

# GROUP 51

# EXTERIOR

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# FRONT BUMPER ASSEMBLY

## ADHESIVE

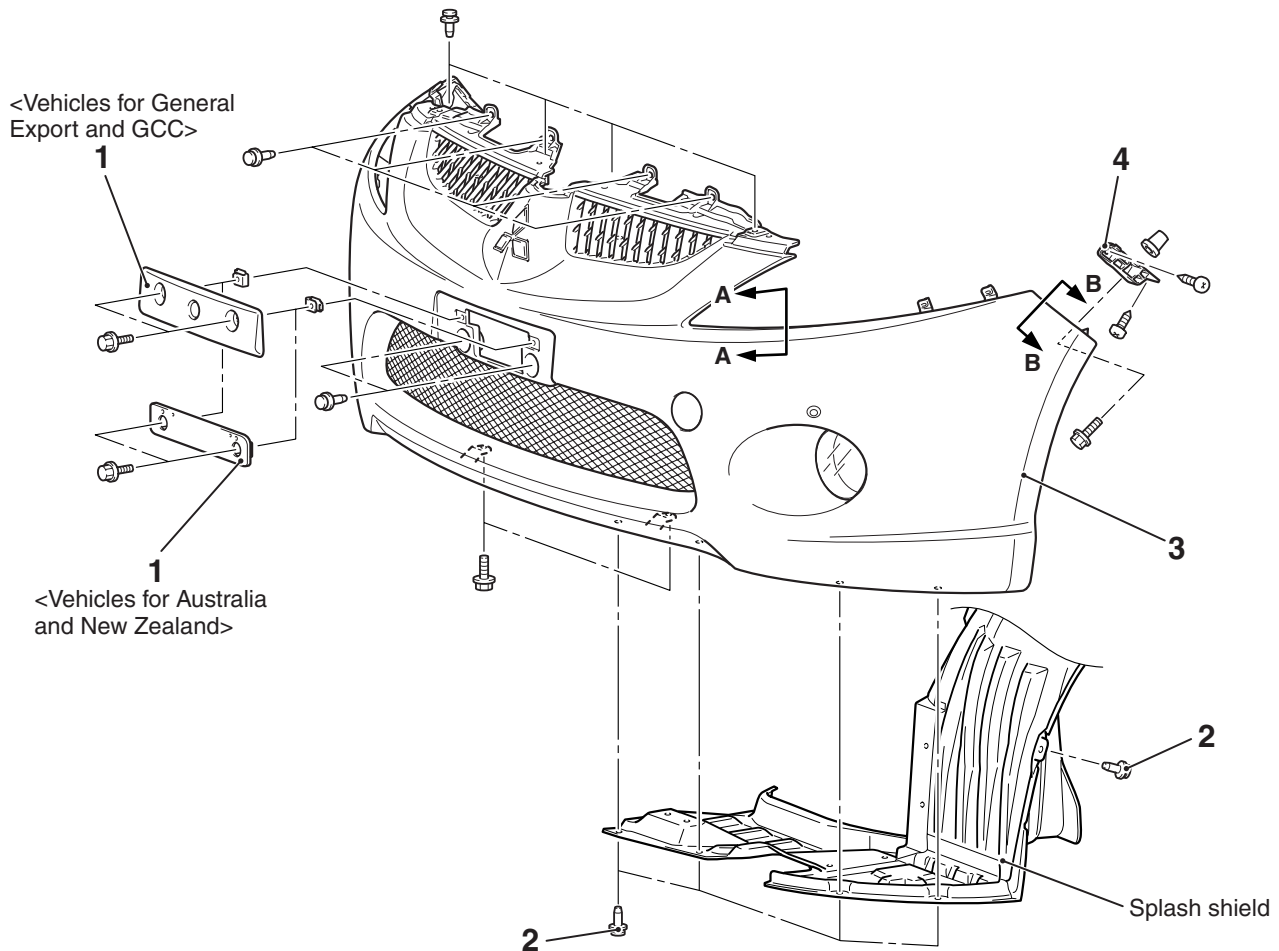
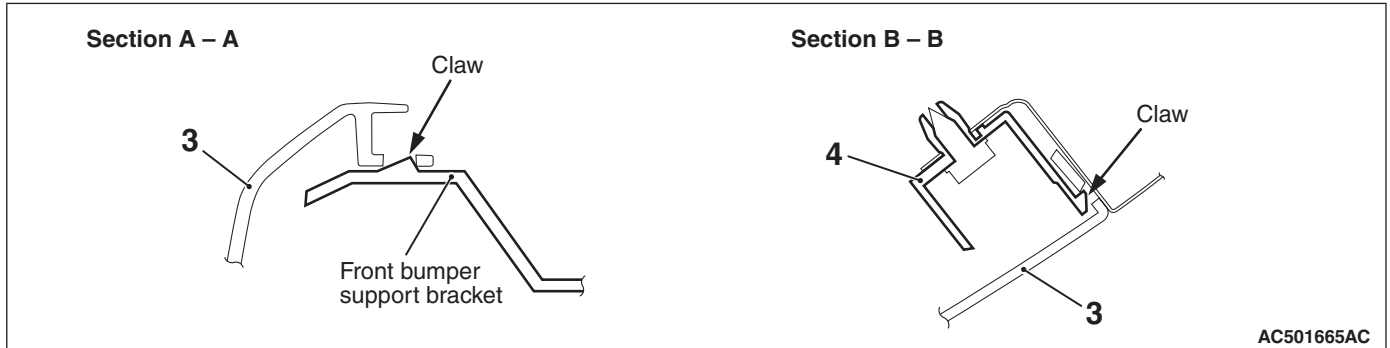
M1511000500545

Application	Specified adhesive
Front three-diamond mark	Double-sided tape [20 mm width 1.2 mm thickness]

## FRONT BUMPER ASSEMBLY

## REMOVAL AND INSTALLATION

M1511001401083



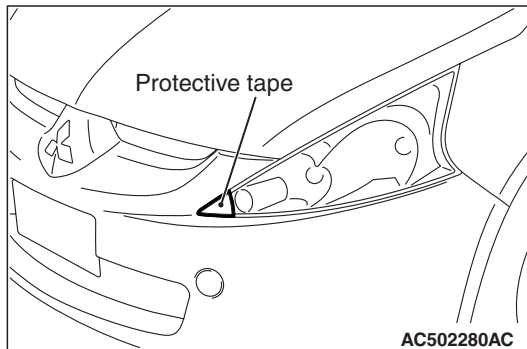
AC311432AD

**Removal steps**

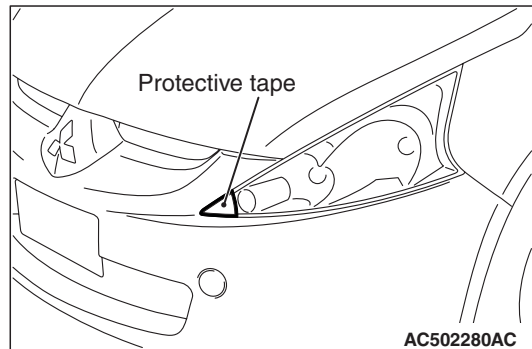
1. Licence plate bracket
2. Splash shield mounting clips
- Front fog lamp connector connection  
<Except vehicles for GCC>

**Removal steps (Continued)**

- Corner sensor connector connection  
<Vehicles for Hong Kong and Singapore>
- <<A>> >>A<< 3. Front bumper assembly
  4. Front bumper side bracket

**REMOVAL SERVICE POINT****<<A>>FRONT BUMPER ASSEMBLY  
REMOVAL****⚠ CAUTION**

Apply the protective tape at the front end of the headlamp to prevent the bumper from damage at the time of bumper removal.

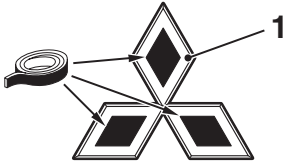
**INSTALLATION SERVICE POINT****>>A<<FRONT BUMPER ASSEMBLY  
INSTALLATION****⚠ CAUTION**

Apply the protective tape at the front end of the headlamp to prevent the bumper from damage at the time of bumper installation.

# DISASSEMBLY AND REASSEMBLY

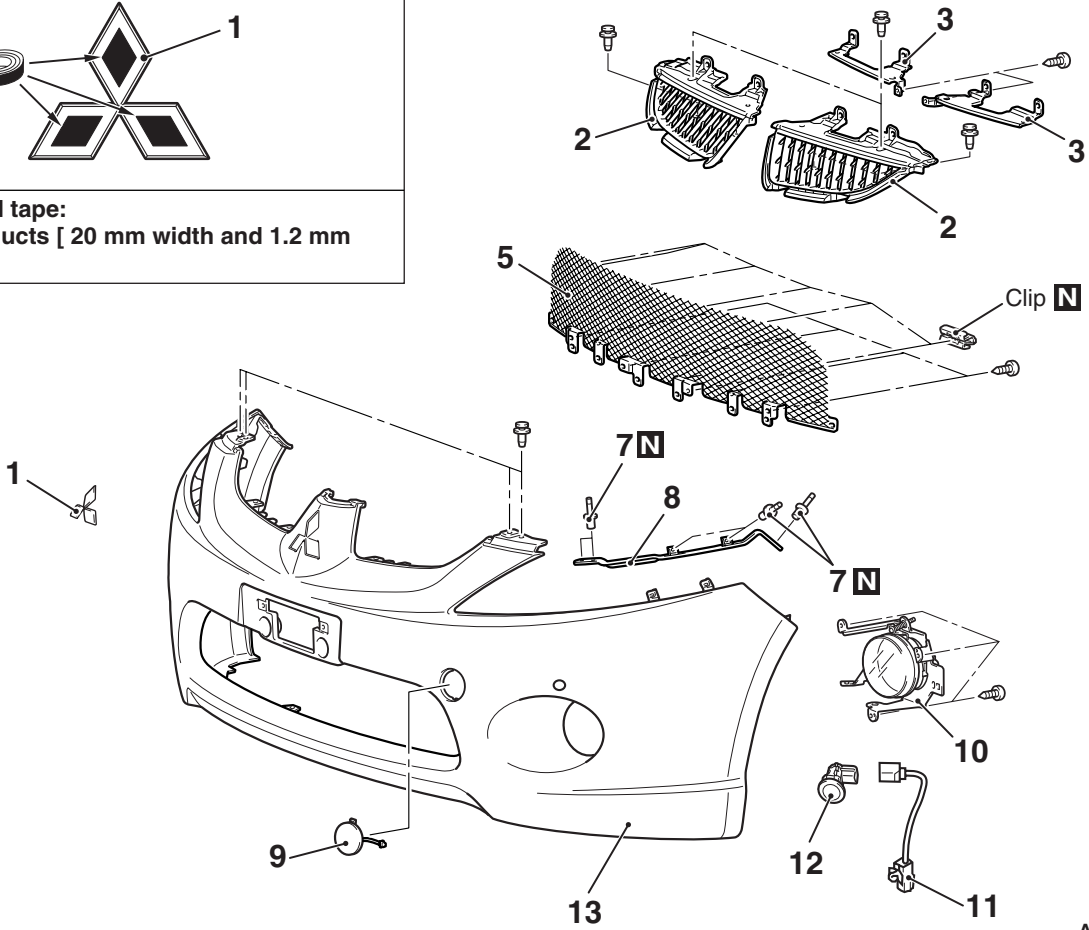
M1511001601087

Double-sided tape affixed location



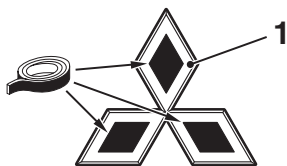
Double-sided tape:  
Generic products [ 20 mm width and 1.2 mm  
thickness ]

<Except vehicles for GCC>



AC503672AB

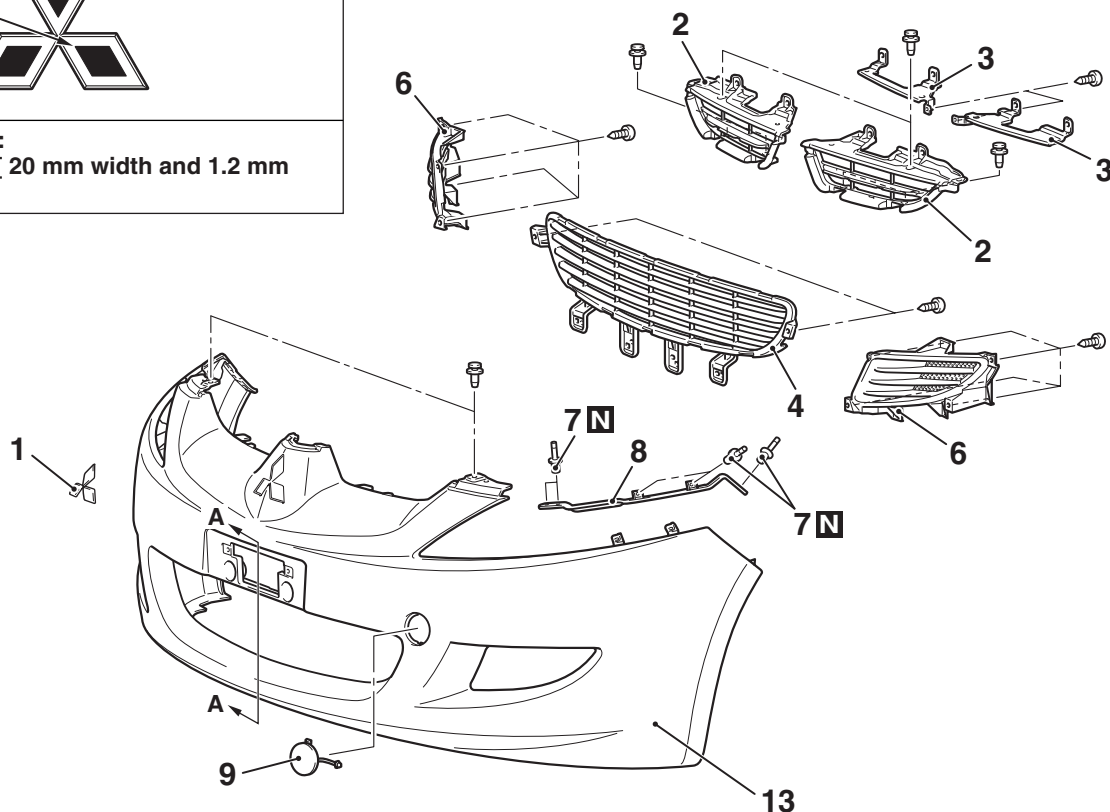
## Double-sided tape affixed location



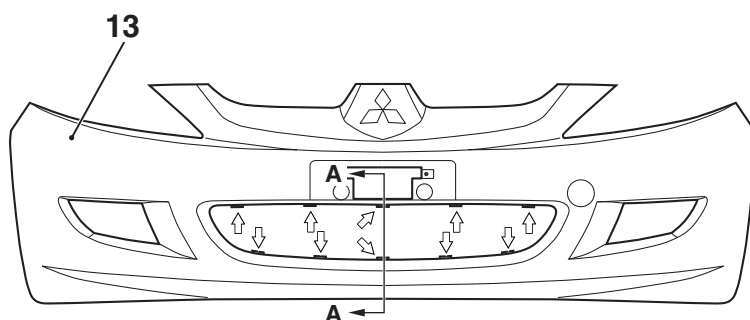
## Double-sided tape:

Generic products [ 20 mm width and 1.2 mm thickness ]

<Vehicles for GCC>



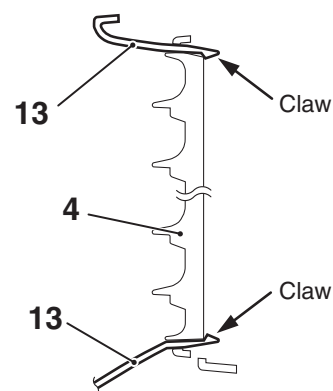
AC503675AB



Note

↔ : Claw positions

## Section A – A



AC503673AB

## Removal steps

1. Front three-diamond mark
2. Front bumper upper grille
3. Front grille upper reinforcement
4. Front bumper lower grille <Vehicles for GCC>
5. Bumper centre net <Except vehicles for GCC>
6. Air intake bezel <Vehicles for GCC>
7. Rivets

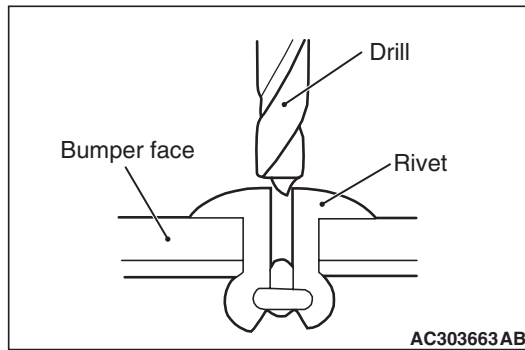
## Removal steps (Continued)

8. Front bumper side plate
9. Towing cover
10. Front fog lamp assembly <Except vehicles for GCC>
11. Corner sensor harness <Vehicles for Hong Kong and Singapore>
12. Corner sensor <Vehicles for Hong Kong and Singapore>
13. Front bumper face

<<A>> >>A<<

## DISASSEMBLY SERVICE POINT

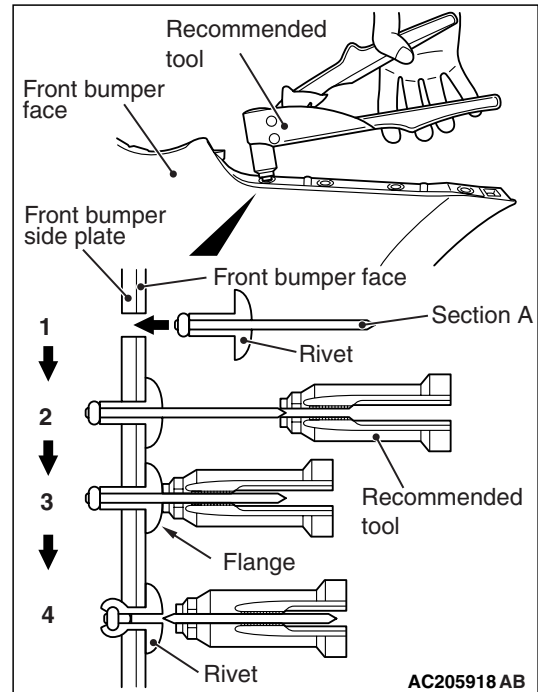
### <<A>> RIVETS REMOVAL



Use a drill (4.0 mm) to make a hole in the rivet to break it, and then remove the rivet.

