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Fig. 2: Exterior Trim Legends  
Courtesy of MAZDA MOTORS CORP.

FRONT BELTLINE MOLDING REMOVAL/INSTALLATION
1. Fully open the door glass.
2. Remove clip A using a protective tape-wrapped flathead screwdriver.
3. Lift (partially peeling back) the front beltline molding in the direction of the arrow and remove it.
4. Install in the reverse order of removal.

Fig. 3: Removing/Installing Front Beltline Molding
Courtesy of MAZDA MOTORS CORP.

COWL GRILLE REMOVAL/INSTALLATION

1. Remove the windshield wiper arm and blade. (See WIPER ARM AND BLADE REMOVAL/INSTALLATION.)
2. Remove the covers.
Fig. 4: Identifying Cowl Grill Components
Courtesy of MAZDA MOTORS CORP.

3. Remove the screws.
4. Remove windshield washer hose from cowl grille.
5. Remove the weatherstrip.
6. Pull the cowl grille in the direction of arrow (1) so that it is free from the pins, pull tabs A in the direction of arrow (2), and then remove the front window glass.
7. Remove the cowl grille.
8. Install in the reverse order of removal.

SIDE COWL GRILLE REMOVAL/INSTALLATION

1. Remove the windshield wiper arm and blade. (See WIPER ARM AND BLADE REMOVAL/INSTALLATION.)
2. Remove the cowl grille. (See COWL GRILLE REMOVAL/INSTALLATION.)
3. Remove the fasteners.
4. Remove the side cowl grill.
5. Install in the reverse order of removal.
BELTLINE MOLDING REMOVAL/INSTALLATION

1. Remove the following parts:
   1. Console (See CONSOLE REMOVAL/INSTALLATION.)
   2. Quarter trim (See QUARTER TRIM REMOVAL/INSTALLATION.)
   3. Scuff plate (See SCUFF PLATE REMOVAL/INSTALLATION.)
   4. Tire house trim (See TIRE HOUSE TRIM REMOVAL/INSTALLATION.)
   5. Aeroboard (See AEROBOARD REMOVAL/INSTALLATION.)
   6. Front seat back bar garnish (See SEAT BACK BAR GARNISH REMOVAL/INSTALLATION.)
   7. Back trim (See BACK TRIM REMOVAL/INSTALLATION.)
   8. Seat belt set plate (See SEAT BELT REMOVAL/INSTALLATION.)
   9. Seat back crossmember assembly (See SEAT BACK CROSSMEMBER ASSEMBLY REMOVAL/INSTALLATION.)
   10. Rear side trim (See REAR SIDE TRIM REMOVAL/INSTALLATION.)
   11. Rear package trim (See REAR PACKAGE TRIM REMOVAL/INSTALLATION.)
   12. Side shelf (See SIDE SHELF REMOVAL/INSTALLATION.)
   13. Seat belt upper anchor installation bolt (See SEAT BELT REMOVAL/INSTALLATION.)
   14. Convertible top (See CONVERTIBLE TOP REMOVAL/INSTALLATION.)
2. Remove the fasteners.

Fig. 5: Identifying Side Cowl Grille And Fastener
Courtesy of MAZDA MOTORS CORP.
Fig. 6: Identifying Beltline Molding Components With Torque Specifications
Courtesy of MAZDA MOTORS CORP.

3. Remove the beltline protector.
4. Remove the nut and bolts.
5. Remove the beltline molding.
6. Install in the reverse order of removal.

**DRIP MOLDING REMOVAL/INSTALLATION**

1. Partially peel back the seaming welt.
2. Remove the screws.
3. Remove the drip molding.
4. Install in the reverse order of removal.
CONVERTIBLE TOP REMOVAL/INSTALLATION

1. Cover both sides of the rear window glass with thick cloth to protect the window.
2. Remove the following parts:
   1. Console (See CONSOLE REMOVAL/INSTALLATION.)
   2. Quarter trim (See QUARTER TRIM REMOVAL/INSTALLATION.)
   3. Scuff plate (See SCUFF PLATE REMOVAL/INSTALLATION.)
   4. Tire house trim (See TIRE HOUSE TRIM REMOVAL/INSTALLATION.)
   5. Aeroboard (See AEROBOARD REMOVAL/INSTALLATION.)
   6. Front seat back bar garnish (See SEAT BACK BAR GARNISH REMOVAL/INSTALLATION.)
   7. Back trim (See BACK TRIM REMOVAL/INSTALLATION.)
   8. Seat belt set plate (See SEAT BELT REMOVAL/INSTALLATION.)
   9. Seat back crossmember assembly (See SEAT BACK CROSSMEMBER ASSEMBLY REMOVAL/INSTALLATION.)
10. Rear side trim (See .)
11. Rear package trim (See REAR PACKAGE TRIM REMOVAL/INSTALLATION.)
12. Side shelf (See .)
13. Seat belt upper anchor installation bolt (See SEAT BELT REMOVAL/INSTALLATION.)
3. Disconnect the rear window defroster connector.
4. Remove in the order indicated in the table.
5. Install in the reverse order of removal.
CONVERTIBLE TOP REMOVAL NOTE

1. Unlock the top lock.

CONVERTIBLE TOP INSTALLATION NOTE

1. Insert the rain rail into the beltline molding lip, and install it over the studs.
2. Install the link bracket to the stud bolts with no gaps (a) on the mating surfaces, then tighten the bolts and nut.

Tightening torque

19-25 N.m \{1.9-2.6 \text{kgf.m}, 14-18 \text{ft.lbf}\}

CONVERTIBLE TOP DISASSEMBLY/ASSEMBLY

1. Disassemble in the order indicated in the table.
2. To remove the striker, remove the following parts:
   1. Female wedge (See CONVERTIBLE TOP DISASSEMBLY/ASSEMBLY.)
   2. Map light (See MAP LIGHT REMOVAL/INSTALLATION.)
   3. A-pillar trim (See A-PILLAR TRIM REMOVAL/INSTALLATION.)
   4. Front header trim (See FRONT HEADER TRIM REMOVAL/INSTALLATION.)
3. Assemble in the reverse order of disassembly.
Fig. 11: Disassembly/Assembly View Of Convertible Top With Torque Specifications
Courtesy of MAZDA MOTORS CORP.

RETAINER DISASSEMBLY NOTE

1. Mark around the retainer installation screws with paint before removing them.
Fig. 12: Identifying Mark Around Retainer Installation Screws
Courtesy of MAZDA MOTORS CORP.

TOP FABRIC DISASSEMBLY NOTE

1. Remove the top fabric from the front bow retainer.

Fig. 13: Removing Top Fabric From Front Bow Retainer
Courtesy of MAZDA MOTORS CORP.

2. Pull out the top fabric from the front header.

Fig. 14: Pulling Out Top Fabric From Front Header
Courtesy of MAZDA MOTORS CORP.
3. Remove the covers.

![Diagram of Covers with Tabs A and B]

**Fig. 15: Identifying Cover**
*Courtesy of MAZDA MOTORS CORP.*

4. Remove the cable installation rivet using a drill.
5. Remove the cables from the cable guide.

![Diagram of Rivet and Cable Guide]

**Fig. 16: Identifying Rivet And Cable Guide**
*Courtesy of MAZDA MOTORS CORP.*

6. Remove the band installation rivet using a drill.
Fig. 17: Identifying Rivet  
Courtesy of MAZDA MOTORS CORP.

7. Remove the nut, then remove the cable end bracket.

Fig. 18: Identifying Cable End Bracket & Nut With Torque Specifications  
Courtesy of MAZDA MOTORS CORP.

RAIN RAIL DISASSEMBLY NOTE

1. Remove the rivets from the top fabric using a drill.

SPRING A DISASSEMBLY NOTE

1. Remove the bolt.
2. Remove the spacers, spring and collars from the link.

Fig. 19: Identifying Spacers, Spring & Collars  
Courtesy of MAZDA MOTORS CORP.

SPRING B DISASSEMBLY NOTE

1. Remove the bolt.
2. Pull the link in the direction of the arrow to remove the spacer and spring.
RAIN RAIL ASSEMBLY NOTE

1. Degrease the rain rail using white gasoline.
2. Install the insulation tape to the rivet installation hole of the rain rail.
3. Secure the top fabric and rain rail with the rivet.
4. Flatten the stem using hammer.

TOP FABRIC ASSEMBLY NOTE

1. Place the link onto the top fabric.
2. Align the link with the set plate installation hole of the top fabric, and install the top fabric to the front header.
3. Thread the cable into the cable guide.
4. Set the aluminum rivet to the riveter, and then secure the cable to the link with the rivet.

RETAINER ASSEMBLY NOTE

1. Install the retainers to the link, aligning the retainer marks with the retainer installation screws.
CONVERTIBLE TOP ADJUSTMENT

1. Remove the spring.
2. Remove the snap ring. (See SNAP RING REMOVAL NOTE.) (See SNAP RING INSTALLATION NOTE.)
3. Remove the pin.
4. Remove the screws.
5. Remove the cover.
6. Adjust the clearance of part A by rotating the adjustment nut.

NOTE:  
- Turn the adjustment nut to the right to narrow the part A clearance, left to widen it.

Fig. 25: Identifying Convertible Top Adjustment Components
Courtesy of MAZDA MOTORS CORP.

Clearance

A: 4-8 mm {0.16-0.31 in}

7. Install in the reverse order of removal.
SNAP RING REMOVAL NOTE

**CAUTION:**

- Remove the snap ring such that the dimension is maintained as indicated in the figure.
- Because the snap ring is to be reused, remove it carefully so that the ring is not expanded.

1. Insert a tape-wrapped flathead screwdriver between the cover and snap ring, and remove the snap ring by prying along the perimeter so as not to damage the snap ring.
SNAP RING INSTALLATION NOTE

1. Insert the snap ring to the pin while slightly expanding the snap ring end using snap ring pliers.
2. After securing the snap ring, verify that there is no excessive play between the snap ring and pin.

