

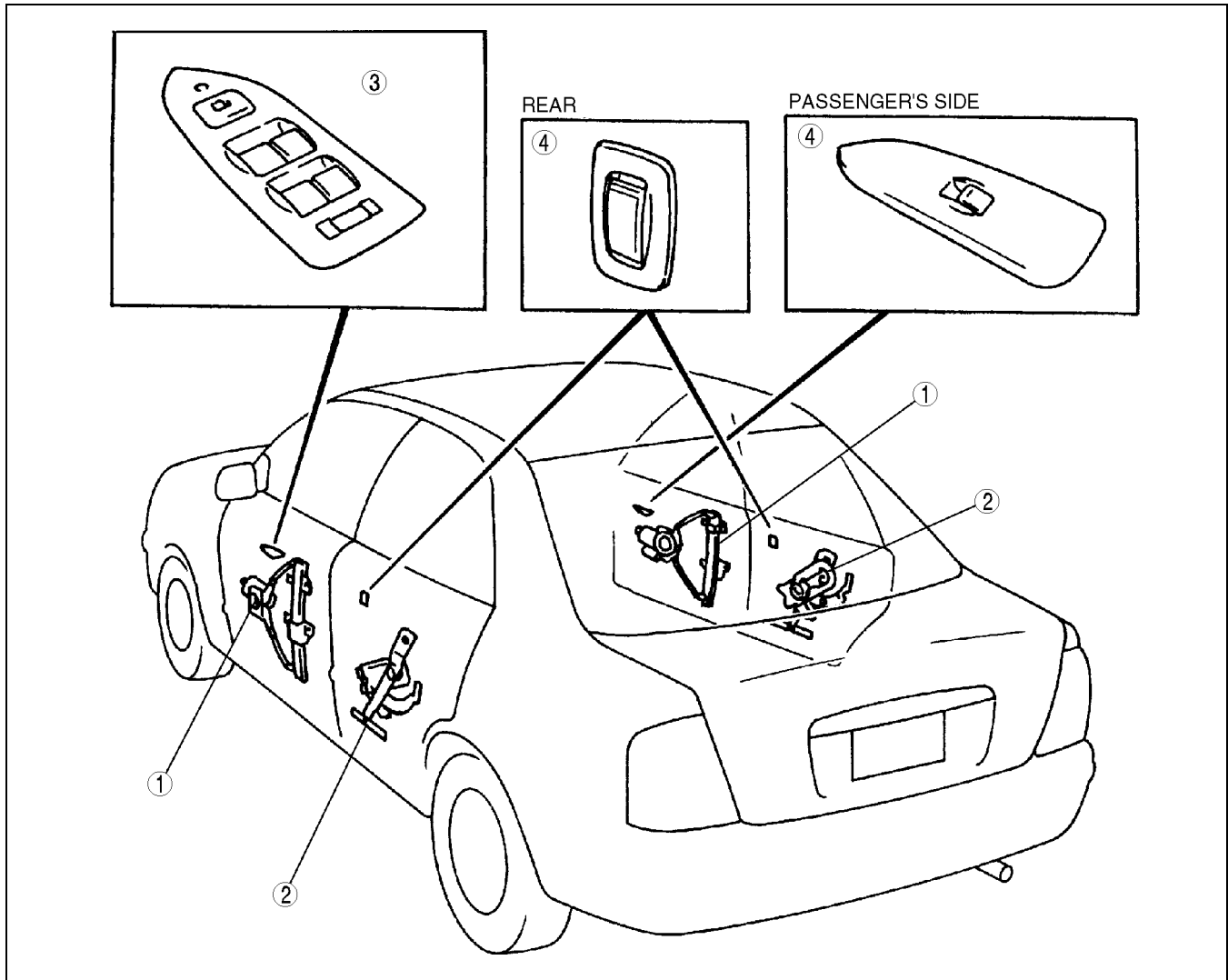
09-12 GLASS/WINDOWS/MIRRORS

| | | | |
|---------------------------------------|----------|--|----------|
| LOCATION INDEX | 09-12-2 | REAR WINDOW GLASS REMOVAL | 09-12-11 |
| Power Window System | 09-12-2 | 4SD | 09-12-11 |
| Rear Window Defroster | 09-12-3 | 5HB | 09-12-12 |
| FRONT DOOR GLASS AND | | REAR WINDOW GLASS | |
| GUIDE REMOVAL/INSTALLATION . | 09-12-3 | INSTALLATION | 09-12-14 |
| REAR DOOR GLASS AND | | 4SD | 09-12-14 |
| GUIDE REMOVAL/INSTALLATION ... | 09-12-4 | 5HB | 09-12-17 |
| POWER WINDOW MOTOR | | WINDSHIELD REMOVAL | 09-12-19 |
| INSPECTION | 09-12-5 | Not Reusing Windshield | 09-12-19 |
| FRONT POWER WINDOW REGULATOR | | Reusing Windshield | 09-12-20 |
| REMOVAL/INSTALLATION | 09-12-5 | WINDSHIELD INSTALLATION | 09-12-21 |
| FRONT POWER WINDOW REGULATOR | | QUARTER WINDOW GLASS | |
| DISASSEMBLY/ASSEMBLY | 09-12-5 | REMOVAL | 09-12-24 |
| Power Window Motor | | QUARTER WINDOW GLASS | |
| Disassembly Note | 09-12-6 | INSTALLATION | 09-12-26 |
| FRONT MANUAL WINDOW REGULATOR | | FILAMENT INSPECTION | 09-12-27 |
| REMOVAL/INSTALLATION | 09-12-6 | FILAMENT REPAIR | 09-12-28 |
| REAR POWER WINDOW REGULATOR | | REAR WINDOW DEFROSTER SWITCH | |
| REMOVAL/INSTALLATION | 09-12-6 | INSPECTION | 09-12-28 |
| REAR POWER WINDOW REGULATOR | | POWER OUTSIDE MIRROR | |
| DISASSEMBLY/ASSEMBLY | 09-12-6 | INSPECTION | 09-12-28 |
| Power Window Motor | | POWER OUTSIDE MIRROR | |
| Disassembly Note | 09-12-7 | REMOVAL/INSTALLATION | 09-12-28 |
| Power Window Motor Assembly Note . | 09-12-7 | MANUAL OUTSIDE MIRROR | |
| REAR MANUAL WINDOW REGULATOR | | REMOVAL/INSTALLATION | 09-12-29 |
| REMOVAL/INSTALLATION | 09-12-7 | OUTSIDE MIRROR GLASS REMOVAL . | 09-12-29 |
| POWER WINDOW MAIN SWITCH | | OUTSIDE MIRROR GLASS | |
| REMOVAL/INSTALLATION | 09-12-7 | INSTALLATION | 09-12-29 |
| POWER WINDOW MAIN SWITCH | | POWER OUTSIDE MIRROR SWITCH | |
| INSPECTION | 09-12-8 | REMOVAL/INSTALLATION | 09-12-30 |
| POWER WINDOW SUBSWITCH | | POWER OUTSIDE MIRROR SWITCH | |
| REMOVAL/INSTALLATION | 09-12-8 | INSPECTION | 09-12-30 |
| Passenger's side | 09-12-9 | REARVIEW MIRROR REMOVAL | 09-12-30 |
| Rear | 09-12-9 | REARVIEW MIRROR INSTALLATION .. | 09-12-31 |
| POWER WINDOW SUBSWITCH | | BASE REMOVAL | 09-12-31 |
| INSPECTION | 09-12-9 | BASE INSTALLATION | 09-12-31 |
| REGULATOR HANDLE REMOVAL | 09-12-10 | | |
| REGULATOR HANDLE | | | |
| INSTALLATION | 09-12-10 | | |

LOCATION INDEX

A3U091201048W01

Power Window System

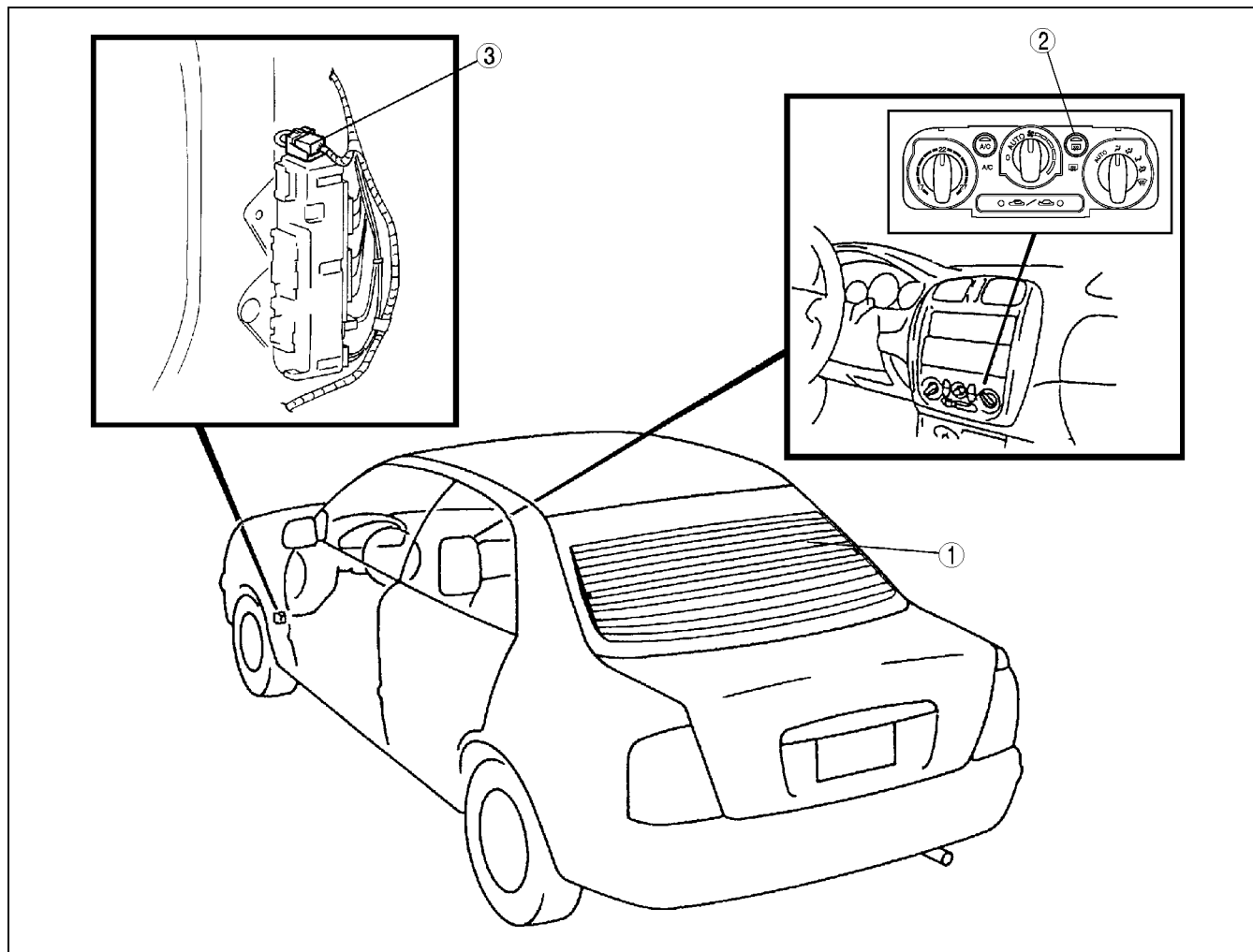


Z3U0912W015

| | |
|---|---|
| 1 | Front power window regulator (See 09-12-5 POWER WINDOW MOTOR INSPECTION) (See 09-12-5 FRONT POWER WINDOW REGULATOR REMOVAL/INSTALLATION) (See 09-12-5 FRONT POWER WINDOW REGULATOR DISASSEMBLY/ASSEMBLY) |
| 2 | Rear power window regulator (See 09-12-5 POWER WINDOW MOTOR INSPECTION) (See 09-12-6 REAR POWER WINDOW REGULATOR REMOVAL/INSTALLATION) (See 09-12-6 REAR POWER WINDOW REGULATOR DISASSEMBLY/ASSEMBLY) |

| | |
|---|--|
| 3 | Power window main switch (See 09-12-8 POWER WINDOW MAIN SWITCH INSPECTION) (See 09-12-7 POWER WINDOW MAIN SWITCH REMOVAL/INSTALLATION) |
| 4 | Power window subswitch (See 09-12-10 POWER WINDOW SUBSWITCH INSPECTION) (See 09-12-9 POWER WINDOW SUBSWITCH REMOVAL/INSTALLATION) |

Rear Window Defroster



Z3U0912W016

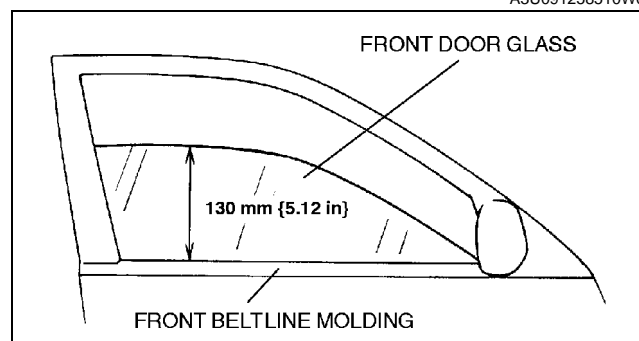
| | |
|---|--|
| 1 | Filament (See 09-12-27 FILAMENT INSPECTION) (See 09-12-28 FILAMENT REPAIR) |
|---|--|

| | |
|---|--|
| 2 | Rear window defroster switch (See 07-40-10 CLIMATE CONTROL UNIT DISASSEMBLY/ASSEMBLY) (See 07-40-11 CLIMATE CONTROL UNIT INSPECTION) |
| 3 | Rear window defroster relay (See 09-21-5 RELAY INSPECTION) |

FRONT DOOR GLASS AND GUIDE REMOVAL/INSTALLATION

A3U091258510W01

1. Lower or raise the front door glass so that the distance from the top of the front door glass at the rear end to the upper part of the front beltline molding is **130 mm {5.12 in}**.
2. Disconnect the negative battery cable.
3. Remove the front door trim. (See 09-17-9 FRONT DOOR TRIM REMOVAL/INSTALLATION.)
4. Remove the inner handle.



