
GROUP 8

REFERENCE MATERIAL

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BOLTED PANEL FIT AND ADJUSTMENT

HOOD

M4080005000060

ADJUSTMENT OF HOOD FIT

1. If the clearance between the hood and body is uneven, loosen the hood hinge assembling nut and hood hinge assembling bolt, move the hood to and fro, and left and right to adjust the hood so the clearance around the hood is even.

Hood hinge assembling nut tightening torque:

$11 \pm 2 \text{ N}\cdot\text{m} (98 \pm 17 \text{ in-lb})$

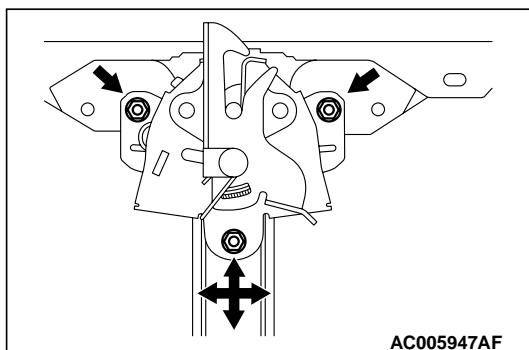
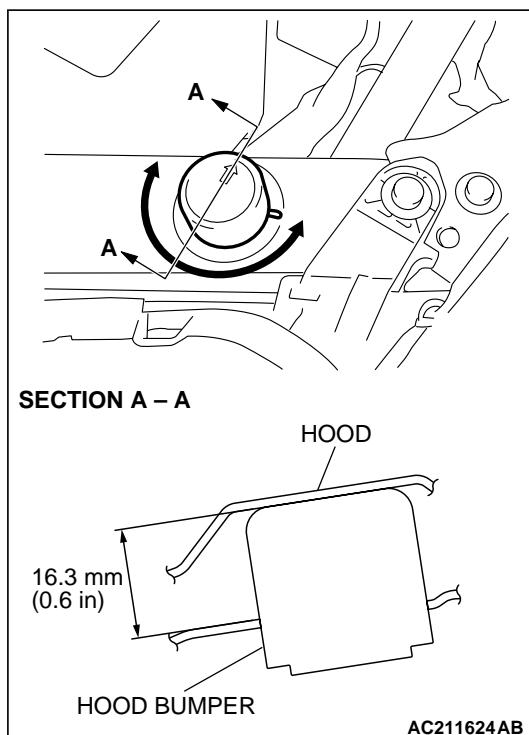
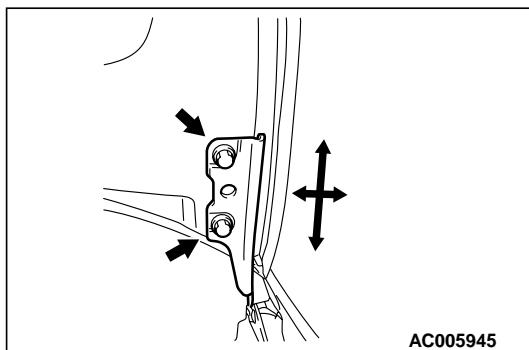
Hood hinge mounting bolt tightening torque:

$21 \pm 4 \text{ N}\cdot\text{m} (16 \pm 2 \text{ ft-lb})$

Hood hinge mounting nut tightening torque:

$11 \pm 2 \text{ N}\cdot\text{m} (98 \pm 17 \text{ in-lb})$

2. Rotate the hood bumper by using arrow mark on the hood bumper as a guide to adjust the hood height. If the hood bumper is rotated just one turn, the hood height changes by approximately 3 mm (0.1 inch).



3. If the hood level, floating, unlock, lock is heavy check the cord of the release cable, loosen the hood latch assembling bolt, lift the hood latch and adjust the bite with the hood striker.

Hood latch assembling bolt tightening torque:

$9 \pm 2 \text{ N}\cdot\text{m} (80 \pm 17 \text{ in-lb})$

DOOR

M4080006000085

ADJUSTMENT OF DOOR FIT

CAUTION

- Attach protection tape to the fender and door edges where the hinge is installed.
- Do not rotate special tool MB991164 with a torque of over 98 N·m (72 ft-lb)

1. Use special tool MB990900 or MB991164 to loosen the hinge mounting bolts on the body side, and then adjust the clearance around the door so that it is uniform on all sides.

Door hinge mounting bolt tightening torque:

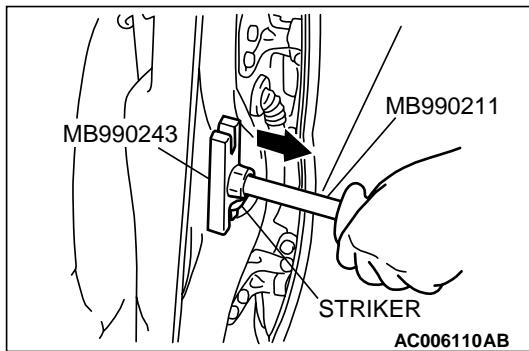
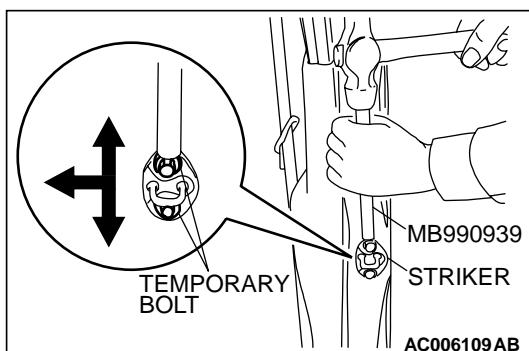
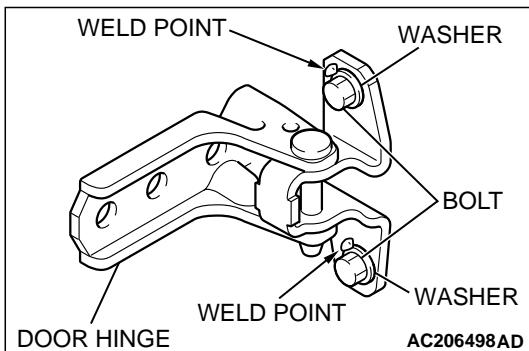
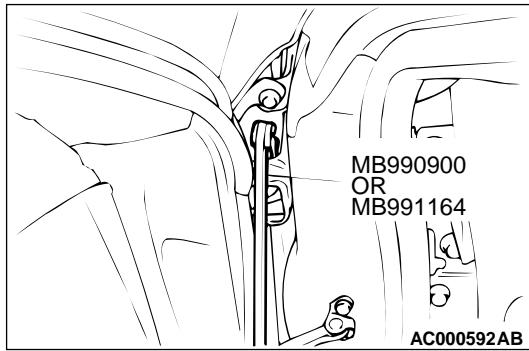
$27 \pm 5 \text{ N}\cdot\text{m} (20 \pm 4 \text{ ft-lb})$

2. If a door is not flush with its surrounding panels, loosen the door-side door hinge mounting bolts and obtain the flushness by moving the door.

Door hinge assembling bolt tightening torque:

$21 \pm 4 \text{ N}\cdot\text{m} (16 \pm 2 \text{ ft-lb})$

NOTE: If the door hinge mounting bolt washers are welded, grind off the welding according to the procedure below beforehand.



1. Remove the door hinge.

2. Use a chisel or grinder to release the door hinge mounting bolt washer, which is welded to the door hinge.
3. On completion, paint the affected area with a suitable touch-in brush to prevent corrosion.

4. Install the door hinge.

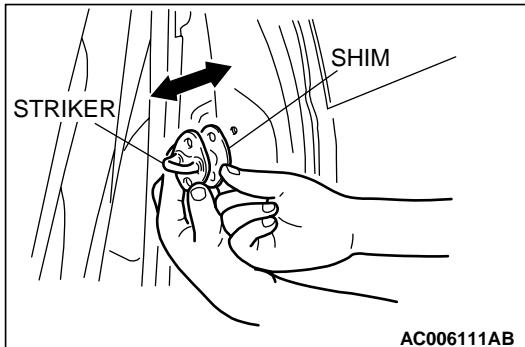
3. When the door is stiff to lock and unlock:

- (1) Adjustment by using the striker (toward the inside of the vehicle and vertical direction)

Install an appropriate bolt instead of the striker mounting bolt, and use special tool MB990939 and a hammer to tap the bolt to the desired direction.

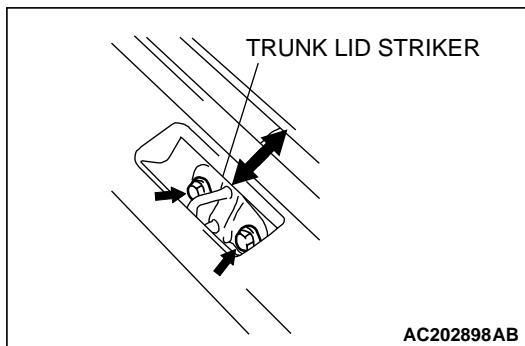
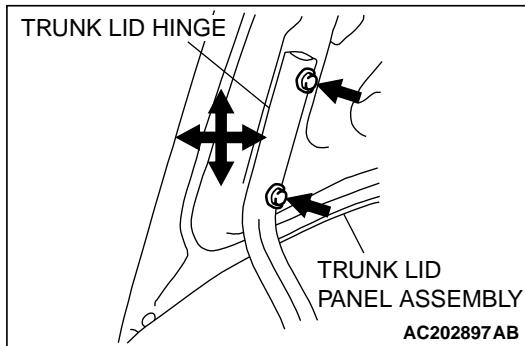
- (2) Adjustment by using the striker (toward the outside of the vehicle)

Use special tools MB990211 and MB990243 to pull the striker toward the outside of the vehicle.



(3) Adjustment by using shims (forward and rearward)
Increase or decrease the number of shims so that the striker engages with the door latch properly.

