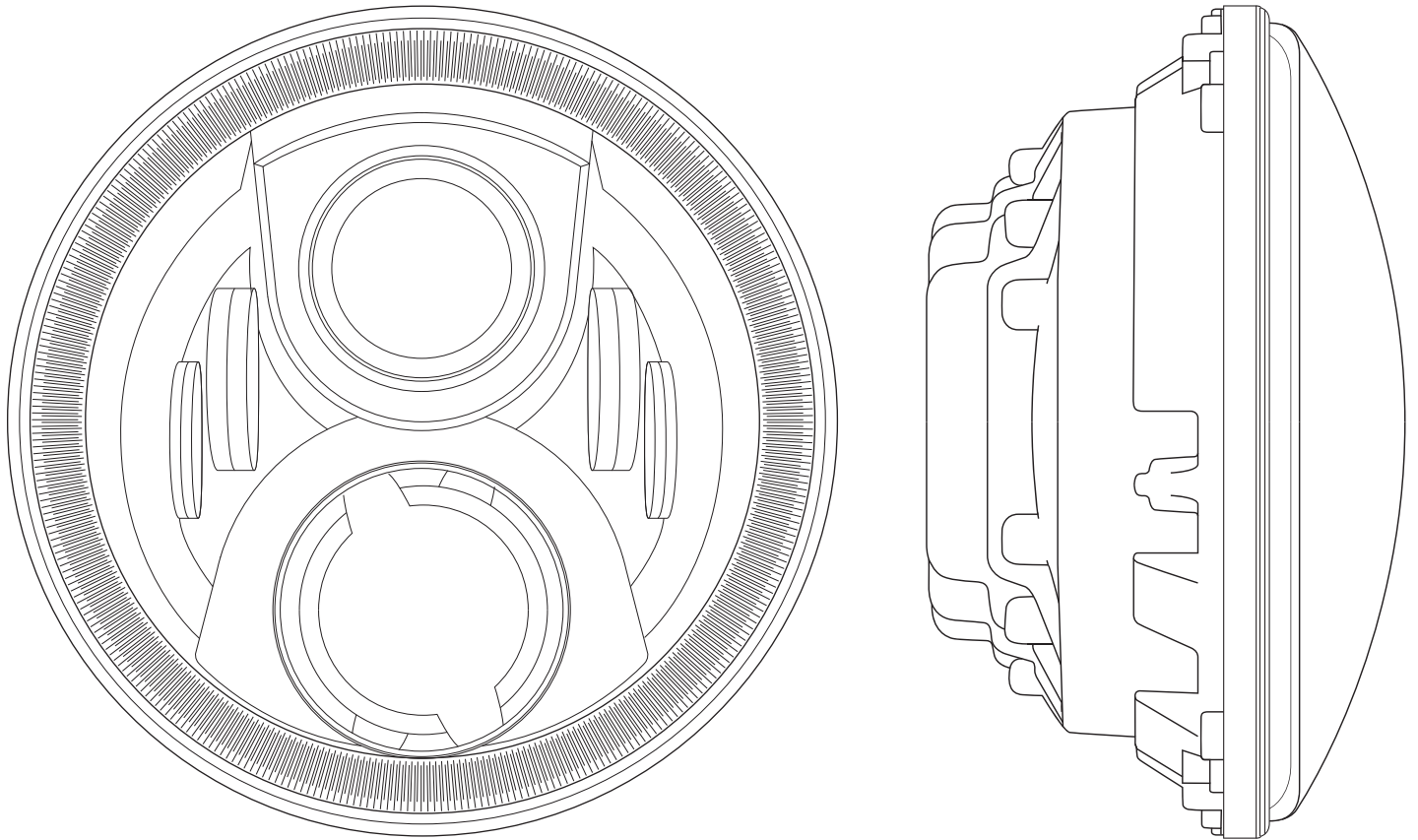


L U M E N

**7" RGB halo headlights with Bluetooth control**

# INSTALLATION INSTRUCTIONS

For 2007 and newer Jeep Wrangler JK





**These instructions may vary slightly among different model year Wranglers. They can also be used as general guidelines for any vehicle which uses 7” headlamps.**

**⚠ Caution**

These instructions presume some automotive technical knowledge/repair experience. If you are unfamiliar with basic automotive repair, please seek professional installation assistance. These instructions are not intended to take the place of good workshop practices and common sense. Improper repairs can lead to property damage or personal injury!

