; then attach it to the top fabric set plate, being sure all the holes are aligned.

### Note

One person should support the top fabric while the outer attaches the seal tape.

5. Attach seal tape B (FB67 R1 236) to seal tape A in the same manner.

### Note

One person should support the top fabric while the outer attaches the seal tape.

### Note

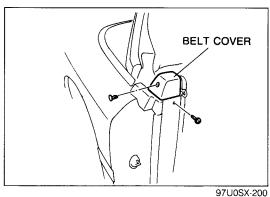
Lower the convertible top fully.

### Installation of cabin-side weatherstrips

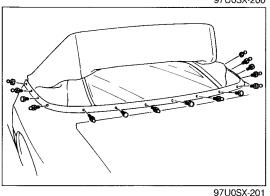
1. Install the cabin-side weatherstrips with the fasteners and screws.

### Note

Attach the ends of the top fabric with the installation clips of the cabin-side weather strips.



2. Affix the belt covers with the fasteners and the screws.



Note Raise the convertible top halfway.

### Installation of top fabric

Mount the top fabric to the body with the fasteners.

Tightening torque Hook, bolt:

2.5-3.5 N·m (25-36 cm-kg, 22-31 in-lb)

4.2—6.2 N·m (43—63 cm-kg, 37—55 in-lb)

Note

Lower the convertible top fully.

### Installation the roof panel

Install the roof panel.

### Inspection of water leaks

Check for water leaks. If water leakage occurs, reconnect the seal tape.

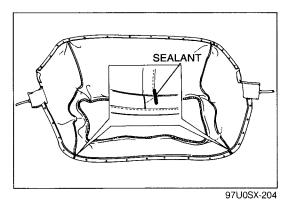
97U0SX-202

### When Installing New Top Fabric or Reinstalling Removed Top Fabric

### Note

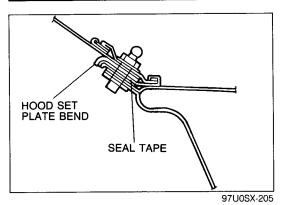
When reusing the top fabric, remove the old seal tape, and replace it with new tape.

97U0SX-203



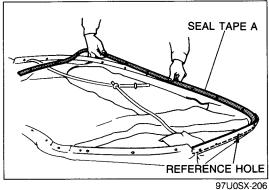
**Application of Sealant** 

Apply sealant BM.5 (K120 W0 218) to the underside of the top fabric as shown.

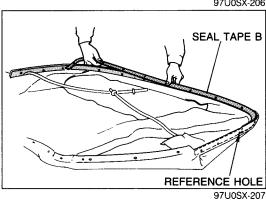


Installation of seal tape

1. Align seal tape A (FB67 R1 235) with the third hole from the left edge; then attach it to the top fabric set plate, being sure all the holes are aligned.