## REASSEMBLY SERVICE POINT

### >>A<< RIVETS ASSEMBLY



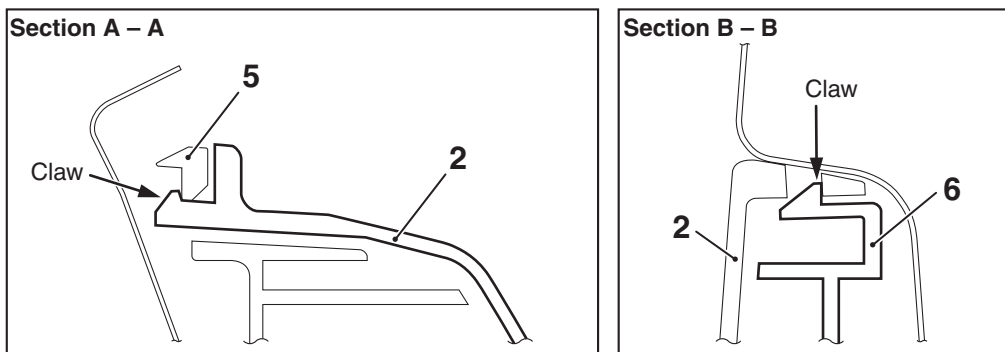
Use recommended tool shown in the illustration to connect the rivet by the following procedure.

1. Insert the rivet into the base material (front bumper face and front bumper side plate assembly).
2. Place the recommended tool over section A of the rivet.
3. While pushing the flange surface of the rivet with the recommended tool, press the handle of the tool.
4. The thin part of section A of the rivet will break and the rivet will then be attached.

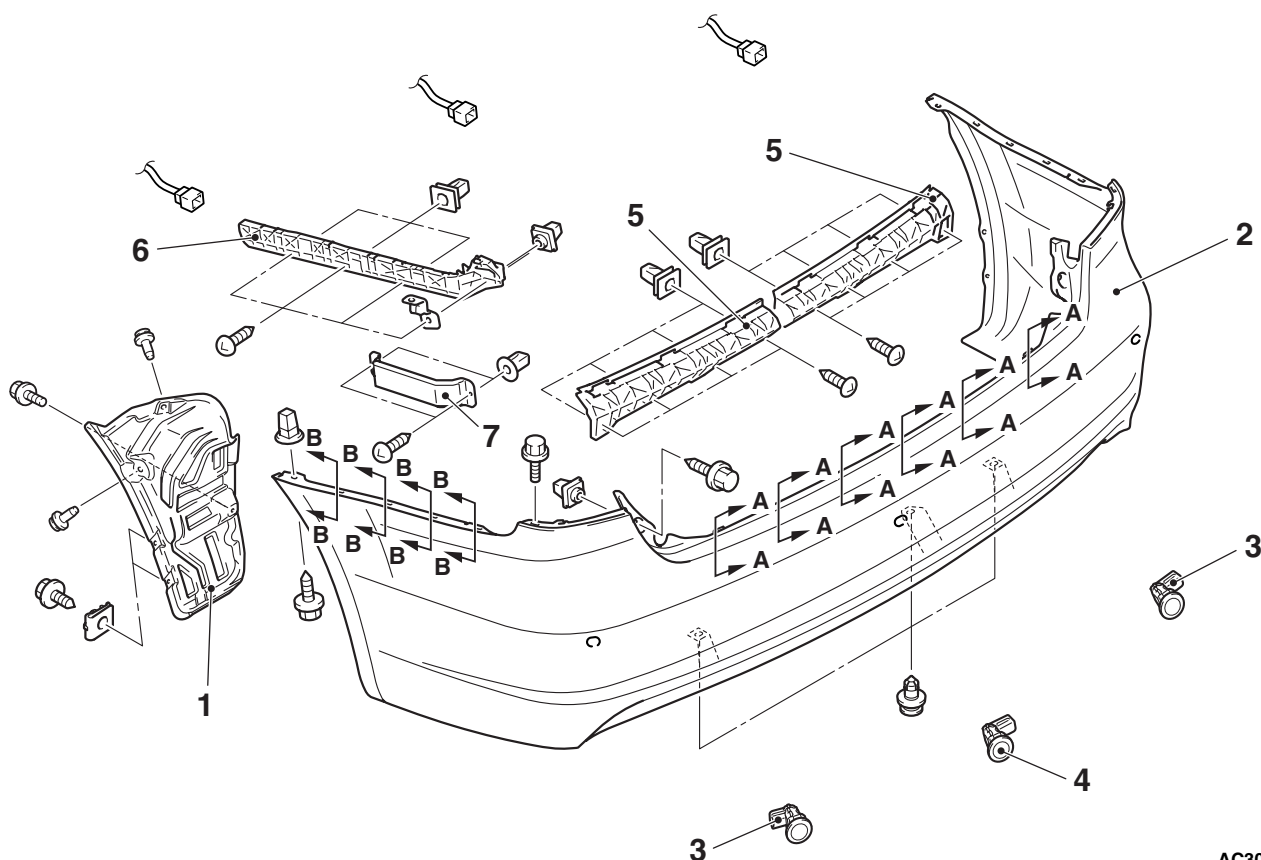
# REAR BUMPER ASSEMBLY

## REMOVAL AND INSTALLATION

M1511001900579



AC313567AJ



AC304072AF

### Removal steps

- Tailgate damper lower (Refer to GROUP 42, Tailgate [P.42-56.](#))
- 1. Rear splash shield
- Corner sensor connector connection <Vehicles for Hong Kong and Singapore>
- Back sonar sensor connector connection <Vehicles for Hong Kong and Singapore>
- 2. Rear bumper assembly

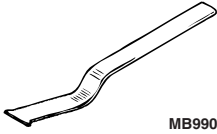
### Removal steps (Continued)

- 3. Corner sensor <Vehicles for Hong Kong and Singapore>
- 4. Back sonar sensor <Vehicles for Hong Kong and Singapore>
- 5. Rear bumper centre bracket
- 6. Rear bumper side bracket
- 7. Rear bumper side reinforcement <Except vehicles for GCC>

# MOULDINGS

## SPECIAL TOOL

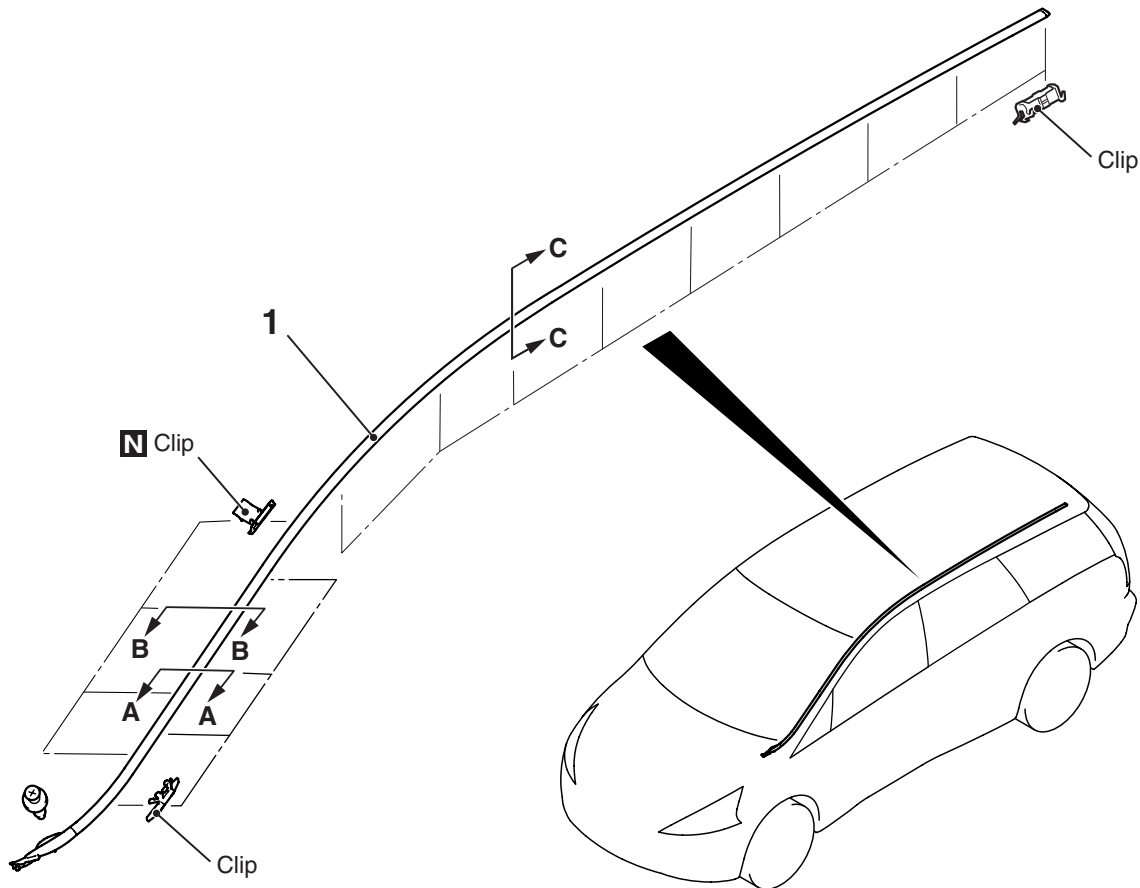
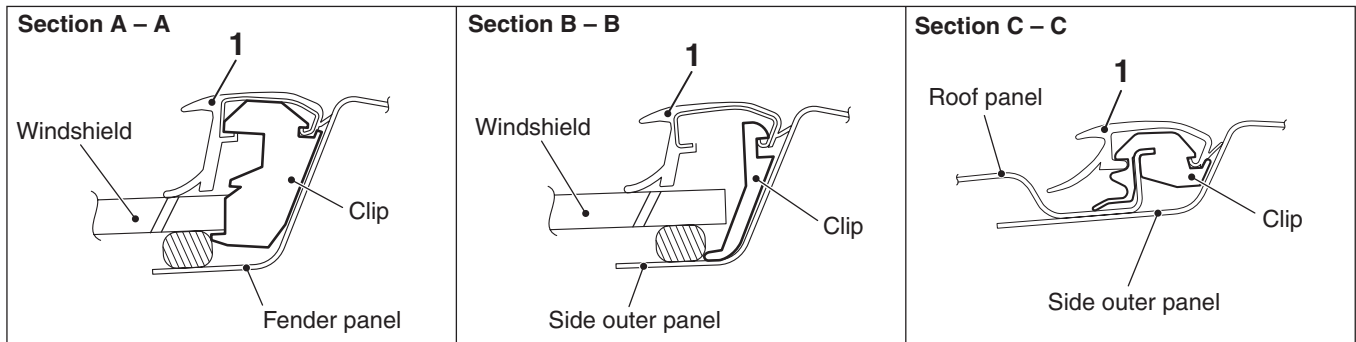
M1511000601299

Tool	Number	Name	Application
	MB990449	Window moulding remover	Removal of drip moulding

## MOULDINGS

## REMOVAL AND INSTALLATION

M1511004700217



## Roof drip moulding removal

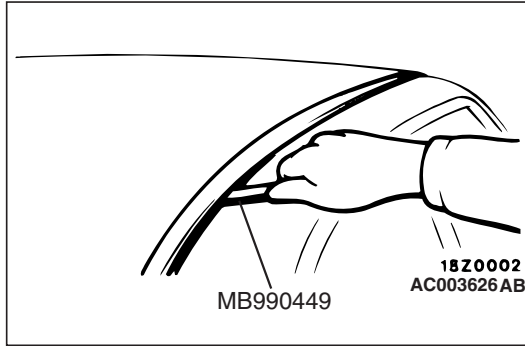
&lt;&lt;A&gt;&gt; &gt;&gt;A&lt;&lt; 1. Roof drip moulding

## REMOVAL SERVICE POINT

## &lt;&lt;A&gt;&gt; ROOF DRIP MOULDING REMOVAL

 CAUTION

If the moulding has become warped, it should not be reused.



Use special tool window moulding remover (MB990449) to pry out the moulding.

## INSTALLATION SERVICE POINT

## &gt;&gt;A&lt;&lt; ROOF DRIP MOULDING INSTALLATION

Install the clips to the roof drip moulding before installing the moulding to the vehicle body.

## GARNISHES

### ADHESIVE

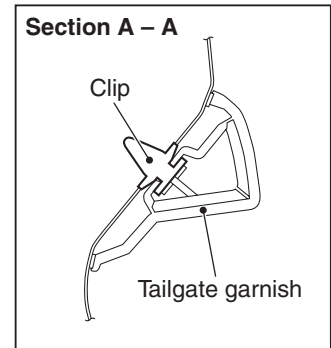
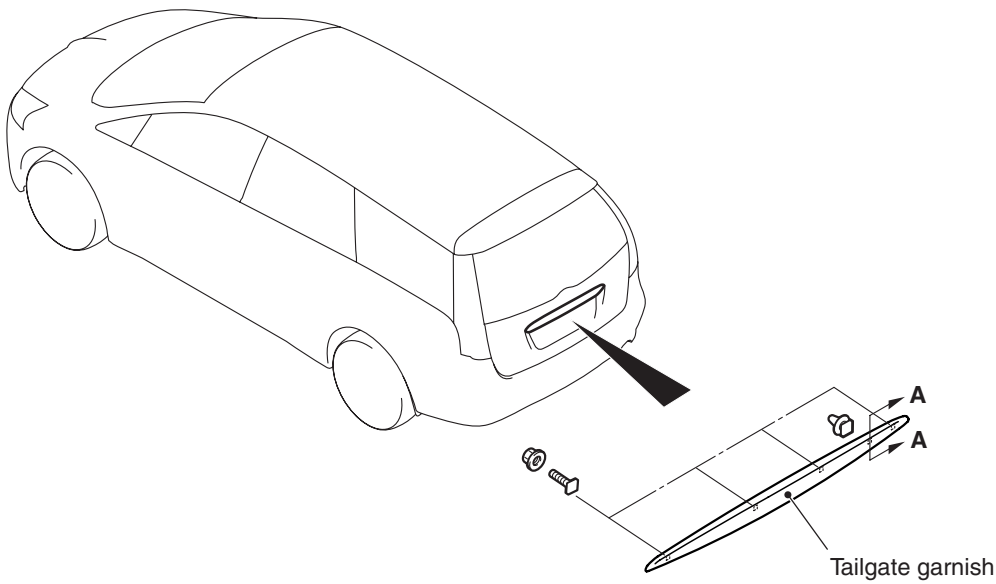
M1511000500556

Application	Specified adhesive
Side sill garnish	Double-sided tape: a: 5.0 mm width, 1.2 mm thickness b: 10.0 mm width, 2.5mm thickness

