

INSTALLATION INSTRUCTIONS

⚠ WARNING

To properly install this headlight you should have a good understanding of automotive electrical procedures and systems, and proficiency in the installation of headlights. **IF YOU DO NOT, PLEASE SEEK PROFESSIONAL ASSISTANCE.**

BEFORE INSTALLATION:

Estimated Time: 30 minutes

Tools Needed: Flathead Screwdriver
Philips Screwdriver
10mm Socket & Ratchet

In the Box:
(2x) Bucket
(2x) Bezel
(2x) Mounting Ring
(2x) Wiring adapters
(2x) Hardware Bags (Not Shown)



PRE-INSTALLATION INSTRUCTIONS:

1. Read all safety notes and mounting guidelines before installing the product. Verify that all parts listed under "In the Box" are present and complete.
2. Inspect the product for damage. DO NOT install the product if there is any damage. Contact the authorized retailer where you purchased it to initiate a warranty claim if there is damage.
3. Verify that all power supply and/or charging systems comply to the specified voltage limits for the light.

NOTES:

In using this guide, you agree J.W. Speaker is not responsible for any damage, misuse, or personal injuries. This document is intended as an educational guide only and does not make guarantees on any finished results.

To properly install this light you should have a good understanding of automotive electrical procedures and systems, and proficiency in the installation of headlights. **IF YOU DO NOT, PLEASE SEEK PROFESSIONAL ASSISTANCE.**

NOTE: Headlights are SOLD SEPARATELY

PRODUCT WARRANTY:

If you have issues with a J.W. Speaker product, please contact the authorized retailer where you purchased it.



INSTALLATION INSTRUCTIONS:

Before you begin the installation process, create marks where your stock headlight beam pattern is on a wall or flat surface about 10-15 feet back. **Don't move your vehicle until you are finished with the install.** Use these marks for aiming your new 7" J.W. Speaker LED headlights once they are installed. Tools required for the install: Flathead screwdriver, Philips screwdriver, 10mm socket & ratchet.

1. Remove 6 clips located on the top of the grille using a flathead screwdriver. Once they are in the open position, pull the grille forward and off the Jeep. Note: there are some clips on the bottom that will come off just by using force.



2. Take out the old halogen headlights by loosening the 10mm bolts (x3). Once the bolts are loose, the entire housing can be removed from the vehicle and the wire adapter can be unplugged.



3. Unbox all the parts from the bracket kit set and identify all the parts for each headlight. It will contain 2 of each: bucket, bezel, mounting ring, wire adapter and hardware. (See image below)



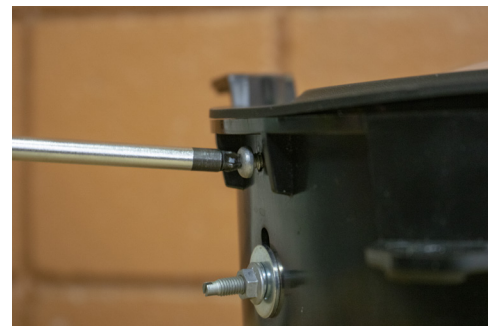
4. Insert your new 7" J.W. Speaker LED headlight into the bucket. Align the 3 rotational notches around the inner perimeter of the bucket with the 3 protrusions on the back of your new 7" J.W. Speaker headlight. It will drop into the bucket properly if you position the top of the light between the top 2 mounting points.



5. Connect the mounting ring over the headlight to secure the headlight into the bucket. Use the SHORTER Philips screws (x3) to secure the mounting ring.



6. Mount the Bezel on the bucket by aligning the slots on the outside perimeter of the bucket with the screw holes. Push down on the bezel to get them aligned. Secure the bezel by using the LONGER Philips screws (x4).



INSTALLATION INSTRUCTIONS:

7. Connect the wire adapter to your 7" J.W. Speaker LED headlight and plug the other end into the wire adapter from your Jeep.



8. Install the bucket into the existing front housing by fastening the 10mm bolts (x3). Double-check the alignment of the studs and holes before tightening up the bolts. Repeat on other headlight



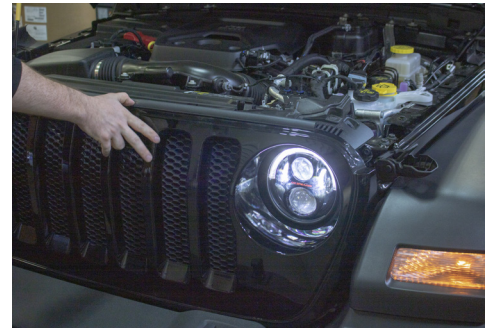
9. With both headlight kits assembled and mounted onto the front housing of your Jeep. You are ready to aim your headlights. Aim the new headlights to the same height as the original beam pattern that you marked before we started this install. This is done by turning the vertical adjuster with a Philips screwdriver. (Located on the top of the housing)



10. After you have the headlight pattern properly aimed, remove the headlights again and to tighten the 3 bolts on the bucket. This will prevent the new headlights from shaking and vibrating. **Be careful to not over or under tighten the bolts.**



11. Re-install your the grille to complete your installation.



HEADLIGHT AIMING INSTRUCTIONS

FOR LOW AND HIGH/LOW HEADLIGHTS

⚠ WARNING

Headlight must be securely mounted and properly aimed such that the beam pattern "cut off line" complies with all applicable regulations. **If you are not familiar with the legal requirements for aiming your headlights, please see a professional service provider.** We recommend that headlights are aimed with a headlight aiming system for proper alignment. Failure to properly aim your headlights is a risk to other drivers and could result in tickets or citations with local authorities. J.W. Speaker is not liable for any damage to the vehicle or light, or any tickets/citations as a result of using these guidelines.