**🔧 Tools and supplies needed:**

- Assortment of flat, Philips and T-15 Torx screwdriver;
- Wire cutters/strippers/crimpers;
- Plastic cable ties.

**📦 In the box**

**Verify that you have the following:**

- (2) 7” sealed beam headlamp;
- (2) headlight plug-and-play connector harnesses;
- (1) Bluetooth RGB light controller with positive and negative leads;
- (1) headlamp-to-controller wiring harness (Y-Harness).

## STEP 1: Removing the factory (existing) headlamps

The Jeep headlamp removal requires that the grille be removed first.

- Ⓐ To remove the grille open the hood; along the top of the grille where it meets the shroud, remove all 6 of the plastic clips.



- Ⓑ Gently pull the top of the grille outward, away from the car. Reach down and release the parking lamp bulbs and holders, by turning them a quarter-turn. Keep them attached to the wire harness, and place them where they will not be damaged. (They can be left to hang in the opening between the bumper and the body of the Jeep.)



- Ⓒ The bottom of the grille is held in place by clips. Gently pull on the bottom of the grille until the clips disengage; remove the grille from the car and put aside in a safe place.





Ⓒ To remove the headlamps:

a. Remove the metal bezel ring, which is held in place with 4 screws. Use a T-15 Torx bit / screwdriver.



b. As the last screw is removed, hold onto the headlamp, as it could fall.



c. Remove the bulb from the assembly with a ¼ turn, remove the headlamp assembly from the car and put it in a safe place. Unplug the factory harness from the bulb, this may involve unlocking the red slide lock.

