

2009 Toyota Highlander Limited
2009 ACCESSORIES & EQUIPMENT Mirror - Highlander

2009 ACCESSORIES & EQUIPMENT

Mirror - Highlander

POWER MIRROR CONTROL SYSTEM

PRECAUTION

1. NOTICE FOR INITIALIZATION

NOTE: When disconnecting the cable from the negative (-) battery terminal, initialize the following system after the cable is reconnected.

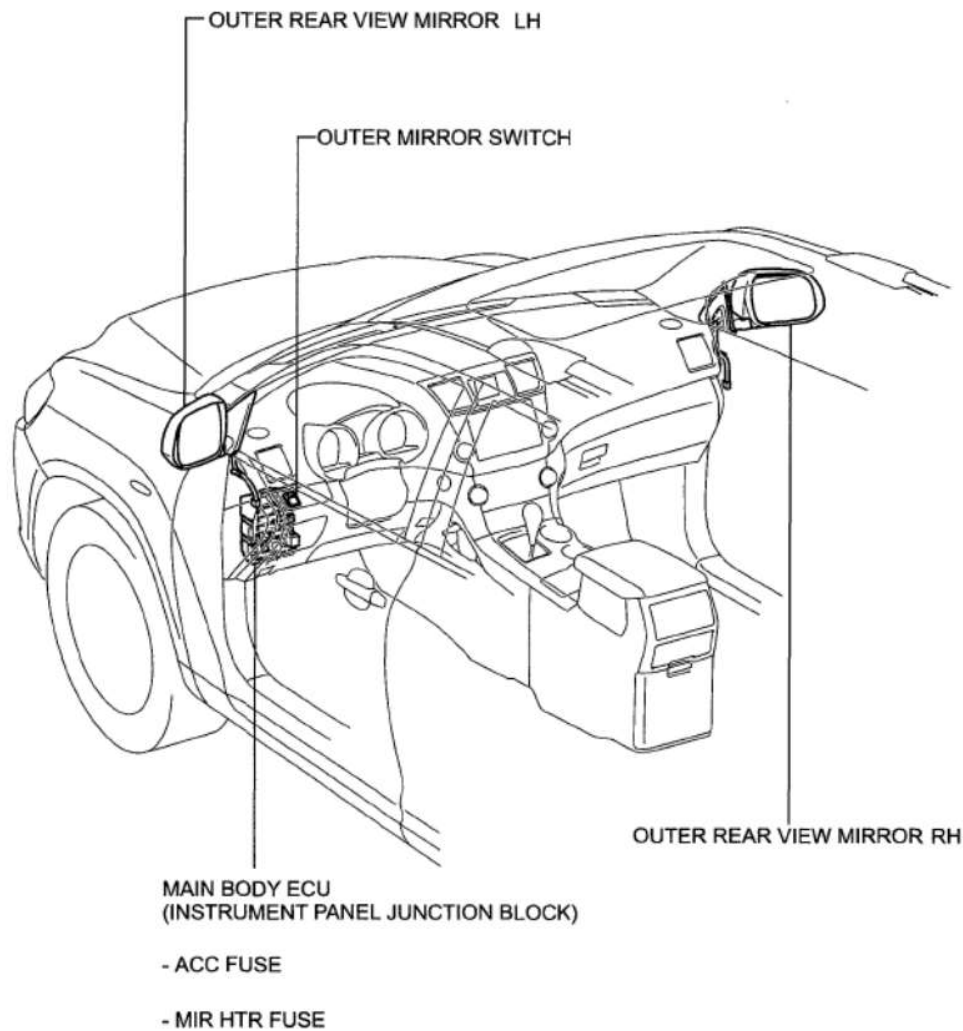
SYSTEM REFERENCE

System Name	See procedure
Power Back Door System	<u>INITIALIZATION</u>

PARTS LOCATION

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Fig. 1: Identifying Power Mirror Control System Components
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

PROBLEM SYMPTOMS TABLE

HINT:

Use the table below to help determine the cause of the problem symptom. The potential causes of the symptoms are listed in order of probability in the "suspected area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.

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Power mirror control system

PROBLEM SYMPTOMS REFERENCE

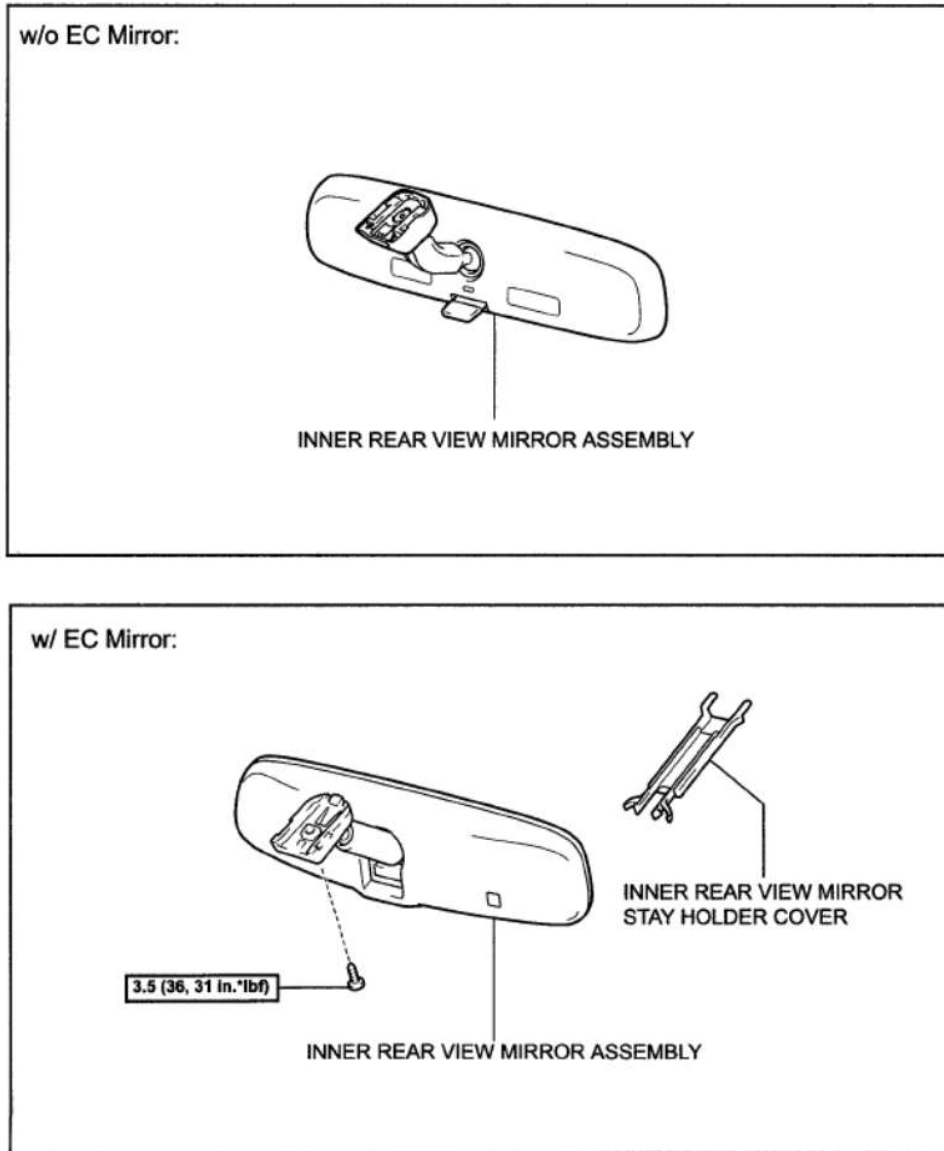
Symptom	Suspected Area	Reference
Mirror does not operate	ACC fuse	<u>PARTS LOCATION</u>
	Outer mirror switch	<u>OUTER MIRROR SWITCH</u>
	Outer rear view mirror	<u>OUTER REAR VIEW MIRROR</u>
	Wire harness	-
Mirror operates abnormally	Outer mirror switch	<u>OUTER MIRROR SWITCH</u>
	Outer rear view mirror	<u>OUTER REAR VIEW MIRROR</u>
	Wire harness	-
Mirror heater does not operate	ACC fuse	<u>PARTS LOCATION</u>
	MIR HTR fuse	<u>PARTS LOCATION</u>
	Outer rear view mirror	<u>OUTER REAR VIEW MIRROR</u>
	Wire harness	-
	for Window defogger system	<u>PROBLEM SYMPTOMS TABLE</u>

INNER REAR VIEW MIRROR

COMPONENTS

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N*m (kg*cm, ft.*lbf): Specified torque

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Fig. 2: Identifying Inner Rear View Mirror Components With Torque Specification
 Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

CALIBRATION

1. SELECT COMPASS DISPLAY MODE

- The MULTIFUNCTION Button allows you to select the Display or Non-display mode of the compass.