Door striker assembling bolt tightening torque:
 $11 \pm 2 \text{ N}\cdot\text{m} (98 \pm 17 \text{ ft-lb})$



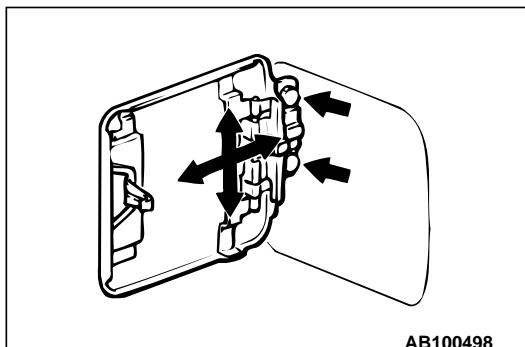
TRUNK LID

M4080017000012

ADJUSTMENT OF TRUNK LID FIT

1. If the clearance between the trunk lid and body is inconsistent, loosen the trunk lid mounting bolt, and move the trunk lid to adjust so that the clearance around the trunk lid becomes consistent.
2. If the trunk lid is floating, if the trunk lid latch is released, or if the latch is heavy, inspect the arrangement of the release cable, loosen the trunk lid striker mounting bolts, and move the trunk lid striker to adjust the alignment between the trunk lid and latch.

Trunk lid striker mounting bolts tightening torque:
 $8.8 \pm 2 \text{ N}\cdot\text{m} (78 \pm 17 \text{ in-lb})$



FUEL FILLER LID

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ADJUSTMENT OF FUEL FILLER LID FIT

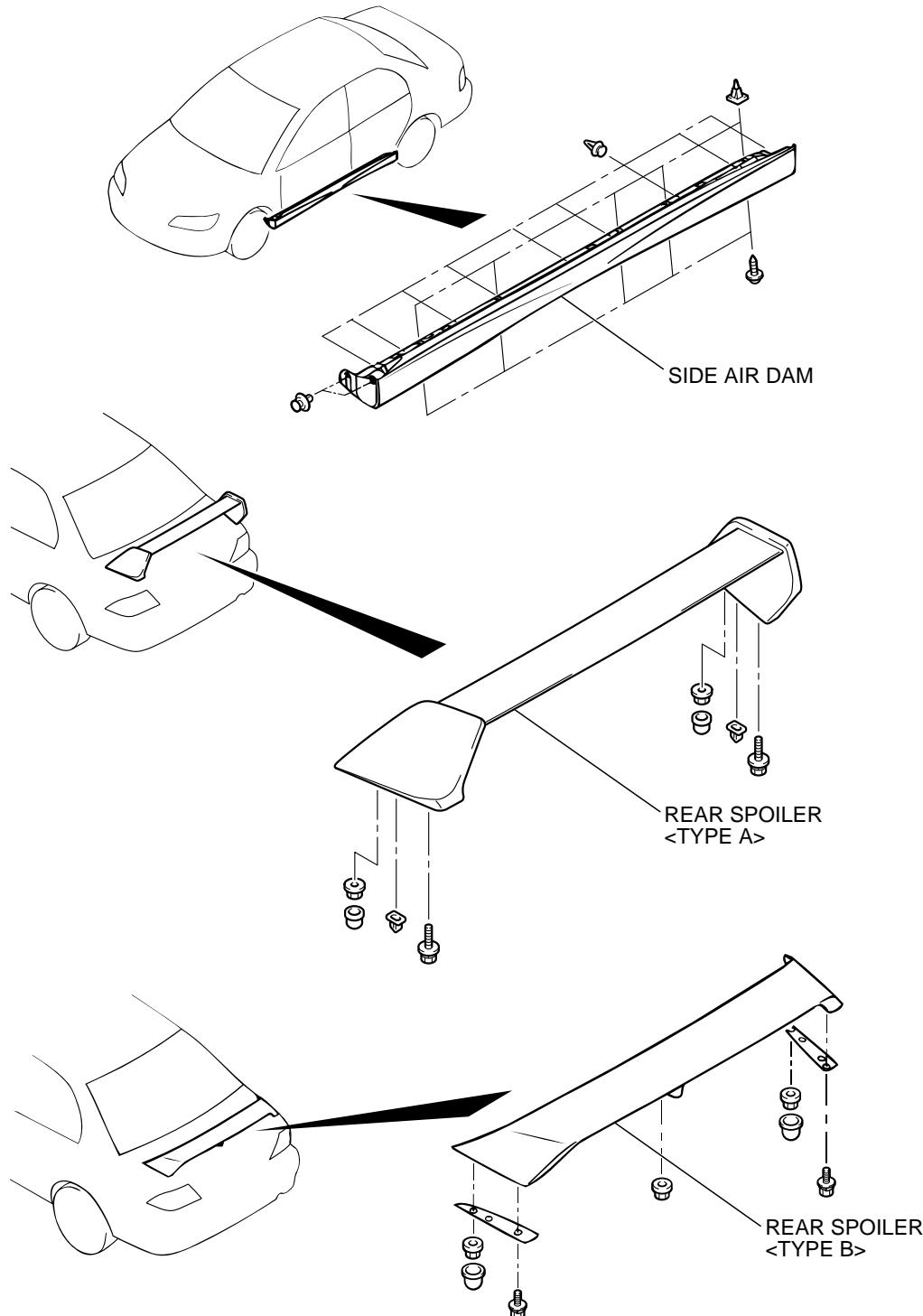
If the leveling and clearance of the fuel filler door is uneven, loosen the fuel filler door assembling bolt, then move and adjust the fuel filler door.

