

# 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:** 13mm Socket or Wrench  
#2 Phillips Screwdriver  
T2J Torx Wrench  
T25 Torx Wrench

**Wire Functions:** Wire Harness Deutsch DT04-8PA:

Pin	Wire Color	Function
1	Black	Ground Rear Repeater
2	Red	Positive Rear Repeater
3	-	-
4	White	High Beam
5	Yellow	Low Beam
6	Black	Ground
7	Green	Turn Signal
8	Brown	Side Marker

**Lights Needed:** (x1) 9600 Peterbilt POD LH Headlight  
(x1) 9600 Peterbilt POD RH Headlight

**Input Voltage:** 12V DC

**Operating Voltage:** 9-18V DC

### 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.

### REGULATORY COMPLIANCE:



### 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.**

J.W. Speaker Model 9600 Peterbilt POD LED Headlights are sold individually and not as a kit. For a complete installation, install both a LH (Left Hand) and RH (Right Hand) light. This refers to the side of the vehicle when sitting in the Driver's seat. The bend in the Turn Signal Optic points outward.



⚠ **WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)  
⚠ **AVERTISSEMENT:** Cancer et effet nocif sur la reproduction - [www.P65Warnings.ca.gov](http://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.



## INSTALLATION INSTRUCTIONS:

**BEFORE BEGINNING:** J.W. Speaker's Model 9600 Peterbilt POD LED Headlights are intended only for Peterbilt 388/389 and 567 trucks. J.W. Speaker recommends that the installation be performed by a certified mechanic familiar with Peterbilt trucks.

**IMPORTANT:** Save all fasteners as they will be needed to reassemble the housing assembly later.

1. Disconnect the wire head lamp harness from the vehicle harness. Take care to document the routing for the wire harness and the location of the strain reliefs as this will be needed when the new lamps assemblies are installed.
2. Carefully, remove the headlamp housing assembly (pod) from the vehicle using a 13 mm socket or wrench (6 nuts). Be sure that the lamp housing assembly is supported until it is ready to be removed. This is a 2-person operation.
3. Remove the back cover from the housing assembly (2 phillips machine screws).\*
4. Remove the front bezel from the assembly (four T2J machine screws).
5. Disassemble the lamp from the housing. There are three T25 machine screws on the front and four T25 Plastite screws on the back.
6. Remove the old lamp.
7. Assemble the wire harness onto the back of the new lamp.
8. Feed the wires through the lamp housing and install the new LED lamp.
9. Install the three T25 machine screws on the front and four T25 Plastite screws on the back.
10. Assemble the front bezel onto the housing assembly with the four T2J machine screws.
11. Feed the wire harness into the truck and re-install the lamp housing assembly onto the truck. Be sure that the lamp housing assembly is supported and aligned as the nuts are tightened. This is a 2-person operation. (Leave the back cover off to make the aiming of the headlight easier.)
12. Route the wire harness through the same path that the old lamp used and connect to the vehicle harness. Be sure that the connector is firmly seated and the snap is engaged. Use

existing strain reliefs or add zip ties to hold the wire harness in position. To prevent damage to the wire harness, follow the same routing as the old lamp.

13. Repeat steps 1 through 12 to install the lamp on the other side.
14. Aim the lamps. It is easiest to reach the adjuster when the back cover of the housing assembly is removed. Depending upon the lamp version the adjustment can be done by hand, or it will require a phillips screwdriver or 5/16 hex wrench



15. Replace the back covers on the headlamp housings.

**\*Per FMVSS the light must be able to adjust without the removal of the housing assembly.** To adjust the headlight without removing the back housing, insert a screwdriver into the back of the housing and adjust headlight as needed.



# 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:

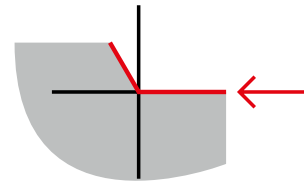
- Tape or chalk to mark lines
- Corresponding tools for your vehicle's aiming mechanism

### OPTIONAL SUPPLIES:

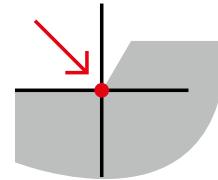
- Laser level to expedite the aiming process and will help to increase accuracy in aiming

### KEY TERMS:

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

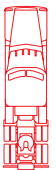


**Alignment Point:** The center of the angle in the Kink that must align to the center point when aiming the light at a wall.



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

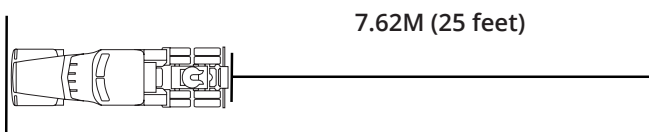
**RHT (Left Hand Traffic):**  
DOT (and some ECE)  
Regulation countries like  
the United Kingdom



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

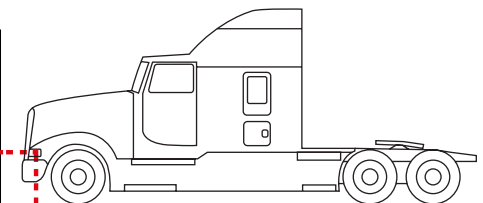
### AIMING GUIDELINES:

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 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.**



**J.W. SPEAKER®**  
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## AIMING GUIDELINES CONTINUED:

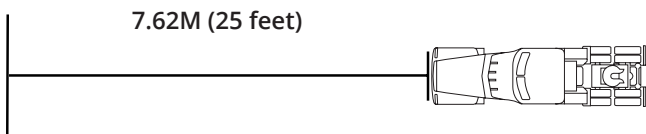
3. Connect the center points between headlights in a straight line, using chalk or tape. This will create your X axis (horizontal) line. **NOTE:** Use a straight edge and a level to make sure this line is straight.



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.

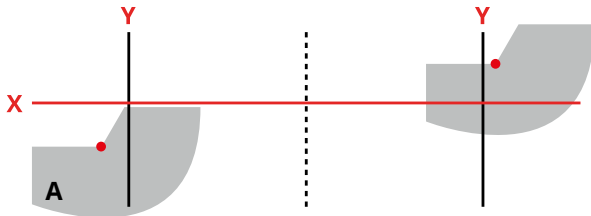


5. Reverse your vehicle in a straight line so that the front of the headlights are 7.62 meters (25 feet) back from the wall.

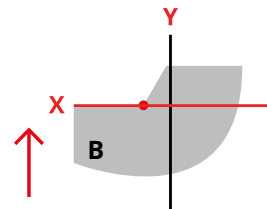


The goal of this sheet is to aim BOTH of your headlights so that the **Alignment Point** is at the cross-section of the horizontal X and vertical Y lines you have drawn. The following directions illustrate the process and proper aiming of headlights.

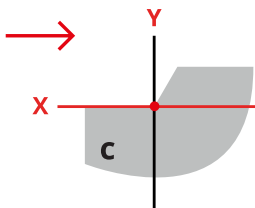
6. When you first turn on your vehicle after installing your headlights, the **Alignment Points** of the **LOW BEAM** may be positioned differently than shown and will likely be aimed differently from each other.



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.