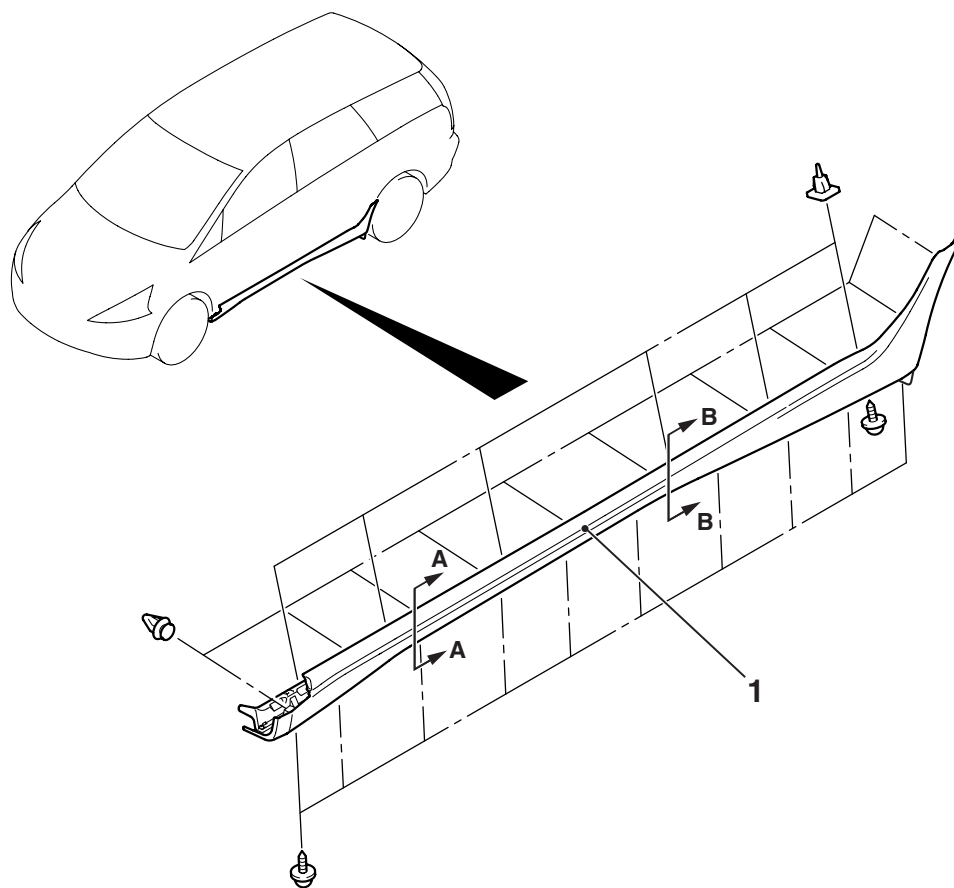
### GARNISHES

### REMOVAL AND INSTALLATION

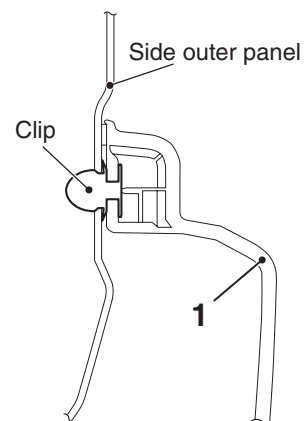
M1511004100163



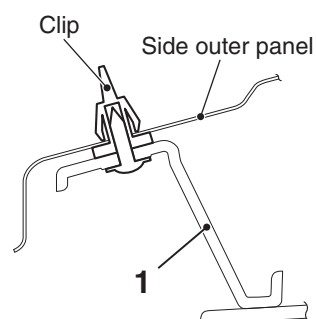
AC302625AB



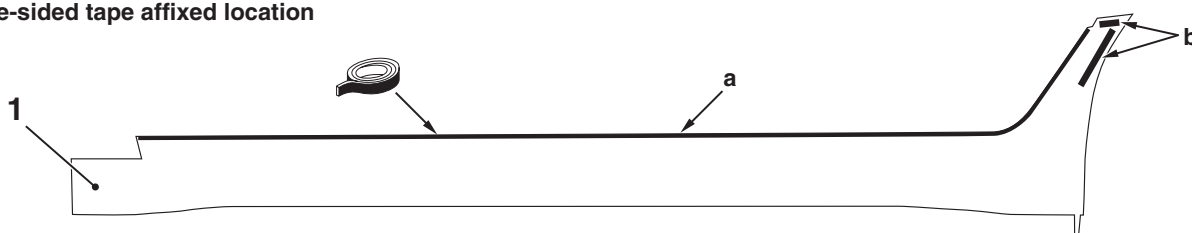
Section A – A



Section B – B



Double-sided tape affixed location



Double-sided tape: Generic products

a: 5.0 mm width, 1.2 mm thickness, b: 10.0 mm width, 2.5 mm thickness

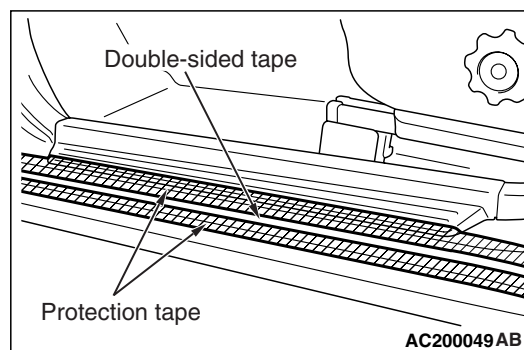
AC313480AB

**Removal steps**

&lt;&lt;A&gt;&gt; &gt;&gt;A&lt;&lt; 1. Side sill garnish

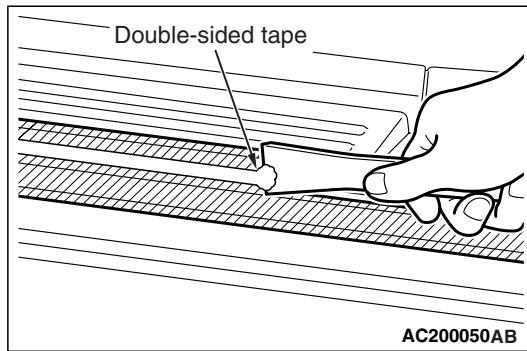
**REMOVAL SERVICE POINT****<<A>> SIDE SILL GARNISH REMOVAL**

Gently lift and remove the side sill garnish. If there is any double-sided tape remaining on the side sill garnish, remove according to the following instructions.  
<Remove double-sided tape remaining on the body surface>



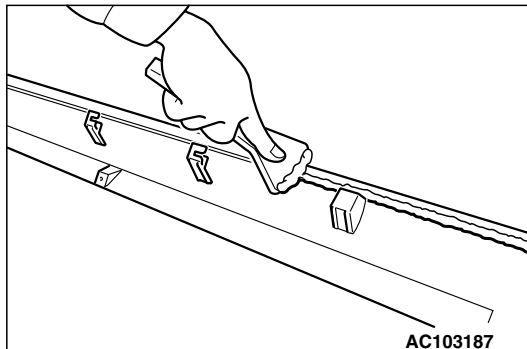
AC200049AB

1. Attach protection tape all the way along the edges of the double-sided tape which is still adhering to the body.



2. Scrape off the double-sided tape with a resin spatula as possible.
3. Peel off the protection tape.
4. Wipe the body surface and clean it with a rag moistened with isopropyl alcohol.

<Remove double-sided tape remaining on side sill garnish and adhere double-sided tape (when re-using side sill garnish)>

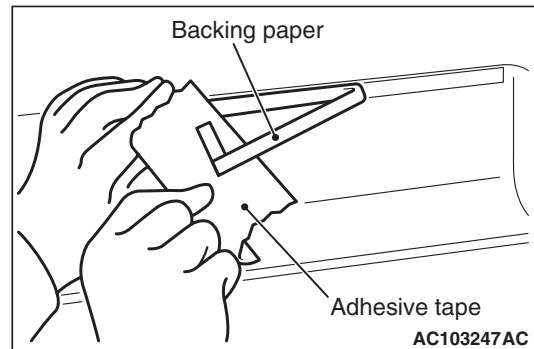


1. Scrape off the double-sided tape on the side sill garnish with a resin spatula as possible.

2. Wipe the side sill garnish surface and clean it with a rag moistened with isopropyl alcohol.
3. Remove only a small portion of the residual adhesive.
4. Adhere the double-sided tape as specified on the side sill garnish (Refer to double-sided tape adherence location).

## INSTALLATION SERVICE POINT

### >>A<< SIDE SILL GARNISH INSTALLATION

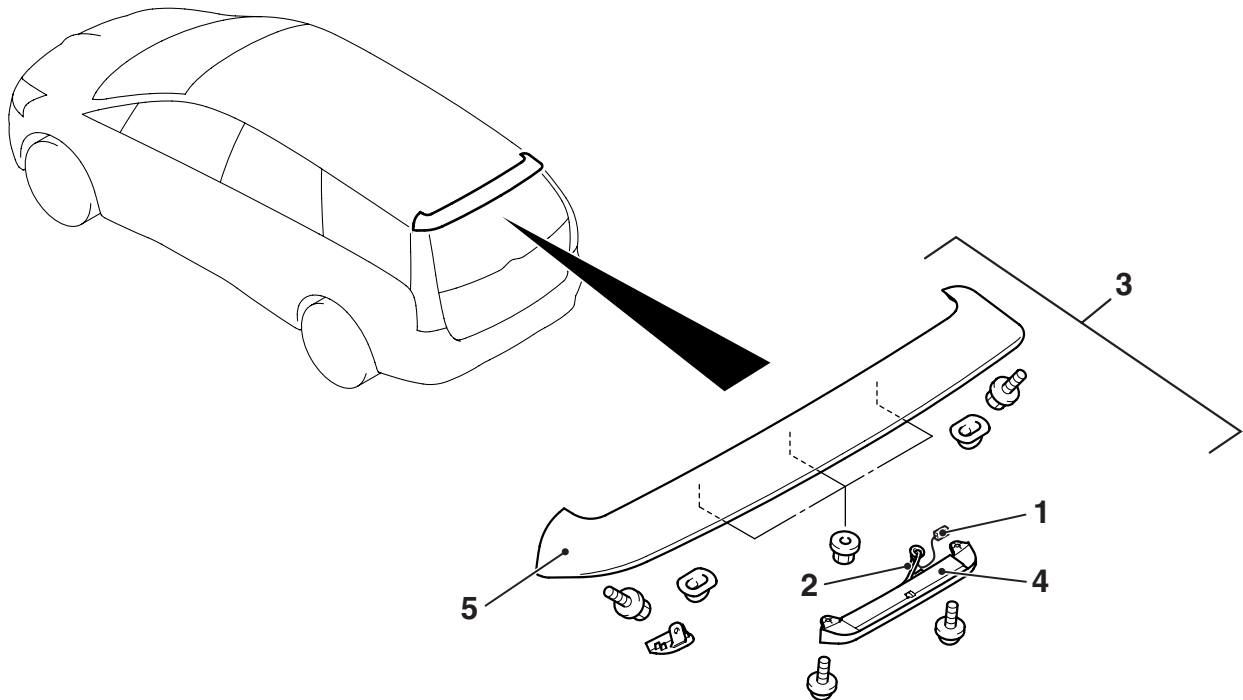


1. Tear off the double-sided tape backing paper.  
*NOTE: If Attach the adhesive tape to the edge of the backing paper, it will be easy to tear off.*
2. Install the side sill garnish.  
*NOTE: If The double-sided tape is difficult to affix in cold temperature, etc., warm the bonding surfaces of the body and side sill garnish to about 40–60 °C before affixing the tape.*
3. Firmly press in the side sill garnish.

# TAILGATE SPOILER

## REMOVAL AND INSTALLATION

M1511019900109



AC312064AB

**Removal steps**

- Tailgate upper trim (Refer to GROUP 52A, Tailgate trim [P.52A-16.](#))
1. High-mounted stop lamp connector connection

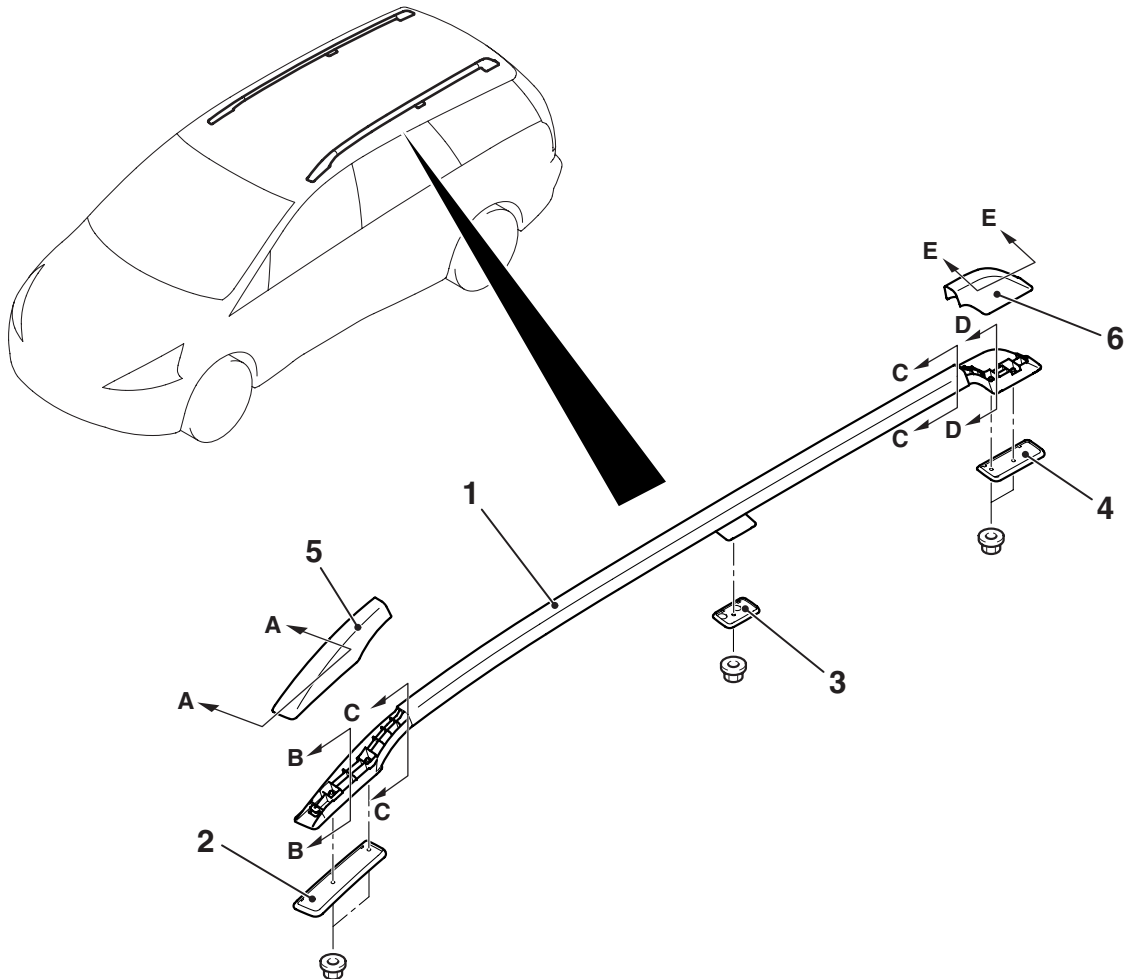
**Removal steps (Continued)**

2. Rear washer hose connection
3. Tailgate spoiler assembly
4. High-mounted stop lamp assembly
5. Tailgate spoiler

# ROOF RAIL

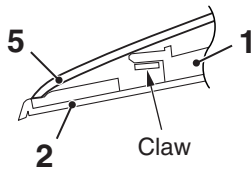
## REMOVAL AND INSTALLATION

M1511016600228

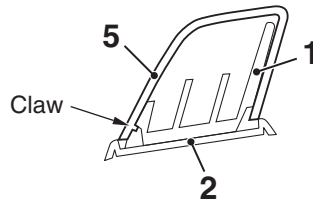


AC313502AB

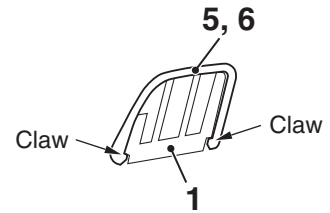
Section A – A



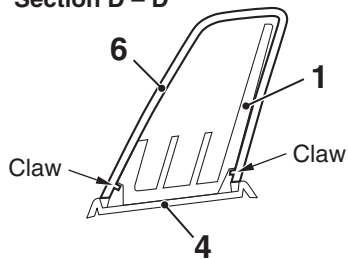
Section B – B



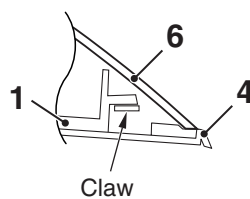
Section C – C



Section D – D



Section E – E



AC302137 AB

**Removal steps**

- Headlining assembly (Refer to GROUP 52A, Headlining [P.52A-17.](#))
1. Roof rail
  2. Front packing

**Removal steps (Continued)**

3. Centre packing
4. Rear packing
5. Front roof rail cover
6. Rear roof rail cover

**WINDSHIELD WIPER AND WASHER****SERVICE SPECIFICATION**

M1511000300444

Item	Standard value
Stop position of the windshield wiper arm/blade assembly (Distance between the edge of the wiper blade and the end of the deck garnish) mm	Driver's side: 123 ± 5 Passenger's side: 25 ± 5

**TROUBLESHOOTING**

M1511020000252

The windshield wiper and washer are controlled by the Smart Wiring System (SWS). For troubleshooting, refer to GROUP 54B, Troubleshooting [P.54B-58](#), GROUP 54C, Troubleshooting [P.54C-32](#), GROUP 54D, Troubleshooting [P.54D-59](#) or GROUP 54E, Troubleshooting [P.54E-40](#).

*NOTE: Even when the ETACS-ECU has failed, the windshield wiper can work at low speed as fail-safe mode. (Normally, the windshield wiper operates when the ignition switch is at the "ACC" position. But, if it enters the fail-safe mode, the wiper can operate only when the ignition switch is at the "ON" position.)*

**ON-VEHICLE SERVICE****WINDSHIELD INTERMITTENT WIPER INSPECTION**

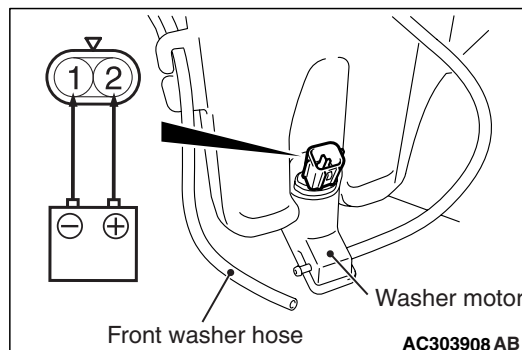
M1511023600026

1. Check the wipers operate in the intermittent action when the windshield intermittent wiper switch is at the intermittent operation.
2. Check that the intermittent wiper interval is changed as the intermittent wiper volume is operated.
3. Turn the windshield intermittent wiper switch to the intermittent operation position. Use the M.U.T.-III to set a simulated vehicle speed with the wiper volume held. The intermittent wiper interval should be changed as the simulated vehicle speed is changed.

4. If either of above is defective, carry out the troubleshooting. (Refer to GROUP 54B, Troubleshooting [P.54B-58](#), GROUP 54C, Troubleshooting [P.54C-32](#), GROUP 54D, Troubleshooting [P.54D-59](#) or GROUP 54E, Troubleshooting [P.54E-40](#).)