WINDSHIELD GARNISH REMOVAL

1. Cut the double-sided adhesive tape on the windshield garnish using a flathead screwdriver or razor while warming it using a hot air blower.

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

2. Remove the windshield garnish.
Fig. 30: Identifying Adhesive Tape On Windshield Garnish
Courtesy of MAZDA MOTORS CORP.

WINDSHIELD GARNISH INSTALLATION

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

NOTE:  
- Double-sided adhesive tape has already been attached to the new windshield garnish

1. When installing a new windshield garnish, follow the procedure below:
   1. Remove the adhesive remaining on the body using razor.
   2. Remove any grease or dirt from the adhesion surface of the body.

2. When reusing the windshield garnish, follow the procedure below:
   1. Remove the adhesive remaining on the windshield garnish and the body using a razor.
   2. Remove any grease or dirt from the adhesion surface of the windshield garnish and body.
   3. Apply primer to the bonding area of the windshield garnish.
   4. Attach double-sided adhesive tape to the windshield garnish as shown in the figure.

Clearance

a. 16 mm {0.62 in}
b. 2.0 mm {0.07 in}
c. 1.5 mm {0.05 in}
d. 2.0 mm {0.07 in}
e. 16 mm {0.62 in}

NOTE:  
- Use 3M GT7116, GT7116FR and GT7104 double-sided adhesive tape or equivalent.
3. Peel off the end of the double-sided adhesive tape (1), (2), and (3), and attach the windshield garnish side to the position shown in the figure.

**Clearance**

- **a**: 0.3-1.7 mm {0.012-0.066 in}

![Fig. 31: Position For Attaching Double-Sided Adhesive Tape On Windshield Garnish](image)

4. Peel off the tape backing from the double-sided adhesive tape (1), (2), and (3), and attach it to the vehicle.

5. Peel off the end of the double-sided adhesive tape (4) and (5), and attach it to the position shown in the figure.

6. Peel off the tape backing from the double-sided adhesive tape (4) and (5), and then adhere the windshield garnish side.

7. Peel off the end of the double-sided adhesive tape (6) and attach the windshield garnish center to the position shown in the figure.

**Clearance**

- **a**: 0.3-1.7 mm {0.012-0.06 in}
- **b**: -0.3-2.3 mm {-0.012-0.090 in}
- **c**: 0.0-0.7 mm {0.00-0.027 in}
Fig. 32: Position For Attaching Adhesive Tape On Windshield Garnish
Courtesy of MAZDA MOTORS CORP.

8. Peel off the end of the double-sided adhesive tape (7) and attach it to the position shown in the figure.
9. Peel off the backing paper from the double-sided adhesive tape (6) and (7), and then attach the windshield garnish center by applying pressure.
10. Peel off the tape backing from the double-sided adhesive tape (8) and (9), and then adhere the windshield garnish center.

Fig. 33: Position For Attaching Double-Sided Adhesive Tape On Windshield Garnish
Courtesy of MAZDA MOTORS CORP.

RETAINER DISASSEMBLY NOTE

1. Mark around the retainer installation screws with paint before removing them.
RETAINER ASSEMBLY NOTE

1. Install the retainers to the link, aligning the retainer marks with the retainer installation screws.

DETACHABLE HARDTOP ADJUSTMENT

TOP LOCK

1. Remove the spring.
2. Remove the snap ring. (See SNAP RING REMOVAL NOTE.) (See SNAP RING INSTALLATION NOTE.)
3. Remove the pin.
4. Remove the screws.
5. Remove the cover.
6. Adjust the clearance of part A by rotating the adjustment nut.
Fig. 36: Identifying Detachable Hardtop Adjustment Components
Courtesy of MAZDA MOTORS CORP.

NOTE:
- Turn the adjustment nut to the right to narrow the part A clearance, left to widen it.

Clearance

A: 4-8 mm \{0.16-0.31 in\}

7. Install in the reverse order of removal.

Fig. 37: Turning Adjusting Nut
Courtesy of MAZDA MOTORS CORP.

SNAP RING INSTALLATION NOTE

1. Insert the snap ring to the pin while slightly expanding the snap ring end using snap ring pliers.
2. After securing the snap ring, verify that there is no excessive play between the snap ring and pin.
SNAP RING REMOVAL NOTE

CAUTION:

- Remove the snap ring such that the dimension is maintained as indicated in the figure.
- Because the snap ring is to be reused, remove it carefully so that the ring is not expanded.

Fig. 39: Identifying Snap Ring With Dimension
Courtesy of MAZDA MOTORS CORP.

1. Insert a tape-wrapped flathead screwdriver between the cover and snap ring, and remove the snap ring by prying along the perimeter so as not to damage the snap ring.
REAR DECK LOCK

1. Remove the screw.
2. Remove the rear deck lock cover.
3. Loosen the plate installation bolts.
4. Install the detachable hardtop to the body.

5. Move the plate right, left, fore, or aft until it is tight.
6. Tighten the plate installation bolts.

**Tightening torque**

17.7-26.4 N.m {1.8-2.6 kgf.m, 13.1-19.4 ft.lbf}

7. Install the rear deck lock cover.
DRAIN COVER REMOVAL/INSTALLATION

EXCEPT POWER RETRACTABLE HARDTOP

1. Remove the following parts:
   1. Console (See CONSOLE REMOVAL/INSTALLATION.)
   2. Quarter trim (See QUARTER TRIM REMOVAL/INSTALLATION.)
   3. Scuff plate (See SCUFF PLATE REMOVAL/INSTALLATION.)
   4. Tire house trim (See TIRE HOUSE TRIM REMOVAL/INSTALLATION.)
   5. Aeroboard (See AEROBOARD REMOVAL/INSTALLATION.)
   6. Front seat back bar garnish (See SEAT BACK BAR GARNISH REMOVAL/INSTALLATION.)
   7. Back trim (See BACK TRIM REMOVAL/INSTALLATION.)
   8. Seat belt set plate (See SEAT BELT REMOVAL/INSTALLATION.)
   9. Seat back crossmember assembly (See SEAT BACK CROSSMEMBER ASSEMBLY REMOVAL/INSTALLATION.)
   10. Rear side trim (See REAR SIDE TRIM REMOVAL/INSTALLATION.)
   11. Rear package trim (See REAR PACKAGE TRIM REMOVAL/INSTALLATION.)
   12. Side shelf (See SIDE SHELF REMOVAL/INSTALLATION.)
   13. Seat belt upper anchor installation bolt (See SEAT BELT REMOVAL/INSTALLATION.)
   14. Convertible top (See CONVERTIBLE TOP REMOVAL/INSTALLATION.)
   15. Beltline protector (See BELTLINE MOLDING REMOVAL/INSTALLATION.)
   16. Retractor screen (See SEAT BELT REMOVAL/INSTALLATION.)

2. Remove the fasteners.
3. Pull the drain cover upward and detach from the drain valve.
4. Remove the drain cover.
5. Detach the tabs of the drain valve from below the vehicle.
6. Remove the drain valve.
7. Install in the reverse order of removal.

**POWER RETRACTABLE HARDTOP**

1. Fully open the deck panel.
2. Remove the following parts:
   1. Console (See CONSOLE REMOVAL/INSTALLATION.)
   2. Quarter trim (See QUARTER TRIM REMOVAL/INSTALLATION.)
   3. Scuff plate (See SCUFF PLATE REMOVAL/INSTALLATION.)
   4. Tire house trim (See TIRE HOUSE TRIM REMOVAL/INSTALLATION.)
   5. Aeroboard (See AEROBOARD REMOVAL/INSTALLATION.)
   6. Front seat back bar garnish (See SEAT BACK BAR GARNISH REMOVAL/INSTALLATION.)
   7. Back trim (See BACK TRIM REMOVAL/INSTALLATION.)
   8. Seat belt upper anchor installation bolt (See SEAT BELT REMOVAL/INSTALLATION.)
   9. Seat belt set plate (See SEAT BELT REMOVAL/INSTALLATION.)
   10. Rear side trim (See REAR SIDE TRIM REMOVAL/INSTALLATION.)
   11. Side shelf (See SIDE SHELF REMOVAL/INSTALLATION.)
   12. Power retractable hardtop link bracket (See POWER RETRACTABLE HARDTOP LINK BRACKET REMOVAL/INSTALLATION.)
   13. Cab-side weatherstrip (See CONVERTIBLE TOP DISASSEMBLY/ASSEMBLY.)
   14. Power retractable hardtop (See POWER RETRACTABLE HARDTOP REMOVAL/INSTALLATION.)
3. Remove the fastener and clip A.
4. Pull the drain cover upward and detach from the drain valve.
5. Remove the upper drain cover and lower drain cover.
6. Detach the tabs of the drain valve from below the vehicle.
7. Remove the drain valve.
8. Install in the reverse order of removal.

**Fig. 44: Identifying Drain Valve Components - Power Retractable Hardtop**
Courtesy of MAZDA MOTORS CORP.

**EXTRACTOR CHAMBER REMOVAL/INSTALLATION**

1. Remove the battery cover.
2. Disconnect the negative battery cable. (See BATTERY REMOVAL/INSTALLATION [LF].)
3. Remove the rear combination light. (See REAR COMBINATION LIGHT REMOVAL/INSTALLATION.)
4. Remove clip A using a fastener remover and then remove the extractor chamber from the vehicle.
5. Install in the reverse order of removal.

**Fig. 45: Identifying Extractor Chamber And Clip**
Courtesy of MAZDA MOTORS CORP.

**SIDE STEP MOLDING REMOVAL**

1. Remove the fasteners.
2. Pull the side step molding and remove clips A from the vehicle body.
3. Slide the side step molding to the vehicle rear and remove clips B and C from the side step molding.
4. Remove the side step molding.
5. Remove clips B and C from the body, then install it to the side step molding.

