

2008 Mazda CX-9 Grand Touring

2008 BODY & ACCESSORIES Doors and Liftgate - Mazda CX-9

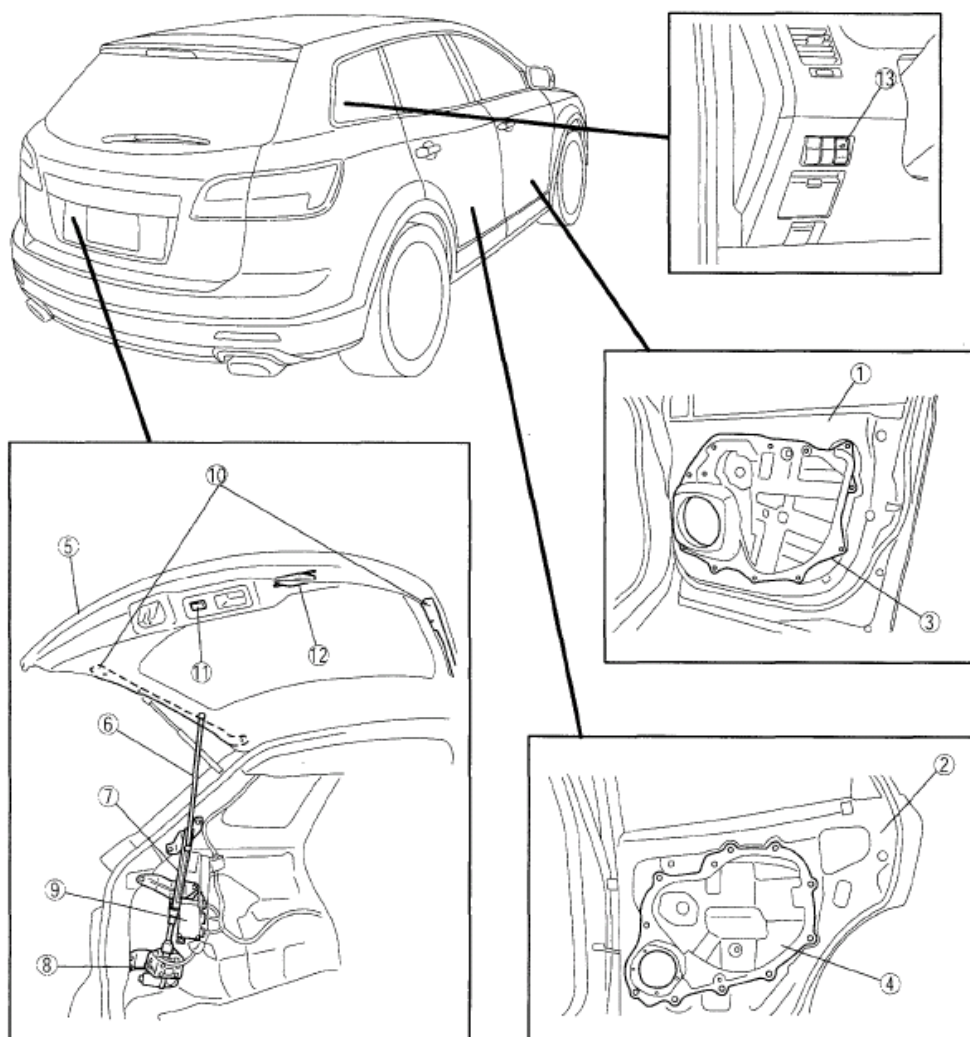
2008 BODY & ACCESSORIES

Doors and Liftgate - Mazda CX-9

DOOR AND LIFTGATE LOCATION INDEX

2008 Mazda CX-9 Grand Touring

2008 BODY & ACCESSORIES Doors and Liftgate - Mazda CX-9



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1	Front door (See 09-11-3 FRONT DOOR REMOVAL/INSTALLATION.) (See 09-11-5 DOOR ADJUSTMENT.)
2	Rear door (See 09-11-4 REAR DOOR REMOVAL/INSTALLATION.) (See 09-11-5 DOOR ADJUSTMENT.)
3	Front door module (See 09-11-5 FRONT DOOR MODULE REMOVAL/INSTALLATION.)
4	Rear door module (See 09-11-6 REAR DOOR MODULE REMOVAL/INSTALLATION.)
5	Liftgate (See 09-11-7 LIFTGATE REMOVAL/INSTALLATION.)
6	PLG arm (See 09-11-9 POWER LIFTGATE (PLG) ARM REMOVAL/INSTALLATION.)
7	PLG slider (See 09-11-10 POWER LIFTGATE (PLG) SLIDER REMOVAL/INSTALLATION.)
8	PLG drive unit (See 09-11-11 POWER LIFTGATE (PLG) DRIVE UNIT REMOVAL/INSTALLATION.)

9	PLG control module (See 09-11-12 POWER LIFTGATE (PLG) CONTROL MODULE REMOVAL/INSTALLATION.) (See 09-11-12 POWER LIFTGATE (PLG) CONTROL MODULE INSPECTION.)
10	PLG touch sensor (See 09-11-14 POWER LIFTGATE (PLG) TOUCH SENSOR REMOVAL/INSTALLATION.) (See 09-11-15 POWER LIFTGATE (PLG) TOUCH SENSOR INSPECTION.)
11	PLG rear switch (See 09-11-16 POWER LIFTGATE (PLG) REAR SWITCH REMOVAL/INSTALLATION.) (See 09-11-16 POWER LIFTGATE (PLG) REAR SWITCH INSPECTION.)
12	PLG buzzer (See 09-11-16 POWER LIFTGATE (PLG) BUZZER REMOVAL/INSTALLATION.) (See 09-11-17 POWER LIFTGATE (PLG) BUZZER INSPECTION.)
13	PLG front switch (See 09-11-15 POWER LIFTGATE (PLG) FRONT SWITCH REMOVAL/INSTALLATION.) (See 09-11-15 POWER LIFTGATE (PLG) FRONT SWITCH INSPECTION.)

Fig. 1: Identifying Door & Liftgate Components Location
 Courtesy of MAZDA MOTORS CORP.

FRONT DOOR REMOVAL/INSTALLATION

1. Disconnect the negative battery cable.
2. To remove the checker, remove the following parts:
 1. Inner garnish (See INNER GARNISH REMOVAL/INSTALLATION .)
 2. Front door trim (See FRONT DOOR TRIM REMOVAL/INSTALLATION .)
 3. Front door speaker (See FRONT DOOR SPEAKER REMOVAL/INSTALLATION .)
3. To remove the front door hinges, remove the following parts:
 1. Windshield wiper arm and blade (See WINDSHIELD WIPER ARM AND BLADE REMOVAL/INSTALLATION .)
 2. Side cowl grille (See COWL GRILLE REMOVAL/INSTALLATION .)
 3. Front bumper (See FRONT BUMPER REMOVAL/INSTALLATION .)
 4. Front combination lights (See FRONT COMBINATION LIGHT REMOVAL/INSTALLATION .)
 5. Sail garnish (See SAIL GARNISH REMOVAL/INSTALLATION .)
 6. Front fender panel (See FRONT FENDER PANEL REMOVAL/INSTALLATION .)
4. Remove in the order indicated in the table.

