# **EXTERIOR**

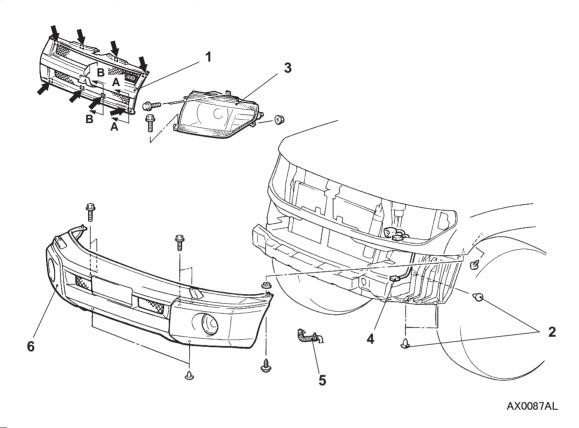
# **EXTERIOR**

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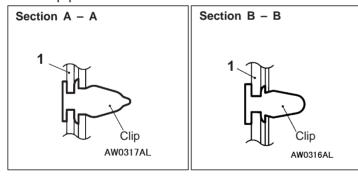
# FRONT BUMPER

# **REMOVAL AND INSTALLATION**



## NOTE

## -: Clip positions

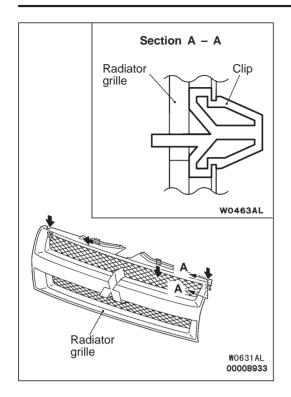


#### Removal steps



- Radiator grille
   Splash shield installation clips
   Headlamp
   Fog lamp connector

- 5. Headlamp washer hose connection Vehicles with headlamp washer>6. Front bumper assembly

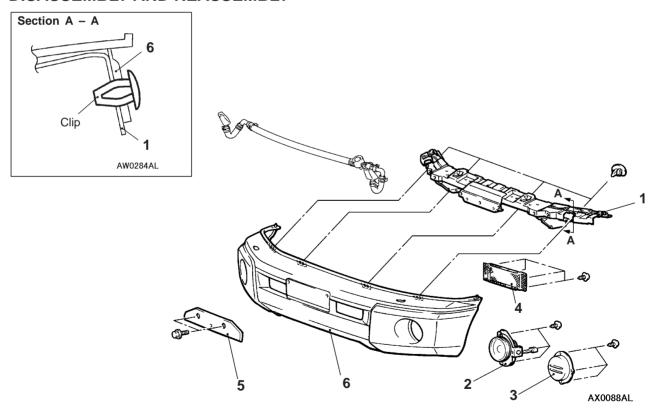


## **REMOVAL SERVICE POINT**

## **▲**A► RADIATOR GRILLE REMOVAL

Remove the radiator grille by pushing the tab of the radiator grille clips in the direction of the arrows with a flat-tipped screwdriver, while lightly pulling the radiator grille towards you.

#### **DISASSEMBLY AND REASSEMBLY**



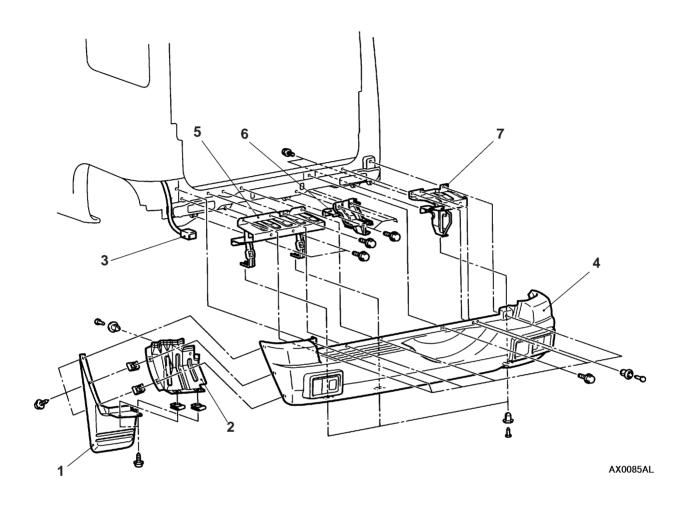
#### Disassembly steps

- 1. Front bumper reinforcement assembly
- Headlamp washer assembly <Vehicles with headlamp washer> (Refer to P.51-17)
- 2. Fog lamp

- 3. Fog lamp cover <Vehicles without fog lamp>
- 4. Bumper net
- 5. Licence plate bracket
- 6. Front bumper face

# **REAR BUMPER**

# **REMOVAL AND INSTALLATION**

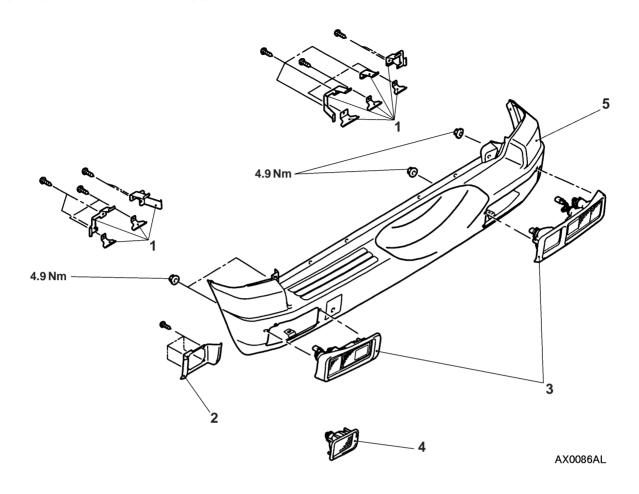


#### Removal steps

- Rear mud guard
   Rear splash shield
   Rear combination lamp or rear fog lamp connection
- 4. Rear bumper assembly
- 5. Bumper step reinforcement assembly