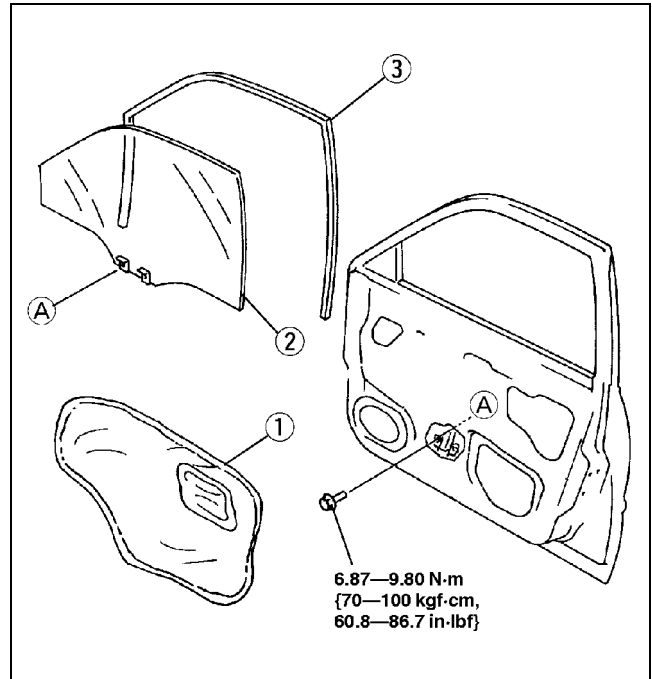
Y3U912WAJ

GLASS/WINDOWS/MIRRORS

5. Remove in the order indicated in the table.

| | |
|---|-------------------|
| 1 | Door screen |
| 2 | Front door glass |
| 3 | Glass run channel |

6. Install in the reverse order of removal.



X3U912WB7

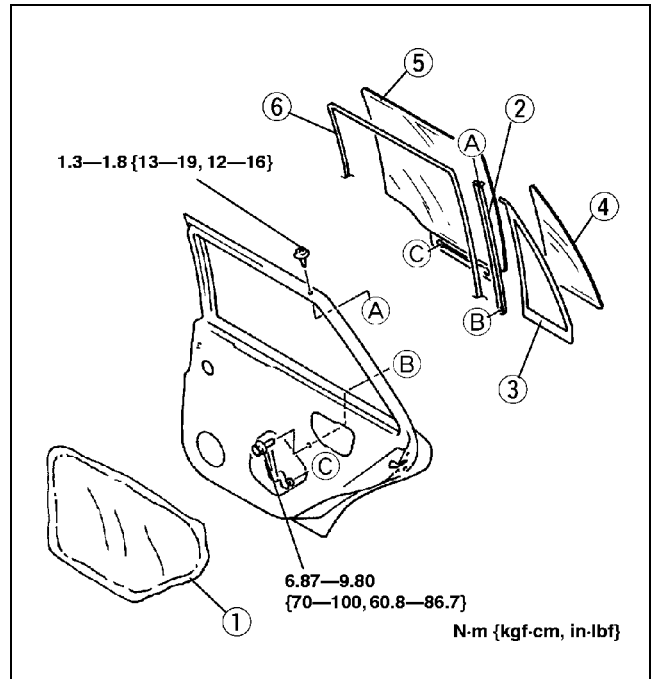
REAR DOOR GLASS AND GUIDE REMOVAL/INSTALLATION

A3U091272510W01

1. Open the rear door glass completely.
2. Disconnect the negative battery cable.
3. Remove the rear door trim. (See 09-17-9 REAR DOOR TRIM REMOVAL/INSTALLATION.)
4. Remove the inner handle.
5. Remove in the order indicated in the table.

| | |
|---|--|
| 1 | Door screen |
| 2 | Glass guide |
| 3 | Door quarter window glass weatherstrip |
| 4 | Door quarter window glass |
| 5 | Rear door glass |
| 6 | Glass run channel |

6. Install in the reverse order of removal.



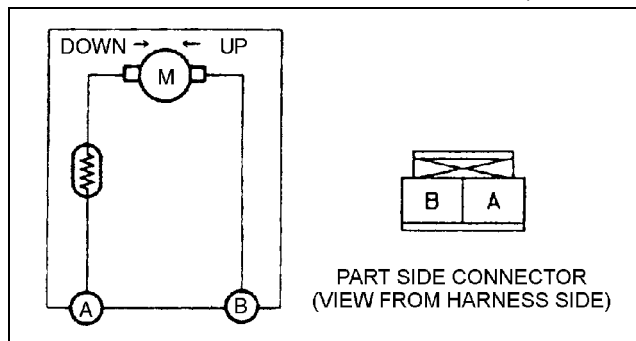
X3U912WB8

POWER WINDOW MOTOR INSPECTION

A3U091258581W01

1. Remove the power window motor. (See 09-12-5 FRONT POWER WINDOW REGULATOR DISASSEMBLY/ASSEMBLY.) (See 09-12-6 REAR POWER WINDOW REGULATOR DISASSEMBLY/ASSEMBLY.)
2. Apply battery positive voltage to the power window motor terminals and inspect the operation of the power window motor.
 - If not as specified, replace the power window motor.

| Terminal | | Motor operation |
|----------|-----|-----------------|
| A | B | |
| GND | B+ | UP |
| B+ | GND | DOWN |



Y3U912WA0

FRONT POWER WINDOW REGULATOR REMOVAL/INSTALLATION

A3U091258560W01

1. Disconnect the negative battery cable.
2. Remove the front door glass. (See 09-12-3 FRONT DOOR GLASS AND GUIDE REMOVAL/INSTALLATION.)
3. Disconnect the front power window regulator connector.
4. Remove the bolts and the nuts, then remove the front power window regulator.

Tightening torque

6.87—9.80 N·m {70—100 kgf·cm, 60.8—86.7 in·lbf}

5. Install in the reverse order of removal.

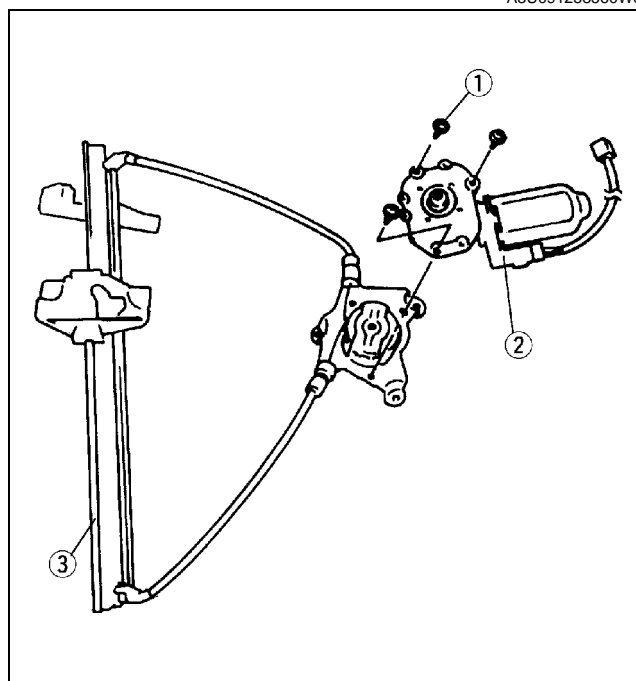
FRONT POWER WINDOW REGULATOR DISASSEMBLY/ASSEMBLY

A3U091258560W02

1. Disassemble in the order indicated in the table.

| | |
|---|---|
| 1 | Screw |
| 2 | Power window motor (See 09-12-6 Power Window Motor Disassembly Note) |
| 3 | Frame |

2. Assemble in the reverse order of disassembly.

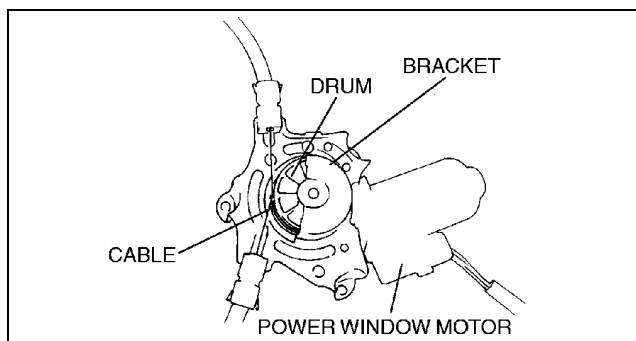


X3U912WC0

GLASS/WINDOWS/MIRRORS

Power Window Motor Disassembly Note

1. Hold the drum and the cable with the bracket to prevent them from being pulled out with the power window motor.



X3U912WC1

FRONT MANUAL WINDOW REGULATOR REMOVAL/INSTALLATION

A3U091258561W01

1. Remove the front door glass. (See 09-12-3 FRONT DOOR GLASS AND GUIDE REMOVAL/INSTALLATION.)
2. Remove the bolts and the nuts, then remove the front manual window regulator.

Tightening torque

6.87—9.80 N·m {70—100 kgf·cm, 60.8—86.7 in·lbf}

3. Install in the reverse order of removal.

REAR POWER WINDOW REGULATOR REMOVAL/INSTALLATION

A3U091272560W01

1. Disconnect the negative battery cable.
2. Remove the rear door glass. (See 09-12-4 REAR DOOR GLASS AND GUIDE REMOVAL/INSTALLATION.)
3. Disconnect the rear power window regulator.
4. Remove the bolts, then remove the rear power window regulator.

Tightening torque

6.87—9.80 N·m {70—100 kgf·cm, 60.8—86.7 in·lbf}

5. Install in the reverse order of removal.

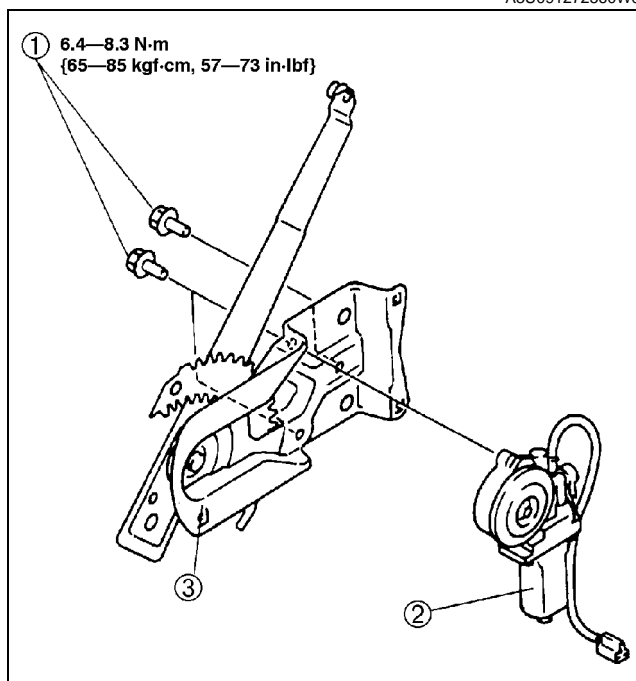
REAR POWER WINDOW REGULATOR DISASSEMBLY/ASSEMBLY

A3U091272560W02

1. Disassemble in the order indicated in the table.

| | |
|---|---|
| 1 | Bolt |
| 2 | Power window motor (See 09-12-7 Power Window Motor Disassembly Note) (See 09-12-7 Power Window Motor Assembly Note) |
| 3 | Frame |

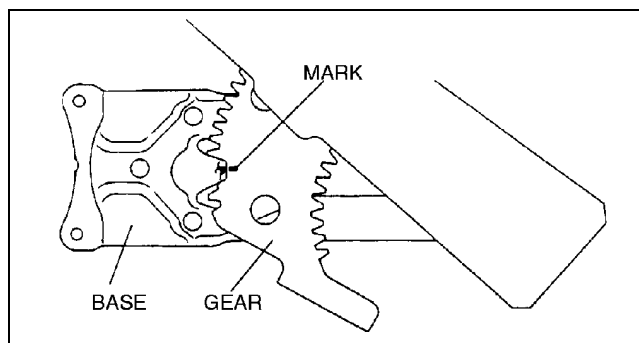
2. Assemble in the reverse order of disassembly.



Y3U912WA1

Power Window Motor Disassembly Note

1. Make marks on the gear and the base before disassembling the power window motor.



X3U912WC3

Power Window Motor Assembly Note

1. Align the marks on the gear and the base before assembling the power window motor.

REAR MANUAL WINDOW REGULATOR REMOVAL/INSTALLATION

A3U091272561W01

1. Remove the rear door glass. (See 09-12-4 REAR DOOR GLASS AND GUIDE REMOVAL/INSTALLATION.)
2. Remove the bolts, then remove the rear manual window regulator.

Tightening torque

6.87—9.80 N·m {70—100 kgf·cm, 60.8—86.7 in·lbf}

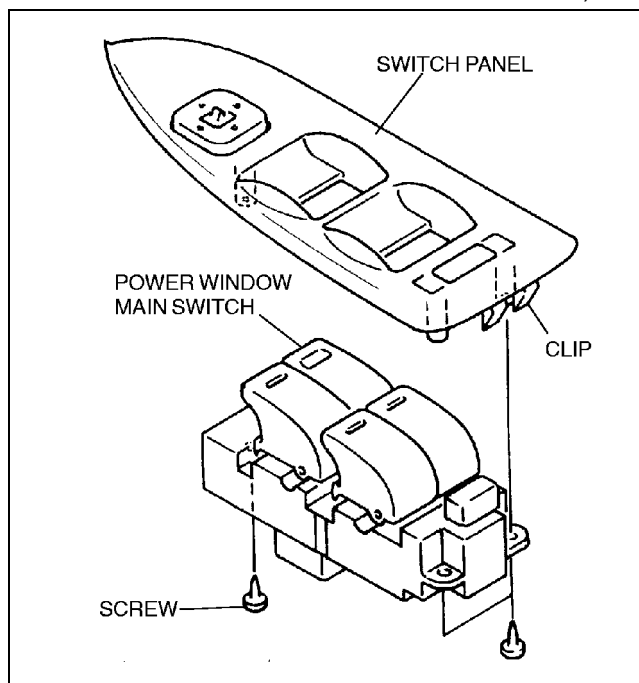
3. Install in the reverse order of removal.

POWER WINDOW MAIN SWITCH REMOVAL/INSTALLATION

A3U091266350W01

09-12

1. Disconnect the negative battery cable.
2. Remove the driver-side front door trim. (See 09-17-9 FRONT DOOR TRIM REMOVAL/INSTALLATION.)
3. Push out the clip from the reverse side of the trim, and remove the switch panel.
4. Remove the screw, and remove the power window main switch.
5. Install in the reverse order of removal.



X3U912WC4

GLASS/WINDOWS/MIRRORS

POWER WINDOW MAIN SWITCH INSPECTION

A3U091266350W02

1. Remove the power window main switch. (See 09–12–7 POWER WINDOW MAIN SWITCH REMOVAL/ INSTALLATION.)
2. When inspecting the passenger's side and the rear, turn the power-cut switch to ON.
3. Inspect for continuity between the power window main switch terminals using an ohmmeter.
 - If not as specified, replace the power window main switch.

Driver's side

○—○ : Continuity

| Switch position | Terminal | | | |
|--------------------------|----------|-----|-----|-----|
| | F | H | J | L |
| CLOSE | ○ | ○—○ | ○ | ○ |
| OFF | | ○—○ | ○—○ | ○—○ |
| MANUAL OPEN AUTO OPEN | ○ | ○—○ | ○—○ | ○ |

Z3U0912W003

Passenger's side

○—○ : Continuity

| Switch position | Terminal | | | |
|-----------------|----------|-----|-----|-----|
| | F | H | B | D |
| CLOSE | ○ | ○—○ | ○ | ○ |
| OFF | | ○—○ | ○—○ | ○—○ |
| OPEN | ○ | ○—○ | ○ | ○ |

Z3U0912W004

Rear left

○—○ : Continuity

| Switch position | Terminal | | | |
|-----------------|----------|-----|-----|-----|
| | F | H | I | K |
| CLOSE | ○ | ○—○ | ○ | ○ |
| OFF | | ○—○ | ○—○ | ○—○ |
| OPEN | ○ | ○—○ | ○ | ○ |

Z3U0912W005

Rear right

○—○ : Continuity

| Switch position | Terminal | | | |
|-----------------|----------|-----|-----|-----|
| | F | H | A | C |
| CLOSE | ○ | ○—○ | ○ | ○ |
| OFF | | ○—○ | ○—○ | ○—○ |
| OPEN | ○ | ○—○ | ○ | ○ |

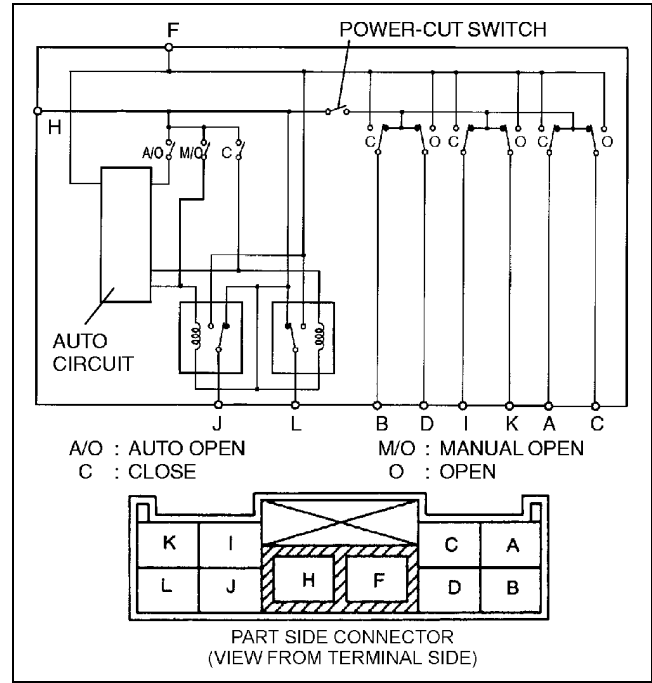
Z3U0912W006

Power-cut switch

○—○ : Continuity

| Switch position | Terminal | | | | | | | |
|-----------------|----------|-----|-----|-----|-----|-----|-----|-----|
| | H | J | L | B | D | I | K | A |
| ON | ○—○ | ○—○ | ○—○ | ○—○ | ○—○ | ○—○ | ○—○ | ○—○ |
| OFF | ○—○ | ○—○ | ○—○ | ○—○ | ○—○ | ○—○ | ○—○ | ○—○ |

