

STARKEY

PRODUCTS

2009-2017 Ford F-150 Footwell Lighting Kit

<u>Parts List:</u>	<u>Quantity:</u>	<u>Tool List:</u>
LED lamps & wiring harness	1	• Ratchet & Socket set OR
PB-4440 Parts Bag	1	• Adjustable Wrench
		• Pliers
		• Small knife or razor blade

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 Wiring:

Before beginning the steps below, turn off the vehicle, remove key, and engage the emergency brake. Disconnect negative (black) battery cable from the battery. This is done by loosening the bolt located on the side of the battery cable terminal with a wrench. You may let the cable sit off to the side. Do NOT allow it to make contact with the +12v Red battery cable!

Familiarize yourself with the wiring harness/ lamps. Each end of the wiring harness has a set of lamps. The set of lamps with the red connector (+12v power) and ring terminal (- ground) will be installed in the front seat. On the other end are the lamps intended for the back seat. Each lamp can be removed from the black mounting channel it is installed in by simply sliding the lamp out one side.

1. Remove the passenger side door sill plate. You will hear it unsnap. This is done by pulling straight up, starting at the front and working your way back. You will hear 'popping' noises when the clips come loose - this is normal. See picture 1.
2. Locate the interior fuse box. It is located behind the passenger side kick panel directly in front of the door. If you have trouble finding it, refer to your vehicles user manual for the specific location.
3. Remove the fuse box access cover.
4. Remove the kick panel. It can be removed by first pulling upward where it attaches to the door sill plate - one clip holds it in place. Then pull backward where it attaches to the door frame to release the rest of the clips. See picture 2.
5. Locate the lamp intended for the driver side. Slide the lamp out of the black mounting channel.
6. Starting at the passenger side, pass the lamp assembly through the space behind the center console toward the driver side footwell. See picture 3. If you are having trouble getting the lamp to pass through, taping it to a bent clothes hanger will help. On the 2015+ F150, there is a panel on the driver side footwell that makes it difficult to see the lamp as it is passed through. If necessary, use a 9/32" socket to loosen screw and remove the panel.



#1
Remove passenger side door sill plate carefully.



#2
Remove kick panel shown. First pull upward, then backward gently.

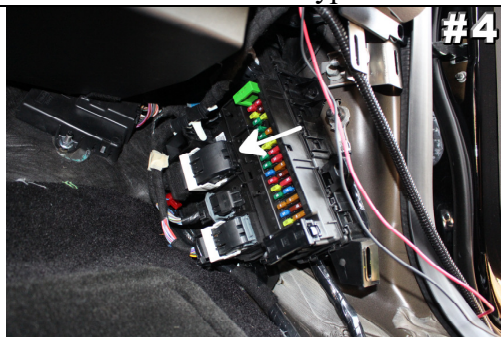


#3
Route driver side lamp behind center console toward driver side.

7. We will finish installing the driver side lamp later. Begin routing the wiring around the passenger side to the kick panel. On 2015+ trucks, there is a small rectangular hole behind the glove box where you can run the wiring up into the dash and pull it down right in front of the fuse box. This will allow you to hide the wiring/ lamp on the passenger side.

Wiring will vary depending on the truck model year. If you have a 2015-2017 F-150, follow step 8 below. If you have a 2009-2014 F-150, skip to step 15.

8. **2015-2017 F-150's:** Locate the large black 36 position connector shown in picture 4. It has a white bar running across it. It is the third connector from the bottom. It has 23 wires coming out of it.
9. Press the release tab on the top of the connector while sliding the white bar to the side to unplug it. It will 'click'. See picture 5 for a closer view.
10. Unplug the connector and gently pull it out to gain better access to the wiring. Pull back a few inches of electrical tape wrapped around the connectors bundle of wiring. Do not use any tool to remove the electrical tape that could cut wires or otherwise cause damage.
11. Using the supplied **red wire tap**, slide the **Gray** wire with **Purple** stripe (Pin # 13) onto the wire tap. See picture 6. 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! The wire in question is a 22 gauge wire (the thinnest type of wire running into this connector).