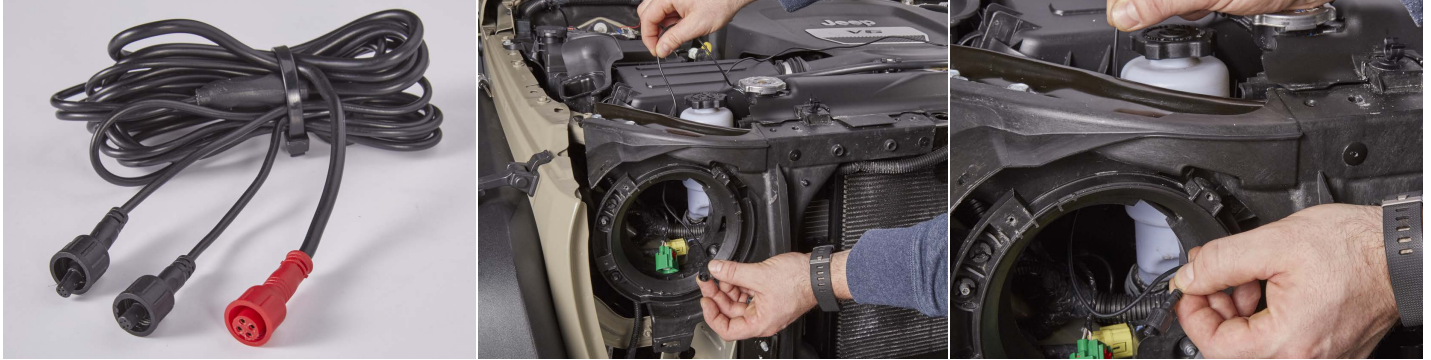




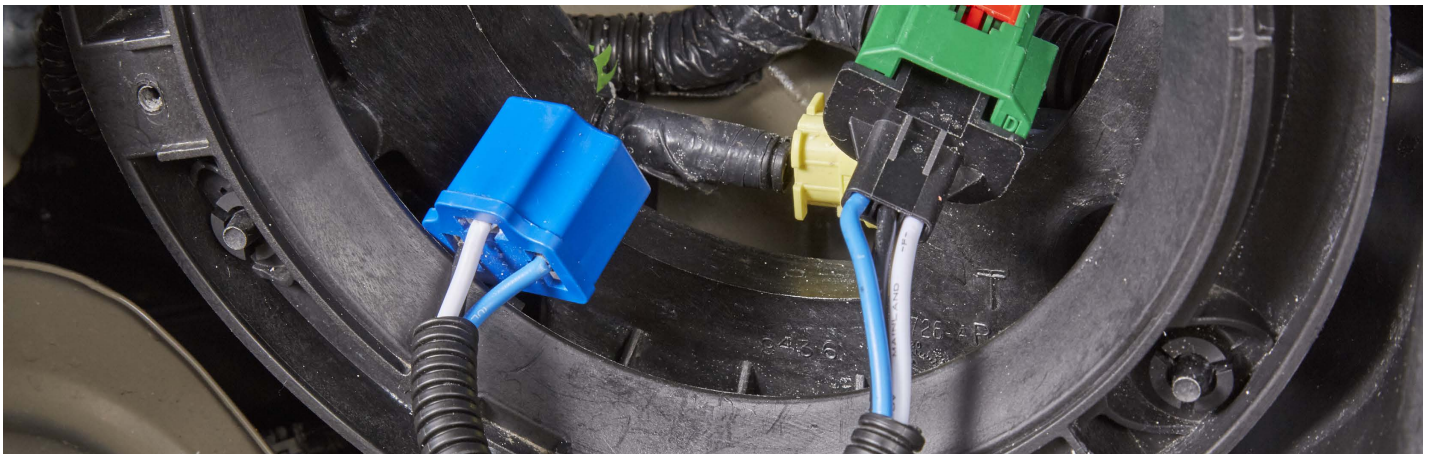
## STEP 2: Routing & connecting the plug-and-play electrical connections

- Ⓐ Take the Y-Harness and feed one of the black connectors through the back of the passenger side headlight. Next, feed the other connector through the driver side headlight.

*NOTE! Make sure the wires will not be pinched when the headlight is reinstalled.*



- Ⓑ Take one headlamp plug-n-play connector harness from the kit, and plug it into the factory harness. Be sure to secure the connection so the plug will not disconnect. A cable tie or electrical tape may be necessary if your slide lock does not “click”.



- Ⓒ Connect the corresponding wires from the headlight assembly to the new wire and harness. Now, repeat on the other side of the vehicle.



### STEP 3: Connecting the power wires and Bluetooth controller box

- Ⓐ The bare red and black wires of the Bluetooth controller may be connected in one of three ways:
- To a 12V source which is “hot” with the key (see below);
  - Through a driver-operated on/off switch (not included);
  - Directly to a B+ 12V source. *(NOTE! With this choice, the headlamp halo can only be turned off through the Bluetooth app on your smartphone. Be aware that failure to turn off the halo may result in a drained battery.)*
- Ⓑ We recommend the first choice, routing the wiring to a 12V source which turns on and off with the ignition key. Below are two recommended methods for making these connections.
- **Method A:** Making the connection at a 12V accessory socket.
  - **Method B:** Making the connection at the fuse box with an “add-a-fuse” connector.

#### Method A

You may begin this step at either the driver or passenger side of the vehicle; we recommend the driver side so that the red wire has a shorter path to the driver’s side interior.

- Ⓐ Extend the red wire from the Bluetooth color light controller to the desired length for proper connection.

#### ⚠ Caution

Some Jeeps have TWO 12V accessory sockets, one hot with the key on, and one hot all the time. Select the one which is “on” only with the ignition on. If you select the one which is always hot, the DRL lights will never turn off, and you will drain the battery.



*In our 2007 Wrangler, the LEFT 12V socket is hot only with key on, so this is the one we used. The RIGHT socket is hot at all times.*

#### ⚠ Caution

Modern (JK) Jeeps use multiplex (Canbus) wiring throughout the vehicle. You CANNOT randomly select a 12V under-hood wire and splice into it without potentially disturbing the Canbus system.