2. SET ZONE

- Deviation between the "magnetic north" and "actual north" differs depending on the location.

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Therefore, adjustment of the magnetism is required. Because the magnetic condition differs depending on the area where the vehicle is used, it is necessary for each user to set the zone (Refer to Compass Zone Map). The zone setting can be changed using the MULTIFUNCTION Button of the inner mirror.

3. PERFORM CALIBRATION
- a.

Because each vehicle has its own magnetic field, calibration should be performed for each individual vehicle. This compass function is used when storing the record of the vehicle's magnetic field.
4. WHEN COMPASS IS MAGNETIZED:
- a.

A compass could be magnetized during shipping by vessels or freight cars. Therefore, make sure to perform calibration and ensure that calibration is performed properly before delivery. If this cannot be done (cannot be completed in spite of driving around several times), it may be caused by magnetization. Demagnetize the vehicle using a demagnetizer and perform calibration again.
5. SET COMPASS

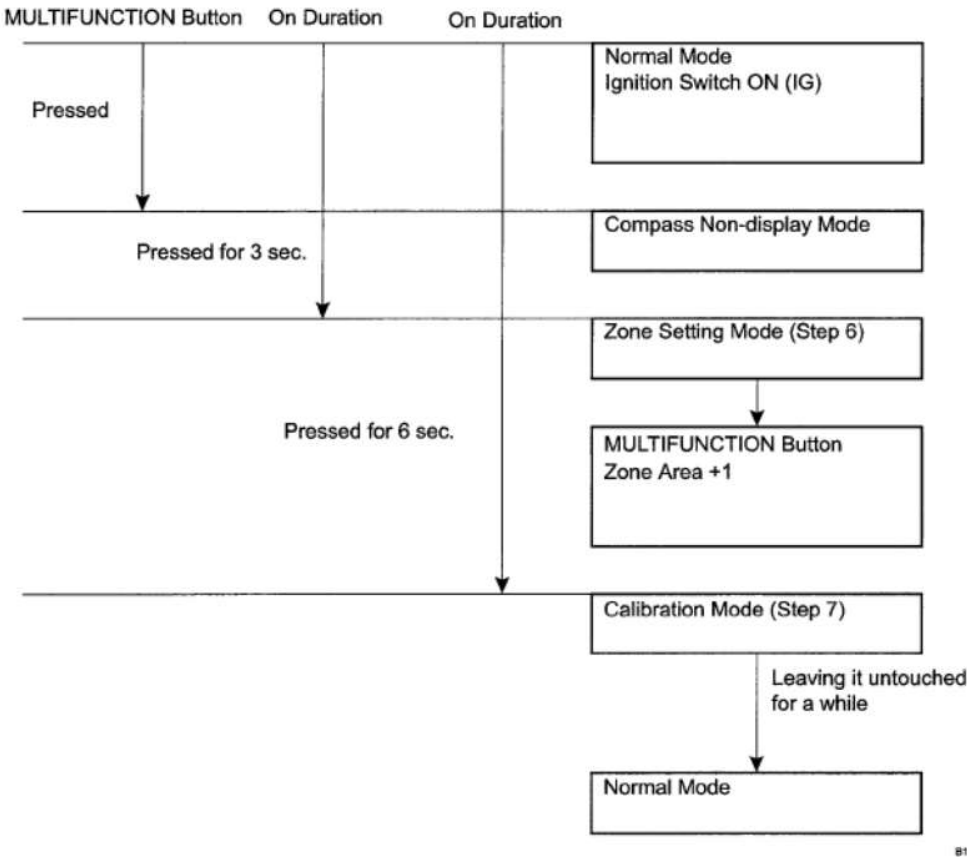


Fig. 3: Zone Setting Mode Chart
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

6. ZONE SETTING MODE
- a.

Pressing the MULTIFUNCTION Button for 3 seconds in the normal mode will activate the zone setting mode. A number (1-15) is displayed on the compass display.

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In the initial state, "8" is displayed.

- b. The displayed number increases +1 every time the MULTIFUNCTION Button is pressed. Referring to the map, check the number for the area where the vehicle will be used and set the zone number.

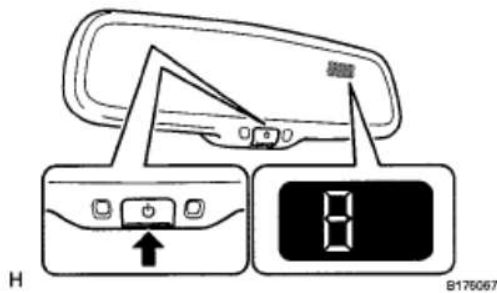


Fig. 4: Identifying Compass Display

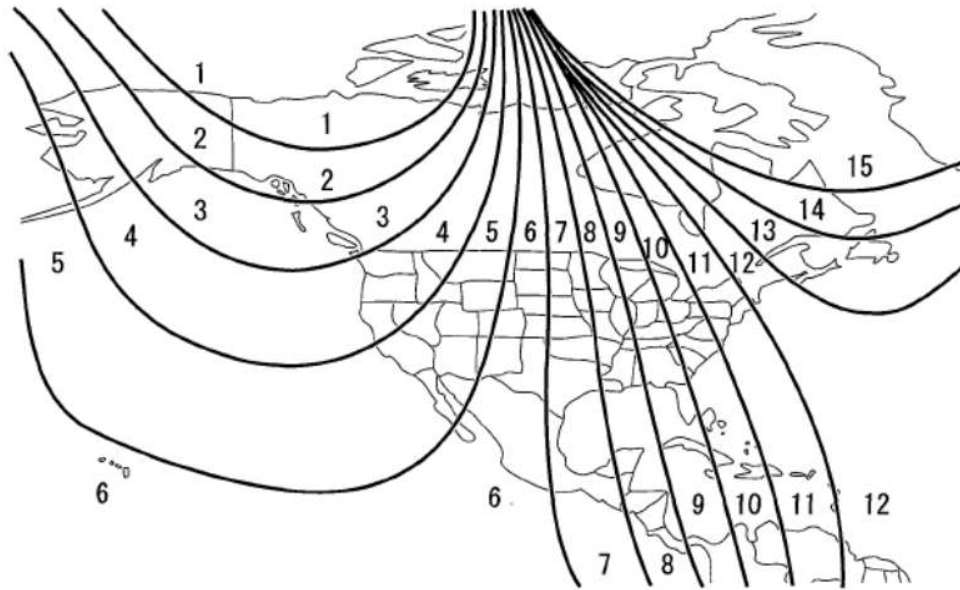
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

- c. Leave it untouched for several seconds after setting and check that the compass display shows an azimuthal direction (N, NE, E, SE, S, SW, W or NW) or "C".

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SETTING NUMBERS



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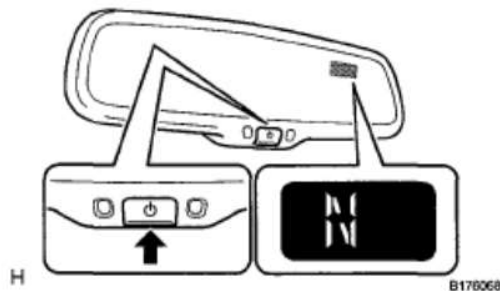
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Fig. 5: Compass Zone Map Chart

Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

7. CALIBRATION SETTING MODE

- Pressing the MULTIFUNCTION Button for 6 seconds in the normal mode will activate the calibration setting mode. "N" is displayed on the compass display.
- Drive the vehicle at a slow speed of 8 km/h (5 mph) or less in the circular direction.
- Driving around the circle 1 to 3 times will display the azimuthal direction on the display, completing the calibration.



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Fig. 6: Identifying Compass Display

Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

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After the calibration is completed, it is not necessary to perform the above procedures unless the magnetic field strength is drastically changed. If this happens, the azimuthal display will be changed to "N".

REMOVAL**1. REMOVE INNER REAR VIEW MIRROR ASSEMBLY (w/o EC Mirror)**

- a. Disengage the 2 claws and the cover.

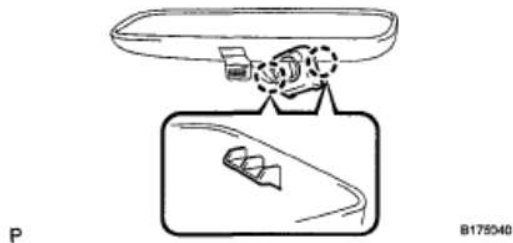


Fig. 7: Identifying Cover Claws

Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

- b. Pull the lever in the direction indicated by the arrow shown in the illustration and slide the inner rear view mirror assembly upward to remove it.