#4
2015+ Locate largest connector with white bar – it is 3rd from the bottom.

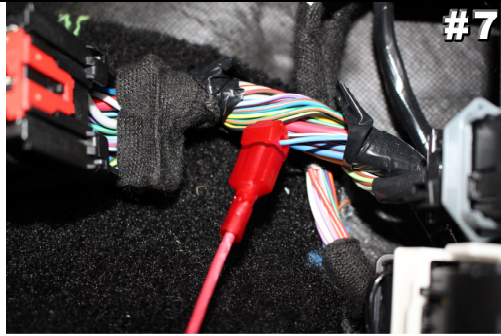


#5
Press release button/ tab while sliding bar to the side to unplug connector.



#6
Slide Gray w/ Purple Tracer wire into place and close wire tap firmly.

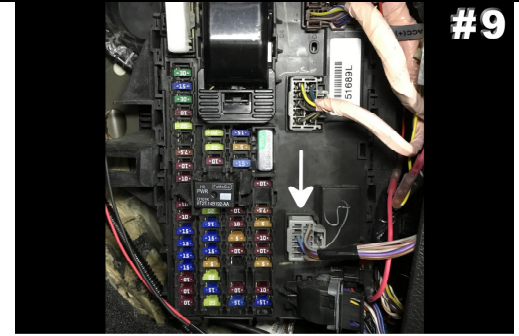
12. Plug the **red** wire from the Starkey wiring into the back of the wire tap. See picture 7.
13. Re-connect the large black connector. Be certain to pull the white bar to the side to insure the connector snaps back into place.
14. Use a 13mm socket or wrench to attach the **black** ground wire to the bolt circled in picture 8. Re-attach the nut and tighten. Skip to step 20.
15. **2009-2014 F-150's:** Locate the gray connector on the fuse box shown in picture 9. It is designated the C2280A connector. On 2009-2010's, the connector has 14 positions. On 2011-2014's, it has 12 positions. Unplug the connector and gently pull it out to gain better access to the wiring.



Plug red wire into the wire tap.



Attach black ground wire to the 13mm bolt circled above.



2009-2014 – Locate gray connector.

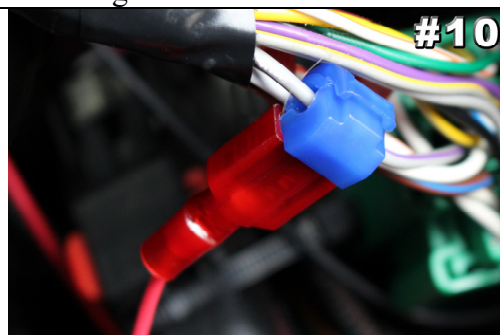
16. Using the supplied **blue wire tap**, slide the **Gray** wire with **Purple** stripe onto the wire tap. See picture 6. On 2009-2010 model years, it is pin # 9. On 2011-2014 model years, it is pin # 1. The wire should sit in the middle of the two teeth. Squeeze down on the wire tap making sure it snaps closed. Do not cut Wire! The wire in question is an 18 gauge wire (the thickest variety of wire running into this connector).
17. Plug the **red** wire from the Starkey wiring into the back of the wire tap. See picture 10.
18. Re-connect the gray C2280A connector. Be sure it clicks into place.
19. Attach the **black** ground wire to the bolt at the top-right of the fuse box. Re-attach the nut and tighten.
20. Route remaining lamps and wiring down the door sill toward the back seat. See picture 11.
21. Now it is time to route the wiring for the rear seats. Note: Remove black mounting channel from each lamp first.

2015+ F150: On most 2015+ trucks, you'll notice there is a bundle of factory wiring under the door sill that splits off and runs under the carpet. See picture 11. This is a small channel that routes wiring connected to the seats under the carpet. You can use this pathway to route the rear seat lamps.

22. To pass the lamps through this channel, lift up on the carpet/ trim piece on the seat while carefully pushing each lamp and wiring through. At the same time you can guide the lamps out of the hole under the seat. Skip to step 24.

2009-2014 F150: You'll need to route the wiring under the carpet (to hide it) and cut a small slit in the carpet under the seat where the lamps and wiring emerges. See picture 11.

