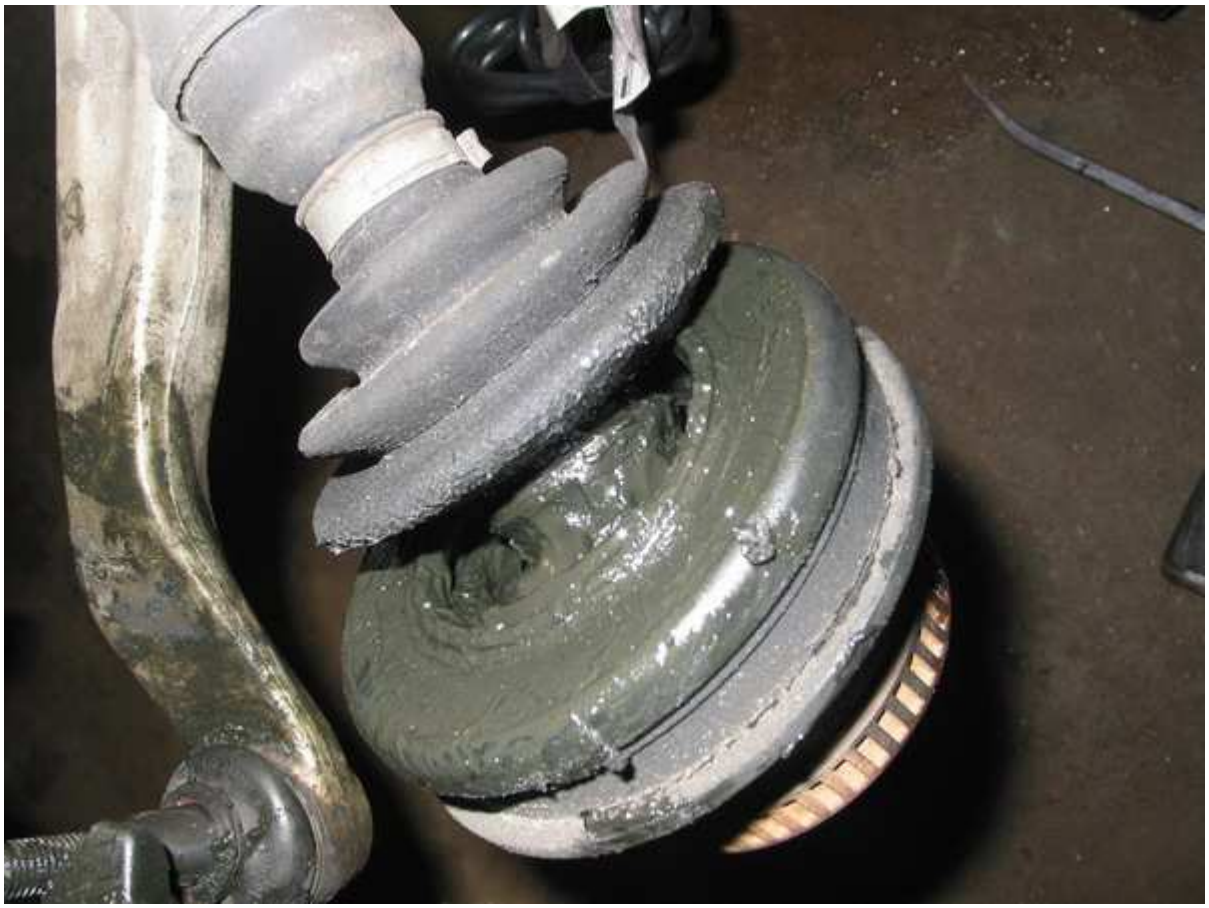
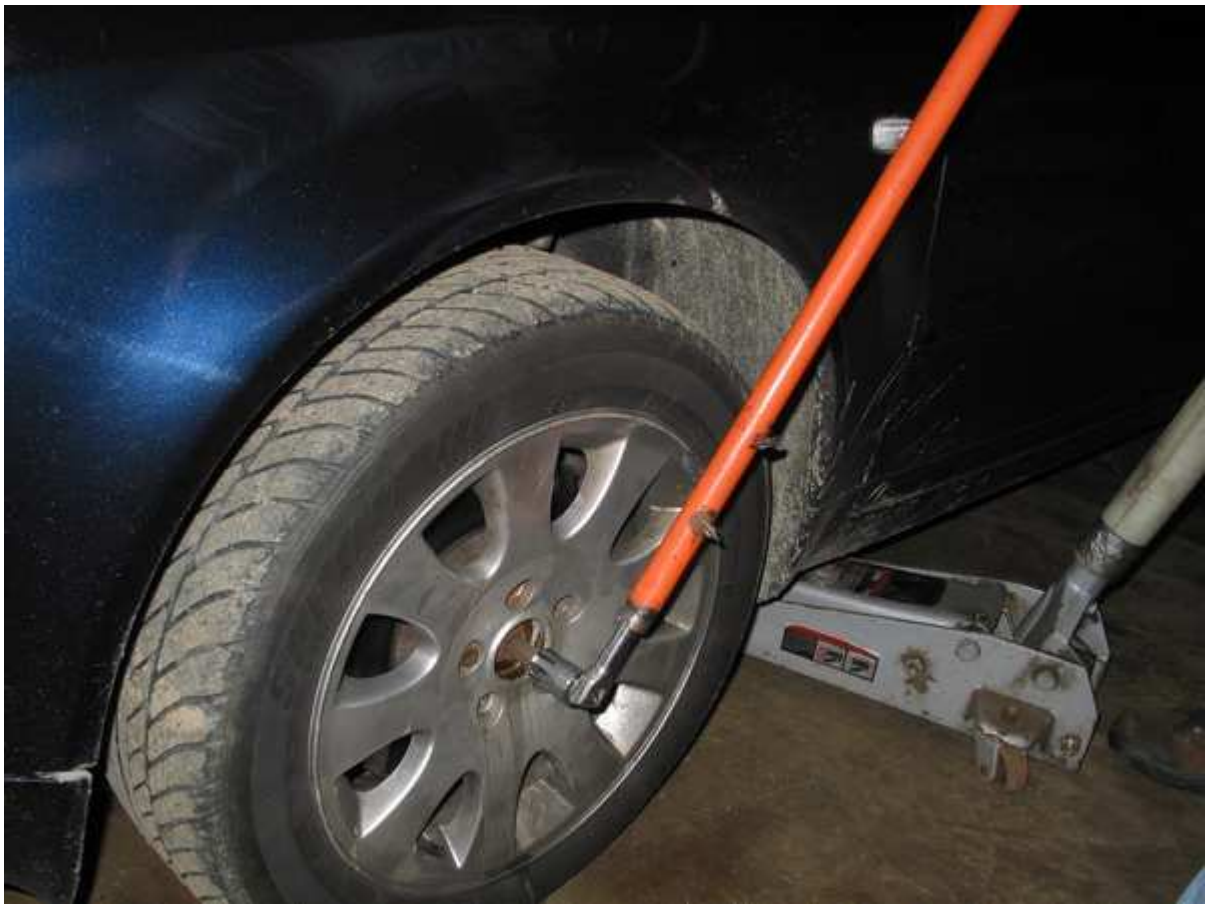
Tech Article Title	Author	Date
CV Boot Replacement	Kris Hansen	2005