**Fig. 46: Identifying Side Step Molding Components**

*Courtesy of MAZDA MOTORS CORP.*

**SIDE STEP MOLDING INSTALLATION**

1. Install clips A and then C to the vehicle from the rear side.
2. Install the clips B.
3. Install the fasteners.
FRONT UNDER COVER REMOVAL/INSTALLATION

1. Remove the splash shield A. (See SPLASH SHIELD REMOVAL/INSTALLATION.)
2. Remove the bolts A at section A shown in the figure.
3. Remove the bolts B at section B shown in the figure.
4. Remove the fasteners C at section C shown in the figure.
5. Remove the front under cover.
6. Install in the reverse order of removal.
SPLASH SHIELD REMOVAL/INSTALLATION

SPLASH SHIELD A

1. Remove the bolts.
2. Remove the fasteners at section A shown in the figure.
3. Install in the reverse order of removal.
1. Remove the front suspension tower bar. (See **FRONT SUSPENSION TOWER BAR REMOVAL/INSTALLATION**.)
2. Remove the splash shield A. (See **SPLASH SHIELD A**.)
3. Remove the front shock absorber and coil spring. (See **FRONT SHOCK ABSORBER AND COIL SPRING REMOVAL/INSTALLATION**.)
4. Remove the fasteners at section A shown in the figure.
5. Remove the splash shield B.
6. Install in the reverse order of removal.

![Identifying Fasteners Section](image)

**Fig. 50: Identifying Fasteners Section**
Courtesy of MAZDA MOTORS CORP.

**POWER RETRACTABLE HARDTOP REMOVAL/INSTALLATION**

**CAUTION:**
- If the deck panel does not operate electrically, see "**DECK PANEL MANUAL OPEN/CLOSE PROCEDURE**" to open/close the deck panel.

1. Unlock the top lock.
2. Fully open the deck panel.
3. Cover both sides of the rear window glass with thick cloth to protect the window.
4. Remove the battery cover.
5. Disconnect the negative battery cable. (See **BATTERY REMOVAL/INSTALLATION [LF]**.)
6. Remove the following parts:
   1. Console (See **CONSOLE PANEL REMOVAL/INSTALLATION**.)
   2. Quarter trim (See **QUARTER TRIM REMOVAL/INSTALLATION**.)
   3. Scuff plate (See **SCUFF PLATE REMOVAL/INSTALLATION**.)
   4. Tire house trim (See **TIRE HOUSE TRIM REMOVAL/INSTALLATION**.)
5. Aeroboard (See AEROBOARD REMOVAL/INSTALLATION.)
6. Front seat back bar garnish (See SEAT BACK BAR GARNISH REMOVAL/INSTALLATION.)
7. Back trim (See BACK TRIM REMOVAL/INSTALLATION.)
8. Seat belt upper anchor installation bolt (See SEAT BELT REMOVAL/INSTALLATION.)
9. Power retractable hardtop link bracket (See POWER RETRACTABLE HARDTOP LINK BRACKET REMOVAL/INSTALLATION.)
10. Rear side trim (See REAR SIDE TRIM REMOVAL/INSTALLATION.)
11. Cab-side weatherstrip (See CONVERTIBLE TOP DISASSEMBLY/ASSEMBLY.)

7. Disconnect the roof motor connectors.
8. Disconnect the rear window defroster connector.
9. Disconnect the roof motor limit switch connector.
10. Disconnect the power retractable hardtop drain hose. (See POWER RETRACTABLE HARDTOP DRAIN HOSE REMOVAL/INSTALLATION.)
11. Remove in the order indicated in the table.
12. Install in the reverse order of removal.
Fig. 51: Identifying Power Retractable Hardtop With Bolts Torque Specifications
Courtesy of MAZDA MOTORS CORP.

**BOLT B REMOVAL/INSTALLATION NOTE**

1. Remove or install bolt B shown in the figure by inserting a hand from the deck panel opening.
POWER RETRACTABLE HARDTOP INSTALLATION NOTE

1. Place the main bracket on the stud bolt so that the power retractable hardtop top lock is locked.
2. Install the power retractable hardtop without any gap (a) between the positioning surface of the main bracket and stud bolt, and tighten the bolt and nut.

Tightening torque

19-25 N.m {1.9-2.6 kgf.m, 14-18 ft.lbf}
Fig. 53: Identifying Gap Between Positioning Surface Of Main Bracket And Stud Bolt
Courtesy of MAZDA MOTORS CORP.

POWER RETRACTABLE HARDTOP ADJUSTMENT

TOP LOCK

1. Remove the spring.
2. Remove the snap ring. (See SNAP RING REMOVAL NOTE.) (See SNAP RING INSTALLATION NOTE.)
3. Remove the pin.
4. Remove the screws.
5. Remove the cover.

Fig. 54: Identifying Power Retractable Hardtop Adjustment Components
Courtesy of MAZDA MOTORS CORP.
SNAP RING REMOVAL NOTE

CAUTION:  
- Remove the snap ring such that the dimension is maintained as indicated in the figure.
- Because the snap ring is to be reused, remove it carefully so that the ring is not expanded.

Fig. 55: Identifying Snap Ring With Dimension
Courtesy of MAZDA MOTORS CORP.

1. Insert a tape-wrapped flathead screwdriver between the cover and snap ring, and remove the snap ring by prying along the perimeter so as not to damage the snap ring.

SNAP RING INSTALLATION NOTE

1. Insert the snap ring to the pin while slightly expanding the snap ring end using snap ring pliers.
2. After securing the snap ring, verify that there is no excessive play between the snap ring and pin.
POWER RETRACTABLE HARDTOP ASSEMBLY ADJUSTMENT

1. Loosen the installation bolts and nut for each link.

2. Adjust the gap and height difference between the front roof panel and rear window glass within the specification by moving them back and forth, left and right, and by adjusting the number of shims if necessary.
Fig. 59: Identifying Gap And Height Difference Section Between Front Roof Panel And Rear Window Glass

Courtesy of MAZDA MOTORS CORP.

Clearance

a: 5.0 - 9.0 mm {0.20 - 0.35 in}

b: -2.0 - 2.0 mm {-0.07 - 0.07 in}

c: 5.0 - 9.0 mm {0.20 - 0.35 in}

d: -2.0 - 2.0 mm {-0.07 - 0.07 in}

3. Tighten the bolts and nuts.

POWER RETRACTABLE HARDTOP SWITCH REMOVAL/INSTALLATION

NOTE:

- The power retractable hardtop switch is integrated with the hazard warning switch. (See HAZARD WARNING SWITCH REMOVAL/INSTALLATION.)

POWER RETRACTABLE HARDTOP SWITCH INSPECTION

1. Verify that the continuity between the power retractable hardtop switch terminals is as indicated in the table.
   - If not as indicated in the table, replace the hazard warning switch.
2. Apply battery voltage to power retractable hardtop switch terminal L, and connect terminal C to ground.

<table>
<thead>
<tr>
<th>Test condition</th>
<th>Terminal</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPEN SWITCH ON</td>
<td>F</td>
</tr>
<tr>
<td>OPEN SWITCH OFF</td>
<td>A</td>
</tr>
<tr>
<td>CLOSE SWITCH ON</td>
<td>R1</td>
</tr>
<tr>
<td>CLOSE SWITCH OFF</td>
<td>R2</td>
</tr>
</tbody>
</table>

| R1 | 900—1010 ohms |
| R2 | 2178—2222 ohms |

Fig. 60: Power Retractable Hardtop Switch Continuity Chart  
Courtesy of MAZDA MOTORS CORP.

3. Verify that the LED illuminates.

- If there is any malfunction, replace the hazard warning switch.

POWER RETRACTABLE HARDTOP CONTROL MODULE REMOVAL/INSTALLATION

1. Remove the battery cover.
2. Disconnect the negative battery cable. (See BATTERY REMOVAL/INSTALLATION [LF].)
3. Remove the service hole cover (LH) of the back trim.
4. Partially peel back the power retractable hardtop cover.
5. Remove the roof hook cable case.
6. Remove in the order indicated in the table.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nut</td>
</tr>
<tr>
<td>2</td>
<td>Connector</td>
</tr>
<tr>
<td>3</td>
<td>Power retractable hardtop control module</td>
</tr>
</tbody>
</table>

Fig. 63: Identifying Power Retractable Hardtop Control Module Components
Courtesy of MAZDA MOTORS CORP.

7. Install in the reverse order of removal.

**POWER RETRACTABLE HARDTOP CONTROL MODULE INSPECTION**

1. Remove the following parts:
   1. Console (See CONSOLE REMOVAL/INSTALLATION .)
   2. Quarter trim (See QUARTER TRIM REMOVAL/INSTALLATION .)
3. Scuff plate (See SCUFF PLATE REMOVAL/INSTALLATION.)
4. Tire house trim (See TIRE HOUSE TRIM REMOVAL/INSTALLATION.)
5. Aeroboard (See AEROBOARD REMOVAL/INSTALLATION.)
6. Front seat back bar garnish (See SEAT BACK BAR GARNISH REMOVAL/INSTALLATION.)
7. Back trim (See BACK TRIM REMOVAL/INSTALLATION.)

2. Attach the tester lead to the power retractable hardtop control module wiring harness-side connector and inspect voltage, continuity, or resistance according to the standard (reference) on the table.