- 6. Bumper center reinforcement
- assembly
  7. Bumper side reinforcement assembly

## **DISASSEMBLY AND REASSEMBLY**



#### Disassembly steps

- Bracket <R.H. drive vehicles>
   Bracket <L.H. drive vehicles>
   Rear combination lamp assembly <R.H. drive vehicles>

- 4. Rear fog assembly<L.H. drive vehicles>5. Rear bumper face

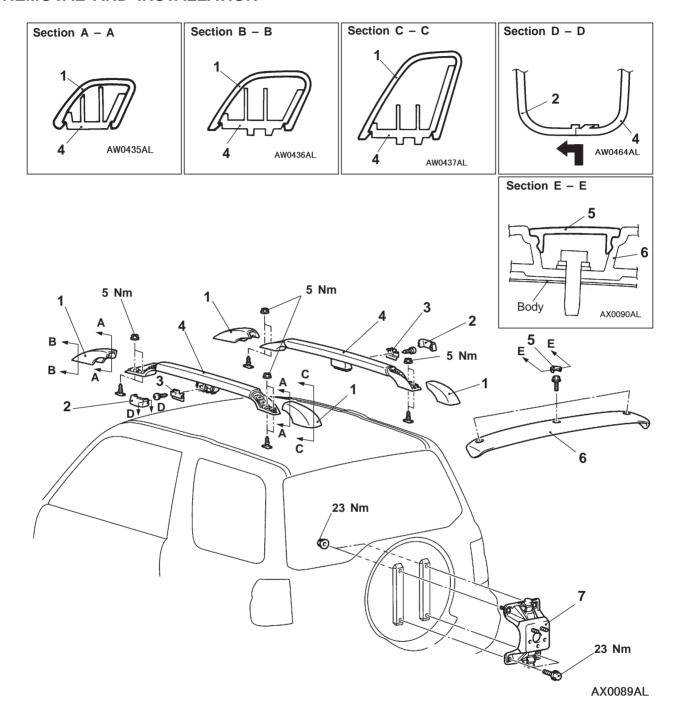
# **EXTERIOR PARTS**

# SPECIAL TOOL

Tool	Number	Name	Use
B990784	MB990784	Ornament remover	Removal of roof rack cover.

# **EXTERIOR PARTS**

## **REMOVAL AND INSTALLATION**



#### Roof rail removal steps



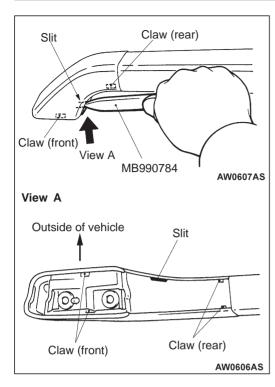
- A 1. Roof rack cover (front, rear)
  - 2. Roof rack cover (side)
  - 3. Center bracket
  - 4. Roof bar

#### Roof spoiler removal steps

- 5. cover
- 6. Roof spoiler

#### Spare tyre carrier removal steps

- Spare tyre cover (Refer to GROUP 31.)
- Spare tyre
  Back door trim and waterproof film (Refer to GROUP 42.)
- 7. Spare tyre carrier



## REMOVAL SERVICE POINT

#### **▲**A▶ ROOF RACK COVER (FRONT, REAR) REMOVAL

1. Insert the special tool into the slit.

#### NOTE

The roof rack assembly has the slit.

- 2. Insert the special tool as far as possible and remove the claw (front) by prying the roof rack cover toward you.
- 3. Remove the claw (rear).

#### Caution

Spread out the roof rack cover sufficiently and pull it upward, otherwise the claws will be broken.

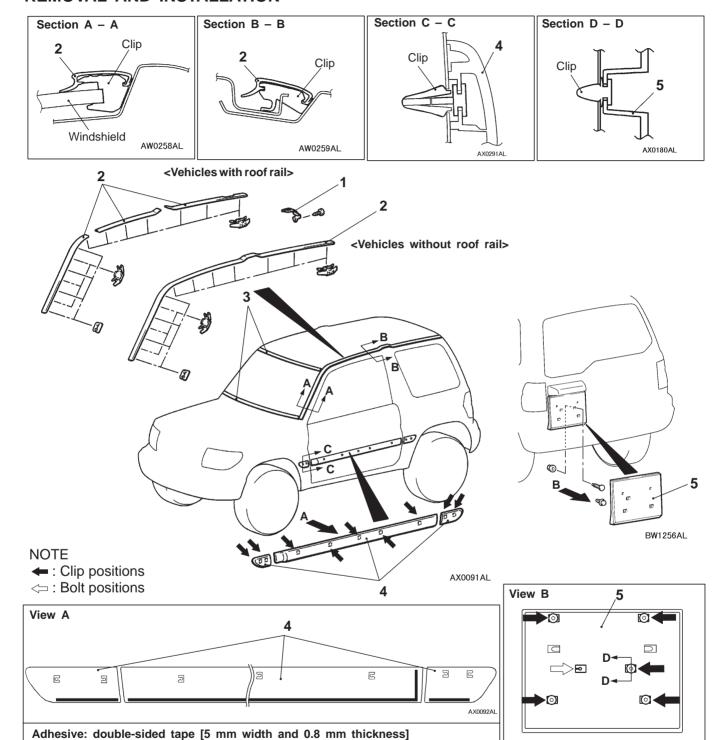
# **MOULDING AND GARNISH**

# SPECIAL TOOL

Tool	Number	Name	Use
B990449	MB990449	Window moulding remover	Removal of roof drip moulding.