**WASHER MOTOR INSPECTION (WINDSHIELD WASHER)**

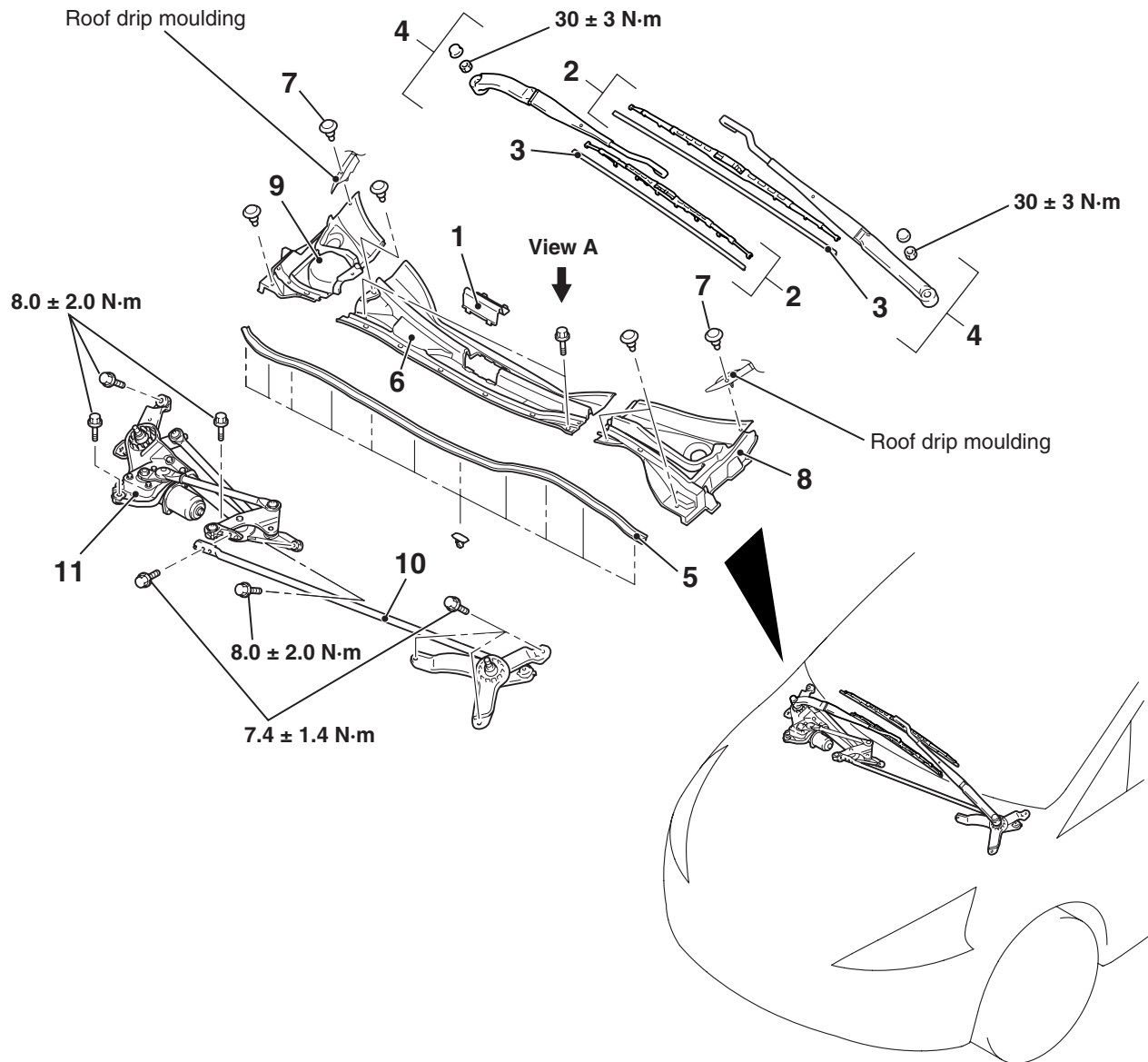
M1511019100716



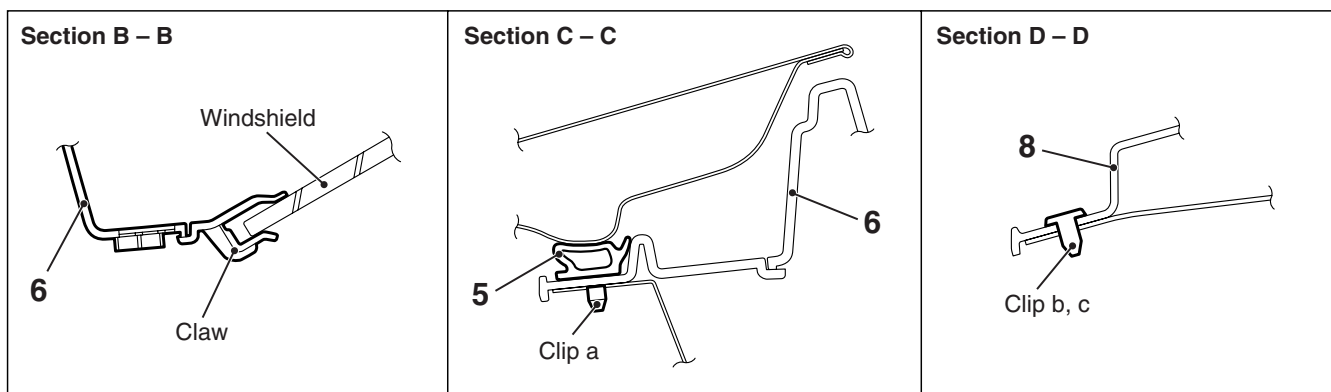
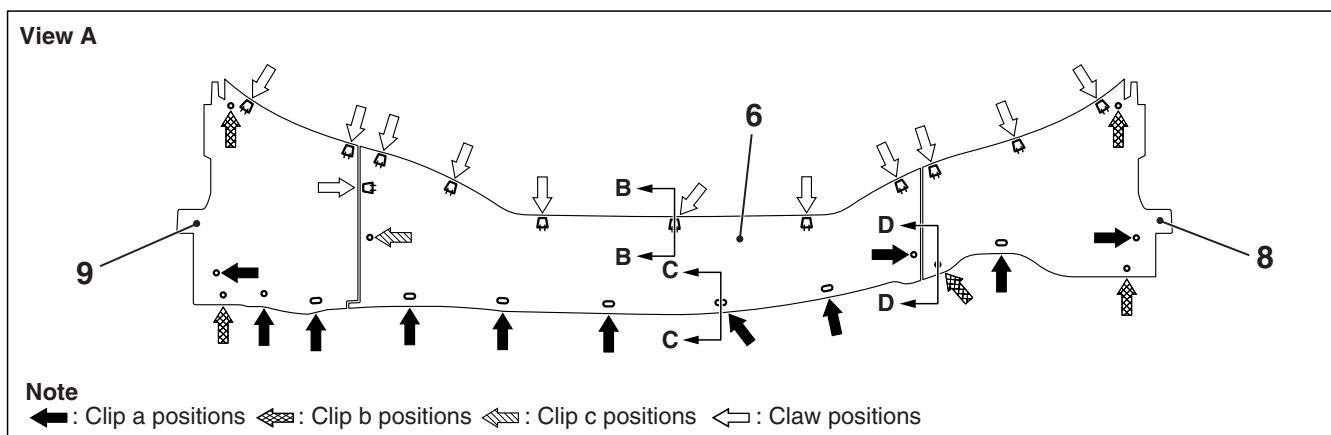
1. Check the washer fluid level, and refill if necessary.
2. Remove the splash shield.
3. Disconnect the washer motor connector.
4. Disconnect the front washer hose as shown.
5. Connect the battery to the washer motor connector as shown. Check that the washer motor delivers washer strongly.

## WINDSHIELD WIPER REMOVAL AND INSTALLATION

M1511007900221



AC310899AC



AC310648AB

**Deck garnish removal**

1. Front deck garnish cover

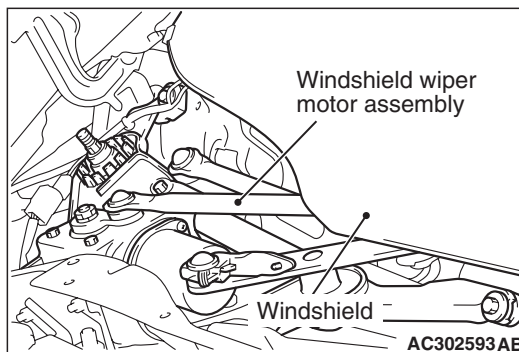
**Wiper blade assembly removal steps**

2. Wiper blade assembly
3. Wiper blade

**Windshield wiper motor and link assembly removal steps**

- >>A<<
4. Wiper arm blade assembly
    - Cowl top centre panel (Refer to GROUP 42, Loose Panel P.42-80.)
  5. Hood weather strip
  6. Front deck garnish
  7. Drip moulding clip
  8. Front deck garnish (LH)
  9. Front deck garnish (RH)
- <<A>>
10. Windshield wiper link
  11. Windshield wiper motor assembly

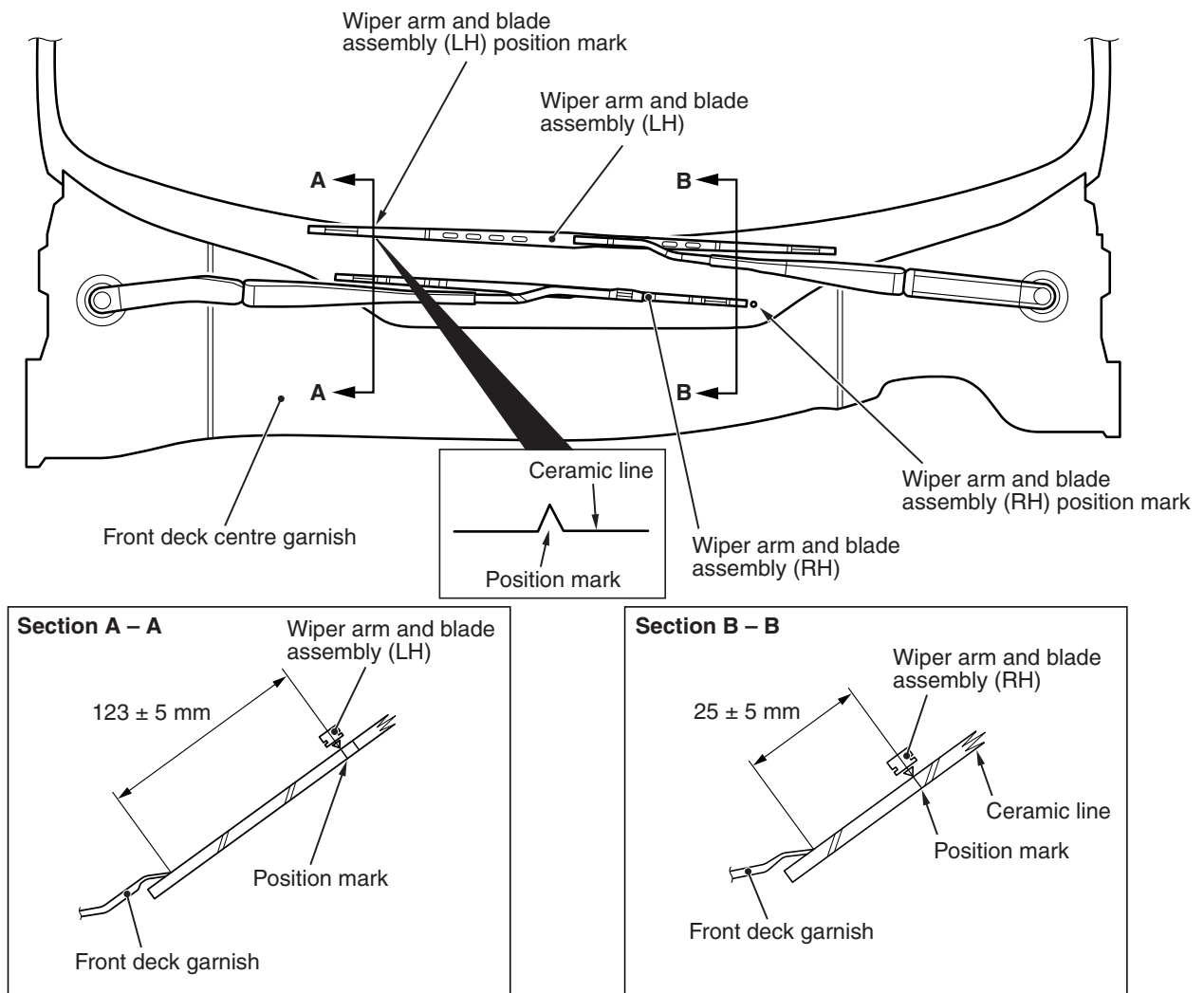
**NOTE:** For removal and installation of the wiper and washer switch, refer to GROUP 54A, Column switch P.54A-211.

**REMOVAL SERVICE POINT****<<A>> WINDSHIELD WIPER MOTOR ASSEMBLY AND WIPER LINK REMOVAL****⚠ CAUTION**

**Be careful not to contact the windshield when the windshield wiper motor assembly and the windshield wiper link assembly are removed.**

## INSTALLATION SERVICE POINT

### >>A<< WIPER ARM AND BLADE ASSEMBLY INSTALLATION



AC313569AB

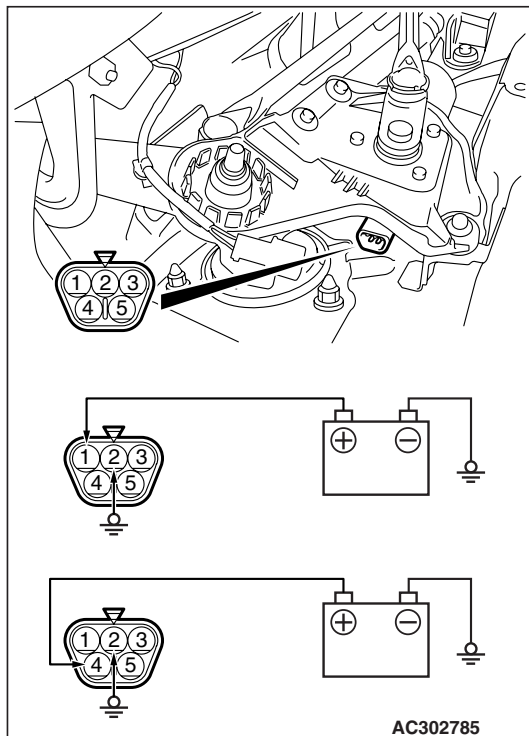
Install the wiper arm and blade assembly at the specified positions.

## INSPECTION

M1511019100727

# WINDSHIELD WIPER MOTOR CHECK

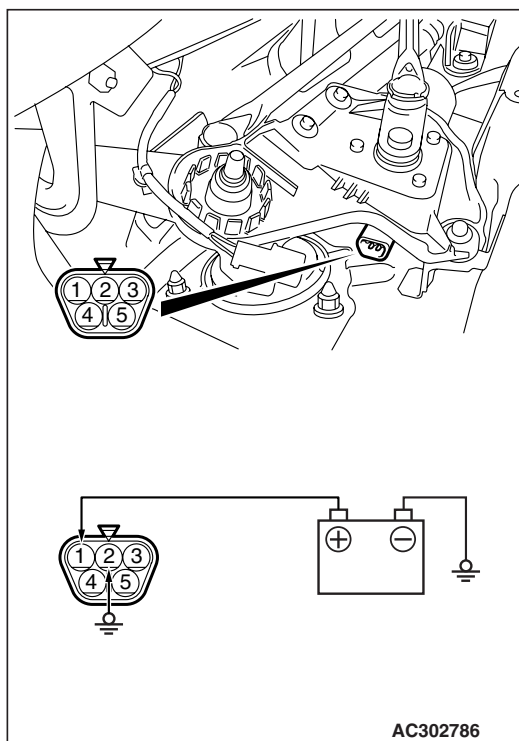
## OPERATION CHECK OF THE WINDSHIELD WIPER MOTOR WHEN IT IS WORKING AT LOW OR HIGH SPEED.



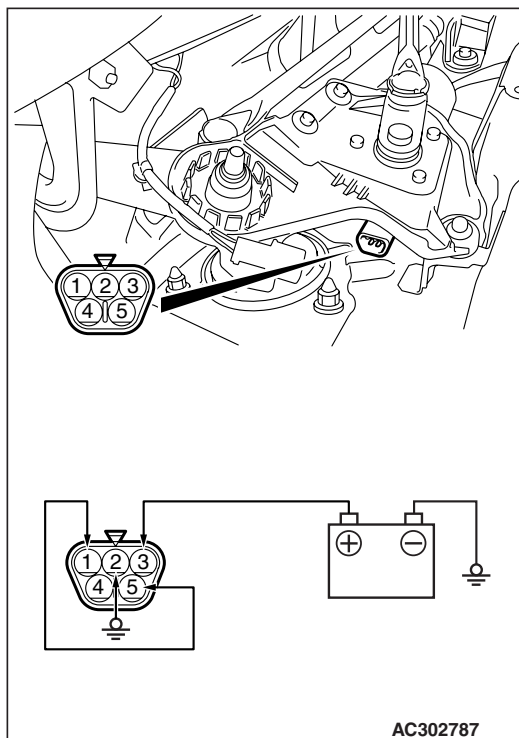
1. Connect the positive battery terminal to windshield wiper motor connector terminal No.1 as shown. Check the low-speed operation of the motor by earthing windshield wiper motor connector terminal No.2.
2. Connect the positive battery terminal to windshield wiper motor connector terminal No.4 as shown. Check the high-speed operation of the motor by earthing windshield wiper motor connector terminal No.2.