Eventually, all of us will have the sheer joy of having the CV boot tearing, and emptying all of the grease into your nice shiny wheels.



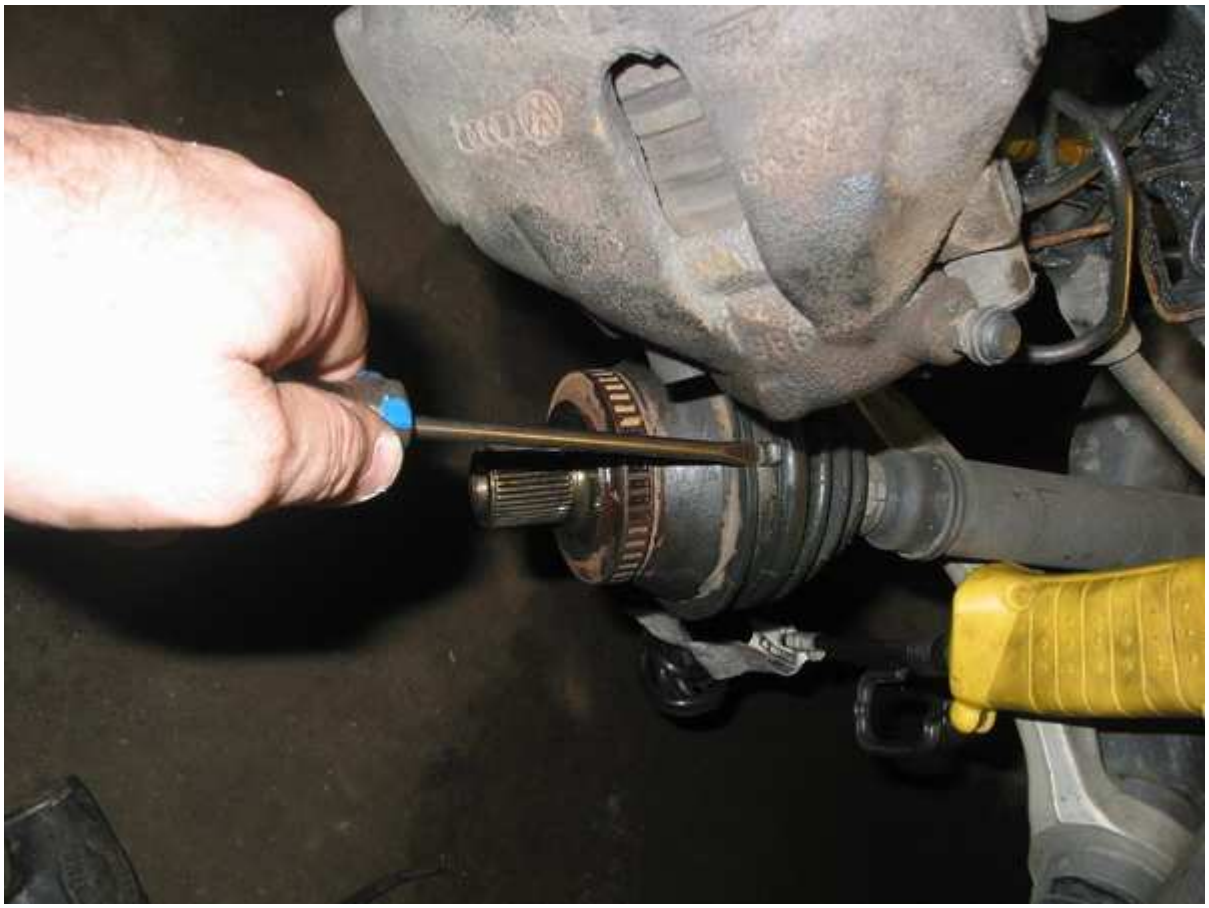
Step One is to remove the axle collar bolt. This is a 17mm Allen bolt on newer cars, on older cars, it's a 23, 24 or 27mm NUT(depending on the year of the car). This is done by hand usually. Remove the center cap from your wheels, and use a long breaker bar to loosen the axle bolt.



Next, after safely jacking and securing the car, remove the wheel and the collar bolt fully.

The next step is to give the upright some room to move, which allows the axle to be pulled out of the hub. The 'official' way is to pull the nororious pinch bolt out, and pop the upper control arms out of the upright. This time, for whatever reason, I decided to pop the lower rear arm out of the upright, figuring that I'd have to wrestle less with the upright, considering with angles and such, it would have to move less to acheive the same goal. I was more or less right, but I'd have to do it the 'official' way again, to see if I am truly right, or just out of my mind. :-)

