

## 48" Anti-Collision Blade LED Light Bar Installation

### Instructions

Congratulations on your purchase of a high quality PUTCO product. Should you need any application or technical assistance, feel free to call us at: 1-800-247-3974

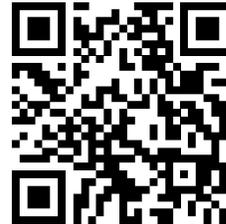
Monday-Friday 8:00 a.m. - 5:00 p.m. (Central Standard Time)

**Follow this installation step by step with our instructional video!**

KIT CONTENTS:	
Description	Qty.
LED Light Bar (w/ 4 pin connector)	1
Black Powder coated Blade Mounting Bracket	1
3M Tape Strip (PT1100 45.5")	1
Black Powder Coated Mounting Brackets	4
Tail Light T-Harness (#118599)	1
Crimp Connectors	6
Alcohol Wipes	1
Zip Ties	2
10-24 x 5/16" Black Button Head Bolt	4
10-24 Black Nylock Nut	4

### Tools Needed:

- Clean Towel
- Wire Crimper / Wire Strippers
- Cable Puller / Fish Tool
- T20 Bit
- 8mm Socket
- Pliers
- Grommet Sealant
- 10mm Socket
- 1/8" Allen Head
- 3/8" Wrench



INSTRUCTIONS  
QUICK LINK

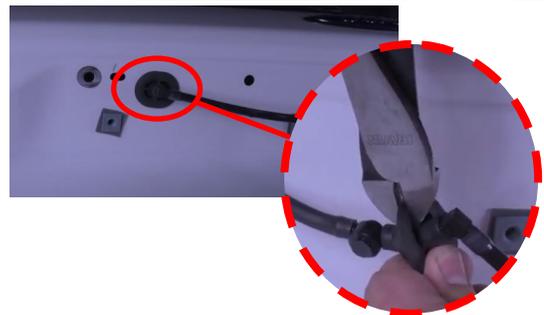
### Anti-Collision Light Bar Installation

- Verify the kit contents above. Remove any protective wrapping.
- Clean and dry the vehicle thoroughly in location where light bar is to be installed.

**The Blade LED Light Bar for this application is intended to be installed near the bottom of the hatch.**

### Installation Instructions

1. Remove interior hatch trim cover. This will require the removal of two bolts in the interior handle location of the hatch using a T20 bit.
2. Remove the camera housing trim cover from the vehicle using a 10mm socket.
3. Cut a slit in the gasket under trim piece on the drivers side of the vehicle as shown.



**Figure 1: Pilot Hole Locations**

Figure 2: 3/4" Hole Location and Grommet Install

4. Insert the light bar barrel connectors into the grommet area, then reinsert the grommet. Then reinstall the trim piece previously removed in step 2 (less the 10mm bolts).
5. Use zip ties and provided 3M tape to hold logic box inside hatch. Then reconnect the barrel connectors between the lightbar and logic box.
6. Assemble no drill blade bracket and vehicle mounting brackets together as shown.



7. Route the blade through the hole on the left side of the blade bracket.
8. Clean Blade LED lightbar and bracket with provided alcohol wipes.
9. Apply 3M tape to back of LED lightbar.
10. Mount the light bar bracket assembly to the rear of the vehicle using the 10mm bolts from the vehicle uninstalled in step 2.



11. Pull liner off back of 3M tape. Center LED lightbar on black bracket assembly. Light bar wire should exit toward driver side of vehicle.
12. Install provided blade assembly end caps by removing the 3M tape on the back and sliding the end cap over the end of the bracket blade assembly as shown, then press the end cap onto the vehicle and hold pressure for 20-30 seconds to secure the 3M tape. Once this has been done on one side, repeat on the other side.
13. Route wires into vehicle through hatchback boot (We advise the use of a fish line when routing through the boot), taking care not to damage boot or wires (**Figure 5**). **NOTE: be sure boot is properly sealed.** Then route wires through the head liner and down the rear D-pillar.

