

# STARKEY

## PRODUCTS

### 2009-2014 Ford F-150 Raptor-Style Grille Lights

<u>Parts List:</u>	<u>Quantity:</u>	<u>Tool List:</u>
Bracket & pre-installed lamps	1	• Flat head screwdriver
Wiring harness	1	• Phillips screwdriver
PB-4430 Parts Bag	1	• Ratchet & Socket set
		• Pliers

Thank you for purchasing one of our products. Please familiarize yourself with the parts included as well as the instructions before attempting installation. Please seek the help of a certified technician if you feel unable to complete the installation safely and properly. Failure to read and follow the instructions below may result in personal injury or damage to property. Starkey Products, Inc. and our retailers assume no liability for failures to comply with guidelines and warnings outlined in this instruction manual.

#### Installing the Light Bar:

Before beginning the steps below, turn off the vehicle, remove key, and engage the emergency brake.

1. Open hood of truck and make sure hood is held open securely.
2. Locate the two bolts circled in picture 1 and remove them with a 10mm socket. These are directly above the backside of the Ford emblem in the grille.
3. Decide how low you would like the Light bar to hang. If you want the lights to sit as high as possible, use the round holes on the outermost edges of the bracket. If you would like it to hang a little lower, use the long slots.
4. Hand tighten the hardware and confirm fitment. Make sure the bracket is centered and level. When satisfied, tighten the 10mm nuts. See picture 2 for picture of the bracket installed.
5. Secure the wiring from the light bar using the supplied adhesive backed clips. Each clip ratchets closed over the wiring. See picture 3.



Remove 10mm nuts on backside of grille above the Ford emblem.



Position bracket and tighten the 10mm nuts.



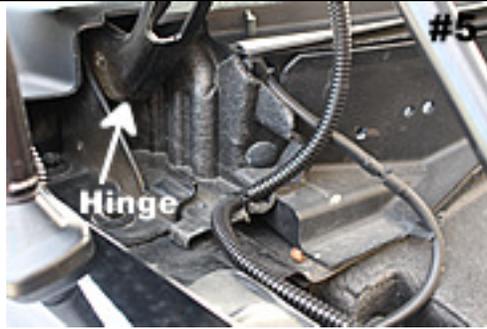
Secure wiring behind the grille with included adhesive backed clips.

#### Connecting the wiring:

1. Connect the wiring harness to the light bar connector.
2. Remove the hood insulation push pins circled in picture 4 below using a flat head screwdriver to pry up on the pin and pull it out.



Remove circled push pins and route wiring behind insulation along line.



Use supplied zip ties to secure wiring at hood base – do not zip tie to hinge.



Remove screw with phillips screwdriver.

3. Route the wiring behind the hood insulation in the approximate location of the dashed line in picture 4 above.
4. Secure the wiring at the base of the hood with supplied zip ties. Be sure to leave just enough slack to allow the hood to open and close properly, but not so much that it will get smashed from the hoods hinges. Do not zip tie to the hood hinge or shock! See picture 5.
5. Route the wiring down the passenger side fender towards the headlight.
6. Use a phillips screw driver to remove the push-pin holding the rubber shroud around the headlight. See picture 6 for a closer view.
7. Remove the 3 bolts that hold the passenger side headlight in place. See picture 7 below.
8. Carefully pull the head light straight out. There are several clips holding it in place so you will have to use some force. If you encounter a lot of resistance, check to make sure all hardware was removed.
9. Typically it is not necessary to unplug all of the head light connections, but you may do so if you would like. In the example below, we laid a towel over the bumper so the headlight had a soft place to sit while we connected the wiring. See picture 8.
10. Locate the running light bulb wiring. Pull back the electrical tape to gain access to the wiring. Be sure you are connecting to the proper wire. It is easy to confuse the running light wiring with the turn signal indicator wiring. If you are unsure, turn your running lights on to confirm.
11. Using one of the supplied **red** wire taps, slide the correct wire onto the wire tap. 2009-2010 = Purple with White Stripe. 2011-2014 = Yellow with Blue stripe. See picture 9 below. The wire should sit in the middle of the two teeth. Squeeze down on the wire tap making sure it snaps closed. Do not cut wire!
12. Plug the **Red** wire from the wiring harness into the back of the wire tap. See picture 10.
13. Use a 9mm socket or wrench to attach the **Black** ground wire to the bolt shown in picture 11 below. Re-attach the bolt so the ring terminal makes proper contact and the bolt is tight. This bolt is located directly behind the washer fluid reservoir filler neck.



Remove the 3 bolts holding the head light in place.



Lay headlight on soft surface or unplug all connections and remove.



Slide wire into place and close wire tap completely.



Plug correct wire into the wire tap as indicated above.



Attach the ground wire to the bolt behind the washer fluid reservoir.

#### Final Installation:

1. Double check everything to make sure it was connected properly. Test the Light Bar to make sure it comes on and off with your other running lights. This can be done by unlocking/ locking the doors with your key fob. If the lights do not come on, visit the trouble shooting guide below.
2. Re-install the head light and re-attach all hardware.
3. Re-install the hood insulation pins.
4. Secure all wiring with the supplied zip ties.
5. Enjoy your new Raptor-Style Light Bar! The lights will activate automatically when your running lights are turned on.

#### Trouble shooting guide:

Lamps won't turn on –

- Check to make sure you connected **red** wire tap to the correct wire outlined in the 'Installing the Light Bar' section above. This is the MOST common mistake made during installation.
- Check the ground cable you connected under the 'Installing the Light Bar' section. Make sure that it is making proper contact and that the bolt is tightened.

Lamps only come on when locking or unlocking doors with key FOB –

- You have most likely connected the red wire to the turn signal wiring. Check to make sure you are connecting the red wire to the running light wiring.

If you are still having trouble with your product, please contact us for technical assistance. Tech support is available via phone Monday through Friday 9am-5pm. Email tech support is available during regular business hours as well as weekends, holidays, and evenings.

**Starkey Products, Inc.**

**Phone:** (386) 951-6335

**Email:** [Tech@Starkey-Products.com](mailto:Tech@Starkey-Products.com)

**Website:** [www.Starkey-Products.com](http://www.Starkey-Products.com)

#### **Limited Warranty:**

*This warranty covers defects in materials or workmanship in any component sold by Starkey Products, Inc. or its authorized dealers. Warranty is effective for five years from the date of purchase\*. Coverage terminates if you sell or transfer ownership of the product. Starkey Products will repair or replace the defective or malfunctioning product or any defective or malfunctioning part thereof at no charge. This warranty covers parts and labor only. This warranty does not cover any problem that is caused by abuse, misuse, acts of God, or improper installation. Any modification or alteration to any component will void the product warranty. Warranty does not cover wear that any components receive through the normal course of operation and use (including but not limited to bulbs). All warranty claims require proof of purchase.*

*\*Any painted surfaces are guaranteed not to bubble, peel, or crack for the duration of the warranty period. Warranty does not cover normal wear and tear resulting from impacts, scratches, road debris, or harsh chemicals.*