



Classic LightBar 2005-2013 Mustang



Note: Read installation instructions before starting.

Component List:

- | | |
|--|--------------|
| <input type="checkbox"/> 1 – LightBar | Part #110000 |
| <input type="checkbox"/> 1 – Driver Side Bracket w/Set Screw | Part #115003 |
| <input type="checkbox"/> 1 – Passenger Side Bracket w/Set Screw | Part #115004 |
| <input type="checkbox"/> 4 – Button Head Screw | Part #117000 |
| <input type="checkbox"/> 4 – Flange Nut | Part #117001 |
| <input type="checkbox"/> 2 – 4" Zip-Ties | Part #116053 |
| <input type="checkbox"/> 1 – CDC LightBar Wiring Harness | Part #05001 |
| <input type="checkbox"/> 1 – Light Blue T-Tap Connector (2010-13 Only) | Part #182003 |
| <input type="checkbox"/> 1 – Red T-Tap Connector (2010-13 Only) | Part #117032 |
| <input type="checkbox"/> 2 – 6" Velcro Strap | Part #950009 |

Tools Required:

- | | |
|-------------------------|-----------------------|
| 3/8" Drive Ratchet | Drill Motor |
| 3/8" Drive 3" Extension | 1/8" Drill Bit |
| 3/8" Drive 10mm Socket | 5/16" Drill Bit |
| 3/8" Drive 13mm Socket | 2" Hole Saw |
| T-50 Torx Bit | Trim Tool (Fork Tool) |
| 1/4" Allen Wrench | Electrical Tape |
| 3/16" Allen Wrench | Center Punch |
| 1/2" Wrench | Hammer |
| Wire Cutter/Stripper | Wire Crimper |

The Classic LightBar is NOT intended to provide protection in the event of a rollover.

The Classic LightBar is Patented: All rights reserved by Classic Design Concepts

1. Remove Back Seat:

- A) Locate the retainers securing the seat bottom into the vehicle, approximately 10 inches from the end of the cushion, either side. Use your thumb to push in retainer release tab. Lift the seat up to remove.

Figure 1

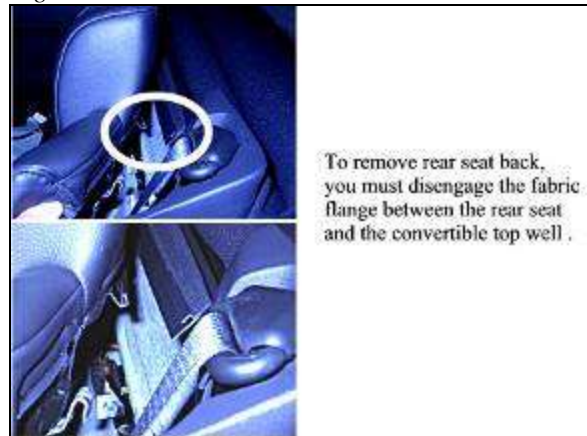


- B) Remove the two 13mm screws securing the seat back, located on each lower corner. Lift seat upward to release seat back from brackets at the top. You can carefully prop the seat back under the retracted top (see Figure 2 below), use caution if choosing this method not to damage or scratch the vinyl of the seat. You can remove the seat from the vehicle completely by disengaging the flanges securing the top of the rear seat to the fabric of the convertible top well (see Figure 3 below).

Figure 2



Figure 3



2. Remove Quarter Trim Panels:

- A) Grip the Quarter Trim Panel Cap at the shoulder strap opening and lift up to dislodge the retaining clips.

Figure 4



- B) The inside plastic Quarter Trim Panels are two-piece panels. Remove the upper portion of the Quarter Trim Panel from the vehicle; it is not necessary to remove the lower portion. Pull the forward edge of the trim Panel over the pinch weld in the doorjamb, then run your fingers across the seam between the two parts, separating the panels.

Figure 5



- C) Use a Door Trim Tool (Fork Tool) to dislodge the pushpin retainer at the rear edge of the Trim Panel approximately 4" down from the top, pry Trim Panel toward the outside of car to release retainer.

