# CTIVE DESERT DESIGNS®

### **Preparation:**

- Disconnect the negative battery terminal. Park the vehicle on level ground and set the emergency brake.
- We recommend reading through the installation instructions in whole before performing the work.
- When button head bolts are being used, install the supplied washer on the nut side. Then, hold the bolt station-

ary and only turn the nut to tighten. Do not turn the bolt to tighten hardware assembly, unless otherwise noted. • Estimated Installation Time: Add 1.5 Hours on Top of Bumper Install

\*\*This installation requires 2 people for best results\*\* \*\*Labor Rates are based on a vehicle with no pre-existing damage. Wiring labor is based on a standard wiring procedure with light switches installed in an easily accessible location. Custom light triggering or switch mounting location will result in a greater labor charge.\*\*

#### You will need the following tools:

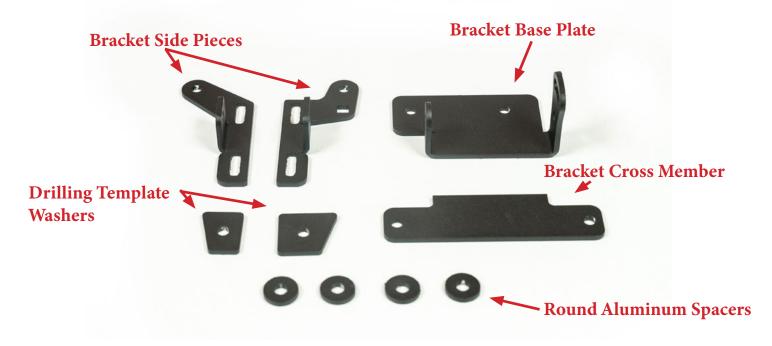
- Ratchet
- 7mm Socket
- 13mm Socket
- T30 Torx Socket
- Drill

#### Included in Kit:

- Black Button Head Bolts (1/4"-20 x 1") 6
- Black Lock Nuts (1/4"-20) 6
- Flat Washer (1/4") 1
- Round Aluminum Spacers (1/4" ID) 4
- Bracket Base Plate 1
- Bracket Cross Member 1

- 5/32" Allen Wrench/Socket - 8mm Socket
- 15mm Socket
- 1/4" Drill Bit
- Black Washers (1/4") 6
- Carriage Bolt (1/4"-20 x 1") 1
- Nylon Lock Nut (1/4"-20) 1
- 2 - Drilling Template Washers
- Bracket Side Plates 1

\*\*When installing this with an aftermarket bumper, you should follow the removal section of the bumper install guide, then follow the installation section of this guide, and finally follow the installation section of your bumper guide.\*\*



- 7/16" Socket & Wrench
- 10mm Socket
- 21mm Socket
- 1 1/2" Hole Saw



### **Removal:**

1. From underneath the vehicle, unplug the main bumper harness connector. This connector can be found along the top side of the passenger side frame rail. (Fig A)



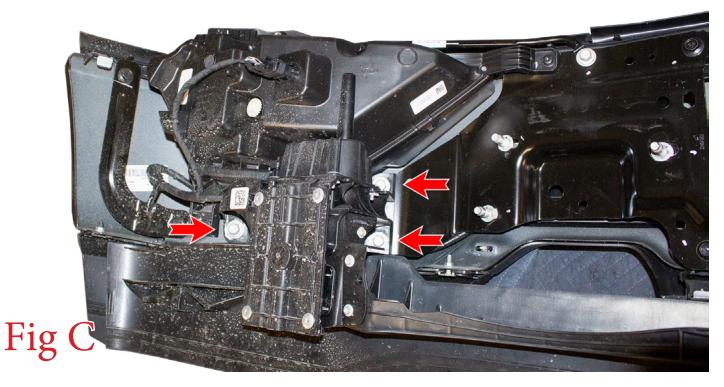
2. From underneath the vehicle, along the back of the frame horns, use a 21mm Socket to remove the 3 mounting bolts (per side) that hold on the OEM front bumper. Then, remove the bumper from the vehicle. As you are removing the bumper, you will have to unplug the lower shutter motor and release the three clips that hold the harness to the lower shutter assembly (for Ecoboost only). (Fig B)



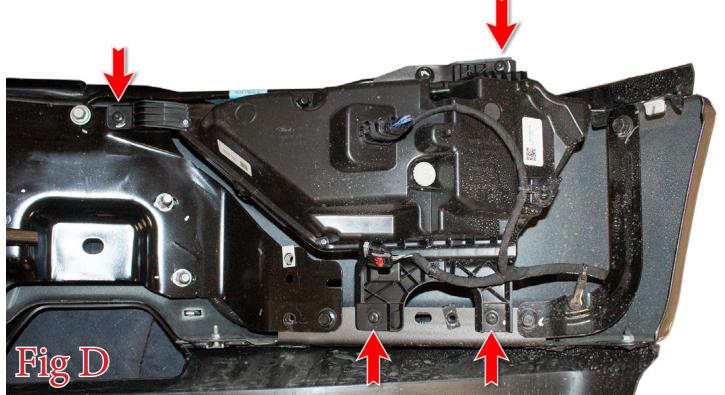


2021-Current Ford F150 Adaptive Cruise Control Relocation Bracket Installation Instructions