# MOULDING AND GARNISH

## **REMOVAL AND INSTALLATION**



#### Roof drip moulding removal steps

- Roof rail assembly <Vehices with roof rail> (Refor to P.51-6)
   Roof drip cover

- Roof drip moulding
   Windshield moulding (Refer to GROUP 42 Windshield.)



#### Side protector moulding removal

4. Side protector moulding

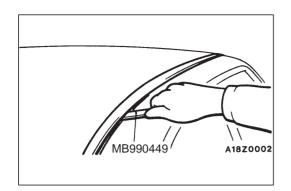
# Rear licence plate garnish removal

Back door trim (Refer to GROUP 42 Back door.)

BW1259AL

5. Rear licence plate garnish





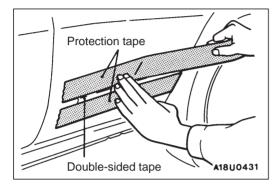
#### REMOVAL SERVICE POINT

#### **▲**A▶ ROOF DRIP MOULDING REMOVAL

Use the special tool to lever out the moulding.

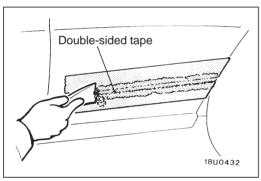
#### Caution

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

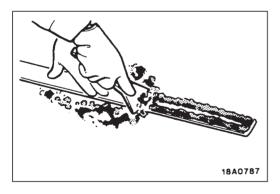


#### **▲B** SIDE PROTECT MOULDING REMOVAL

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



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



#### **INSTALLATION SERVICE POINTS**

#### ►A SIDE PROTECT MOULDING INSTALLATION

Double-sided tape affixing to the side protect moulding (when reusing)

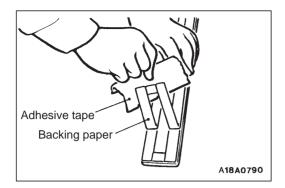
 Scrape off the double-sided tape with a resin spatula or gasket scraper.

- 2. Wipe off the side protect moulding adhesion surface and clean it with a shop towel moistened with isopropyl alcohol.
- 3. Affix the specified double sided tape to the side protect moulding. (Refer to P.51-8.)

#### Specified adhesive tape:

Double-sided tape: 5 mm width and 0.8 mm thickness

# 51-10 EXTERIOR – Moulding and Garnish/Windshield Wiper and Washer



4. Remove strip paper from the pressure sensitive double-sided tape.

#### NOTE

Affix double-sided tape to the end of strip paper for ease of strip paper removal. (Refer to P.51-8.)

5. Install the side protect moulding.

#### NOTE

If it is hard to affix the double-sided tape in winter, heat the application surfaces at both the vehicle body and the side protect moulding.

Body 40 - 60°C

Side protect moulding 20 - 30 °C

Apply pressure fully to the side protect moulding.

# WINDSHIELD WIPER AND WASHER

# SERVICE SPECIFICATIONS

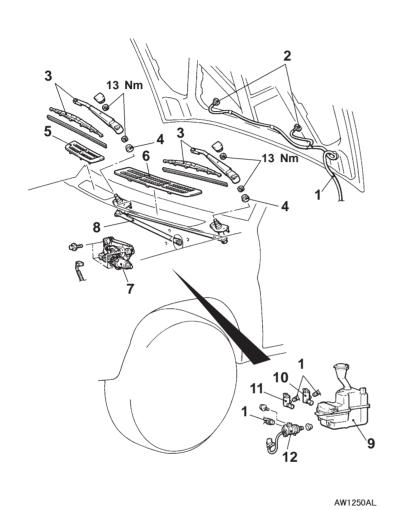
Items	Standard value	
Park position of windshield wiper arm and blade assembly (Distance between wiper blade and windshield lower moulding) mm	Driver's side	20 ± 5 < L.H. drive vehicles> 30 ± 5 < R.H. drive vehicles >
	Passenger's side	20 ± 5 <l.h. drive="" vehicles=""> 30 ± 5 <r.h. drive="" vehicles=""></r.h.></l.h.>

# **TROUBLESHOOTING**

The windshield wiper and washer is controlled by the Smart Wiring System (SWS). For troublesshooting, refer to GROUP 54B - Troubleshooting.