Figure 6

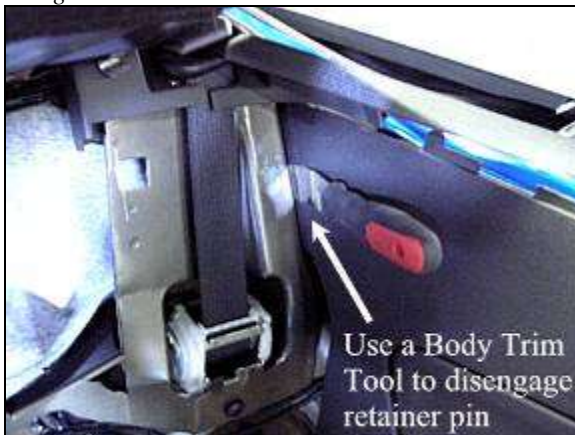
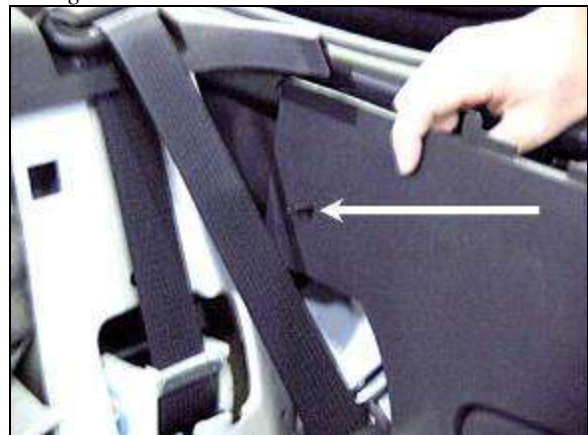


Figure 7



3. Install Light Bar Brackets:

- A) Remove the shoulder belt guide retaining bolt with a T-50 Torx Bit. Remove the 10mm bolt directly behind the shoulder belt guide.

Figure 8

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B) Install the LightBar Bracket to the vehicle using the factory bolts removed in the above step.

Note: Factory Seatbelt Bolts are intended only as locators for the LightBar Brackets, NOT to secure the Brackets. Torque seatbelt guide bolt (T-50 Torx) to 30 lb-ft. It is imperative that the shoulder strap guide bolt spacer fit inside the clearance hole of the LightBar Bracket so that the seat belt functions properly and the LightBar Bracket fits properly.

C) With the LightBar Bracket in place and secured by the 10mm bolt and the shoulder strap bolt reinstalled, center punch through the two Bracket attachment holes. Drill $\frac{1}{8}$ " pilot holes through Bracket hole into sheet metal. Enlarge pilot holes to $\frac{5}{16}$ ".

Figure 9



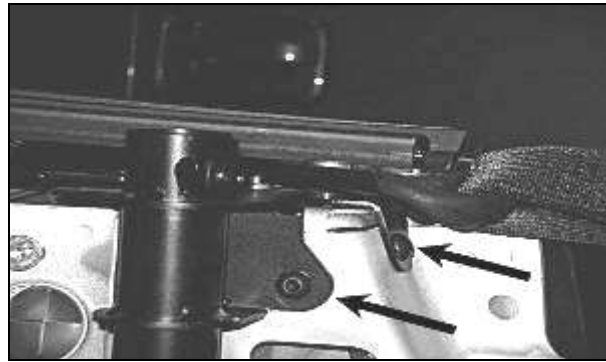
Figure 10



Note: It is very important that you protect the seat belt and the shoulder strap retractor from the cutting debris that is created during the drilling process. We recommend using a magnet or drop cloth to catch the debris.

D) Install the Button Head Screws through the Bracket, place nuts on the inside of the body channel, securing Bracket to the vehicle. Tighten Button Head Screws.

Figure 11



E) Repeat installation steps for Light Bar bracket on opposite side of car.