**STANDARD (REFERENCE)**

![Fig. 64: Identifying Power Retractable Hardtop Control Module Connector Terminals](image-url)

**POWER RETRACTABLE HARDTOP CONTROL MODULE CONNECTOR TERMINALS REFERENCE**

<table>
<thead>
<tr>
<th>Terminal</th>
<th>Signal</th>
<th>Connected to</th>
<th>Test condition</th>
<th>Standard</th>
<th>Inspection item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A</td>
<td>Trunk lid opener relay output signal</td>
<td>Trunk lid opener relay</td>
<td>The deck panel is in the fully closed position.</td>
<td>B+</td>
<td>• Deck panel limit switch&lt;br&gt;• Trunk lid opener relay&lt;br&gt;• Related wiring harness</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The deck panel is not in the fully closed position.</td>
<td>1.0 or less</td>
<td></td>
</tr>
<tr>
<td>1B</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1C</td>
<td>Power window input signal</td>
<td>Power window main switch</td>
<td>Under any condition: Inspect for continuity to power window main switch.</td>
<td>Continuity detected</td>
<td>• Power window main switch&lt;br&gt;• Related wiring harness</td>
</tr>
<tr>
<td>1D</td>
<td>Top lock input signal</td>
<td>Top lock switch</td>
<td>When the top lock is turned to the ON&lt;br&gt;When the top lock is locked.</td>
<td>1.0 or less</td>
<td>• Top lock switch&lt;br&gt;• Related wiring</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th></th>
<th>Power window full open request signal (Output)</th>
<th>Power window main switch.</th>
<th>Under any condition: Inspect for continuity to power window main switch.</th>
<th>Continuity detected</th>
<th>harness</th>
</tr>
</thead>
</table>
| 1E | Power window full open request signal (Output) | Power window main switch. | Under any condition: Inspect for continuity to power window main switch. | Continuity detected | • Power window main switch 
|    |                                               |                           |                                                                        |                    | • Related wiring harness |
| 1F | Trunk lid latch switch signal                 | Trunk lid latch switch    | When the trunk lid is open.                                            | 1.0 or less        | • Trunk lid latch switch 
|    |                                               |                           |                                                                        |                    | • Related wiring harness |
|    |                                               |                           | When the trunk lid is closed.                                          | B+                 |                     |
| 1G | Hall effect sensor power supply               | • Roof Motor              | Ignition switch is turned to the ON position                           | 1.0 or less        | • Roof Motor 
|    |                                               | • Deck panel motor        |                                                                        |                    | • Deck panel Motor 
|    |                                               |                           |                                                                        |                    | • Related wiring harness |
| 1H | Input signal of the roof panel open/close switch | Power retractable hardtop switch (hazard warning switch) | Ignition switch is turned to the ON position                           | approx. 2.5        | • Power retractable hardtop switch 
|    |                                               |                           |                                                                        |                    | • Related wiring harness |
|    |                                               |                           | Opening switch on                                                     | approx. 3.4        |                     |
|    |                                               |                           | Closing switch on                                                     |                     |                     |
|    |                                               |                           | Other                                                                  | approx. 5.0        |                     |
| 1I | Roof motor hall sensor input signal (RH)      | Roof motor (RH)           | When the roof is moving.                                              | Pulse is output. (See INSPECTION USING AN OSCILLOSCOPE (REFERENCE).) | • Roof motor (RH) 
|    |                                               |                           |                                                                        |                    | • Related wiring harness |
| 1J | Power supply                                 | ROOM 15 A fuse            | Under any condition                                                   | B+                 | • ROOM 15 A fuse 
|    |                                               |                           |                                                                        |                    | • Related wiring harness |
| 1K | Deck panel motor hall sensor input signal (RH) | Deck panel motor (RH)     | When the deck panel is moving.                                        | Pulse is output. (See INSPECTION USING AN OSCILLOSCOPE (REFERENCE).) | • Deck panel motor (RH) 
|    |                                               |                           |                                                                        |                    | • Related wiring harness |
| 1L | -                                              | -                         | -                                                                      | -                  | -                   |
| 1M | Roof motor hall sensor input signal (LH) | Roof motor (LH) | When the roof is moving. | Pulse is output. (See **INSPECTION USING AN OSCILLOSCOPE (REFERENCE).**) | • Roof motor (LH)  
• Related wiring harness |
| 1N | - | - | - | - | - |
| 1O | Deck panel motor hall sensor input signal (LH) | Deck panel motor (LH) | When the deck panel is moving. | Pulse is output. (See **INSPECTION USING AN OSCILLOSCOPE (REFERENCE).**) | • Deck panel motor (LH)  
• Related wiring harness |
| 1P | - | - | - | - | - |
| 1Q | Hall effect sensor GND | GND | Under any condition: Inspect for continuity to GND. | Continuity detected | • Related wiring harness |
| 1R | Roof close position switch input signal | Power retractable hardtop limit switch | Ignition switch is turned to the ON position | When the roof panel is fully closed.  
When the roof panel is not fully closed. | 1.0 or less  
B+ | • Power retractable hardtop limit switch  
• Related wiring harness |
| 1S | CAN-H | - | Because this terminal is for communication, good/no good judgment by terminal voltage is not possible. | - | • Related wiring harnesses |
| 1T | Roof open position switch input signal | Power retractable hardtop limit switch | Ignition switch is turned to the ON position | When the roof panel is fully open.  
When the roof panel is not fully open. | 1.0 or less  
B+ | • Power retractable hardtop limit switch  
• Related wiring harness |
| 1U | CAN-L | - | Because this terminal is for communication, good/no good judgment by terminal voltage is not possible. | - | • Related wiring harnesses |
| 1V | Signal GND | Power retractable hardtop limit switch/deck panel limit switch | Ignition switch is turned to the ON position | Under any condition | 1.0 or less | • Related wiring harness  
• Related |
<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1W</td>
<td>Signal GND</td>
<td>GND</td>
<td>Under any condition: Inspect for continuity to GND.</td>
<td>Continuity detected</td>
<td>wiring harness</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1X</td>
<td>IG1</td>
<td>ENGINE 15 A fuse</td>
<td>IG ON When the ignition switch is not in the ON position.</td>
<td>B+ 1.0 or less</td>
<td>Related wiring harness</td>
</tr>
<tr>
<td>2A</td>
<td>Power supply</td>
<td>Main fuse block</td>
<td>Under any condition</td>
<td>B+</td>
<td>Related wiring harness</td>
</tr>
<tr>
<td>2B</td>
<td>Power supply</td>
<td>Main fuse block</td>
<td>Under any condition</td>
<td>B+</td>
<td>Related wiring harness</td>
</tr>
<tr>
<td>2C</td>
<td>Indicator light output signal</td>
<td>Power retractable hardtop Indicator light (hazard warning switch)</td>
<td>Ignition switch is turned to the ON position</td>
<td>Illuminated Not illuminated</td>
<td>B+ 1.0 or less Hazard switch Related wiring harness</td>
</tr>
<tr>
<td>2D</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2E</td>
<td>Power GND</td>
<td>GND</td>
<td>Under any condition: Inspect for continuity to GND.</td>
<td>Continuity detected</td>
<td>Related wiring harness</td>
</tr>
<tr>
<td>2F</td>
<td>Power GND</td>
<td>GND</td>
<td>Under any condition: Inspect for continuity to GND.</td>
<td>Continuity detected</td>
<td>Related wiring harness</td>
</tr>
<tr>
<td>3A</td>
<td>Roof motor control (open)</td>
<td>Roof motor (RH)</td>
<td>Ignition switch is turned to the ON position</td>
<td>Roof panel open operation</td>
<td>Roof panel close operation Other</td>
</tr>
<tr>
<td>3B</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3C</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3D</td>
<td>Roof motor control (close)</td>
<td>Roof motor (LH)</td>
<td>Ignition switch is turned to the ON position</td>
<td>Roof panel open operation</td>
<td>Roof panel close operation Other</td>
</tr>
<tr>
<td>3E</td>
<td>Deck panel motor control (close)</td>
<td>Deck panel motor (RH)</td>
<td>Ignition switch is turned to the ON position</td>
<td>Deck panel open operation</td>
<td>Deck panel close operation Other</td>
</tr>
</tbody>
</table>
| 3F | Deck panel open position sensor input signal | Deck panel limit switch | Ignition switch is turned to the ON position | When the deck panel is fully open. | 1.0 or less | • Deck panel limit switch  
• Related wiring harness |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3G</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
| 3H | Deck panel motor control (open) | Deck panel motor (LH) | Ignition switch is turned to the ON position | Deck panel open operation | B+ | • Deck panel motor (LH)  
• Related wiring harness |
| 3I | Roof motor control (close) | Roof motor (RH) | Ignition switch is turned to the ON position | Roof panel open operation | 1.0 or less | • Roof motor (RH)  
• Related wiring harness |
| 3J | - | - | - | - | - | - |
| 3K | - | - | - | - | - | - |
| 3L | Roof motor control (open) | Roof motor (LH) | Ignition switch is turned to the ON position | Roof panel open operation | B+ | • Roof motor (LH)  
• Related wiring harness |
| 3M | Deck panel motor control (open) | Deck panel motor (RH) | Ignition switch is turned to the ON position | Deck panel open operation | B+ | • Deck panel motor (RH)  
• Related wiring harness |
| 3N | - | - | - | - | - | - |
| 3O | Deck panel close position sensor input signal | Deck panel limit switch | Ignition switch is turned to the ON position | Except closed position | 1.0 or less | • Deck panel limit switch  
• Related wiring harness |
| 3P | Deck panel motor control (close) | Deck panel motor (LH) | Ignition switch is turned to the ON position | Deck panel open operation | 1.0 or less | • Deck panel motor (LH)  
• Related wiring harness |

(1) (1) : The voltage increases during operation speed control of the roof and deck panel.
INSPECTION USING AN OSCILLOSCOPE (REFERENCE)

Roof motor hall sensor

- Terminal connected: power retractable hardtop control module 1I (RH), 1M (LH) - Negative battery terminal
- Oscilloscope setting: 2 V/DIV (Y): 5 ms/DIV (X), DC range
- Measurement condition: When the roof is moving.

NOTE:  
- Pulse interval varies with the roof operation speed.

![Fig. 65: Roof Motor Hall Sensor Pulse Signal](image)

DECK PANEL MOTOR HALL SENSOR

- Terminal connected: power retractable hardtop control module 1K (RH), 1O (LH) - Negative battery terminal
- Oscilloscope setting: 2 V/DIV (Y): 5 ms/DIV (X), DC range
- Measurement condition: When the deck panel is moving.