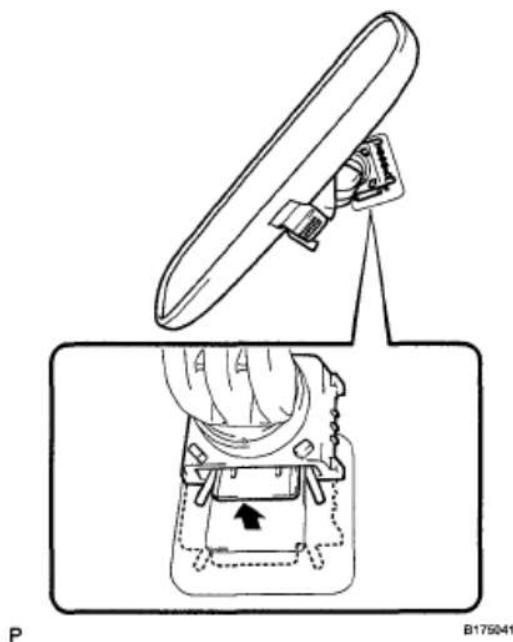


Fig. 8: Pulling Lever

Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

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2. REMOVE INNER REAR VIEW MIRROR STAY HOLDER COVER (w/ EC Mirror)

- Disengage the 2 claws and slide the inner rear view mirror stay holder cover as shown in the illustration.

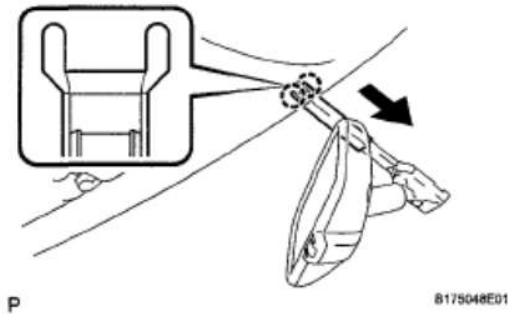


Fig. 9: Sliding Inner Rear View Mirror Stay Holder Cover
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

- Disengage the 2 claws and remove the inner rear view mirror stay holder cover.

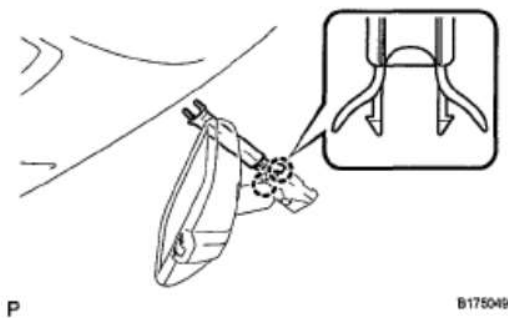


Fig. 10: Identifying Inner Rear View Mirror Stay Holder Cover Claws
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

3. REMOVE INNER REAR VIEW MIRROR ASSEMBLY (w/ EC Mirror)

- Disconnect the connector.
- Using a "TORX" socket wrench (T20), remove the screw and the inner rear view mirror.

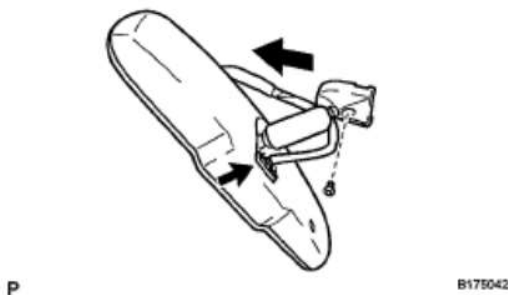


Fig. 11: Removing Inner Rear View Mirror

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Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

INSPECTION

1. INSPECT INNER REAR VIEW MIRROR ASSEMBLY

- a. Inspect operation of the electronic inner mirror.
 1. Connect the positive (+) lead from the battery to terminal 1 and the negative (-) lead to terminal 2.
 2. Attach black colored tape to the forward sensor to prevent it from sensing.
 3. Light up the mirror with an electric light, and check that the mirror surface changes from bright to dark.

OK: Mirror surface changes from bright to dark.

If the result is not as specified, replace the mirror assembly.

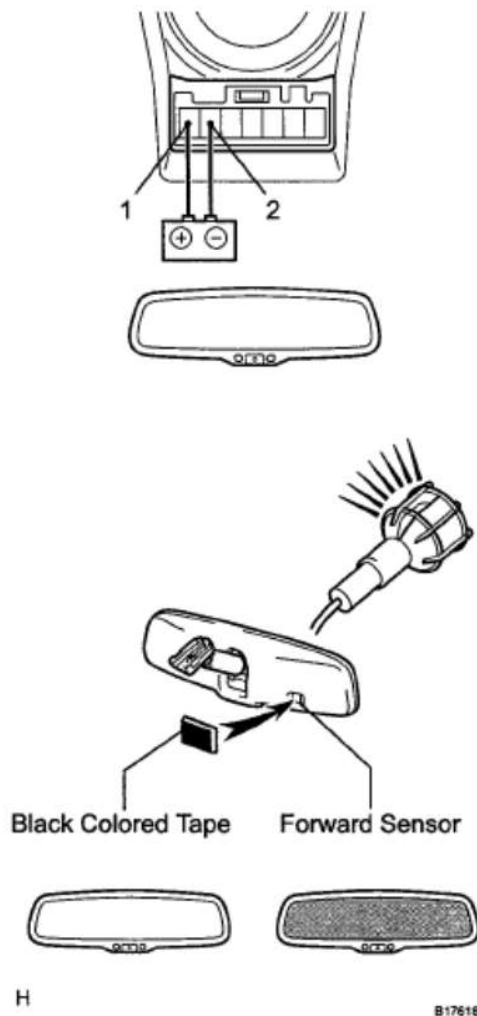


Fig. 12: Attaching Black Colored Tape To Forward Sensor

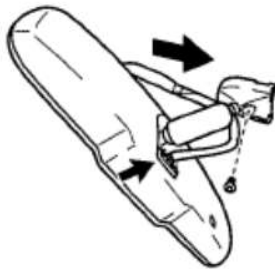
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Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

INSTALLATION**1. INSTALL INNER REAR VIEW MIRROR ASSEMBLY (w/ EC Mirror)**

- a. Using a "TORX" socket wrench (T20), install the inner rear view mirror with the screw.

Torque: 3.5 N*m (36 kgf*cm, 31 in.*lbf)



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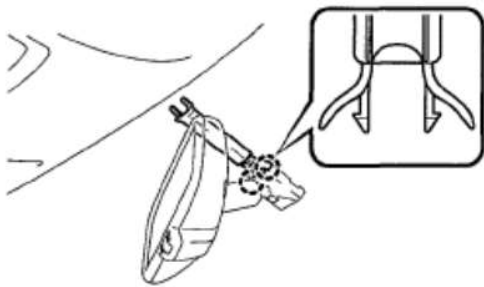
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Fig. 13: Installing Inner Rear View Mirror

Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

2. INSTALL INNER REAR VIEW MIRROR STAY HOLDER COVER (w/ EC Mirror)

- a. Engage the 2 claws and install the inner rear view mirror stay holder cover.



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Fig. 14: Identifying Inner Rear View Mirror Stay Holder Cover Claws

Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

- b. Engage the 2 claws and install the inner rear view mirror stay holder cover as shown in the illustration.

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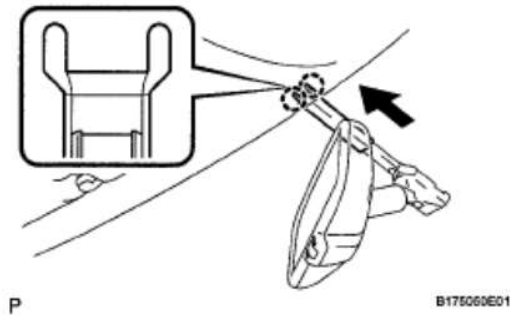


Fig. 15: Installing Inner Rear View Mirror Stay Holder Cover
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

3. INSTALL INNER REAR VIEW MIRROR ASSEMBLY (w/o EC Mirror)

- Slide the inner rear view mirror assembly in the direction indicated by the arrow shown in the illustration to install it.

