INSTALLATION INSTRUCTIONS

A 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: 13mm Socket or Wrench

T25 Torx Wrench

Pliers

Flat Head Screwdriver

Kit Includes: 1. (x1) Front Plate

2. (x1) Middle Plate

3. (x1) Back Plate

4. (x3) 1/4 Thick nut

5. (x3) 1/4 Nut

6. (x3) Split washer

7. (x3) 1/4 Washer

8. (x3) Shock Mount

9. (x1) Adjustment Spring

10. (x1) Torx T25 Bolt

11. (x2) Flat Head Slotted Bolts

12. (x3) Flat Head Bolts

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:

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.







Bucket Assembled with Headlight, Front View

▲ WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov ▲ AVERTISSMENT: Cancer et effet nocif sur la reproduction - www.P65Warnings.ca.gov

PRODUCT WARRANTY:

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



BEFORE BEGINNING: This bucket mount assembly is designed specifically for PAR 56 headlights. Before starting assembly, verify that all components listed in the parts inventory are present and be sure to use the proper tools and follow the torque specifications noted in the instructions.

Step 1: Assemble Shock Mounts to Back Plate

1. Thread a 1/4" thick nut onto the shock mount stud.



- 2. Insert the shock mount through the back plate from the back side.
- 3. On the front side, layer the following onto each stud:



- 1.1/4" Washer
- 2. Split Washer
- 3.1/4" Nut

4. Tighten each assembly to 16 in-lb using a torque wrench.



Step 2: Install Adjustment Spring

1. Position the adjustment spring and secure it to the back plate using the Torx T25 bolt.



2. Tighten the bolt to 14 in-lb.





Step 3: Pre-load Slotted Bolts

1. Thread all flat head slotted bolts into the back plate. Leave approximately 1 inch of each bolt sticking out.



Step 4: Install Middle Plate

1. Align the middle plate and slot it into the slotted flat head bolts.

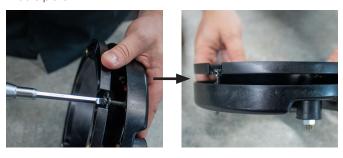


2. Using pliers, pull the spring through the hole and hook it into the notch on the middle plate.



Step 5: Secure the Middle Plate

1. Tighten each slotted bolt down by $\frac{1}{4}$ inch to lightly secure the middle plate.



Step 6: Install Headlamp

1. Insert the headlamp into the middle plate. Align the lamp tabs with the bucket housing to ensure proper seating.



Step 7: Attach Front Plate

1. Position the front plate over the lamp.



2. Secure using flat head bolts, tightening each to 14 in-lb.



Step 8: Adjust Aim

1. Use the inner slotted screws to make final aiming adjustments as needed.



HEADLIGHT AIMING INSTRUCTIONS FOR LOW AND HIGH/LOW HEADLIGHTS

A 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:

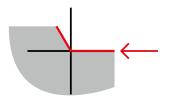
- Tape or chalk to mark lines
- · Corresponding tools for your vehicle's aiming mechanism

OPTIONAL SUPPLIES:

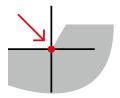
 Laser level to expedite the aiming process and will help to increase accuracy in aiming

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.



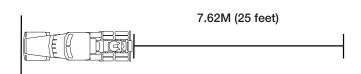




The following instructions are illustrated for RHT vehicles. Aiming for LHT vehicles will be mirrored to what is shown.

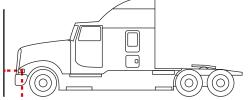
AIMING GUIDELINES:

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 truck 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.

To meet proposed 5-Star rating, lights must be installed on vehicles at gross weight with headlights at 0.8—1.2m off the ground.





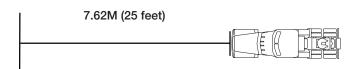
AIMING GUIDELINES CONTINUED:

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.



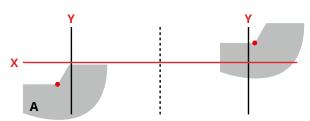


5. Reverse your vehicle in a straight line so that the front of the headlights are 7.62 meters (25 feet) back from the wall.

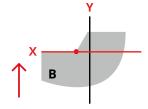


The goal of this sheet is to aim BOTH of your headlights so that the **Alignment Point** is at the cross-section of the horizontal X and vertical Y lines you have drawn. The following directions illustrate the process and proper aiming of headlights.

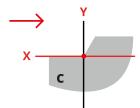
6. When you first turn on your vehicle after installing your headlights, the **Alignment Points** of the **LOW BEAM** may be positioned differently than shown and will likely be aimed differently from each other.



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.