NOTE:  
- Pulse interval varies with the deck panel operation speed.

![Fig. 65: Roof Motor Hall Sensor Pulse Signal](image)
POWER RETRACTABLE HARDTOP CONTROL MODULE BRACKET REMOVAL/INSTALLATION

1. Remove the battery cover.
2. Disconnect the negative battery cable. (See BATTERY REMOVAL/INSTALLATION [LF] .)
3. Remove the following parts:
   1. Console (See CONSOLE REMOVAL/INSTALLATION .)
   2. Quarter trim (See QUARTER TRIM REMOVAL/INSTALLATION .)
   3. Scuff plate (See SCUFF PLATE REMOVAL/INSTALLATION .)
   4. Tire house trim (See TIRE HOUSE TRIM REMOVAL/INSTALLATION .)
   5. Aeroboard (See AEROBOARD REMOVAL/INSTALLATION .)
   6. Front seat back bar garnish (See SEAT BACK BAR GARNISH REMOVAL/INSTALLATION .)
   7. Back trim (See BACK TRIM REMOVAL/INSTALLATION .)

4. Remove the roof hook cable case.

5. Remove in the order indicated in the table.
6. Remove the nuts.
7. Remove the power retractable hardtop control module bracket.
8. Install in the reverse order of removal.

Fig. 69: Identifying Power Retractable Hardtop Control Module And Bracket
Courtesy of MAZDA MOTORS CORP.

**ROOF MOTOR REMOVAL/INSTALLATION**

1. Remove the battery cover.
2. Disconnect the negative battery cable. (See BATTERY REMOVAL/INSTALLATION [LF].)
3. Remove the following parts:
   1. Console (See CONSOLE PANEL REMOVAL/INSTALLATION.)
   2. Quarter trim (See QUARTER TRIM REMOVAL/INSTALLATION.)
   3. Scuff plate (See SCUFF PLATE REMOVAL/INSTALLATION.)
   4. Tire house trim (See TIRE HOUSE TRIM REMOVAL/INSTALLATION.)
   5. Aeroboard (See AEROBOARD REMOVAL/INSTALLATION.)
6. Front seat back bar garnish (See SEAT BACK BAR GARNISH REMOVAL/INSTALLATION.)
7. Back trim (See BACK TRIM REMOVAL/INSTALLATION.)
8. Seat belt upper anchor installation bolt (See SEAT BELT REMOVAL/INSTALLATION.)
9. Power retractable hardtop link bracket (See POWER RETRACTABLE HARDTOP LINK BRACKET REMOVAL/INSTALLATION.)

4. Disconnect the roof motor connector.
5. Remove the bolts A and washers.
6. Remove the roof motor bracket.
7. Remove the bolts B and C.
8. Remove the roof motor.
9. Install in the reverse order of removal.

![Diagram of roof motor components]

Fig. 70: Identifying Roof Motor Components With Torque Specifications
Courtesy of MAZDA MOTORS CORP.

**ROOF MOTOR INSPECTION**

1. Apply battery positive voltage and connect the ground to roof motor terminals A and E, and then inspect the roof motor operation.
   - If the roof motor does not operate as indicated in the table, replace it.

**CAUTION:**
- If the roof motor temperature is high, the motor may not rotate.
due to the motor internal PTC function. Leave it untouched for about 3 min to cool it down, then reinspect.

**ROOF MOTOR OPERATION REFERENCE**

<table>
<thead>
<tr>
<th>Operation</th>
<th>Terminal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open</td>
<td>B+</td>
</tr>
<tr>
<td>Close</td>
<td>Ground</td>
</tr>
</tbody>
</table>

2. Connect the battery positive voltage to roof motor terminal B and connect terminal F to ground.
3. Operate the roof motor and measure the voltage at terminal D.
   - If there is any malfunction, replace the roof motor.

**Voltage**

- **Pulse**: max. 13 V/min. 0 V

**POWER RETRACTABLE HARDTOP LIMIT SWITCH REMOVAL/INSTALLATION**

**NOTE:**
- The power retractable hardtop limit switch is installed on the RH side.

1. Fully open the deck panel.
2. Cover both sides of the rear window glass with thick cloth to protect the window.
3. Remove the battery cover.
4. Disconnect the negative battery cable. (See BATTERY REMOVAL/INSTALLATION [LF].)
5. Remove the following parts:
   1. Console (See CONSOLE PANEL REMOVAL/INSTALLATION.)
2. Quarter trim (See QUARTER TRIM REMOVAL/INSTALLATION.)
3. Scuff plate (See SCUFF PLATE REMOVAL/INSTALLATION.)
4. Tire house trim (See TIRE HOUSE TRIM REMOVAL/INSTALLATION.)
5. Aeroboard (See AEROBOARD REMOVAL/INSTALLATION.)
6. Front seat back bar garnish (See SEAT BACK BAR GARNISH REMOVAL/INSTALLATION.)
7. Back trim (See BACK TRIM REMOVAL/INSTALLATION.)
8. Seat belt upper anchor installation bolt (See SEAT BELT REMOVAL/INSTALLATION.)
9. Power retractable hardtop link bracket (See POWER RETRACTABLE HARDTOP LINK BRACKET REMOVAL/INSTALLATION.)
10. Cab-side weatherstrip (See CONVERTIBLE TOP DISASSEMBLY/ASSEMBLY.)

6. Disconnect the roof motor limit switch connector.
7. Disconnect the power retractable hardtop drain hose. (See POWER RETRACTABLE HARDTOP DRAIN HOSE REMOVAL/INSTALLATION.)
8. Remove the power retractable hardtop. (See POWER RETRACTABLE HARDTOP REMOVAL/INSTALLATION.)
9. Remove in the order indicated in the table.

Fig. 72: Identifying Power Retractable Hardtop Limit Switch Components
Courtesy of MAZDA MOTORS CORP.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Screw A</td>
</tr>
<tr>
<td>2</td>
<td>Cover (See 09-16-36 Cover Installation Note.)</td>
</tr>
<tr>
<td>3</td>
<td>Screw B</td>
</tr>
<tr>
<td>4</td>
<td>Power retractable hardtop limit switch</td>
</tr>
</tbody>
</table>

10. Install in the reverse order of removal.
**COVER INSTALLATION NOTE**

1. Install the power retractable hardtop limit switch wiring harness to the cover hook and groove shown in the figure.

![Diagram showing power retractable hardtop limit switch and associated components]

**Fig. 73: Identifying Power Retractable Hardtop Limit Switch With Associated Components**

**POWER RETRACTABLE HARDTOP LIMIT SWITCH INSPECTION**

1. Verify that the continuity between the power retractable hardtop limit switch terminals is as indicated in the table.
   - If not as indicated in the table, replace the roof motor link (RH). (The power retractable hardtop limit switch is integrated with the roof motor link (RH).)

<table>
<thead>
<tr>
<th>Switch position</th>
<th>Terminal</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>POWER RETRACTABLE HARDTOP CLOSE POSITION SWITCH</td>
<td>ROD PUSHED</td>
<td></td>
<td></td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>POWER RETRACTABLE HARDTOP OPEN POSITION SWITCH</td>
<td>ROD PUSHED</td>
<td></td>
<td></td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

---

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DECK PANEL REMOVAL/INSTALLATION

CAUTION:  
• If the deck panel does not operate electrically, see "DECK PANEL MANUAL OPEN/CLOSE PROCEDURE" to open/close the deck panel.

1. Fully open the deck panel.
2. Remove the battery cover.
3. Disconnect the negative battery cable. (See BATTERY REMOVAL/INSTALLATION [LF] .)
4. Set the side shelf out of the way. (See SIDE SHELF REMOVAL/INSTALLATION .)
5. Insert a Phillips screwdriver with no wear securely into each screw groove and remove the screws.

CAUTION:  
• The screws are engaged firmly because thread-locking compound has been applied to them. When removing the screws, be careful not to deform the screw groove.
6. Remove the rod from the wire guide.
7. Remove tabs A using a tape-wrapped flathead screwdriver, and then remove the wire guide plate.
8. Loosen the nut, then pull the roof hook cable in the direction shown by the arrow and remove it.

**Fig. 77: Removing Tabs A**
 Courtesy of MAZDA MOTORS CORP.

9. Remove the bolts.
Fig. 78: Identifying Rear Deck Bracket Bolt With Torque Specifications
Courtesy of MAZDA MOTORS CORP.

10. Disconnect the deck panel motor connectors.
11. Disconnect the high-mount brake light connector.
12. Disconnect the deck panel limit switch connector.
13. Remove the deck panel.

DECK PANEL DISASSEMBLY/ASSEMBLY

1. Remove the deck panel motors. (See DECK PANEL MOTOR REMOVAL/INSTALLATION.)
2. Remove the high-mount brake light. (See HIGH-MOUNT BRAKE LIGHT REMOVAL/INSTALLATION.)

NOTE:
- Verify the number of shims because it differs depending on the installation position.

3. Disassemble in the order indicated in the table.
4. Assemble in the reverse order of disassembly.

Fig. 79: Identifying Deck Panel Disassemble/Assemble Components With Torque Specifications
DECK PANEL LINK REMOVAL NOTE

1. When removing the deck panel link, place the positioning mark by affixing masking tape on the deck panel link and deck panel.

DECK PANEL LINK INSTALLATION NOTE

1. Install the shim according to the number verified prior to removal.
2. Align the alignment marks placed before the deck panel link removal and install the deck panel link.
3. Refer to DECK PANEL ADJUSTMENT and verify that the gap and height difference between the deck panel, trunk lid, and back window glass are within the specifications. Adjust the power retractable hardtop if necessary.