Z3U0912W007



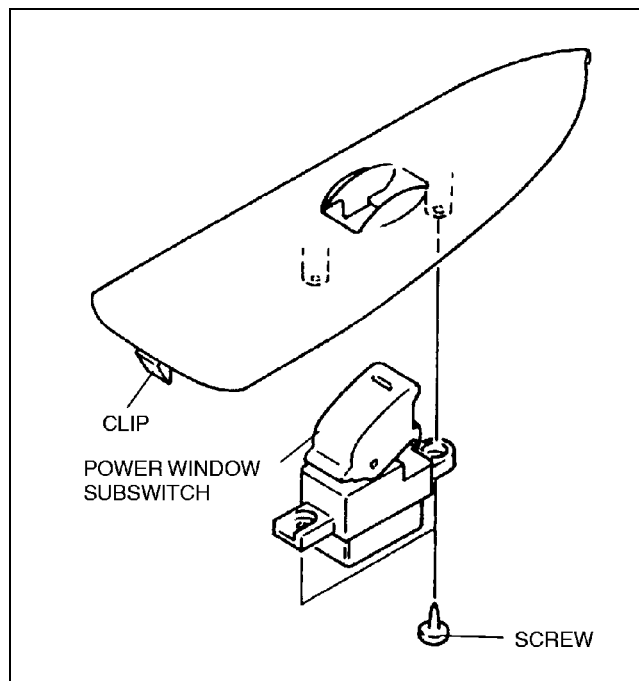
Y3U912WA2

POWER WINDOW SUBSWITCH REMOVAL/INSTALLATION

A3U091266370W01

Passenger's side

1. Disconnect the negative battery cable.
2. Remove the passenger-side front door trim. (See 09-17-9 FRONT DOOR TRIM REMOVAL/INSTALLATION.)
3. Push out the clip from the reverse side of the trim, and remove the switch panel.
4. Remove the screw, and remove the power window subswitch.
5. Install in the reverse order of removal.

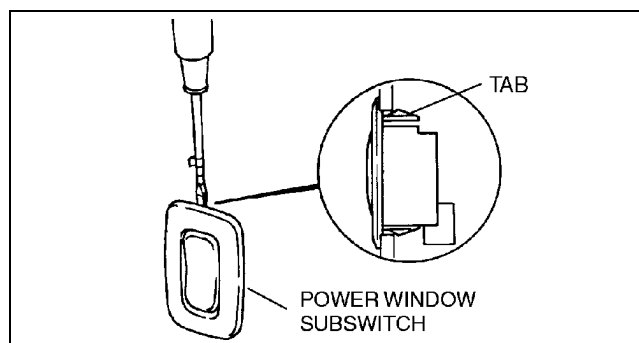


X3U912WD0

09-12

Rear

1. Disconnect the negative battery cable.
2. Remove the tab by inserting a tape-wrapped, flathead screwdriver between the switch and the rear door trim.
3. Disconnect the connector, and remove the power window subswitch.
4. Install in the reverse order of removal.



Y3U912WAK

GLASS/WINDOWS/MIRRORS

POWER WINDOW SUBSWITCH INSPECTION

A3U091266370W02

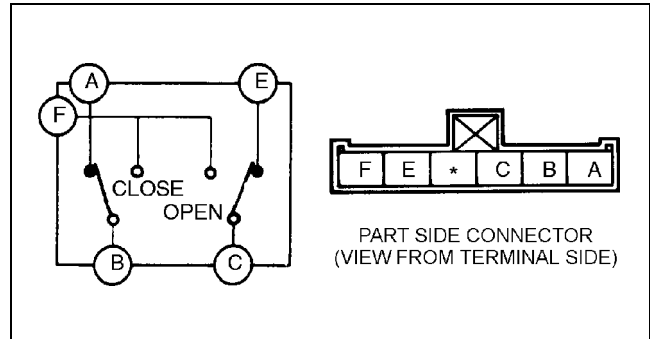
1. If inspecting the passenger's side, remove the switch panel.
2. If inspecting the rear, remove the power window subswitch.
3. Inspect for continuity between the power window subswitch terminals using an ohmmeter.
 - If not as specified, replace the power window subswitch.

Passenger's side

○—○ : Continuity

| Switch position | Terminal | | | | |
|-----------------|----------|-----|-----|-----|-----|
| | A | B | C | E | F |
| CLOSE | | ○—○ | ○—○ | | ○—○ |
| OFF | ○—○ | | ○—○ | ○—○ | |
| OPEN | ○—○ | | ○—○ | | ○—○ |

Z3U0912W008



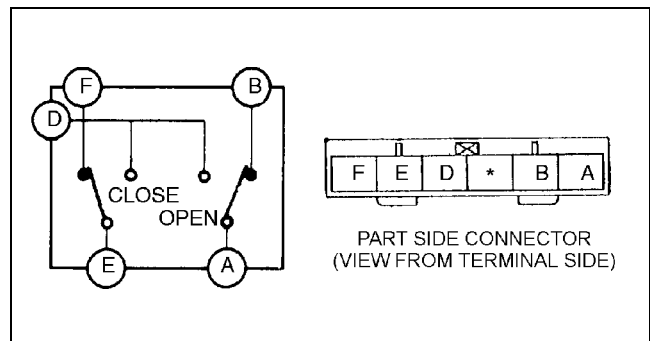
Y3U912WA3

Rear

○—○ : Continuity

| Switch position | Terminal | | | | |
|-----------------|----------|---|-----|-----|---|
| | A | B | D | E | F |
| CLOSE | ○—○ | | ○—○ | | |
| OFF | ○—○ | | | ○—○ | |
| OPEN | ○—○ | | ○—○ | ○—○ | |

Z3U0912W009

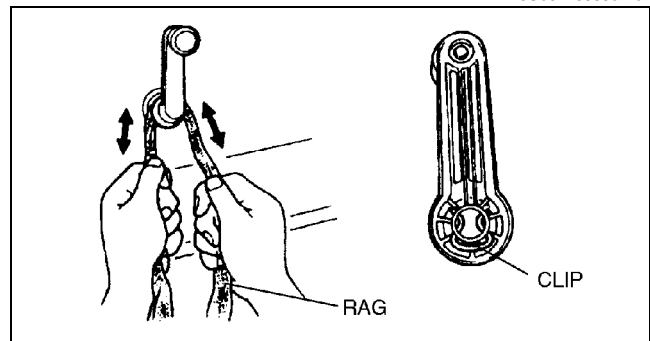


Y3U912WA4

REGULATOR HANDLE REMOVAL

A3U091258580W01

1. Remove the regulator handle clip using a rag as shown.

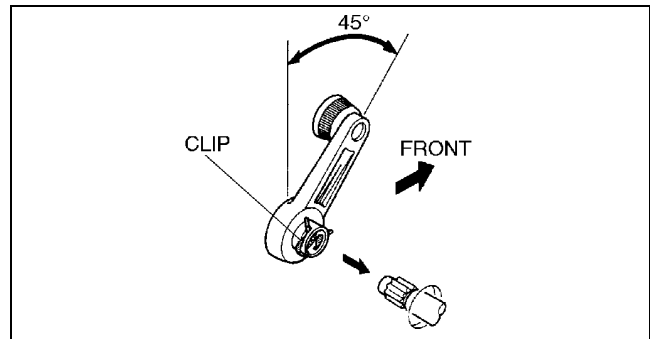


X3U912WD5

REGULATOR HANDLE INSTALLATION

A3U091258580W02

1. Install the clip in the regulator handle.
2. Close the door glass fully and push the regulator handle on as shown.



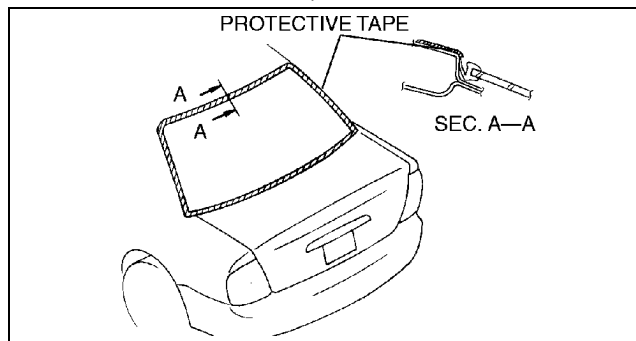
Z3U0912W002

REAR WINDOW GLASS REMOVAL

A3U091263931W01

4SD

1. Remove the headliner. (See 09-17-16 HEADLINER REMOVAL/INSTALLATION.)
2. Apply protective tape along the edge of body to protect it from damage.



X3U912WAP

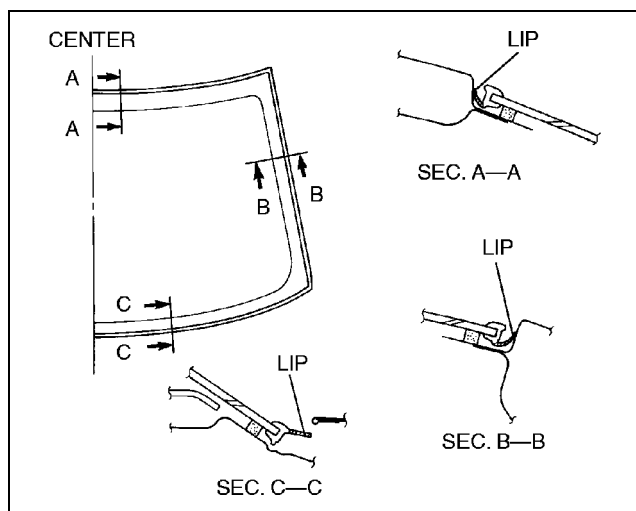
3. Remove the lip of the rear window molding using a razor.

Warning

- Using a razor with bare hands can cause injury. Always wear gloves when using a razor.

Note

- The rear window molding is a replacement part.



A3U0912W0101

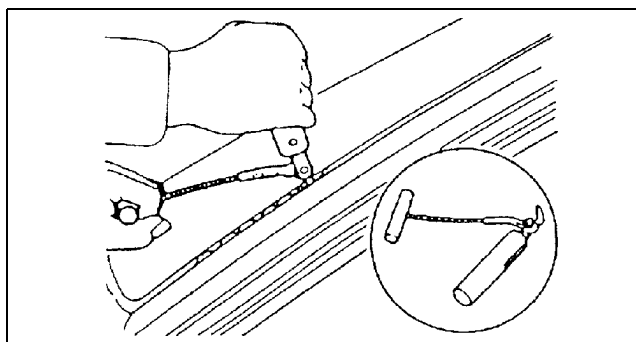
Not Reusing Rear Window Glass

1. Use a tool like that shown in the figure, and insert the blade into the sealant.

Note

- For the areas of the sealant that are difficult to cut, use the **SST** (piano wire) and follow the procedures under "Reusing rear window glass".

2. Pull through the sealant around the edge of the glass.
3. Remove the glass.



X3U912WAR

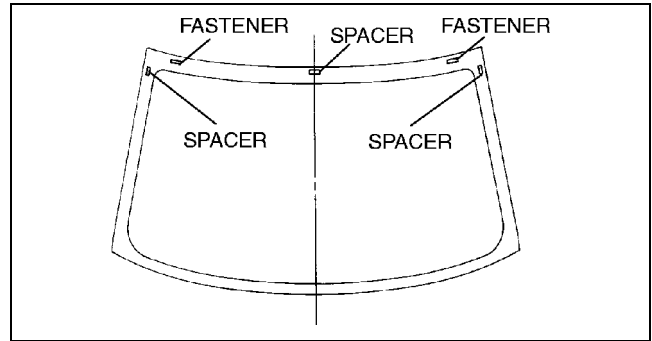
Reusing Rear Window Glass

Note

- Before removing the rear window glass from the body, mark the position of the rear window glass by affixing tape to the windshield and body panel.

GLASS/WINDOWS/MIRRORS

1. Use an awl to saw through the sealant, except where there are fasteners and spacers, from the inside of the vehicle.



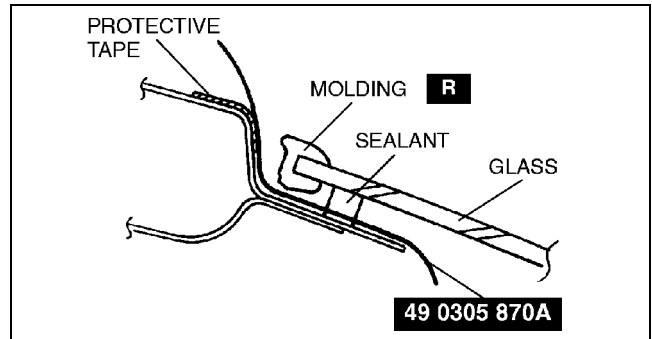
X3U912WAS

2. Pass the **SST** (piano wire) through the hole.

Warning

- Using a **SST** (piano wire) with bare hands can cause injury. Always wear gloves when using a **SST** (piano wire).

3. Wind each end of the wire around a bar.



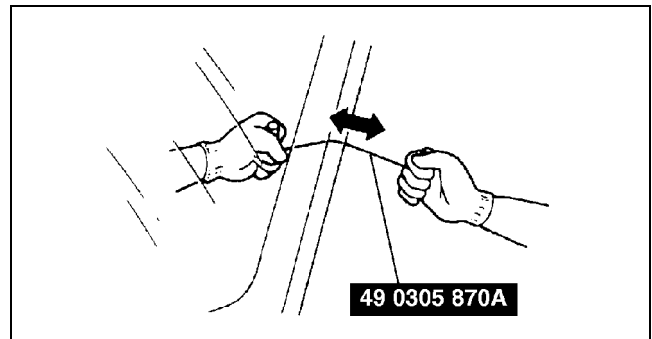
X3U912WAT

4. Working with another person, saw through the sealant around the edge of the glass, being careful not to damage the body.

Note

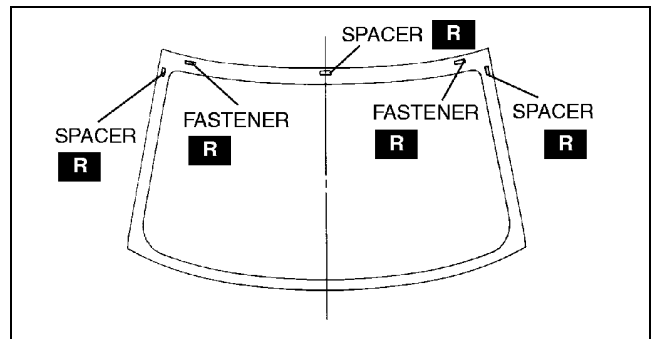
- Use a long sawing action to spread the work over the whole length of the **SST** (piano wire) to prevent it from breaking.

5. Remove the rear window glass.



X3U912WAU

6. Remove the spacers and fasteners.
7. Remove the rear window molding from the rear window glass.



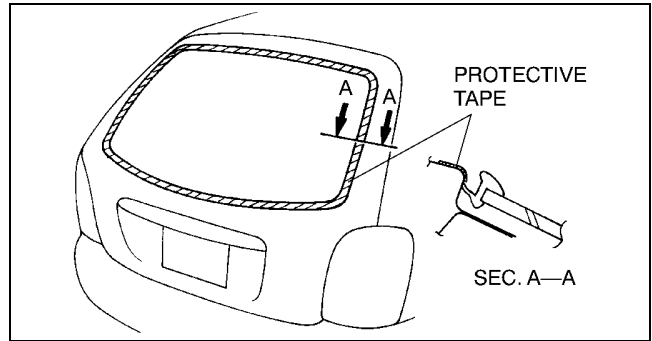
X3U912WAV

5HB

1. Remove the rear wiper arm and blade. (See 09–19–12 REAR WIPER ARM AND BLADE REMOVAL/INSTALLATION.)
2. Remove the liftgate trim.
3. Remove the rear spoiler.

