

GENERAL

OUTLINE OF CHANGES

The service procedures have been established due to the following changes. The other service procedures are the same as before.

- A two bulb type headlamp has been adopted.
- The fog lamp has been reshaped.
- The rear combination lamp has been reshaped.
- The licence plate lamp has been reshaped.

HEADLAMP ASSEMBLY

SERVICE SPECIFICATIONS

Item			Standard value	Limit
Headlamp aiming	Low beam	Vertical direction	0.57° (99.5 mm) lower than horizontal line H	± 0.17°
		Horizontal direction	Position at which the startup point of 15° is crossed with vertical line V	± 0.5°
Measurement of headlamp illuminous intensity cd			—	30,000 cd or more per one headlamp

NOTES ON HEADLAMP ASSEMBLY:

Plastic outer lens are equipped with headlamp assembly. For handling, care should be taken for the following items:

- Headlamps should not be illuminated for more than 3 minutes with scratch preventive protectors, etc. covered on them.
- Masking such as taping should not be attached on outer lens.
- Outer lens surface should not be rubbed with a sharp-edged tool, etc.
- Specified wax remover should be used for insisently washing.
- Authorized Mitsubishi Genuine bulbs should be used.

ON-VEHICLE SERVICE

HEADLAMP AIMING

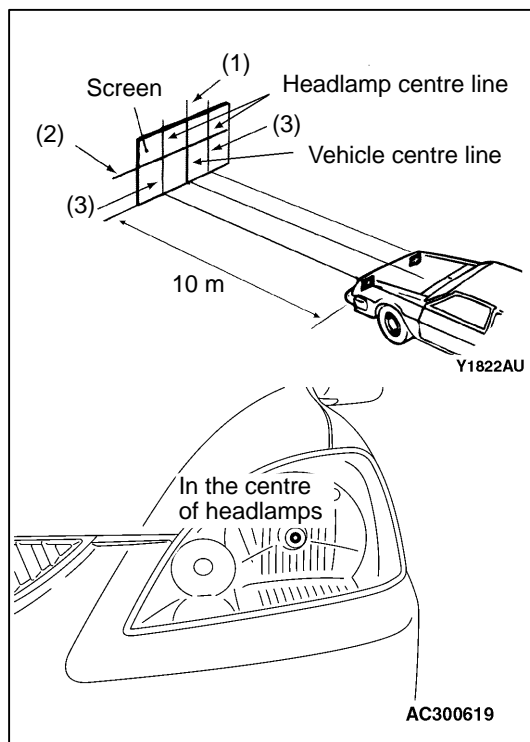
PRE-AIMING INSTRUCTION

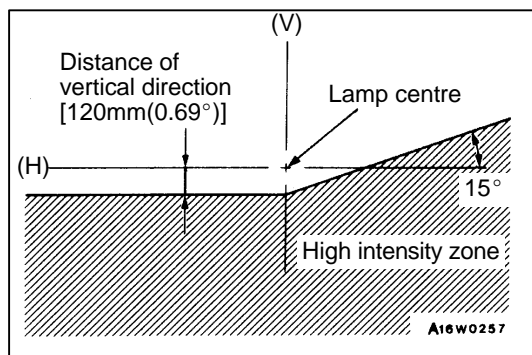
1. Inspect for badly rusted or faulty headlamp assemblies.
2. These conditions must be corrected before a satisfactory adjustment can be made.
3. Inspect tyres inflation, and adjust if necessary.
4. If the fuel tank is not full, place a weight in luggage room of vehicle to simulate weight of a full tank 0.8 kg per litre.
5. There should be no other load in the vehicle other than driver or substituted weight of approximately 75 kg placed in driver's position.
6. Thoroughly clean headlamp lenses.
7. Place the vehicle on a level floor, perpendicular to a flat screen 10m away from the bulb centre-marks on the headlamp 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.