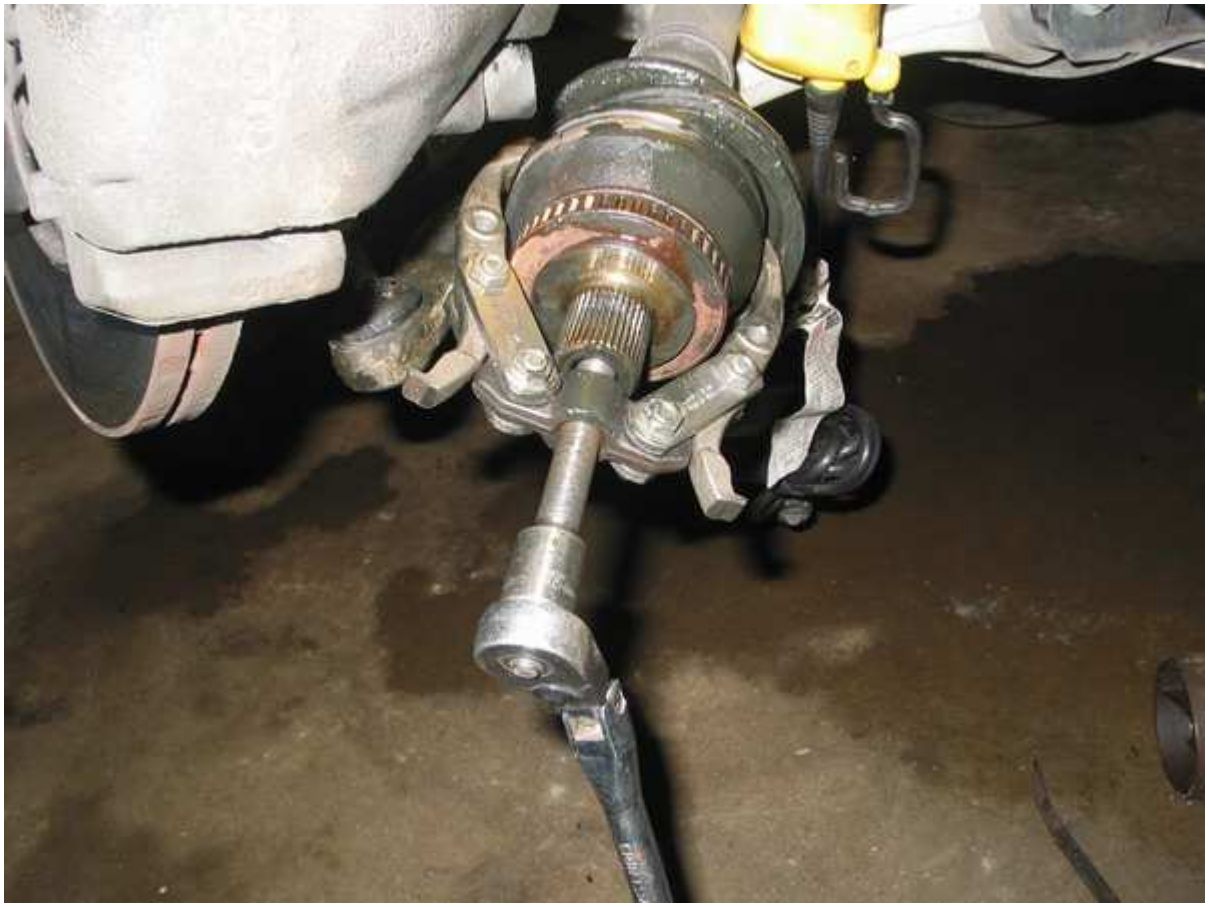
But I digress. Now that you have the upright moved enough to free the axle from the hub, swing it out and toward the rear of the car. Peel the old boot and clamps off now.



Once you get the old boot and clamps off, you need to remove the CV joint from the axle. The only thing that holds the CV joint on is a little C clip, which is inside the joint. No, there is no way to remove this, what you have to do is 'press' the joint off over the C clip.

The 'official tool for this is a long threaded rod, with a hex on the end, much like the axle bolt. Some people have had sucess using the original axle bolt to drive the CV joint off of the axle. I have not had this same kind of luck.

