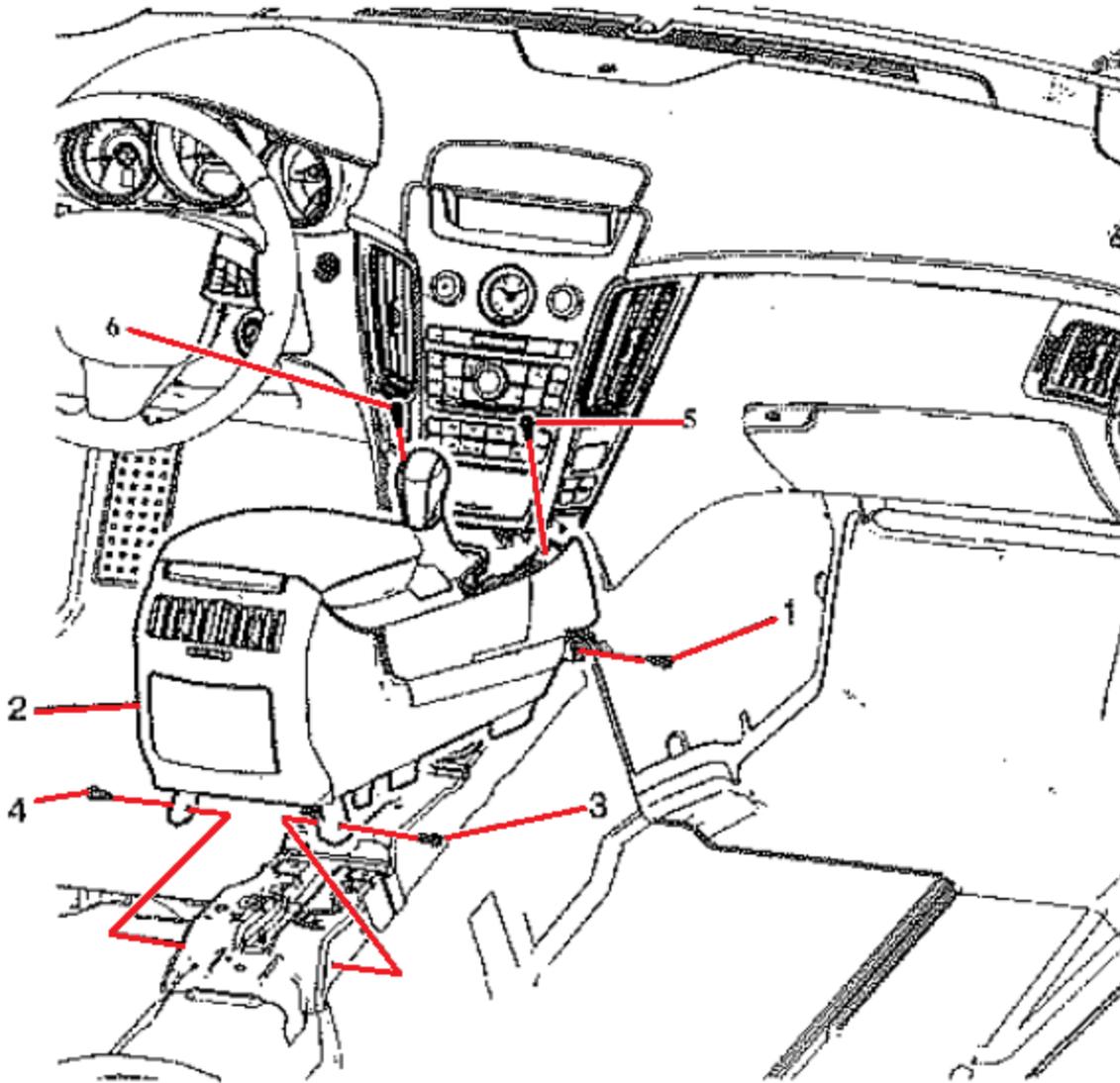


# Creative Steel 2009-2015 CTS-V Shifter Install Instructions

Tools needed:

- 1) 10mm wrench(ratcheting preferred) and shorter the length the better
- 2) Ratchet, extension (6" and 12" would be helpful), and 10mm socket(deep or short is fine)
- 3) Plastic trim removal tool
  - a) If you don't have one, you can wrap tape around a flat head screw driver.
    - i) Make sure to check it often, so you don't rip the tape.
- 4) The supplied "Crow Feet"
  - a) They will be two round plates with a 3/8" square hole cut out. The square hole is for a 3/8" extension to reach down into the console. The half-hex crow foot (15/16") is for the jam nuts, while the rounded (3/4") is for the pivot ball of the shifter.
- 5) 1" wrench or a Crescent wrench that will achieve 1"

The install of the shifter shouldn't take any more than two hours. You will do the entire install inside the vehicle, and you will not have to get underneath for the swap. To ease install, have access to all four seats in the vehicle.



\*Diagram of screws holding console in place. Screw locations highlighted in red.

\*\*Removal of stock shifter:

- 1) Chalk the wheels and/or set the E-Brake.
- 2) Sitting in the driver seat, take your trim removal tool to the wood grain or carbon fiber plastic panels on the side of the center console.
  - a) Pry at the rear, next to the cup holder working your way up towards the dash.
  - b) You will need to remove both sides.
  - c) Remove the two screws(#5 & #6 in the diagram) that were behind the trim pieces, placing in a dedicated spot

- 3) Pull up on both sides of the E-Brake trim piece.
  - a) Then push in the tabs at the rear that hold the shift boot to the trim piece.
    - i) This will allow you to pull the shift knob off without possibility of breaking a tab.
    - ii) Pulling of shift knob will take some force. Pull up while not having your face close to your hands.
- 4) Put the driver side seat in the furthest rear position.
  - a) Pull down/out the carpet next to the console revealing the screw(#1 & #2 in the diagram) holding the front of the console in. Take screw out and place in dedicated spot.
    - i) The ratchet, extension and socket work great here over a wrench.
  - b) Repeat steps on passenger side.
- 5) Put passenger side seat in furthest forward position.
  - a) Pull down/out carpet next to the console revealing the screw(#3 & #4 in the diagram) holding the rear of the console in. Take screw out and place in dedicated spot.
    - i) The ratchet, extension and socket work great here over a wrench.
  - b) Repeat steps on driver side.
- 6) Your console will now be free to move. Remove the sound deadening foam.
  - a) Sitting in the driver seat (you can move it back to a comfortable position) lift up in the rear of the console getting the console tabs out of the carpet, and pull backwards.
    - i) This should disconnect the console from the dash allowing more room for the shifter.
- 7) Now with the console back you will notice the E-Brake and another set of wires are connected to the console. You can either disconnect the positive side of the battery and disconnect these wires and continue on, or you can gently work around the console. (working around the console isn't a super big deal. It can be lifted upwards a little allowing room to get the shifter pieces out.
- 8) You will now see a bracket holding the shifter to the underbody of the car.
  - a) There will be four screws holding the shifter to the cast aluminum piece, and there will be four studs sticking up with nuts holding the bracket to the underbody. There may also be a plastic tab over one of the studs; this can be lifted off the stud by hand.
  - b) Remove the screws and nuts, and pull the bracket out of the center console.

- 9) Now pull the rubber shield up and off the shifter, exposing the four bolts holding the "top half" to the "bottom half."
  - a) Using your small wrench you will have to use the open end to loosen the screws, but then should be able to get them out by hand. You can lift up on the shifter as the "bottom half" will pivot on the transmission.
  - b) Remove the top half of the shifter
  
- 10) Now would be a good time to check the state of the rear bushing in the "bottom half" of the shifter. You will see a black plastic piece sticking off the rear of the aluminum housing. There should be two screws on each side (driver and passenger) of the black housing. If they are present and tight move on. If not tightened down we recommend applying some Loc-Tite before re-tightening.
- 11) Another piece to check is the coupling between the shifter and the transmission. You will notice a piece in front of the shifter about an inch long and an inch wide with a bolt head on top. This is what attaches the shifter to the transmission linkage. Over time, this bolt will loosen up and cause side-to-side play in the shifter. Now is a good time to make sure it is plenty tight.