GLASS/WINDOWS/MIRRORS

4. Apply protective tape along the edge of body to protect it from damage.



A3U0912W009

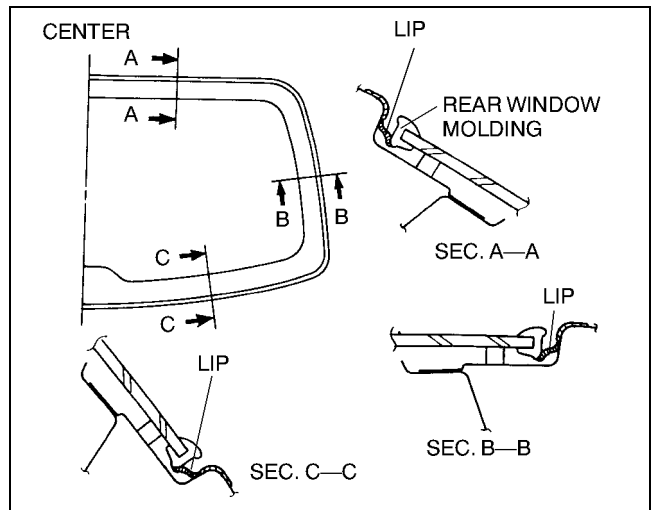
5. Remove the lip of the rear window molding using a razor.

Warning

- Using a razor with bare hands can cause injury. Always wear gloves when using a razor.

Note

- The rear window molding is a replacement part.



A3U0912W010

09-12

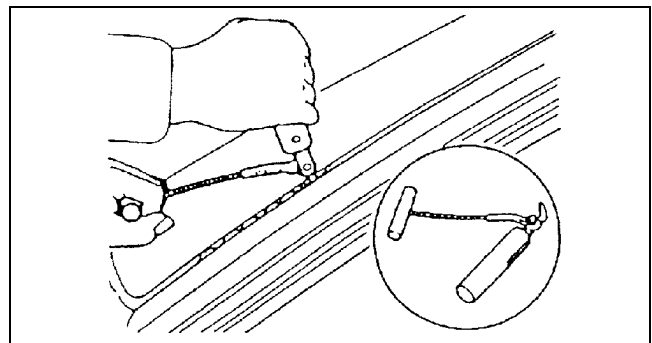
Not Reusing Rear Window Glass

1. Use a tool like that shown in the figure, and insert the blade into the sealant.

Note

- For the areas of the sealant that are difficult to cut, use the **SST** (piano wire) and follow the procedures under "Reusing rear window glass".

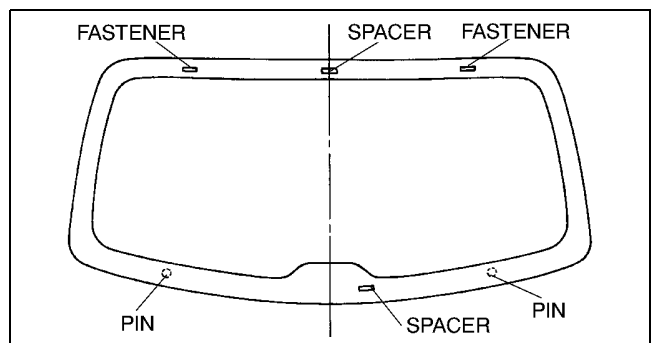
2. Pull through the sealant around the edge of the glass.
3. Remove the glass.



X3U912WAR

Reusing Rear Window Glass

1. Use an awl to saw through the sealant, except where there are fasteners and spacers, from the inside of the vehicle.



A3U0912W011

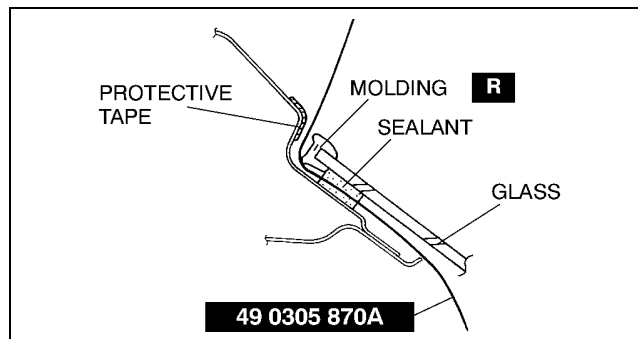
GLASS/WINDOWS/MIRRORS

- Pass the **SST** (piano wire) through the hole.

Warning

- Using a **SST** (piano wire) with bare hands can cause injury. Always wear gloves when using a **SST** (piano wire).

- Wind each end of the **SST** (piano wire) around a bar.

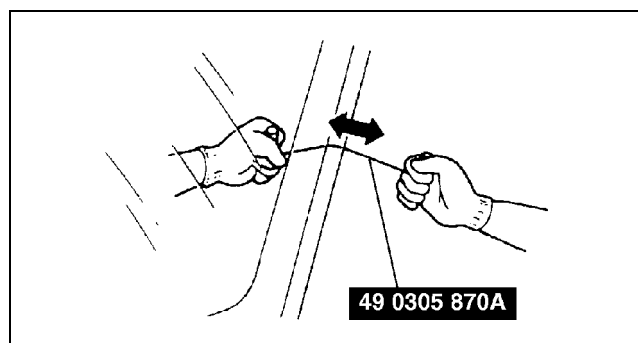


- Working with another person, saw through the sealant around the edge of the glass, being careful not to damage the body.

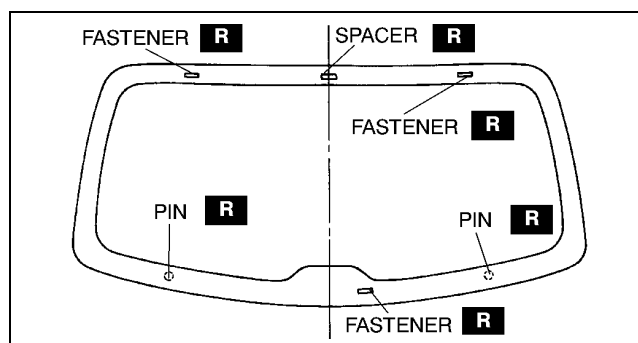
Note

- Use a long sawing action to spread the work over the whole length of the **SST** (piano wire) to prevent it from breaking.

- Remove the rear window glass.



- Remove the pins, fasteners and spacers.
- Remove the rear window molding from the rear window glass.



A3U0912W013

REAR WINDOW GLASS INSTALLATION

4SD

A3U091263931W02

Caution

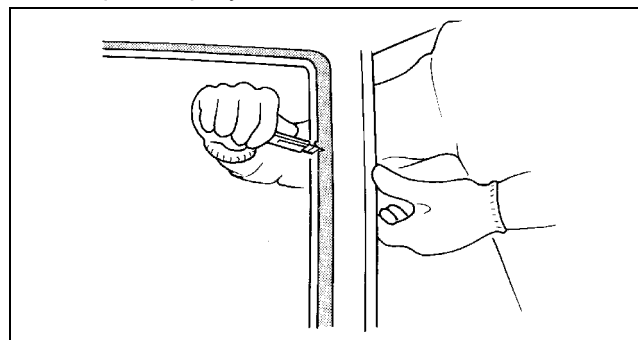
- To prevent the sealant from cracking or the glass from being pushed out by air pressure if a door is closed, open all of the windows and leave them open until the sealant has hardened.

- Cut away the old sealant using a razor so that 1—2 mm {0.04—0.07 in} thickness of sealant remains around the circumference of the frame.
 - If all the sealant has come off in any one place, apply some primer after degreasing, and allow it 30 minutes to dry. Then put on new sealant to create a 2 mm {0.08 in} layer.

Warning

- Using a razor with bare hands can cause injury. Always wear gloves when using a razor.

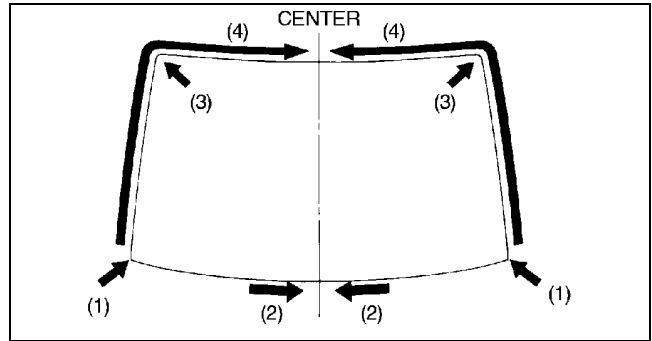
- Clean and degrease an approximately 50.0 mm {1.97 in} wide strip around the circumference of the glass and the bonding area on the body.



WSXWXX0003J

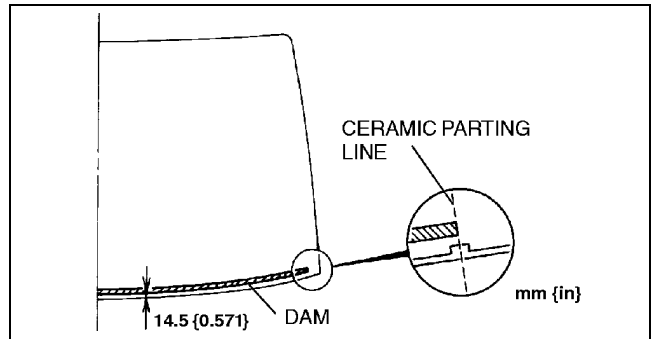
GLASS/WINDOWS/MIRRORS

3. Align the lower corners of the molding and glass. (1)
4. Install the lower, starting from the outer ends and moving inward. (2)
5. Align the marking of the molding with the ceramic parting line on the glass. (3)
6. Install the sides and upper, starting from the lower edge and moving upward and inward, being careful not to pull out the corners. (4)



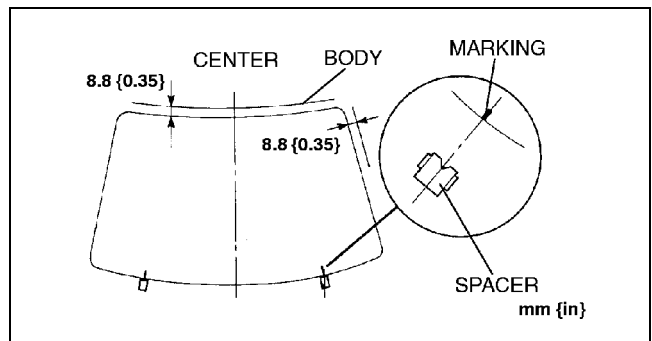
X3U912WAX

7. Securely bond a dam on the lower side of the glass **14.5 mm {0.571 in}** from the edge.
8. Install spacers into the hole.
9. Temporarily install the glass onto the body and adjust the glass-to-body clearance.
10. Make a marks on the glass directly above the V-notch of the spacers.



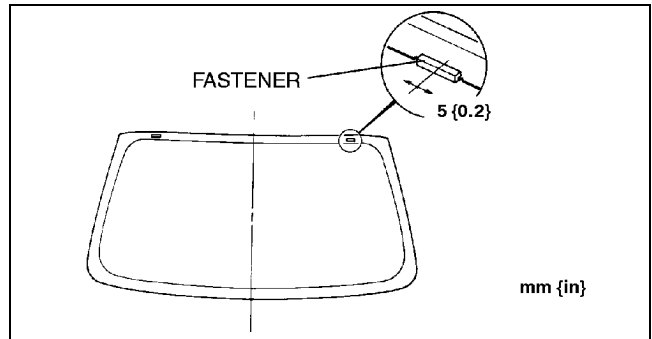
Y3U912WA5

11. Verify that the gap along the upper and side edge is **8.8 mm {0.35 in}**.
12. Remove the windshield.



X3U912WAZ

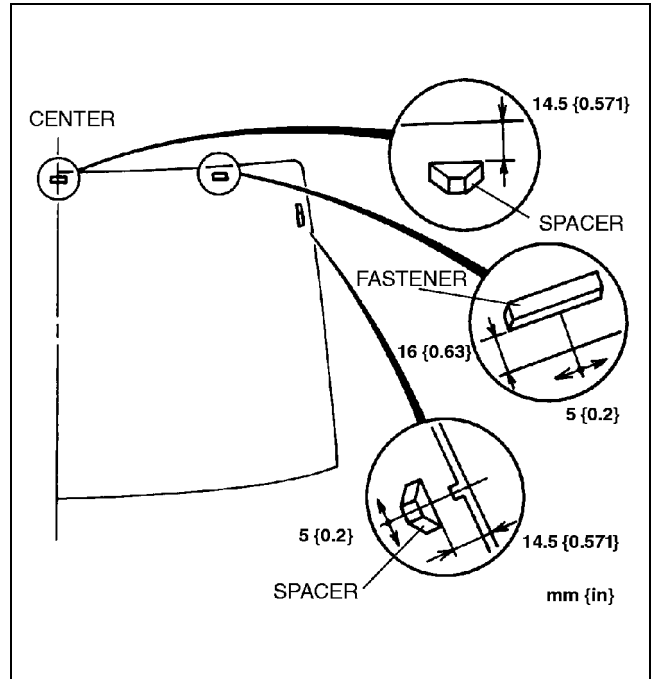
13. Install the fasteners on the body as shown.



Y3U912WAH

GLASS/WINDOWS/MIRRORS

14. Install the fasteners and spacers onto the glass as shown.



Y3U912WA6

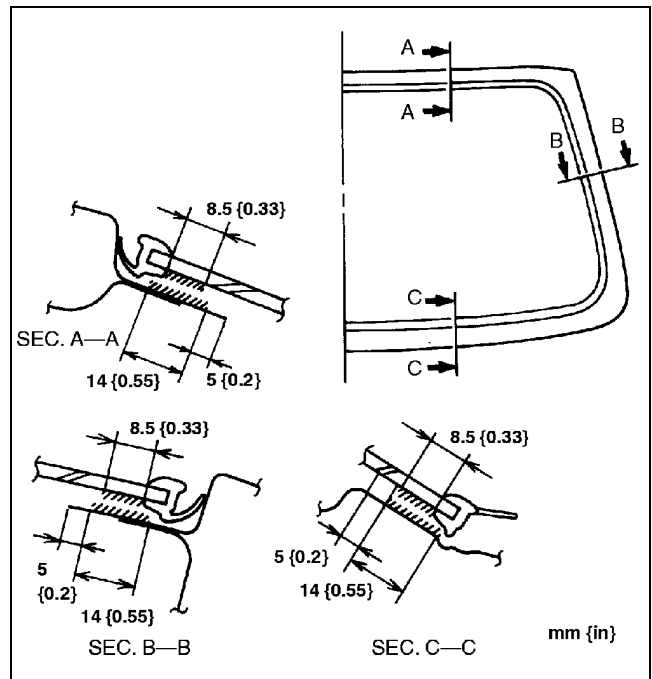
15. Use a brush to apply primer to the bonding area of the glass and body within the region shown.

Caution

- Keep the area free of dirt and grease, and do not touch the surface, otherwise the primer may not properly bond to the surface of the glass and body, which may cause leaks to occur.

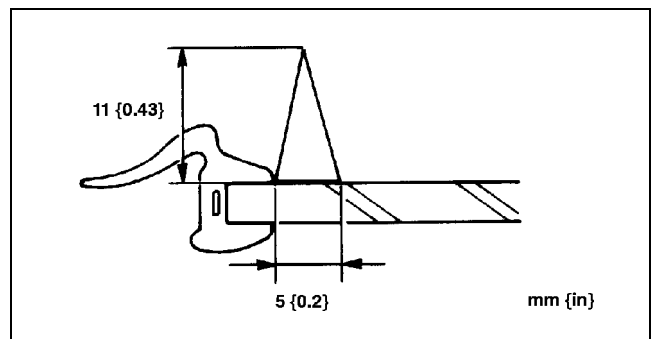
Note

- Use only glass primer on the glass, and body primer on the body and molding. Allow it to dry for **approximately 30 minutes**.