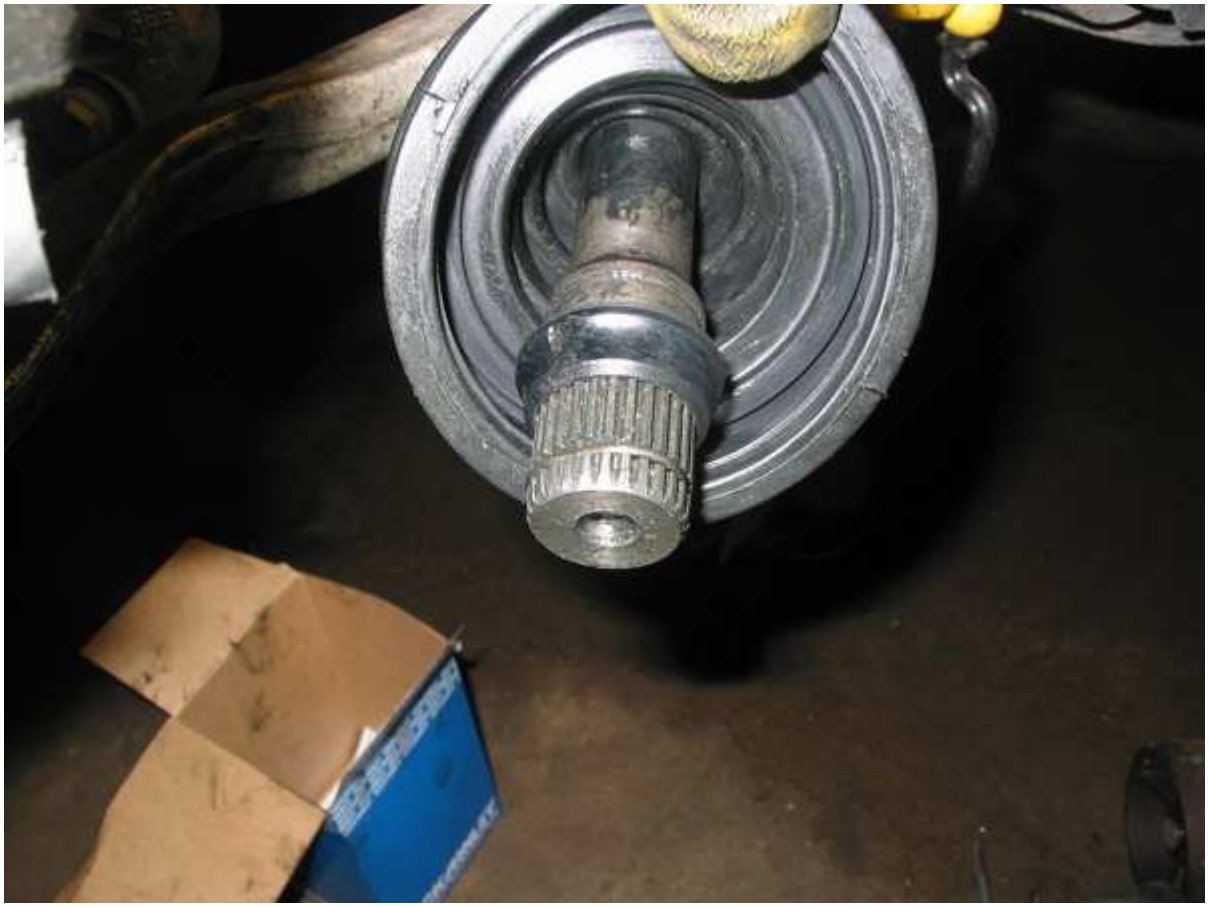
Instead, I use a 2 arm puller.



WARNING!!! When the joint pops off of the axle, it will make a loud and sudden bang.

Use parts cleaner and degreaser to clean all of the old grease/dirt out of the CV joint. Be very careful to not let the balls come out of the joint and fall on the floor. Use compresseed air to blow any remaining cleaner and grease out of the joint, and re-pack the noint with the new grease supplied with the kit.

