65138–01

ADJUSTMENT

1. VEHICLE PREPARATION FOR HEADLAMP AIM ADJUSTMENT

(a) Prepare the vehicle:

- Ensure there is no damage or deformation to the body around the headlamps.
- Fill the fuel tank.
- Make sure that the oil is filled to the specified level.
- Make sure that the coolant is filled to the specified level.
- Inflate the tires to the appropriate pressure.
- Place the spare tire, tools, and jack in their original position.
- Unload the trunk.
- Sit a person of average weight (75 kg, 165 lbs) in the driver's seat.

2. PREPARATION FOR HEADLAMP AIMING (Using a screen)

(a) Prepare the vehicle according to the following conditions:

- Place the vehicle in a location that is dark enough to clearly observe the cutoff line. The cutoff line is a distinct line, below which light from the headlamps can be observed and above which it cannot.
- Place the vehicle at a 90° angle to the wall.
- Create a 25 m (82 ft) distance between the vehicle and the wall.
- Place the vehicle on a level surface.
- Bounce the vehicle up and down to settle the suspension.

NOTICE:

A distance of 25 m (82 ft) between the vehicle and the wall is necessary for proper aim adjustment. If unavailable, secure a distance of exactly 3 m (9.84 ft) for check and adjustment. (The target zone will change with the distance so follow the instructions in the illustration.)

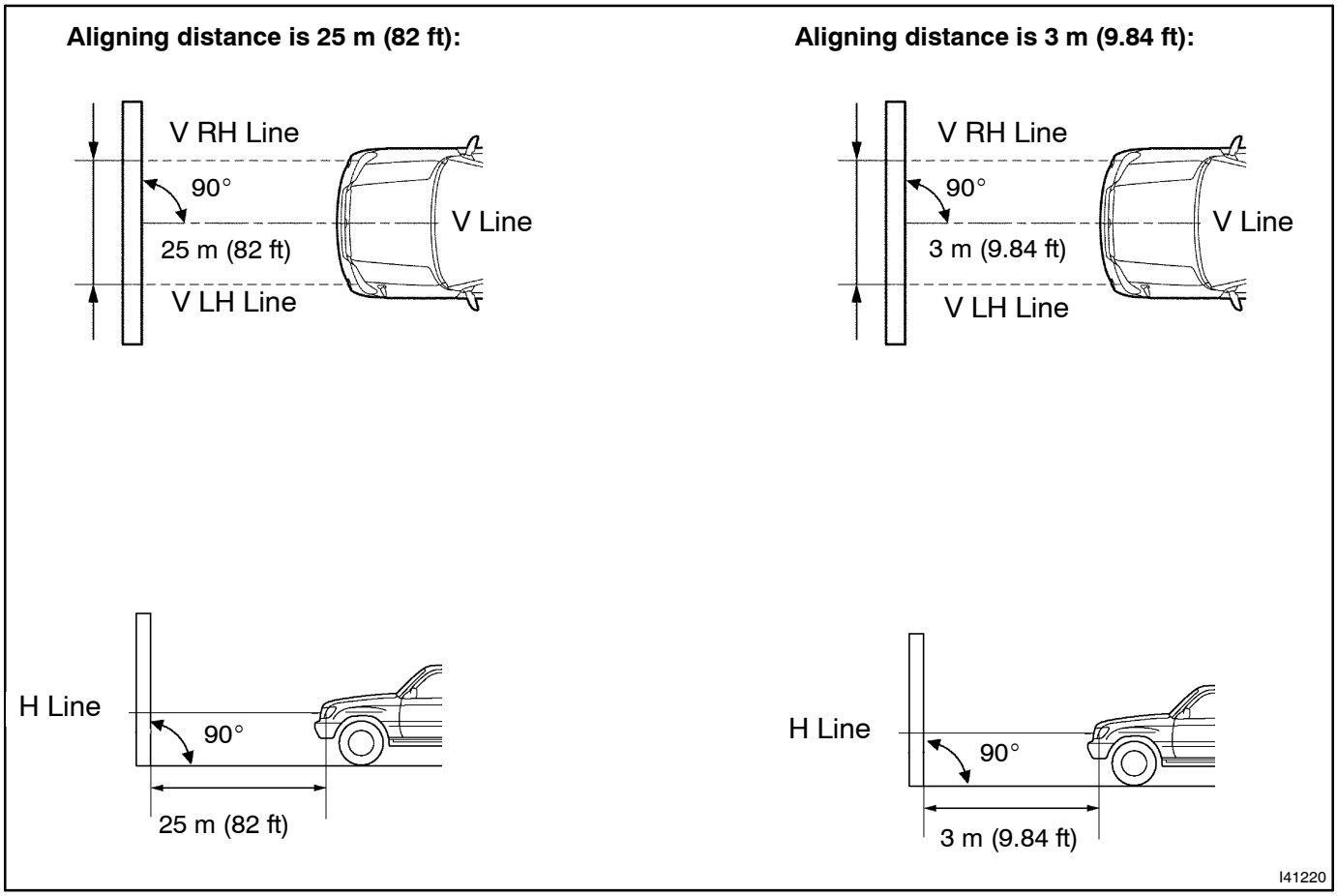
(b) Prepare a piece of thick white paper (approximately 2 m (6.6 ft) (height) x 4 m (13.1 ft) (width)) to use as a screen.