2. Attach seal tape B (FB67 R1 236) to seal tape A in the same manner.

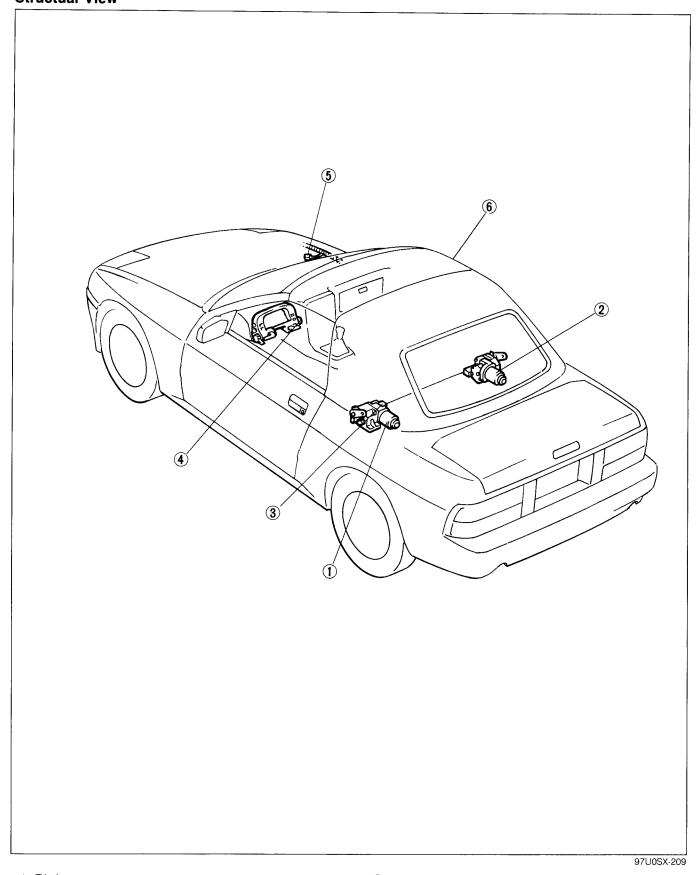


Inspection of water leaks

- 1. Install the top fabric to the body; then check for water leakage.
- 2. If water leakage occurs, reconnect the seal tape.