3. Wiring LightBar LED: YEAR SPECIFIC- read ALL instructions before beginning!

A) **All Years:** Route the plastic **Connector end** of CDC LightBar Wiring Harness #05001 behind speaker and up through the LightBar Bracket tube. Let the Connector end of Harness hang out of the top of LightBar Bracket, leaving approximately 4" slack.

NOTE: Secure all wires away from the moving components of the Convertible Top mechanism.

B) LIGHTBAR GROUND (Black) WIRE

All Years: Locate the plug behind the passenger side quarter trim panel, to the rear of stereo speaker. Remove connector from the sheet metal by dislodging the retainer clip. (*Figure 12, below*)

Locate the factory **White Wire with Purple Stripe (solid White on some 2011+ cars)** within the connector. From the back of the connector (no need to disconnect/separate connector halves), push the metal terminal of the LightBar Wiring Harness **Black** wire into the same connector opening along side the metal terminal of the White or White/Purple wire. Secure the Black CDC wire to the factory harness with a 4" Zip Tie (CDC #116053). Place Zip Tie immediately behind the shrink wrap on the Black Wire Pin. Tug Black wire to verify that Zip Tie and Pin are secured. Wrapping the CDC wire to the factory wires with electrical tape can provide additional support.

Figure 12

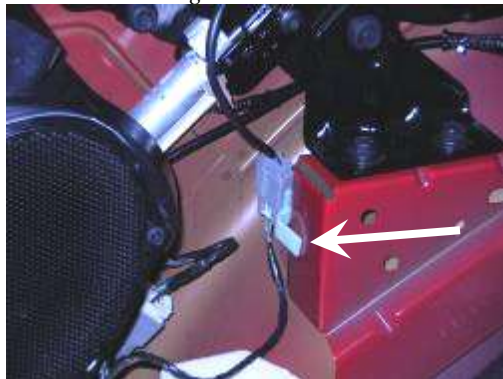


Figure 13

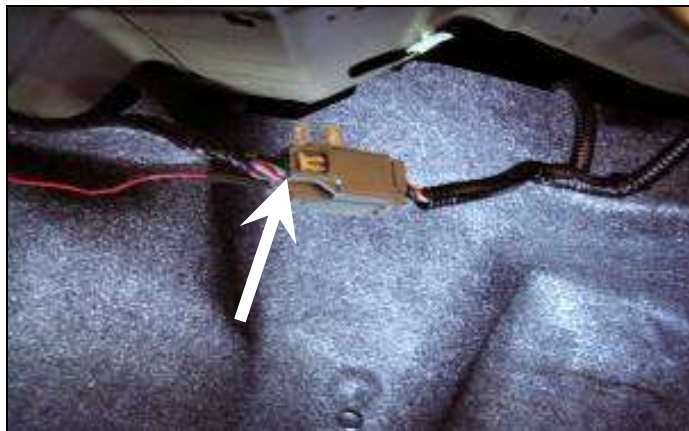


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C) LIGHTBAR POSITIVE (Red) WIRE

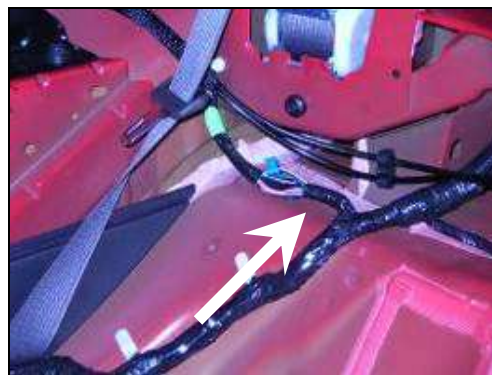
2005-2009 Models:

Route the remaining red LightBar Harness wire into passenger side of trunk, following existing wire harnesses next to convertible pump. Locate the wire harness connector on the passenger side of the trunk, attached to the under-side of the “package tray” area. The connector is located along the wire harness that feeds the trunk lid. Remove connector from the sheet metal by dislodging the retainer clip to aid in LightBar wire installation. Locate the factory **Tan Wire with Blue Stripe** within the connector. From the backside of the connector, push the metal terminal of the LightBar Wiring Harness **Red** wire into the same connector opening along side of the metal terminal of the Tan/Blue wire. Secure the Red CDC wire to the factory harness with a 4” Zip Tie. Place Zip Tie immediately behind the shrink wrap on the Red Wire Pin. Tug Red wire to verify that Zip Tie and Pin are secured. Wrapping the CDC wire to the factory wires with electrical tape may provide additional support.