# WINDSHIELD WIPER AND WASHER

## **REMOVAL AND INSTALLATION**



AW1291AL AW1271AL Section A - A Claw AW1292AL Section B - B Section C - C AW0566AL AW1272AL

- 1. Washer hose connection
- 2. Washer nozzle

# Wiper motor and linkage removal steps

- **►**A<
- 3. Wiper arm and blade assembly
- 4. Washer
- 5. Front deck garnish <R.H. drive vehicles>
- 6. Front deck garnish <L.H. drive vehicles>
- 7. Wiper motor
- 8. Linkage assembly

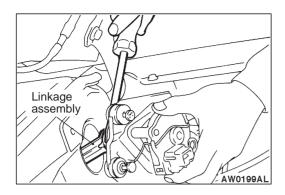
#### Washer tank removal steps

- Air cleaner
- Intake duct
- 1. Washer hose connection
- 9. Headlamp washer motor <Vehicles with headlamp washer>
- 10. Front washer motor
- 11. Rear washer motor
- 12. Washer tank assembly

#### NOTE

For removal and installation of the column switch assembly (wiper and washer switch), refer to GROUP 37A - Steering Wheel and Shaft.





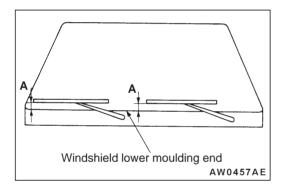
#### REMOVAL SERVICE POINT

#### **▲**A▶ WIPER MOTOR REMOVAL

- Remove the wiper motor mounting bolts.
- 2. Use a flat-tipped screwdriver to separate the wiper motor crank arm from the linkage assembly, and then remove the wiper motor.

#### Caution

Because the installation angle of the crank arm and the wiper motor has been set, do not remove them unless it is necessary to do so. If they must be removed, remove them only after marking their mounting positions.

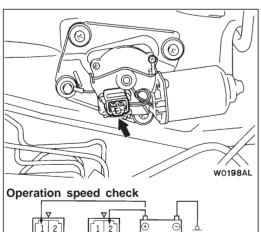


#### INSTALLATION SERVICE POINTS

#### ►A WIPER ARM AND BLADE ASSEMBLY INSTALLATION

Install the wiper blade so that the wipers stops at the specified stop position (standard value) as shown in the illustration.

Standard value (A): 20  $\pm$  5 mm <L.H. drive vehicles> 30  $\pm$  5 mm <R.H. drive vehicles>



(B) Automatic stop

W0562AL

Low speed High speed

Stop position check

(A) Low

WIPER MOTOR CHECK

INSPECTION

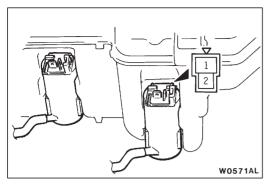
Disconnect the wiring harness connector, and then check the wiper motor operation with the wiper motor remaining installed to the body.

#### Wiper Motor Operation Speed

Connect a battery to the wiper motor as shown in the illustration and check the operation speed.

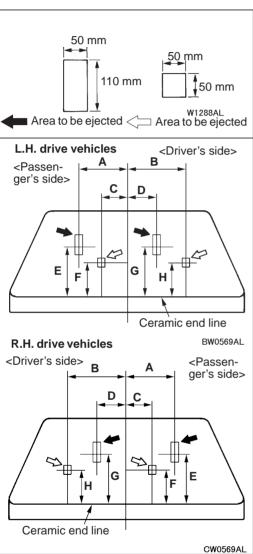
#### **Stop Position**

- 1. Connect a battery to the wiper motor as shown in the (A) of the illustration. While the wiper motor operates at low speed, disconnect the battery to stop the wiper motor.
- 2. Connect the terminals via a jumper wire and a battery to the wiper motor as shown in the (B) of the illustration. After the motor starts turning at low speed, it should stop at the automatic stop position.



#### WASHER MOTOR CHECK

- 1. With the washer motor installed to the washer tank, fill the washer tank with water.
- 2. Check that the water squirts out strongly when battery voltage is applied to terminal (2) and terminal (1) is earthed.



#### WASHER FLUID EJECTION POINT CHECK

Adjust the ejection angle by moving the nozzle.

Item	Distance mm	Item	Distance mm
А	350	Е	320
В	475	F	200
С	165	G	310
D	200	Н	200

# **REAR WIPER AND WASHER**

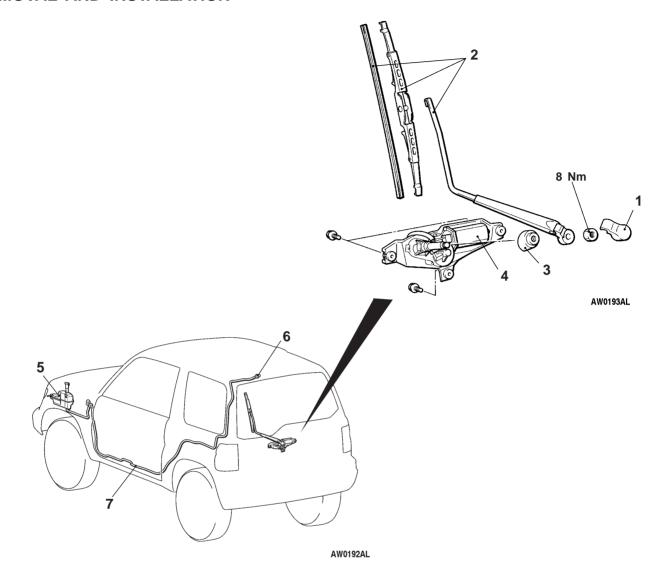
# SERVICE SPECIFICATION

Items	Standard value
Park position of rear wiper arm and blade assembly (Distance between wiper blade and back door glass ceramic end line) mm	33 ± 5

# **TROUBLESHOOTING**

The rear wiper and washer is controlled by the Smart Wiring System (SWS). For troublesshooting, refer to GROUP 54B - Troubleshooting.

