

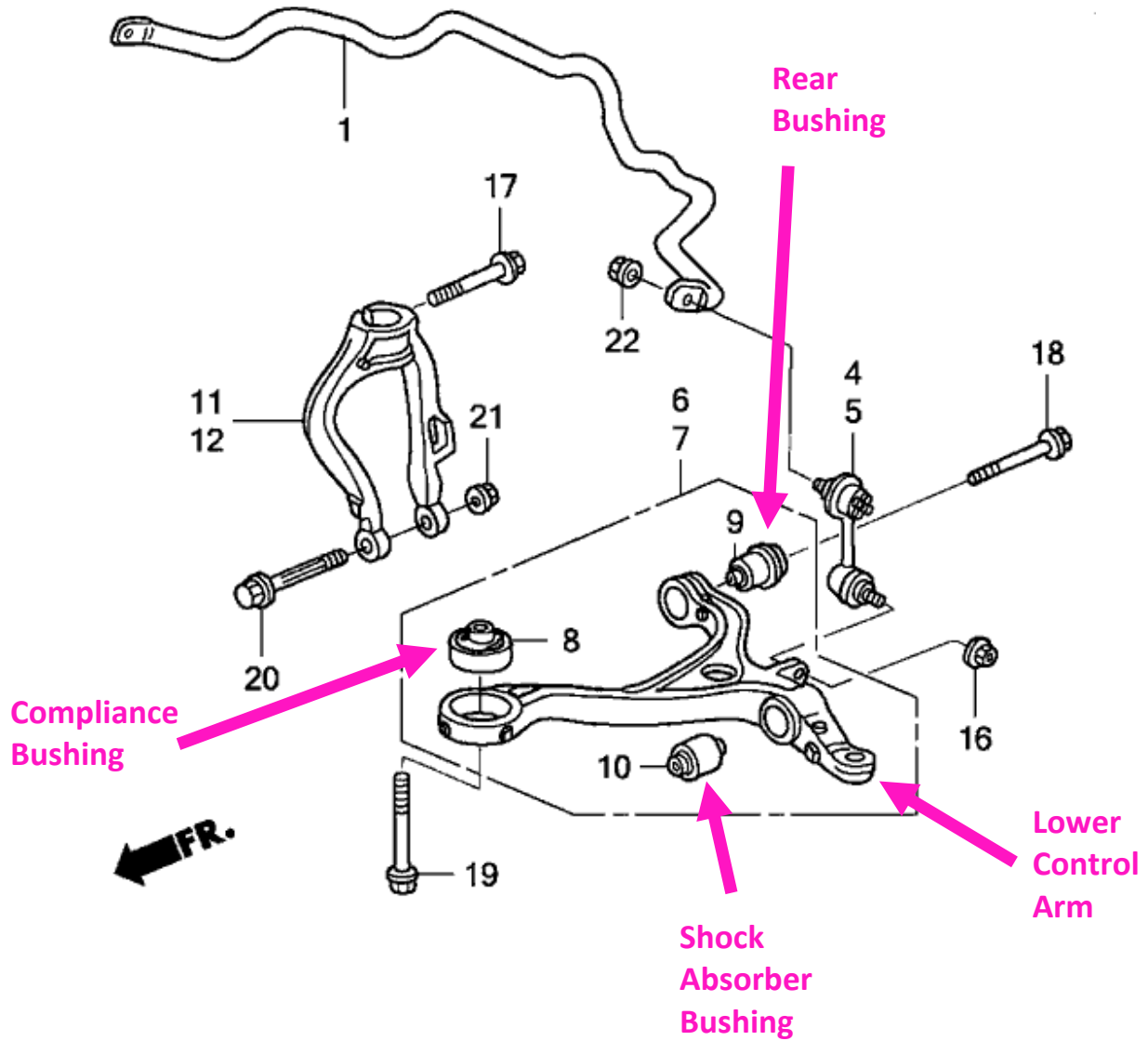
Replacing Lower Control Arm Bushings on a 2007 Honda Accord 4CYL

Disclaimer: I have benefited greatly from others who have taken the time to post auto repair videos/tutorials online. To try and return the favor, I have documented a few of my recent repairs. I try to perform the work conscientiously in accordance with the Honda service manual, but I am not a professional technician by any stretch so please use this material at your own risk. I hope this information might benefit others who are preparing to do this job.

This write-up describes how I replaced the three lower control arm bushings. Usually the large Compliance Bushing (shown below) is the first to show wear, typically cracking in the bushing rubber. In extreme cases, the rubber will crack all the way through and the control arm will be "floating" leading to clunking noises and a drifting feel when steering. In the case shown below there is only very minor cracking (red arrow) and the bushing really does not need to be replaced yet (in fact it just passed inspection at a Honda dealership). However, since there are 250k miles on it, I figured I would replace the bushings while I had the time (and since the bushings are relatively inexpensive). I am sure there are different views on the subject, but I have heard some say that the bearing should be replaced when it is cracked half way through.