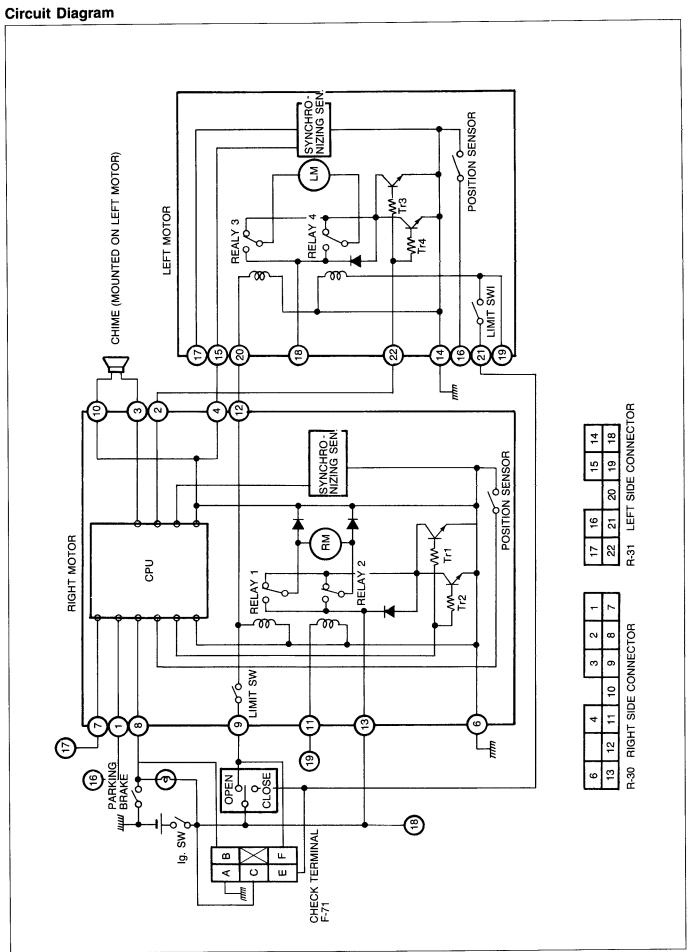
# S CONVERTIBLE TOP

### **CONVERTIBLE TOP MOTOR Structual View**



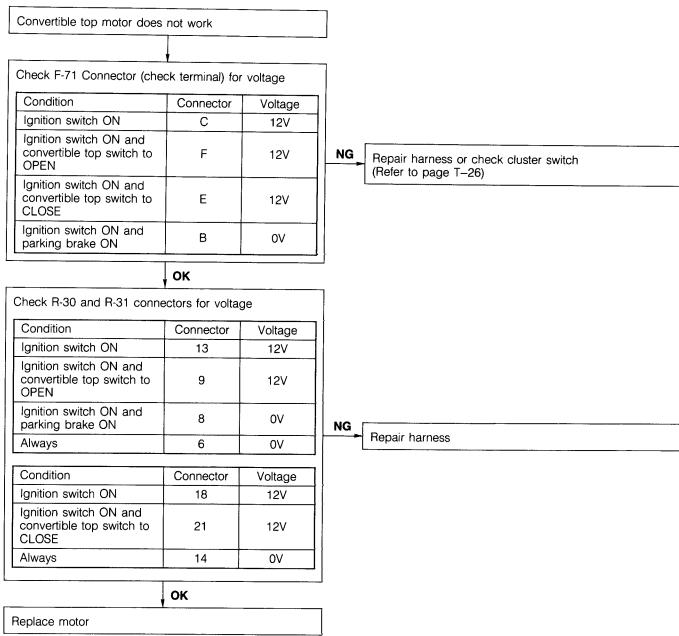
- Right motor
   Left motor
   Chime

- 4. Convertible top control switch (cluster switch)5. Check terminal6. Convertible top assembly



