



# OUTBACK CF5™ COB L.E.D. TAILGATE LIGHTS INSTALLATION INSTRUCTIONS

PART # 20-822, 20-823-20-834 & 20-835

## PARTS LIST

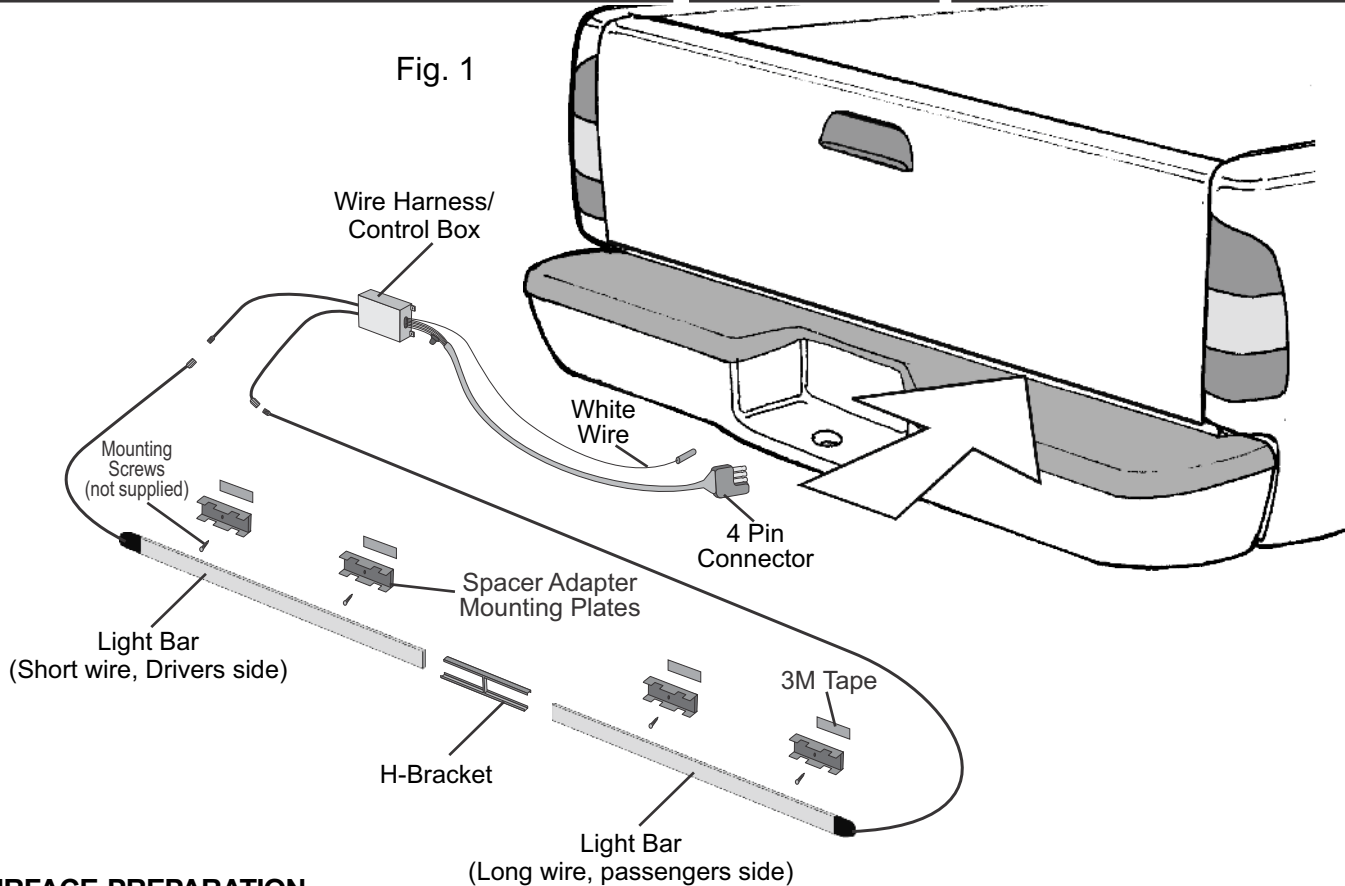
1 Two piece Outback CF5 Lights	1 Wire Harness
1 H-Bracket	1 Wire Tap Connector
4 Spacer Adapter Mounting Plates	1 Alcohol Prep. Pad
5 Pieces of 3M Self Stick Tape	6 Wire Taps

