

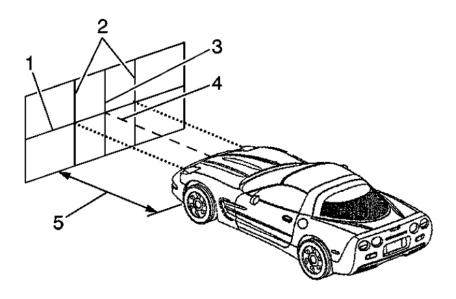
Headlamp Vertical Aiming Screw GENERAL MOTORS CORP.

Headlight aiming is only adjusted vertically. Vertical aiming of each of the composite headlamps is done by turning adjusting screws which move the headlamp capsule in relation to the headlamp frame. The vertical adjustment screw (1) is located on the inner wheelhouse.

Some state and local authorities have specific requirements for aiming the headlamps. These requirements must be followed.

Aiming Area Preparation

Choose an appropriate aiming area, then prepare the aiming screen as described in the following.



Choosing Headlamp Aiming Area GENERAL MOTORS CORP.

The aiming area should be darkened and large enough to accommodate the vehicle and an additional 7.62 m (25 ft) measured from the face of the headlamp capsules to the front of the screen.

The floor on which the vehicle rests must be flat with the bottom of the screen. If the floor is not level, compensate as necessary.

The aiming screen should be at least 1.52 m (5 ft) high by 3.66 m (12 ft) wide with a matte white surface well shaded from extraneous light, and properly adjusted to the floor on which the vehicle stands.

The screen should be provided with a vertical centerline (3), 2 laterally adjustable vertical tapes (2), and 1 vertically adjustable horizontal tape (1).

<u>IMPORTANT:</u> For each vehicle checked, the horizontal line or tape (1) on the screen must be adjusted. Vehicles of the same model and year may have different standing height for the headlamp

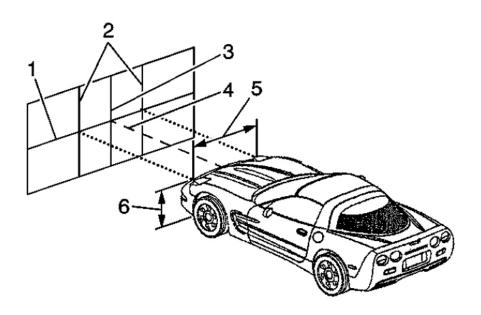
Make provisions to allow the screen to be movable, so that it can be aligned parallel with the rear axle of the vehicle. This will allow for a horizontal line drawn perpendicular to the centerline of the screen to pass through the center point between the 2 headlamp capsules (4).

After the aiming screen has been set up in a permanent location, paint or tape a reference line on the floor 7.62 m (25 ft) from the screen, to identify the proper location of the headlamp capsules when they are being aimed (5).

If a regular commercial aiming screen is not available, the screen may consist of a vertical wall having a clear uninterrupted area at least 1.83 m (6 ft) high by 3.66 m (12 ft) wide, finished with a washable non-gloss white paint.

Vehicle Preparation

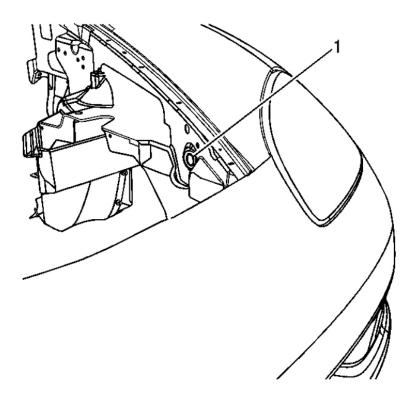
Prepare the vehicle for checking the headlamp beam aim as follows:



Preparing Vehicle For Adjusting Headlamp Beam Aim

- 1. Make sure that all the components are in place on the vehicle, if other service has been performed on the vehicle.
- 2. The vehicle must have a full tank of gas.
- 3. Make sure the tires are inflated to the proper pressures.
- 4. Stop all other operations of work on the vehicle.
- 5. Position the vehicle so it is square with the aiming screen, and with the headlamp capsules directly over the reference line which has been painted or taped on the floor.
- 6. Locate the vertical center line on the aiming screen (3) so that it is in line with the center of the vehicle (4). This can be accomplished by sighting through the center of the rear window and over the hood.
- 7. Mark the vertical center of the front and rear windows with narrow tape. Use these marks as sights to locate the centerline of the vehicle. Move the vehicle or the screen until the center line of the screen comes into alignment with the 2 points.
- 8. Close the doors.
- 9. Rock the vehicle sideways to stabilize the suspension.
- 10. Measure the height from the floor to the horizontal center of a headlamp capsule lens (6). Adjust the horizontal tape on the aiming screen (1) to match this dimension.
- 11. Measure the distance between the centerline of the right headlamp capsule lens and the center of the left headlamp capsule lens (5). Position the vertical tapes on the aiming screen (2) this distance to the right and left of the screen centerline.

Adjustment Procedure



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- 1. Raise the hood.
- 2. Turn on the low beam headlamps and block the light from projecting onto the screen from the passenger side headlamp.
- 3. Inspect the vertical aim.
- 4. Adjust the aim using the vertical adjusting screw, to align the top edge of the high intensity zone to the headlamp horizontal centerline (2), within the range of 51 mm (2 in) above (6) the lamp horizontal centerline (2), to 64 mm (2.5 in) below (5) the lamp horizontal centerline (2) on the aiming screen.
- 5. Repeat the aiming procedure for the passenger side headlamp while blocking the light from projecting onto the screen from the driver side headlamp.
- 6. Turn OFF the headlamps.

IMPORTANT: DO NOT cover the headlamp, this may cause excessive heat build up.

7. Close the hood.