3. Set the OEM bumper on a workbench. Then, use a 13mm Socket to remove the mounting bolts (3 per side) for the lower spoiler system. Once all bolts are removed, remove the lower spoiler. (Fig C)

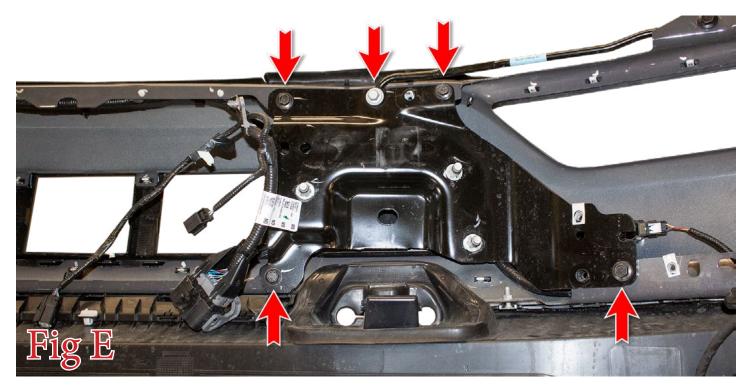


4. Use a T30 Torx Socket to remove the fog light assembly mounting bolts (4 per side). Then, remove the fog light assemblies from the OEM bumper. (Fig D)





5. Using a 13mm Socket, remove the 6 mounting bolts (per side) that hold in the bumper structure. Then, remove those pieces from the bumper. (Fig E)



6. Release the plastic clip holding the adaptive cruise control module to its bracket. Then, remove the module from its bracket. (Fig F)





7. Remove the series of plastic clips holding the front bumper harness to the OEM bumper. Then, remove the harness from the bumper. (Fig G)

Fig G



8. Find the section of the bumper harness that goes to the adaptive cruise control bracket. Cut the wire loom from this point all the way back to the main connector so you can separate the adaptive cruise wires from the rest of the harness. Once you have all the wires separated you can re-loom everything. (Fig H)

Strip back the wire loom starting at this connector and ending at the main harness connector so it looks like below when you are complete.

Fig H



9. Pop the hood and remove the radiator cover clips (x14). Then, remove the radiator cover from the vehicle. (Fig I)



10. Use a 10mm Socket to remove the upper grille mounting bolts (x4). (Fig J)



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11. Use a 7mm Socket to remove the 2 valance bolts in the front section of each wheel well. (Fig K)



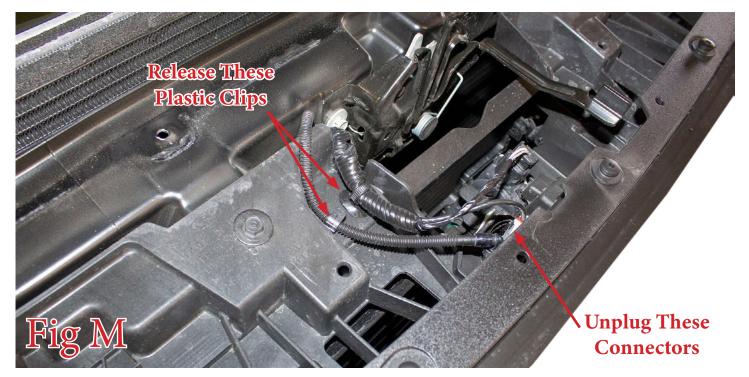
- 12. Pull the valance off the vehicle. There are no tools required for this step, it simply pulls off by hand.
- 13. Use an 8mm Socket to remove the lower grille mounting bolts (1 per side). (Fig L)



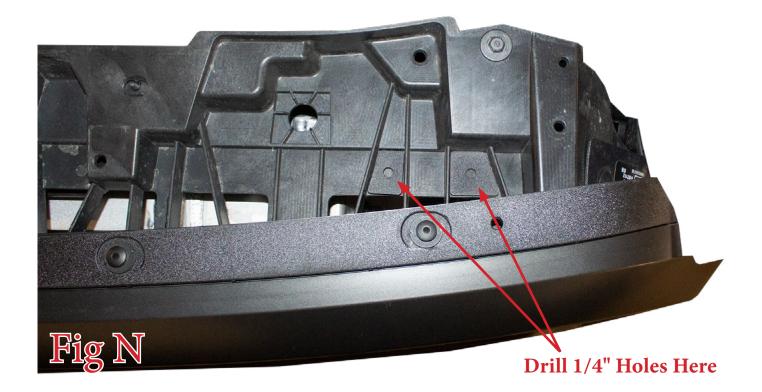
# Fig L



14. Unplug the three connectors on the top side of the grille and release the two plastic clips holding the wires to the grille. Then, remove the grille from the vehicle. (Fig M)