- Ⓑ Run the red wire through the firewall and under the dash. Access the wiring behind the 12V accessory socket. (You may need to view videos online to learn the proper way to remove the dash of your vehicle.)



- Ⓒ With the ignition on, using the multimeter/test lamp, probe the two wires to find the one which is hot with key on. Turn off the ignition.
- Ⓓ Using a 3M Scotch-Lok or similar, connect the red wire to that 12V accessory socket wire.
- Ⓔ Using cable ties and/or electric tape, neatly secure the red wire along its travel path.
- Ⓕ Connect the black wire from the Bluetooth color light controller to a ground in the engine compartment.

### Method B

You may begin this step at either the driver or passenger side of the vehicle; we recommend the passenger side so that the red wire has a shorter path to the engine compartment fuse box.

Bussmann® add-a-circuit. Part# BP/HHH-RP

### Important!

If there is a fuse in your chosen fuse box location, move it to the lower fuse location in the add-a-circuit. If no fuse is there, add one to the lower fuse location.



### ⚠ Caution

Please research which fuse position to use in order to properly wire your lighting accessory. Choosing the wrong location could result in major electrical issues.

- Ⓐ Extend the red wire from the Bluetooth color light controller to the desired length for proper connection.
- Ⓑ Run the red wire along a path within the engine compartment that will end next to the fuse box. Leave plenty of slack in the wire until all connections are complete.
- Ⓒ Once you have selected the proper fuse position, insert the fuses to your Add a Circuit as follows:
  - a. With the blades of the Add a Circuit pointing down, the lower fuse receptacle is to be used for the existing fuse in your fuse box. Plug that fuse in the Add a Circuit.

b. The upper fuse receptacle is to be used for the accessory you are adding. Plug that fuse in. For DRL function of a sealed beam headlight, a 10 AMP fuse is sufficient. But make sure that you use the correct fuse for the location you have selected.

c. Plug the Add a Circuit into the selected fuse position.

- Ⓓ TEMPORARILY connect the red wire to the Add a Circuit connector (use electrical tape), as you will NOT want to finalize (crimp) the connection until both headlights are installed and all functionality testing has confirmed that all connections are correct.

*NOTE! It is important that lid fuse box lid can be closed completely. Once functionality has been confirmed, create a channel for the wire to pass through the fuse box wall without being pinched or the fuse box being compromised. The picture below shows the completed wire passing through the fuse box (red box). This channel was created using a triangular file.*

- Ⓔ Connect the black wire from the Bluetooth color light controller to a ground in the engine compartment.





## STEP 4: Testing functionality and lighting

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After power has been confirmed, test complete functionality before finalizing the install:

1. Test both low and high beam function.
2. Test turn signal and parking light function.
3. Troubleshoot any malfunctions by checking all connections and power sources.

*Note! A new headlamp will not fix previously existing electrical issues with your vehicle.*

## STEP 5: Downloading the app and RGB function

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- Ⓐ Download the app “BLE\_Light” from your app store or scan the QR code applicable to your smartphone.
- Ⓑ Use the “Scan” function to find your new headlights. Make sure you are within 5-10 feet of the controller when scanning begins to guarantee connection.
- Ⓒ Once connected, use the app features to turn the RGB function On/Off or adjust any mode and brightness of the halos.

## STEP 6: Securing all wiring and controllers

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- Ⓐ Secure all wires from the Y-Harness and confirm they are all clear of the engine block and any moving parts.  
*\*\*\*Be especially mindful of moving parts such as fans and belts.*
- Ⓑ Make sure the Bluetooth controller is secured and clear of the engine block and any moving parts.
- Ⓒ Any excess wiring should be secured and clear of the engine block and any moving parts.

## STEP 7: Final steps

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- Ⓐ With everything secured, the headlamps should be placed back in the headlight buckets, using the bezels to secure the lamps in place.
- Ⓑ Be sure that no wires are pinched in this process.
- Ⓒ Test functionality one more time before reinstalling the grille.
- Ⓓ Reinstall the turn / parking lights into the grille.
- Ⓔ Reinstall the grille, confirm it is locked into place.
- Ⓕ Secure the grille with the 6 clips that were removed.