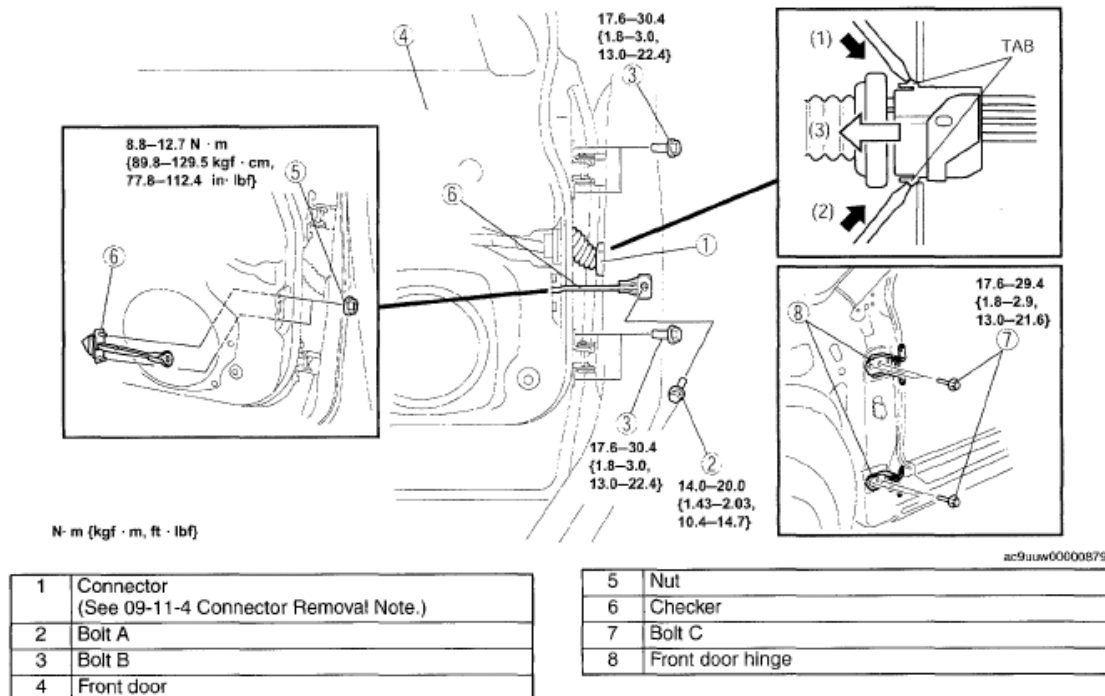
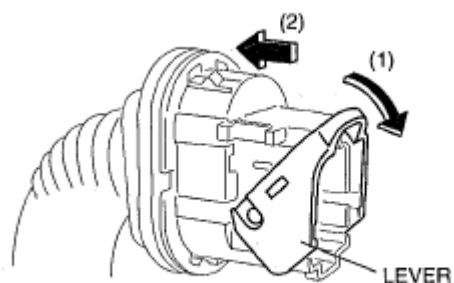


Fig. 2: Identifying Front Door Components & Torque Specifications
 Courtesy of MAZDA MOTORS CORP.

5. Install in the reverse order of removal.
6. Adjust the front door. (See **DOOR ADJUSTMENT.**)

CONNECTOR REMOVAL NOTE

1. Pull down the lever in the direction of the arrow (1) and disconnect the connector in the direction of the arrow (2).



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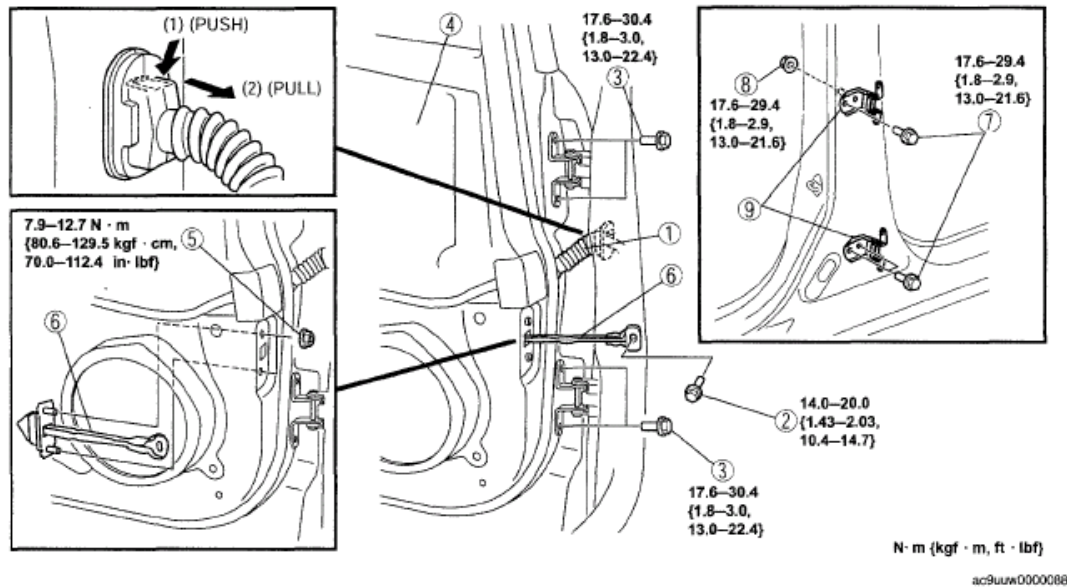
Fig. 3: View Of Lever
Courtesy of MAZDA MOTORS CORP.

REAR DOOR REMOVAL/INSTALLATION

1. To remove the checker, remove the following parts:
 1. Inner sail garnish (See **INNER SAIL GARNISH REMOVAL/INSTALLATION .**)
 2. Rear door trim (See **REAR DOOR TRIM REMOVAL/INSTALLATION .**)
 3. Rear door speaker (See **REAR DOOR SPEAKER REMOVAL/INSTALLATION .**)
2. Remove in the order indicated in the table.

2008 Mazda CX-9 Grand Touring

2008 BODY & ACCESSORIES Doors and Liftgate - Mazda CX-9



1	Connector
2	Bolt A
3	Bolt B
4	Rear door
5	Nut

6	Checker
7	Bolt C
8	Nut
9	Rear door hinge

Fig. 4: Identifying Rear Door Components & Torque Specifications
 Courtesy of MAZDA MOTORS CORP.

3. Install in the reverse order of removal.
4. Adjust the front door. (See **DOOR ADJUSTMENT**.)

DOOR ADJUSTMENT

1. Loosen the door hinge installation bolts.
2. Adjust the gap and height difference to the standard range by moving the door back and forth, left and right.