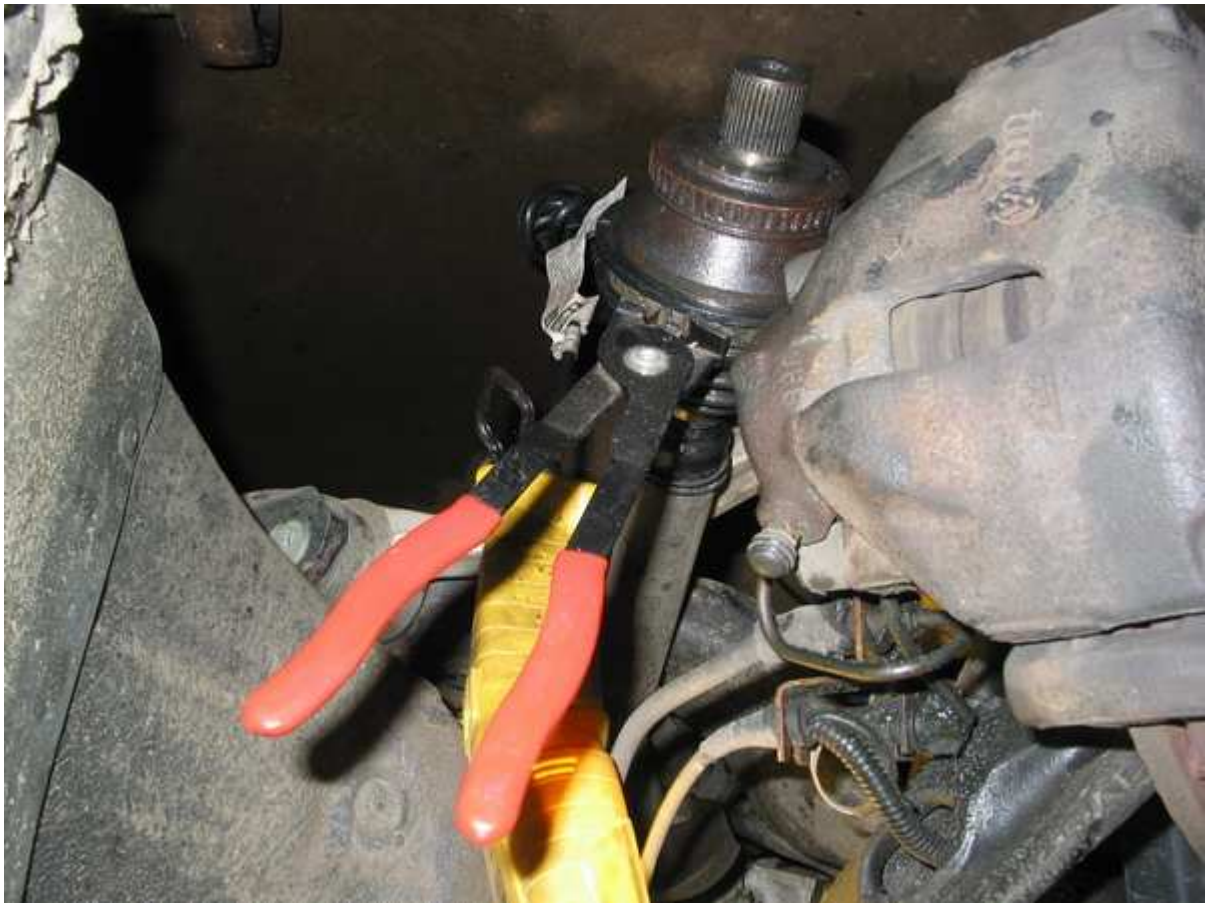
Slide the new boot (use a small bit of grease to help it slide onto the axle), the small clamp, the spring washer, and the plastic cone back onto the axle. Put the C clip into the groove.



Take your joint, all nicely packed with new clean grease, and line it up on the axle. You'll need to hold it in place with one hand, while, with the other hand, you carefully but firmly drive it on over the C clip with a BFH*

Once you get the joint fully seated on the axle (feel behind the joint, the plastic 'spacer' should not be able to move), you need to get the boot clamped down. I like to clamp the BIG side first.

Using a finger, guide the boot over the joint. It's a bit of a pain to get it all the way on. tighten the clamp using the clamp pliers. Don't tighten the small clamp yet, wait till you get the axle bolted back in. This will allow any air to escape from within the boot.



Slide the axle back into the hub, re-attach the control arm, tighten the axle bolt as tight as you can with the car on the jack. Mount up the wheel, and lower the car off of the jacks. Torque the axle bolt to 90lb/ft +180 degree turn (Please consult the manual for your specific car for the actual torque specs.)

Jack and secure the car, dismount the wheel, tighten the small clamp, clean all of the residual grease from the suspension, remount your tire again, torque the lugs, lower the car and revel in the fact that you saved a few hundred bucks in labor. You may have gotten a little dirty too. :-)

*BFH stands for really big hammer, but not in those words :-)