Fuel filler door assembling bolt tightening torque: 5.0 ±1.0 N·m (44 ±9in-lb)

INSTALLATION AND REMOVAL OF ADHESIVE COMPONENTS

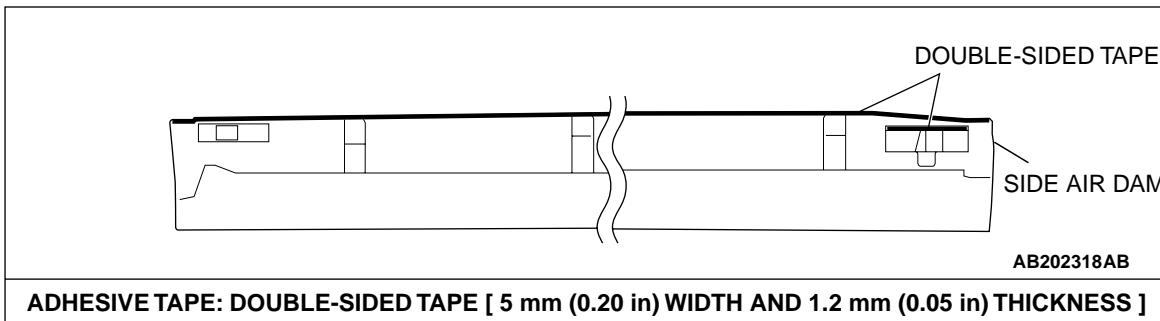
AERO PARTS

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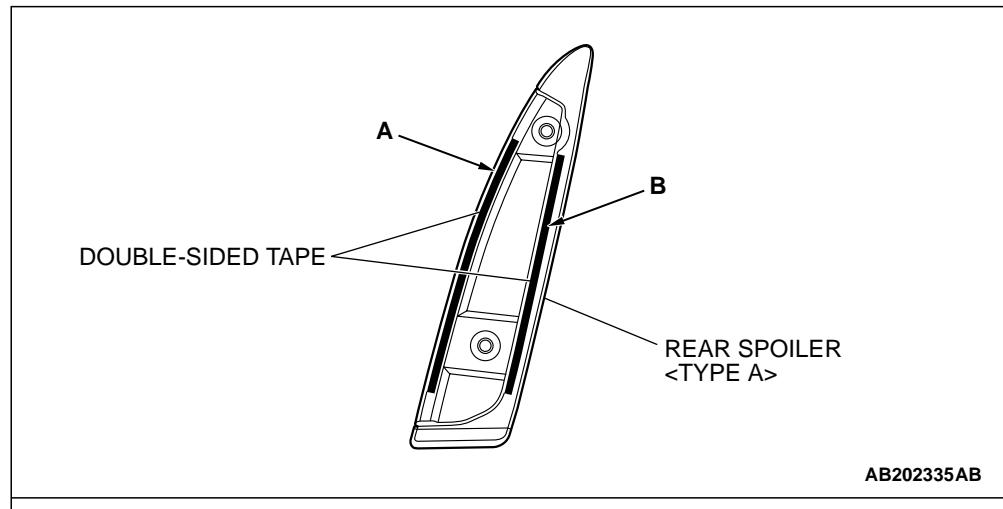


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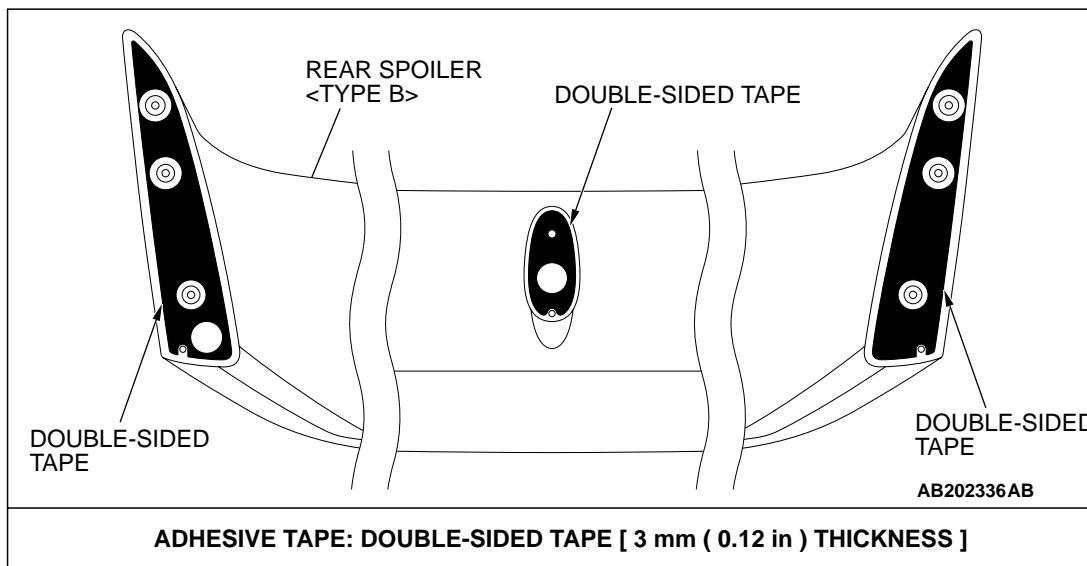
ADHESIVE TAPE POSITION



ADHESIVE TAPE: DOUBLE-SIDED TAPE [5 mm (0.20 in) WIDTH AND 1.2 mm (0.05 in) THICKNESS]