2010-2013 Models:

Locate the wire harness on the passenger side leading to the trunk. There is a branch coming from the main bundle that runs outward, this is where you will find the 2010+ positive trigger wire. Attach the Red T-Tap Connector (CDC #117032) to the **Yellow w/Brown stripe** wire in 2010 Mustangs. In 2011+ Mustangs, use **Yellow w/Silver stripe**. Cut the spade terminal off of the CDC Harness Red wire, strip end, and crimp on the Light Blue Connector (CDC #182003). Route red wire behind quarter trim panel and plug Red wire w/Light Blue Connector into the Red T-Tap.



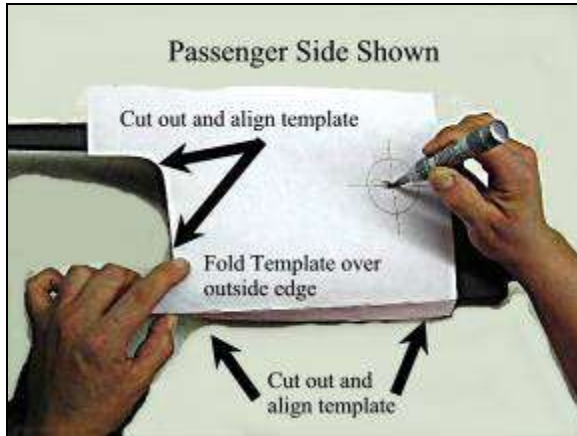
- D) Temporarily plug LightBar into Harness and press the brake pedal to verify proper function of LED. If LED doesn't illuminate when brake pedal is depressed, check your connections at both connections. When verification is complete unplug the Light Bar from the LightBar Vehicle Harness and set aside.
- E) Reinstall the upper portion of the Quarter Trim Panels on both sides.

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5. Cutting holes in Quarter Trim Panel Caps:

- A) Cutout the Template (last page of instructions) and place on the Passenger Side Trim Panel Cap and align as directed on the Template. Center punch the 2" hole center point, remove the template and drill an 1/8" pilot hole. Follow in the pilot hole with a 2" Hole Saw.
- B) Flip Template over and place on the Driver Side Trim Panel Cap and repeat the above steps for marking and drilling the 2" hole.

Figure 16



6. Reinstall Quarter Trim Panel Caps:

- A) Install the Trim Panel Caps onto their respective sides and verify that the 2" holes drilled in step #4 do not obstruct the LightBar Bracket receiver tube. If the receiver tube is blocked, trim the Cap as necessary to achieve an unobstructed path for the LightBar to pass through. The Connector end of the CDC LightBar Harness MUST extend out of the Bracket to allow for connection to the Bar (Figure 17).

Figure 17

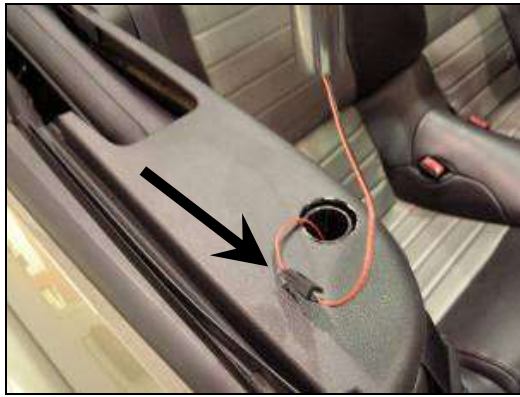


7. Installation of Classic LightBar:

- A) Plug the Connector from the LED into the CDC Vehicle Harness installed in the previous steps. Step on brake pedal to verify proper LED function. If LED doesn't illuminate when the brake pedal is depressed, check your connections at the truck connector then the connector behind the Trim Panel. Push wire down through the LightBar Bracket receiver tube while lowering the LightBar ends into the Mounting Brackets.