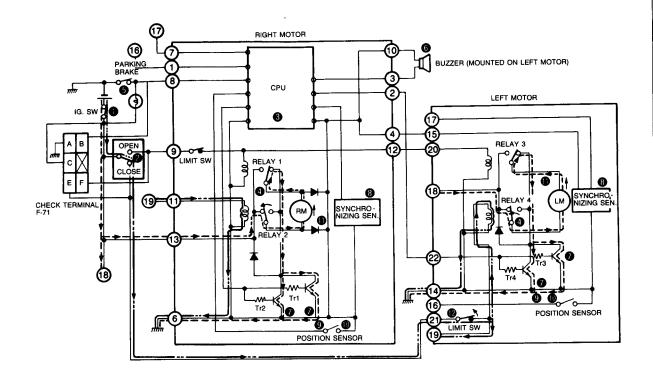
# S CONVERTIBLE TOP

### **Troubleshooting**

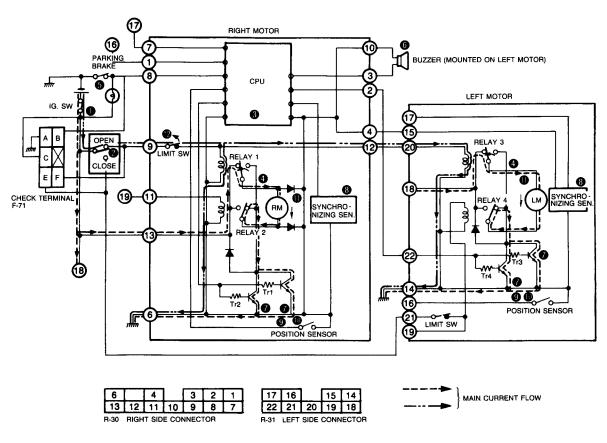


### **Motor Operation**

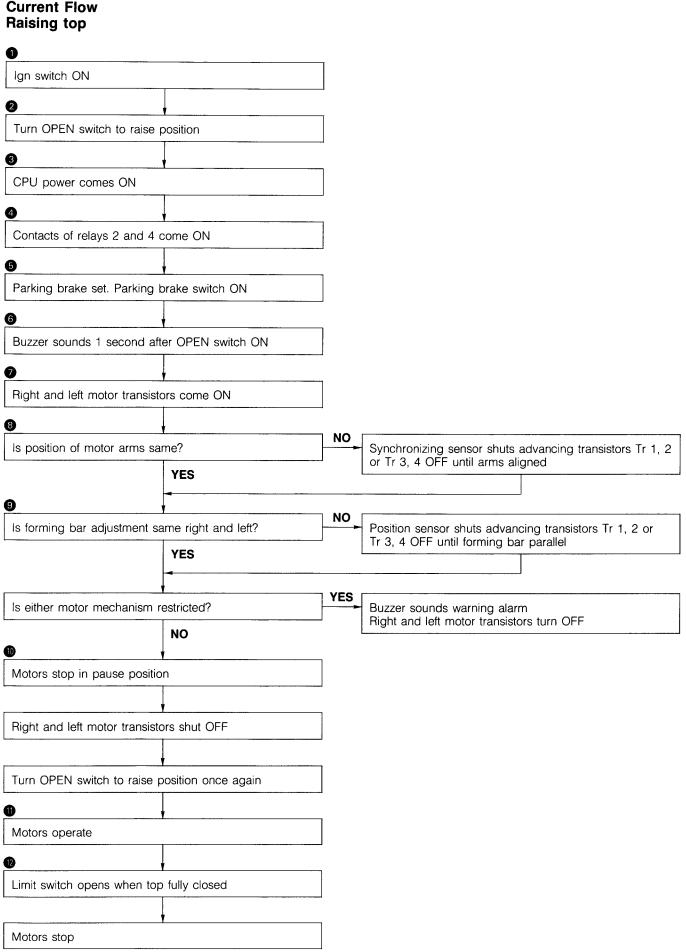
#### RAISING CONVERTIBLE TOP



#### LOWERING CONVERTIBLE TOP



# S CONVERTIBLE TOP MOTOR



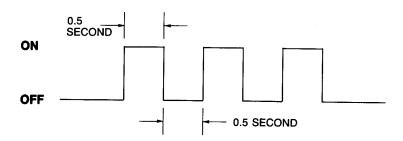
# Lowering top Ign switch ON Turn OPEN switch to lower position CPU power comes ON Contacts of relays 1 and 3 come ON Parking brake set. Parking brake switch ON Buzzer sounds 1 second after OPEN switch ON Right and left motor transistors come ON NO Synchronizing sensor shuts advancing transistors Tr 1, 2 or Tr 3, 4 OFF until arms aligned Is position of motor arms same? YES NO Position sensor shuts advancing transistors Tr 1, 2 or Is forming bar adjustment same right and left? Tr 3, 4 OFF until forming bar parallel YES YES Is either motor mechanism restricted? Buzzer sounds warning alarm Right and left motor transistors turn OFF NO Motors stop in pause position Right and left motor transistors shut OFF Turn OPEN switch to lower position once again Motors operate Limit switch opens when top fully open Motors stop 97U0SX-215

# S CONVERTIBLE TOP MOTOR

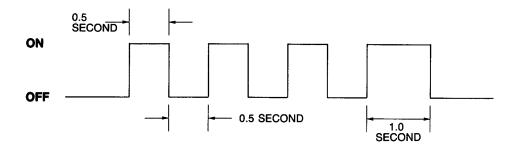
#### **Buzzer**

The buzzer operates in the three patterns described below.

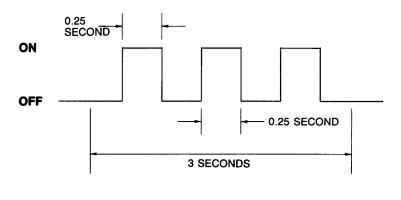
1. Raising and lowering top.



2. Movement of top restricted more than three seconds while raising or lowering, or OPEN switch held on after top fully raised.



3. Parking brake released while top operating.



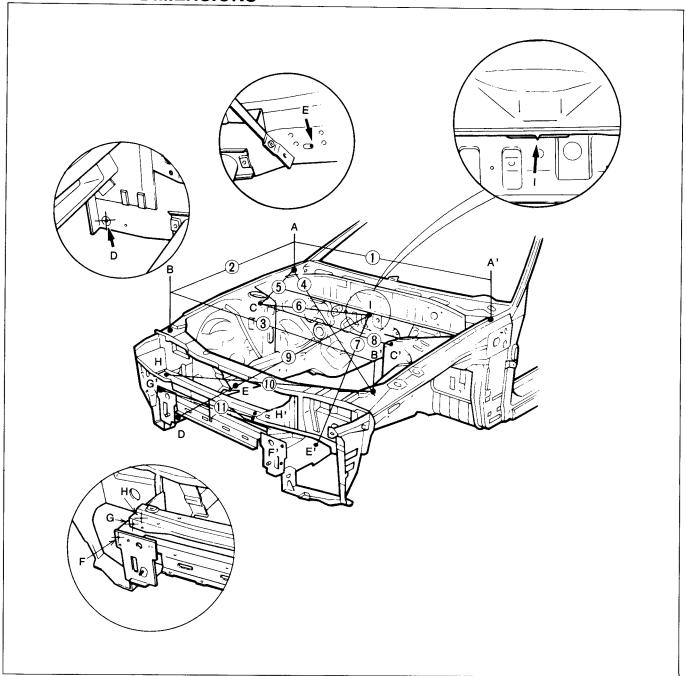
## TOOLS FOR SERVICING AND REPLACING CONVERTIBLE TOP

