

Headlamp

The vehicle is equipped with a vehicle headlamp aim device on each headlamp (13008). Each headlamp may be properly aimed in the horizontal direction (left/right) and the vertical direction (up/down) by following the procedures as outlined. The horizontal aim must be adjusted first.

Position the vehicle on a surface that is level in the front-to-rear direction.

NOTE: Because the vehicle automatic air suspension system requires certain "threshold" conditions to actuate the "level" adjustment, inspection of the headlamp's vertical aim may indicate an out-of-adjustment condition even if the vehicle is on a level ground and the headlamp vertical aim is not out of range. Do not reset the headlamp aim without performing the following steps to engage the automatic air suspension system leveling feature.

Let the vehicle's air suspension adjust the ride height setting as follows:

1. Make sure the air suspension switch on the LH side of the luggage compartment is ON.
2. Start the engine, lower the driver window, make sure the transmission is in PARK, set the parking brake and pull the hood latch control handle.
3. Get out of the vehicle and leave the driver door open (passenger door closed).
4. Sit or step on the front bumper to lower the front of the vehicle.
5. Close the driver door.
6. Stay until the air compressor stops raising the front of the vehicle.
7. Sit or step on the rear bumper to lower the rear of the vehicle.
8. Open, then close the driver door.
9. Stay until the air compressor stops raising the rear of the vehicle (the front of the vehicle will vent after rear is done pumping).
10. Open and close the driver door (the rear of the vehicle will vent and the front and rear will now be at the proper ride height setting.)
11. Reach in the window and turn the engine off.
12. Do not lean on the vehicle until after the headlamps have been adjusted.

After the ride height is set, adjust the headlamp horizontal aim as follows:

1. Open the hood and lift the headlamp access panel. Locate the horizontal indicator and adjusting screw. They are located closest to the center of the vehicle.

To properly aim the headlamps use Rotunda Headlight Aiming Kit 196-00001 or equivalent and follow these instructions. Adapters cannot be used on the headlamps due to the lack of aiming pads. Low beam is the only adjustment. Use a 4 mm wrench to turn the horizontal adjusting screw.

The secondary indicator clip is used only to calibrate the horizontal "0" point after vehicle service from damage. It should be lined up to the "0" point on the gray retainer from the factory. If the

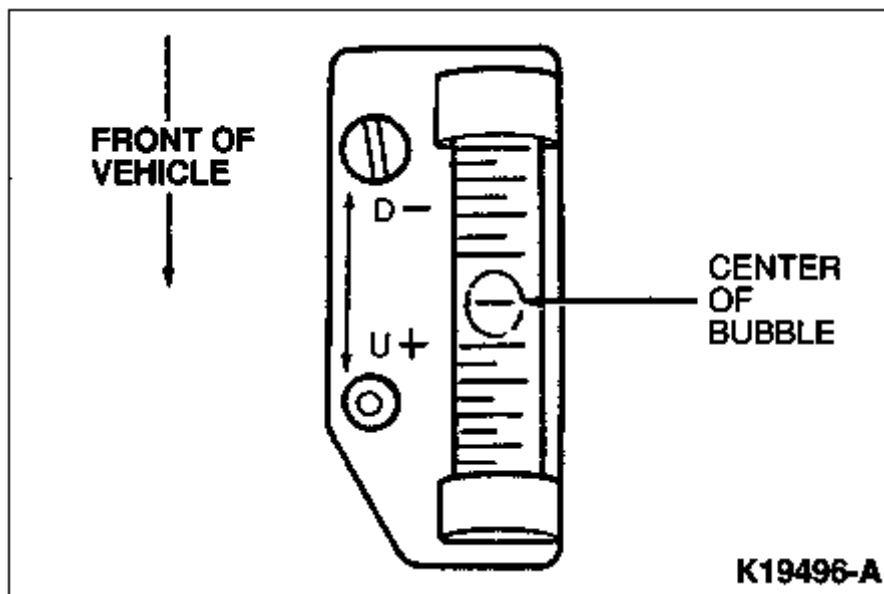
vehicle has been serviced in the front end and the clip is not lined up to the "0" on the gray retainer, the large pointer on the clip becomes the new "0" horizontal point. The screw line should then be lined up to the clip for horizontal adjustment.

To set the secondary indicator clip pointer, after service, use the Rotunda Headlight Aiming Kit 196-00001 or equivalent to set the proper horizontal aim. After the horizontal aim is set, move the secondary indicator clip pointer to align with the smooth-to-knurl intersection on the screw (ignore the "0" indicator on the gray retainer). This becomes the new "0" point.

NOTE: Do not adjust the vertical aim until after adjusting the horizontal aim.

- | With the hood open, locate the bubble level vertical aim indicator. It is visible through a clearance opening in front of the headlamp access panel.
- | With the vehicle on a level surface, use a 4 mm wrench to turn the vertical aim adjustment screw, located on the back of the lamp assembly, clockwise or counterclockwise until the bubble in the spirit level is centered.
- | Close the headlamp access panel when the horizontal aim has been completed.
- | Close the hood.

Vertical Aim Indicator With a Spirit Level Properly Centered



NOTE: A non-zero bubble vial reading does not necessarily indicate out-of-aim headlamps. If vehicle is not positioned on a surface that is level in the front-to-rear direction, the slope will be included in the vial reading. Therefore, vertical headlamp adjustment should be performed only when beam direction appears to be incorrect or a level surface can be verified to allow accurate reference of bubble vial.

If the vehicle cannot be placed on a true level surface, the headlamps still can be adjusted using the vertical headlamp aim device if the slope of the surface is accurately known and does not differ by more than 1.2 degrees from true level. A difference of 60 mm (2.37 inch) in height of the surface between the front and rear wheels corresponds to 1.2 degree slope.

If the vehicle is on a downward or upward slope of not more than 1.2 degrees, the vertical headlamp aim device's bubble level can be used to correct for the effects of the surface slope, provided that the slope is accurately known.

Each graduation of the bubble level represents 0.19 degrees of downward or upward slope. To correct for

the effects of a surface slope, turn the vertical aim adjustment screw until the bubble is centered at a position corresponding to the slope of the surface.

Each 2.5 mm (0.1 inch) difference in surface height between the front and rear wheel corresponds to 0.051 degrees of surface slope; each 0.19 degrees of surface slope corresponds to a 9.4 mm (0.37 inch) difference in surface height between the front and rear wheels.