HEADLAMP ADJUSTMENT

<USING A SCREEN>

1. 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 centre line.
 - (2) Measure the distance from the centre-marks on the headlamp 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 centre line of the vehicle to the centre of each headlamp. Transfer the measurement to the screen. Vertical tape or mark on the screen with reference to the centre line of each headlamp bulb.





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

Standard value:

(Vertical direction)

99.5 mm (0.57°) below horizontal (H)

(Horizontal direction)

Position at which the startup point of 15° is crossed with vertical line (V)

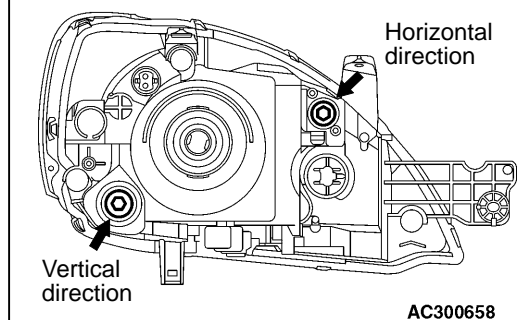
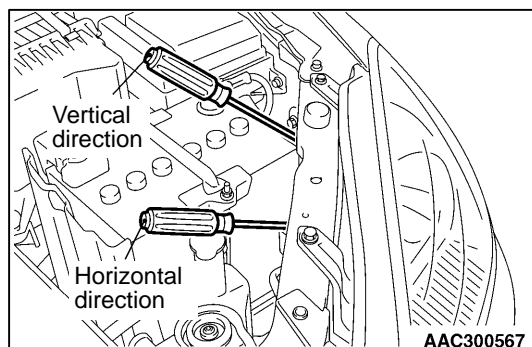
Limit:

(Vertical direction) $\pm 0.17^\circ$

(Horizontal direction) $\pm 0.5^\circ$

NOTE

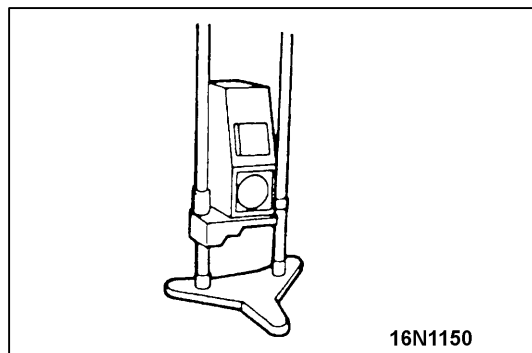
The illustration shows L.H. drive vehicles. For R.H. drive vehicles, it is symmetrical.



3. Alternately turn the adjusting screw to adjust the headlamp aiming.

Caution

Be sure to adjust the aiming adjustment screw in the tightening direction.



<USING A BEAM SETTING EQUIPMENT>

1. The headlamps should be aimed with the proper beam setting equipment, and in accordance with the equipment manufacture's instructions.

NOTE

If there are any regulations pertinent to the aiming of headlamps in the area where the vehicle is to be used, adjust so as to meet those requirements.

2. Alternately turn the adjusting screw to adjust the [headlamp aiming](#).

HEADLAMP INTENSITY MEASUREMENT

Caution

1. On the headlamp not yet adjusted, perform aiming with connector removed and the lamps switched off, if applicable. In addition, care should be taken to prevent a change of optical axis when connector is reconnected.
2. Plastic outer lens are equipped with headlamps. When lens surface is covered with materials for not penetrating light, headlamp operation time should be within 3 minutes. In addition, masking such as taping should not be performed.
1. Using a photometer, and following its manufacture's instruction manual.
2. Maintain an engine speed of 2,000 r/min, with the battery in the charging condition
3. Set the headlamps to high beam.
4. Measure the headlamp centre intensity (a point of H line and V line) and check to be sure that the limit value is satisfied.