# **REAR WIPER AND WASHER** REMOVAL AND INSTALLATION



#### Wiper motor assembly removal steps

- Back door trim (Refer to GROUP 42.)
- 1. Cover
- 2. Wiper arm and blade assembly
  - 3. Grommet
  - 4. Wiper motor assembly

#### Washer tank and washer motor removal

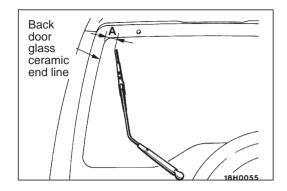
5. Washer tank and washer motor (Refer to P.51-11.)

#### Rear washer hose removal steps

- Rear seat (Refer to GROUP 52A.)
- Scuff plate and quarter trim (Refer to GROUP 52A.)
- Headlining (Refer to GROUP 52A.)
  Washer nozzle
- 7. Washer hose

## NOTE

For removal and installation of the column switch assembly (wiper and washer switch), refer to GROUP 37A - Steering Wheel and Shaft.

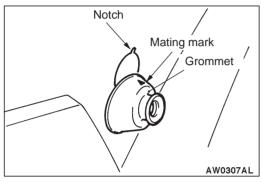


#### INSTALLATION SERVICE POINT

# ►A WIPER ARM AND BLADE ASSEMBLY INSTALLATION

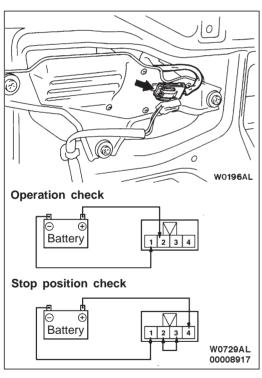
Install so that the wiper blade is positioned at the shown position when the wiper arm stops.

Standard value (A): 33  $\pm$  5 mm



#### **▶**B GROMMET INSTALLATION

Align the mating mark of grommet and the notch of installation hole.



#### INSPECTION

#### **WIPER MOTOR CHECK**

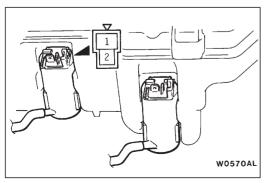
Disconnect the wiring harness connector, and check the wiper motor operation with the wiper motor remaining installed to the body.

#### **Wiper Motor Operation**

Connect a battery to the wiper motor as shown in the illustration and check the motor operation.

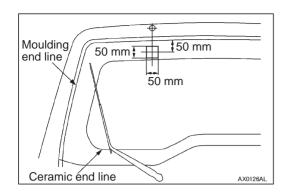
#### **Wiper Motor Stop Position**

- 1. Operate the wiper motor, and then disconnect the battery to stop the wiper motor while the wiper motor is operating.
- Reconnect the battery as shown in the illustration, and confirm that after the motor starts turning, it stops at the automatic stop position.



#### WASHER MOTOR CHECK

- 1. With the washer motor installed to the washer tank, fill the washer tank with water.
- 2. Check that the water squirts out strongly when system voltage is applied to terminal 2 and terminal 1 is earthed.



#### WASHER FLUID EJECTION POINT CHECK

Adjust the ejection angle by moving the nozzle.

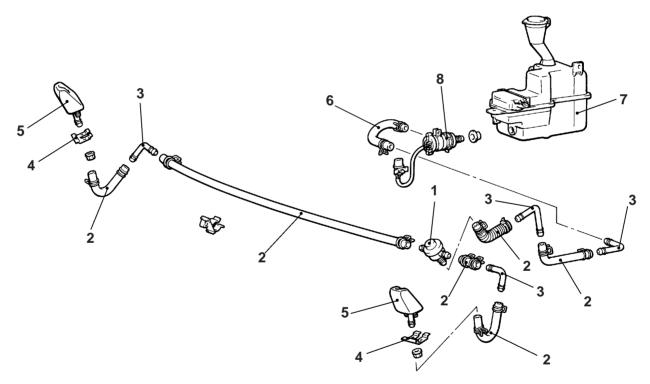
# **HEADLAMP WASHER**

# **TROUBLESHOOTING**

The headlamp washer is controlled by the Smart Wiring System (SWS). For troublesshooting, refer to GROUP 54B - Troubleshooting.

# **HEADLAMP WASHER**

## REMOVAL AND INSTALLATION



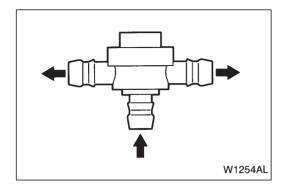
#### AW1249AL

# Nozzle and check valve removal steps

- Draining of washer fluid
- Front bumper (Refer to P.51-2.)
- 1. Check valve
- 2. Washer hose
- 3. Joint
- 4. Bracket
- 5. Nozzle

## Washer tank removal steps

- Draining of washer fluid
- Air cleaner
- Intake duct
- 6. Washer hose
- 7. Washer tank assembly
- 8. Headlamp washer motor

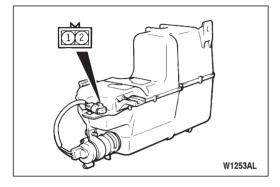


## **INSPECTION**

## **CHECK VALVE CHECK**

Apply pressure to the inlet of the check valve to check its opening pressure.