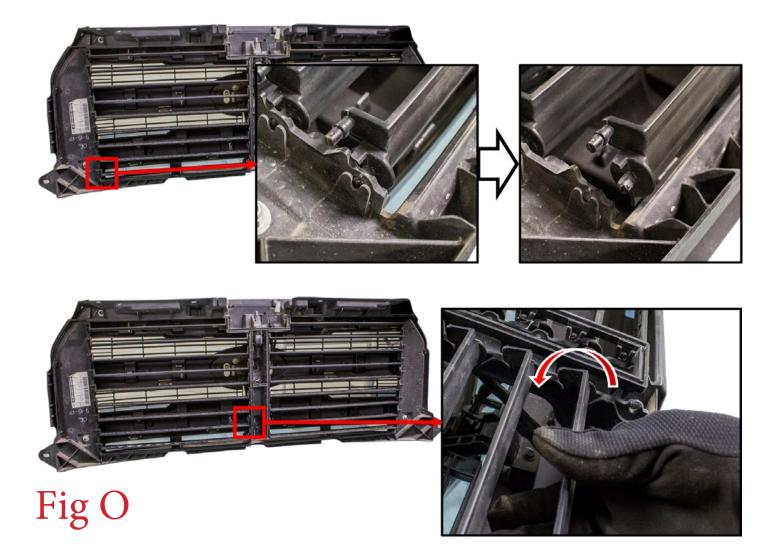


15. Set the grille on a work bench. Then set the drilling template washers down into the two grooves on the driver side of the grille. Use a 1/4" Drill Bit to drill a hole where the templates line up. (Fig N)





16. Remove the driver side grille shutters from the back side of the grille. To do this, remove the outer from its hole by bending the middle portion of the shutter outwards until there is enough clearance to release the peg. Then, rotate the shutter towards the front of the grille to release the inner pegs. (Fig O)

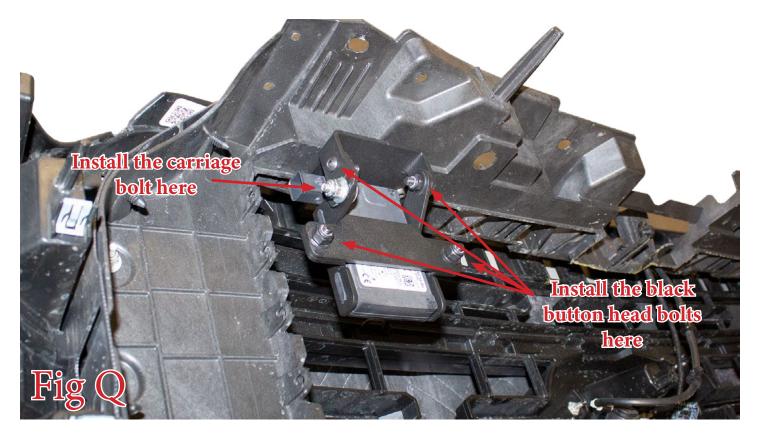




17. Mount the upper portion of the bracket onto the grille as shown in (Fig P). Make sure to mount the bolts with the button head facing down. Also be sure to mount it with two of the supplied spacers between the grille and the shutter. The hardware mounting order is shown in (Fig P).



18. Set the rest of the bracket and module in place. Use the supplied Black 1/4" Bolts (x4), Black 1/4" Washers (x4) and Black 1/4" Lock Nuts (x4) as well as the supplied 1/4" Carriage Bolt (x1), 1/4" Washer (x1) and 1/4" Lock Nut (x1). (Fig Q) Make sure to adjust the tilt on your Adaptive Cruise Module so that the module is parallel to the front face of the grille, and perpendicular to the ground.





19. Use a 1 1/2" Hole Saw or something similar to drill a hole large enough to pass the Adaptive Cruise Control connector through. on the lower/passenger side of the bottom of the grille. (Fig R)



## Installation:

20. Reinstall your grill by reversing Steps 9-14.

21. If you are installing an aftermarket bumper, follow the installation part of that guide now. As your are putting the bumper back on the vehicle, you will have to fish the extended ACC wiring (from Step 8) through the grille to plug the module in.

22. If you are reinstalling your OEM bumper, install the wiring harness back onto the bumper, then reverse Steps 1-5. As your are putting the bumper back on the vehicle, you will have to fish the extended ACC wiring (from Step 8) through the grille to plug the module in.

23. Stand back and enjoy your new ADD Adaptive Cruise Control Bracket.

24. Check and re-tighten, if needed, all mounting bolts after 100 miles and periodically thereafter.

\*\*If your Adaptive Cruise Control is not sensitive enough you may have to go back and adjust the tilt. Pointing it higher (towards the sky) will make it less sensitive, while pointing it down (towards the ground) will make it more sensitive.\*\*



2021-Current Ford F150 Adaptive Cruise Control Relocation Bracket Installation Instructions



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