

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:

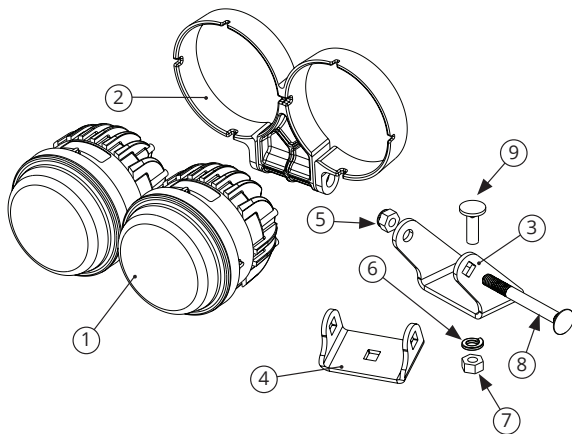
Estimated Time:	25 minutes
Tools Needed:	5/16 Wrench/Short Socket
Wire Functions:	Black = Ground Yellow = High Beam White = Low Beam Red = Front Position
In the Box:	1) Model 93M Headlight 2) Double Clamp 3) Bracket for Fat Bob 4) Bracket for Custom Bikes 5) Hex Nut Lock with Nylon Insert 6) Washer, Lock, Helical Spring 7) 5/16 - 18 UNC - 2B Hex Nut 8) 5/16 - 18 x 3.0 Bolt 9) 5/16 - 18 RND HD Bolt
Input Voltage:	12-24V DC
Operating Voltage:	10.5-38V DC

REGULATORY COMPLIANCE:



INSTALLATION INSTRUCTIONS:

- Turn off the vehicle and disconnect the battery.
- Remove the existing headlights from the bike. Ensure to cover all painted areas to avoid damage during install.
- Unplug the connector of the existing headlight from the bike. On Fat Bob Models this will be in the frame just behind the front forks. On non-Fat Bob models the location or connector type may vary; follow from the back of the lamp to point of connection of the vehicle, and unplug.
- Install the lamps into the clamp (2). Ensure that lamps are oriented correctly: on the high beam lamp the front position light pipe will be at the top of the low beam the word "SPEAKER" will be at the top.
- Decide which mounting bracket (3 or 4) is right for your bike by doing a mock install. The longer bracket (3) was designed for use on Fat Bob models, but it is ultimately a personal preference for look and application. Assemble the mounting bracket to the headlight using the long bolt (8), secure with the nut (5), and tighten.
- Install the headlight using bolt #9 going through bike's triple tree. Ensure all bolts are tight. Plug the provided connector into the back of the lights. The male shape of the connectors will match the corresponding female ports on the lamps.
- 7a. For Fat Bob applications, plug connector into OEM connector. Re-insert connected connector into bike frame and replace sealing plug.
- 7b. If the connector does not match your application, the best practice is to hard wire the lamp in. Cut the wires 1 inch from single side connector. Do not shorten the harness any further as there is a diode the harness needed the light to work properly. Use a wire stripper to expose a few MM of metal core on each wire. Use the Wire Functions provided above to match the lamp wires on the light to the wires coming from the vehicle. We suggest using butt connectors or solder splices to have a secure wire connection.
- Lay and secure wires to avoid any pulling or abrasion that may damage the wires or light.
- Aim the lights (continued on next page). Note: Loosening bolt #8 will allow you to change the angle of the light. Re-tighten once aiming is completed.



PRE-INSTALLATION INSTRUCTIONS:

- Read all safety notes and mounting guidelines before installing the product. Verify that all parts listed under "In the Box" are present and complete.
- 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.
- Verify that all power supply and/or charging systems comply to the specified voltage limits for the light.

PRODUCT WARRANTY:

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

MOTORCYCLE

AIMING INSTRUCTIONS

⚠ WARNING

A motorcycle's automatic-on headlight feature provides increased visibility of the rider to other motorists. Poor visibility of the rider to other motorists can result in serious injury or even death.

Remember to check the motorcycle's headlight beam pattern for proper height and lateral aim:

- When the new owner takes delivery of the motorcycle.
- When there is a change in load (adding luggage, etc.).

BEFORE INSTALLATION:

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

REQUIRED SUPPLIES:

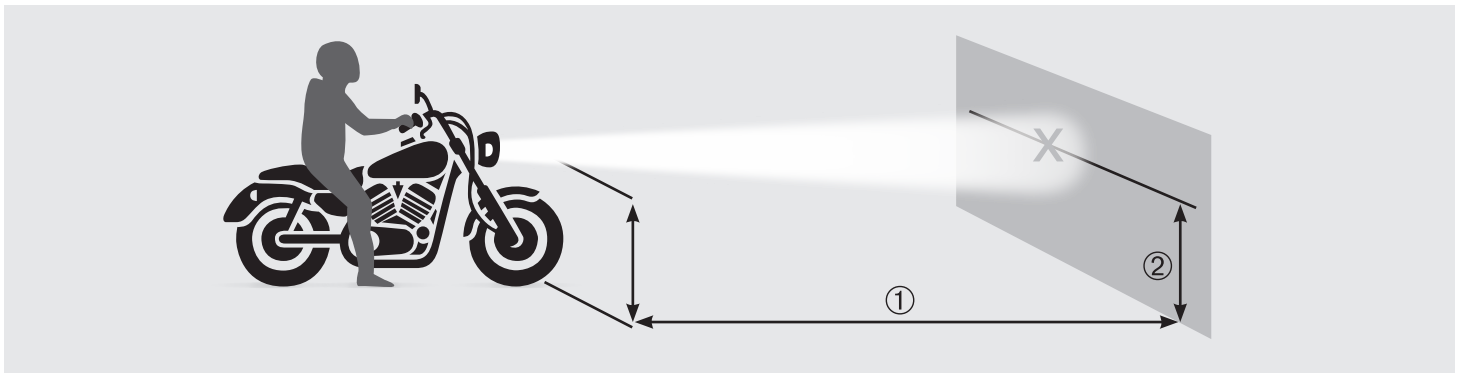
- Tape or chalk to mark lines.
- Correct tools for your motorcycle's aiming mechanism.

OPTIONAL SUPPLIES:

- Laser level to help increase accuracy in aiming.

HEADLIGHT AIMING PROCEDURE:

1. Position motorcycle 25 feet (7.62) meters away from a screen or wall ①. Measure the distance from directly below the front axle to the base of the screen or wall.
2. On the screen or wall, draw a line from the ground to the approximate center point of the headlight ②.
3. Load motorcycle with rider, passenger (if normally present) and any other cargo normally carried.
4. Stand motorcycle upright with both tires resting on the floor and with front wheel aligned directly forward towards the screen or wall.
5. Turn ignition/headlight switch to the IGNITION position. Set handlebar headlight switch to the HIGH beam position.
6. Check light beam for proper height aiming:
 - a. The main beam of light (broad, flat pattern of light) should be centered equally above and below horizontal line on screen or wall.
 - b. Main beam of light should be directed straight ahead. Properly adjusted headlights project an equal area of light to right and left of center.
7. Adjust headlight aiming if necessary.



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