# CHECK OF STOP POSITION OF THE WINDSHIELD WIPER MOTOR

Prior to this check, ensure that there is no excessive play at the windshield wiper link.



1. Connect the battery to windshield wiper motor connector terminal No.1 as shown. Operate the motor at low speed by earthing the motor.
2. Disconnect the battery cable from motor connector terminal No.1. The motor should stop.



3. Connect the battery to motor connector terminal No.3 as shown.
4. Connect motor connector terminal No.5 to No.1 as shown.
5. Check to see that the motor runs at low speed and then stops at the automatic stop position.

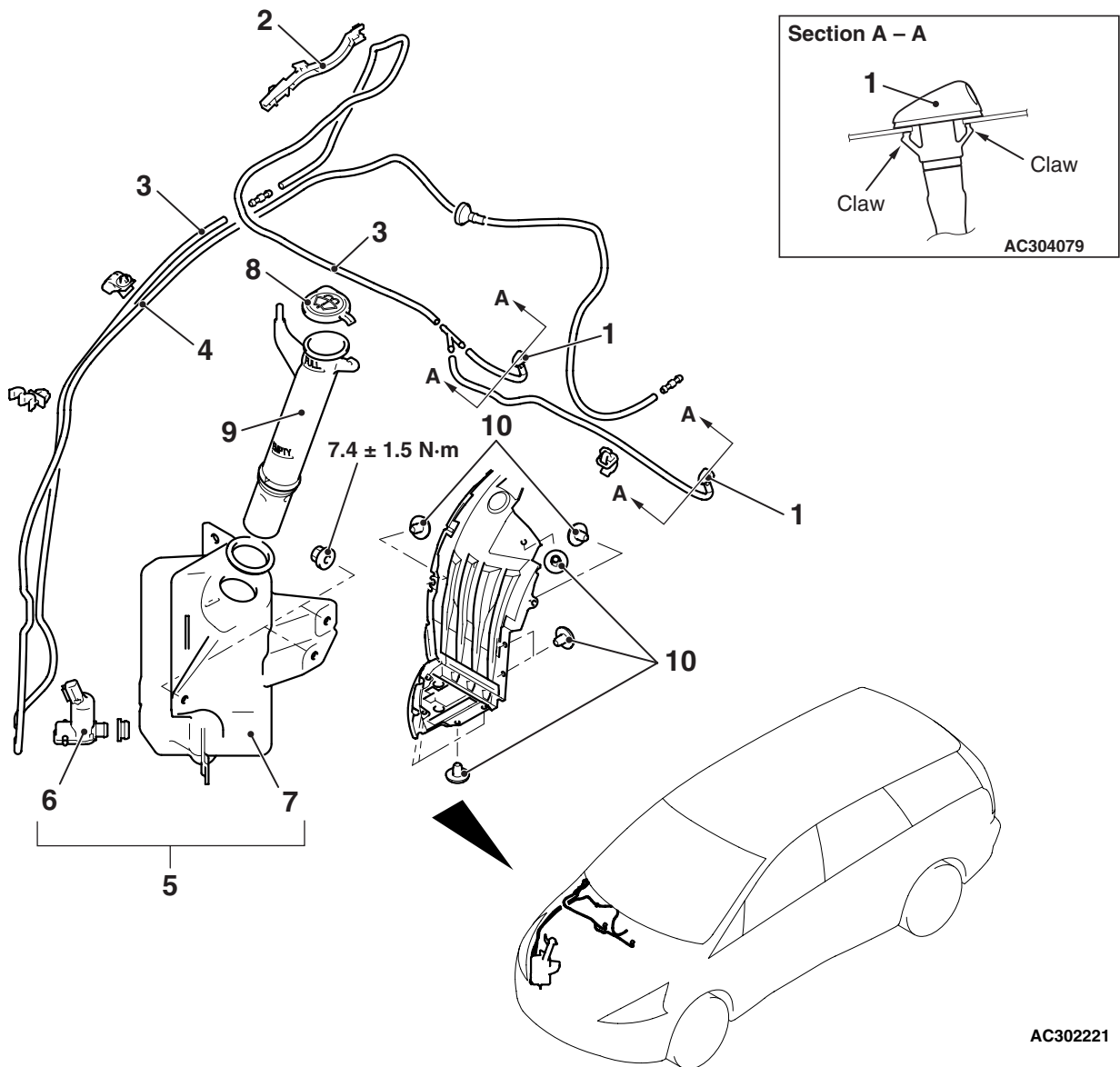
## WINDSHIELD WIPER SWITCH CHECK

Check the input signals (mist, intermittent, low speed and high speed) from the windshield wiper switch.  
(Refer to GROUP 54B, Troubleshooting [P.54B-58](#), GROUP 54C, Troubleshooting [P.54C-32](#), GROUP 54D, Troubleshooting [P.54D-59](#) or GROUP 54E, Troubleshooting [P.54E-40](#).)

## WINDSHIELD WASHER

### REMOVAL AND INSTALLATION

M1511008200418



#### Windshield washer nozzle removal steps

- Hood insulator (Refer to GROUP 42, hood [P.42-6](#).)
1. Windshield washer nozzle

#### Windshield washer hose removal steps

1. Windshield washer nozzle
  2. Clip
- Fender (RH) (Refer to GROUP 42, Fender [P.42-9](#).)

**Windshield washer hose removal steps (Continued)**

3. Windshield washer hose
4. Rear washer hose

**Washer tank removal steps**

- Front bumper assembly (Refer to P.51-3.)
- 5. Washer tank assembly
- 6. Washer motor
- 7. Washer tank

&lt;&lt;A&gt;&gt;

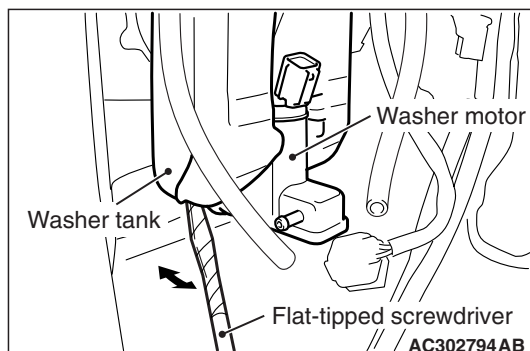
**Washer tank removal steps**

8. Cap
9. Washer tank filler hose

**Washer motor removal steps**

10. Splash shield (RH)
6. Washer motor

*NOTE: For removal and installation of the wiper and washer switch, refer to GROUP 54A, Column switch P.54A-211.*

**REMOVAL SERVICE POINTS****<<A>> WASHER MOTOR REMOVAL**

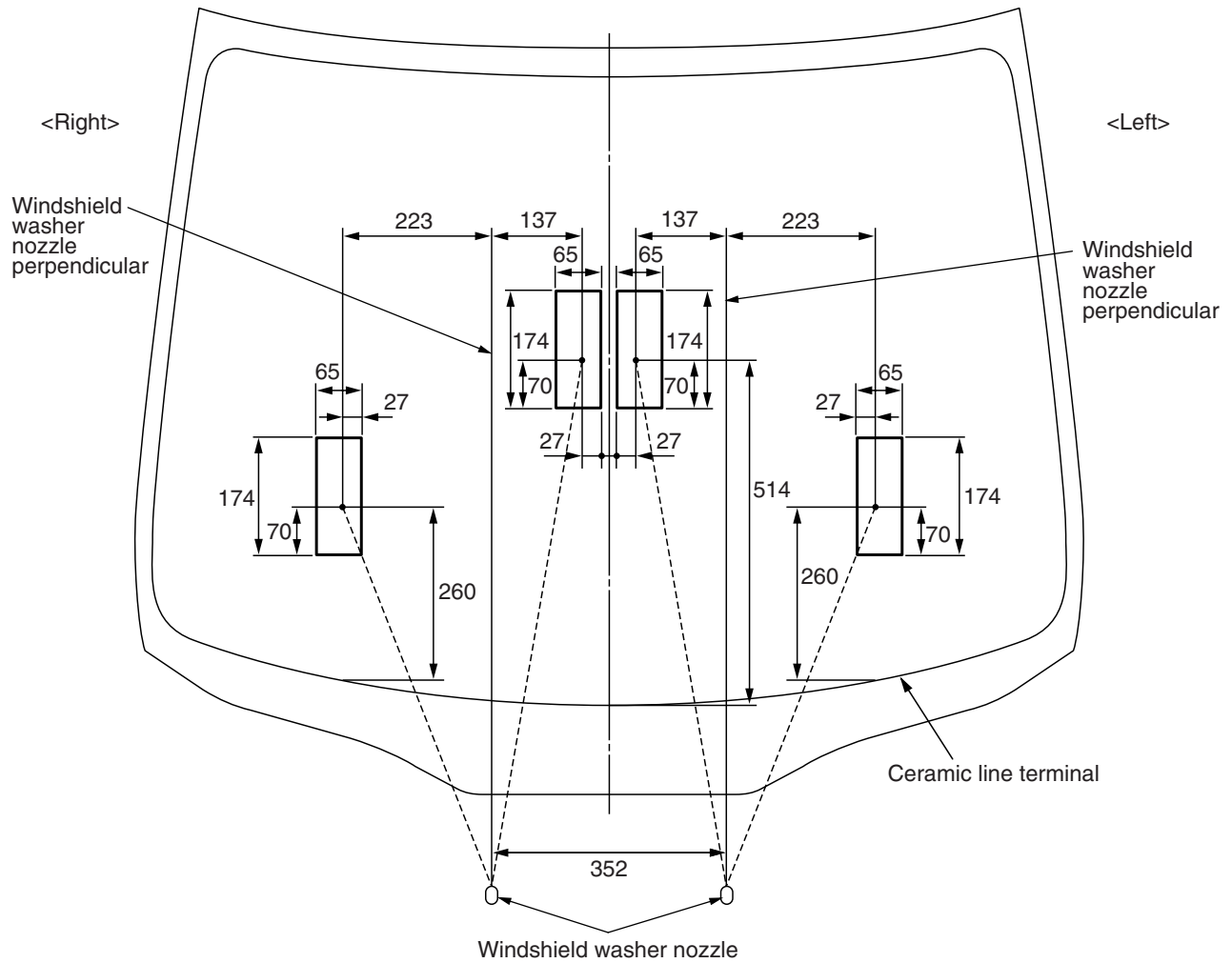
Insert a flat-tipped screwdriver wrapped with protective tape between the washer tank and the lower outer side of the washer motor. Pry out the washer motor.

INSPECTION

M1511019100738

WINDSHIELD WASHER FLUID EJECTION  
CHECK

Unit: mm



Move the nozzle to adjust the position so that the spray is in the area shown in the illustration.

AC302128AB

## REAR WIPER AND WASHER

### TROUBLESHOOTING

M1511020000263

The rear wiper washer is controlled by the Smart Wiring System (SWS). For troubleshooting, refer to GROUP 54B, Troubleshooting [P.54B-58](#), GROUP 54C, Troubleshooting [P.54C-32](#), GROUP 54D, Troubleshooting [P.54D-59](#) or GROUP 54E, Troubleshooting [P.54E-40](#).

### ON-VEHICLE SERVICE

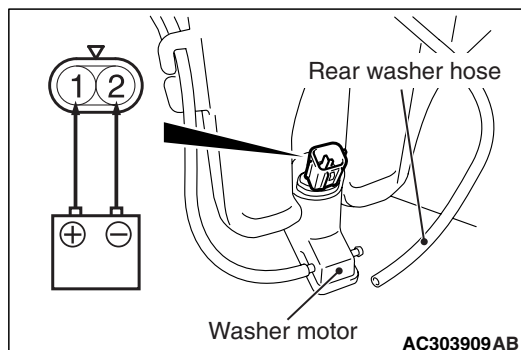
#### OPERATION CHECK OF REVERSE GEAR-LINKED OPERATION OF THE REAR WIPER

M1511022600045

1. When the selector lever is moved to the "R" position with the rear wiper switch at the "INT" position, the wiper should operate twice or three times at low speed after approximately one second.
2. If not, carry out the troubleshooting. (Refer to GROUP 54B, Troubleshooting [P.54B-58](#), GROUP 54C, Troubleshooting [P.54C-32](#), GROUP 54D, Troubleshooting [P.54D-59](#) or GROUP 54E, Troubleshooting [P.54E-40](#).)

### WASHER MOTOR INSPECTION (REAR WASHER)

M1511019100749

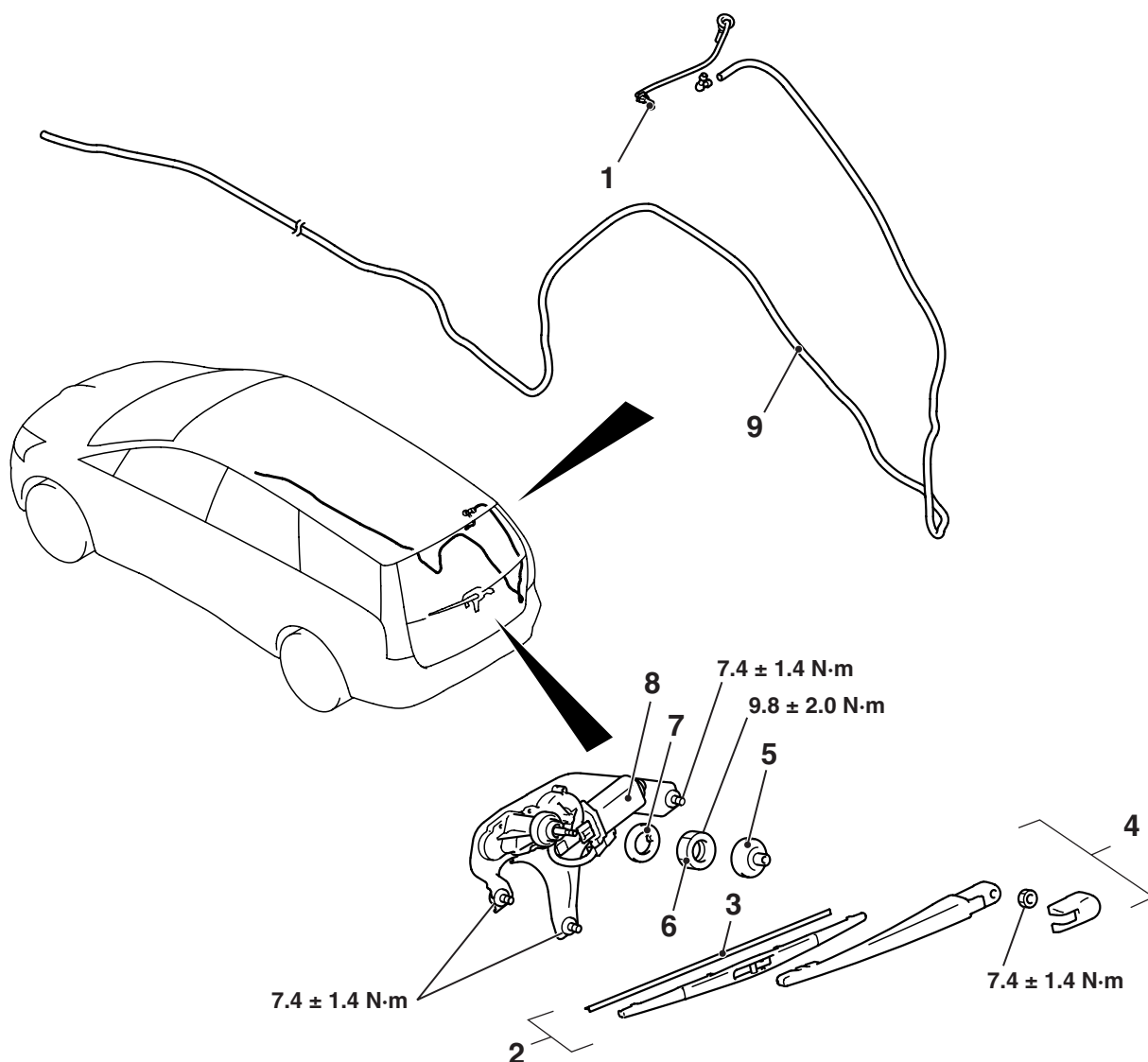


1. Check the washer fluid level, and refill if necessary.
2. Remove the splash shield.
3. Disconnect the washer motor connector.
4. Disconnect the rear washer hose as shown.
5. Connect the battery to the washer motor connector as shown. Check that the washer motor delivers washer strongly.

## REAR WIPER AND WASHER

### REMOVAL AND INSTALLATION

M1511008500453



AC312141AB

#### Washer tank assembly removal

- Washer tank (Refer to P.51-21.)
- Washer motor (Refer to P.51-21.)

#### Rear washer nozzle removal steps

- Tailgate spoiler (Refer to P.51-14.)
- High-mounted stop lamp assembly (Refer to GROUP 54A, High-mounted stop lamp P.54A-154.)

1. Rear washer nozzle assembly

#### Rear wiper blade removal steps

2. Rear wiper blade assembly

>>A<< 3. Rear wiper blade

#### Rear wiper motor removal steps

>>B<< 4. Rear wiper arm blade assembly

- Tailgate trim (Refer to GROUP 52A, Tailgate trim P.52A-16.)

#### Rear wiper motor removal steps

5. Cover
6. Nut
7. Washer packing
8. Rear wiper motor assembly

#### Rear washer hose removal steps

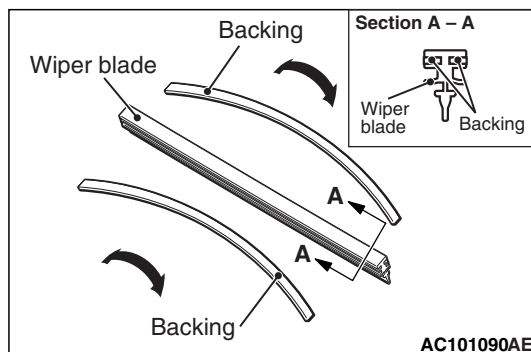
- Cowl side trim, front scuff plate, rear scuff plate, quarter trim (Refer to GROUP 52A, Interior trim P.52A-10.)
- Tailgate trim (Refer to GROUP 52A, Tailgate trim P.52A-16.)

