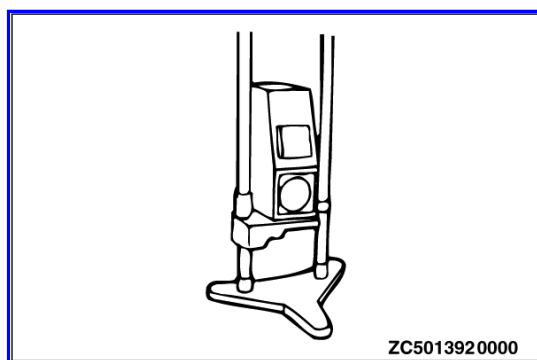


HEADLAMP AIMING

M15410900017ENG0000010000

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

USING A SCREEN (LOW-BEAM)

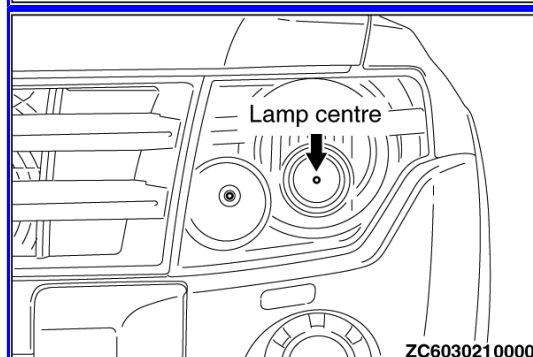
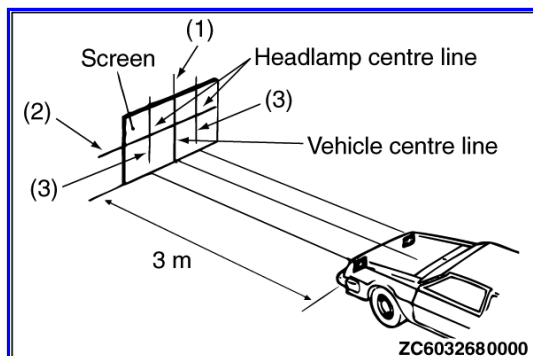
Pre-aiming instruction

1. Inspect for badly rusted or faulty headlamp assemblies.
2. These conditions must be corrected before a satisfactory adjustment can be made.
3. Inspect tyre inflation, and adjust if it is necessary.
4. If the fuel tank is not filled up, put weight in the luggage compartment to make up for the fuel shortage so that the weight will become 90% of full-state weight or heavier. (0.8 kg per litter)
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. Put the headlamp levelling switch in "0" position. <Vehicles with manual levelling system>

7. Thoroughly clean the headlamp lenses.



8. Place the vehicle on a level floor, perpendicular to a flat screen 3 m away from the bulb centre-marks on the headlamp lens.

9. Rock vehicle sideways to allow vehicle to assume its normal position.

10. To correct for distortion of the suspension, rock the bumpers on the front/rear side of the vehicle up and down three times alternately.

11. Run the engine at a speed of 2,000 r/min to charge the battery.

12. 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 is for reference to the centre line of each headlamp bulb.

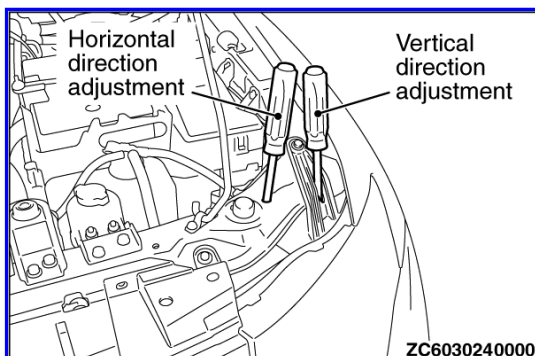
Headlamp adjustment

caution

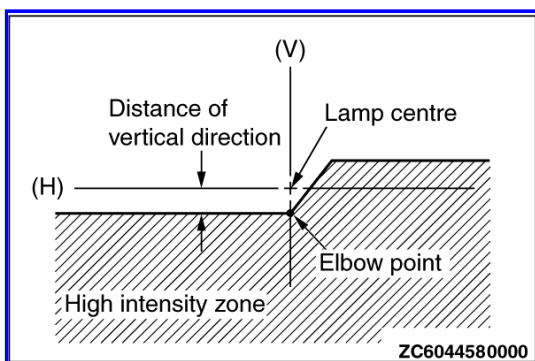
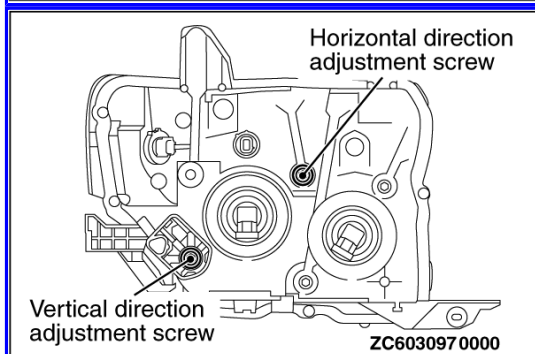
- ┆ Do not cover a headlamp for more than three minutes to prevent the plastic headlamp lens deformation.
- ┆ When adjusting one headlamp beam, make sure that another headlamp is off by disconnecting

the connector from it. When reconnecting the connector, make sure that the headlamp beam is not disturbed accidentally.