Limit: 30,000 cd or more per one headlamp

NOTE

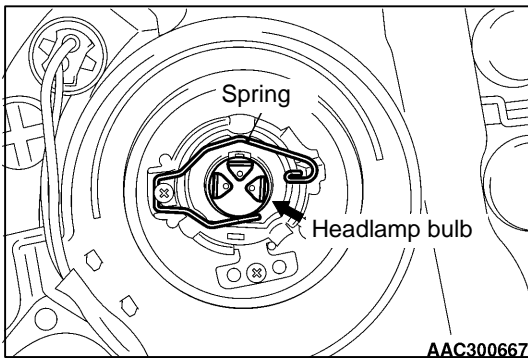
1. There may be special local regulations pertaining to headlamp intensity, be sure to make any adjustments necessary to satisfy such regulations.
2. If an illuminometer is used to make the measurements, convert its values to photometer values by using the following formula.

$I = Er^2$ Where:

I=intensity (cd)

E=illumination (lux)

r=distance (m) from headlamps to illuminometer

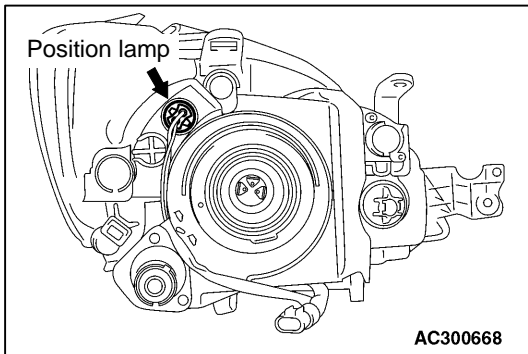


HEADLAMP BULB REPLACEMENT

1. Disconnect battery.
2. Disconnect connector.
3. Remove socket cover.
4. Remove bulb mounting spring to pull out bulb.
5. After bulb is replaced, properly reconnect connector.

Caution

Do not touch bulb surface bare-handed or with dirty gloves. If dirt is attached on glass surface of the bulb, immediately use alcohol or thinner to remove dirt, and install the bulb after well dried.

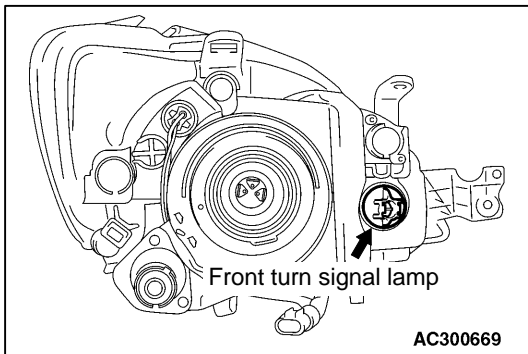


POSITION LAMP BULB REPLACEMENT

Disconnect connector, and screw out position lamp socket.

Caution

Do not touch bulb surface bare-handed or with dirty gloves. If dirt is attached on glass surface of the bulb, immediately use alcohol or thinner to remove dirt, and install the bulb after well dried.



FRONT TURN-SIGNAL LAMP BULB REPLACEMENT

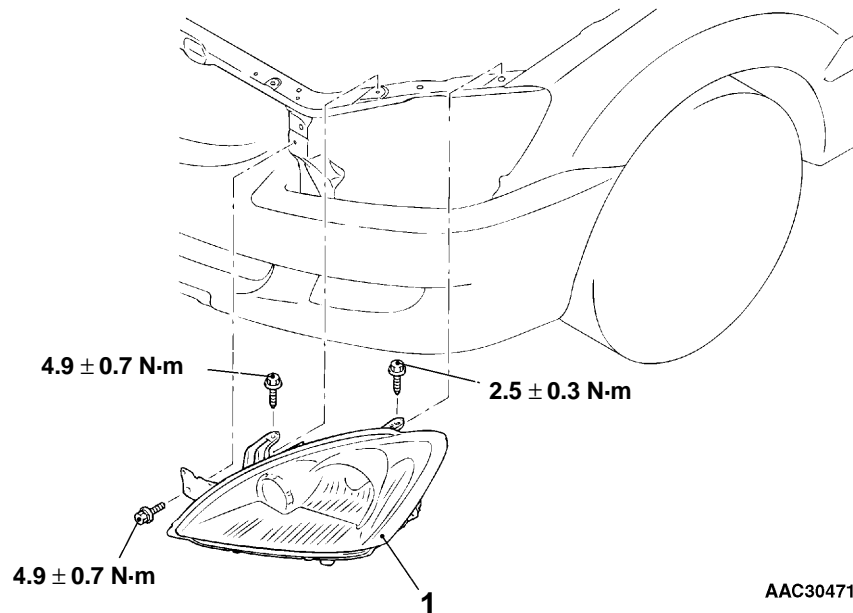
Disconnect connector, and screw out front turn-signal lamp socket.