ADHESIVE TAPE:
DOUBLE-SIDED TAPE A: [5 mm (0.2 in) WIDTH AND 0.8 mm (0.03 in) THICKNESS]
B: [5 mm (0.2 in) WIDTH AND 1.2 mm (0.05 in) THICKNESS]

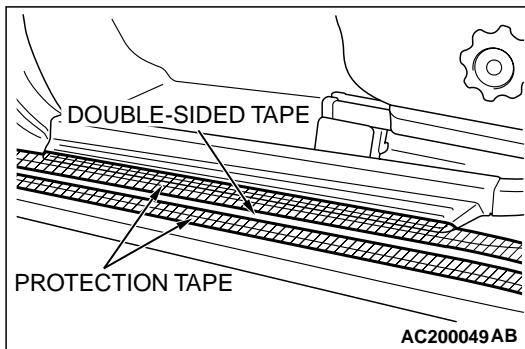


ADHESIVE TAPE: DOUBLE-SIDED TAPE [3 mm (0.12 in) THICKNESS]

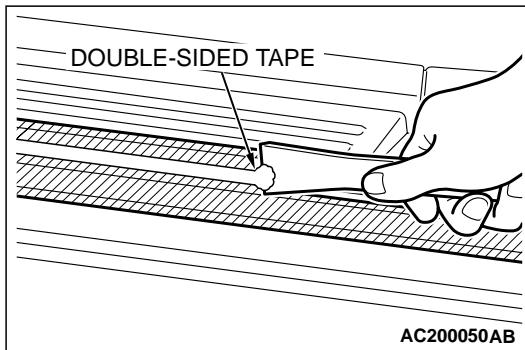
REMOVAL

Gently lift and remove the side air dam. If there is any double-side tape remaining on the side air dam, remove according to the following instructions.

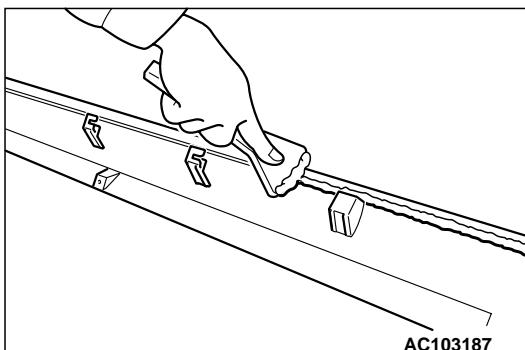
<Remove double-side tape remaining on the body surface>



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

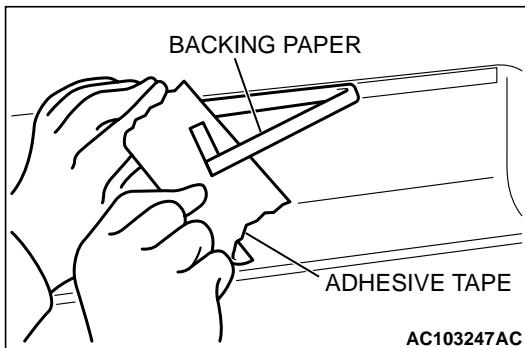


2. Scrape off the double-sided tape with a resin spatula as possible.
3. Peel off the protection tape.
4. Use a shop towel moistened with 3M™ AAD Part number 8906 or equivalent to wipe the body.



<Remove double-side tape remaining on side air dam and adhere double-side tape (when re-using side air dam)>

1. Scrape off the double-sided tape on the side air dam with a resin spatula as possible.
2. Use a shop towel moistened with 3M™ AAD Part number 8906 or equivalent to wipe the side air dam surface.
3. Remove only a small portion of the residual adhesive.
4. Adhere the double-side tape as specified on the side air dam.



INSTALLATION

1. Tear off the double-sided tape backing paper.

NOTE: If you attach the adhesive tape to the edge of the backing paper, it will be easy to tear off.

2. Install the side air dam.

NOTE: If the double-sided tape is difficult to affix in cold temperature, etc., warm the bonding surfaces of the body and side air dam to about 40 – 60 °C (104 – 140 °F) before affixing the tape.

3. Firmly press in the side sill garnish.

ADJUSTMENT OF OTHER PARTS

FRONT WHEEL ALIGNMENT

M4080009000062

Measure wheel alignment with alignment equipment on a level surface. The front suspension, steering system, wheels, and tires should be serviced to normal condition before measuring wheel alignment.

TOE-IN

Standard value: $0 \pm 2 \text{ mm (} 0 \pm 0.08 \text{ inch)}$

1. Adjust the toe-in by undoing the clip and jam nut, and turning the left and right tie rod turnbuckles by the same amount (in opposite directions).

NOTE: The toe will move out as the left turnbuckle is turned toward the front of the vehicle and the right turnbuckle is turned toward the rear of the vehicle.

2. Install the clip and tighten the jam nut to the specified torque.

Tightening torque: $52 \pm 2 \text{ N}\cdot\text{m (} 38 \pm 2 \text{ ft-lb)}$

3. Confirm that the toe-in is at the standard value.
4. Use a turning radius gauge to check that the steering angle is at the standard value.