DECK PANEL ADJUSTMENT

1. Loosen the installation nuts for deck panel.
2. Adjust the gap and height difference between the deck panel and trunk lid within the specification by moving the deck panel back and forth, left and right, and by adjusting the number of shims if necessary.

Fig. 80: Identifying Deck Panel, Deck Panel Link And Nut With Torque Specifications
Courtesy of MAZDA MOTORS CORP.
Clearance

- **a**: 4 - 6 mm \(\{0.16 - 0.23 \text{ in}\}\)
- **b**: -2 - 2 mm \(\{-0.07 - 0.07 \text{ in}\}\)

3. Tighten the nuts.

**DECK PANEL MOTOR REMOVAL/INSTALLATION**

**CAUTION:**

- If the deck panel does not operate electrically, see "DECK PANEL MANUAL OPEN/CLOSE PROCEDURE" to open/close the deck panel.

1. Fully open the deck panel.
2. Remove the battery cover.
3. Disconnect the negative battery cable. (See BATTERY REMOVAL/INSTALLATION [LF].)
4. Set the side shelf out of the way. (See SIDE SHELF REMOVAL/INSTALLATION.)
5. Remove the deck panel. (See DECK PANEL REMOVAL/INSTALLATION.)
6. Remove the screws indicated in the figure.
7. Remove the deck panel motor.
8. Install in the reverse order of removal.
DECK PANEL MOTOR INSPECTION

1. Apply battery positive voltage and connect the ground to deck panel motor terminals A and E, and then inspect the deck panel motor operation.
   - If the deck panel motor does not operate as indicated in the table, replace it.

   CAUTION: If the deck panel motor temperature is high, the motor may not rotate due to the motor internal PTC function. Leave it untouched for about 3 min to cool it down, then reinspect.
DECK PANEL MOTOR OPERATION REFERENCE

<table>
<thead>
<tr>
<th>Operation</th>
<th>Terminal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open</td>
<td>Ground</td>
</tr>
<tr>
<td>Close</td>
<td>B+</td>
</tr>
<tr>
<td>Open</td>
<td>A</td>
</tr>
<tr>
<td>Close</td>
<td>B+</td>
</tr>
</tbody>
</table>

2. Connect the battery positive voltage to deck panel motor terminal D and connect terminal F to ground.
3. Operate the deck panel motor and measure the voltage at terminal B.
   - If there is any malfunction, replace the deck panel motor.

NOTE:
   - Terminal C is not used for the system control.

Voltage
   - Pulse: max. 13 V/min. 0 V

DECK PANEL LIMIT SWITCH REMOVAL/INSTALLATION

CAUTION:
   - If the deck panel does not operate electrically, see "DECK PANEL MANUAL OPEN/CLOSE PROCEDURE" to open/close the deck panel.

1. Fully open the deck panel.
2. Remove the battery cover.
3. Disconnect the negative battery cable. (See BATTERY REMOVAL/INSTALLATION [LF] .)
4. Set the side shelf out of the way. (See SIDE SHELF REMOVAL/INSTALLATION .)
5. Remove the deck panel. (See DECK PANEL REMOVAL/INSTALLATION.)
6. Remove the deck panel motor. (RH) (See DECK PANEL MOTOR REMOVAL/INSTALLATION.)
7. Remove the screws A and B.
8. Remove the deck panel limit switch plate.
9. Remove the screws C.
10. Remove the deck panel limit switch.
11. Install in the reverse order of removal.
DECK PANEL LIMIT SWITCH INSPECTION

1. Verify that the continuity between the deck panel limit switch terminals is as indicated in the table.
   
   - If not as indicated in the table, replace the deck panel link (RH).

Fig. 85: Deck Panel Limit Switch Continuity Chart
Courtesy of MAZDA MOTORS CORP.
REAR DECK WEATHERSTRIP REMOVAL

1. Fully open the deck panel.
2. Remove the quarter trim. (See QUARTER TRIM REMOVAL/INSTALLATION.)
3. Remove the cab-side weatherstrip. (See CONVERTIBLE TOP DISASSEMBLY/ASSEMBLY.)
4. Remove the fasteners.
5. Remove the rear deck weatherstrip.

REAR DECK WEATHERSTRIP INSTALLATION

1. Align the deck flange with the weatherstrip marking, and insert. (1)
2. Peel off the tape backing of the butylene tape, align it to the molded part at the tip of the rear deck weatherstrip and press, then attach the fasteners. (2)
3. Install the rear deck weatherstrip. (3)
4. Install the cab-side weatherstrip. (See CONVERTIBLE TOP DISASSEMBLY/ASSEMBLY.)
5. Install the quarter trim. (See QUARTER TRIM REMOVAL/INSTALLATION.)
ROOF HOOK REMOVAL/INSTALLATION

1. Fully close the power retractable hardtop.
2. Remove the following parts:
   1. Console (See CONSOLE PANEL REMOVAL/INSTALLATION.)
   2. Quarter trim (See QUARTER TRIM REMOVAL/INSTALLATION.)
   3. Scuff plate (See SCUFF PLATE REMOVAL/INSTALLATION.)
   4. Tire house trim (See TIRE HOUSE TRIM REMOVAL/INSTALLATION.)
   5. Aeroboard (See AEROBOARD REMOVAL/INSTALLATION.)
   6. Front seat back bar garnish (See SEAT BACK BAR GARNISH REMOVAL/INSTALLATION.)
   7. Back trim (See BACK TRIM REMOVAL/INSTALLATION.)
3. Open the cable case cover and disconnect the cable while pressing the cable in the direction of the arrow. (See ROOF HOOK INSTALL NOTE.)
4. Remove the bolts.

Fig. 88: Rear Deck Weatherstrip Installation View
Courtesy of MAZDA MOTORS CORP.

Fig. 89: Direction For Pressing Cable
Courtesy of MAZDA MOTORS CORP.
5. Remove the roof hook.

Fig. 90: Identifying Roof Hook, Screw And Bolt With Torque Specifications
Courtesy of MAZDA MOTORS CORP.

6. Remove the screws.
7. Pull up the cover and remove the hook.
8. Remove the cover.
9. Install in the reverse order of removal.

Fig. 91: Identifying Roof Hook, Screw And Cover
Courtesy of MAZDA MOTORS CORP.

ROOF HOOK INSTALL NOTE

1. Securely fix the 3 grooves to the cable case.
ROOF HOOK CABLE REMOVAL/INSTALLATION

1. Fully open the deck panel.
2. Remove the following parts:
   1. Console (See CONSOLE PANEL REMOVAL/INSTALLATION.)
   2. Quarter trim (See QUARTER TRIM REMOVAL/INSTALLATION.)
   3. Scuff plate (See SCUFF PLATE REMOVAL/INSTALLATION.)
   4. Tire house trim (See TIRE HOUSE TRIM REMOVAL/INSTALLATION.)
   5. Aeroboard (See AEROBOARD REMOVAL/INSTALLATION.)
   6. Front seat back bar garnish (See SEAT BACK BAR GARNISH REMOVAL/INSTALLATION.)
   7. Back trim (See BACK TRIM REMOVAL/INSTALLATION.)
3. Open the cable case cover and disconnect the cable while pressing the cable in the direction of the arrow. (See ROOF HOOK INSTALL NOTE.)
4. Set the side shelf out of the way. (See SIDE SHELF REMOVAL/INSTALLATION.)
5. Insert a Phillips screwdriver with no wear securely into each screw groove and remove the screws.
CAUTION:  • The screws are engaged firmly because thread-locking compound has been applied to them. When removing the screws, be careful not to deform the screw groove.

6. Remove the rod from the wire guide.
7. Remove tabs A using a tape-wrapped flathead screwdriver, and then remove the wire guide plate.

8. Loosen the nut, then pull the roof hook cable in the direction shown by the arrow and remove it.
9. Remove the nut.
10. Remove the cable case.
11. Remove the roof hook cable from the hook and clip shown in the figure.

12. Install in the reverse order of removal.

**CAUTION:**

- If the roof hook cable is installed to the installation groove on the drain cover, it may become a source of noise during deck panel operation. Do not install it even if there is an installation groove on the drain cover.
ROOF HOOK INSTALL NOTE

1. Securely fix the 3 grooves to the cable case.

POWER RETRACTABLE HARDTOP LINK BRACKET REMOVAL/INSTALLATION

1. Remove the following parts:
   1. Console (See CONSOLE PANEL REMOVAL/INSTALLATION.)
   2. Quarter trim (See QUARTER TRIM REMOVAL/INSTALLATION.)
   3. Scuff plate (See SCUFF PLATE REMOVAL/INSTALLATION.)
   4. Tire house trim (See TIRE HOUSE TRIM REMOVAL/INSTALLATION.)
   5. Aeroboard (See AEROBOARD REMOVAL/INSTALLATION.)
   6. Front seat back bar garnish (See SEAT BACK BAR GARNISH REMOVAL/INSTALLATION.)
   7. Back trim (See BACK TRIM REMOVAL/INSTALLATION.)
   8. Seat belt upper anchor installation bolt (See SEAT BELT REMOVAL/INSTALLATION.)
2. Remove the bolts A, B and C. (See BOLT B, C INSTALL NOTE.)

3. Remove the junction. (See SEAT BACK CROSSMEMBER ASSEMBLY REMOVAL/INSTALLATION.)

4. Loosen the installation bolts and nuts of the seat back crossmember component, and tilt the seat back crossmember component towards the vehicle front. (See SEAT BACK CROSSMEMBER ASSEMBLY REMOVAL/INSTALLATION.)

Fig. 100: Identifying Power Retractable Hardtop Link Bracket And Bolts With Torque Specifications
Courtesy of MAZDA MOTORS CORP.

5. Rotate the power retractable hardtop link bracket in the direction shown by the arrow at the pivot fulcrum of pin A and set the hook out of the way.