Clearance

- a. 2.5-4.5 mm {0.10-0.17 in}
 - b. -1.0-1.0 mm {-0.03-0.03 in}
 - c. 3.0-6.0 mm {0.12-0.23 in}
 - d. -1.5-1.5 mm {-0.05-0.05 in}
3. Tighten the bolts or screws.
 4. If the front door and rear door dose not open/close smoothly, loosen the door

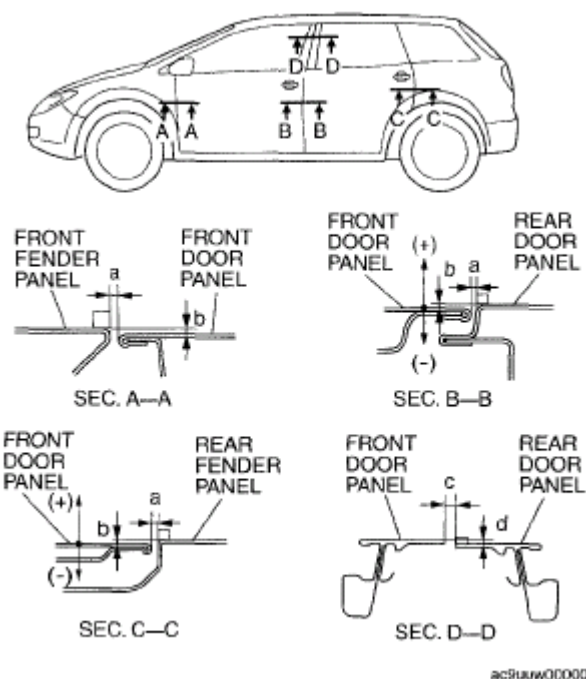
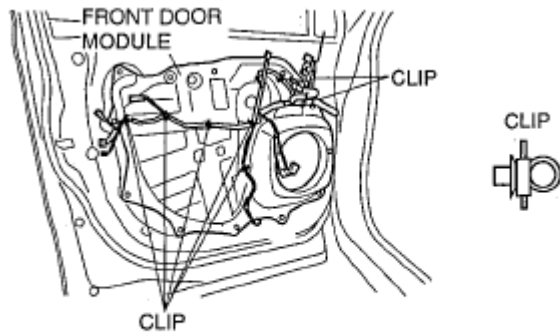


Fig. 5: Identifying Forth Door Gap Adjustment (Left And Right)
 Courtesy of MAZDA MOTORS CORP.

FRONT DOOR MODULE REMOVAL/INSTALLATION

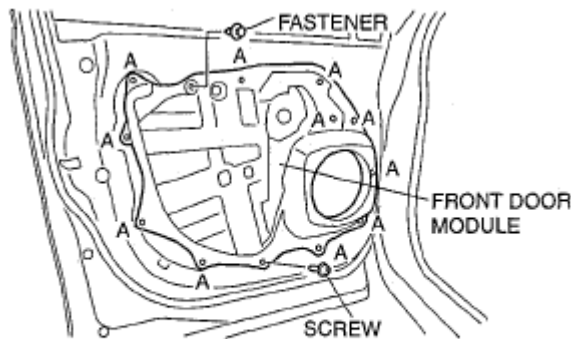
1. Disconnect the negative battery cable.
2. Remove the following parts:
 1. Inner garnish (See **INNER GARNISH REMOVAL/INSTALLATION**)
 2. Front door trim (See **FRONT DOOR TRIM REMOVAL/INSTALLATION**)
 3. Front door speaker (See **FRONT DOOR SPEAKER REMOVAL/INSTALLATION**)
 4. Front door glass (See **FRONT DOOR GLASS REMOVAL/INSTALLATION**)
3. Disconnect the power outer mirror connector.
4. Remove the clips securing the wiring harness shown in the figure and set the wiring harness out of the way.



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Fig. 6: Identifying Front Door Module And Clip
Courtesy of MAZDA MOTORS CORP.

5. Remove screws and fastener.
6. Remove the front door module.
7. Install in the reverse order of removal.



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Fig. 7: Identifying Front Door Module With Screws And Fastener
Courtesy of MAZDA MOTORS CORP.

REAR DOOR MODULE REMOVAL/INSTALLATION

1. Disconnect the negative battery cable.
2. Remove the following parts:
 1. Inner sail garnish (See **INNER SAIL GARNISH REMOVAL/INSTALLATION** .)
 2. Rear door trim (See **REAR DOOR TRIM REMOVAL/INSTALLATION** .)
 3. Rear door speaker (See **REAR DOOR SPEAKER REMOVAL/INSTALLATION** .)
 4. Rear door glass (See **REAR DOOR GLASS REMOVAL/INSTALLATION** .)

3. Remove the clips securing the wiring harness shown in the figure and set the wiring harness out of the way.

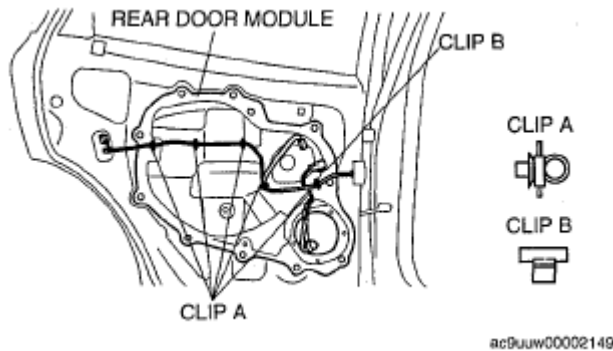


Fig. 8: Identifying Rear Door Module And Clip
Courtesy of MAZDA MOTORS CORP.

4. Remove screws and fastener.
5. Remove the rear door module.
6. Install in the reverse order of removal.

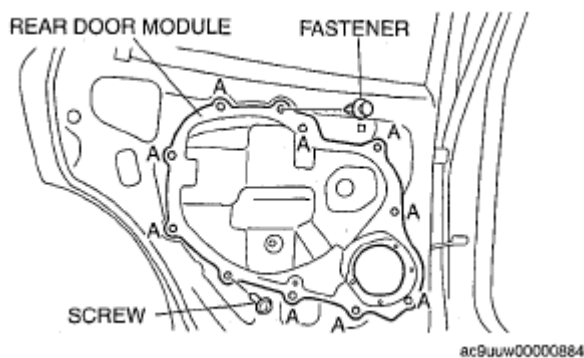


Fig. 9: Identifying Rear Door Module With Screws And Fastener
Courtesy of MAZDA MOTORS CORP.

LIFTGATE REMOVAL/INSTALLATION

WARNING:

- When removing the stay damper, serious injury may occur if the stay damper is removed without supporting the liftgate. Always perform the procedure with at least another person.

CAUTION:

- If replacing the rear window glass, leave the power liftgate (PLG) unoperated for two days after the rear Window glass installation. If the power liftgate (PLG) is operated automatically with the sealant not hardened after the rear window glass installation, the liftgate may

deform. It is recommended that you refrain from operating the power liftgate (PLG) for seven days after the rear window glass installation. Manual opening/closing will not cause liftgate deformation.

1. Disconnect the negative battery cable.
2. Disconnect the PLG arm. (Liftgate side) (Vehicles with PLG)
3. Remove the following parts:
 1. Trunk box (See **TRUNK BOX REMOVAL/INSTALLATION** .)
 2. Seat side box (See **SEAT SIDE BOX REMOVAL/INSTALLATION** .)
 3. Trunk end trim (See **TRUNK END TRIM REMOVAL/INSTALLATION** .)
 4. Third-row seat (See **THIRD-RROW SEAT REMOVAL/INSTALLATION** .)
 5. Rear scuff plate inner (See **REAR SCUFF PLATE REMOVAL/INSTALLATION** .)
 6. Third-row seat belt lower anchor installation bolt (See **THIRD-RROW SEAT BELT REMOVAL/INSTALLATION** .)
 7. Trunk side trim (See **TRUNK SIDE TRIM REMOVAL/INSTALLATION** .)
 8. Roof side trim (See **ROOF SIDE TRIM REMOVAL/INSTALLATION** .)
 9. Second-row seat belt upper anchor installation bolt (See **SECOND-RROW SEAT BELT REMOVAL/INSTALLATION** .)
 10. C-pillar trim (See **C-PILLAR TRIM REMOVAL/INSTALLATION** .)
 11. Third-row seat belt upper anchor installation bolt (See **THIRD-RROW SEAT BELT REMOVAL/INSTALLATION** .)
 12. D-pillar trim (See **D-PILLAR TRIM REMOVAL/INSTALLATION** .)
 13. Liftgate upper trim (See **LIFTGATE UPPER TRIM REMOVAL/INSTALLATION** .)
 14. Liftgate side trim (See **LIFTGATE SIDE TRIM REMOVAL/INSTALLATION** .)
 15. Liftgate lower trim (See **LIFTGATE LOWER TRIM REMOVAL/INSTALLATION** .)
4. Pull down the headliner.
5. Disconnect the rear washer hose.
6. Disconnect the liftgate wiring harness connector.
7. Disconnect the stay damper band with using the flat blade screwdriver.