Opening pressure: 78 kPa

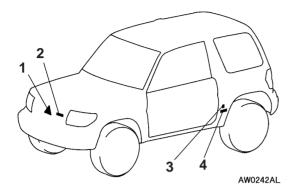


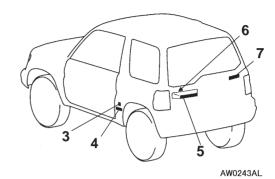
#### HEADLAMP WASHER MOTOR CHECK

- 1. With the washer motor installed to the washer tank, fill the washer tank with water.
- 2. Connect battery (+) and (-) cables to terminals (1) and (2) respectively to see that the washer motor runs and water is injected.

# **MARKS**

## REMOVAL AND INSTALLATION





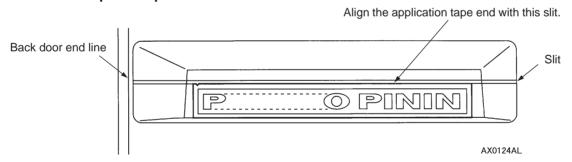
- 1. Three diamonds mark
- 2. "GDI" mark
- 3. Pininfarina mark4. Pininfarina logo mark

- 5. Vehicle name decal
- - 6. Three diamonds mark 7. "GDI" mark

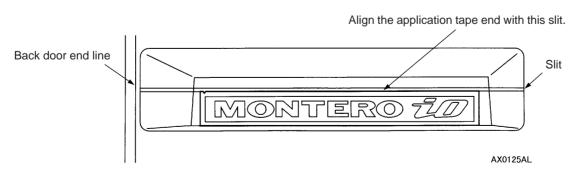
# INSTALLATION SERVICE POINT ►A INSTALLATION OF MARKS

**APPLICATION POSITION** 

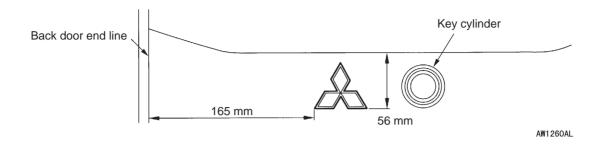
#### (5) Vehicle name decal <Vehices except for Spain>



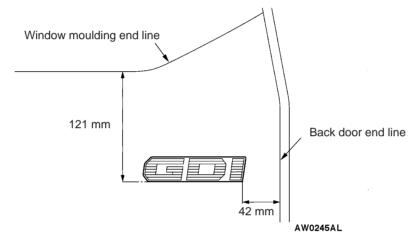
#### <Vehicles for Spain>



#### (6) Three diamonds mark



#### (7) GDI mark



#### 2. INSTALLATION PROCEDURE

- (1) Clean the mark installation surfaces on the body with unleaded petrol.
- (2) Peel off the backing paper from the reverse side of the marks, and then attach the marks to the vehicle body so that they fit properly into position.

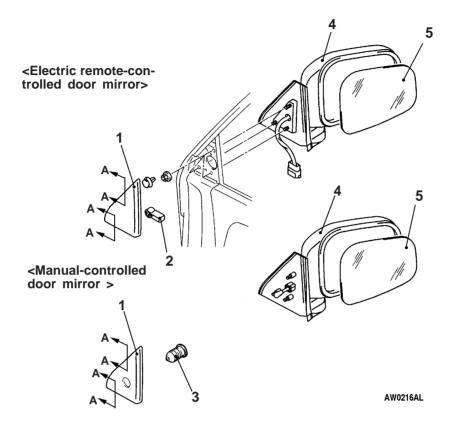
#### Caution

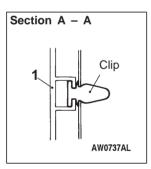
When attaching the marks, the surrounding temperature should be  $20-38^{\circ}C$  and the air should be completely free from dust.

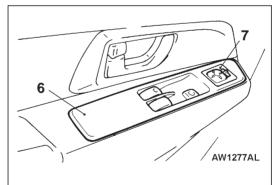
If the surrounding temperature is lower than  $20^{\circ}$ C, the marks and the places on the body where the marks are to be attached should be heated to  $20-38^{\circ}$ C. When the marks are attached, care should be used not to allow bubble to enter between tape and the body.

# **OUTSIDE DOOR MIRROR**

## **REMOVAL AND INSTALLATION**







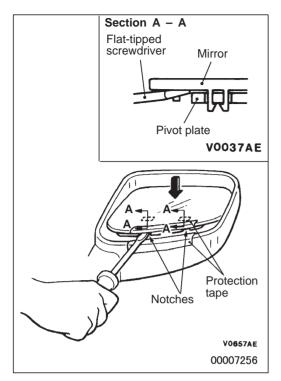
#### Door mirror removal steps

- 1. Delta inner cover
- Clip
   Boot
- 4. Mirror assembly
- 5. Mirror

#### Electric remote-controlled mirror switch removal steps

- 6. Power window and remote-controlled mirror switch assembly (Refer to GROUP 42 Door trim and water proof film.)
- 7. Electric remote-controlled mirror switch

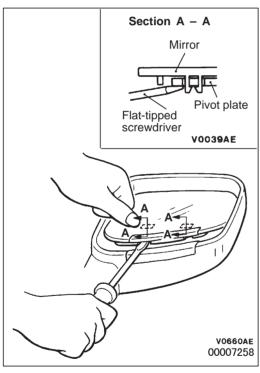




## **REMOVAL SERVICE POINT**

#### **▲**A► MIRROR REMOVAL

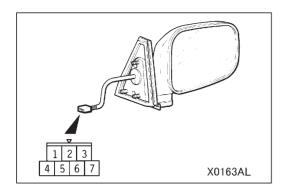
Using a hand, push the upper part of mirror to tilt it. Apply a protection tape as shown in the illustration. Insert a flat-tipped screwdriver between a notch behind the mirror and the pivot plate, and then pry off the lower part of mirror from the pivot plate.