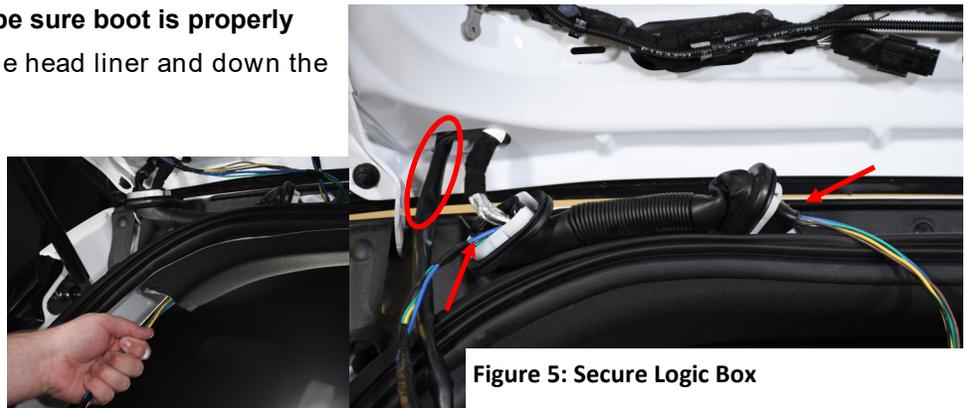
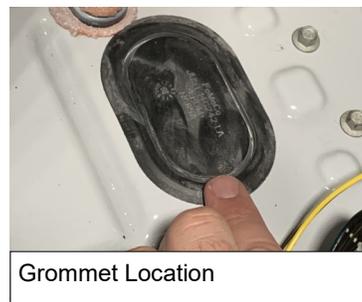
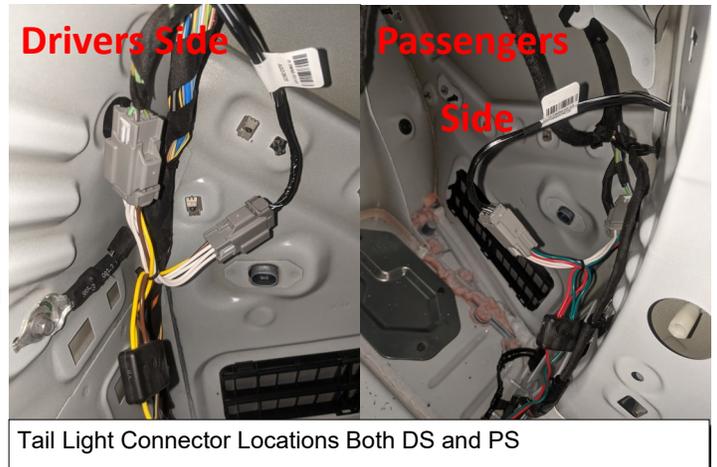
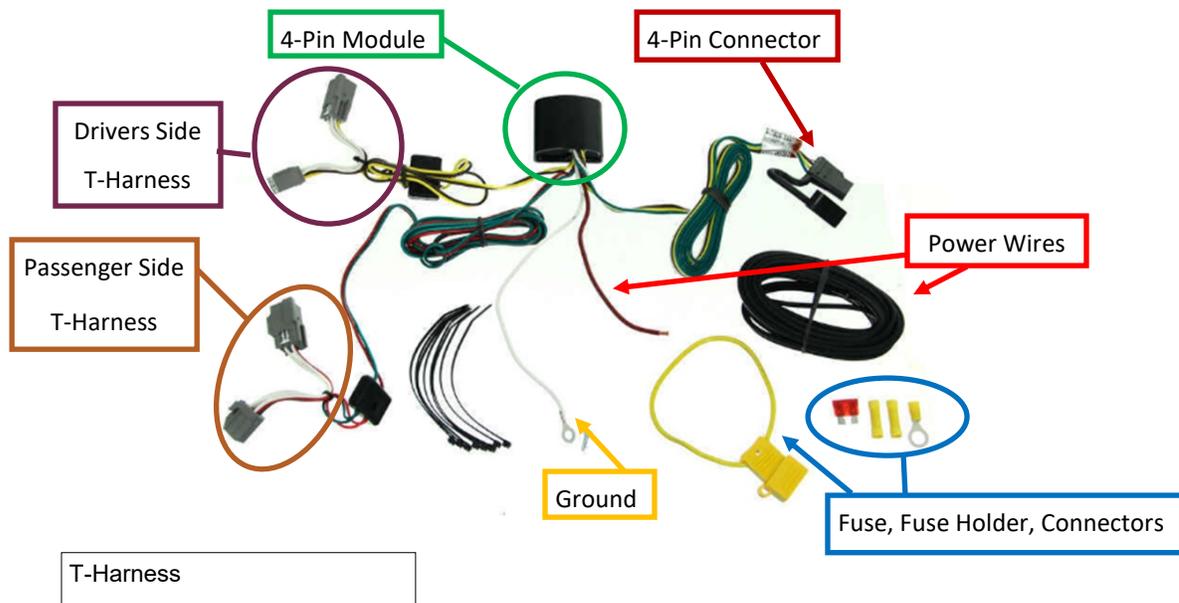