Y3U912WA7

16. Once the primer is dry, apply sealant measuring **11.0 mm {0.433 in}** in height and **5.0 mm {0.20 in}** in width around the entire circumference to fill the gap between the dam and the edge of the glass.
17. Align the marks on the glass with the V-notches in the spacers and install the glass onto the body.
18. Press firmly inward on the glass to compress the sealant.



Y3U912WA8

GLASS/WINDOWS/MIRRORS

19. Verify that the gap along the upper and side edge is **8.8 mm {0.35 in}**.

Hardening time of sealant

| Temperature | Surface hardening time | Time required until car can be put into service |
|---------------|------------------------|---|
| 5 °C {41 °F} | Approx. 1.5 h | Approx. 12 h |
| 20 °C {68 °F} | Approx. 1 h | Approx. 4 h |
| 35 °C {95 °F} | Approx. 10 min. | Approx. 2 h |

20. Install the headliner. (See 09–17–16 HEADLINER REMOVAL/INSTALLATION.)

5HB

Caution

- To prevent the sealant from cracking or the glass from being pushed out by air pressure if a door is closed, open all of the windows and leave them open until the sealant has hardened.

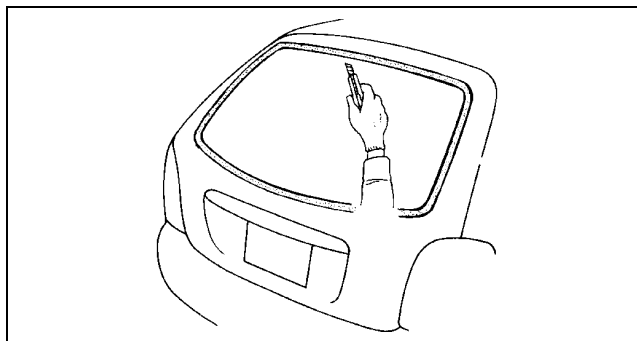
1. Cut away the old sealant using a razor so that **1—2 mm {0.04—0.07 in}** thickness of sealant remains around the circumference of the frame.

- If all the sealant has come off in any one place, apply some primer after degreasing, and allow it **30 minutes** to dry. Then put on new sealant to create a **2 mm {0.08 in}** layer.

Warning

- Using a razor with bare hands can cause injury. Always wear gloves when using a razor.

2. Clean and degrease the ceramic parting of the glass and the bonding area on the body.

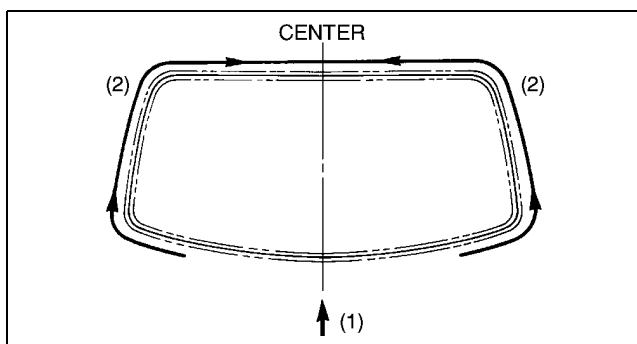


A3U0912W014

09–12

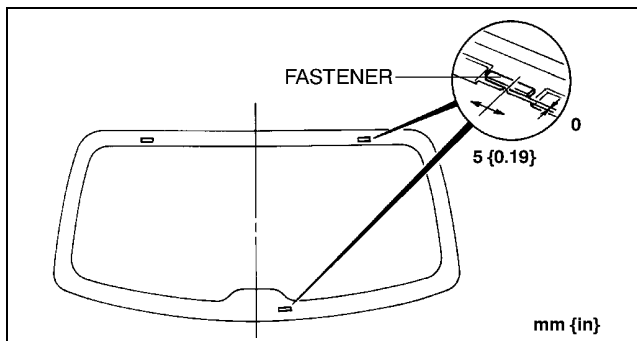
3. Align the weld joint of the molding with lower center of the glass. (1)

4. Install the molding around the entire circumference of the glass (2).



A3U0912W015

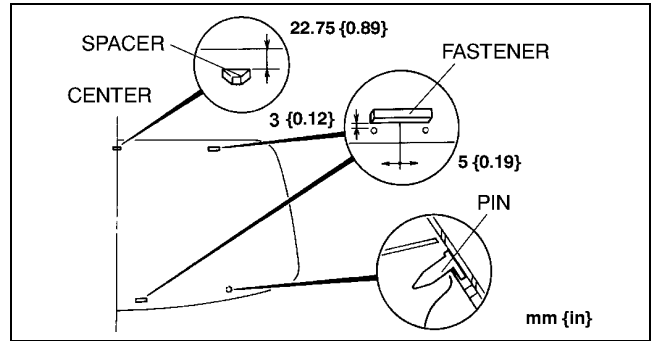
5. Install the fasteners onto the body as shown.



A3U0912W016

GLASS/WINDOWS/MIRRORS

6. Install the spacer, pins and fasteners onto the glass as shown.



A3U0912W017

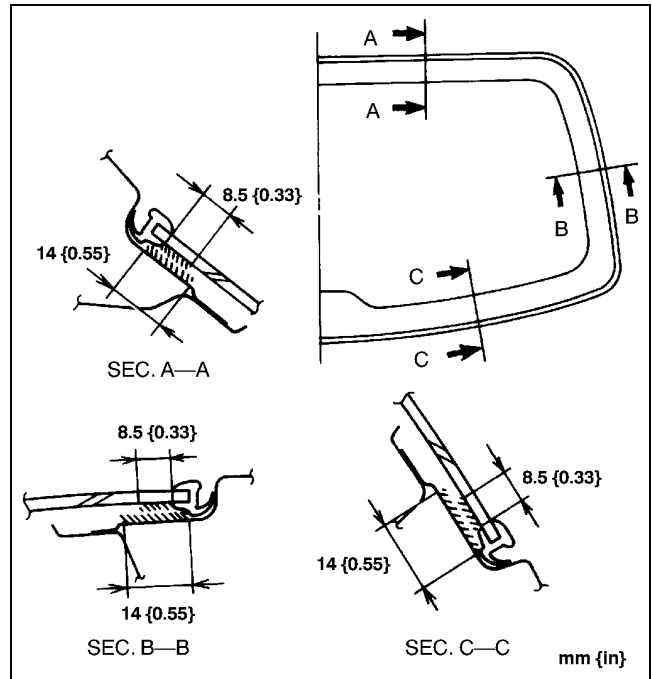
7. Use a brush to apply primer to the bonding area of the glass and body within the region shown.

Caution

- Keep the area free of dirt and grease, and do not touch the surface, otherwise the primer may not properly bond to the surface of the glass and body, which may cause leaks to occur.

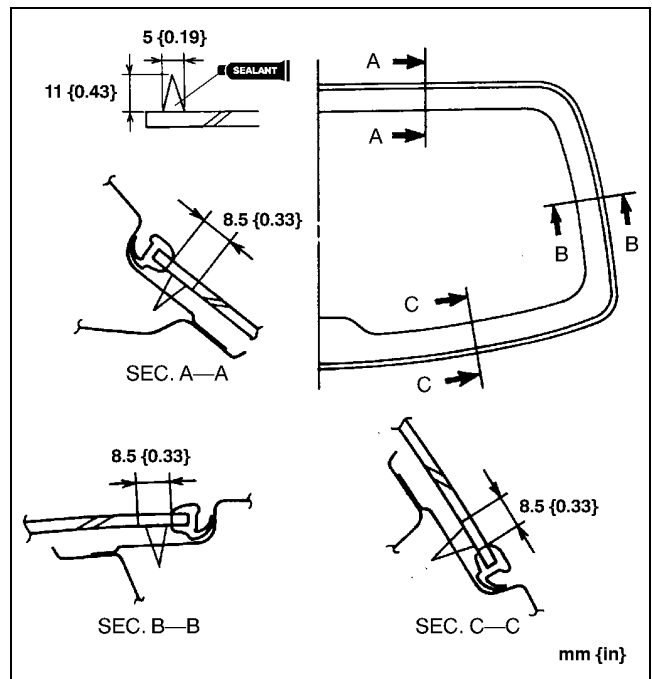
Note

- Use only glass primer on the glass, and body primer on the body and molding. Allow it to dry for **approximately 30 minutes**.



A3U0912W018

8. Once the primer is dry, apply sealant measuring **11.0 mm {0.433 in}** in height and **5.0 mm {0.20 in}** in width around the entire circumference to fill the gap between the dam and the edge of the glass.
9. Align the pins and install the glass onto the body.



A3U0912W019

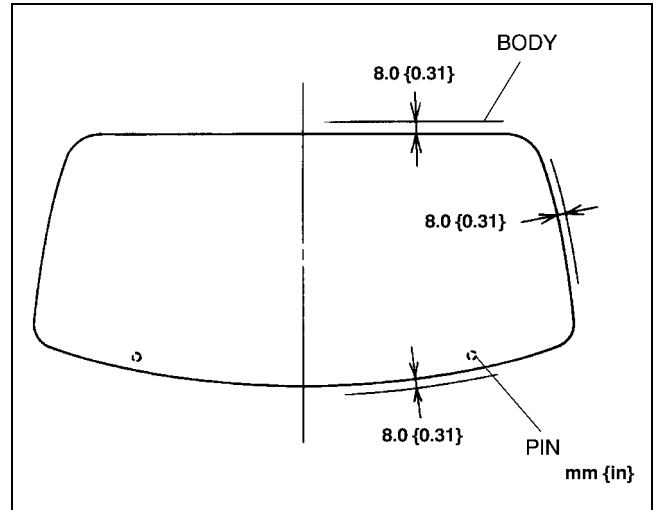
GLASS/WINDOWS/MIRRORS

10. Verify that the gap along the upper, side and lower edge is **8.8 mm {0.35 in}**.
11. Press firmly inward on the glass to compress the sealant.

Hardening time of sealant

| Temperature | Surface hardening time | Time required until car can be put into service |
|---------------|------------------------|---|
| 5 °C {41 °F} | Approx. 1.5 h | Approx. 12 h |
| 20 °C {68 °F} | Approx. 1 h | Approx. 4 h |
| 35 °C {95 °F} | Approx. 10 min. | Approx. 2 h |

12. Install the rear spoiler.
13. Install the liftgate trim.



A3U0912W020

WINDSHIELD REMOVAL

A3U091263900W01

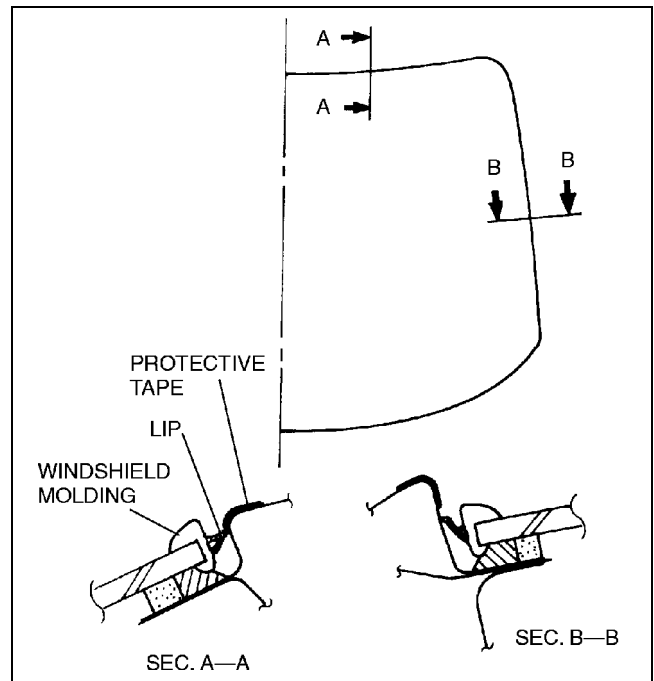
1. Remove the rearview mirror. (See 09–12–30 REARVIEW MIRROR REMOVAL.)
2. Remove the cowl grille. (See 09–16–1 COWL GRILLE REMOVAL/INSTALLATION.)
3. Remove the headliner. (See 09–17–16 HEADLINER REMOVAL/INSTALLATION.)
4. Apply protective tape along the edge of the body to protect it from damage.
5. Apply protective tape to the dashboard to protect it from damage.
6. Cut the lip of the windshield molding using a razor.

Warning

- Using a razor with bare hands can cause injury. Always wear gloves when using a razor.

Note

- The windshield molding is a replacement part.



X3U912WA7

09–12

Not Reusing Windshield

1. Remove the base. (See 09–12–31 BASE REMOVAL.)

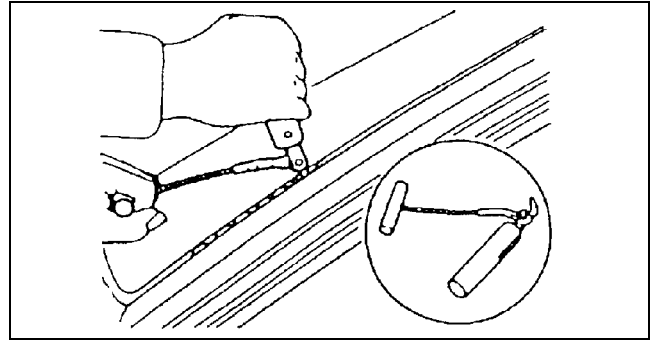
GLASS/WINDOWS/MIRRORS

2. Use a tool like that shown in the figure, and insert the blade into the sealant.

Note

- For the areas of the sealant that are difficult to cut, use the **SST** (piano wire) and follow the procedures under "Reusing Windshield".

3. Pull through the sealant around the edge of the glass.
4. Remove the glass.



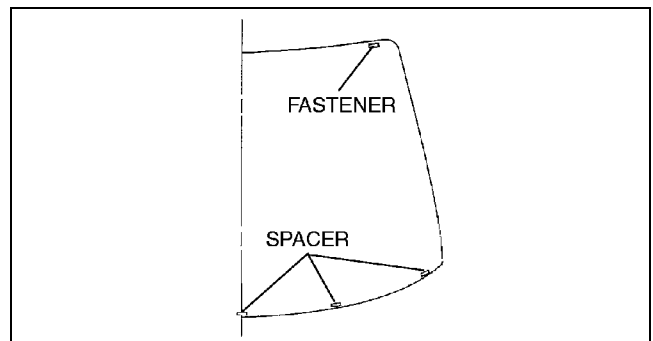
X3U912WA8

Reusing Windshield

Note

- Before removing the windshield from the body, mark the position of the windshield by affixing tape to the windshield and body panel.

1. Make a hole through the sealant except fasteners and spacers from the inside of the vehicle using an awl.



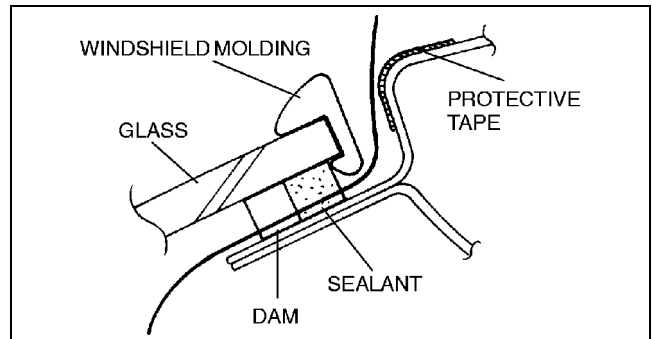
X3U912WA9

2. Pass the **SST** (piano wire) through the hole.

Warning

- Using a **SST** (piano wire) with bare hands can cause injury. Always wear gloves when using a **SST** (piano wire).