Caution

Do not touch bulb surface bare-handed or with dirty gloves. If dirt is attached on glass surface of the bulb, immediately use alcohol or thinner to remove dirt, and install the bulb after well dried.

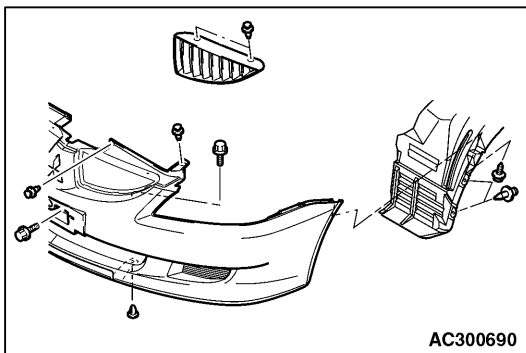
HEADLAMP ASSEMBLY

REMOVAL AND INSTALLATION



Removal steps

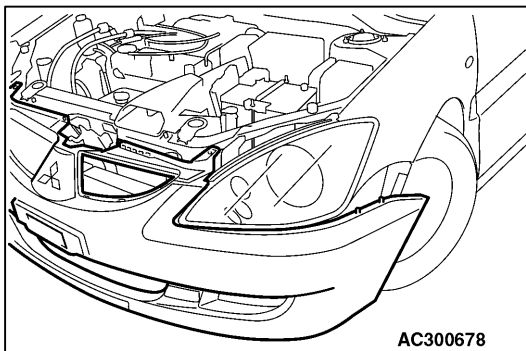
1. Headlamp assembly



REMOVAL SERVICE POINT

◀A▶ HEADLAMP ASSEMBLY REMOVAL

1. Remove the splash shield, the radiator grill, the front bumper assembly mounting clips, the screws and the bolts shown in the illustration.
2. Dislocate the front bumper and remove the headlamp assembly.



FRONT FOG LAMPS

SERVICE SPECIFICATION

Item	Standard value
Front fog lamp light axis check	Illuminates to within 40 metres

ON-VEHICLE SERVICE

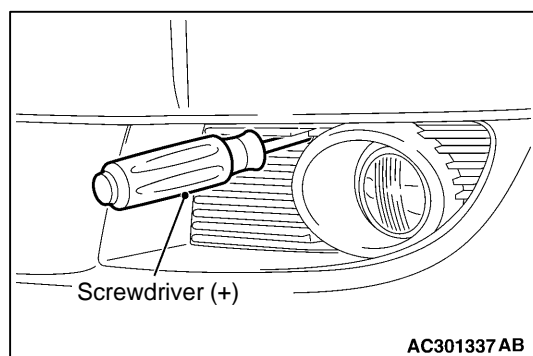
FRONT FOG LAMP AIMING CHECK

After setting the vehicle to the following condition, adjust the front fog lamp aiming.

- Check that the tyre inflation pressure is at the value indicated on the tyre pressure labels.
- Set the vehicle to the unladen condition and park it on a level surface.
- Have a single person (approximately 75 kg) sit in the driver's seat.
- Run the engine at a speed of 2,000 r/min to fully charge the battery.

Turn on the front fog lamps and check that the illumination is within the standard value range.

