

**Garrett/ATP 2011-2012
Mechanical BOV's F-150 Charge
Air Cooler Installation Guide**

Courtesy:

Mr. Bryant Hebert

Tools Needed:

13mm socket (To remove lower CAC bracket)

10mm socket (To remove upper CAC bracket)

Ratchet with 12" – 16" extensions

Small Regular (Flat Blade) Screwdriver

Optional Tools:

8mm socket (Loosen and Tighten hose clamps)

15mm deep socket (To remove rear lower deflector)

Typical install time:

45 – 90 minutes depending on Mechanical Aptitude and tools available

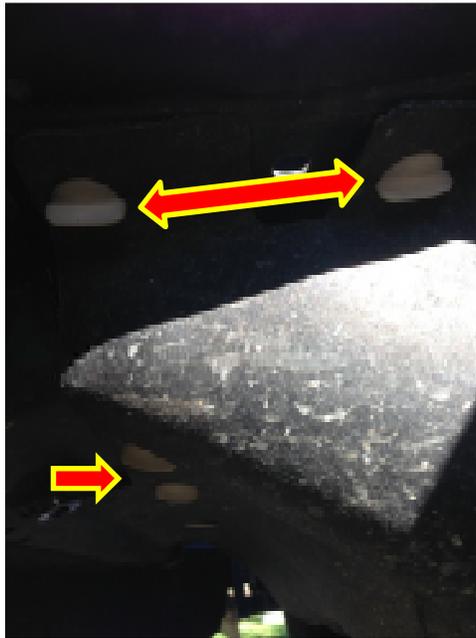
1. Remove 2ct Upper CAC Bracket bolts using a 10mm socket.



2. Remove Upper CAC Bracket and put aside. Good practice is to reinstall the bolts into the holes so they do not walk off.
3. Using Small Regular Screwdriver remove Cir-Clip from drivers side hose.



NOTE: It may be easier to remove drivers side access panel to help remove clip from underneath connection. To do this Turn 4ct white clips ¼ turn Counter-clockwise till they release.



4. Once clip has been offset from groove apply pressure to pull connection apart. Some resistance is felt as this is an o-ring seal. It's not advisable to pry on the connector as it is plastic and can be damaged.
5. Once removed use a Regular Screwdriver or 8mm nut driver to remove Hose Clamps on passenger side tubes.
Note: I found it easier to use a nut driver with 8mm socket with a couple ¼" extensions to remove the hose clamps as they are under the radiator and not easy to get to from above or below. You may need to pull CAC towards front of truck to get necessary room.



6. Once hoses are loosened they slide off rather easily. If not grab connections and rotate them back and forth to break any seal they have to remove them.

Time to move to the bottom of the truck.

7. Locate bolts holding Lower CAC Bracket to frame and remove using 13mm socket. **(NOTE: Watch your head as the CAC can fall once the bracket has been loosened.)**



NOTE: I found it easier to remove the rear lower valance to help get the CAC out but it is not necessary. If you opt for this you will need a 15mm deep socket to remove the nuts from the studs holding it on.