>>C<< 9. Rear washer hose

**NOTE:** For removal and installation of the wiper and washer switch, refer to GROUP 54A, Column switch P.54A-211.

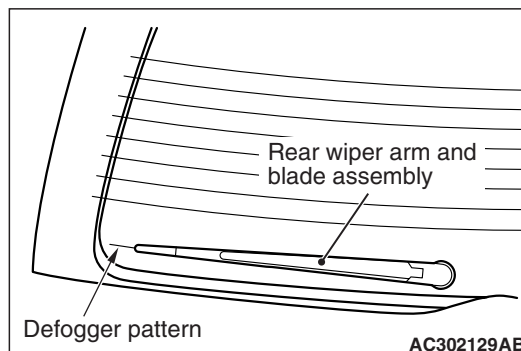
## INSTALLATION SERVICE POINTS

## &gt;&gt;A&lt;&lt; WIPER BLADE INSTALLATION

**CAUTION**

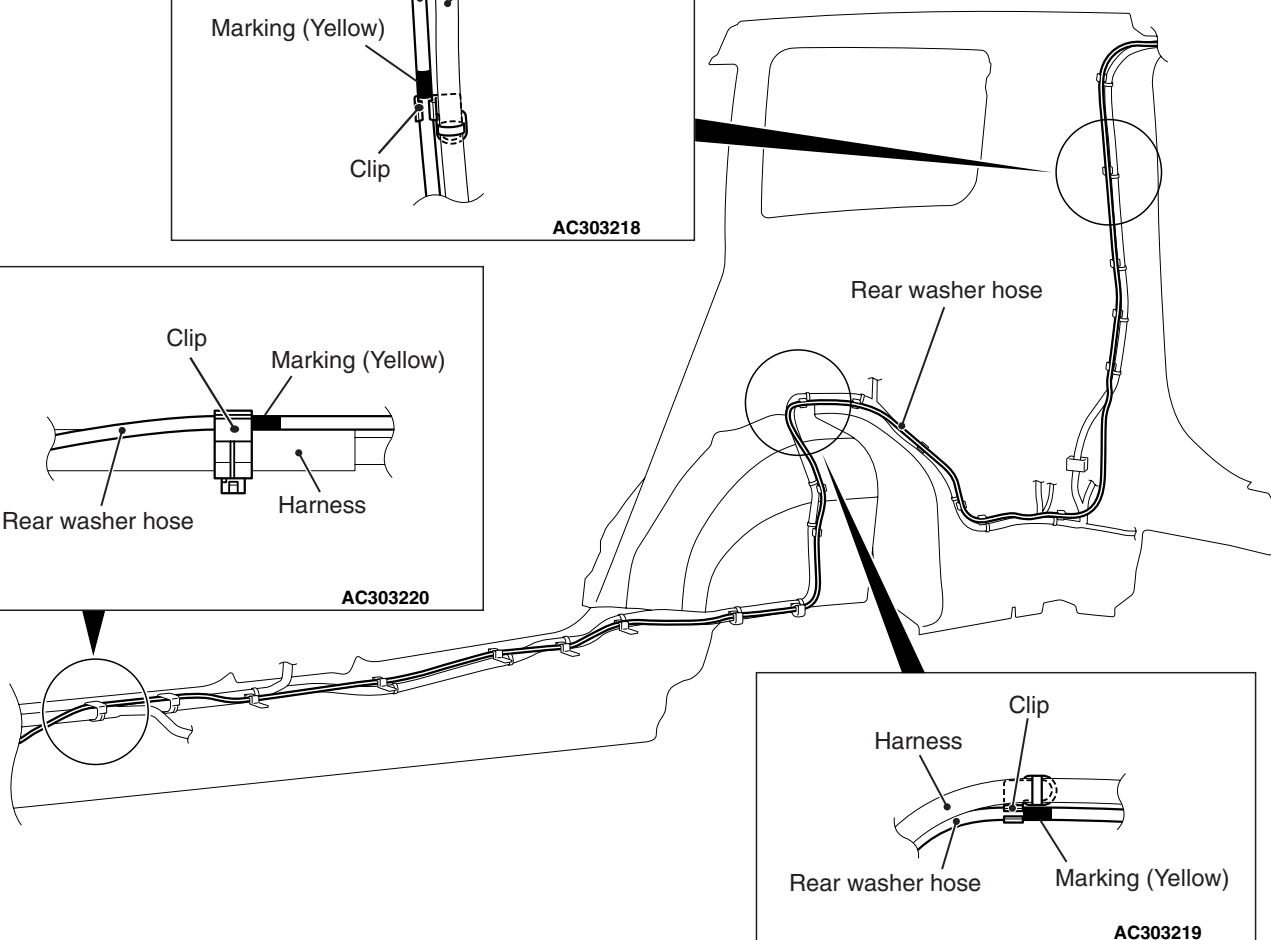
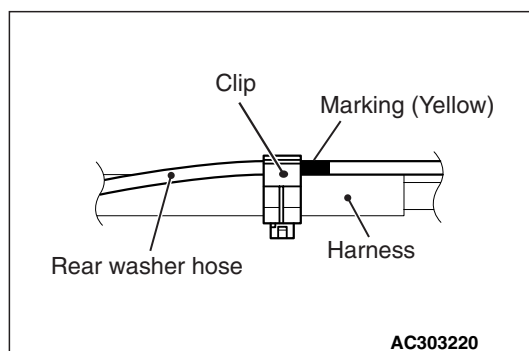
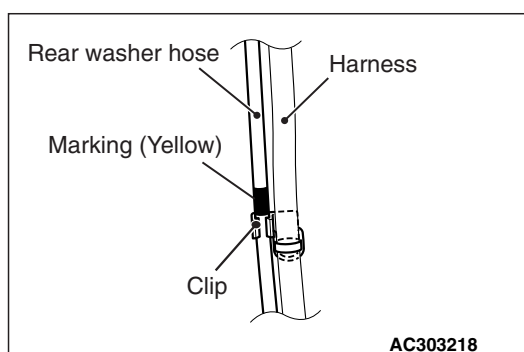
Use a curved backing like that shown for the backing of a wiper blade to ensure sustained wiper wiping performance.

## &gt;&gt;B&lt;&lt; REAR WIPER ARM AND BLADE ASSEMBLY



Install the rear wiper arm/blade assembly so that its tip is positioned at the rear window defogger heater element of the tailgate as shown.

## &gt;&gt;C&lt;&lt; REAR WASHER HOSE ROUTING



Route the rear washer hose so that its markings are aligned with the clips as shown.

## INSPECTION

### REAR WIPER MOTOR CHECK

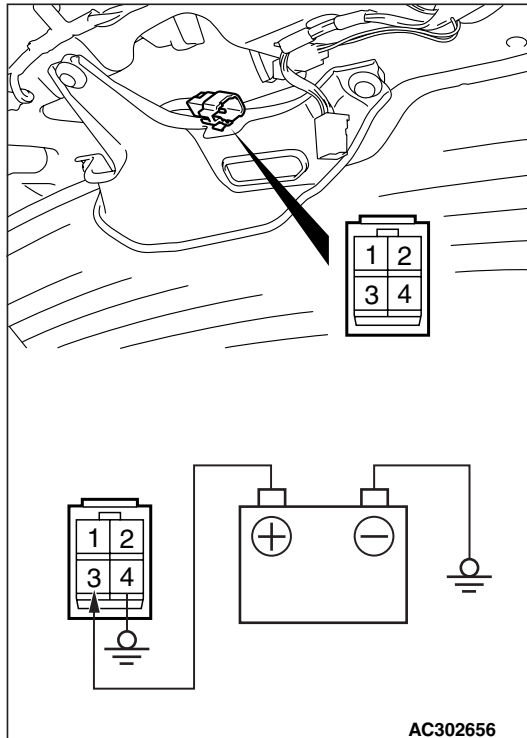
M1511019100750

Inspect the rear wiper motor by removing the harness connector with the motor attached to the vehicle.

### OPERATION CHECK OF THE REAR WIPER MOTOR

#### ⚠ CAUTION

Before operating the rear wiper motor, apply water to the tailgate glass to avoid damage to the tailgate glass surface or the wiper blade due to dry wiping.

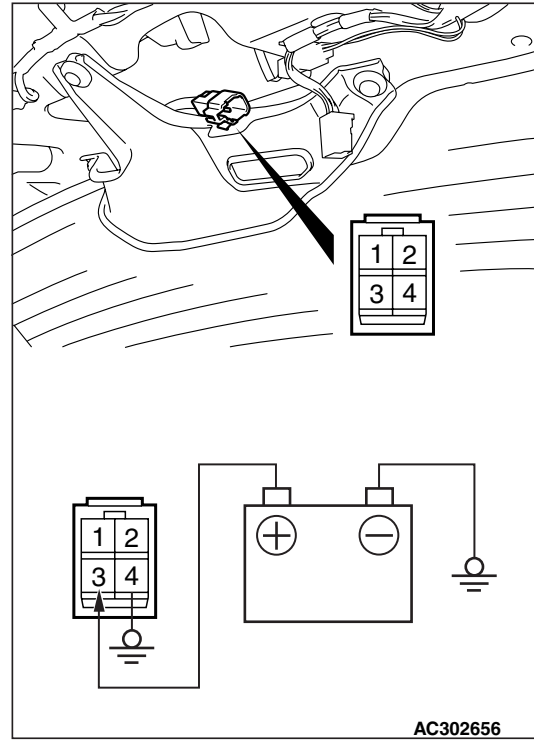


Check the motor operation by connecting the battery to the rear wiper motor as shown.

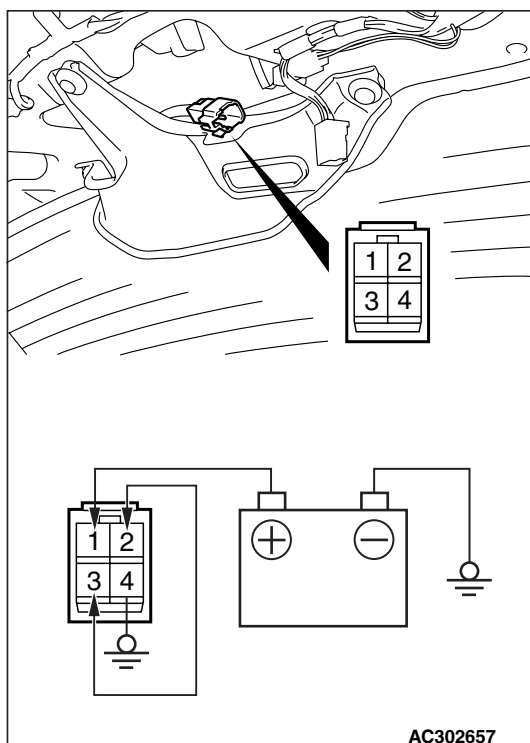
### CHECK OF STOP POSITION OF THE REAR WIPER MOTOR

#### ⚠ CAUTION

Before operating the rear wiper motor, apply water to the tailgate glass to avoid damage to the tailgate glass surface or the wiper blade due to dry wiping.



1. Connect the battery to the rear wiper motor as shown.
2. Disconnect the battery cable from the rear windshield wiper motor while it is turning and then check to see that the motor stops.

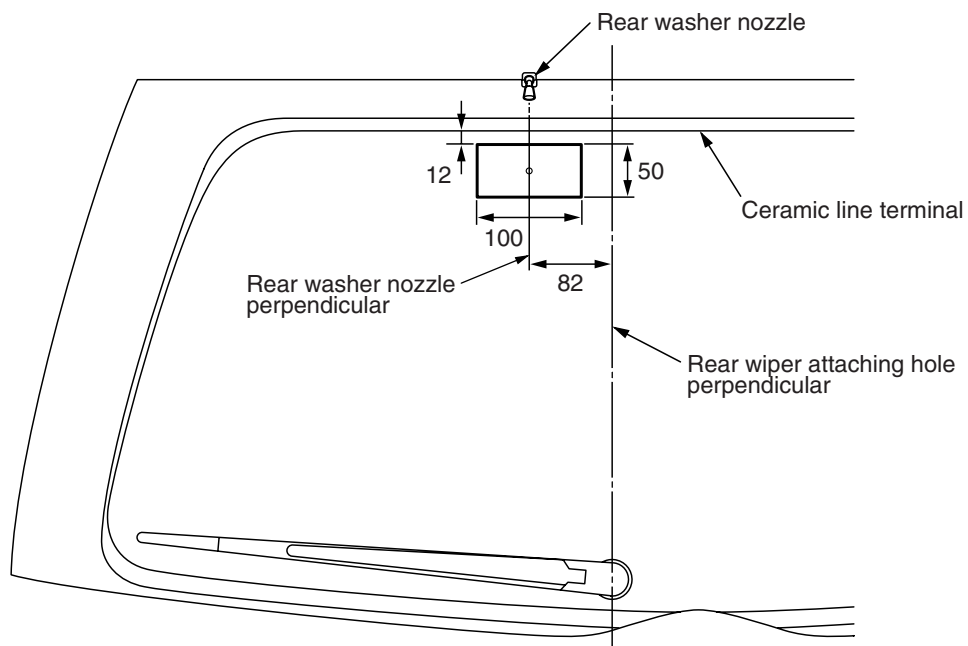


4. Check to see that the rear windshield wiper motor runs and then stops at the automatic stop position.

3. Re-connect the battery as shown.

## REAR WASHER FLUID EJECTION CHECK

Unit: mm



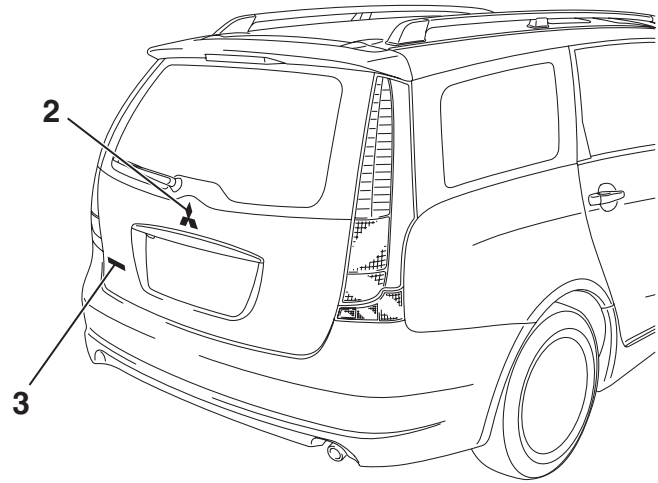
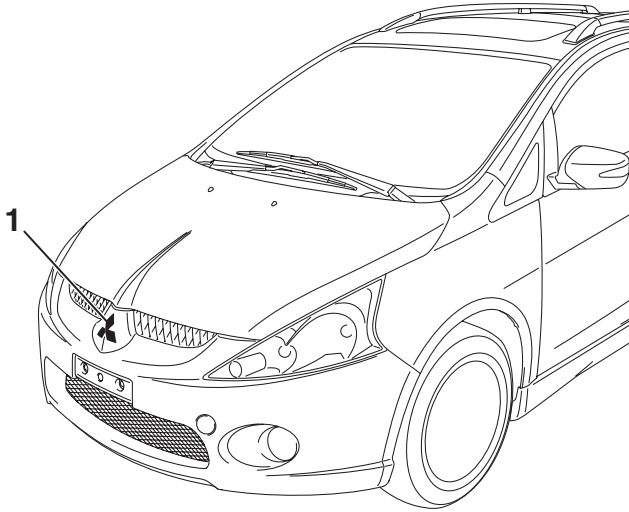
AC302130AB

Move the nozzle to adjust the position so that the spray is in the area shown in the illustration.

# MARK

## REMOVAL AND INSTALLATION

M1511011801383



AC503251AB

### Removal

1. Front three-diamond mark (Refer to Front Bumper P.51-5.)

### Removal (Continued)

- >>A<< 2. Rear three-diamond mark
- >>A<< 3. GRANDIS mark

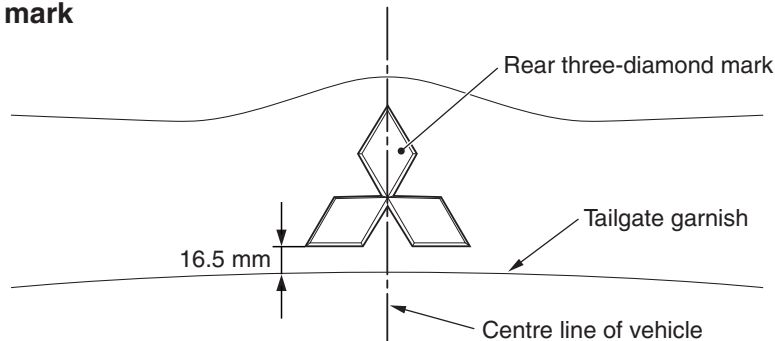
## INSTALLATION SERVICE POINT

### >>A<< MARK APPLICATION

1. Installation position

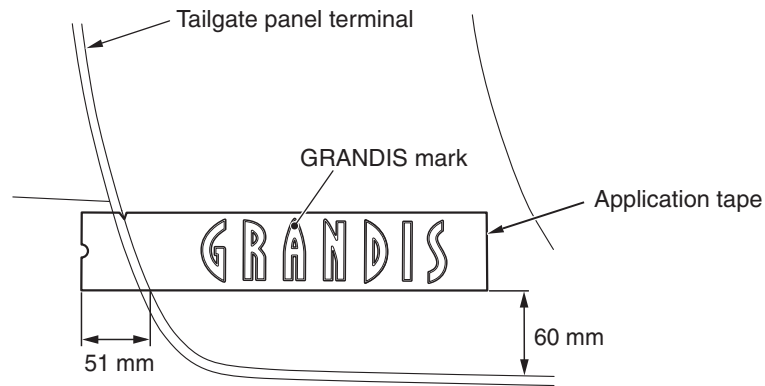
Attach each mark to the position shown in the illustration.