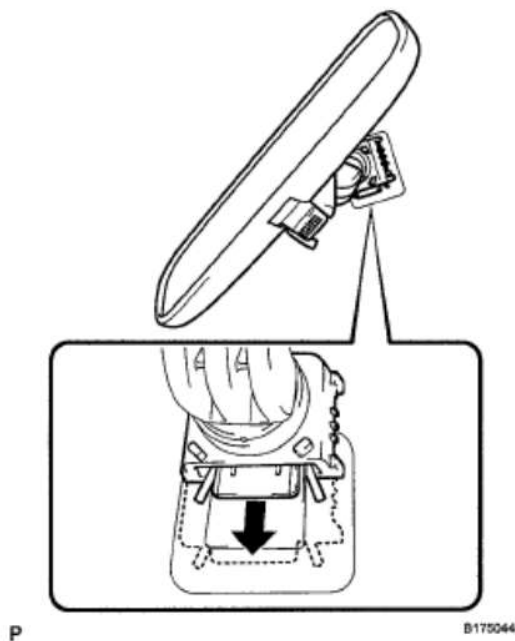
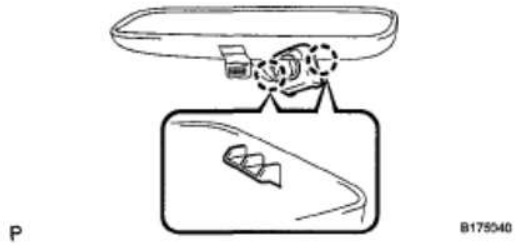


Fig. 16: Sliding Inner Rear View Mirror Assembly
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

- Engage the 2 claws and install the cover.

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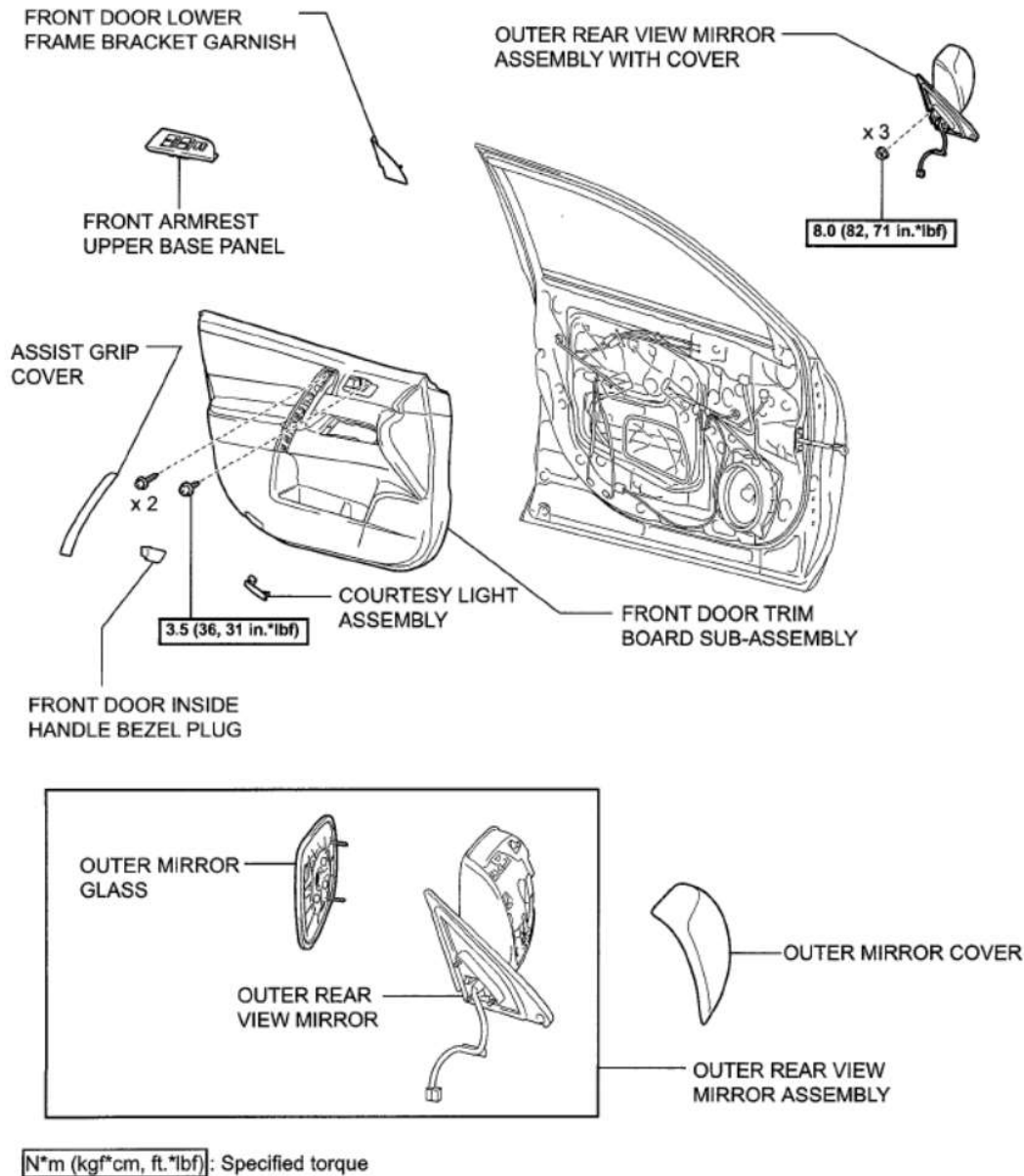
**Fig. 17: Identifying Cover Claws**

Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

OUTER REAR VIEW MIRROR**COMPONENTS**

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Fig. 18: Identifying Outer Rear View Mirror Components With Torque Specification
 Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

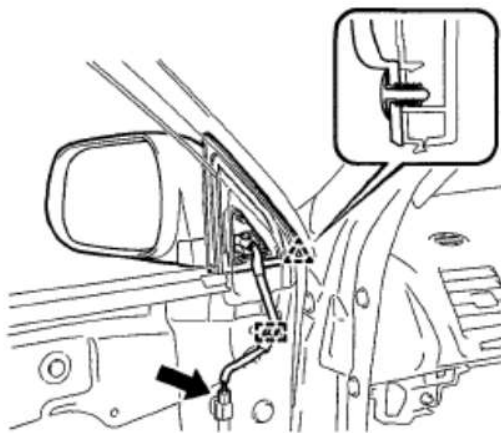
REMOVAL

1. REMOVE FRONT DOOR LOWER FRAME BRACKET GARNISH (See DISASSEMBLY)
2. REMOVE FRONT DOOR INSIDE HANDLE BEZEL PLUG (See DISASSEMBLY)
3. REMOVE FRONT ARMREST UPPER BASE PANEL (See DISASSEMBLY)
4. REMOVE POWER WINDOW REGULATOR MASTER SWITCH ASSEMBLY (See DISASSEMBLY)

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5. **REMOVE ASSIST GRIP COVER** (See DISASSEMBLY)
6. **REMOVE COURTESY LIGHT ASSEMBLY** (See DISASSEMBLY)
7. **REMOVE FRONT DOOR TRIM BOARD SUB-ASSEMBLY** (See DISASSEMBLY)
8. **REMOVE OUTER REAR VIEW MIRROR ASSEMBLY WITH COVER**
 - a. Disconnect the connector and disengage the clamp.
 - b. Disengage the clip.

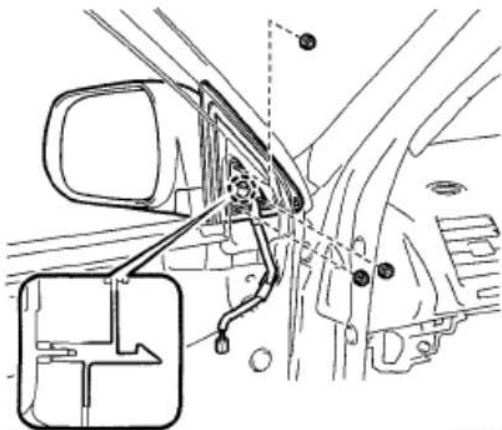


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Fig. 19: Locating Outer Rear View Mirror Assembly Connector
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

- c. Remove the 3 nuts.
 - d. Disengage the claw and remove the outer rear view mirror assembly with cover.
9. **REMOVE OUTER MIRROR GLASS (w/o Heater)** (See REMOVAL)
10. **REMOVE OUTER MIRROR GLASS (w/ Heater)** (See REMOVAL)
11. **REMOVE OUTER MIRROR COVER** (See REMOVAL)



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Fig. 20: Identifying Outer Rear View Mirror Assembly With Cover Claw
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

INSPECTION

1. INSPECT OUTER REAR VIEW MIRROR ASSEMBLY RH
- a. Disconnect the mirror connector.

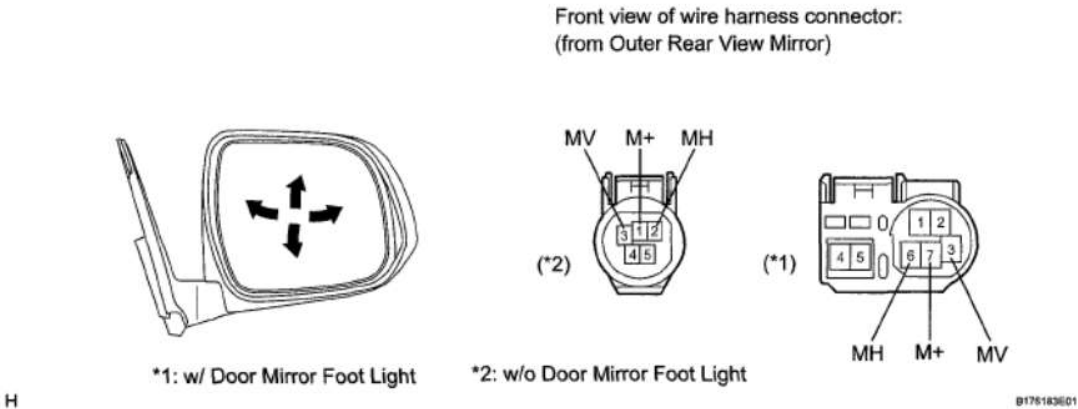


Fig. 21: Identifying RH Outer Rear View Mirror Assembly Connector Terminals
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

- b. Apply battery voltage and check the operation of the mirror.