#### \*\*Installation of Creative Steel Short Shifter

- 1) We will now install the Creative Steel shifter; Do not have the stick (adjustable portion of the shifter) threaded onto the base. The four supplied screws will connect the base or now the "top half" to the "bottom half."
  - a) The shifter base will come pre lubricated and will be pre-set at for attaining the shortest throw possible.
- 2) Put the shifter onto the "bottom half" with the grease zirk towards the front of the vehicle. Make sure screws are going in straight with your fingers before tightening them down with a wrench. Tighten them until they are tight, no need to go Hulk (a 6mm screw's torque spec is only 44 in-lbs).
  - a) You do not use the rubber shield that came on the stock "top half"
  - b) The rear screws will be easiest as you can get the ratcheting portion of the wrench on the screw if you pull up the shifter assembly.
- 3) Put the bracket that will hold the shifter to the underbody of the car on.
  - a) Make sure the plastic tab is above the bracket, and gets put back on the stud.
  - b) Tighten the nuts down on the studs until tight.

- c) Pulling up on the threaded rod, you will be able to thread the screws from the bracket into the "top half" of the shifter.
  
- 4) Now you can thread the stick onto the shifter, and temporarily set it to a position you feel you may like. The jam nut should be below the stick.
  - a) Having the stick flush with the top of the threaded rod will make it the same height as the stock shifter. This position is temporary and can/may be adjusted once the console is back together.
  - b) The flat spot at the top of the stick should face toward the front of the car.
  
- 5) Put the console back into place (attach wires if you unplugged them) and make sure carpet is set correctly. You will need to push the console forward in the front and then work the carpet in the rear to get the console ears down between the carpet.
  - a) Tighten down all six screws that hold the console into place.
- 6) Put on the E-brake trim piece.
- 7) Now will come time to test if you like the shifter height. Press the shift knob onto the stick with the tape still applied to the stick. See how you like the height and adjust by pulling off the knob and threaded the stick up or down the threaded rod.
- 8) Once you found a height you feel comfortable with, pull the knob off and remove the E-brake trim.
  - a) Using the appropriate crow foot on the jam nut and the crescent wrench on the spacer, tighten the two together making sure the shifter is still pointed forward.
  - b) Pull tape off shifter stick.
- 9) Put on E-brake trim and side pieces.
- 10) Put on Shift knob and boot, enjoy.

## Adjusting the shifter:

Instructions on the supplied crow feet: You should get two flat plates that have a notch cut out of them and a square hole. The two crow feet are different; one has a half-hex notch out, and this is for the jam nuts on the shifter; the second has a rounded notch out and this is for the ball of the shifter. The square hole is for a 3/8 extension for a ratchet. What these allow you to do is tighten/loosen the jam nuts and ball inside the cramped center console. Now you won't have to try and find a wrench that will fit.

You are at the final stages (and the fun part) of the shifter install, congratulations! We generally get the shifter set up for approximately the same as stock throw length. As defined, throw length is the distance between the pivot ball(shifter base) and the linkage to the transmission(the bottom plastic bushing). The height is the distance between the pivot ball and the shifter knob.

With the throw length setup, you can thread the stick onto the shifter and see what height feels comfortable to you while sitting in the seat. If you have found the height you like, but want the throw to be shorter, you will loosen the jam nut against the ball, and thread the threaded rod clock wise (Careful not to go too far! You can touch the bottom of the aluminum housing, and get the plastic bushing stuck. If you want it really low, adjust the shifter in the neutral position until you hit the bottom, then thread back up about 5 turns. Check to make sure it still rotates enough). If you want the throw to be longer, turn the thread counter clockwise. Readjust your stick height and see how it feels.

Once you have found the combination that you like, jam the bottom nut and the ball together using the supplied crow feet. Then jam the top nut to the shifter stick. Make sure the machined flat at the top of the shifter stick is facing forward.

You can then put the foam back in the center console, put the trim ring back in and pop the knob on.