Standard value: Illuminates to within 40 metres



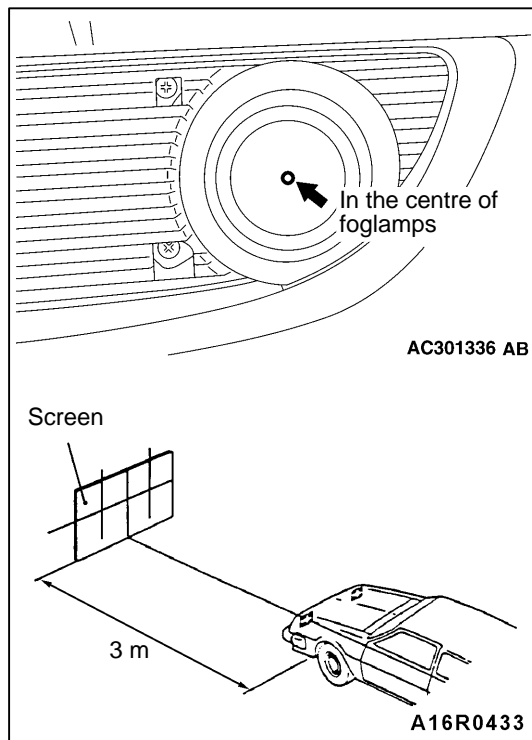
If the value is out of the standard value, insert the screwdriver (+) through the aiming hole on the side under cover to adjust by turning the adjusting gear for fog lamp aiming.

NOTE

Horizontal adjustment is not possible.

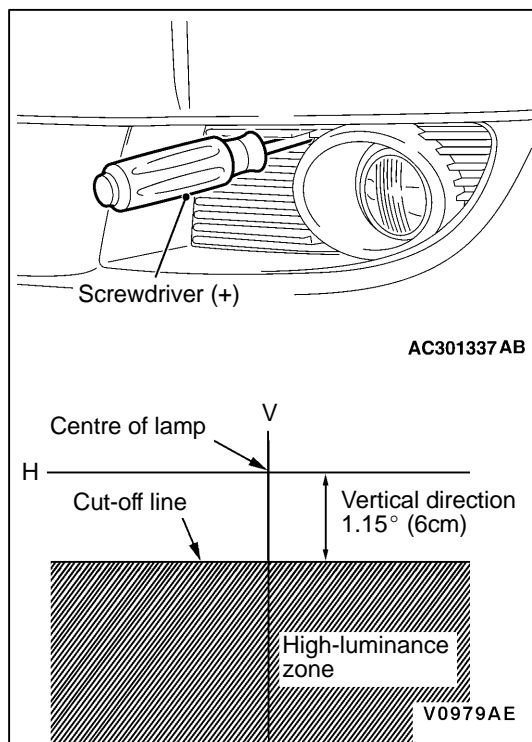
Caution

For the fog lamp which is not being measured, disconnect that fog lamp's connector if possible so that it does not illuminate while carrying out the adjustment. Furthermore, make sure that the light axis does not get shifted when re-connecting the connector.



In addition, the method of checking the light axis on a screen (simple check) is given below.

1. Place the screen so that it is directly opposite the centre of the fog lamp at a distance of 3 metres, and turn on the fog lamps.



2. Insert the screwdriver (+) through the aiming hole on the air intake bezel. By turning the adjusting gear for fog lamp aiming, align the cutoff line (border line of shadow temperature) with the specified position in the figure.

NOTE

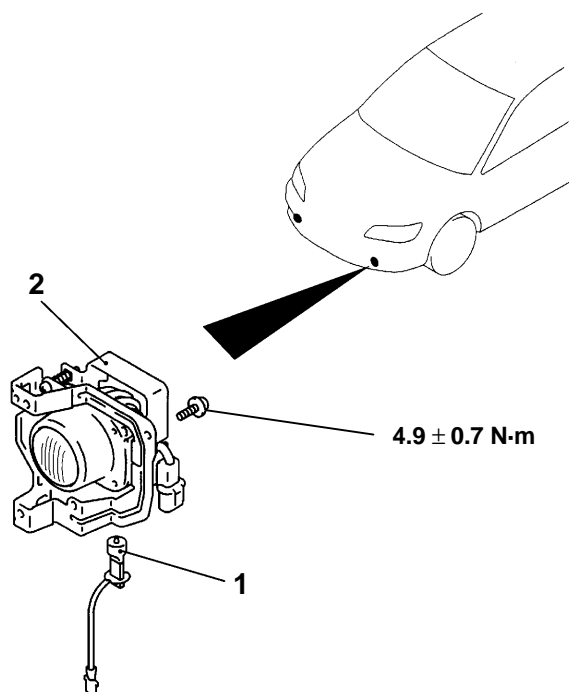
Horizontal adjustment is not possible.