23. Locate a suitable spot to cut the slit in the carpet **UNDER** the passenger seat. Be cautious where you cut – feel under the carpet to make sure there is no existing wiring in that location. Route the lamps up and out of this spot so that the wiring isn't seen when the door sill plate is re-installed.
24. Route the lamp for the driver side under the seat tracks and over to the driver side seat. Be sure to tuck the wiring under the center console.



2009-2014 F150's - Plug red wire into the blue wire tap.



Route wiring along door sill and under carpet (wiring comes out under seat)

Mounting the Lamps:

At this point you'll want to decide how you will mount each lamp. Take a look under the dash on both the driver & passenger side to determine where you would like to mount the LED lamp. We recommend you mount the lamps where they will not be visible when getting in and out of the truck. The lamps can be mounted to virtually any hard, flat surface using the included 3M adhesion promotor.

Remember the rear lamps will need enough slack in the wiring so that it travels back and forth when the seat position is adjusted. At the same time, the wiring should run under seat track rails to avoid moving parts. Too much slack can cause a foot to snag the wiring as well.

Lastly, the lamps have some flexibility in their mounting. Particularly in the case of the rear lamps, you may find that they have to be installed at an angle to adhere properly to a flat surface. This isn't a big deal because the light is diffused 120 degrees and you won't be able to tell how they are oriented once installed.

In the following steps we will prep the surface and apply an adhesion promotor to ensure a strong bond. Once the c-channel (the black piece each lamp sits inside) is installed, it will be difficult to move so you want to be sure of the placement.

1. Put on a set of protective gloves.
2. Use the included alcohol prep pads to wipe the surface down where all 4 lamps will be mounted. 3M™ Adhesion Promoter 06396 is supplied in an easy-to-use sponge applicator packet. Hold packet upright and avoid squeezing an opened packet to prevent spillage of liquid contents. The packet can be opened by tearing across the top of the packet at the notches. This will expose the sponge applicator. Do not remove the sponge or squeeze a freshly opened packet. Handling the bottom section of the packet should enable application of adhesion promotor with no mess.
3. Apply a thin, uniform coating to the general area where the LED lamp will be mounted. It can be used on metal or plastic surfaces. Wait 30-90 seconds for the coating to dry completely.
4. Peel off the tape backing and carefully place the first lamp onto the surface under the dash. Be sure to press down firmly to make sure it adheres properly. REMEMBER – once you place the lamp, it cannot be easily removed.
5. Repeat the process on all LED lamps.

Final Installation:

1. Double check everything to make sure it was connected properly.
2. Re-connect the negative battery cable to the car battery. Remember to re-tighten the bolt.
3. Test the lights by using the key FOB to unlock doors. If the lights do not come on, visit the trouble shooting guide below.
4. Use the supplied zip ties to secure all wiring. Pay special attention to the wiring near the driver side pedals.
5. Replace passenger side kick panel cover. Take your time to make sure everything lines up. Note: the outside edge of the kick panel located in the door jamb gets tucked under the existing rubber seal.
6. Re-install door sill panel making sure it snaps into place.
7. Enjoy your new footwell lighting kit! The lights will activate when you open any door. Lights will dim automatically when you start your truck or lock the doors.

Trouble shooting guide:

Lamp(s) won't turn on –

- Check to make sure you connected **red OR blue** wire tap to the correct factory wire outlined in the 'Installing the Wiring' section above. This is the MOST common mistake made.
- Check the ground cable you connected under the 'Installing the Wiring' section. Make sure that it is making proper metal-to-metal contact and that the bolt is tightened. If there is paint on the bolt or surface, you may need to scrape some of the paint off under the bolt/ nut.

Some interior lights or door locks aren't functioning –

- The connector near the fuse box you unplugged on page 2 was not re-connected properly or completely. Plugging it back in will restore function. On 2015+ trucks, be sure to pull the white bar back over until it snaps into place.

Lights will not shut off –

- Check to make sure you have tapped into the correct color wire. This is the most likely cause of the issue.

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

Website: 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.