6. Remove the power retractable hardtop link bracket.

7. Install in the reverse order of removal.

Fig. 101: Rotating Power Retractable Hardtop Link Bracket
Courtesy of MAZDA MOTORS CORP.
BOLT B, C INSTALL NOTE

1. Temporarily tighten all the bolts, then tighten the bolts in the order indicated in the figure.

Tightening torque

19-25 N.m {1.9-2.6 kgf.m, 14-18 ft.lbf}

Fig. 102: Power Retractable Hardtop Link Bracket Bolts Tightening Order
Courtesy of MAZDA MOTORS CORP.

FRONT ROOF PANEL REMOVAL/INSTALLATION

1. Fully open the deck panel.
2. Cover both sides of the rear window glass with thick cloth to protect the window.
3. Remove the battery cover.
4. Disconnect the negative battery cable. (See BATTERY REMOVAL/INSTALLATION [LF].)
5. Remove the following parts:
   1. Console (See CONSOLE REMOVAL/INSTALLATION.)
   2. Quarter trim (See QUARTER TRIM REMOVAL/INSTALLATION.)
   3. Scuff plate (See SCUFF PLATE REMOVAL/INSTALLATION.)
   4. Tire house trim (See TIRE HOUSE TRIM REMOVAL/INSTALLATION.)
   5. Aeroboard (See AEROBOARD REMOVAL/INSTALLATION.)
   6. Front seat back bar garnish (See SEAT BACK BAR GARNISH REMOVAL/INSTALLATION.)
   7. Back trim (See BACK TRIM REMOVAL/INSTALLATION.)
   8. Seat belt upper anchor installation bolt (See SEAT BELT REMOVAL/INSTALLATION.)
   9. Power retractable hardtop link bracket (See POWER RETRACTABLE HARDTOP LINK BRACKET REMOVAL/INSTALLATION.)
10. Cab-side weatherstrip (See CONVERTIBLE TOP DISASSEMBLY/ASSEMBLY.)
11. Power retractable hardtop (See POWER RETRACTABLE HARDTOP REMOVAL/INSTALLATION.)
NOTE:

- Verify the number of shims because it differs depending on the installation position.

6. When removing the front roof panel, place the positioning mark by affixing masking tape on the roof link and front roof panel.

![Fig. 103: Identifying Mark And Tape](image)

Fig. 103: Identifying Mark And Tape
Courtesy of MAZDA MOTORS CORP.

7. Remove the tabs A and hook B.
8. Remove the cover.
9. Remove the bolts and washers.
10. Remove the sims.
11. Remove the front roof panel.
12. Install in the reverse order of removal.
FRONT ROOF PANEL INSTALLATION NOTE

1. Install the shim according to the number verified prior to removal.
2. Align the alignment marks placed before the front roof panel removal and install the front roof panel.
3. Refer to POWER RETRACTABLE HARDTOP ADJUSTMENT and verify that the gap and height difference between the front roof panel and middle roof panel are within the specifications. Adjust the power retractable hardtop if necessary.

FRONT ROOF PANEL DISASSEMBLY/ASSEMBLY

1. Disassemble in the order indicated in the table.
2. Assemble in the reverse order of disassembly.
Fig. 105: Disassemble/Assemble View Of Front Roof Panel With Torque Specifications  
Courtesy of MAZDA MOTORS CORP.

RETAINER DISASSEMBLY NOTE

1. Mark around the retainer installation screws with paint before removing them.

Fig. 106: Identifying Mark Around Retainer Installation Screws  
Courtesy of MAZDA MOTORS CORP.

RETAINER ASSEMBLY NOTE

1. Install the retainers to the link, aligning the retainer marks with the retainer installation screws.
MIDDLE ROOF PANEL REMOVAL/INSTALLATION

1. Fully open the deck panel.
2. Cover both sides of the rear window glass with thick cloth to protect the window.
3. Remove the battery cover.
4. Disconnect the negative battery cable. (See BATTERY REMOVAL/INSTALLATION [LF].)
5. Remove the following parts:
   1. Console (See CONSOLE REMOVAL/INSTALLATION.)
   2. Quarter trim (See QUARTER TRIM REMOVAL/INSTALLATION.)
   3. Scuff plate (See SCUFF PLATE REMOVAL/INSTALLATION.)
   4. Tire house trim (See TIRE HOUSE TRIM REMOVAL/INSTALLATION.)
   5. Aeroboard (See AEROBOARD REMOVAL/INSTALLATION.)
   6. Front seat back bar garnish (See SEAT BACK BAR GARNISH REMOVAL/INSTALLATION.)
   7. Back trim (See BACK TRIM REMOVAL/INSTALLATION.)
   8. Seat belt upper anchor installation bolt (See SEAT BELT REMOVAL/INSTALLATION.)
   9. Power retractable hardtop link bracket (See POWER RETRACTABLE HARDTOP LINK BRACKET REMOVAL/INSTALLATION.)
10. Cab-side weatherstrip (See CONVERTIBLE TOP DISASSEMBLY/ASSEMBLY.)
11. Power retractable hardtop (See POWER RETRACTABLE HARDTOP REMOVAL/INSTALLATION.)
6. Remove the front roof panel from the middle roof panel. (See FRONT ROOF PANEL REMOVAL/INSTALLATION.)
7. Remove the rear window glass from the middle roof panel. (See REAR WINDOW GLASS REMOVAL/INSTALLATION[POWER RETRACTABLE HARDTOP].)
8. Remove the roof motor from the middle roof panel. (See ROOF MOTOR REMOVAL/INSTALLATION.)
9. Install in the reverse order of removal.
MIDDLE ROOF PANEL DISASSEMBLY/ASSEMBLY

1. Remove the middle roof panel weatherstrip. (See MIDDLE ROOF PANEL WEATHERSTRIP REMOVAL/INSTALLATION.)
2. Disassemble in the order indicated in the table.
3. Assemble in the reverse order of disassembly.

Fig. 108: Disassemble/Assemble View Of Middle Roof Panel
Courtesy of MAZDA MOTORS CORP.

RETAINER DISASSEMBLY NOTE

1. Mark around the retainer installation screws with paint before removing them.

Fig. 109: Identifying Mark Around Retainer Installation Screws
Courtesy of MAZDA MOTORS CORP.

RETAINER ASSEMBLY NOTE
1. Install the retainers to the link, aligning the retainer marks with the retainer installation screws.

![Diagram of retainer and mark alignment](image1.png)

**Fig. 110: Identifying Mark Around Retainer Installation Screws**
*Courtesy of MAZDA MOTORS CORP.*

**MIDDLE ROOF PANEL WEATHERSTRIP REMOVAL/INSTALLATION**

**REMOVAL**

1. Remove the fasteners.

![Diagram of middle roof panel weatherstrip components](image2.png)

**Fig. 111: Identifying Middle Roof Panel Weatherstrip Components**
*Courtesy of MAZDA MOTORS CORP.*

2. Peel off the double-sided adhesive tape.
3. Remove the middle roof panel weatherstrip.

**INSTALLATION**

**WARNING:**
• Using a razor with bare hands can cause injury. Always wear gloves when using a razor.

NOTE:
• Double-sided adhesive tape has already been attached to the new middle roof panel weatherstrip.

1. Remove the double-sided adhesive tape on the middle roof panel using a utility knife.
2. Remove any grease or dirt from the adhesion surface of the middle roof panel.
3. Install the fasteners.

4. Peel off the tape backings and attach the weatherstrip by applying pressure.

**ROOF LINK LOCK REMOVAL/INSTALLATION**

1. Fully open the deck panel.
2. Remove the rear defroster harness from the roof link lock (LH). (See **REAR WINDOW GLASS REMOVAL/INSTALLATION[POWER RETRACTABLE HARDTOP]**.)
3. Remove the bolt.
4. Remove the pin A.
5. Remove the roof link lock.
6. Install in the reverse order of removal.

**Fig. 112: Identifying Middle Roof Panel Weatherstrip Components**

*Courtesy of MAZDA MOTORS CORP.*
POWER RETRACTABLE HARDTOP CONTROL MODULE BRACKET REMOVAL/INSTALLATION

1. Remove the battery cover.
2. Disconnect the negative battery cable. (See BATTERY REMOVAL/INSTALLATION [LF].)
3. Remove the following parts:
   1. Console (See CONSOLE REMOVAL/INSTALLATION.)
   2. Quarter trim (See QUARTER TRIM REMOVAL/INSTALLATION.)
   3. Scuff plate (See SCUFF PLATE REMOVAL/INSTALLATION.)
   4. Tire house trim (See TIRE HOUSE TRIM REMOVAL/INSTALLATION.)
   5. Aeroboard (See AEROBOARD REMOVAL/INSTALLATION.)
   6. Front seat back bar garnish (See SEAT BACK BAR GARNISH REMOVAL/INSTALLATION.)
   7. Back trim (See BACK TRIM REMOVAL/INSTALLATION.)
4. Remove the roof hook cable case.
5. Remove in the order indicated in the table.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Connector</td>
</tr>
<tr>
<td>2</td>
<td>Nut</td>
</tr>
<tr>
<td>3</td>
<td>Bolt</td>
</tr>
<tr>
<td>4</td>
<td>Power retractable hardtop control module assembly</td>
</tr>
</tbody>
</table>

Fig. 115: Removing View Of Power Retractable Hardtop Control Module Bracket With Torque Specifications
Courtesy of MAZDA MOTORS CORP.

6. Remove the nuts.
7. Remove the power retractable hardtop control module bracket.
8. Install in the reverse order of removal.

Fig. 116: Identifying Power Retractable Hardtop Control Module Bracket And Nut
Courtesy of MAZDA MOTORS CORP.

BLACK-OUT FILM REMOVAL

FRONT

1. Partially peel back the middle roof weatherstrip.
2. Peel off the black-out film by pulling it outward from one end.

**NOTE:**
- Slowly remove the black-out film since it may tear easily.
REAR

1. Move the power retractable hardtop in the open direction as shown in the figure until it is separated from the middle roof panel.