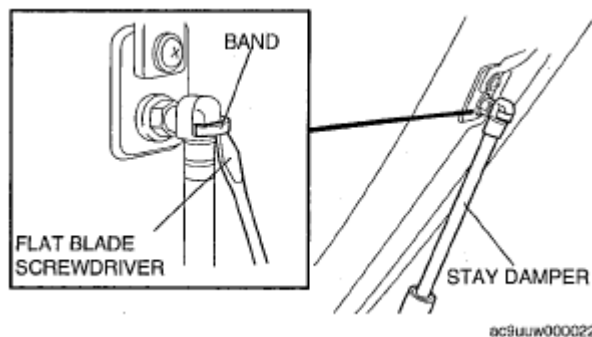
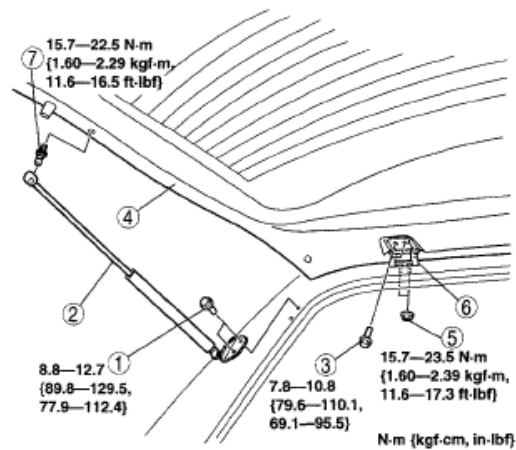


Fig. 10: Prying Stay Damper Band With Screwdriver

Courtesy of MAZDA MOTORS CORP.

8. Remove in the order indicated in the figure.

1	Bolt A
2	Stay damper
3	Bolt B
4	Liftgate
5	Nut
6	Liftgate hinge
7	Stud ball



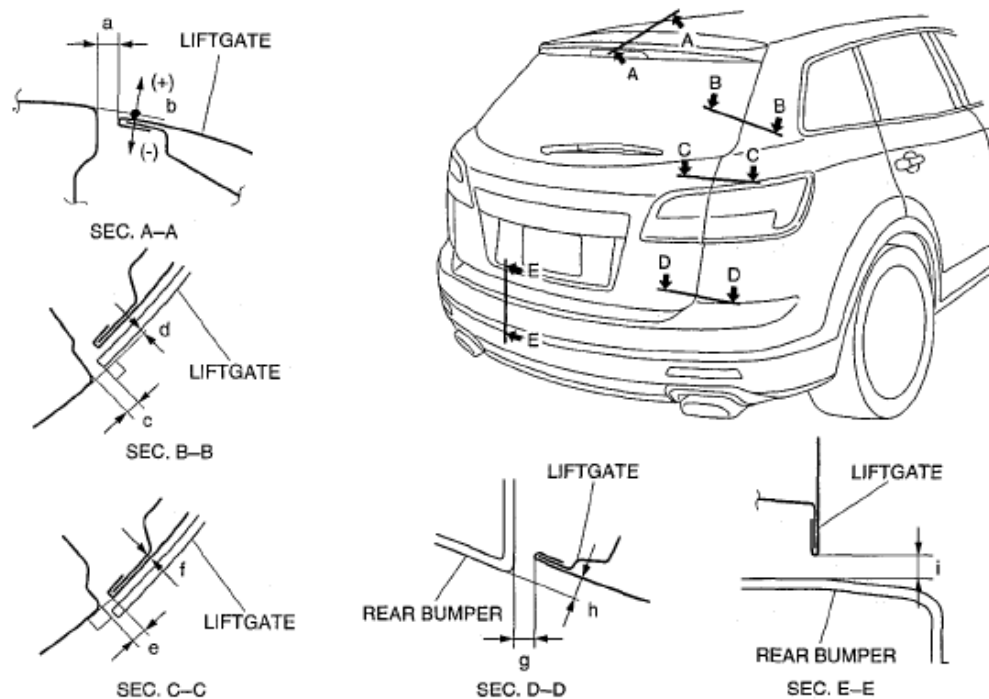
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Fig. 11: Identifying Stay Damper, Liftgate Hinge & Torque Specifications
 Courtesy of MAZDA MOTORS CORP.

- If replacing with a new liftgate, the old rear window glass may be reinstalled if it is reuse able. If not, install new rear window glass.(see **REAR WINDOW GLASS INSTALLATION**)
- Install in the reverse order of removal.
- Adjust the liftgate. (See **LIFTGATE ADJUSTMENT.**)

LIFTGATE ADJUSTMENT

- Measure the gap and height between the liftgate and the body.
- Loosen the liftgate hinge installation bolts and adjust the gap by moving the liftgate.



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Fig. 12: Identifying Liftgate, Body Gap Adjustment & Torque Specifications
 Courtesy of MAZDA MOTORS CORP.

Clearance

- a. 5.0-7.0 mm {0.19-0.27 in}
- b. -2.0-0.0 mm {-0.08-0.00 in}
- c. 1.8-6.8 mm {0.07-0.27 in}
- d. -0.1-5.1 mm {-0.01-0.20 in}
- e. 2.8-5.2 mm {0.11-0.20 in}
- f. -0.2-2.2 mm {-0.01-0.08 in}
- g. 1.5-6.5 mm {0.06-0.25 in}
- h. -2.0-2.0 mm {0.08-0.08 in}
- i. 4.0-8.0 mm {0.16-0.31 in}

3. Tighten the bolts or screws.

POWER LIFTGATE (PLG) ARM REMOVAL/INSTALLATION

NOTE:

- If the negative battery cable is disconnected with the liftgate half opened, the clutch cannot be disengaged resulting in difficulty in opening/closing operation of the liftgate. Disconnect the negative battery cable with the liftgate in the fully open/close position.

1. Disconnect the negative battery cable.
2. Remove the following parts:
 1. Trunk box (See **TRUNK BOX REMOVAL/INSTALLATION** .)
 2. Seat side box (LH) (See **SEAT SIDE BOX REMOVAL/INSTALLATION** .)
 3. Trunk end trim (See **TRUNK END TRIM REMOVAL/INSTALLATION** .)
 4. Third-row seat (See **THIRD-ROW SEAT REMOVAL/INSTALLATION** .)
 5. Third-row seat belt lower anchor installation bolt (LH) (See **THIRD-ROW SEAT BELT REMOVAL/INSTALLATION** .)
 6. Rear scuff plate inner (LH) (See **REAR SCUFF PLATE REMOVAL/INSTALLATION** .)
 7. Trunk side trim (LH) (See **TRUNK SIDE TRIM REMOVAL/INSTALLATION** .)
 8. Roof side trim (LH) (See **ROOF SIDE TRIM REMOVAL/INSTALLATION** .)
 9. Second-row seat belt upper anchor installation bolt (LH) (See **SECOND-ROW SEAT BELT REMOVAL/INSTALLATION** .)
 10. C-pillar trim (LH) (See **C-PILLAR TRIM REMOVAL/INSTALLATION** .)
 11. Third-row seat belt upper anchor installation bolt (LH) (See **THIRD-ROW SEAT BELT REMOVAL/INSTALLATION** .)
 12. D-pillar trim (LH) (See **D-PILLAR TRIM REMOVAL/INSTALLATION** .)
3. Disconnect the PLG arm band with using the flat blade screwdriver.
4. Remove the PLG arm.
5. Install in the reverse order of removal.