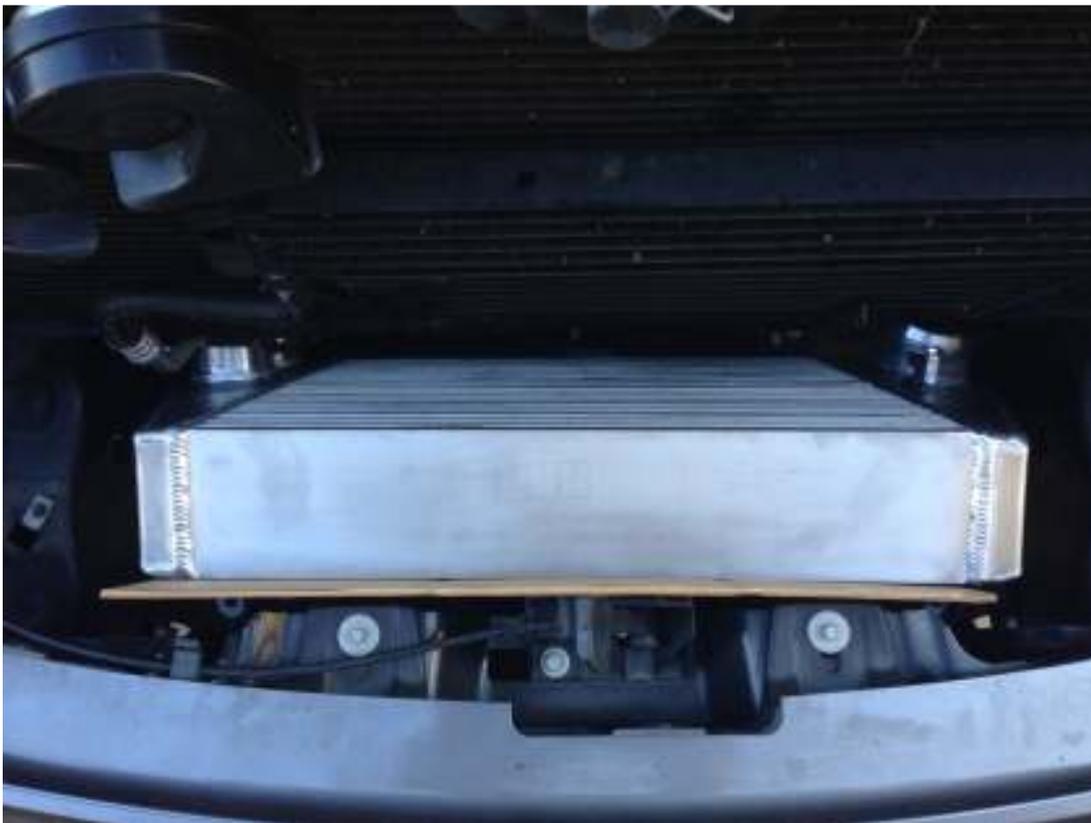
8. Once 2ct 13mm bolts have been removed just let the Lower CAC Bracket hang out the way till the Stock CAC has been removed from the truck.



9. Swap grommets from Factory CAC to new Garrett/ATP CAC.



10. Reinstall Lower CAC bracket using 13mm socket and Lower Rear Valance if removed with 15mm deep socket and tighten it up. (The new CAC can be installed from above)



11. Reinstall passenger side hoses first. Install and tighten lower hose and then install and tighten upper hose.
(NOTE: Make sure they are sitting flush against CAC barb to be sure they are properly on.)
12. Once complete move to drivers side hose. Push hose on and reinstall Cir-Clip in the groove and be sure it is flush. If it is not sitting flush like on Factory CAC hose can be blown off as it isn't properly retained.
(NOTE: If hose cannot be properly lined up it may be necessary to loosen Hose Clamp on Throttlebody to give it some slack to be aligned.)
13. Reinstall Upper CAC Bracket using 10mm socket and tighten up.
14. Check to be sure everything is put back together and tightened.

Addendum for MY 2013+ which uses the intercooler mounted E-BOV (Electronic Blow Off Valve) instead of a mechanical diverter valve mounted on each of the twin turbos.

1. Unbolt the E-BOV from the big flange black canister (which is attached to the stock intercooler). It's a 2 bolt flange.
2. Move this E-BOV directly over to the ATP intercooler and bolt it directly to the matching E-BOV flange using the two bolts provided.
3. The black canister will no longer be required so archive it for future use.
4. The return hose that connects the outlet of the black canister to the airbox intake pipe is also not used.
5. Make sure the electrical plug is connected back onto the E-BOV.
6. Use the supplied billet plug/hose and clamps to plug the end of the airbox pipe where the return hose was deleted.