BEFORE AIMING:

1. Vehicle is being aimed on a level surface.
2. All tires are properly inflated.
3. Vehicle is at normal driving height.

REQUIRED SUPPLIES:

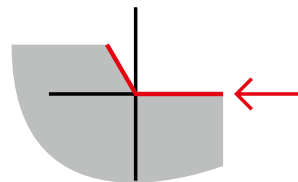
- Tape or chalk to mark lines
- Corresponding tools for your vehicle's aiming mechanism

OPTIONAL SUPPLIES:

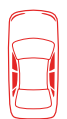
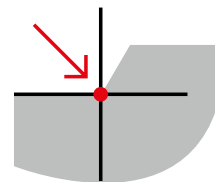
- Laser level to expedite the aiming process and will help to increase accuracy in aiming

KEY TERMS:

Kink (elbow): The top of the pattern that is the cut-off when aimed at a wall.



Alignment Point: The center of the angle in the Kink that must align to the center point when aiming the light at a wall.



LHT (Left Hand Traffic):
ECE Regulation countries
like the United Kingdom

RHT (Right Hand Traffic):
DOT (and some ECE)
Regulation countries like
the United Kingdom

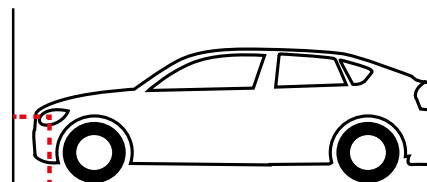


*The following instructions are illustrated for RHT vehicles.
Aiming for LHT vehicles will be mirrored to what is shown.*

AIMING GUIDELINES:

1. Park your vehicle close to a wall, in an area where there is at least 7.62 meters (25 feet) of space behind it (excluding the car length).

2. On the wall, draw a line from the ground to the approximate center point of the headlight. Repeat for the other headlight. This will create your Y axis lines.



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AIMING GUIDELINES CONTINUED:

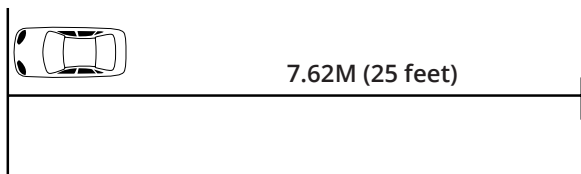
3. Connect the center points between headlights in a straight line, using chalk or tape. This will create your X axis (horizontal) line. **NOTE:** Use a straight edge and a level to make sure this line is straight.



4. Extend your vertical, Y (vertical) axis lines up approximately 3 feet. Your lines should match the diagram below, when looking at the lines straight on.

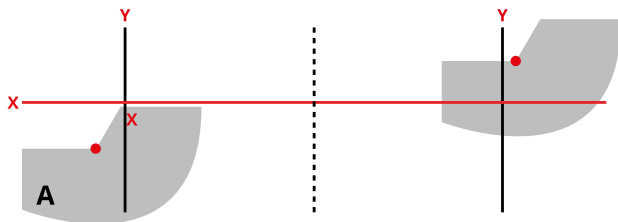


5. Reverse your vehicle in a straight line so that the front of the headlights are 7.62 meters (25 feet) back from the wall.

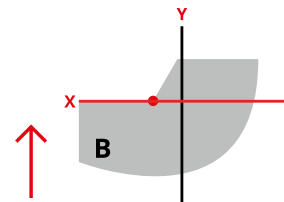


The goal of this sheet is to aim BOTH of your headlights so that the **Alignment Point** is at the crosssection of the horizontal X and vertical Y lines you have drawn. The following directions illustrate the process and proper aiming of headlights.

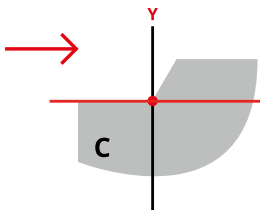
6. When you first turn on your vehicle after installing your headlights, the **Alignment Points** may be positioned differently than shown and will likely be aimed differently from each other.



7. Using the alignment mechanisms in your vehicle, adjust one headlight vertically until the **Alignment Point** is even with the X axis.



8. On the same headlight, adjust horizontally until the **Alignment Point** is even with the Y axis.



9. Repeat this process on the other headlight. Both headlights should match the diagram below, where the **Alignment Point** is even with the point where the X and Y axis crosses.