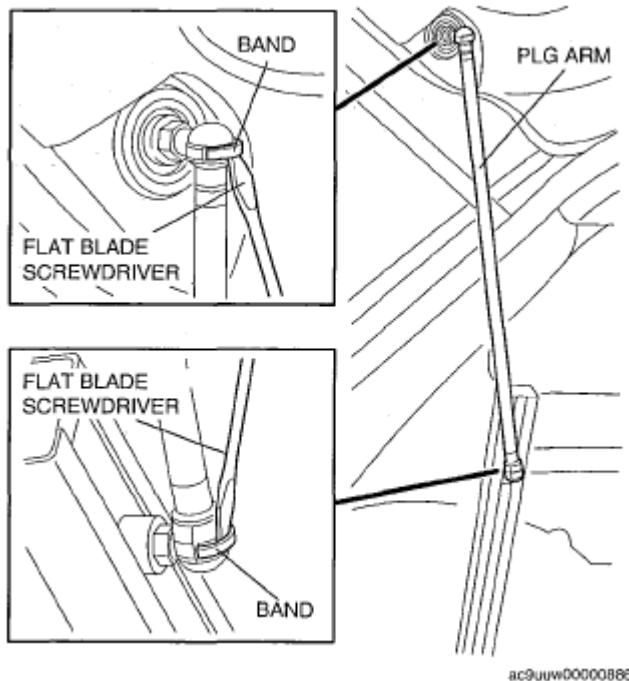


Fig. 13: Prying PLG Arm Band With Screwdriver

Courtesy of MAZDA MOTORS CORP.

POWER LIFTGATE (PLG) SLIDER REMOVAL/INSTALLATION

NOTE:

- If the negative battery cable is disconnected with the liftgate half opened, the clutch cannot be disengaged resulting in difficulty in opening/closing operation of the liftgate. Disconnect the negative battery cable with the liftgate in the fully open/close position.

1. Disconnect the negative battery cable.
2. Remove the following parts:
 1. Trunk box (See **TRUNK BOX REMOVAL/INSTALLATION** .)
 2. Seat side box (LH) (See **SEAT SIDE BOX REMOVAL/INSTALLATION** .)
 3. Trunk end trim (See **TRUNK END TRIM REMOVAL/INSTALLATION** .)
 4. Third-row seat (See **THIRD-ROW SEAT REMOVAL/INSTALLATION** .)
 5. Third-row seat belt lower anchor installation bolt (LH) (See **THIRD-ROW SEAT BELT REMOVAL/INSTALLATION** .)
 6. Rear scuff plate inner (LH) (See **REAR SCUFF PLATE REMOVAL/INSTALLATION** .)
 7. Trunk side trim (LH) (See **TRUNK SIDE TRIM REMOVAL/INSTALLATION** .)
 8. Roof side trim (LH) (See **ROOF SIDE TRIM REMOVAL/INSTALLATION** .)
 9. Third-row seat belt upper anchor installation bolt (LH) (See **THIRD-ROW SEAT BELT REMOVAL/INSTALLATION** .)
 10. D-pillar trim (LH) (See **D-PILLAR TRIM REMOVAL/INSTALLATION** .)
3. Disconnect the connection of the band that is on the PLG slider side of PLG arm with using the flat blade screwdriver.
4. Put the PLG arm.

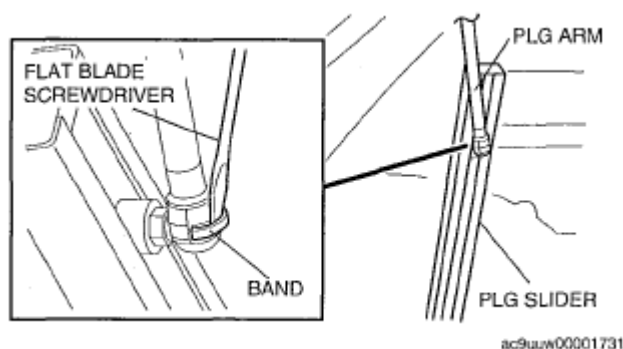


Fig. 14: Prying PLG Arm Band With Screwdriver
 Courtesy of MAZDA MOTORS CORP.

5. Revolve the outer joint in the direction of the arrow to disconnect from the PLG slider and the PLG drive unit.
6. Remove the bolts.
7. Remove the PLG slider.

8. Install in the reverse order of removal.

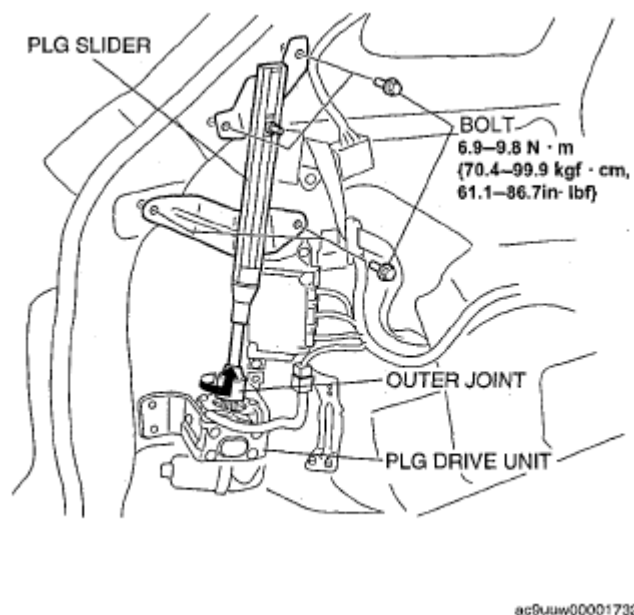


Fig. 15: View Of Outer Joint & Torque Specifications
Courtesy of MAZDA MOTORS CORP.

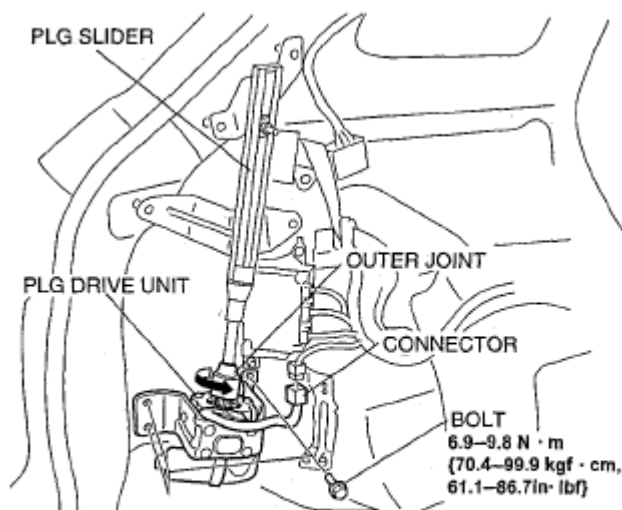
POWER LIFTGATE (PLG) DRIVE UNIT REMOVAL/INSTALLATION

NOTE:

- If the negative battery cable is disconnected with the liftgate half opened, the clutch cannot be disengaged resulting in difficulty in opening/closing operation of the liftgate. Disconnect the negative battery cable with the liftgate in the fully open/close position.