ADHESIVE AGENT K180 W0 313	For installing OUTER HOOD ASS'Y and HEADLINER	STAPLE GUN	For installing OUTER HOOD ASS'Y
STAPLE	For installing OUTER HOOD ASS'Y and BELT	RIVETER	For installing INSULATOR
ALUMINUM RIVET φ4.0mm (φ0.16 in)	For installing INSULATOR	DRILL φ4.5mm (φ0.18 in)	For removing RIVET
GLASS SEALANT BM-5 K120 W0 218	For sealing GLASS	GLASS SEALANT TP-33M	For sealing GLASS
DOUBLE SIDED ADHESIVE TAPE	For installing INSULATOR	BLACK TAPE	For holding ROOF CLOTH
ETHYL ALCOHOL	For cleaning	REPAIR SHEET B2Y5 R1 211	For repairing TOP FABRIC

97U0SX-217

# S FRONT BODY DIMENSIONS

### FRONT BODY DIMENSIONS



87U14X-141

A, A': Front fender mounting nut

B, B': Front fender mounting nut C, C': Front suspension mounting block mounting hole

D, D': Tie-down hook mounting nut

E, E': Front frame reference hole
F, F': Front side frame reference hole

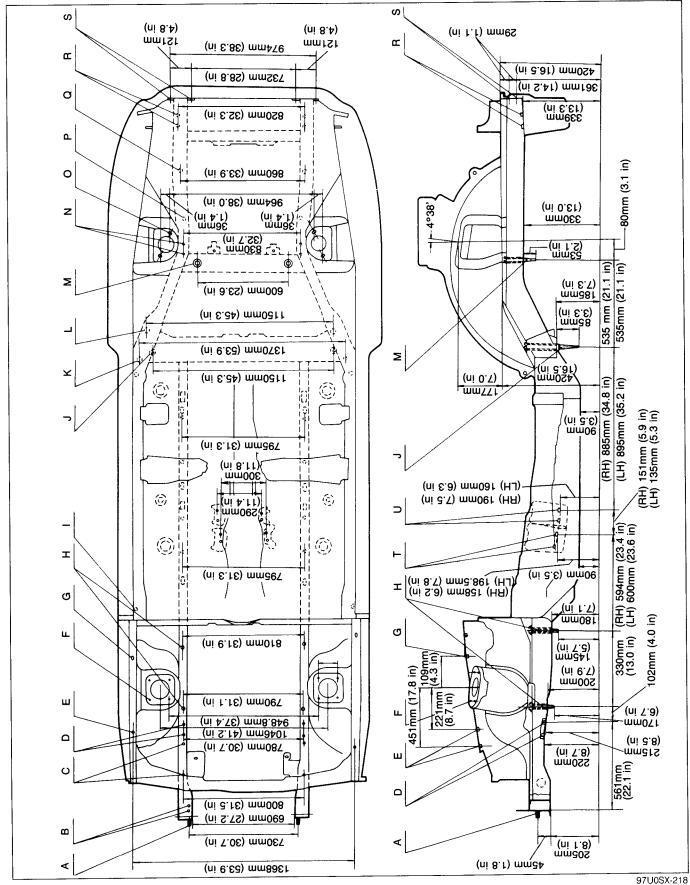
G, G': Fender upper stay mounting nut H, H': Front facia mounting nut