#### Rear three-diamond mark



AC302265 AB

## GRANDIS mark



AC503252AB

## 2. Installation procedure

- (1) Use 3M ATD Part number 8906 or equivalent to clean the mark installation surfaces on the body.

**⚠ CAUTION**

**When attaching the marks, the ambient temperature should be 20 –38° C and the air should be completely free of dust. If the ambient temperature is lower than 20° C, the marks and the places on the vehicle body where the marks are to be attached should be heated to 20 –38° C.**

- (2) Peel off the protection sheet on the back of the marks to paste it on the installation position.

## DOOR MIRROR

### ON-VEHICLE SERVICE

#### CHECK THE VEHICLE SPEED-DEPENDENT AUTOMATIC UNFOLDING FUNCTION OF THE OUTSIDE REAR-VIEW MIRRORS

M1511023300025

1. Check that the outside rear-view mirrors are unfolded when you set simulated vehicle speed of 30km/h or more by using the M.U.T.-III with the mirrors folded.
2. If not, carry out the troubleshooting. For troubleshooting, refer to GROUP 54B, Troubleshooting [P.54B-58](#), GROUP 54C, Troubleshooting [P.54C-32](#), GROUP 54D, Troubleshooting [P.54D-59](#) or GROUP 54E, Troubleshooting [P.54E-40](#).

#### CHECK THE IGNITION-LIKED FOLD AND UNFOLDING FUNCTION OF THE OUTSIDE REAR-VIEW MIRRORS

M1511023400022

1. When the ignition switch is turned on with the the mirrors folded, they should be unfolded. When the ignition switch is turned off with the the mirrors unfolded, they should be folded.
2. If not, carry out the troubleshooting. For troubleshooting, refer to GROUP 54D, Troubleshooting [P.54D-59](#), GROUP 54E, Troubleshooting [P.54E-40](#).

*NOTE: The electric folding outside rear-view mirrors are set to the vehicle speed-dependent unfolding as default setting. Prior to this check, confirm whether the ignition-linked function is enabled or not (Refer to GROUP 54E, Customise Function [P.54E-353](#)).*

#### CHECK THE IGNITION-LIKED FOLD AND UNFOLDING FUNCTION OF THE KEYLESS ENTRY-LINKED OUTSIDE MIRRORS

M1511023500029

1. When you use the the keyless entry system to unlock the doors with the the mirrors folded, they should be unfolded. When the keyless entry system locks the doors with the the mirrors unfolded, they should be folded.
2. If not, carry out the troubleshooting. For troubleshooting, refer to GROUP 54D, Troubleshooting [P.54D-59](#), GROUP 54E, Troubleshooting [P.54E-40](#).

*NOTE: The electric folding outside rear-view mirrors are set to the vehicle speed-dependent unfolding as default setting. Prior to this check, confirm whether the keyless entry-linked function is enabled or not (Refer to GROUP 54E, Customise Function [P.54E-353](#)).*

#### CHECK OF DOOR MIRROR TIMER FUNCTION

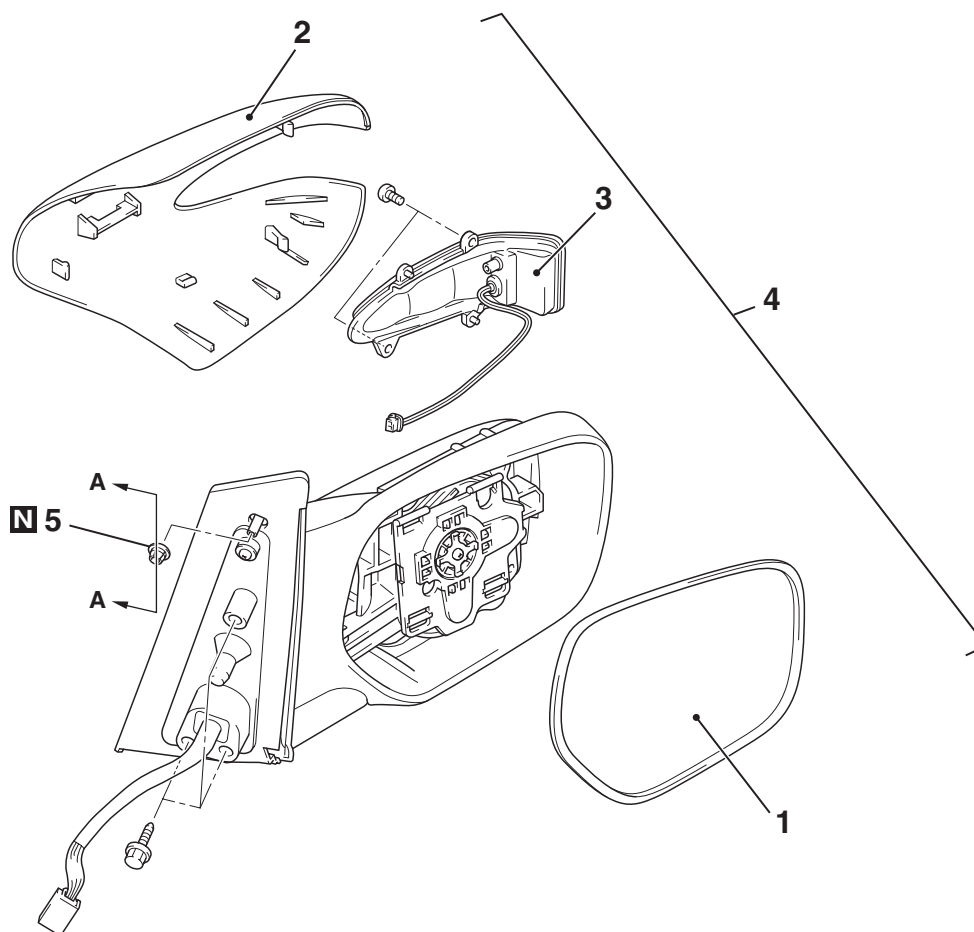
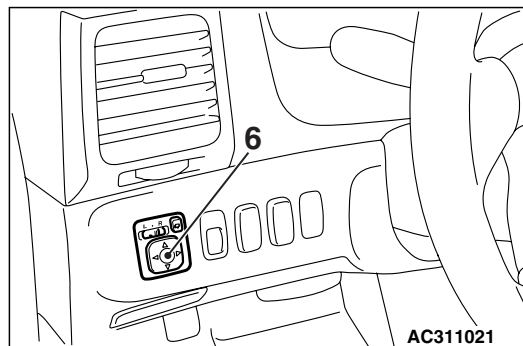
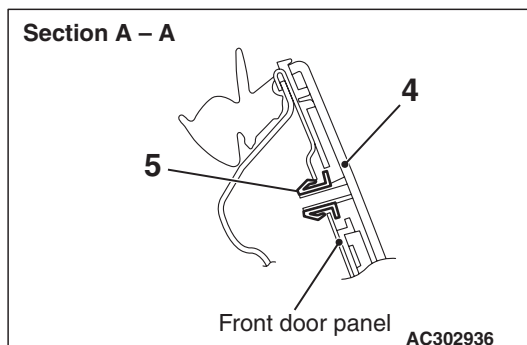
M1511021700050

1. Turn the ignition switch to the "LOCK" (OFF) position. Then check that the door mirrors can be folded and unfolded for approximately 30 seconds.
2. If not, carry out the troubleshooting. (Refer to GROUP 54B, Troubleshooting [P.54B-58](#), GROUP 54C, Troubleshooting [P.54C-32](#), GROUP 54D, Troubleshooting [P.54D-59](#) or GROUP 54E, Troubleshooting [P.54E-40](#).)

## DOOR MIRROR

## REMOVAL AND INSTALLATION

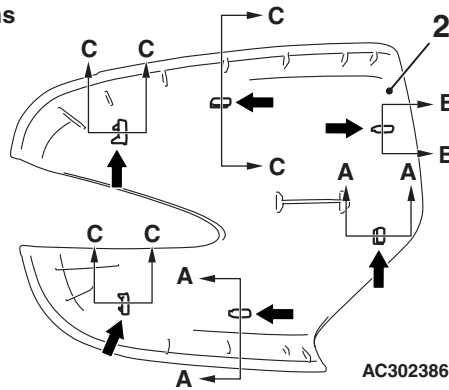
M1511006400483



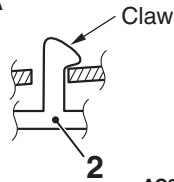
AC311568AB

Door mirror outer cover claw positions

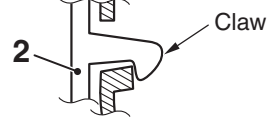
Note  
←: Claw positions



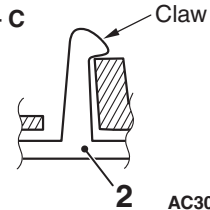
Section A – A



Section B – B



Section C – C



AC503722AB

<<A>>

1. Mirror
- Door mirror outer cover removal steps**

<<A>>

1. Mirror

<<B>> >>A<<

2. Door mirror outer cover
  3. Side turn-signal lamp
- Door mirror assembly removal steps**
- Front door trim (Refer to group 52A, Door trim [P.52A-12.](#))

**Door mirror assembly removal steps (Continued)**

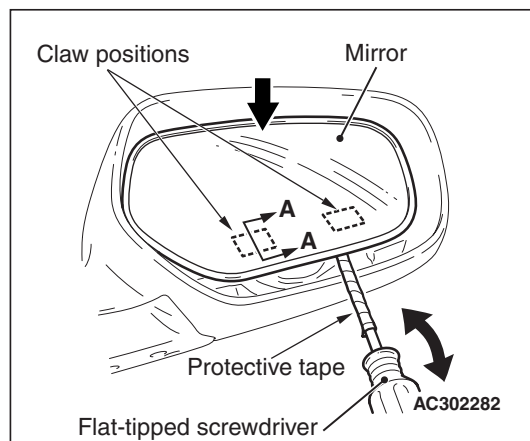
4. Door mirror assembly
  5. Clip
- Remote controlled mirror switch removal steps**
- Instrument panel under cover (Refer to group 52A, Instrument panel assembly [P.52A-2.](#))
  - 6. Remote controlled mirror switch

## REMOVAL SERVICE POINT

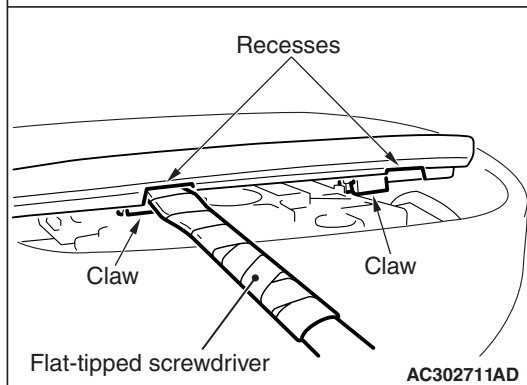
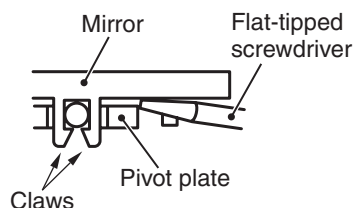
## &lt;&lt;A&gt;&gt; MIRROR REMOVAL

**CAUTION**

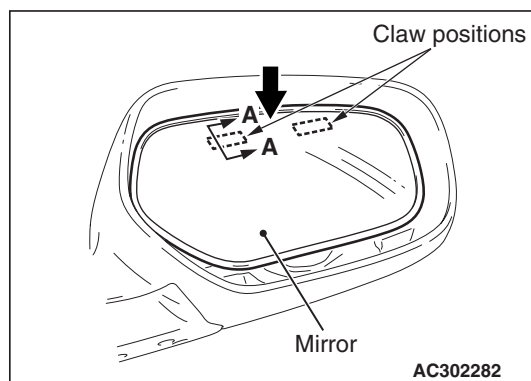
The tab of the mirror is prone to breakage when working in cold temperatures. Always use a hair drier or the like to warm up the mirror tab and its periphery to 20° C or higher prior to works. When the mirror is heated too quickly from its cold state, it may be broken.



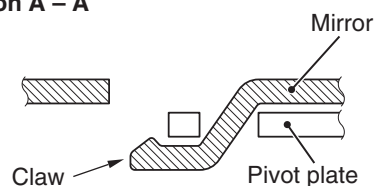
## Section A – A



1. Slant the mirror upward with your hands. Then insert a flat-tipped screwdriver wrapped with protective tape between the pivot plate and mirror through the cut-out from behind the mirror. Now pry off the mirror tab and release the lower side of the mirror as shown in the illustration.



## Section A – A

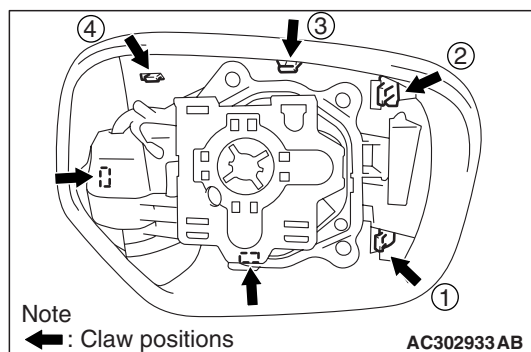


AC302415

AC303105AB

2. Release the upper side of the mirror from the tab as shown while pulling out the mirror.
3. Disconnect the connector of the heated mirror.

## &lt;&lt;B&gt;&gt; DOOR MIRROR OUTER COVER REMOVAL



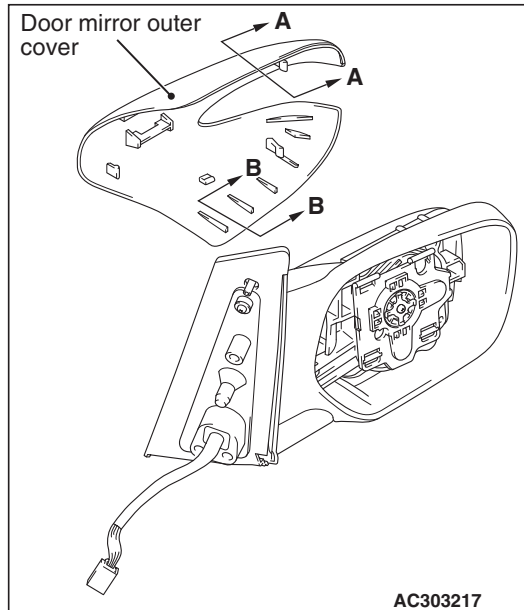
Remove the door mirror outer cover by disengaging the tabs in the numerical order of the illustration from the mirror body side.

## INSTALLATION SERVICE POINT

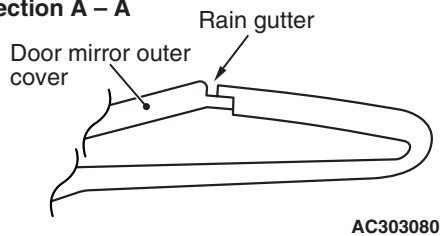
### >>A<< DOOR MIRROR OUTER COVER INSTALLATION

#### **⚠ CAUTION**

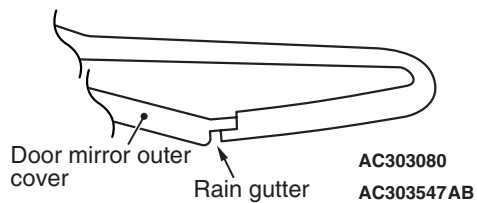
Tap the six tab positions securely to confirm that they are engaged securely.