1. Disconnect the negative battery cable.
2. Remove the following parts:
 1. Trunk box (See **TRUNK BOX REMOVAL/INSTALLATION** .)
 2. Seat side box (LH) (See **SEAT SIDE BOX REMOVAL/INSTALLATION** .)
 3. Trunk end trim (See **TRUNK END TRIM REMOVAL/INSTALLATION** .)
 4. Third-row seat (See **THIRD-ROW SEAT REMOVAL/INSTALLATION** .)
 5. Third-row seat belt lower anchor installation bolt (LH) (See **THIRD-ROW SEAT BELT REMOVAL/INSTALLATION** .)
 6. Trunk side trim (LH) (See **TRUNK SIDE TRIM REMOVAL/INSTALLATION** .)
3. Revolve the outer joint in the direction of the arrow to disconnect from the PLG drive unit and the PLG slider.
4. Disconnect the PLG drive unit connector.
5. Remove the bolts.

6. Remove the PLG drive unit.
7. Install in the reverse order of removal.



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Fig. 16: View Of PLG Drive Unit Connector & Torque Specifications
Courtesy of MAZDA MOTORS CORP.

POWER LIFTGATE (PLG) CONTROL MODULE REMOVAL/INSTALLATION

1. Disconnect the negative battery cable.
2. Remove the following parts:
 1. Trunk box (See **TRUNK BOX REMOVAL/INSTALLATION** .)
 2. Seat side box (LH) (See **SEAT SIDE BOX REMOVAL/INSTALLATION** .)
 3. Trunk end trim (See **TRUNK END TRIM REMOVAL/INSTALLATION** .)
 4. Third-row seat (See **THIRD-ROW SEAT REMOVAL/INSTALLATION** .)
 5. Third-row seat belt lower anchor installation bolt (LH) (See **THIRD-ROW SEAT BELT REMOVAL/INSTALLATION** .)
 6. Trunk side trim (LH) (See **TRUNK SIDE TRIM REMOVAL/INSTALLATION** .)
3. Disconnect the PLG control module connector.
4. Remove the bolts.
5. Remove the PLG control module.
6. Install in the reverse order of removal.

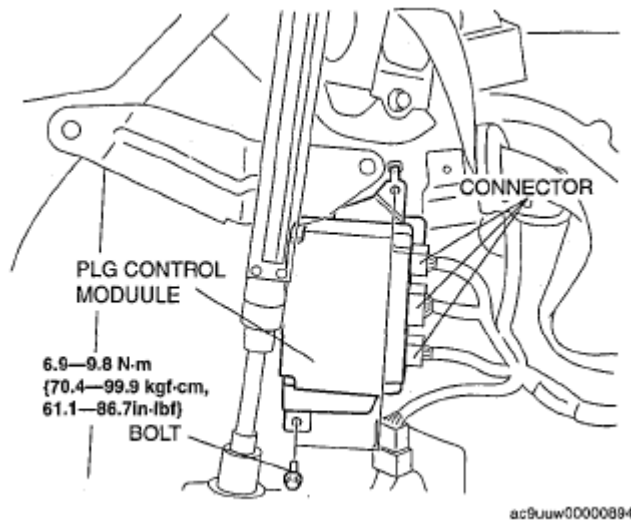


Fig. 17: Identifying PLG Control Module, Connector & Torque Specifications
 Courtesy of MAZDA MOTORS CORP.

POWER LIFTGATE (PLG) CONTROL MODULE INSPECTION

1. Measure the PLG control module terminal voltage.
2. If there is large difference between the measured value and the value in the terminal voltage table, inspect the parts under "Inspection item(s)" and related wiring harnesses.
 - If the system does not work properly even though the inspection items or related wiring harnesses do not have any malfunction, replace the PLG control module.

Terminal Voltage Table (Reference)

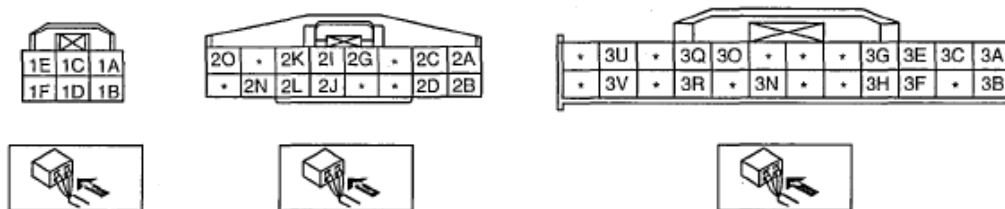


Fig. 18: Identifying PLG Control Module Connector Terminal
 Courtesy of MAZDA MOTORS CORP.

CONNECTOR TERMINAL REFERENCE

Terminal	Signal name	Connected to	Measurement condition	Voltage (V)/Continuity	Inspection item(s)
	Closure		After opening the liftgate.		<ul style="list-style-type: none"> • Liftgate latch and lock actuator

2008 Mazda CX-9 Grand Touring

2008 BODY & ACCESSORIES Doors and Liftgate - Mazda CX-9

1A	motor (Closed)	Closure motor	operate the closure motor with the liftgate half-closed	0 --> B+ --> 0	<ul style="list-style-type: none"> ○ Latch position switch ○ Closure motor
1B	Closure motor (Open)	Closure motor	Open the fully closed liftgate by hand	0 --> B+ --> 0	<ul style="list-style-type: none"> ● Liftgate latch and lock actuator <ul style="list-style-type: none"> ○ Latch position switch ○ Closure motor ● Liftgate outer handle switch
1C	Power supply	PLG 20 A fuse	Under any condition	B+	PLG 20 A fuse
1D	GND	Body ground	Under any condition	1.0 or less	<ul style="list-style-type: none"> ● Related wiring harnesses
1E	PLG motor (Open)	PLG motor	Open the fully closed liftgate	0 --> B+ --> 0	PLG drive unit
1F	PLG motor (Closed)	PLG motor	Close the fully opened liftgate	0 --> B+ --> 0	PLG drive unit
2A	IG1	METER 10 A fuse	Ignition switch is at ON position	B+	METER 10 A fuse
			Ignition switch is at LOCK or ACC position	1.0 or less	
2B	PLG rear switch signal	PLG rear switch	When operating the PLG rear switch	B+	PLG rear switch
			When not operating the PLG rear switch	1.0 or less	
2C	PLG buzzer output	PLG buzzer	When the PLG buzzer is sounding	B+	PLG buzzer
			Other	1.0 or less	
2D	PLG touch sensor GND	Body ground	Under any condition	1.0 or less	<ul style="list-style-type: none"> ● Related wiring harnesses
2G	Clutch output (-)	PLG clutch	When PLG is open or closing	1.0 or less	PLG drive unit
			Other	No Continuity	
2I	Clutch output (+)	PLG clutch	When PLG is open or closing	B+	PLG drive unit
			Other	1.0 or less	