Standard value:

Inner wheel	$31^{\circ}45' \pm 1^{\circ}30'$
Outer wheel (for reference)	$27^{\circ}15'$

CAMBER, CASTER AND KINGPIN INCLINATION

Standard value:

Items	Specifications
Camber (Selectable from 2 options)	$-1^{\circ}00' \pm 30^{\circ}$ or $-2^{\circ}00' \pm 30^{\circ}$
Caster	$3^{\circ}55' \pm 30^{\circ}$
Kingpin inclination	$13^{\circ}45' \pm 1^{\circ}30'$

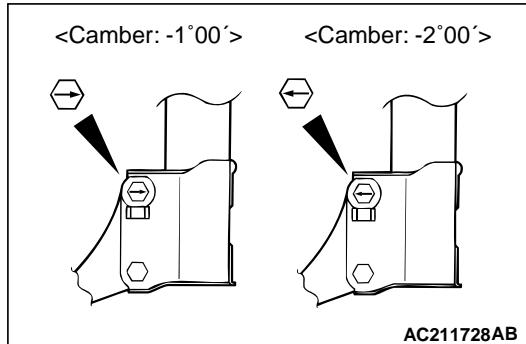
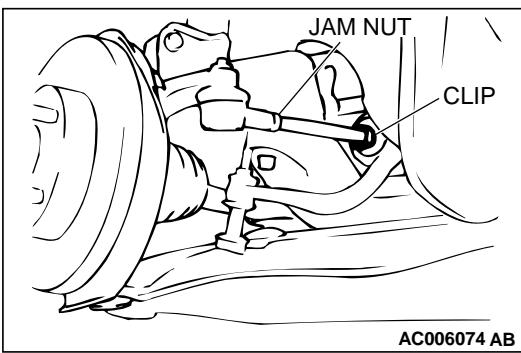
NOTE:

1. **: difference between right and left wheels must be less than 30'*
2. *Caster and kingpin inclination are preset at the factory and cannot be adjusted.*

SELECTION THE CAMBER

Select the camber by the installation direction of the allow of the connecting bolt of the strut assembly and the knuckle.

- $-1^{\circ}00' \pm 30'$: Install the bolt turning the allow to the direction of vehicle inside.
- $-2^{\circ}00' \pm 30'$: Install the bolt turning the allow to the direction of vehicle outside.



REAR WHEEL ALIGNMENT

M4080010000066

1. The rear suspension, wheels and tyres should be serviced to normal condition prior to measurement of wheel alignment.
2. Measure the wheel alignment with the vehicle parked on a level surface.

TOE-IN

Standard value: $3 \pm 2 \text{ mm (} 0.12 \pm 0.07 \text{ inch)}$

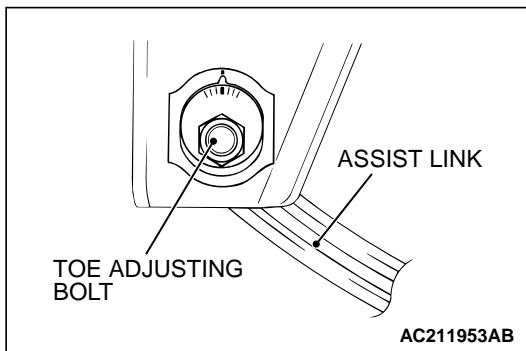
If toe-in is not within the standard value, adjust by following procedures.

1. Be sure to adjust the camber before making toe adjustment.
2. Carry out adjustment by turning the toe adjusting bolt (assist link mounting bolt which is located on the inner side of the body).

Left wheel: Turning clockwise (+) toe-in

Right wheel: Turning clockwise (-) toe-in

NOTE: The scale has gradations of approximately 3.3 mm (0.13inch) (single side toe angle equivalent to 19').



CAMBER

Standard value:

$- 1^\circ 00' \pm 30'$ (difference between right and left wheel: less than 30')

If camber and/or toe-in is not within the standard value, adjust by following procedures.

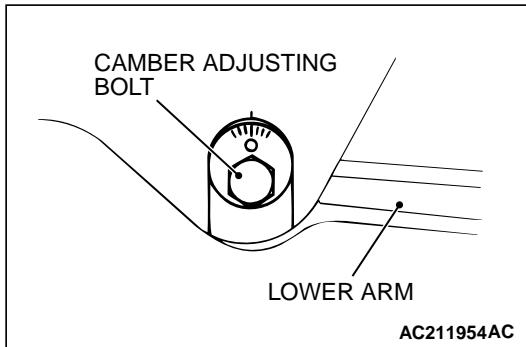
1. Carry out camber adjustment by turning the camber adjusting bolt (lower arm to rear crossmember mounting bolt).

Left wheel: Turning clockwise (+) camber

Right wheel: Turning clockwise (-) camber

NOTE: The scale has gradations of approximately 14'