OK: w/ Door Mirror Foot Light

MEASUREMENT SPECIFIED CONDITION

Measurement Condition	Specified Condition
Battery positive (+) --> Terminal 3 (MV) Battery negative (-) --> Terminal 7 (M+)	Turns upward
Battery positive (+) --> Terminal 7 (M+) Battery negative (-) --> Terminal 3 (MV)	Turns downward
Battery positive (+) --> Terminal 6 (MH) Battery negative (-) --> Terminal 7 (M+)	Turns left
Battery positive (+) --> Terminal 7 (M+) Battery negative (-) --> Terminal 6 (MH)	Turns right

w/o Door Mirror Foot Light

MEASUREMENT SPECIFIED CONDITION

Measurement Condition	Specified Condition
Battery positive (+) --> Terminal 3 (MV) Battery negative (-) --> Terminal 1 (M+)	Turns upward
Battery positive (+) --> Terminal 1 (M+)	Turns downward

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Battery negative (-) --> Terminal 3 (MV)	Turns left
Battery positive (+) --> Terminal 2 (MH)	
Battery negative (-) --> Terminal 1 (M+)	
Battery positive (+) --> Terminal 1 (M+)	Turns right
Battery negative (-) --> Terminal 2 (MH)	

If the result is not as specified, replace the mirror assembly.

c. with Mirror Heater:

Front view of wire harness connector:
(from Outer Rear View Mirror)

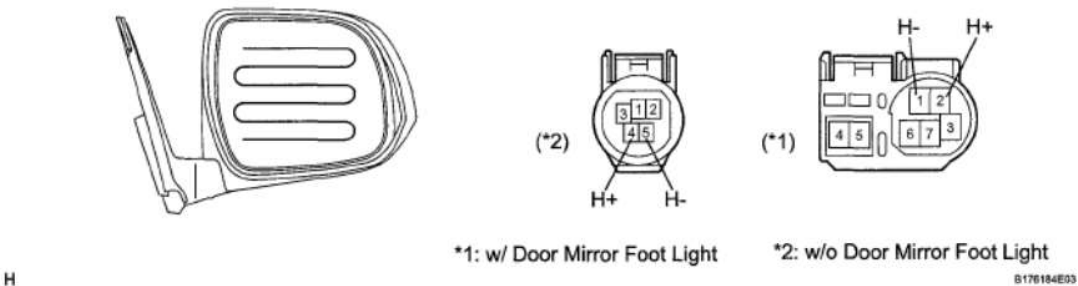


Fig. 22: Identifying RH Outer Rear View Mirror Assembly Connector Terminals (With Mirror Heater)

Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

Check the resistance.

1. Measure the resistance according to the value(s) in the table bellow.

Standard resistance:

w/ Door Mirror Foot Light

TESTER CONNECTION SPECIFIED CONDITION

Tester Connection	Condition	Specified Condition
2 (H+) - 1 (H-)	Always	3.8 to 4.8 ohms

w/o Door Mirror Foot Light

TESTER CONNECTION SPECIFIED CONDITION

Tester Connection	Condition	Specified Condition
4 (H+) - 5 (H-)	Always	3.8 to 4.8 ohms

If the result is not as specified, replace the outer rear view mirror.

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2. Connect the cable from the positive battery (+) terminal to terminal 2^{*1} or 4^{*2} and the negative battery (-) terminal to terminal 1^{*1} or 5^{*2}, then check that the mirror becomes warm.

HINT:

- ^{*1}: w/ Door Mirror Foot Light
- ^{*2}: w/o Door Mirror Foot Light

OK: Mirror becomes warm.

HINT:

It takes a short time for the mirror to become warm.

If the result is not as specified, replace the outer rear view mirror.

2. INSPECT OUTER REAR VIEW MIRROR ASSEMBLY LH

- a. Disconnect the mirror connector.

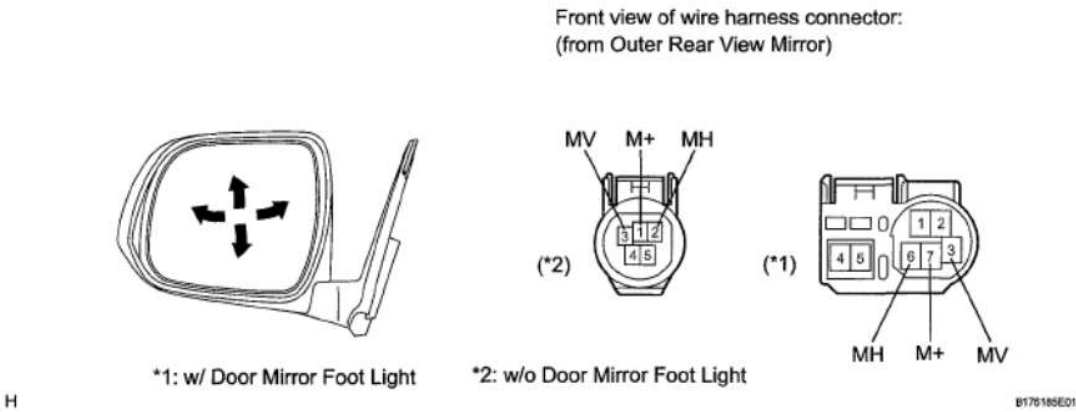


Fig. 23: Identifying LH Outer Rear View Mirror Assembly Connector Terminals
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

- b. Apply battery voltage and check the operation of the mirror.

OK: w/ Door Mirror Foot Light

MEASUREMENT SPECIFIED CONDITION

Measurement Condition	Specified Condition
Battery positive (+) --> Terminal 3 (MV)	Turns upward
Battery negative (-) --> Terminal 7 (M+)	
Battery positive (+) --> Terminal 7 (M+)	Turns downward
Battery negative (-) --> Terminal 3 (MV)	

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Battery positive (+) --> Terminal 6 (MH)	Turns left
Battery negative (-) --> Terminal 7 (M+)	
Battery positive (+) --> Terminal 7 (M+)	Turns right
Battery negative (-) --> Terminal 6 (MH)	

w/o Door Mirror Foot Light

MEASUREMENT SPECIFIED CONDITION

Measurement Condition	Specified Condition
Battery positive (+) --> Terminal 3 (MV)	Turns upward
Battery negative (-) --> Terminal 1 (M+)	
Battery positive (+) --> Terminal 1 (M+)	Turns downward
Battery negative (-) --> Terminal 3 (MV)	
Battery positive (+) --> Terminal 2 (MH)	Turns left
Battery negative (-) --> Terminal 1 (M+)	
Battery positive (+) --> Terminal 1 (M+)	Turns right
Battery negative (-) --> Terminal 2 (MH)	

If the result is not as specified, replace the mirror assembly.

c. with Mirror Heater:

Front view of wire harness connector:
(from Outer Rear View Mirror)

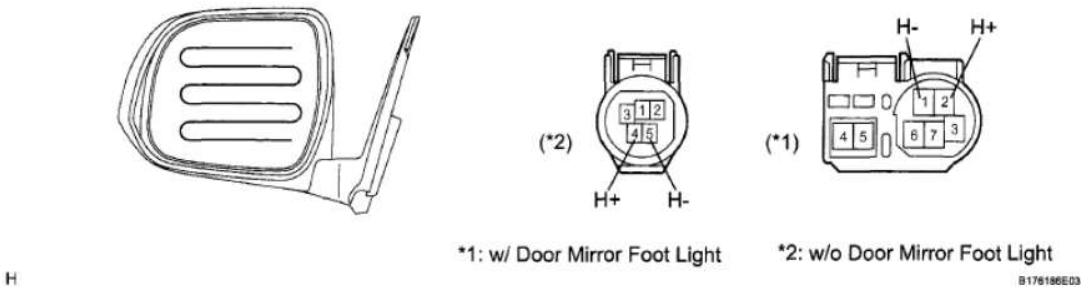


Fig. 24: Identifying LH Outer Rear View Mirror Assembly Connector Terminals (With Mirror Heater)
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

Check the resistance.