2008 Mazda CX-9 Grand Touring

2008 BODY & ACCESSORIES Doors and Liftgate - Mazda CX-9

2J	PLG motor rotation signal A	Rotation sensor	Pulse signal	-	PLG drive unit
2K	Rotation signal power source	Rotation sensor	Under any condition	5	PLG drive unit
2L	PLG motor rotation signal B	Rotation sensor	Pulse signal	-	PLG drive unit
2N	Rotation sensor GND	Body ground	Under any condition	1.0 or less	<ul style="list-style-type: none"> • Related wiring harnesses
2O	Power supply	BCM	Under any condition	B+	BCM
3A	PLG touch sensor signal (RH)	PLG touch sensor (RH)	When sensor is operating normally (usually)	0.5-4.2 or less	PLG touch sensor (RH)
			When sensor is at fault	Other than those above	
3B	PLG touch sensor signal (LH)	PLG touch sensor (LH)	When sensor is operating normally (usually)	0.5-4.2 or less	PLG touch sensor (LH)
			When sensor is at fault	Other than those above	
3C	Lock signal	Passenger seat side lock link switch	Passenger seat side door is locked. Check the continuity with earth	Continuity	Passenger seat side lock link switch
			Passenger seat side door is unlocked. Check the continuity with earth	No Continuity	
3E	Motor return signal	Return switch	After opening the liftgate, operate the closure motor with the liftgate half-closed	1.0 or less	<ul style="list-style-type: none"> • Liftgate latch and lock actuator <ul style="list-style-type: none"> ○ Return switch
3F	Liftgate latch switch signal	Liftgate latch switch	Liftgate is open (liftgate latch switch is ON)	1.0 or less	Liftgate latch and lock actuator
			Liftgate is closed (liftgate latch switch is OFF)	B+	
3G	Full latch switch	Latch position switch	After opening the liftgate, operate the closure motor with the liftgate half-closed	1.0 or less --> B+ --> 1.0 or less	<ul style="list-style-type: none"> • Liftgate latch and lock actuator <ul style="list-style-type: none"> ○ Latch position switch ○ Closure

2008 Mazda CX-9 Grand Touring

2008 BODY & ACCESSORIES Doors and Liftgate - Mazda CX-9

					motor
3H	Half latch switch	Latch position switch	After opening the liftgate, operate the closure motor with the liftgate half-closed	1.0 or less --> B+	<ul style="list-style-type: none"> • Liftgate latch and lock actuator <ul style="list-style-type: none"> ○ Latch position switch ○ Closure motor
3N ⁽¹⁾	Unlock signal	Passenger seat side lock link switch	Passenger seat side door is locked. Check the continuity with earth	No Continuity	Passenger seat side lock link switch
			Passenger seat side door is unlocked. Check the continuity with earth	Continuity	
3O	Liftgate outer handle switch signal	Liftgate outer handle switch	When operating the liftgate outer handle (When the liftgate outer handle switch is ON)	B+	Liftgate outer handle switch
			When not operating the liftgate outer handle (When the liftgate outer handle switch is OFF)	1.0 or less	
3Q	PLG front switch signal (Input)	PLG front switch	PLG front switch: Switch is at ON	B+	PLG front switch
			PLG front switch: Switch is at OFF	1.0 or less	
3R	Power supply to PLG switches	PLG switch	PLG front switch: Open or close switch is at ON	1.0 or less	PLG control module
			PLG front switch: Open or close switch is at OFF	B+	
3U	CAN_L	-	Because this terminal is for communication, good/no good judgment by terminal voltage is not possible	-	-
3V	CAN_H	-	Because this terminal is for communication, good/no good judgment by terminal voltage is not possible	-	-

(1) When checking the operation of UNLOCK signal, position the rear door lock knobs of both sides at LOCK.

POWER LIFTGATE (PLG) TOUCH SENSOR REMOVAL/INSTALLATION

1. Disconnect the negative battery cable.
2. Remove the following parts:

1. Liftgate upper trim (See LIFTGATE UPPER TRIM REMOVAL/INSTALLATION .)
2. PLG arm (See POWER LIFTGATE (PLG) DRIVE UNIT REMOVAL/INSTALLATION.)
3. Liftgate side trim (See LIFTGATE SIDE TRIM REMOVAL/INSTALLATION .)
4. Liftgate lower trim (See LIFTGATE LOWER TRIM REMOVAL/INSTALLATION .)
3. Disconnect the PLG touch sensor connector.
4. Remove the screws.
5. Remove the PLG touch sensor.
6. Install in the reverse order of removal.

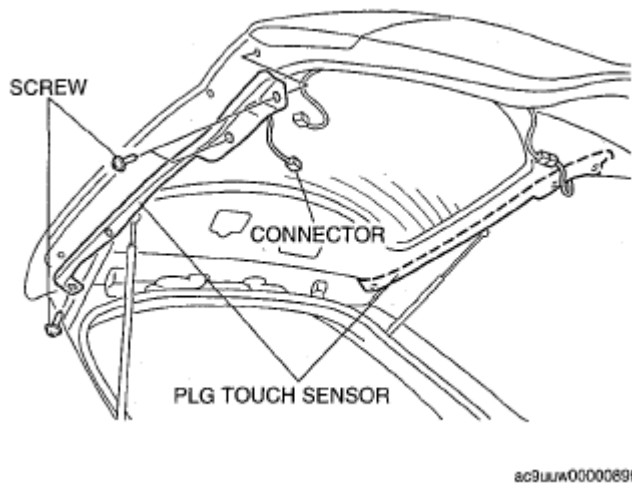


Fig. 19: Identifying PLG Touch Sensor, Connector & Screw
 Courtesy of MAZDA MOTORS CORP.

POWER LIFTGATE (PLG) TOUCH SENSOR INSPECTION

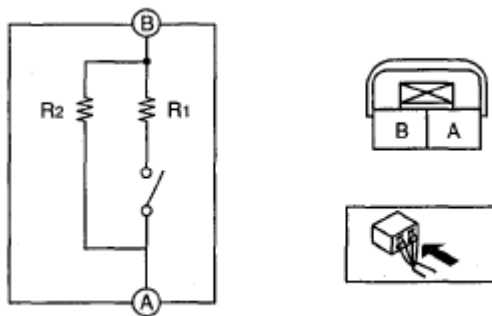
1. Verify that the resistance is as indicated in the table.
 - If no as indicated in the table, replace the PLG touch sensor.

○—W—○ : Resistance

Position	Terminal	
	A	B
When the sensor is not tripped	○—R ₁ —○	
When the sensor is tripped	○—R ₂ —○	

R₁: 950—1,050 ohms
 R₂: 100 ohms or less.
 ac9uuw00001735

Fig. 20: PLG Touch Sensor Resistance Chart
 Courtesy of MAZDA MOTORS CORP.



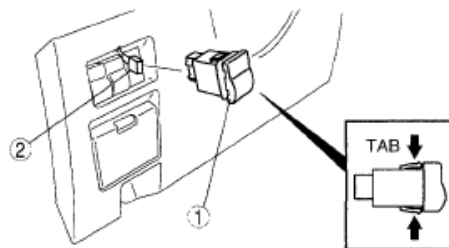
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Fig. 21: PLG Touch Sensor - Circuit Diagram
 Courtesy of MAZDA MOTORS CORP.

POWER LIFTGATE (PLG) FRONT SWITCH REMOVAL/INSTALLATION

1. Disconnect the negative battery cable.
2. Remove the dashboard under cover. (Driver's side) (See **DASHBOARD UNDER COVER REMOVAL/INSTALLATION** .)
3. Remove the hood release lever. (See **HOOD LATCH AND RELEASE LEVER REMOVAL/INSTALLATION** .)
4. Remove in the order indicated in the table.

