



Creative Steel 04-07 CTS-V Shifter Installation Instructions

Tools Needed:

Plastic trim removal tool (or a putty knife with some tape on it so it won't scratch the center console)

10mm wrench or small ratchet and deep well socket

13mm wrench and 8mm allen key

5/16" drill bit and preferably a cordless drill

9/16" wrench and ratchet with socket (two wrenches would work)

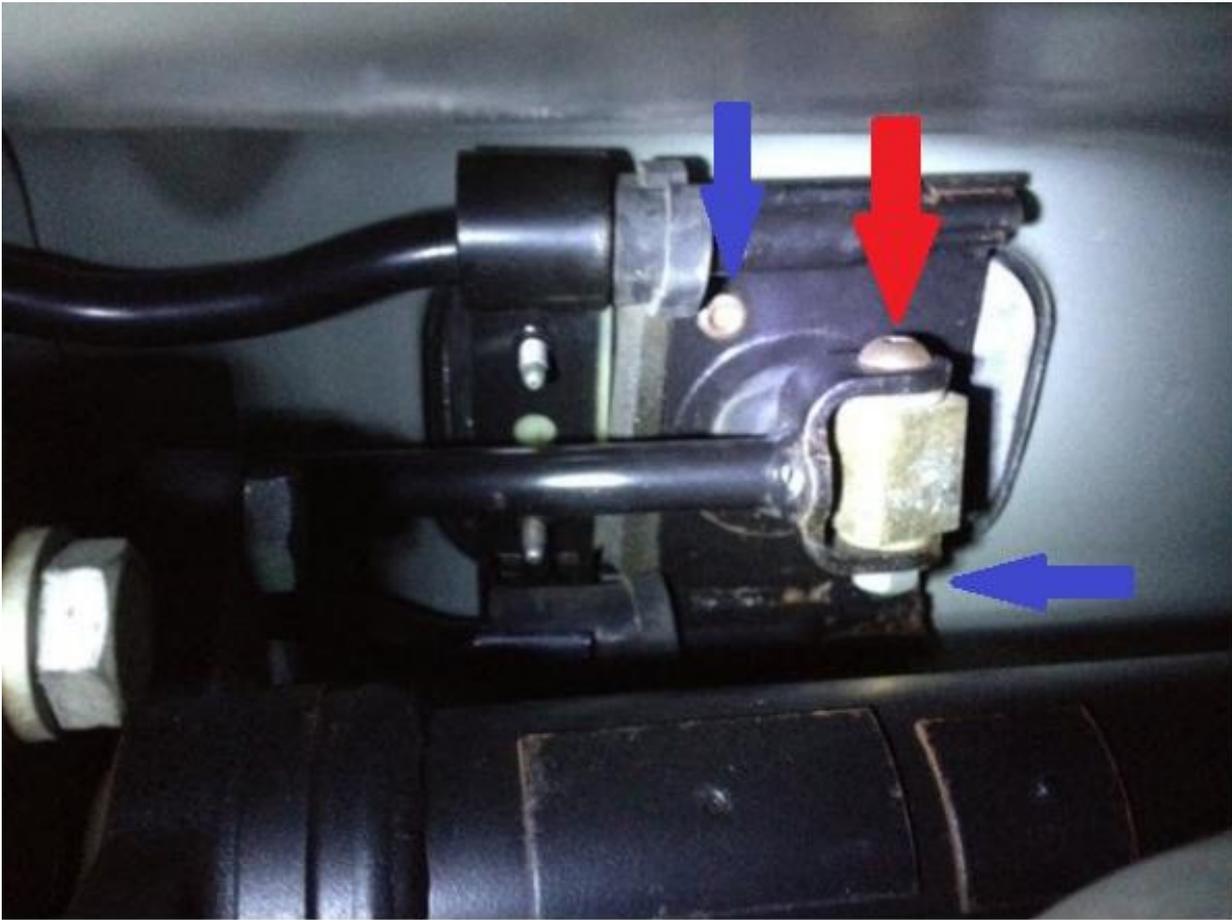
Start off by lifting the vehicle up on jack stands or ramps. Make sure the E-Brake is on and wheels are chocked, as you may shift the transmission.

Getting in the driver seat we will take the knob off first. The shifter knob, shifter boot, and the bezel around the center console are all connected together. We would recommend taking a plastic trim removal tool and prying the rear of the trim ring up and toward the center of the boot. The rear clips pop out while you have to pull backwards to get the front clips off the center console. Once the trim ring is no longer connected, you can now lift up on the shifter knob without possibility of breaking a tab. Putting the shifter in 2nd gear and giving the knob a slight twist back and forth seems to help while pulling the knob off. Watch your face, as sometimes the knobs are hard to get off.