2. After adjusting the camber, the toe should be adjusted.

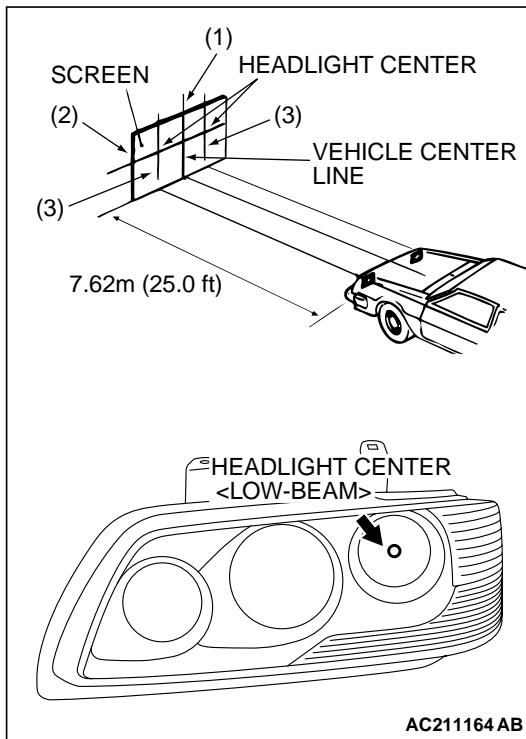


HEADLIGHT AIMING

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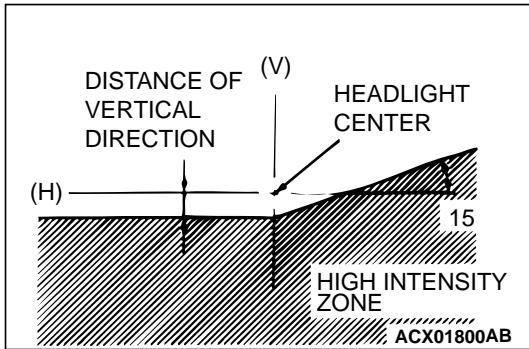
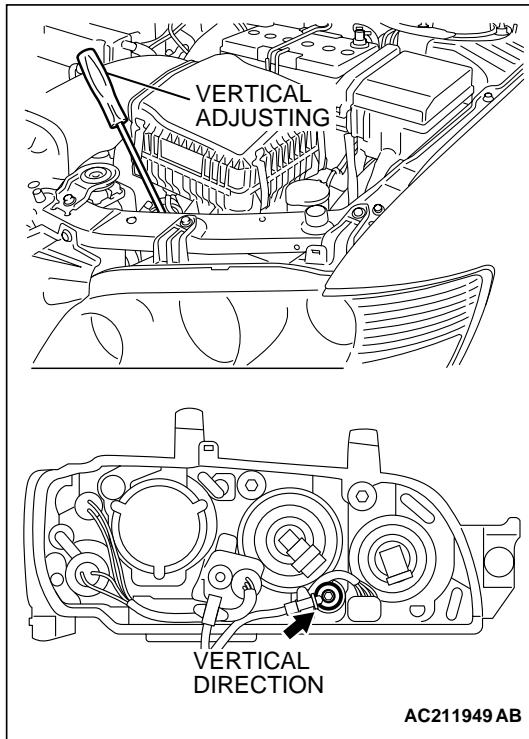
PRE-AIMING INSTRUCTIONS

1. Inspect for badly rusted or faulty headlight assemblies.
2. These conditions must be corrected before a satisfactory adjustment can be made.
3. Inspect tire inflation, and adjust if it is necessary.
4. If the fuel tank is not full, place a weight in luggage room of the vehicle to simulate weight of a full tank [3 kg (6.5 pounds) per gallon.]
5. There should be no other load in the vehicle other than driver or substituted weight of approximately 70 kg (150 pounds) placed in driver's position.
6. Thoroughly clean the headlight lenses.
7. Place the vehicle on a level floor, perpendicular to a flat screen 7.62m (25.0 feet) away from the bulb center-marks on the headlight lens.
8. Rock vehicle sideways to allow vehicle to assume its normal position.
9. Bounce the front suspension through three (3) oscillations by applying the body weight to hood or bumper.
10. Four lines of adhesive tape (or equivalent markings) are required on screen or wall:
 - (1) Position a vertical tape or mark so that it is aligned with the vehicle center line.
 - (2) Measure the distance from the center-marks on the headlight lens to the floor. Transfer the measurement to the screen. Horizontal tape or mark on the screen is for reference of vertical adjustment.
 - (3) Measure the distance from the center line of the vehicle to the center of each headlight. Transfer the measurement to the screen. Vertical tape or mark on the screen with reference to the center line of each headlight bulb.



HEADLIGHT ADJUSTMENT

1. The low beam headlight should project on the screen upper edge of the beam (cut-off).
2. If not the case, turn the adjusting screws to achieve the specified low-beam cut-off location on the aiming screen.



Standard value:

(Vertical direction) Range of headlight center line $53 \pm 50 \text{ mm} (\pm 2.1 \text{ inches})$

NOTE: There is no horizontal aim adjustment. Horizontal aim is preset and does not require adjustment.

3. When adjusting one headlight, disconnect the other headlight harness.

CAUTION

Do not cover a headlight for more than three minutes to prevent the plastic headlight lens deformation.