1	PLG front switch
2	Connector



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Fig. 22: Identifying PLG Front Switch & Connector
 Courtesy of MAZDA MOTORS CORP.

5. Install in the reverse order of removal.

POWER LIFTGATE (PLG) FRONT SWITCH INSPECTION

1. Verify that the continuity between the PLG front switch terminals is as indicated in the table.
 - If not as indicated in the table, replace the PLG front switch.

○—○ : Continuity ○ ⊕ ○ : Bulb

Switch position	Terminal			
	A	C	E	F
Off			○ ⊕ ○	○ ⊕ ○
On	○—○	○—○	○ ⊕ ○	○ ⊕ ○

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Fig. 23: PLG Front Switch Continuity Chart
Courtesy of MAZDA MOTORS CORP.

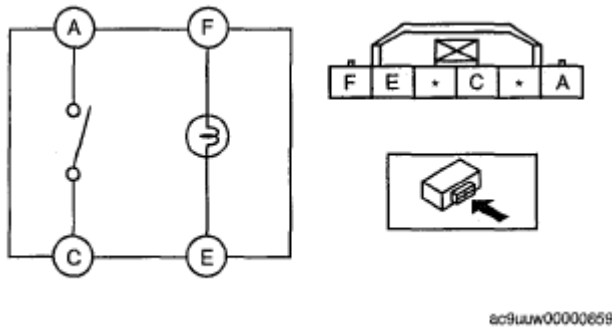


Fig. 24: PLG Front Switch - Circuit Diagram
Courtesy of MAZDA MOTORS CORP.

POWER LIFTGATE (PLG) REAR SWITCH REMOVAL/INSTALLATION

1. Disconnect the negative battery cable.
2. Remove the liftgate recess. (See LIFTGATE LOWER TRIM REMOVAL/INSTALLATION .)
3. Disconnect the connector from the PLG rear switch.
4. Remove the PLG rear switch from the recess.
5. Install in the reverse order of removal.

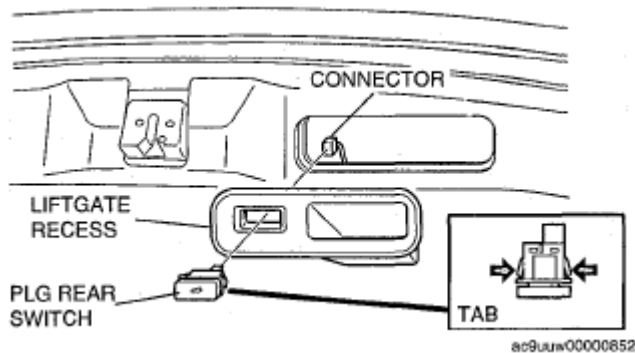


Fig. 25: Identifying PLG Rear Switch & Connector
Courtesy of MAZDA MOTORS CORP.

POWER LIFTGATE (PLG) REAR SWITCH INSPECTION

1. Verify that the continuity between the PLG rear switch terminals is as indicated in the table.
 - If not as indicated in the table, replace the PLG rear switch.

○—○: Continuity

Switch position	Terminal	
	C	D
Off		
On	○—○	○—○

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Fig. 26: PLG Rear Switch Continuity Chart
Courtesy of MAZDA MOTORS CORP.

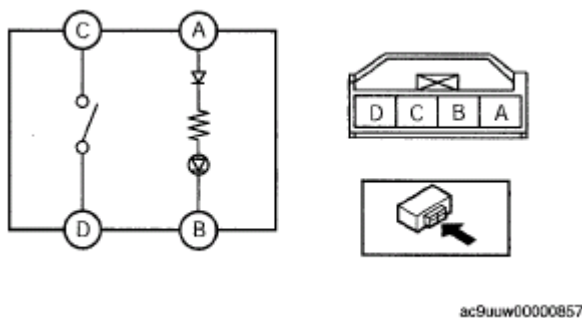


Fig. 27: PLG Rear Switch - Circuit Diagram
Courtesy of MAZDA MOTORS CORP.

2. Apply battery voltage to PLG rear switch terminal A, and connect terminal B to ground.
3. Verify that the LED illuminates.
 - If there is any malfunction, replace the PLG rear switch.

POWER LIFTGATE (PLG) BUZZER REMOVAL/INSTALLATION

CAUTION: • Do not remove the PLG buzzer except when replacing the PLG buzzer because thread-locking compound has been applied to the screws.

1. Disconnect the negative battery cable.
2. Remove the following parts:
 1. Liftgate upper trim (See **LIFTGATE UPPER TRIM REMOVAL/INSTALLATION** .)
 2. PLG arm (See **POWER LIFTGATE (PLG) DRIVE UNIT REMOVAL/INSTALLATION**.)
 3. Liftgate side trim (See **LIFTGATE SIDE TRIM REMOVAL/INSTALLATION** .)
 4. Liftgate lower trim (See **LIFTGATE LOWER TRIM REMOVAL/INSTALLATION** .)
3. Disconnect the PLG buzzer connector.

4. Remove the bolt.
5. Remove the clip.
6. Remove the PLG buzzer.
7. Install in the reverse order of removal.

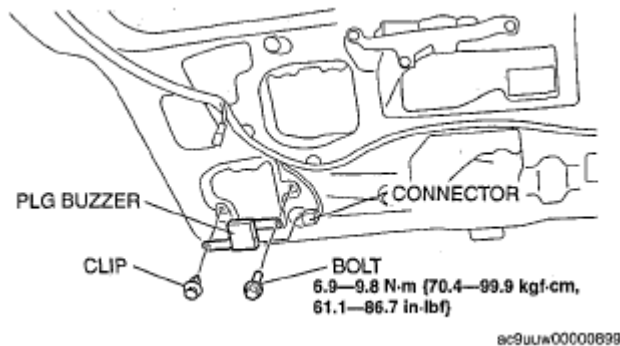
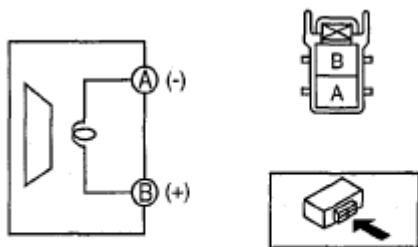


Fig. 28: Identifying PLG Buzzer, Connector & Torque Specifications
 Courtesy of MAZDA MOTORS CORP.

POWER LIFTGATE (PLG) BUZZER INSPECTION

1. Connect the battery to the PLG buzzer and check if the PLG buzzer sounds.
 - When the PLG buzzer does not sound, replace it.



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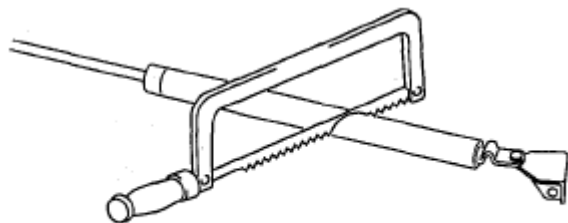
Fig. 29: PLG Buzzer - Circuit Diagram
 Courtesy of MAZDA MOTORS CORP.

STAY DAMPER DISPOSAL

NOTE: The gas in the stay damper is colorless, odorless, and non-toxic.

1. Wear protective eye wear.
2. Lay the stay damper flat.
3. Saw through the stay damper body using hacksaw.
4. Allow the gas to escape from the stay damper.

5. Discard the stay damper.



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Fig. 30: Cutting Stay Damper With Hacksaw
Courtesy of MAZDA MOTORS CORP.