I, I': Cowl panel point

Mea- sure- ment	Length mm (in)
1	1384 (54.49)
2	873 (34.37)
3	1354 (53.31)
4	1624 (63.94)
5	504 (19.84)
6	613 (24.13)
7	887 (34.92)
8	943 (37.13)
9	1205 (47.44)
10	1052 (41.42)
11	788 (31.02)

### UNDERBODY PROJECTED DIMENSIONS

#### **COUPE**



# S UNDERBODY PROJECTED DIMENSIONS

A:Front bumper mounting bolt

B:Tie-down hook mounting nut

C:Undercover mounting nut

D:Front stabilizer mounting nut

E:Front fender mounting nut

F: Front suspension mounting block mounting hole

G:Front fender mounting nut

H:Front suspension mounting bolt

I:Front frame reference hole

J :Rear suspension member mounting bolt

K:Rear frame reference hole

L:Rear frame reference hole

M:Differential member mounting bolt

N:Rear stabilizer mounting nut

O:Rear suspension mounting block mounting hole

P:Rear frame reference hole

Q:Rear frame reference hole

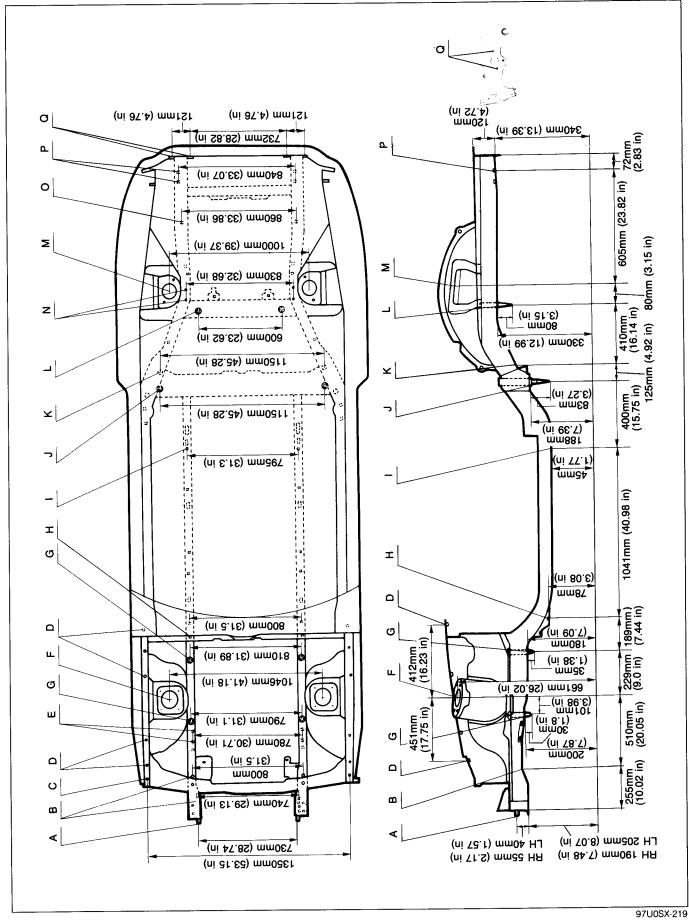
R:Tie-down hook mounting nut

S:Rear bumper mounting hole

T:Transmission hanger bracket mounting nut (M/T)

U:Transmission hanger bracket mounting nut (A/T)

#### **CONVERTIBLE**



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# S UNDERBODY PROJECTED DIMENSIONS