Once you have the knob and shifter boot out of the way, remove the sound deadening foam. You should now be able to see the shifter and the brackets holding it down. Don't unbolt them yet.



Getting under the vehicle with your drill, 13mm wrench, and allen key start by taking the linkage bolt off the shifter arrowed by red. Keep this bolt as you will still need it. Once the linkage is out of the way you can now drill the head off the rivet (arrowed by blue) with your drill. You do not need to drill all the way through the rivet, just enough that the rivet can be pushed out; you do not want to drill out the holes.

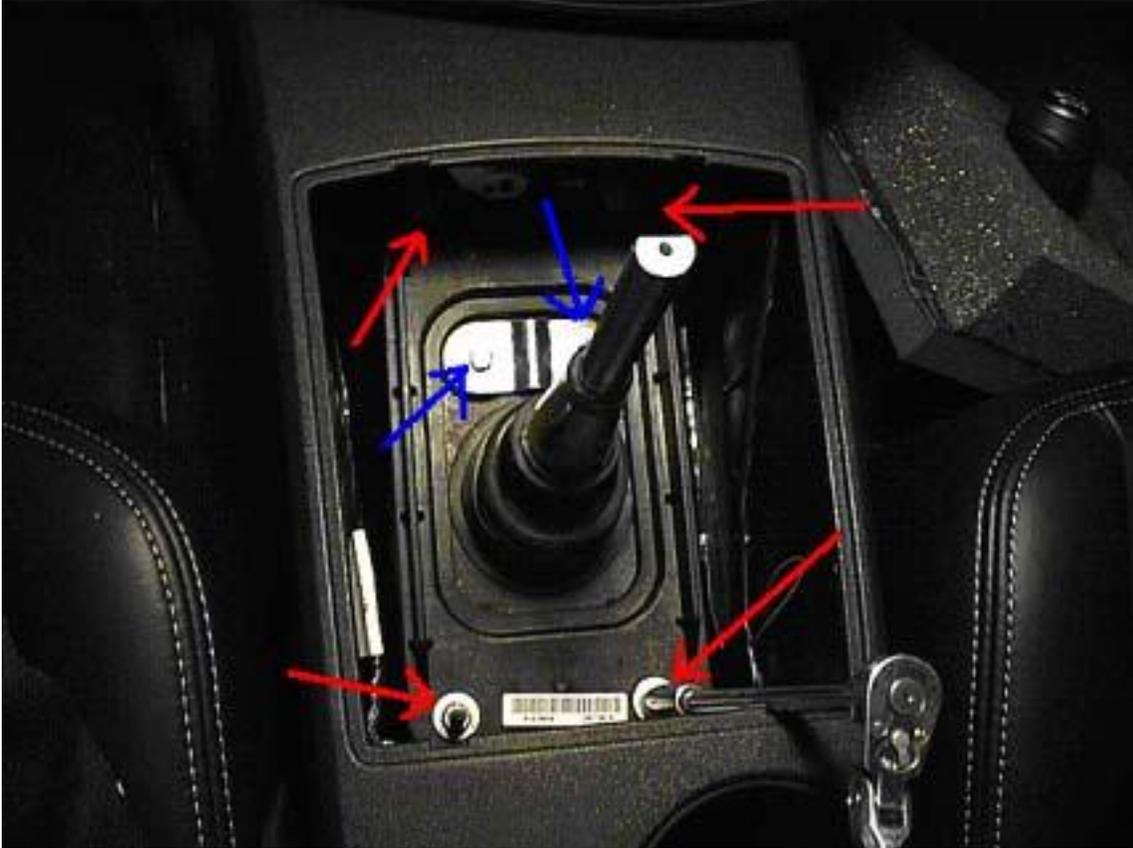


Clean yourself off(maybe put a sheet on the seat) and get into the driver's seat again.

Remove the four nuts noted by the red arrows. (CAREFUL: Loosening, and then spinning off by hand seems to be the safest way to not drop these down into no-mans land)

Then remove the two screws arrowed in blue. This will drop the shifter down and allow you to pull the top plate out of the center console.

Once the plate is out of the way, you should be able to remove the shifter from the linkage base plate that it was riveted to. The rubber boot that is over the shifter will not be used on the Creative Steel shifter.