Figure 5: Secure Logic Box

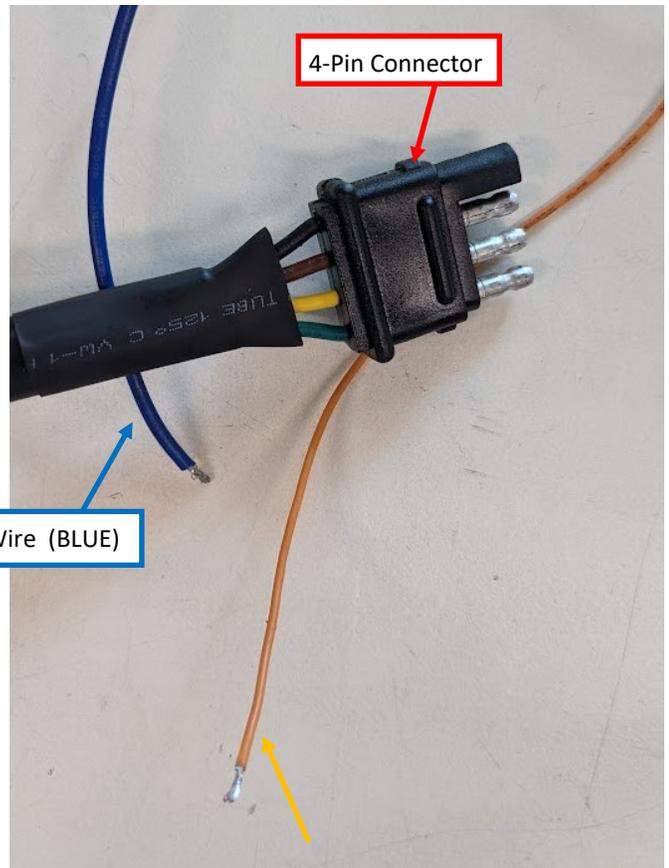
14. Remove both driver and passenger cargo area trim to expose Ford harness connectors for each tail light.
15. Attach the green wire on the 4-pin connector to the green wire on Blade LED lightbar wire using provided crimp connectors, or solder them together. Repeat for yellow, brown, and black wires on the 4-pin plug.
16. Route cable from Blade LED lightbar with 4-pin plug toward the internal space behind the trim (removed in step 14) on the drivers side of the vehicle.
17. Locate vehicle tail light connectors behind trim (Removed in step 12). The T-harness connector with YELLOW wires should be connected between the OEM plug on the DRIVER side. The T-harness connector with RED wires shall be connected between the OEM connector on the PASSENGER side of the vehicle
18. Connect the WHITE ground wire to the existing grounding point at the rear driver side of the vehicle shown.
19. Cut grommet, using care not to ruin grommet or damage harness. Then, run the black power wire from the grommet under the vehicle to the battery in the engine compartment (avoid moving and or hot objects when routing power wire). **NOTE: be sure to completely seal grommet after routing wires.**