Figure 18

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- B) Lower Classic LightBar evenly into Mounting Brackets. Lower Bar down to the tops of Trim Panel Caps. With the bottom of the LightBar flat on the surface of the trim panel Caps; tighten the LightBar Bracket Set Screw.

Figure 19



8. Reinstall your back seat:

- A) Reinstall by reversing step 1.

9. Clearance Convertible Top:

- A) Cycle the convertible Top to the half-way point. Locate the elastic band that secures the top to the frame at the forward end of the rear window seal.



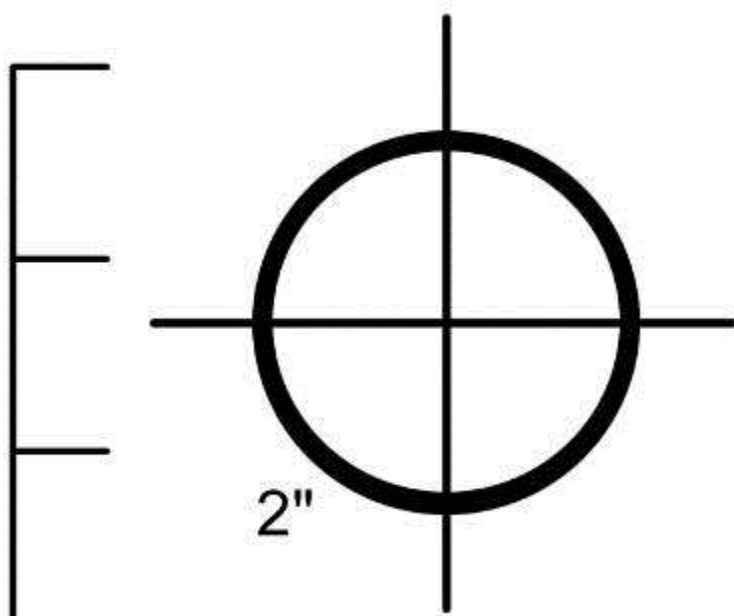
- B) Use the 6" Velcro straps (CDC # 950009) to draw the elastic band tight. Cross the Velcro Strap around the elastic band. Route the top leg of the Velcro Strap **behind** the frame. **IT IS IMPORTANT THAT THE TOP LEG GO UNDER THE FRAME!**

CD4II3AB



- C) Wrap the top leg around frame and secure Velcro Strap to the frame with the bottom leg of the Velcro Strap, as shown.





2"

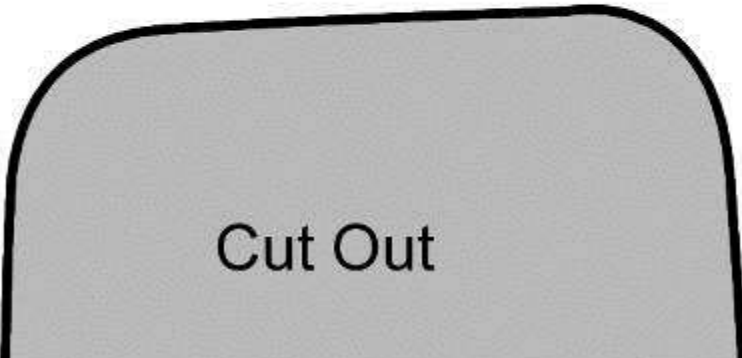
05 and up Mustang Light Bar

This side up when marking passenger side.