Caution

For the front fog lamp which is not being measured, disconnect that fog lamp's connector if possible so that it does not illuminate while carrying out the adjustment. Furthermore, make sure that the light axis does not get shifted when re-connecting the connector.

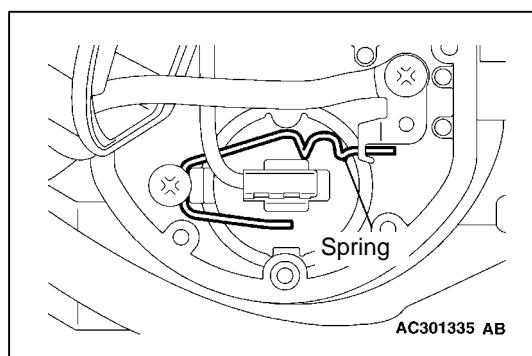
FRONT FOG LAMPS

REMOVAL AND INSTALLATION



Removal steps

- Side under cover
- 1. Front fog lamp bulb
- 2. Front fog lamp assembly



REMOVAL SERVICE POINT

◀A▶ FRONT FOG LAMP BULB REMOVAL

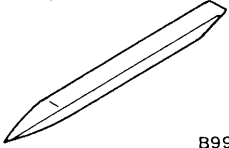
- (1) Remove the bulb cover.
- (2) Remove the bulb installation spring and extract the bulb.

Caution

Do not touch the surface of the bulb with bare hands or dirty gloves. If the surface (glass section) should become dirty, clean it immediately with alcohol or thinner, and let it dry thoroughly before installing it.