4. High-beam pattern should be correct when the low-beams are adjusted properly.

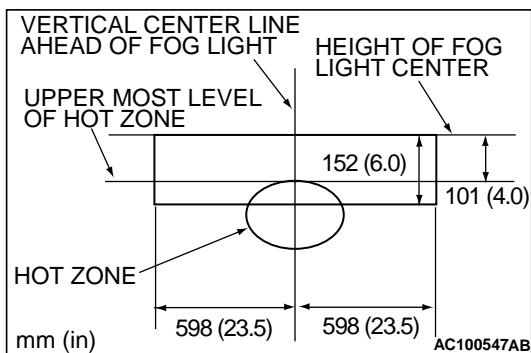
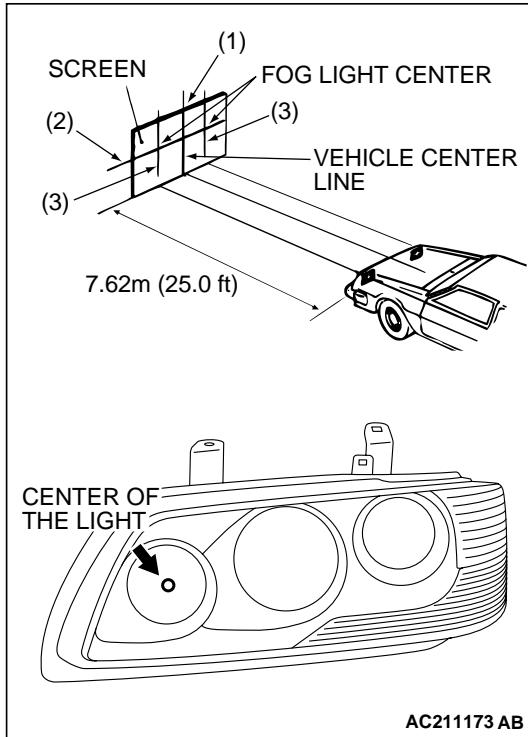
FOG LIGHT AIMING

M4080013000043

PRE-AIMING INSTRUCTIONS

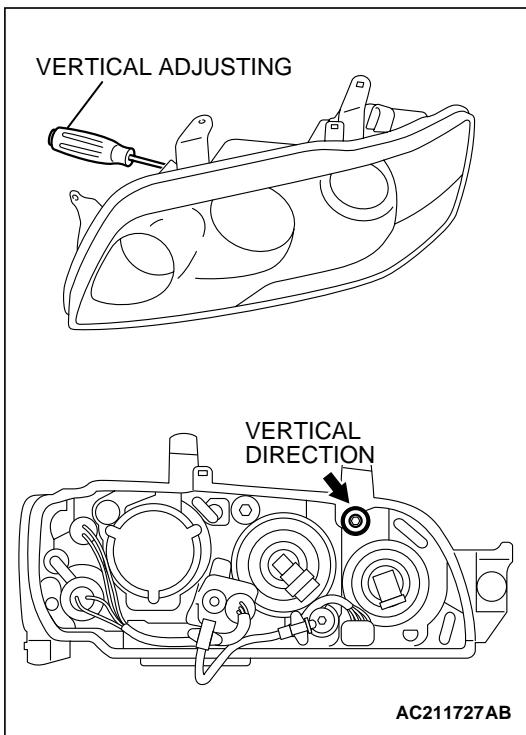
1. Inspect for badly rusted or faulty fog light assemblies.
2. These conditions must be corrected before a satisfactory adjustment can be made.
3. Inspect tire inflation, and adjust if necessary.
4. If the fuel tank is not full, place a weight in the trunk of the vehicle to simulate weight of a full tank [3 kg (6.5 pounds) per gallon.]
5. There should be no other load in the vehicle other than driver or substituted weight of approximately 70 kg (150 pounds) placed in driver's position.

6. Thoroughly clean fog light lenses.
7. Place the vehicle on a level floor, perpendicular to a flat screen 7.62m (25.0 feet) away from the bulb center-marks on the fog light lens.
8. Rock vehicle sideways to allow vehicle to assume its normal position.
9. Bounce the front suspension through three (3) oscillations by applying the body weight to hood or bumper.
10. Measure the center of the fog lights as shown in the illustration.
11. Four lines of adhesive tape (or equivalent markings) are required on screen or wall:
 - (1) Position a vertical tape or mark so that it is aligned with the vehicle center line.
 - (2) Measure the distance from the center-marks on the fog light lens to the floor. Transfer the measurement to the screen. Horizontal tape or mark on the screen is for reference of vertical adjustment.
 - (3) Measure the distance from the center line of the vehicle to the center of each fog light. Transfer the measurement to the screen. Vertical tape or mark on the screen with reference to the center line of each fog light bulb.



FOG LIGHT ADJUSTMENT

1. Check if the beam shining onto the screen is at the standard value.



2. If it is not within the standard value range, adjust by turning the adjusting screw.

Standard value:

(Vertical direction): Top of the hot zone should be 101 mm (4.0 inches) (0.76°) downward from the height of the fog light center.

Limit:

(Vertical direction): Top of the hot zone should be 152mm (6.0 inches) (1.14°) in maximum downward from the height of the fog light center.

NOTE: The horizontal direction is non-adjustable. If deviation of the light beam axis exceeds the standard value, check that the mounting location or some other points are not faulty.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS) - AIR BAG

M4080016000020

⚠ WARNING

- *Improper service maintenance of any SRS air bag can lead to unintended operations of the SRS system or serious injury.*
- *If SRS components may be subjected to heat over 90 °C (194 °F), during painting, remove the SRS control unit, air bag module (driver's seat, passenger seat), clock spring, interconnecting wiring, SRS warning light and pre-tensioner seat belt.*
- *Service or maintenance of any SRS air bag components or related components must be performed only at an authorized MITSUBISHI dealer.*
- *Before beginning service or maintenance of any SRS air bag components or related components, MITSUBISHI dealer personnel must thoroughly review the Service Manual (especially GROUP 52B - SRS AIR BAG).*

NOTES