Flip over to mark drivers side

Scale in 1" increments

FOLD ALONG DOTTED LINE



Cut Out

Cut Out

Cut Out



iLight Lightbar Wiring Instructions 2005 - 2013 Mustang

****Read entire installation guide before starting.**



Component List:

- 1 – iLight / Brake Light Wire Harness (included with Lightbar)
- 1 – Red Ring Terminal
- 2 – Red T-Tap Connector (05-09 require 2, 2010 & newer require 1)
- 1 – Male Spade Connector

Tools Required:

- 1/4" Ratchet
- 10mm 1/4" Drive Socket
- Trim Panel/Fork Tool
- Needle-Nose pliers
- Wire Crimpers
- Wire Strippers

2010 – 2013 Installation:

1. During the Lightbar installation process, you will be routing the Lightbar's iLight/Brake Light wire harness through the passenger-side mounting bracket (Step 3A). Wire the brake light wires per the Lightbar installation instructions.



2. Remove plastic sill plate, be careful not to bend part.



3. Remove the 2-piece passenger kick-panel plastic covers, exposing wire harnesses. Pull rear-ward on large portion of kick panel to dislodge clips.

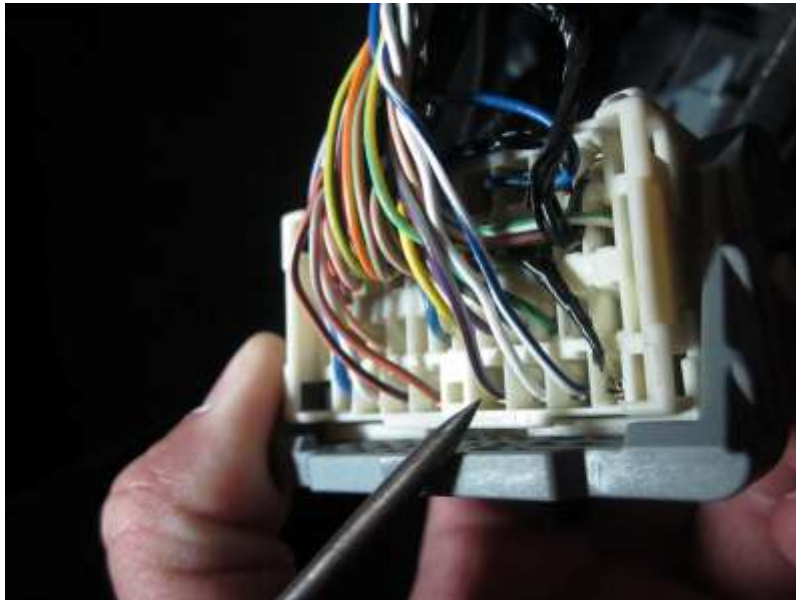


4. From the Lightbar bracket, route iLight wire harness downward behind the plastic trim panel and forward toward the passenger kick panel area. Route the harness along the existing body harness (behind the carpet) and secure with electrical tape or plastic zip ties. Be sure the wire will not chafe or get pinched along any sharp metal edges.

5. Locate the large wire connector in the passenger kickpanel area; it may be helpful to dislodge the connector from the car using a trim panel/fork tool.

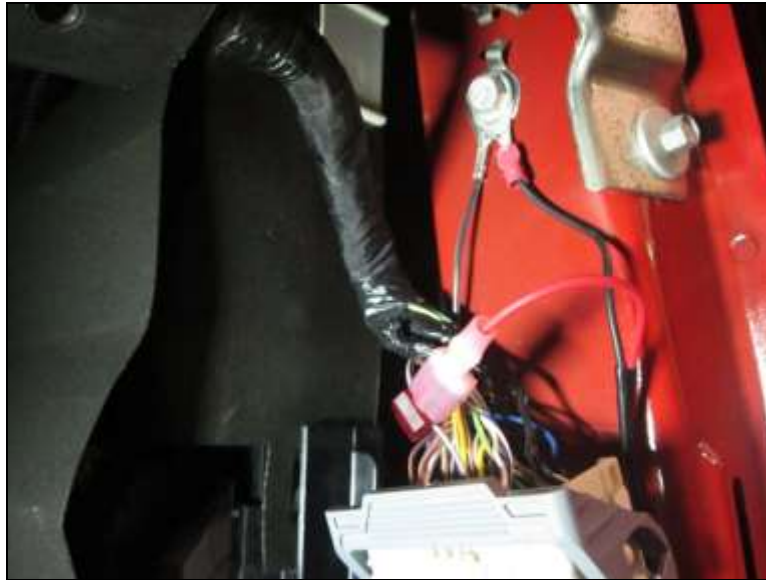


6. Looking at the back of the upper-half of the connector, locate the wire in **pin #4**, **GRAY w/ PURPLE stripe** (see pointer below).