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



1. The low-beam headlamp 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; 36 mm (0.69°) below horizontal (H)

Horizontal direction; Elbow point intersects the vertical line (V)

Limit:

Vertical direction; 21 mm (0.4°) to 51 mm (0.98 °) below the horizontal (H)

Horizontal direction; ±26 mm (±0.5°) from the vertical line (V)

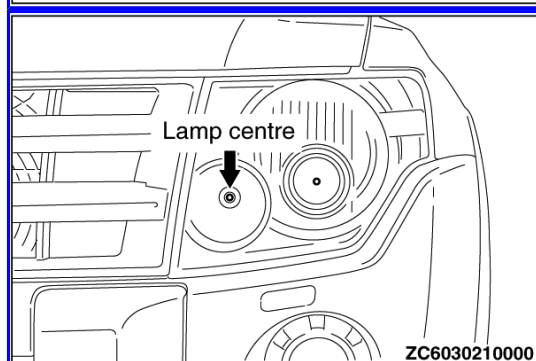
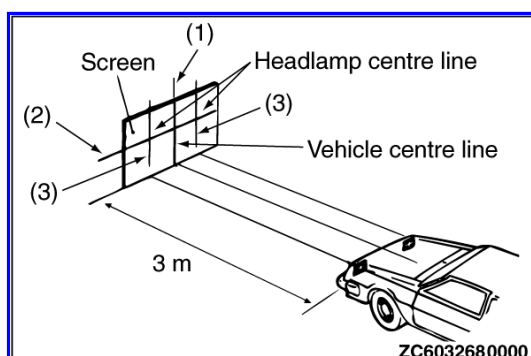
note

The illustration shows LH drive vehicles. For RH drive vehicles, it is symmetrical.

USING A SCREEN (HIGH-BEAM)

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 tyre inflation, and adjust if it is necessary.
4. If the fuel tank is not filled up, put weight in the luggage compartment to make up for the fuel shortage so that the weight will become 90% of full-state weight or heavier. (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 the headlamp lenses.



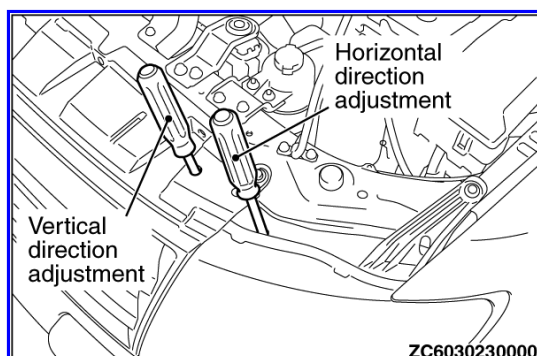
7. Place the vehicle on a level floor, perpendicular to a flat screen 3 m away from the bulb centre-marks on the headlamp lens.
8. Rock vehicle sideways to allow vehicle to assume its normal position.
9. To correct for distortion of the suspension, rock the bumpers on the front/rear side of the vehicle up and down three times alternately.
10. Run the engine at a speed of 2,000 r/min to charge the battery.
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 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 is for reference to the centre line of each headlamp bulb.

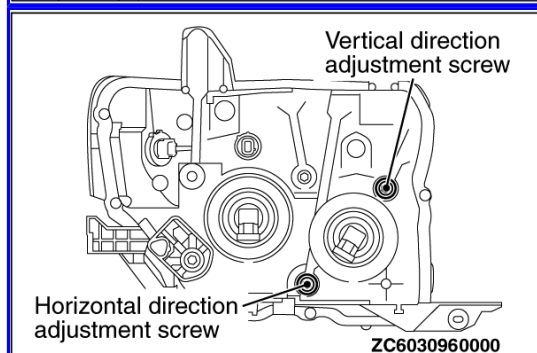
Headlamp adjustment

caution

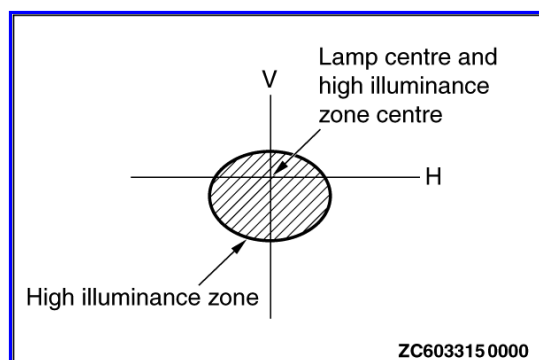
- ┆ Do not cover a headlamp for more than three minutes to prevent the plastic headlamp lens deformation.
- ┆ When adjusting one headlamp beam, make sure that another headlamp is off by disconnecting the connector from it. When reconnecting the connector, make sure that the headlamp beam is not disturbed accidentally.
- ┆ Be sure to adjust the aiming adjustment screw in the tightening direction.



1. The high-beam headlamp 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 high-beam cut-off location on the aiming screen.



Standard value:
Vertical direction and horizontal direction; Intersecting position of vertical line (V) and horizontal line

**(H)****Limit:****Vertical direction; 26 mm (0.5°) or less below the horizontal (H)****Horizontal direction; ± 26 mm ($\pm 0.5^\circ$) from the vertical line (V)**