3. Wind each end of the **SST** (piano wire) around a bar.



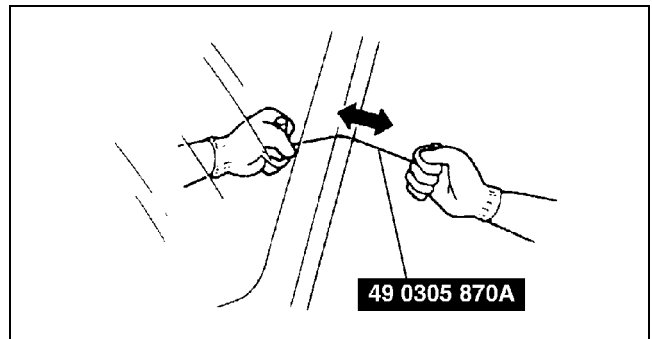
X3U912WAA

4. Working with another person, saw through the sealant around the edge of the glass.

Note

- Use a long sawing action to spread the work over the whole length of the **SST** (piano wire) to prevent it from breaking.

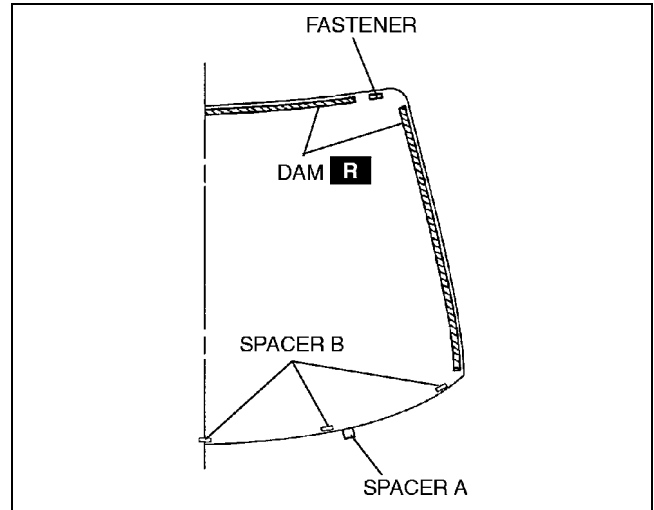
5. Remove the windshield.



X3U912WAB

GLASS/WINDOWS/MIRRORS

6. Remove the dam from the windshield.
7. Remove the fasteners.
8. Remove spacers A and B.



Z3U0912W011

WINDSHIELD INSTALLATION

A3U091263900W02

Caution

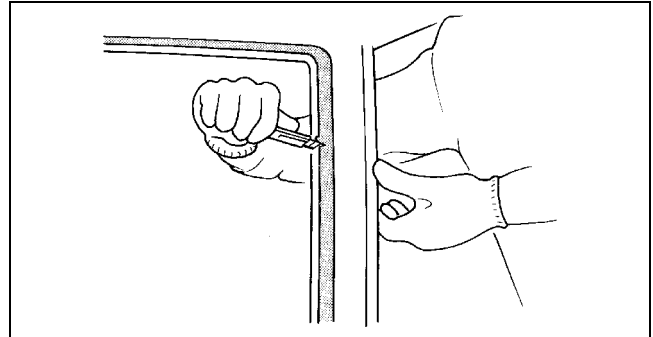
- To prevent the sealant from cracking or the glass from being pushed out by air pressure if a door is closed, open all of the windows and leave them open until the sealant has hardened.

1. Cut away the old sealant using a razor so that **1—2 mm {0.04—0.07 in}** thickness of sealant remains around the circumference of the frame.
 - If all the sealant has come off in any one place, apply some primer after degreasing, and allow it **30 minutes** to dry. Then put on new sealant to create **2 mm {0.08 in}** layer.

Warning

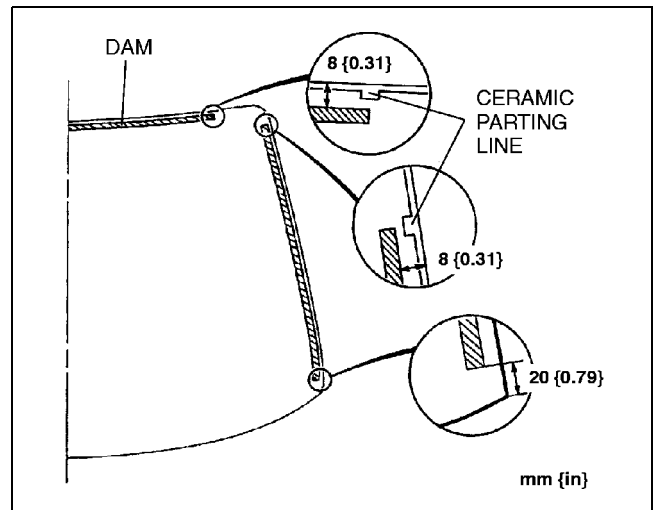
- Using a razor with bare hands can cause injury. Always wear gloves when using a razor.

2. Clean and degrease an **approximately 50.0 mm {1.97 in}** wide strip around the circumference of the glass and the bonding area on the body.



WSXWXX0003J

3. Securely bond a dam along the circumference of the glass **8.0 mm {0.31 in}** from the edge.

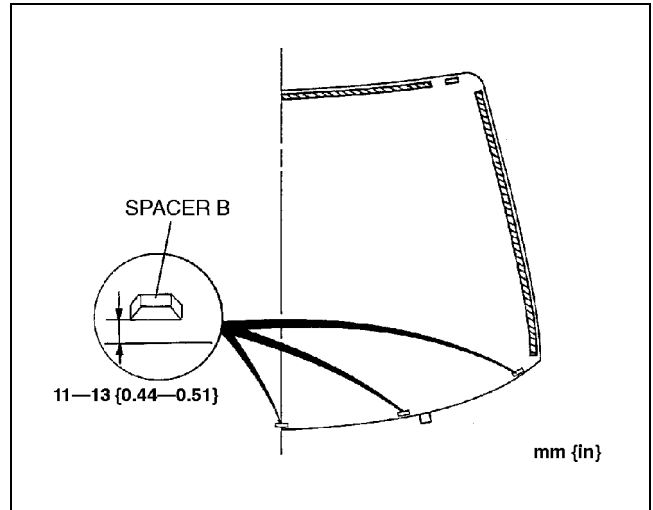


Z3U0912W012

09-12

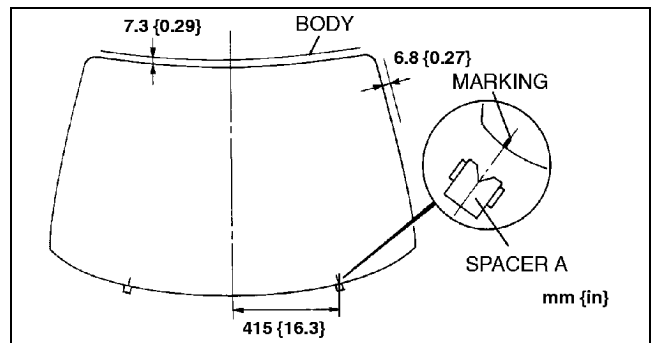
GLASS/WINDOWS/MIRRORS

4. Install the spacers B on the glass as shown.



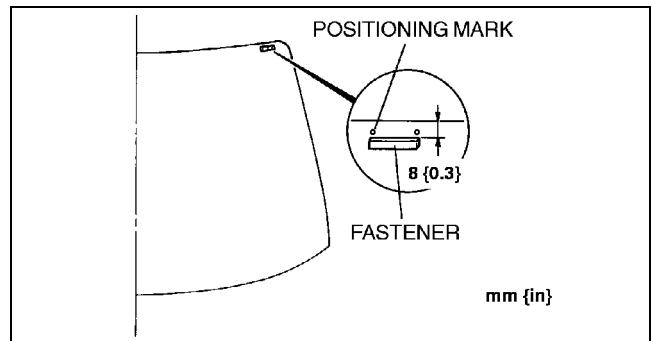
Z3U0912W013

5. Install spacers A into the hole.
6. Temporarily install the glass onto the body and adjust the glass-to-body clearance.
7. Make a mark on the glass directly above the V-notch of spacers A.
8. Verify that the gap along the upper edge is **7.3 mm {0.29 in}**, and that the side edge is **6.8 mm {0.27 in}**.
9. Remove the windshield.



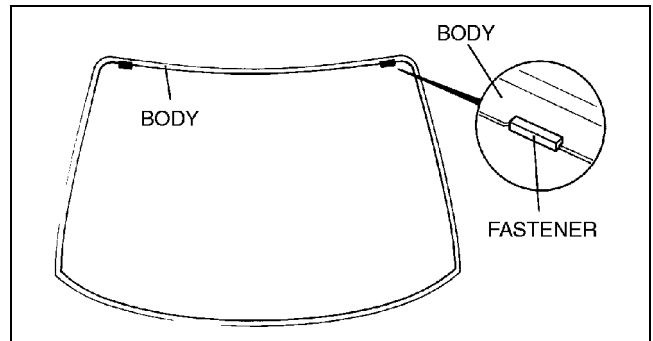
X3U912WAG

10. Install the fasteners on the glass marks as shown.



Y3U912WAA

11. Install the fasteners on the body as shown.



X3U912WAH

GLASS/WINDOWS/MIRRORS

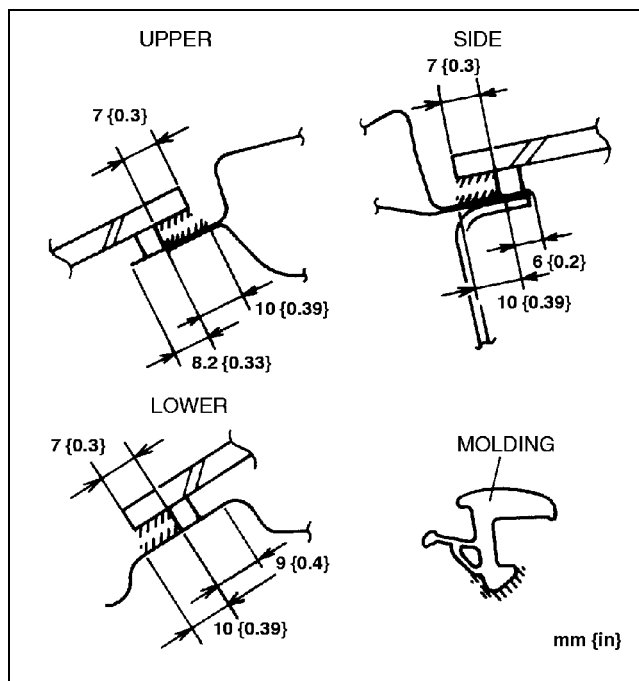
12. Use a brush to apply primer to the bonding area of the glass, the body, and the molding within the area shown.

Caution

- Keep the area free of dirt and grease, and do not touch the surface, otherwise the primer may not properly bond to the surface of the glass and body, which may cause leaks to occur.

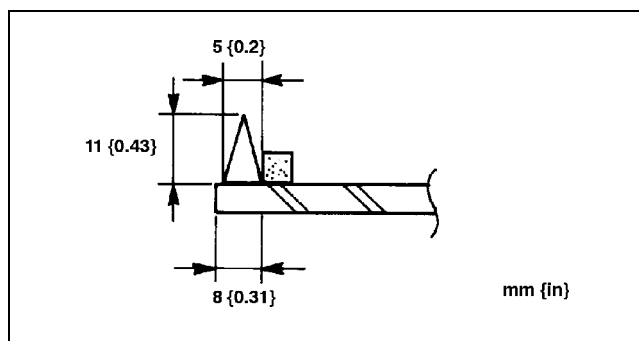
Note

- Use only glass primer on the glass, and body primer on the body and the molding. Allow it to dry for **approximately 30 minutes**.



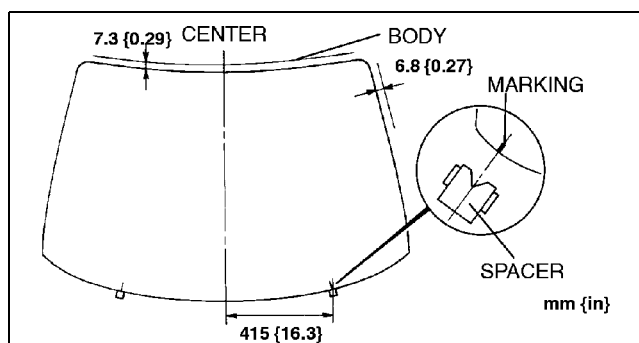
Y3U912WAB

13. Once the primer is dry, apply sealant around the entire circumference to fill the gap between the dam and the edge of the glass measuring **11.0 mm {0.433 in}** high and **5.0 mm {0.20 in}** wide.
14. Align the glass marks with the V-notches in the spacers and install the glass onto the body.
15. Press firmly inward on the glass to compress the sealant.



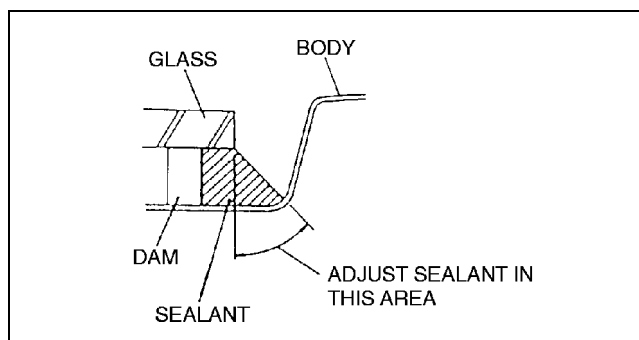
Y3U912WAC

16. Verify that the gap along the upper edge is **7.3 mm {0.29 in}** and side edge is **6.8 mm {0.27 in}**.



X3U912WAL

17. Use a scraper to smooth away any sealant that oozes out. Add more sealant to any points of poor contact. Adjust the sealant as shown if necessary.



X3U912WAM

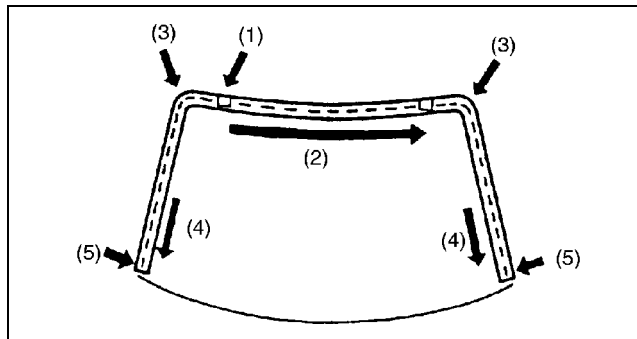
GLASS/WINDOWS/MIRRORS

18. Before the surface of the sealant has hardened, install the windshield molding.

Hardening time of sealant

| Temperature | Surface hardening time | Time required until car can be put into service |
|---------------|------------------------|---|
| 5 °C {41 °F} | Approx. 1.5 h | Approx. 12 h |
| 20 °C {68 °F} | Approx. 1 h | Approx. 4 h |
| 35 °C {95 °F} | Approx. 10 min. | Approx. 2 h |

19. Align the marking on the molding with the inner side of the body groove. (1)
20. Install the upper edge starting from the outer ends and moving inward. (2)
21. Install the corners. (3)
22. Install the windshield molding installation clips to the cowl grille hole. (4)
23. Install the sides, starting from the upper edge and moving downward, being careful not to pull out the corners. (5)
24. Use isopropyl alcohol to remove any excess sealant.
25. Install the headliner. (See 09-17-16 HEADLINER REMOVAL/INSTALLATION.)
26. Install the cowl grille. (See 09-16-1 COWL GRILLE REMOVAL/INSTALLATION.)
27. Install the base. (See 09-12-31 BASE INSTALLATION.)
28. Install the rearview mirror. (See 09-12-31 REARVIEW MIRROR INSTALLATION.)

