

E153438

GENERAL PROCEDURES > HEADLAMP ADJUSTMENT

Adjustment

1.

 **NOTE:** If the flash video link does not load or is incompatible with your browser, a .wmv version of the video can be accessed at: http://www.fordservicecontent.com/Ford_Content/videos/FusionHeadlampAdj2.wmv

All headlamp types

 **NOTE:** Refer to the Owner's Literature for the headlamp adjustment screw location.

 **NOTE:** Consult your state vehicle inspection manual for recommended tolerance ranges for visual aiming.

 **NOTE:** Horizontal aim is not adjustable.

2.

Identify the headlamp type. Vehicles are equipped with Visually Optically Aligned Left (VOL) or Visually Optically Aligned Right (VOR) headlamps. Molded in small letters on the headlamp lens is one of the following: VOL and SAE or VOR and SAE.

3.

 **NOTE:** Before starting headlamp adjustment, entry conditions must be met.

Vehicle must be on level ground.

Tires must be correctly inflated.

Vehicle must be normally loaded.

Headlamps must be clean.

Headlamps must operate correctly.

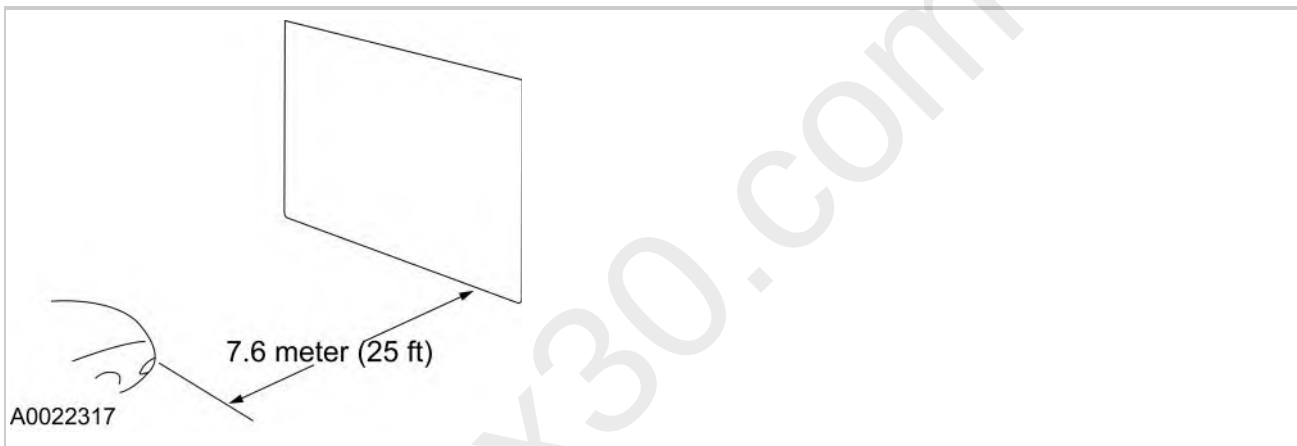
Air suspension switch must be on (if equipped).

4.



NOTE: The vertical wall or screen must be a minimum of 2.4 m (8ft) wide.

Park the vehicle on a level surface approximately 7.6 m (25 ft) from the vertical wall or screen directly in front of it.

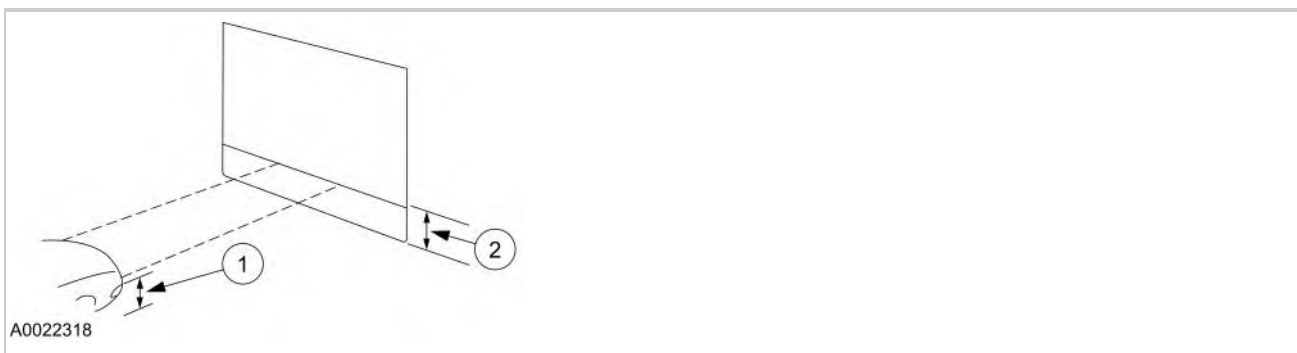


5.



NOTE: The bulb center of the low beam bulb is sometimes marked on the lens (circle, crosshair or other mark) or is the center of the low beam reflector, bulb shield or the low beam projector inner lens.

Measure the center of the headlamp height to ground and record the measurement.



6.



NOTE: Use a 2.4 m (8 ft) section of masking tape for the horizontal reference line.

For vehicles with headlamp bulb center heights below 95 cm (37.5 inches), place the horizontal reference line equal to the headlamp bulb center height.

For vehicles with headlamp bulb center heights between 95 cm - 105 cm (37.5 - 41.5 inches), place the horizontal reference line at the headlamp bulb center height minus 1.3 cm (0.5 inch).

For vehicles with headlamp bulb center heights above 105 cm (41.5 inches), place the horizontal reference line at the headlamp bulb center height minus 2.5 cm (1.0 inch).

7.



NOTE: Carry out this procedure in a dark environment to effectively see the headlamp beam pattern.

Turn the low beam headlamps on to illuminate the wall or screen and open the hood.

8.



NOTE: The cut off of the beam pattern is the horizontal line of the beam pattern where there is MAXIMUM change between light and dark.

On the wall or screen, locate the cut off of the beam pattern.

VOR-type headlamps



NOTE: Procedure applies to both left and right headlamps with VOR molded on lens.

9.



NOTE: The appearance of the VOR beam pattern may vary between vehicles.

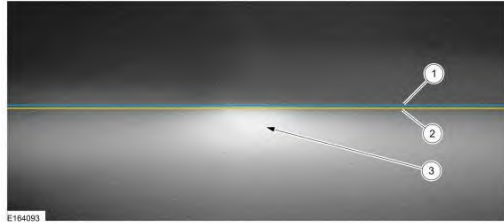
There is a distinct cutoff in the right portion of the beam pattern.

10.

1 - Horizontal reference line

2 - Cut off

3 - High intensity zone



11.



NOTE: Align one headlamp while covering the other headlamp.

Align the headlamps to the horizontal reference line. Adjust the headlamp as necessary using the headlamp adjusting screw.

12.

Repeat the previous step for the remaining headlamp.

VOL-type headlamps



NOTE: Procedure applies to both left and right headlamps with VOL molded on lens.

13.



NOTE: The appearance of the VOL beam pattern may vary between vehicles.

For VOL-type headlamps, there is a distinct cutoff in the left portion of the beam pattern. The edge of this cutoff should be positioned 5 CM (2 in) below the horizontal reference line.

14.

1 - Horizontal reference line

2 - Cut off

3 - High intensity zone