#### INSTALLATION SERVICE POINT

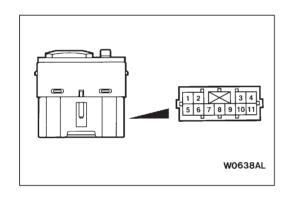
#### ►A MIRROR INSTALLATION

While holding the pivot plate with a flat-tipped screwdriver, push the mirror to engage the clips at its lower part with the pivot plate.



# INSPECTION ELECTRIC REMOTE-CONTROLLED MIRROR OPERATION CHECK

Battery	Direction of				
1	2	3	6	7	operation
<b>—</b>		<b>-</b> -⊖			UP
$\ominus$ —					DOWN
-	$\overline{}$				LEFT
$\ominus$	-				RIGHT
			0—	—	Vehicles with heater mirror



# ELECTRIC REMOTE-CONTROLLED MIRROR SWITCH CONTINUITY CHECK

Switch	Switch	Termir	Terminal No.								
	position	Left m	Left mirror			Right mirror					
		1	6	9	10	11	1	2	3	6	9
Adjustment switch	UP	<u> </u>									
Adjustifient switch	01								$\bigcirc$		
	DOWN					_					
						-					+
	RIGHT		0	-0			0-	-0			
	1									<u> </u>	
	LEFT		+							+	
											+

**NOTES** 

# GROUP 51 **EXTERIOR**

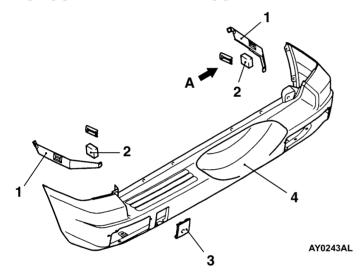
## **GENERAL**

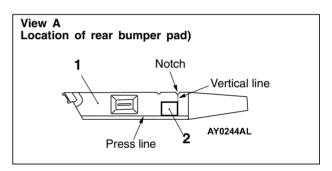
#### **OUTLINE OF CHANGES**

- Due to the introduction of 5-door models, the rear bumper service procedure has been added.
- Due to the introduction of 5-door models, the service procedures for the roof drip moulding and the side protector moulding have been added.
- Due to the change on the front deck garnish, the service procedure has been changed.
- The side protector moulding for 5-door models has a "Pininfarina" mark and "Pininfarina" logo mark. Due to this, the service procedure has been established.
- Due to the change on the GDI mark, the service procedure has been changed.

# **REAR BUMPER**

#### **DISASSEMBLY AND REASSEMBLY**





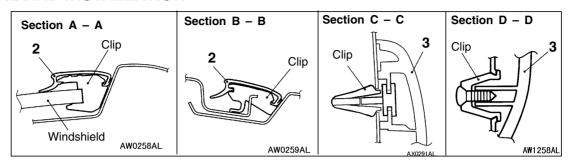
#### **Disassembly steps**

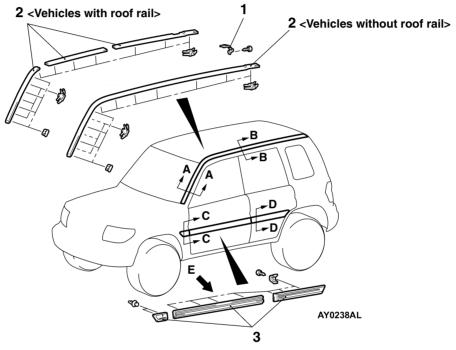
- Rear combination lamp assembly and rear combination lamp assembly bracket <R.H. drive vehicles>
- Rear fog assembly and rear fog assembly bracket <L.H. drive vehicles>

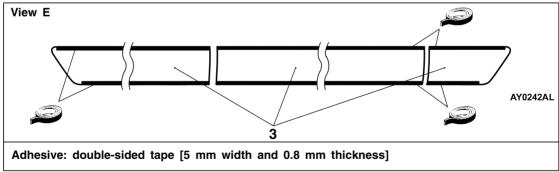
- 1. Rear bumper face side bracket
- 2. Rear bumper pad
- 3. Rear bumper cover
- 4. Rear bumper face