## TOOLS NEEDED

12 volt test light  
Tape measure  
Marker  
Screw Driver  
Wire cutters

Note: Before beginning read instructions through carefully and completely. Prior to attaching your new L.E.D. Tailgate Light Bar, open tailgate fully to ensure gate clears Tailight Bar without interference.

Fig. 1



## SURFACE PREPARATION

It is very important the mounting surface is clean and free of wax, dirt, oil, water or other contaminants that could interfere w/ adhesive bonding. Place Light Bar in approximate mounting position in area below tailgate to determine mounting area to clean and prepare for installation. Take the Alcohol Preparation Pad supplied and clean mounting surfaces thoroughly.

## INSTALLATION

**Note:** This product must be used in it's two piece full length to function correctly. **DO NOT CUT.**

- 1) Slide or snap on (2) Spacer Adapter Mounting Plates onto each Light Bar. Slide each side of the light bar into the center H-Bracket. (See Fig. 1 to reference pieces)
- 2) Use a tape measure and marker, mark ends of Light Bar onto vehicle as a guide to ensure Light Bar is positioned properly. **IMPORTANT!** The **Side of light with the short piece of wiring** should be located on the drivers side to assure that the left & right turn signals are correct.
- 3) Install 1 piece of 3M tape to the back of each Spacer Adapter Mounting Plate by peeling off the one side of the protective paper backing and pressing it on. Once you have applied the strips press on the protective paper backing to adhere.
- 4) Make sure the mounting plates are positioned for best mounting position. Carefully peel off protective paper backing(s) from all four of the pieces of 3M Tape, installed on the light bar, exposing the adhesive. Now install the light bar to the truck using positioning marks from step 2.
- 5) After product is mounted, apply steady pressure on the Light Bar to ensure proper bonding.

Alternate Mounting Option 1: Mounting screws (not supplied) may be used instead of 3M Tape to install Spacer Adapter Mounting Plates. If these are used instead make sure to figure out placement of mounting brackets before drilling marked holes.

Alternate Mounting Option 2: If the vehicle doesn't have any mounting obstructions and the surface is flat, the light bar may be mounted directly to the surface without using the Spacer Adapter Mounting Plates. If you decide to do this option you may want to purchase extra 3M mounting tape to be applied to full light bar.

**Note:** Do not install this product if outside temperature is below 60°F or above 90°F. Do not subject Light Bar to extreme temperatures, water or road contaminants for 24 hours after installation to allow adhesive to fully bond to mounting surface.

**Warning:** Installation of accessories should only be undertaken by those with mechanical and electrical knowledge and are familiar with working on vehicles. Always use eye protection (goggles, safety glasses or shield). Park the vehicle in a well lit area, on level ground and apply the parking brake. After installation, check all lights and electronic functions thoroughly. Failure to follow instructions can lead to severe damage and personal injury.

## ELECTRICAL CONNECTIONS

Light bars must be threaded to Wire harness / Control box wires. There won't be a mistake because the drivers side and the passengers side of the Light Bars have different connections (Male / Female).

### Option 1: (For trucks with towing packages and without trailer detection)

- 1) Plug the 4 pin connector on tailgate light bar into the 4 pin trailer connector on truck. (See Fig. 2)
- 2) Wire reverse light (white wire) into the reverse light on 7 pin trailer connector (Middle Pin) or into factory reverse light using a supplied wire tap.