1. Measure the resistance according to the value(s) in the table bellow.

Standard resistance:

w/ Door Mirror Foot Light

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TESTER CONNECTION SPECIFIED CONDITION

Tester Connection	Condition	Specified Condition
2 (H+) - 1 (H-)	Always	3.8 to 4.8 ohms

w/o Door Mirror Foot Light

TESTER CONNECTION SPECIFIED CONDITION

Tester Connection	Condition	Specified Condition
4 (H+) - 5 (H-)	Always	3.8 to 4.8 ohms

If the result is not as specified, replace the outer rear view mirror.

2. Connect the cable from the positive battery (+) terminal to terminal 2^{*1} or 4^{*2} and the negative battery (-) terminal to terminal 1^{*1} or 5^{*2}, then check that the mirror becomes warm.

HINT:

- ^{*1} : w/ Door Mirror Foot Light
- ^{*2} : w/o Door Mirror Foot Light

OK: Mirror becomes warm.

HINT:

It takes a short time for the mirror to become warm.

If the result is not as specified, replace the outer rear view mirror.

INSTALLATION

1. **INSTALL OUTER MIRROR COVER** (See **INSTALLATION**)
2. **INSTALL OUTER MIRROR GLASS (w/o Heater)** (See **INSTALLATION**)
3. **INSTALL OUTER MIRROR GLASS (w/ Heater)** (See **INSTALLATION**)
4. **INSTALL OUTER REAR VIEW MIRROR ASSEMBLY WITH COVER**
 - a. Engage the claw, and temporarily install the outer rear view mirror assembly with cover.
 - b. Tighten the 3 nuts in the order shown in the illustration to install the outer rear view mirror assembly with cover.

Torque: 8.0 N*m (82 kgf*cm, 71 in.*lbf)

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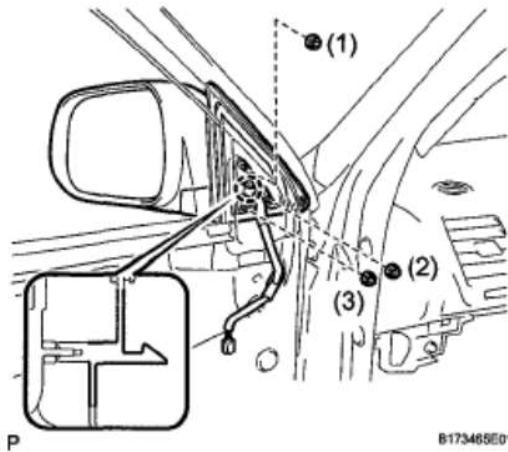


Fig. 25: Identifying Outer Rear View Mirror Assembly With Cover Nuts Tightening Sequence

Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

- c. Engage the clamp and connect the connector.
- d. Install the clip.
5. **INSTALL FRONT DOOR TRIM BOARD SUB-ASSEMBLY** (See REASSEMBLY)
6. **INSTALL COURTESY LIGHT ASSEMBLY** (See REASSEMBLY)
7. **INSTALL ASSIST GRIP COVER** (See REASSEMBLY)
8. **INSTALL POWER WINDOW REGULATOR MASTER SWITCH ASSEMBLY** (See REASSEMBLY)
9. **INSTALL FRONT ARMREST UPPER BASE PANEL** (See REASSEMBLY)
10. **INSTALL FRONT DOOR INSIDE HANDLE BEZEL PLUG** (See REASSEMBLY)

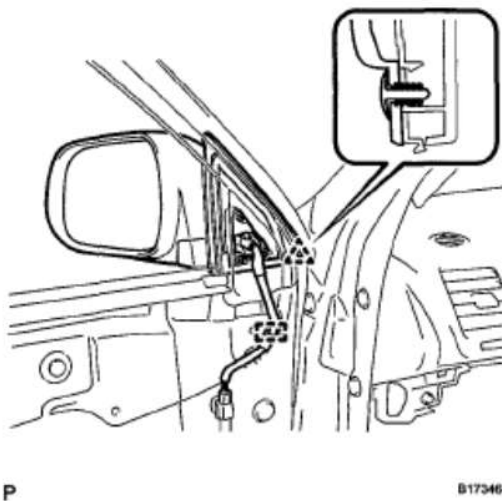
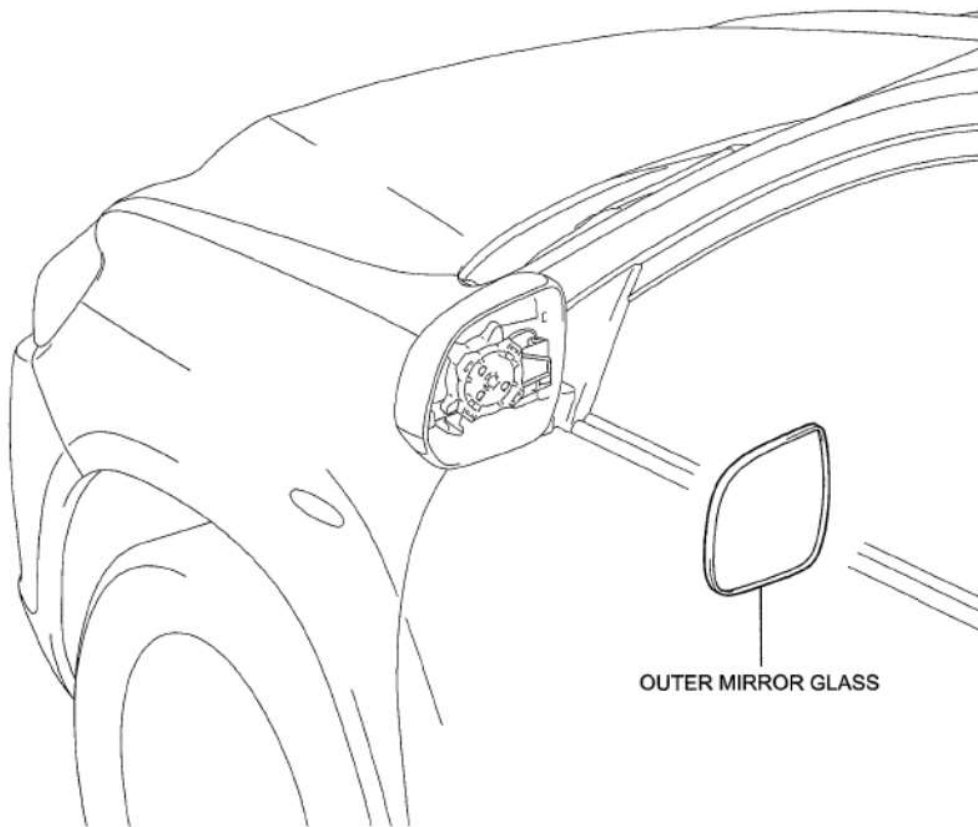


Fig. 26: Identifying Outer Rear View Mirror Assembly With Cover Clamp And Clip
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

2009 Toyota Highlander Limited**2009 ACCESSORIES & EQUIPMENT Mirror - Highlander****11. INSTALL FRONT DOOR LOWER FRAME BRACKET GARNISH (See REASSEMBLY)****OUTER REAR VIEW MIRROR GLASS****COMPONENTS**

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Fig. 27: Identifying Outer Mirror Glass

Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

REMOVAL**1. REMOVE OUTER MIRROR GLASS (w/o Heater)**

- a. Apply protective tape to the bottom of the visor of the door mirror.
- b. Tilt and push the upper part of the mirror surface.
- c. Using a screwdriver with the tip wrapped with protective tape, disengage the 2 claws.

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Fig. 28: Disengaging Claws

Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

- d. Disengage the 2 claws at the upper part of the outer mirror.
- e. Remove the outer mirror glass.