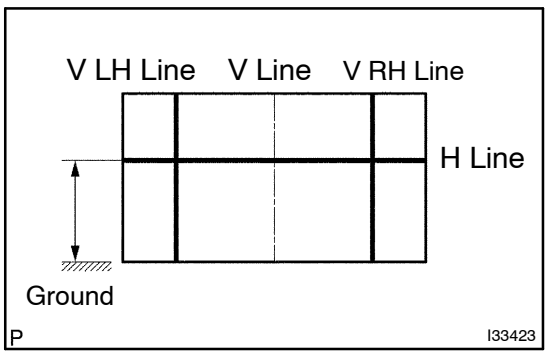
(c) Draw a vertical line down the center of screen (V line).

(d) Set the screen as shown in the illustration.

HINT:

- Stand the screen perpendicular to the ground.
- Align the V line on the screen with the center of the vehicle.





(e) Draw base lines (H line, V LH, V RH lines) on the screen as shown in the illustration.

HINT:

- The base lines differ for ”low–beam inspection” and ”high–beam inspection”.
- Mark the headlamp bulb center marks on the screen. If the center mark cannot be observed on the headlamp, use the center of the headlamp bulb or the manufacturer’s name marked on the headlamp as the center mark.
  (1) H Line (Headlamp height):
  Draw a horizontal line across the screen so that it passes through the center marks. The H line should be at the same height as the headlamp bulb center marks of the low–beam headlamps.
  (2) V LH Line, V RH Line (Center mark position of left–hand (LH) and right–hand (RH) headlamps):
  Draw two vertical lines so that they intersect the H line at each center mark (aligned with the center of the low–beam headlamp bulbs).

3. HEADLAMP AIMING INSPECTION

(a) Cover or disconnect the connector of the headlamp on the opposite side to prevent light from the headlamp not being inspected from affecting headlamp aiming inspection.

NOTICE:

Do not keep the headlamp covered for more than 3 minutes. The headlamp lens is made of synthetic resin, and may easily melt or be damaged due to heat.

HINT:

When checking the aim of the high–beam, cover the low–beam or disconnect the connector.

(b) Start the engine.

NOTICE:

Engine rpm must be 1,500 or more.

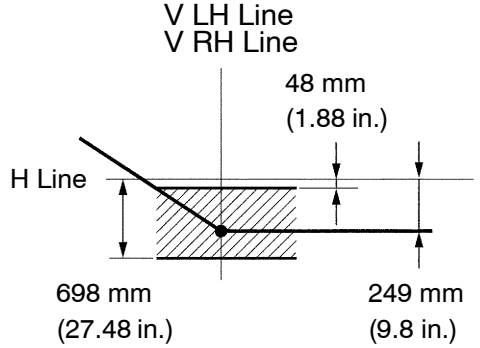
(c) Turn on the headlamp and make sure that the cutoff line falls within the specified area, as shown in the illustration.

HINT:

Since the low–beam light and the high–beam light are a unit, if the aim on one is correct, the other should also be correct. However, check both beams just to make sure.

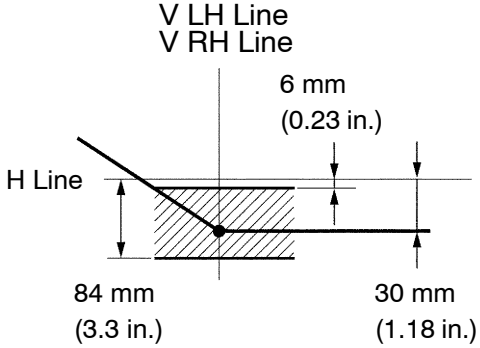
Aligning distance is 25 m (82 ft):

Low Beam:

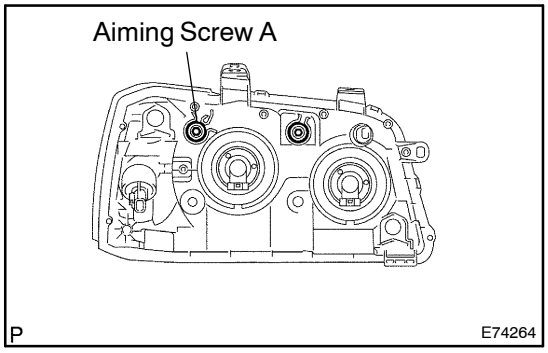


Aligning distance is 3 m (9.84 ft):

Low Beam:



I41222



4. HEADLAMP AIMING ADJUSTMENT

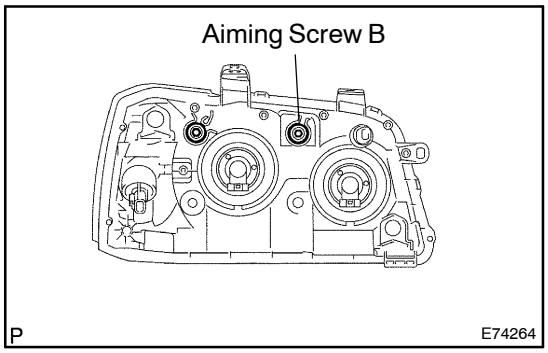
(a) Adjust the aim vertically:
Adjust the headlamp aim into the specified range by turning aiming screw A with a screwdriver.

NOTICE:

The final turn of the aiming screw should be made in the clockwise direction. If the screw is tightened excessively, loosen it and then retighten it, so that the final turn of the screw is in the clockwise direction.

HINT:

- Perform low–beam aim adjustment.
- The headlamp aim moves up when turning the aiming screw clockwise, and moves down when turning the aiming screw counterclockwise.



(b) Adjust the aim horizontally:
Adjust the headlamp aim into the specified range by turning aiming screw B with a screwdriver.

NOTICE:

The final turn of the aiming screw should be made in the clockwise direction. If the screw is tightened excessively, loosen it and then retighten it, so that the final turn of the screw is in the clockwise direction.

HINT:

Perform low–beam aim adjustment.