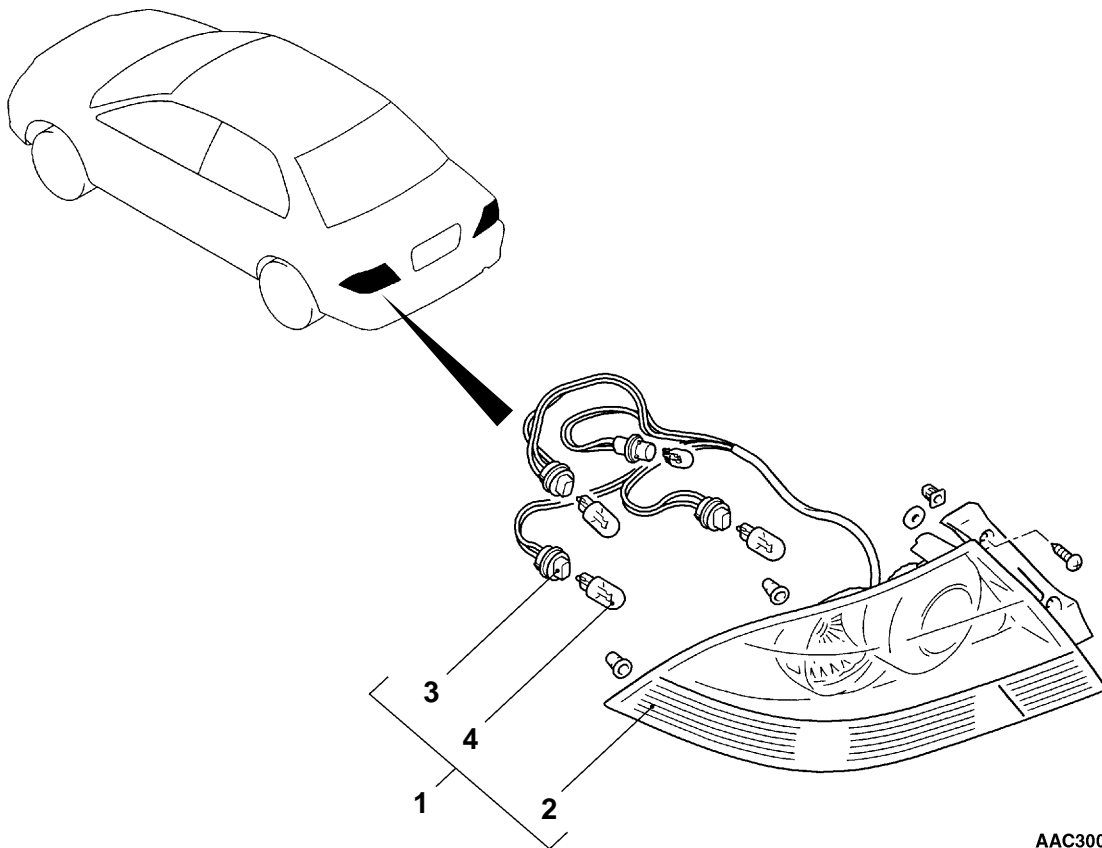
REAR COMBINATION LAMP

SPECIAL TOOL

Tool	Number	Name	Use
 B990784	MB990784	Ornament remover	Rear combination lamp removal