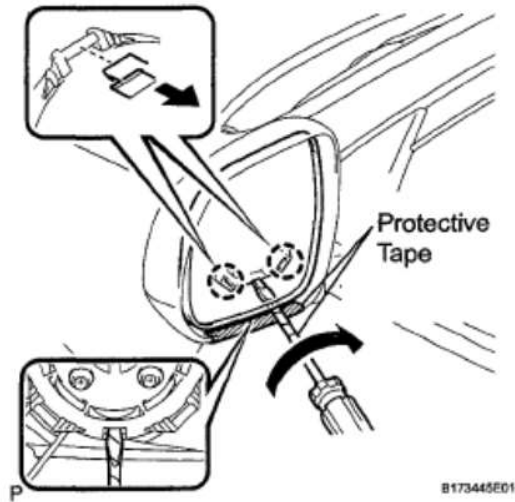


Fig. 29: Removing Outer Mirror Glass

Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

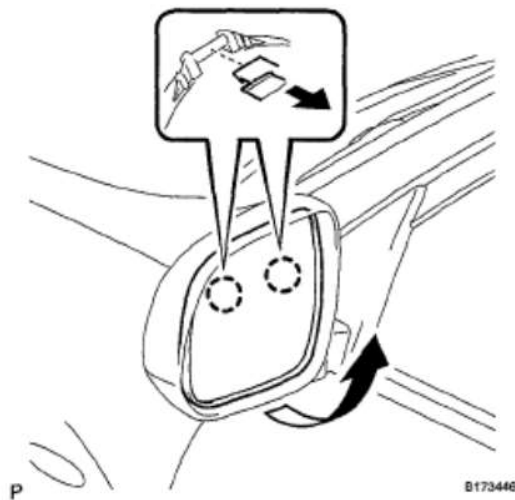
2. REMOVE OUTER MIRROR GLASS (w/ Heater)

- a. Apply protective tape to the bottom of the visor of the door mirror.
- b. Tilt and push the upper part of the mirror surface.
- c. Using a screwdriver with the tip wrapped with protective tape, disengage the 2 claws.

2009 Toyota Highlander Limited**2009 ACCESSORIES & EQUIPMENT Mirror - Highlander****Fig. 30: Disengaging Claws**

Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

- d. Disengage the 2 claws at the upper part of the outer mirror.

**Fig. 31: Removing Outer Mirror**

Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

- e. Disconnect the 2 connectors and remove the outer mirror glass.

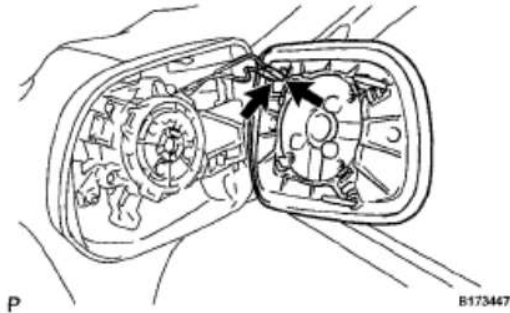
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Fig. 32: Locating Outer Mirror Glass Connectors
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

INSTALLATION**1. INSTALL OUTER MIRROR GLASS (w/ Heater)**

- a. Connect the 2 connectors.

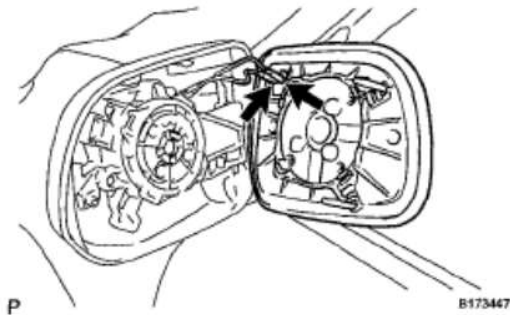


Fig. 33: Locating Outer Mirror Glass Connectors
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

- b. Engage the 2 claws on the upper part of the outer mirror glass to the outer mirror.

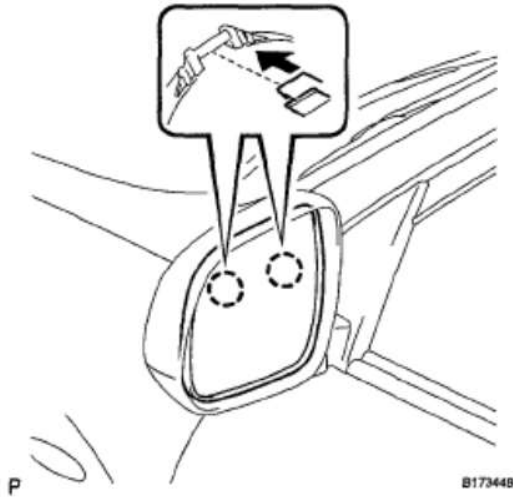
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Fig. 34: Engaging Claws On Upper Part Of Outer Mirror Glass To Outer Mirror
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

- c. Engage the 2 claws on the lower part of the outer mirror glass to the outer mirror as shown in the illustration.



Fig. 35: Engaging Claws On Lower Part Of Outer Mirror Glass To Outer Mirror
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

2. INSTALL OUTER MIRROR GLASS (w/o Heater)

- a. Engage the 2 claws on the upper part of the outer mirror glass to the outer mirror.

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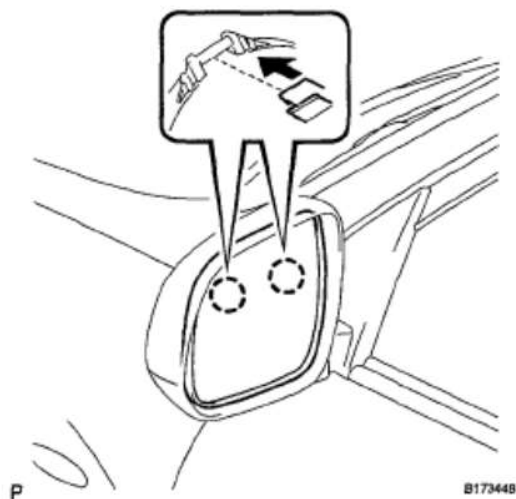


Fig. 36: Engaging Claws On Upper Part Of Outer Mirror Glass To Outer Mirror
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

- b. Engage the 2 claws on the lower part of the outer mirror glass to the outer mirror as shown in the illustration.



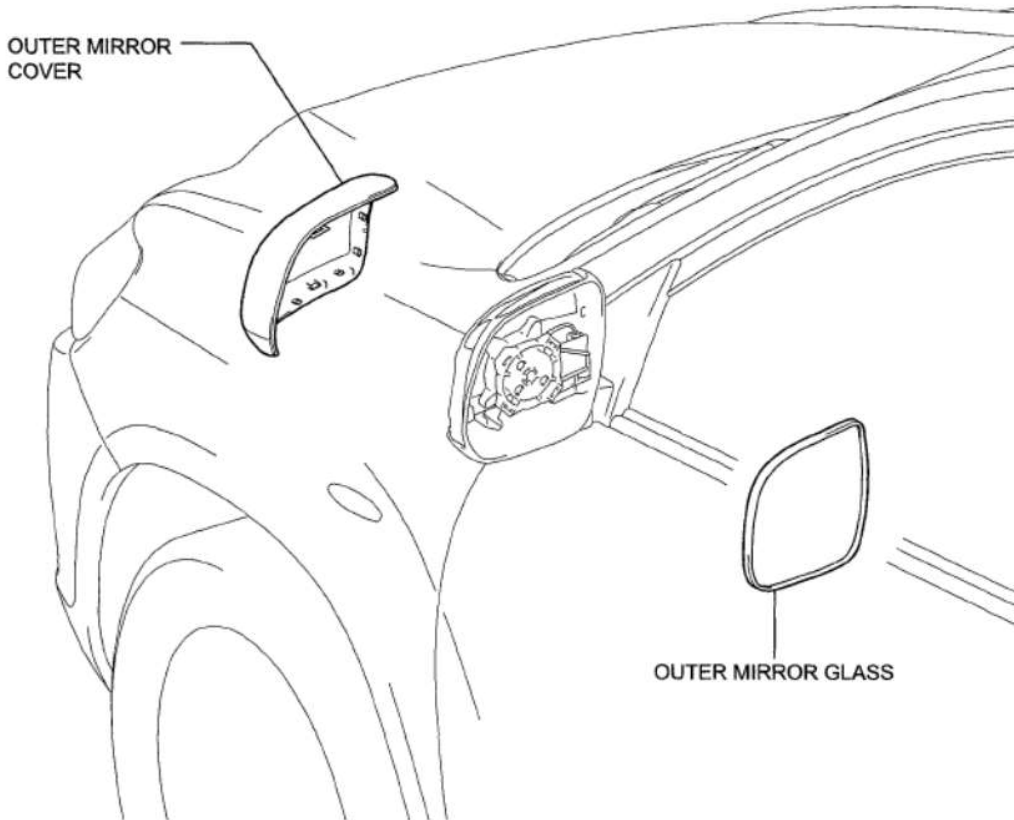
Fig. 37: Engaging Claws On Lower Part Of Outer Mirror Glass To Outer Mirror
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

OUTER MIRROR COVER

COMPONENTS

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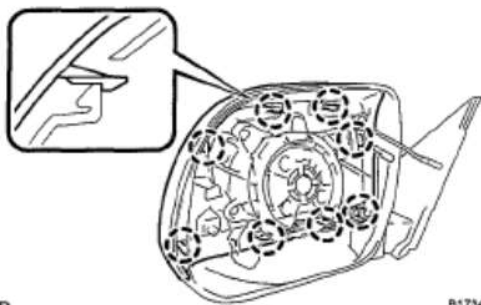
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Fig. 38: Identifying Outer Mirror Cover Components
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

REMOVAL

1. **REMOVE OUTER MIRROR GLASS (w/o Heater)** (See **OUTER REAR VIEW MIRROR GLASS**)
2. **REMOVE OUTER MIRROR GLASS (w/ Heater)** (See **REMOVAL**)
3. **REMOVE OUTER MIRROR COVER**
 - a. Disengage the 8 claws and remove the outer mirror cover from the outer rear view mirror assembly with cover.