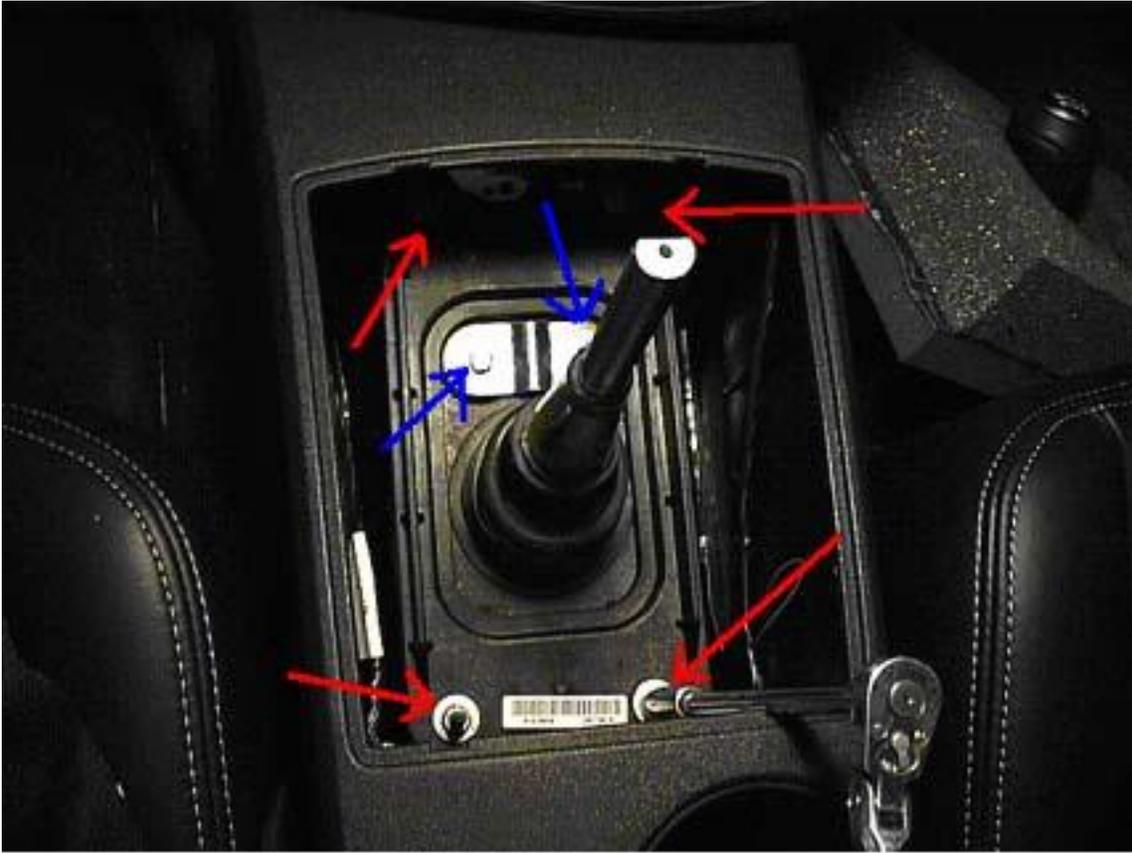


With the OEM shifter out of the car you should be able to put your Creative Steel shifter in. If you purchased the polyurethane support rod bushings, now would be the time to install them. The bushings are noted by the read squares. A pair of pliers will help take the old bushings out. A little grease(non-petroleum based) will help the new bushings slide in. Note the flange of the bushing(fat end) is at the rear of the vehicle.



Putting your Creative Steel shifter in the car may now require two people. It is possible to put the shifter onto the linkage base plate (with the zerk fitting towards the rear) with the bolts through the holes, and then crawl under the car and tighten them with two wrenches. Note that the washer goes under the nut, not under the head of the bolt.

Once the shifter is bolted to the linkage base plate, you will want to now finish securing the shifter from inside the console. Put the top plate in and then lift up the shifter, lining up the two screws that go into the linkage base plate. Secure everything down until it is tight. They are only 6mm screws, so tight is tight (torque spec is only 7ft/lbs.)



Getting back under the vehicle you can connect the linkage to the shifter. Using some blue loctite on the nut will help this OEM bolt to stay tight. Also, you do not want to torque the bolt completely tight as it will make the act of shifting a little snug. Having someone tightening/loosening under the car while you get the feel of the shifter is the best way.

Another solution is to take a 5/16" x 2.5" long bolt and two nuts. This will allow you to adjust the tightness of the linkage, and then double nut the nuts together. The joint cannot come loose, and no need for loctite.

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 15% more than stock throw length. As defined, throw length is the distance between the pivot ball (shifter base) and the linkage to the transmission (the bronze bushings). 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 turn the pivot ball counter clockwise. If you want the throw to be longer, turn the ball 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.