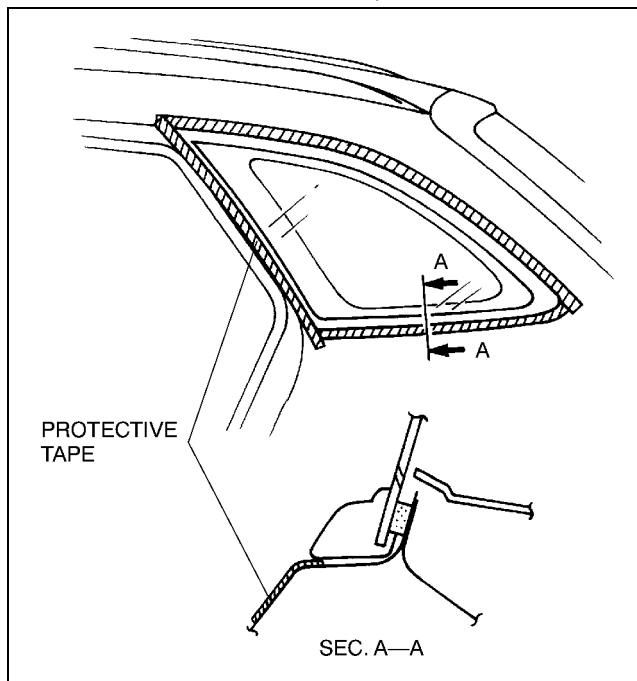


X3U912WAN

QUARTER WINDOW GLASS REMOVAL

A3U091262580W01

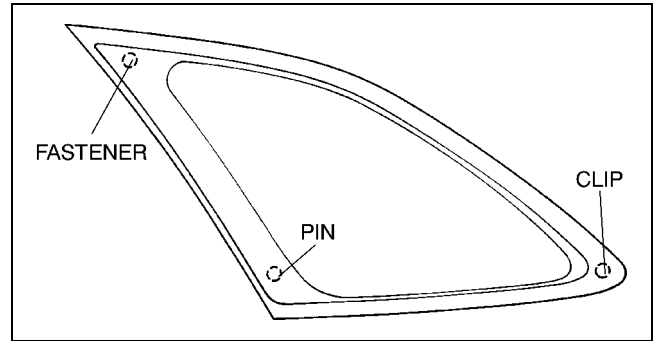
1. Remove the C-pillar trim. (See 09-17-11 C-PILLAR TRIM REMOVAL/INSTALLATION.)
2. Apply protective tape along the edge of body and quarter window glass.



A3U0912W001

GLASS/WINDOWS/MIRRORS

3. Make a hole through the sealant except fastener, pin and clip from the inside of the vehicle using an awl.



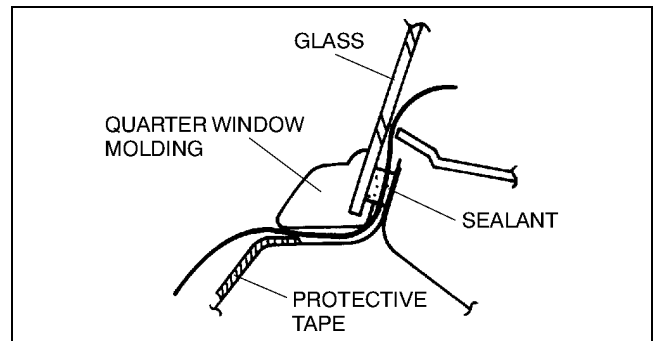
A3U0912W002

4. Pass the **SST** (piano wire) through the hole.

Warning

- Using a **SST** (piano wire) with bare hands can cause injury. Always wear gloves when using a **SST** (piano wire).

5. Wind each end of the **SST** (piano wire) around a bar.

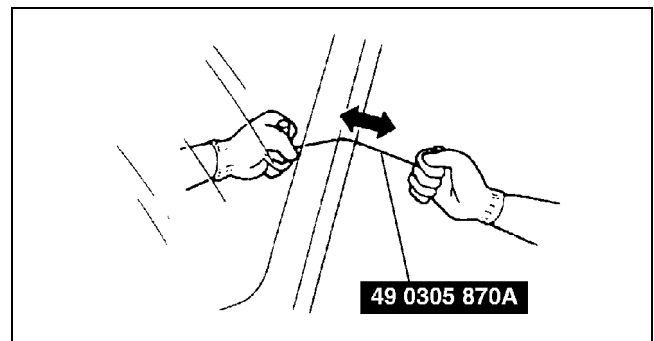


A3U0912W003

6. Working with another person, saw through the sealant around the edge of the glass, being careful to not damage the vehicle body.

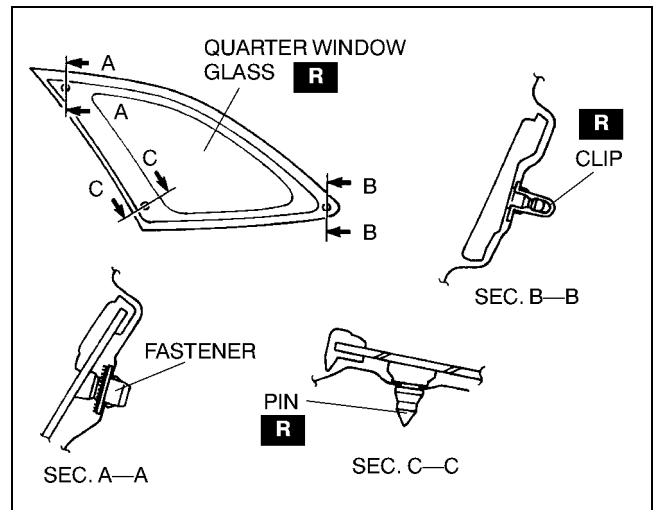
Note

- Use a long sawing action to spread the work over the whole length of the **SST** (piano wire) to prevent it from breaking.



X3U912WAB

7. Pull the quarter window glass, then disengage the fastener, pin and clip.
8. Remove the fastener and pin from the body.



A3U0912W004

09-12

QUARTER WINDOW GLASS INSTALLATION

A3U091262580W02

Caution

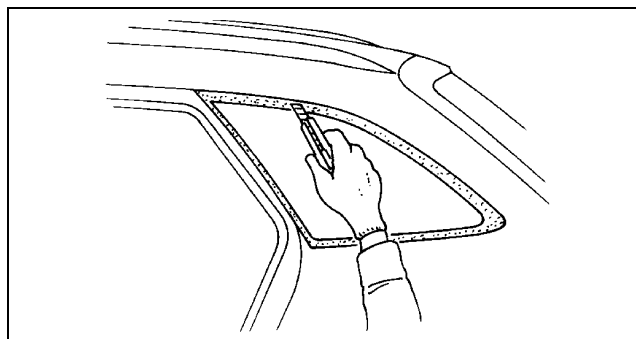
- To prevent the sealant from cracking or the glass from being pushed out by air pressure if a door is closed, open all of the windows and leave them open until the sealant has hardened.

1. Cut away the old sealant using a razor so that 1—2 mm {0.04—0.07 in} thickness of sealant remains around the circumference of the frame.
 - If all the sealant has come off in any one place, apply some primer after degreasing, and allow it 30 minutes to dry. Then put on new sealant to create 2 mm {0.08 in} layer.

Warning

- Using a razor with bare hands can cause injury. Always wear gloves when using a razor.

2. Clean and degrease the ceramic part of the glass and around the circumference of the bonding area on the body.



A3U0912W005

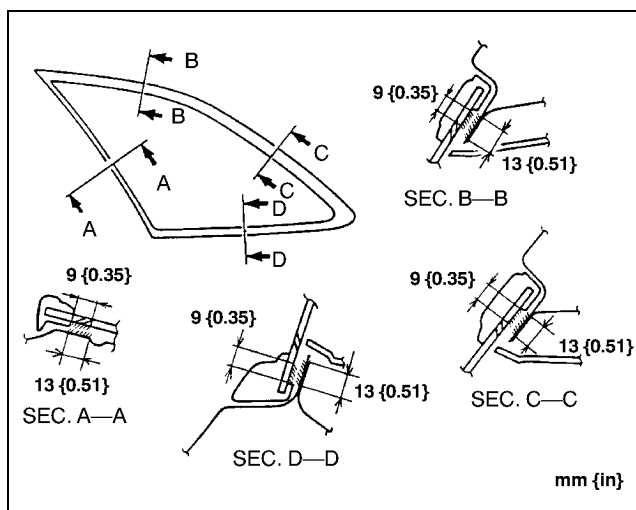
3. Use a brush to apply primer to the bonding area of the glass and body, within the region shown.

Caution

- Keep the area free of dirt and grease, and do not touch the surface or primer may not properly bond to the surface of the glass and body, which may cause leaks to occur.

Note

- Use only glass primer on the glass, and body primer on the body. Allow it to dry for approximately 30 minutes.

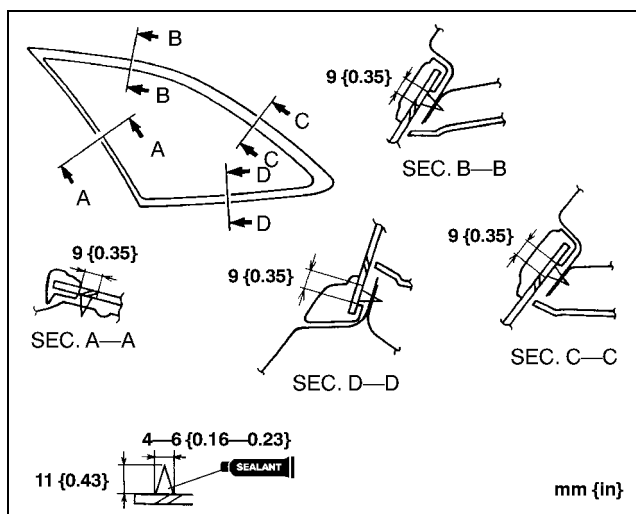


A3U0912W006

4. Once the primer is dry, apply sealant around the entire circumference to fill the gap between the dam and the edge of the glass measuring 11.0 mm {0.433 in} high and 5.0 mm {0.20 in} wide.
5. Align the fasteners and install the glass onto the body.
6. Verify the clearance as shown.

Clearance

- a: 0 mm {0 in}
b: 2.0 mm {0.08 in}



A3U0912W007

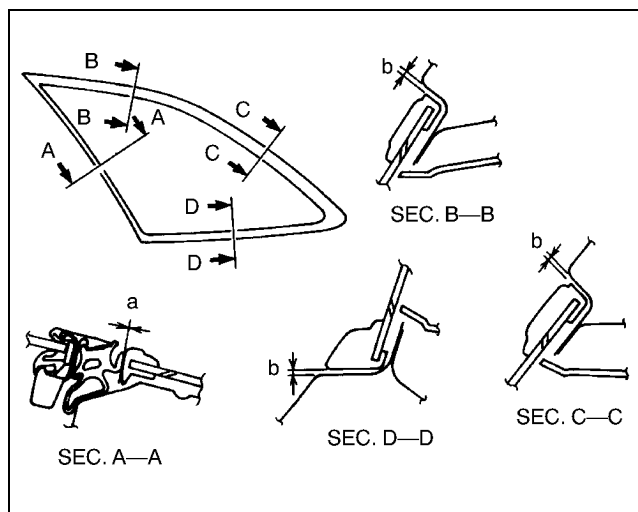
GLASS/WINDOWS/MIRRORS

- Press firmly inward on the glass to compress the sealant.

Hardening time of sealant

| Temperature | Surface hardening time | Time required until car can be put into service |
|---------------|------------------------|---|
| 5 °C {41 °F} | Approx. 1.5 h | Approx. 12 h |
| 20 °C {68 °F} | Approx. 1 h | Approx. 4 h |
| 35 °C {95 °F} | Approx. 10 min. | Approx. 2 h |

- Check for water leaks. If a leak is found, wipe the water off well and repeat the installation.
- Install the C-pillar trim. (See 09-17-11 C-PILLAR TRIM REMOVAL/INSTALLATION.)



A3U0912W008

FILAMENT INSPECTION

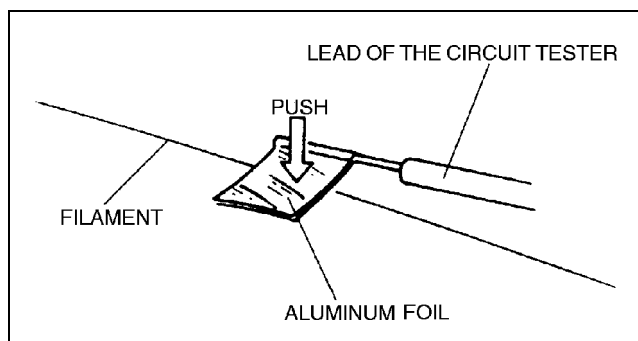
A3U091263931W03

- Turn the ignition switch to ON position.
- Turn the rear window defroster switch to ON.
- Connect the positive (+) lead of the voltmeter to the positive side of each filament and the negative (-) lead to ground.

Caution

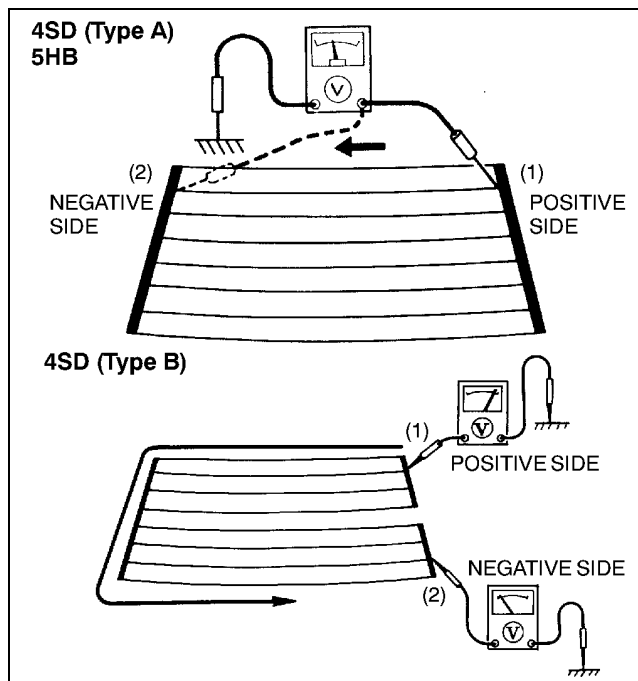
- Directly touching the rear window defroster filament with the lead of the circuit tester will damage it. Wrap aluminum foil around the end of the lead and test the filament by touching it with the foil.

- Gradually, slide the positive (+) lead from the positive side to the negative side and measure the voltage. Verify that the voltage decreases accordingly.
 - If the voltage is not as specified or it changes rapidly, the filament is faulty. Repair the filament.



X3U912WA1

| Measurement place | Voltage (Reference value) |
|-------------------|---------------------------|
| (1)→(2) | Approx. 12 V→ Approx. 0 V |



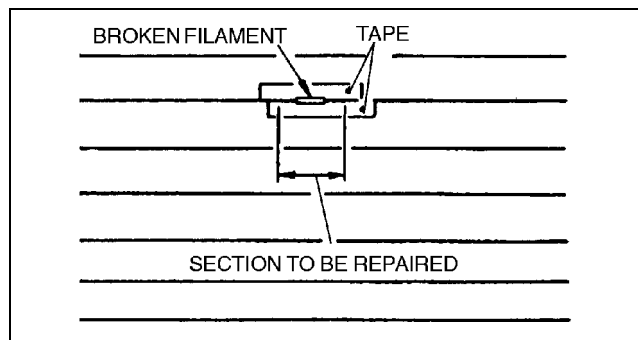
A3U0912W021

GLASS/WINDOWS/MIRRORS

FILAMENT REPAIR

A3U091263931W04

1. Use isopropyl alcohol to clean around the damaged section of the filament.
2. Attach tape above and below the damaged section of the filament.
3. Using a small brush or marking pen, repair the filament with silver paint or equivalent.
4. After **approximately 2—3 minutes**, carefully remove the tape without disturbing the repaired area.
5. Use a hot air blower heated to **150 °C {302 °F}** for **30 minutes** or let the paint set for **24 hours** at **25 °C {77 °F}** to allow it to dry completely.



X3U912WA4

Caution

- Do not use the rear window defroster until the paint is completely dry. It may cause other malfunctions if it is used before the paint is dry.