This wire will feed the positive side (red wire) of the iLight. A few inches from this large connector, attach a red T-Tap (provided) connector to this Gray/Purple stripe wire, closing the T-Tap firmly with pliers.

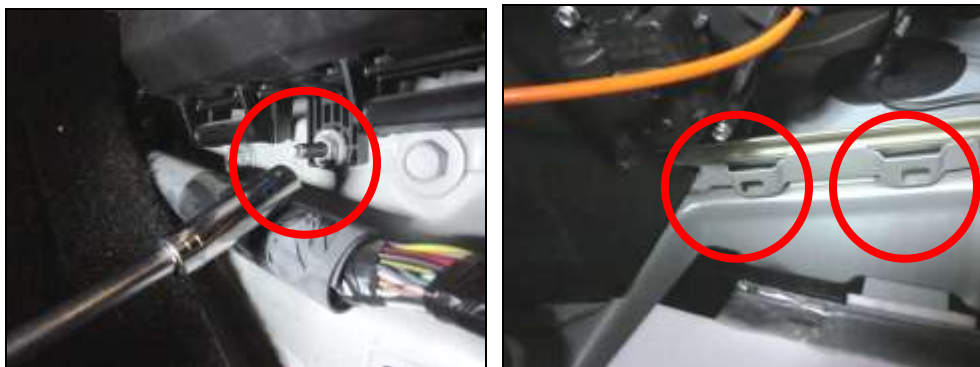
7. Strip some of the insulation off of the red iLight wire and crimp the (provided) Male Spade connector to this wire; connect this spade connector to the T-tap. See picture on the following page.
8. Located directly above this large connector is a ground bolt. Strip some of the insulation off of the black iLight wire, and crimp the (provided) Ring Terminal onto this wire. Ground this wire using the ground bolt above the connector; see picture on the following page.



9. Secure any loose iLight wires as needed. Reinstall kickpanel trim pieces, and reinstall plastic sill cover.
10. Resume remainder of Lightbar installation.

2005 – 2009 Installation:

11. Follow steps 1-3 above.
12. Unbolt Smart Junction Box (SJB) located behind kick panel. Start with 10mm nut located at bottom of SJB. Pull on the lower part of the SJB outward toward center of car. Top of SJB is held to car using J-hooks and slots; see pictures for reference. Raise lower part of SJB until you can dislodge J-hooks at top of SJB.



13. Carefully maneuver SJB around to access back panel, locate top gray electrical connector and disconnect carefully by depressing lock and pivoting arm. Pictures on following page.



14. Connect the iLight's red wire to this connector's black w/ light blue stripe wire, via the provided t-tap and male spade connector. Connect the iLight's black wire to this connector's green w/ yellow stripe wire via the t-tap and male spade connector.



15. Reinstall gray connector to SJB, reinstall kick panel and door sill, resume remainder of Lightbar installation.

TESTING iLight OPERATION

16. Connect iLight/brake light connector to Lightbar at trim panel mounting bracket area.
17. Close all doors and with keyless entry remote, lock doors. This should turn off any interior dome lights. Unlocking the car w/ the remote should turn on the interior dome lights, including the iLight. Test complete.
18. While sitting in the driver's seat, close all doors and lock car, which should turn off all interior lights. At the headlight switch, roll the dimmer "dial" switch all the way up, so that interior lights turn on. The iLight should illuminate as well. Turning off the interior lights w/ same dial switch should turn off iLight. Test complete.
19. If iLight is not responding, check connections at passenger kickpanel. Many times when the male spade connector is crimped to a wire, the metal blade within the connector gets pushed to one side of the insulation, and fails to make contact inside the red T-Tap.
20. LED is polarity specific; it will not function if the wires have been reversed.