REAR COMBINATION LAMP

REMOVAL AND INSTALLATION



AAC300671

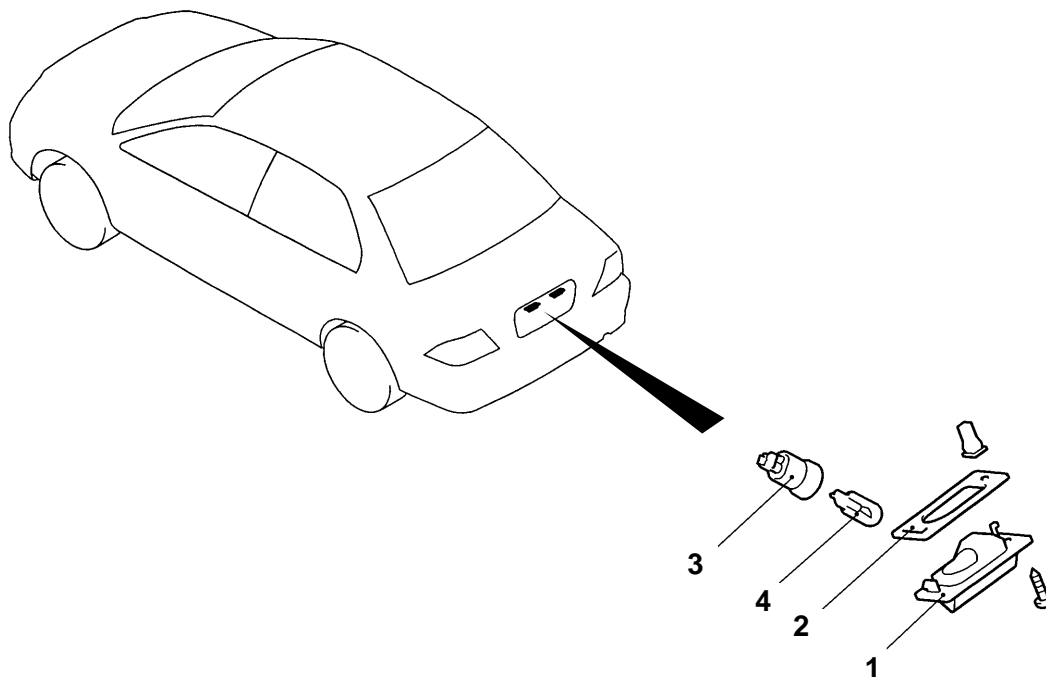
Removal steps

1. Rear combination lamp assembly
2. Rear combination lamp body

3. Socket assembly
4. Bulb

LICENCE PLATE LAMP

REMOVAL AND INSTALLATION



AAC300672

Removal steps

1. Licence plate lamp unit
2. Licence plate lamp base gasket

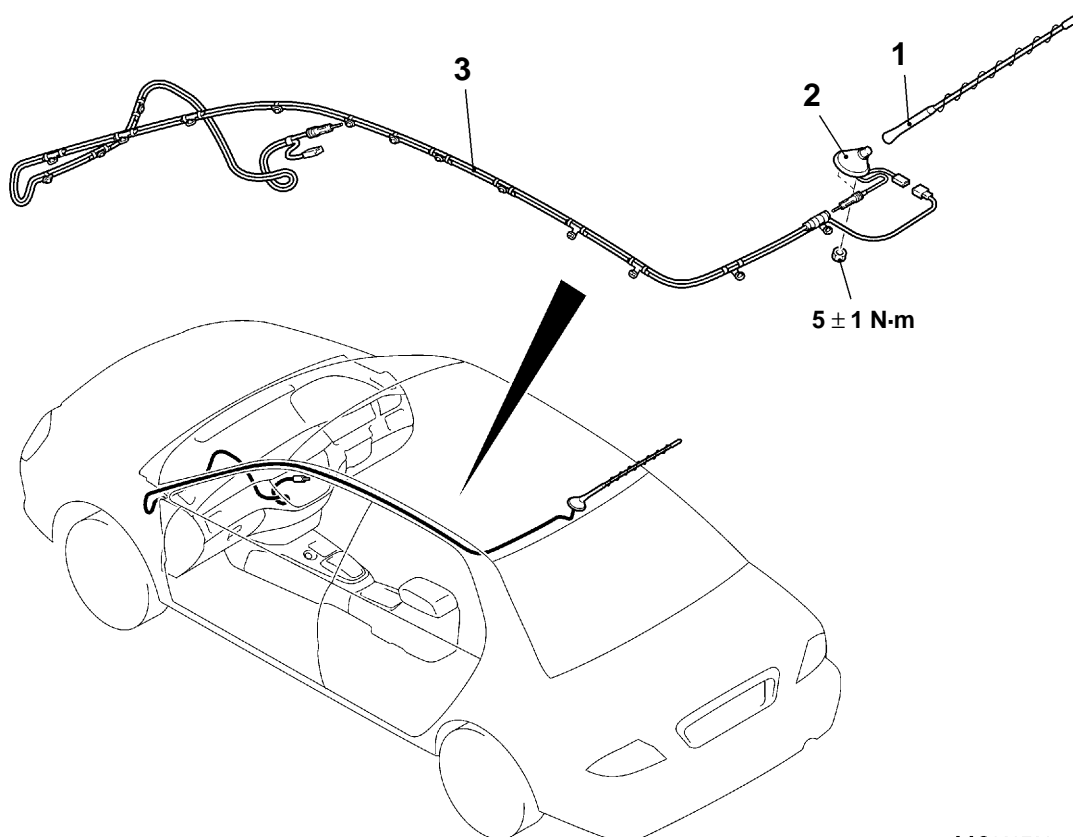
3. Socket
4. Bulb

ANTENNA

REMOVAL AND INSTALLATION

Pre-removal and Post-installation Operation

- Front Pillar Trim, Rear Pillar Trim, Centre Pillar Trim, Lower, Centre Pillar Trim, Upper Removal and Installation (Refer to GROUP 52A, Trims.)*
- Headlining Removal and Installation (Refer to GROUP 52A, Headlining.)*



AAC308761

Removal steps

1. Roof antenna pole
2. Roof antenna base
 - Instrument panel assembly (Refer to GROUP 52A, Instrument panel assembly.)*

3. Antenna feeder cable

NOTE

*: Refer to 2001 LANCER Workshop Manual (Pub No. PWME0021)