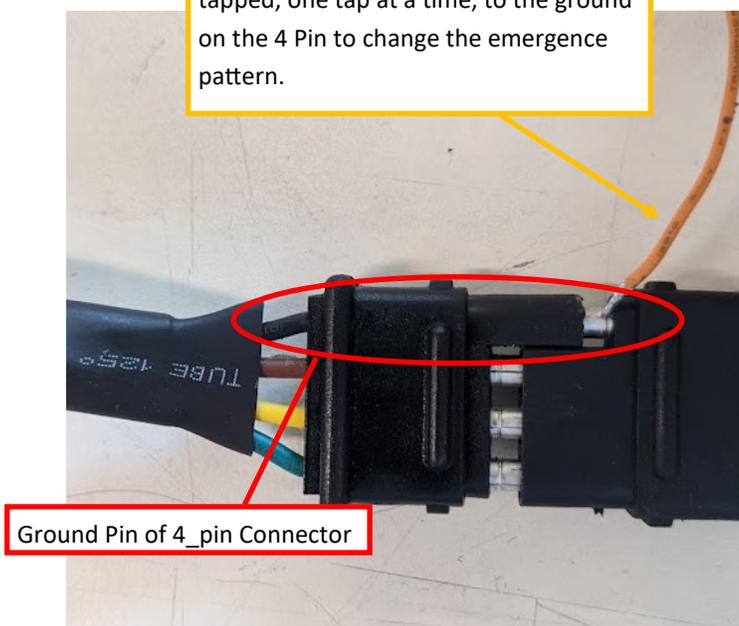
20. Connect the one end of the BLACK power wire that is ran through the grommet to a 12V+ source, and the other end of the power wire to the bare RED wire coming out of the T-Harness 4-pin module with the provided fuse and fuse holder in-line between the red and black wires. **(Figure 9)**.
21. The blue wire controls the emergency flash function. Route this wire to where the switch will be installed inside the vehicle. Connect a 12V+ source to one terminal on the switch and the blue wire to the other.
22. Test light bar functionality before securing wires in place with zip-ties and re-install any trim pieces.



23. To activate the emergence pattern on the blade, first connect the BLUE wire coming from the blade to a switch or other control device. The blue wire must be powered with 12V to activate the emergence pattern.
24. To change the pattern simply "Tap" the Orange (or RED) wire coming from the blade to the ground pin on the 4-Pin connector while the pattern is active.
25. Once the desired pattern is selected, simply plug the 4-pin in all the way into the connector and tape the end of the orange wire or cut off completely.
26. The blue wire controls the emergency flash function. Route this wire to where the switch will be installed inside the vehicle. Connect a 12V+ source to one terminal on the switch and the blue wire to the other.
27. Test light bar functionality before securing wires in place with zip-ties and re-install any trim pieces.



Pattern changing wire (Orange or Red) tapped, one tap at a time, to the ground on the 4 Pin to change the emergence pattern.



After pattern is selected, 4Pin connector needed to be connected completely as shown .



## Sealing Pass-Through Points/Openings

### Liftgate Bulb Seal

- If the liftgate bulb seal is damaged or is removed for any reason, it should be replaced and properly seated.

### Underbody

- Any holes in the body must be sealed with Motorcraft Seam Sealer (TA-2-B).
- Any damaged parts must be replaced. Examples include:
  - Auxiliary A/C pass-through
  - Wiring grommets
  - Body plugs

## Sealing Option for Body Openings/Pass-Through Points

- Pass-through or other openings of similar size should be sealed using the recommended foil-backed mastic patch.
- Foil-backed mastic patch should be used to cover and seal body openings.
- Part numbers for foil-backed mastic patch:
  - 4L3Z18203A16AA; size of patch—1.5 x 147 x 330mm
  - DA5Z65203A16A; size of patch— 1.5 x 100 x 300mm