**Option 2: (Only For Dodge trucks without LED taillights)** This option is recommended for Dodge trucks, some Dodge trailer plug flasher do not flash at the same rate as the flasher in the taillights.

- 1) Cut the 4 pin trailer plug connector off of tailgate light bar.
- 2) Wire the Black wire (ground), Brown wire (Running Lights), Yellow wire (Left Turn / Brake), and Green wire (Right Turn / Brake) into taillights wiring using supplied wire taps.
- 3) There are two red wires coming from the control box, one of them has a 1" piece of Heatshrink material installed on it. Cut that Red wire about 2 inches from the Black Control Box. Move the heat shrink material over the end of that 2" piece of Red wire. Now using a heat gun Heat Shrink the material. Press the end of the heat shrink sticking off of wire together when still warm to seal it up. This is to keep moisture out of the wire.
- 4) Now Pull the other Red wire from the black PVC tubing (enough to reach the +12V power on the 7 pin connector) and wire to the +12V power on the 7 pin trailer connector using a supplied wire tap. Some trucks do not provide a constant +12V unless a trailer is plugged into the 7 pin trailer connector. If this is the case, a separate 16GA or bigger wire may need to be ran from the positive on the battery, additional Instructions for the 2015+ F150 and 2017+ Super Duty have been added to account for this issue below.

**Note:** The wires can also be wired into the 7 Pin trailer connector wires. This is not recommended for trucks with trailer detection.

### For 2015+ F150 and 2017+ Super Duty only

This step is to get a constant +12V back to the 7 pin trailer connector because these trucks disengage the +12V power when the 7 pin trailer connector is not in use. This is to only be done if the +12V red wire on the light bar is being used. (See option 2 step 3)

- 1) Cut a 6" piece of 16awg or bigger wire for the F150. A 12awg or bigger for Super Duty ( This is not supplied with kit).
- 2) Under dash on drivers side. Find trailer tow module. Locate both Orange wire (Pin 3 on C2498C Connector) and Green-Red / Brown-Red wire (On F150) or Red wire (on Super Duty) (Pin 1 on C2498A Connector).
- 3) Attach 6" wire between ORANGE wire (pin 3 on C2498C connector) and GREEN-RED/BROWN-RED wire (on F150) or RED wire (on Super Duty) (Pin 1 on C2498A connector) using wire taps. For F150 supplied wire taps can be used, Super Duty are not supplied, recommend using 3M 902(10awg wire tap). This will activate a continuous +12V to the +12V power pin on the 7 pin trailer connector.

After everything is wired the excess Wiring and the Control box must be mounted or zip tied up under the vehicle.

## SYSTEM CHECK

After installation be sure to check that the Light bar is functioning correctly. With a helpers assistance check all functions turning on running lights, turn signals, back-up lights and brake lights.

### FORD 2015 - Current F-150 & 2017 - Current Super Duty - Suggested Wire Colors for LED Tail Lights

Factory Light	Factory Wire Color	Light Bar Wire Color
Driver Turn	Green with Blue Tracer	Yellow
Driver Running Light	Blue with Gray Tracer	Brown
Passenger Turn	Blue with Orange Tracer	Green
Ground (From 7-pin trailer plug)	White wire in 7-pin	Black
Driver Reverse	Green with Brown Tracer	White
Power (From 7-pin trailer plug)	Orange wire in 7-pin	Red

### Suggested Wire Colors For Halogen Tail Lights

Driver Turn	Gray with Orange Tracer	Yellow
Driver Running Light	Blue with Gray Tracer	Brown
Passenger Turn	Green with Orange Tracer	Green
Ground (From 7-pin trailer plug)	White wire in 7-pin	Black
Driver Reverse	Green with Brown Tracer	White
Power (From 7-pin trailer plug)	Orange wire in 7-pin	Red