REAR WINDOW DEFROSTER SWITCH INSPECTION

A3U091266460W01

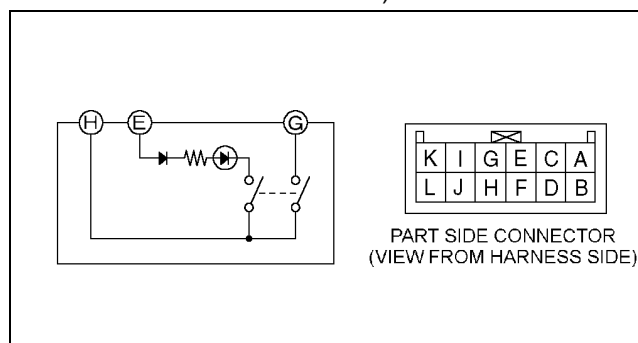
1. Remove the climate control unit. (See 07–40–9 CLIMATE CONTROL UNIT REMOVAL.)
2. Inspect for continuity between the rear window defroster switch terminals using an ohmmeter.

○—○ : Continuity

| Switch position | Terminal | |
|-----------------|----------|-----|
| | E | J |
| OFF | | |
| ON | ○—○ | ○—○ |

Z3U0912W019

3. Connect battery positive voltage to terminal L and ground to terminal E.
4. Turn the rear window defroster switch to ON.
5. Verify that the LED illuminates.
 - If not as specified, replace the climate control unit.



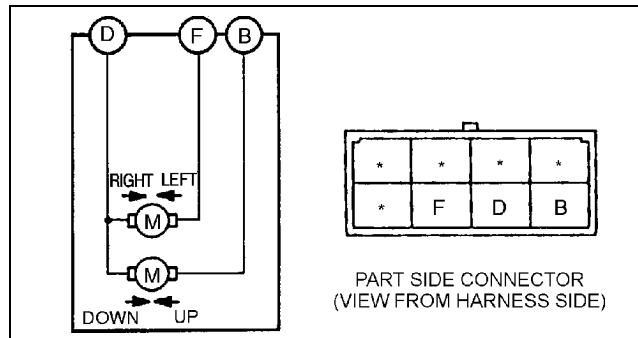
Z3U0912W018

POWER OUTSIDE MIRROR INSPECTION

A3U091269110W01

1. Disconnect the power outside mirror connector. (See 09–12–28 POWER OUTSIDE MIRROR REMOVAL/INSTALLATION.)
2. Apply battery positive voltage to the power outside mirror and inspect the operation of the power outside mirror.
 - If not as specified, replace the power outside mirror.

| Terminal | | Mirror operation |
|----------|-----|------------------|
| B+ | GND | |
| B | D | Up |
| D | B | Down |
| F | D | Left |
| D | F | Right |



Z3U0912W001

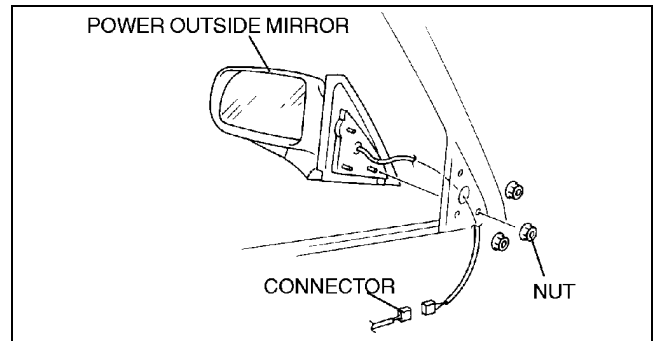
POWER OUTSIDE MIRROR REMOVAL/INSTALLATION

A3U091269110W02

1. Disconnect the negative battery cable.
2. Remove the front door trim. (See 09–17–9 FRONT DOOR TRIM REMOVAL/INSTALLATION.)
3. Partially peel off the door screen.
4. Disconnect the connector.

GLASS/WINDOWS/MIRRORS

5. Remove the nuts, and then remove the power outside mirror.
6. Install in the reverse order of removal.

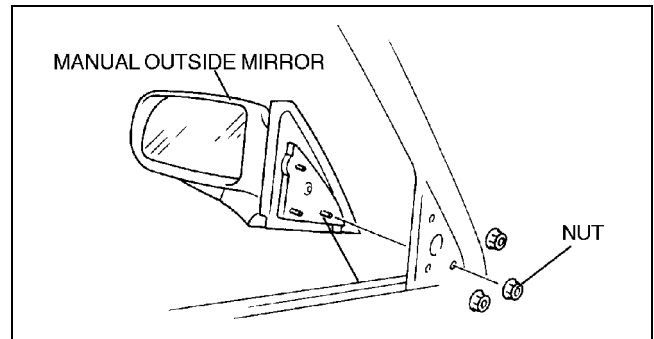


X3U912WD8

MANUAL OUTSIDE MIRROR REMOVAL/INSTALLATION

A3U091269100W01

1. Remove the inner garnish.
2. Remove the nuts, and then remove the manual outside mirror.
3. Install in the reverse order of removal.

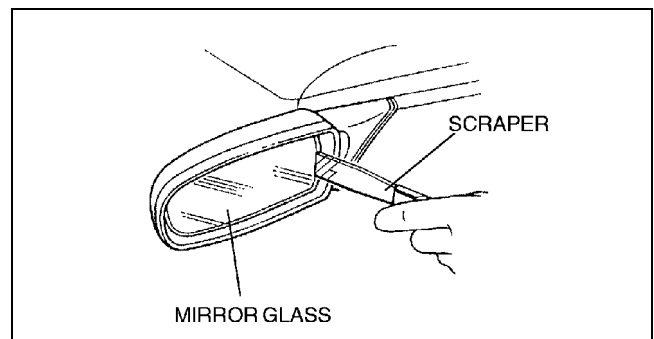


X3U912WD7

OUTSIDE MIRROR GLASS REMOVAL

A3U091269111W01

1. Warm the frame and the mirror glass to **approximately 70 °C {158 °F}** for **3 minutes** using a hot air blower.
2. Put on gloves and protective eye wear.
3. Insert a tape-wrapped scraper between the mirror glass and the frame, and pry the glass loose.

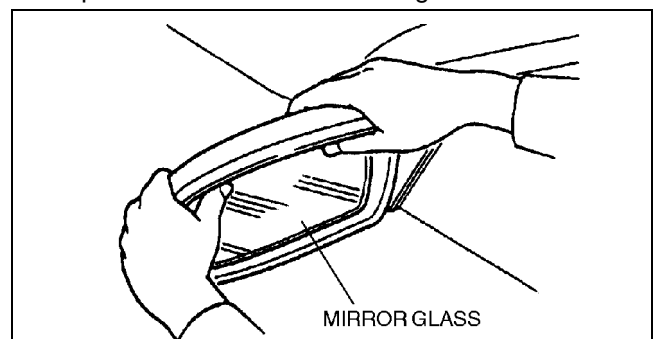


X3U912WD9

OUTSIDE MIRROR GLASS INSTALLATION

A3U091269111W02

1. Clean and degrease the adhesion surface of the mirror glass.
2. Stick double-sided adhesive tape onto the back of the mirror glass.
3. Warm up the frame using a hot air blower.
4. Remove the paper backing from the double-sided adhesive tape on the back of the mirror glass.
5. Insert the mirror glass into the frame, then press lightly on the glass to secure it.



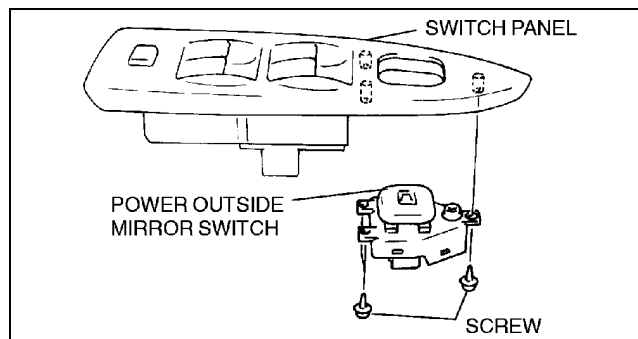
X3U912WE0

GLASS/WINDOWS/MIRRORS

POWER OUTSIDE MIRROR SWITCH REMOVAL/INSTALLATION

A3U09126600W01

1. Disconnect the negative battery cable.
2. Remove the driver-side front door trim. (See 09-17-9 FRONT DOOR TRIM REMOVAL/INSTALLATION.)
3. Push the clip from the reverse side of the trim to remove the switch panel.
4. Disconnect the connector.
5. Remove the screws, and then remove the power outside mirror switch.
6. Install in the reverse order of removal.



X3U912WE2

POWER OUTSIDE MIRROR SWITCH INSPECTION

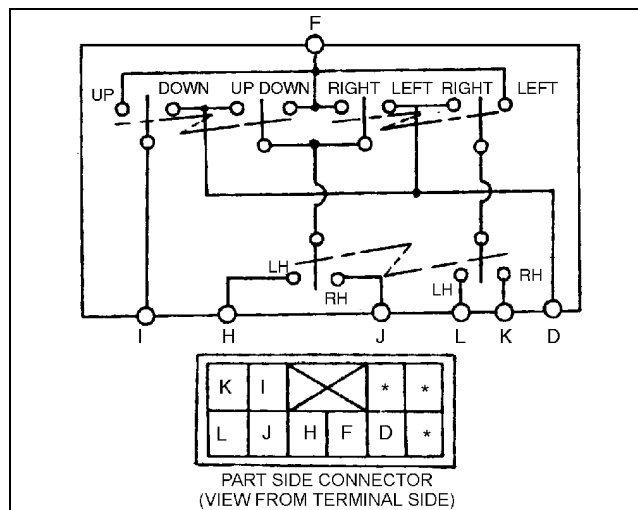
A3U091266600W02

1. Remove the power outside mirror switch. (See 09-12-30 POWER OUTSIDE MIRROR SWITCH REMOVAL/INSTALLATION.)
2. Inspect for continuity between the power outside mirror switch terminals using an ohmmeter.
 - If not as specified, replace the power outside mirror switch.

○—○ : Continuity

| Switch position | Operation | Terminal | | | | | | |
|-----------------|-----------|----------|---|---|---|---|---|---|
| | | F | D | H | L | J | K | I |
| LH | Up | ○ | ○ | ○ | | | | ○ |
| | Down | ○ | ○ | ○ | | | | ○ |
| | Left | ○ | ○ | ○ | ○ | | | |
| | Right | ○ | ○ | ○ | ○ | | | |
| RH | Up | ○ | ○ | | | ○ | | ○ |
| | Down | ○ | ○ | | | ○ | | ○ |
| | Left | ○ | ○ | | | ○ | ○ | |
| | Right | ○ | ○ | | | ○ | ○ | |

X3U912WE3

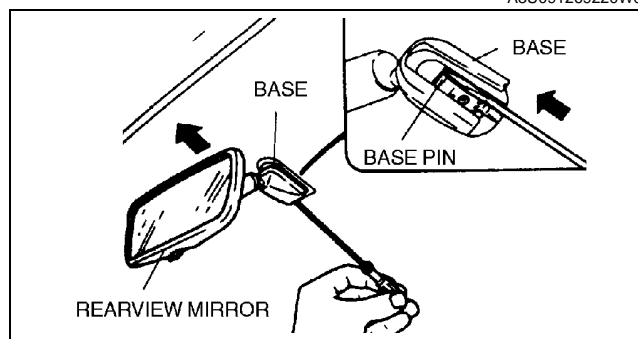


Z3U0912W014

REARVIEW MIRROR REMOVAL

A3U091269220W01

1. Insert a flathead screwdriver between the mirror and the base.
2. Push the base pin down to remove the rearview mirror.

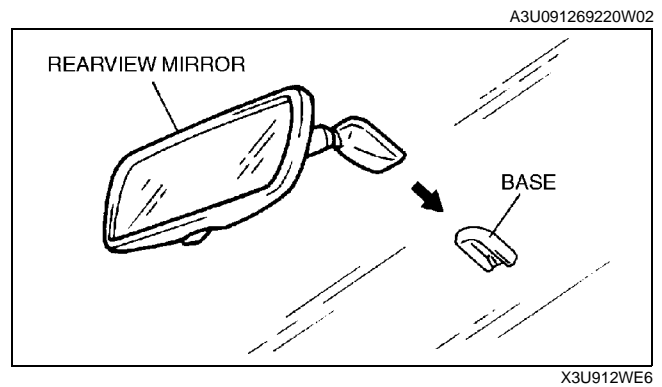


X3U912WE5

GLASS/WINDOWS/MIRRORS

REARVIEW MIRROR INSTALLATION

1. Install the rearview mirror onto the base.

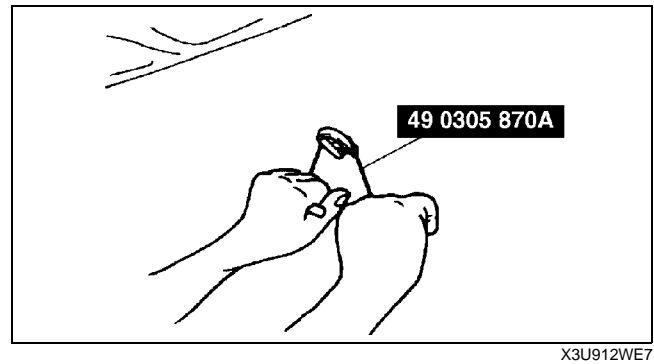


BASE REMOVAL

1. Remove the rearview mirror.
2. Wind each end of a wire around a bar.
3. Saw through the sealant to remove the base.

Note

- Use a long sawing action to spread the work over the whole length of the **SST** (piano wire) to prevent it from breaking.



BASE INSTALLATION

1. Cut away all of the original sealant using a razor.
2. Clean and degrease the ceramic coating on the glass and the base.
3. Apply primer to the bonding area of the glass and the base.

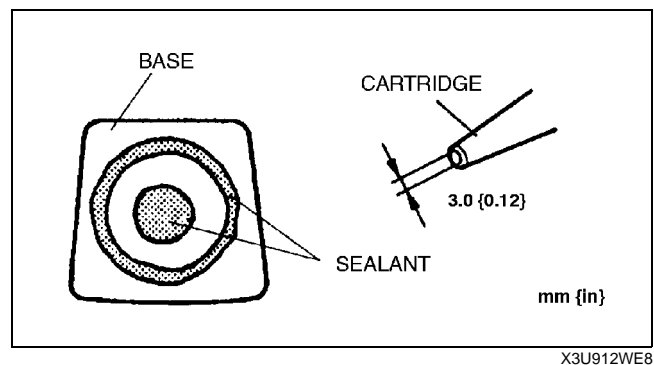
Caution

- **Keep the area free of dirt and grease, and do not touch the surface, otherwise the primer may not properly bond to the surface of the glass.**

4. Apply a height of **3.0 mm {0.12in}** sealant to the base.

Note

- Use only glass primer on the glass, and body primer on the base. Allow the primer to dry for **approximately 30 minutes**.

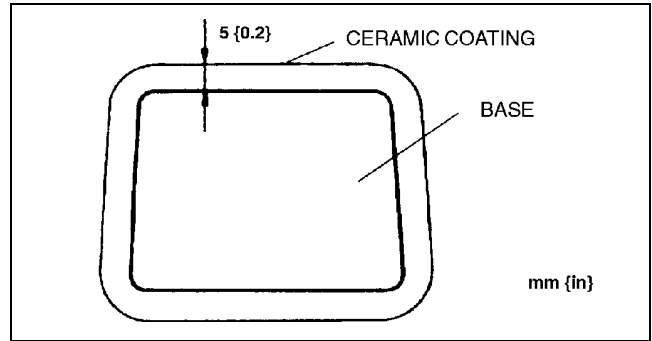


GLASS/WINDOWS/MIRRORS

- Center the base in the ceramic coating and press it onto the glass.
- Use isopropyl alcohol to remove any excess repair sealant.

Hardening time of sealant

| Temperature | Surface hardening time | Time required until car can be put into service |
|---------------|------------------------|---|
| 5 °C {41 °F} | Approx. 1.5 h | Approx. 12 h |
| 20 °C {68 °F} | Approx. 1 h | Approx. 4 h |
| 35 °C {95 °F} | Approx. 10 min. | Approx. 2 h |



X3U912WE9

- Install the rearview mirror.