# **MOULDING**

#### **REMOVAL AND INSTALLATION**







# Roof drip moulding removal steps

- Roof rail assembly
- 1. Roof drip cover
- 2. Roof drip moulding

#### Side protector moulding removal

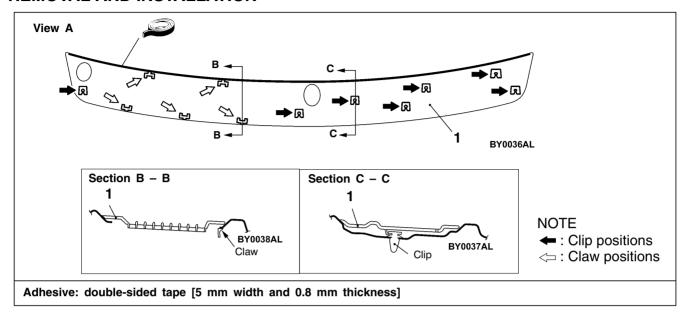
**◄B**▶ ►A 3. Side protector moulding

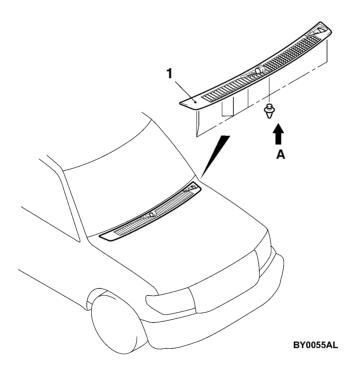
#### NOTE

For the removal and installation service points of the roof drip moulding and the side protector moulding, refer to the Basic Manual.

# **GARNISH**

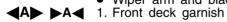
# **REMOVAL AND INSTALLATION**





## Front deck garnish removal steps

• Wiper arm and blade assembly

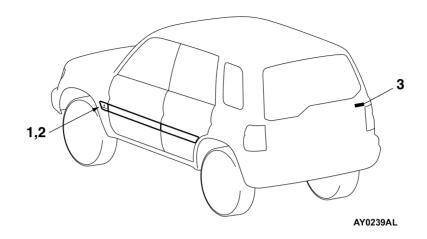


#### NOTE

For the removal and installation service points of the side protector moulding, refer to the Basic Manual.

# **MARKS**

# **REMOVAL AND INSTALLATION**



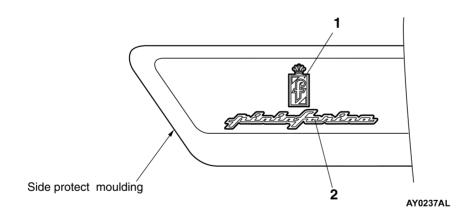
►A 1. Pininfarina mark ►A 2. Pininfarina logo mark

►A 3. GDI mark

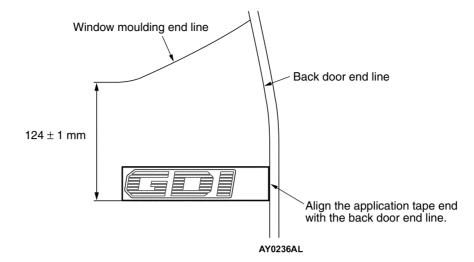
# **INSTALLATION SERVICE POINT**

## **►**A **MARK INSTALLATION**

(1) PININFARINA MARK,(2) PININFARINA LOGO MARK



#### (3) GDI MARK



- 1. Clean the mark installation surfaces on the body with unleaded petrol.
- 2. Peel off the backing paper from the reverse side of the marks, and then attach the marks to the vehicle body so that they fit properly into position.

#### Caution

When attaching the marks, the surrounding temperature should be  $20-38^{\circ}C$  and the air should be completely free from dust.

If the surrounding temperature is lower than  $20^{\circ}$ C, the marks and the places on the body where the marks are to be attached should be heated to  $20 - 38^{\circ}$ C.

**NOTES** 

# GROUP 51 **EXTERIOR**

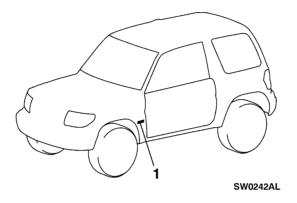
# **GENERAL**

# **OUTLINE OF CHANGES**

The following service procedures have been changed due to the addition of marks.

# **MARKS**

# **REMOVAL AND INSTALLATION**



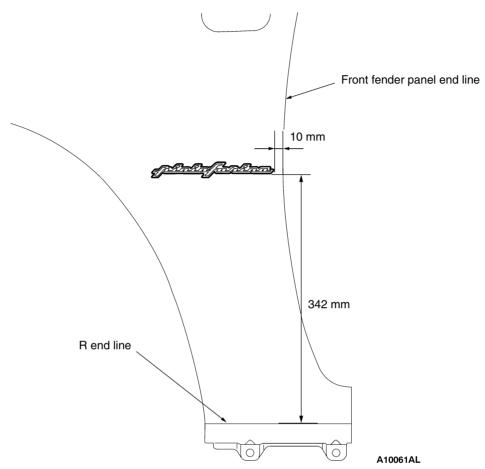
►A 1. Pininfarina logo mark <Vehicles for MPI>

#### INSTALLATION SERVICE POINT

#### ►A INSTALLATION OF MARK

#### 1. APPLICATION POSITION

#### (1) Pininfarina mark



#### 2. INSTALLATION PROCEDURE

- (1) Clean the mark installation surfaces on the body with unleaded petrol.
- (2) Peel off the backing paper from the reverse side of the marks, and then attach the marks to the vehicle body so that they fit properly into position.

#### Caution

When attaching the marks, the surrounding temperature should be 20 – 38°C and the air should be completely free from dust.

If the surrounding temperature is lower than  $20^{\circ}$ C, the marks and the places on the body where the marks are to be attached should be heated to  $20-38^{\circ}$ C. When the marks are attached, care should be used not to allow bubble to enter between tape and the body.