2. Peel off the black-out film by pulling it outward from one end.

NOTE:  
- Slowly remove the black-out film since it may tear easily.
Fig. 119: Removing Black-Out Film
Courtesy of MAZDA MOTORS CORP.

BLACK-OUT FILM INSTALLATION

FRONT

1. Remove any grease or dirt from the affixing surface of the middle roof panel.
2. Peel off the tape backing from the upper area 50-100 mm, and adhere the black-out film to the positioning point shown in the figure.

Clearance

\[ a: 0-2.0 \text{ mm} \{0-0.078 \text{ in}\} \]

3. Peel off the tape backing, and after verifying that the bottom edge is positioned within 2 mm from the line shown in the figure, adhere the surface of the black-out film.
4. Peel off the transparent protective film on the black-out film.
5. Apply pressure to the black-out film in the order of side and back side.
6. Grasp edges b, c and pull in the direction shown by the arrow making sure there are no wrinkles in the corner area, and adhere.
7. Install the middle roof panel weatherstrip. (See MIDDLE ROOF PANEL WEATHERSTRIP REMOVAL/INSTALLATION.)
REAR

1. Remove any grease or dirt from the affixing surface of the middle roof panel.
2. Peel off the tape backing from the upper area **50-100 mm**, and adhere the black-out film to the positioning point shown in the figure.

**Clearance**

\[ a: \text{0-3.0 mm} \{0-0.118 \text{ in}\} \]

3. Peel off the tape backing and adhere the black-out film surface.
4. Peel off the transparent protective film on the black-out film.
5. Apply pressure to the black-out film in the order of side and back side.
6. Fold in the edges in the order shown in the figure.
7. Attach the black out film (LH) using the same procedure as the black out film (RH).

**CAUTION:**
- Adhere so that the center edge of the black-out film (RH) is underneath the center edge of the black-out film (LH) in the center alignment area, with no deviation.

POWER RETRACTABLE HARDTOP DRAIN HOSE REMOVAL/INSTALLATION

1. Fully close the power retractable hardtop.
2. Fully open the deck panel.
3. Remove clip A, and remove the power retractable hardtop drain hose from the rear window glass.
4. Insert your hand from the fully opened deck panel and remove clip B, and remove the power retractable hardtop drain hose from the rear side trim.
5. Install in the reverse order of removal.

Fig. 123: Identifying Power Retractable Hardtop Drain Hose Components
Courtesy of MAZDA MOTORS CORP.

DECK PANEL MANUAL OPEN/CLOSE PROCEDURE

CAUTION:
- Because the pinion gear (deck panel motor) and sector gear are disengaged when the manual open/close procedure is performed, the deck panel does not operate electrically after a repair. It is necessary to perform the recovery procedure to engage the pinion gear (deck panel motor) and sector gear. (See RECOVERY PROCEDURE.)

DECK PANEL MANUAL OPEN/CLOSE PROCEDURE AND TEMPORARY MEASURE PROCEDURE

NOTE:
- The temporary measure is for releasing the lock using a rope if the deck panel needs to be opened/closed again or to drive the vehicle after the deck panel manual open/close procedure has been performed. To open/close the deck panel manually on the vehicle where the temporary measure has already been performed, open/close the deck panel manually referring to "Deck panel manual open/close procedure after temporary measure". (See CLOSE THE DECK PANEL (TEMPORARY MEASURE).)
• To perform the following procedure, use the tools that comes with the vehicle.
• To free the deck panel, both the motors need to be unlocked.
• The following procedure is only for the left side. Perform the same procedure on the right side to free the deck panel.

![Diagram of Eye Bolt and Rope](image1)

**Fig. 124: Identifying Eye Bolt And Rope**
*Courtesy of MAZDA MOTORS CORP.*

**OPEN THE DECK PANEL**

1. Remove the bolts.

![Diagram of Deck Panel and Gear Unit](image2)

**Fig. 125: Identifying Bolts**
*Courtesy of MAZDA MOTORS CORP.*

2. Insert the eye bolt into the thread hole above the removed bolt.
3. Rotate the eye bolt in the tightening direction seven times to press the deck panel motor bracket.

**NOTE:**
- When the deck panel motor bracket is pressed, the deck panel motor bracket rotates, and the pinion gear (deck panel motor) and sector gear are disengaged.

4. Remove the eye bolt.

5. Insert the eye bolt into the guide pipe shown in the figure.
6. Press the eye bolt towards the vehicle rear and disengage the sector gear and the lock pin of the deck panel base link.

7. Lift up the deck panel from the both the left and right sides of the vehicle, one person on each side, to open the deck panel.

Close the deck panel (Temporary measure)

**NOTE:**
- If the deck panel needs to be opened/closed again or to drive the vehicle, perform the following temporary measure procedure.

1. Double tie the rope to the deck panel link screw as shown in the figure.

**CAUTION:**
- Tie the rope securely around the knob so that it does not loosen.
2. Route the rope on the vehicle's front side to the inside of the vehicle, passing it through the gap in the side shelf.

3. Route the rope on the vehicle's rear side to the outside of the vehicle, passing it between the deck panel links.

4. After doing the same procedure on the right side, close the deck panel from both the left and sides of the vehicle, one person on each side.
Fig. 132: Rope Routing On Vehicle Rear Side  
Courtesy of MAZDA MOTORS CORP.

5. Pull the rope on the vehicle's rear (rope is outside of vehicle) along the trunk lid to engage and lock the sector gear and the lock pin of the deck panel base link.

Fig. 133: Direction Of Pulling Rope  
Courtesy of MAZDA MOTORS CORP.

6. Double tie the rope on the vehicle's rear side (rope is outside of vehicle) to the trunk lid hinge as shown in the figure.

**CAUTION:**
- Tie the rope on the trunk lid hinge to prevent the lock from releasing while driving. Tie the rope securely on the trunk lid hinge so that it does not loosen.

Fig. 134: Identifying Trunk Lid Hinge  
Courtesy of MAZDA MOTORS CORP.

**DECK PANEL MANUAL OPEN/CLOSE PROCEDURE AFTER TEMPORARILY MEASURE**

**NOTE:**
- The temporary measure is for releasing the lock using a rope if the deck panel needs to be opened/closed again or to drive-the vehicle after the deck panel manual open/close procedure has been performed. To
open/close the deck panel manually on a vehicle where the temporary measure has already been performed, perform the following procedure and open/close the deck panel manually.

Open the deck panel

1. Pull the rope on the vehicle's front (rope is inside of vehicle) to disengage the sector gear and the lock pin of the deck panel base link.

2. Lift up the deck panel from the both the left and right sides of the vehicle, one person on each side, to open the deck panel.

![Fig. 135: Pulling Rope From Vehicle Front](image1)

Fig. 135: Pulling Rope From Vehicle Front
Courtesy of MAZDA MOTORS CORP.

Close the deck panel

**NOTE:**

- If the deck panel needs to be opened/closed again or to drive the vehicle, perform the following procedure to close the deck panel.

1. Close the deck panel from both the left and right sides of the vehicle, one person on each side.

2. Pull the rope on the vehicle's rear (rope is outside of vehicle) along the trunk lid to engage and lock the sector gear and the lock pin of the deck panel base link.

![Fig. 136: Pulling Rope From Vehicle Rear Side](image2)
3. Double tie the rope on the vehicle's rear side (rope is outside of vehicle) to the trunk lid hinge as shown in the figure.

**CAUTION:**
- Tie the rope on the trunk lid hinge to prevent the lock from releasing while driving. Tie the rope securely on the trunk lid hinge so that it does not loosen.

**Recovery Procedure**

1. Fully open the deck panel.
2. Rotate the deck panel motor bracket in the direction of the arrow to engage the pinion gear (deck panel motor) and the sector gear.
3. Install the bolt.
DECK PANEL MANUAL OPEN/CLOSE PROCEDURE WITH THE ROOF PANEL FULLY CLOSED

1. Disconnect the negative battery cable. (See BATTERY REMOVAL/INSTALLATION [LF] .)
2. Remove the aeroboard. (See AEROBOARD REMOVAL/INSTALLATION .)
3. Peering from the space where the wind blocker was removed, remove both sides of the nuts shown in the figure.

   NOTE:  
   - The number of shims varies depending on the location of the deck panel installation nuts. Adjustment will be easier by verifying the number of shims to be used before removing the deck panel.

4. Lift up the deck panel with one other person.
5. Disconnect the high-mount brake light connector on the left side by pulling it in the direction of (2) while pressing it in the direction of (1).
6. Remove the deck panel.

Nut Removal Note

1. Insert a spanner into the clearance between the deck panel and side shelf, and remove the nuts.
DECK PANEL RECOVERY PROCEDURE

1. Connect the negative battery cable.
2. Fully open the deck panel.
3. Install the deck panel. (See DECK PANEL REMOVAL/INSTALLATION.)
4. Verify the deck panel clearance. (See POWER RETRACTABLE HARDTOP ADJUSTMENT.)

POWER RETRACTABLE HARDTOP OPEN/CLOSE WARNING BEEP ON/OFF SWITCHING

1. Connect the M-MDS to the DLC-2.
2. After the vehicle is identified, select the following items from the initial screen of the M-MDS.
   - When using the IDS (laptop PC)
     1. Select "Module Programming".
   - When using the PDS (Pocket PC)
     1. Select "Programming".

Fig. 140: Removing Nut A
Courtesy of MAZDA MOTORS CORP.

Fig. 141: Removing Nut B
Courtesy of MAZDA MOTORS CORP.
2. Select "Module programming".
3. Then, select items from the screen menu in the following order.
   1. Select "Programmable Parameters".
   2. Select "Warning Lamps/Chimes".
4. Select the RHT buzzer (IC) on the M-MDS to set on/off.

**Item**

- RHT Buzzer - (IC)

![DLC-2 Connector](image)

*Fig. 142: Identifying DLC-2 Connector
Courtesy of MAZDA MOTORS CORP.*