A:Front bumper mounting bolt

B:Undercover mounting nut

C:Front fender reference hole

D:Front fender mounting nut

E:Front stabilizer mounting nut

F: Front suspension mounting block mounting surface

G:Front suspension mounting bolt

H:Crossmember mounting nut

1:Front frame reference hole

J:Rear suspension member mounting bolt

K:Rear frame reference hole

L:Differential member mounting bolt

M:Rear suspension mounting block mounting surface

N:Rear stabilizer mounting nut

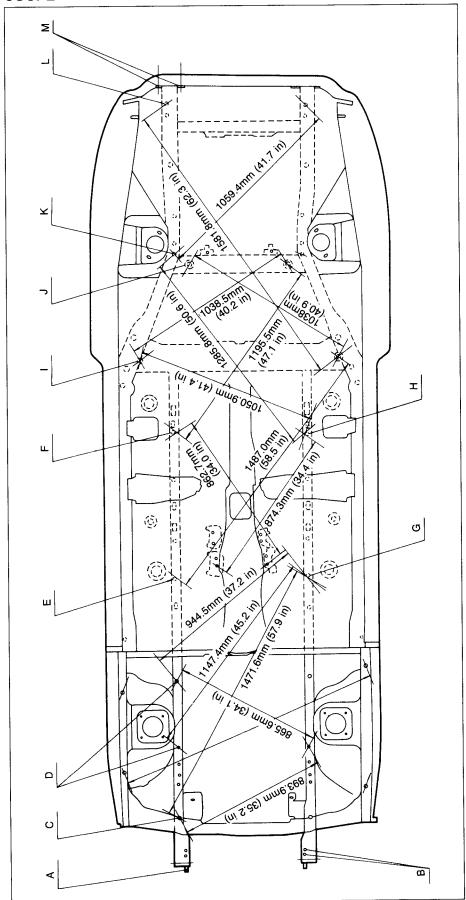
O:Rear frame reference hole

P:Tie-down hook mounting nut

Q:Rear bumper mounting hole

## **UNDERBODY STRAIGHT-LINE DIMENSIONS**

### COUPE



I:Rear suspension member mounting bolt J.Differential member mounting bolt

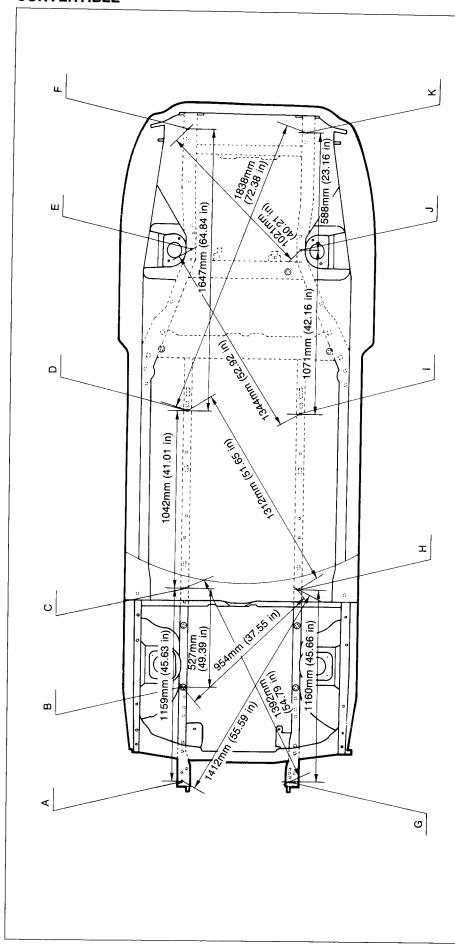
L:Tie-down hook mounting nut K:Rear stabilizer mounting nut

M:Rear bumper mounting hole

A:Front bumper mounting bolt B:Tie-down hook mounting nut C:Undercover mounting nut D:Front suspension mounting bolt E:Front frame reference hole F:Front frame reference hole G:Front frame reference hole H:Front frame reference hole

# UNDERBODY STRAIGHT-LINE DIMENSIONS

### **CONVERTIBLE**



A:Tie-down hook mounting nut B:Front suspension mounting bolt C:Crossmember mounting nut D:Front frame reference hole E:Rear stabilizer mounting nut F:Tie-down hook mounting nut G:Tie-down hook mounting nut

J.Rear stabilizer mounting nut K:Tie-down hook mounting nut H:Crossmember mounting nut l:Front frame reference hole