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Fig. 39: Identifying Outer Mirror Cover Claws

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Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

INSTALLATION**1. INSTALL OUTER MIRROR COVER**

- a. Engage the 8 claws to install the outer mirror cover to the outer rear view mirror assembly with cover.

NOTE: If there is a gap between the cover and the mirror body, it may cause noise when driving.

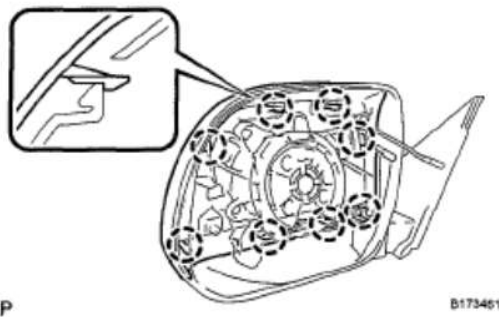


Fig. 40: Identifying Outer Mirror Cover Claws

Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

2. **INSTALL OUTER MIRROR GLASS (w/o Heater)** (See INSTALLATION)
3. **INSTALL OUTER MIRROR GLASS (w/ Heater)** (See INSTALLATION)

OUTER MIRROR SWITCH**COMPONENTS**

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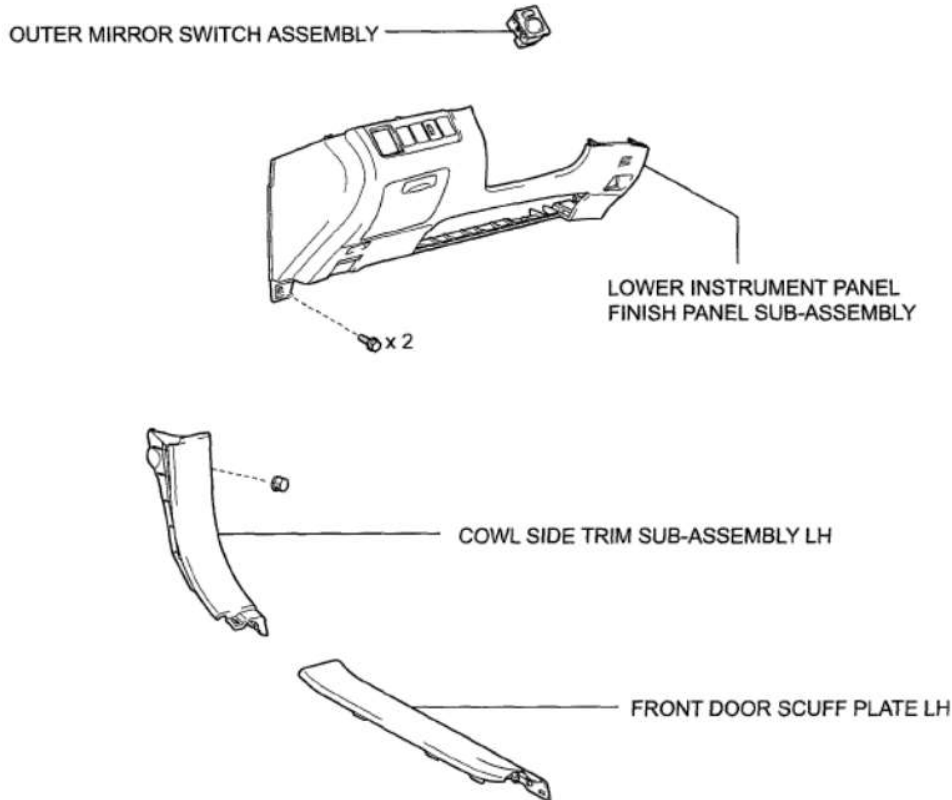


Fig. 41: Identifying Outer Mirror Switch Components
 Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

REMOVAL

1. **REMOVE FRONT DOOR SCUFF PLATE LH** (See **REMOVAL**)
2. **REMOVE COWL SIDE TRIM SUB-ASSEMBLY LH** (See **REMOVAL**)
3. **REMOVE LOWER INSTRUMENT PANEL FINISH PANEL SUB-ASSEMBLY** (for Manual Air Conditioning System) (See **REMOVAL**)
4. **REMOVE LOWER INSTRUMENT PANEL FINISH PANEL SUB-ASSEMBLY** (for Automatic Air Conditioning System) (See **REMOVAL**)
5. **REMOVE OUTER MIRROR SWITCH ASSEMBLY**
 - a. Disengage the 2 claws and remove the outer mirror switch assembly.

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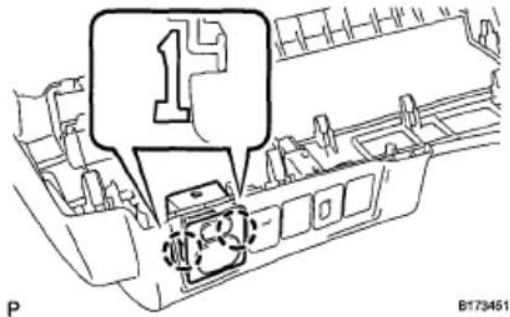


Fig. 42: Identifying Outer Mirror Switch Assembly Claws
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

INSPECTION

1. INSPECT OUTER MIRROR SWITCH ASSEMBLY

- a. The L position of the left/right adjustment switch: Measure the resistance according to the value(s) in the table below.

Standard resistance (for left side)

TESTER CONNECTION SPECIFIED CONDITION		
Tester Connection	Switch Condition	Specified Condition
4 (MLV) - 8 (B) 6 (M+) - 7 (E)	UP	Below 1 ohms
	OFF	10 kohms or higher
4 (MLV) - 7 (E) 6 (M+) - 8 (B)	DOWN	Below 1 ohms
	OFF	10 kohms or higher
5 (MLH) - 8 (B) 6 (M+) - 7 (E)	LEFT	Below 1 ohms
	OFF	10 kohms or higher
5 (MLH) - 7 (E) 6 (M+) - 8 (B)	RIGHT	Below 1 ohms
	OFF	10 kohms or higher

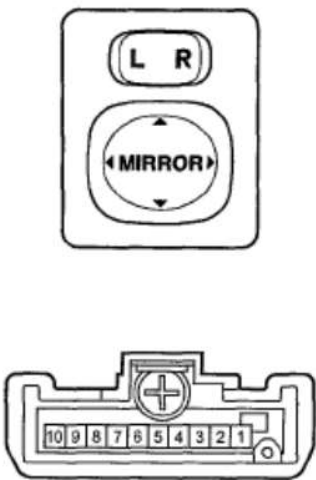
If the result is not as specified, replace the switch assembly.

- b. The R position of the left/right adjustment switch: Measure the resistance according to the value(s) in the table below.

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Component without harness connected:
(Outer Mirror Switch)



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Fig. 43: Identifying Outer Mirror Switch Connector
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

Standard resistance (for right side)

TESTER CONNECTION SPECIFIED CONDITION		
Tester Connection	Switch Condition	Specified Condition
3 (MRV) - 8 (B) 6 (M+) - 7 (E)	UP	Below 1 ohms
	OFF	10 kohms or higher
3 (MRV) - 7 (E) 6 (M+) - 8 (B)	DOWN	Below 1 ohms
	OFF	10 kohms or higher
2 (MRH) - 8 (B) 6 (M+) - 7 (E)	LEFT	Below 1 ohms
	OFF	10 kohms or higher
2 (MRH) - 7 (E) 6 (M+) - 8 (B)	RIGHT	Below 1 ohms
	OFF	10 kohms or higher

If the result is not as specified, replace the switch assembly.

INSTALLATION

1. INSTALL OUTER MIRROR SWITCH ASSEMBLY
- a. Engage the 2 claws and install the outer mirror switch assembly.
2. INSTALL LOWER INSTRUMENT PANEL FINISH PANEL SUB-ASSEMBLY (for Manual Air Conditioning System) (See INSTALLATION)
3. INSTALL LOWER INSTRUMENT PANEL FINISH PANEL SUB-ASSEMBLY (for Automatic

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Air Conditioning System) (See INSTALLATION)



Fig. 44: Identifying Outer Mirror Switch Assembly Claws
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

4. **INSTALL COWL SIDE TRIM SUB-ASSEMBLY LH (See INSTALLATION)**
5. **INSTALL FRONT DOOR SCUFF PLATE LH (See INSTALLATION)**