#### **Section A – A**



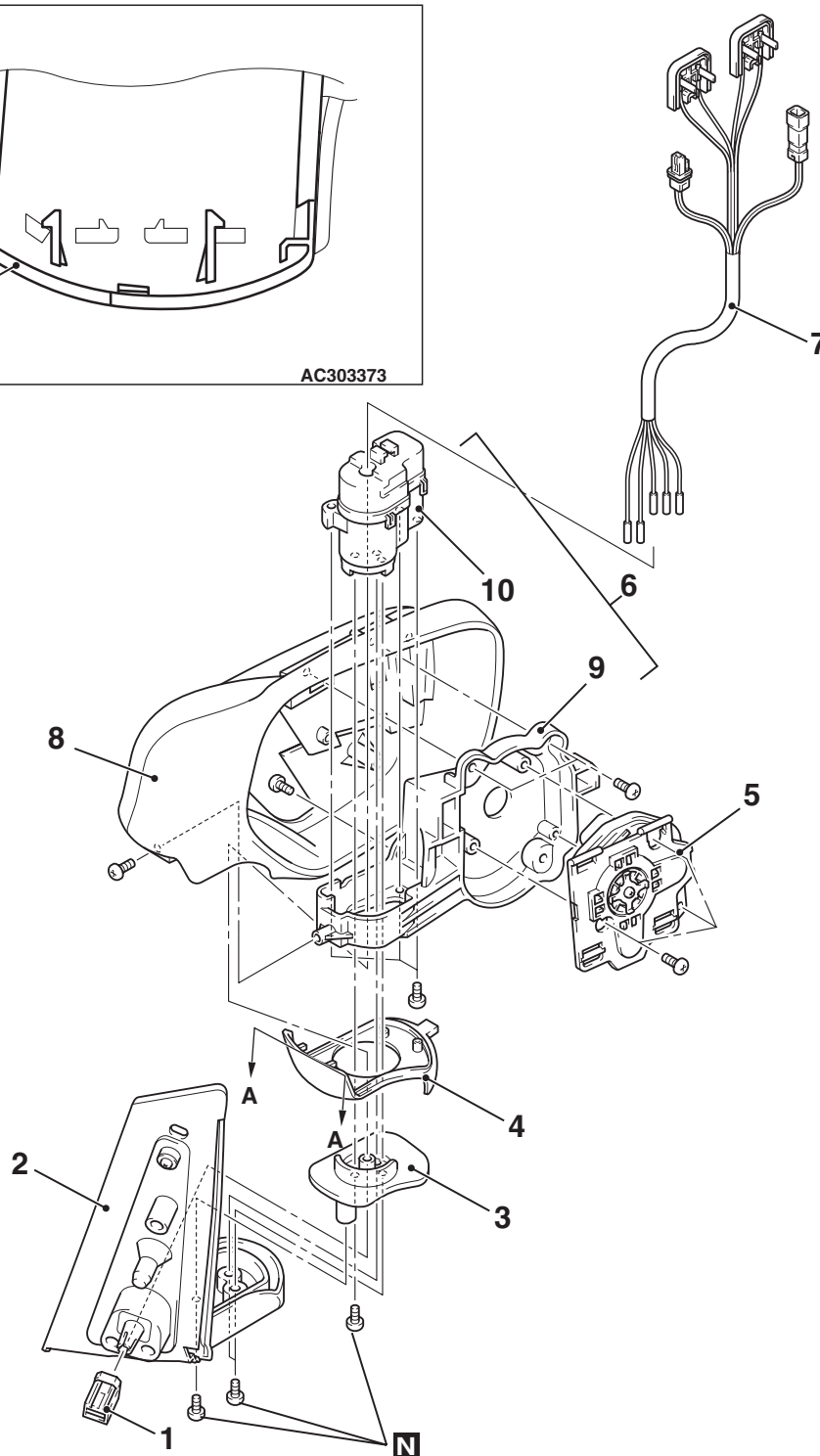
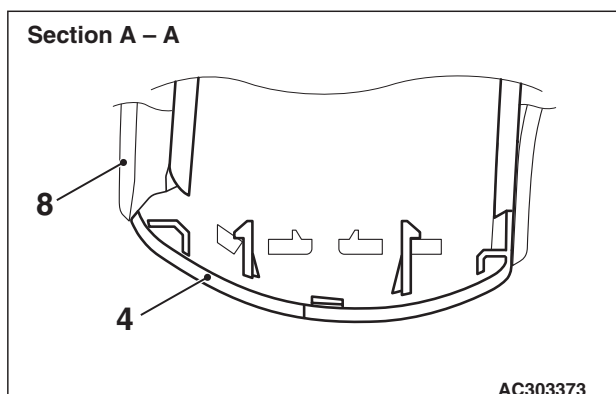
#### **Section B – B**



There should be a space between the door mirror outer cover and the rain gutter as shown.

## DISASSEMBLY AND REASSEMBLY

M1511023900061



AC308903

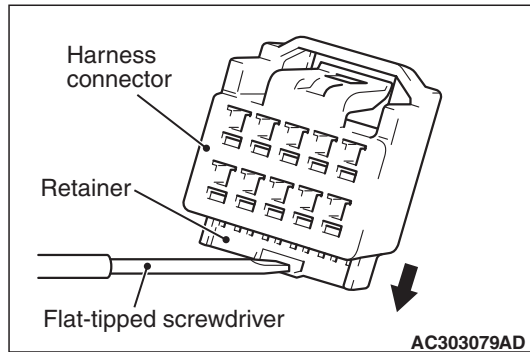
AC308916 AB

- <<A>> >>B<<
- Disassembly steps**
1. Connector
  2. Body base assembly
  3. Base
  4. Body cover
  - >>A<< 5. Actuator

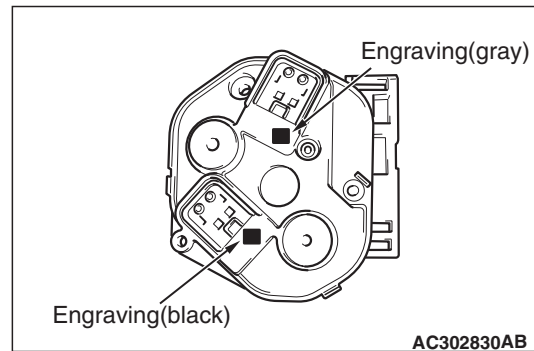
- Disassembly steps (Continued)**
6. Support assembly
  7. Harness assembly
  8. Body
  9. Support
  10. Retractor motor

## DISASSEMBLY SERVICE POINT

### <<A>> CONNECTOR REMOVAL



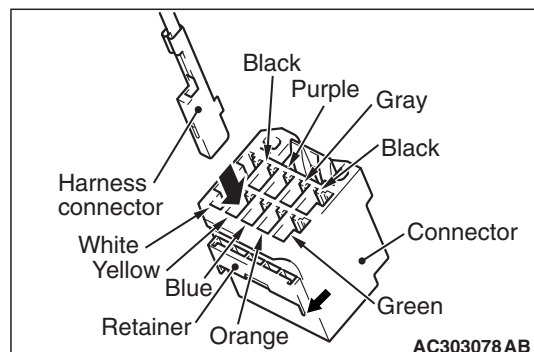
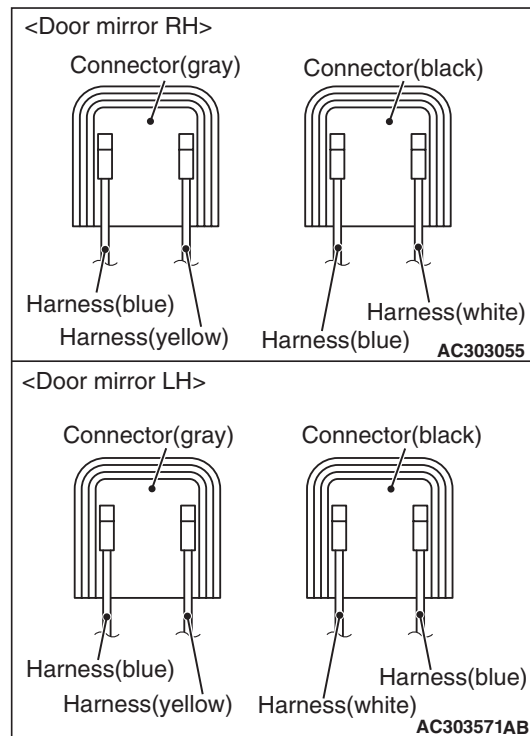
Use a flat-tipped screwdriver to pull up the retainer shown slightly (by a few millimeter). Then disengage the wiring harness terminals to disconnect the connector.



2. Confirm the wiring harness assembly connectors of the same colour as the the colour engraved on the actuator. Connect the connectors to the actuator as shown according to the colours, respectively.
3. Install the actuator to the support assembly.

## REASSEMBLY SERVICE POINT

### >>A<< ACTUATOR INSTALLATION



Pull out the connector retainer slightly until it is loosely fitted. Insert the wiring harness wires of the shown colours to the connector, respectively. Then push in the retainer until it clicks in to position.

1. Check that the wiring harness wires are secured with the connector as shown.

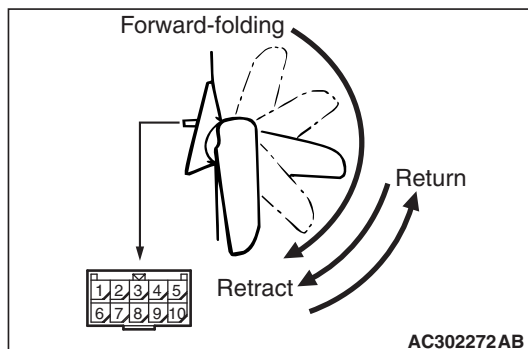
**NOTE:** . Check that the wires are secured as these wires may be released from the connector easily.

## INSPECTION

M1511019101366

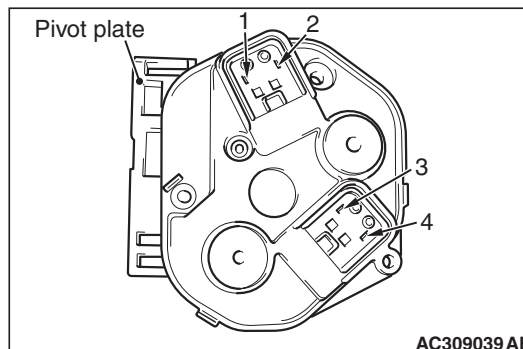
DOOR MIRROR ASSEMBLY OPERATION  
CHECK

Remove the door trim, and then connect the battery to the door mirror assembly connector to check that the door mirror operates.

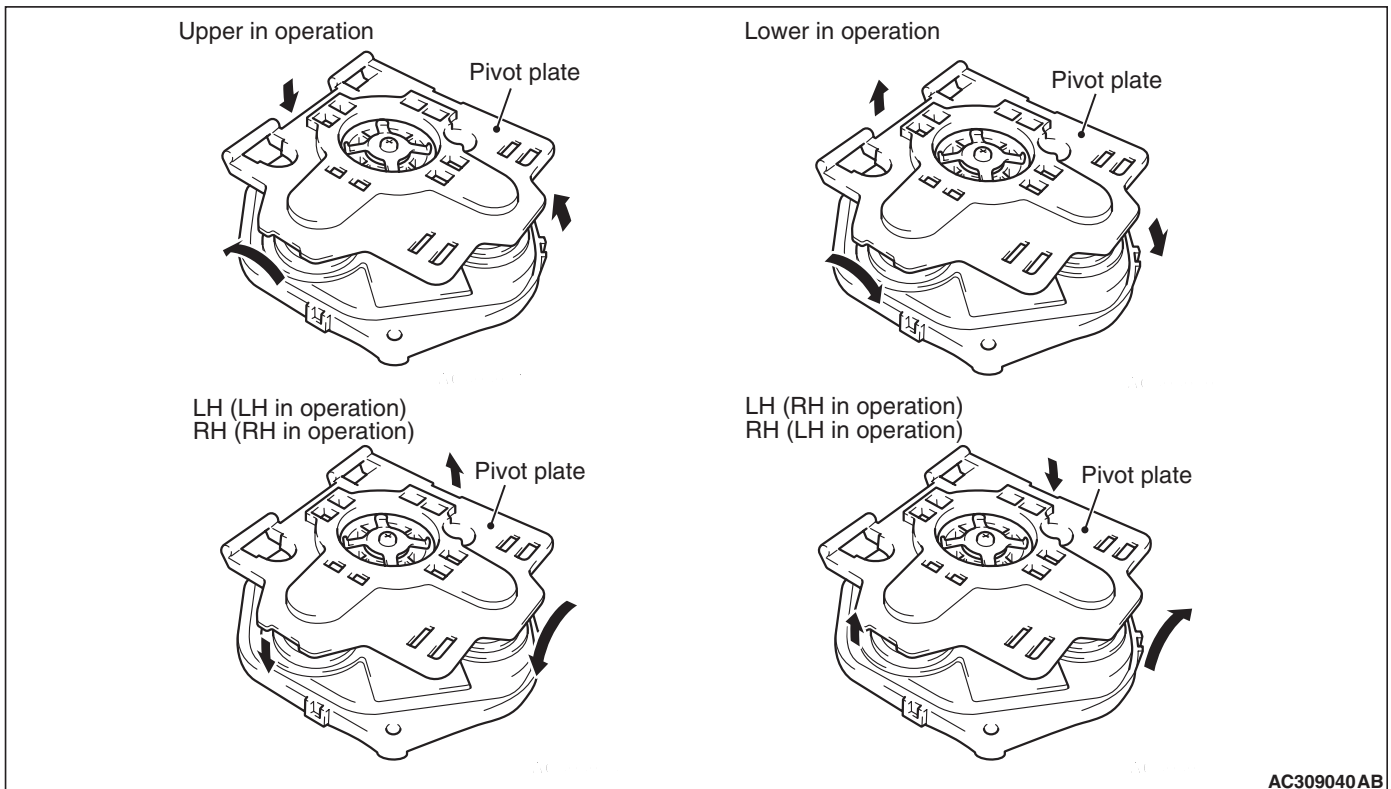


Battery connection	Direction operation
<ul style="list-style-type: none"> <li>Connect terminal 8 to the negative battery terminal.</li> <li>Connect terminal 10 to the positive battery terminal.</li> </ul>	Up
<ul style="list-style-type: none"> <li>Connect terminal 8 to the positive battery terminal.</li> <li>Connect terminal 10 to the negative battery terminal.</li> </ul>	Down
<ul style="list-style-type: none"> <li>Connect terminal 8 to the negative battery terminal.</li> <li>Connect terminal 9 to the positive battery terminal.</li> </ul>	Right
<ul style="list-style-type: none"> <li>Connect terminal 8 to the positive battery terminal.</li> <li>Connect terminal 9 to the negative battery terminal.</li> </ul>	Left
<ul style="list-style-type: none"> <li>Connect terminal 6 to the positive battery terminal.</li> <li>Connect terminal 7 to the negative battery terminal.</li> </ul>	Retract
<ul style="list-style-type: none"> <li>Connect terminal 6 to the negative battery terminal.</li> <li>Connect terminal 7 to the positive battery terminal.</li> </ul>	Return

## ACTUATOR OPERATION CHECK

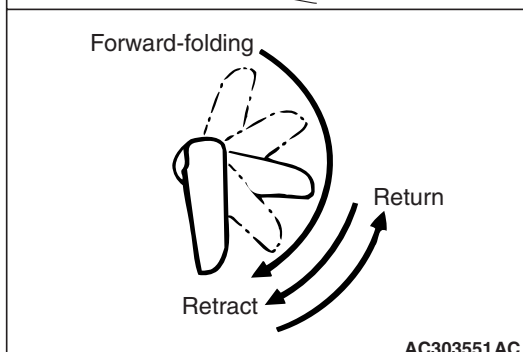
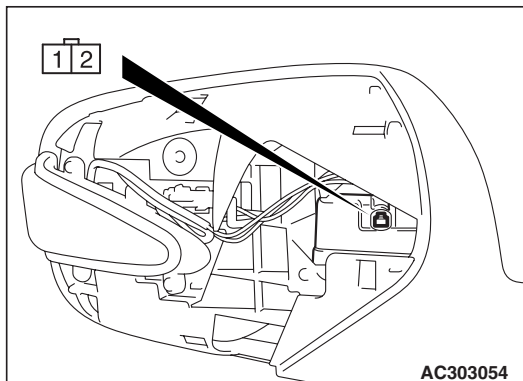


Battery connection	Pivot plate operation
<ul style="list-style-type: none"> <li>Connect terminal 3 to the negative battery terminal.</li> <li>Connect terminal 4 to the positive battery terminal.</li> </ul>	Up
<ul style="list-style-type: none"> <li>Connect terminal 3 to the positive battery terminal.</li> <li>Connect terminal 4 to the negative battery terminal.</li> </ul>	Down
<ul style="list-style-type: none"> <li>Connect terminal 1 to the positive battery terminal.</li> <li>Connect terminal 2 to the negative battery terminal.</li> </ul>	Right
<ul style="list-style-type: none"> <li>Connect terminal 1 to the negative battery terminal.</li> <li>Connect terminal 2 to the positive battery terminal.</li> </ul>	Left

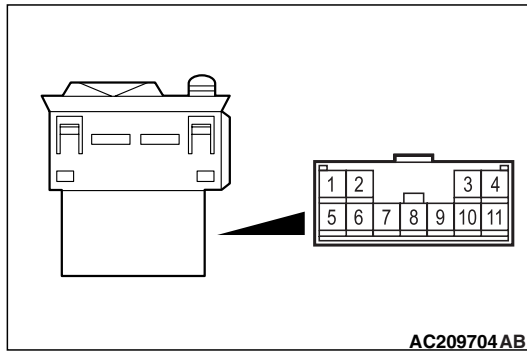


## RETRACTOR MOTOR OPERATION CHECK

Remove the door mirror outer cover. Connect the battery to the connector shown to check that the mirror can be folded and unfolded correctly.



Battery connection	Pivot plate operation
<ul style="list-style-type: none"> <li>Connect terminal 1 to the negative battery terminal.</li> <li>Connect terminal 2 to the positive battery terminal.</li> </ul>	Retract
<ul style="list-style-type: none"> <li>Connect terminal 1 to the positive battery terminal.</li> <li>Connect terminal 2 to the negative battery terminal.</li> </ul>	Return

**DOOR MIRROR CONTROL SWITCH CONTINUITY CHECK**

Switch position		Tester connection	Specified condition
OFF		1-2, 1-3, 1-4, 1-6, 1-10, 1-11, 2-9, 3-9, 6-9, 9-10, 9-11	Open circuit
Left side	OFF	1-6, 1-10, 1-11, 6-9, 9-10, 9-11	Open circuit
	Up	1-6, 9-11	Less than 2 ohms
	Down	1-11, 6-9	
	Right	1-6, 9-10	
	Left	1-10, 6-9	
Right side	OFF	1-2, 1-3, 1-6, 2-9, 3-9, 6-9	Open circuit
	Up	1-6, 3-9	Less than 2 ohms
	Down	1-3, 6-9	
	Right	1-6, 2-9	
	Left	1-2, 6-9	
Retract and return		1-4	Less than 2 ohms