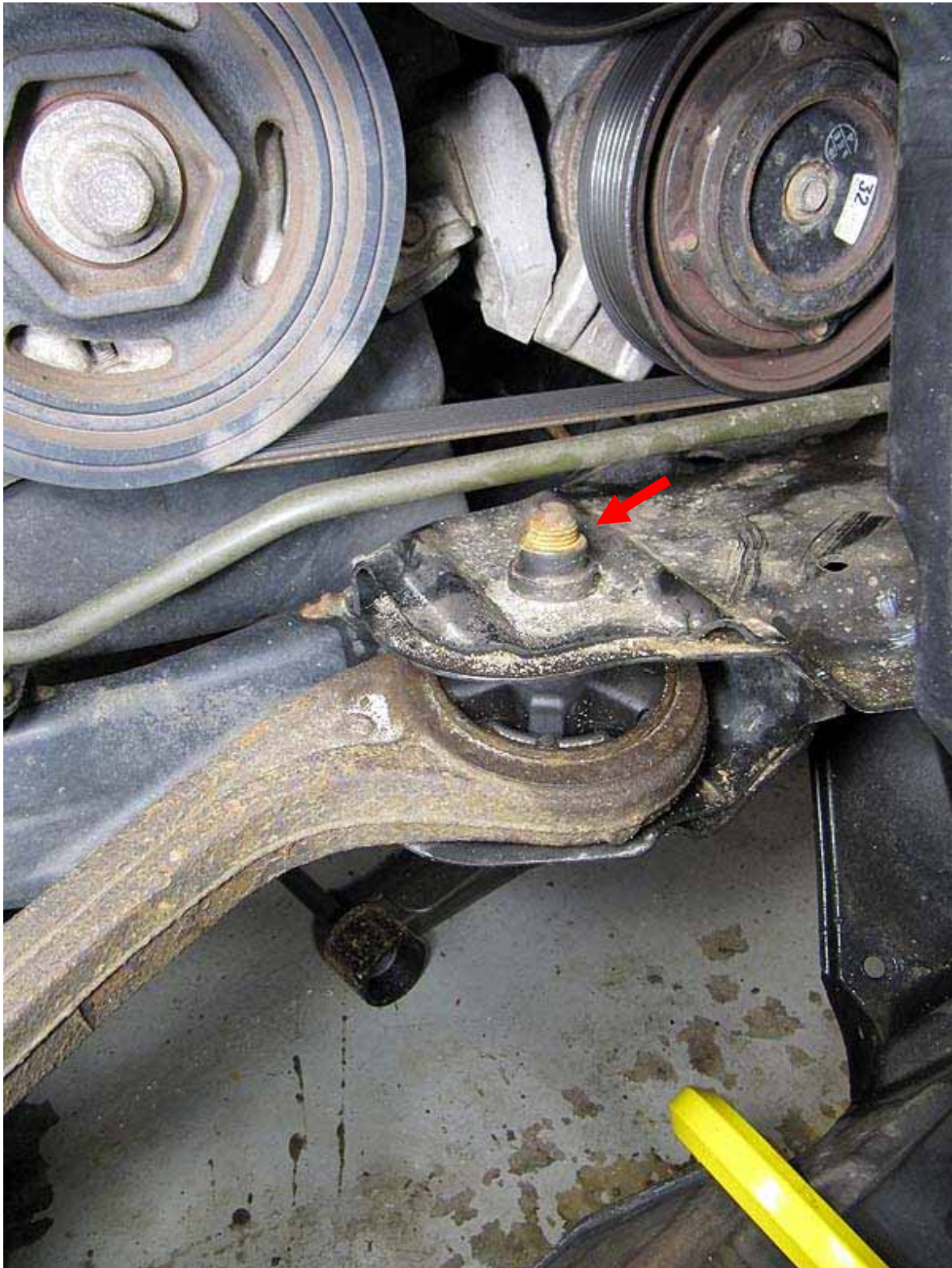
There are three Lower Control Arm Bushings: Compliance Bushing, Shock Absorber Bushing and Rear Bushing. Per the Honda service manual, the following bolts and nuts should be replaced with new parts when re-installing the lower arm (per the service manual): 20, 21, 19, 18, 16.



#1 – Loosen the Rear Bushing bolt but leave it in place to hold the Lower Control Arm in position when the ball joint is removed. This bolt was not too bad to get out, but was much worse on the other side where I had to use a torch (MAPP) to heat the nut (red arrow).



#2 – Loosen the Compliance Bushing bolt. Sounds easy, but it wasn't, at least in my case (the bolt was in there for 250k miles and through New England winters). The bolt didn't budge with an impact wrench (780 ft-lb rating) or breaker bar with 3' cheater.



#3 – I heated the top and bottom of the bolt using a MAPP torch. There is a metal power steering line that runs very close to the bolt. To protect it, I wrapped it in a water-soaked rag.



#4 – Then using a breaker bar and 3' cheater I was able to break the bolt free. However, I was not out of the woods yet!



#5 – Even after the bolt was broken free of the nut, the metal bushing sleeve remained frozen to the bolt. So as I twisted the bolt, the center of the bushing twisted with it. I pushed hard enough that I thought the bushing was twisted so far that it could break. I didn't really want to tear the bushing apart so I put a pair of Vise Grips on the inner sleeve of the bushing and used a crow-bar (yellow) against the frame to keep the Vise Grips from twisting. With a LOT of force on the end of the cheater, the bolt eventually broke free (somewhat amazingly the Vise Grips held despite all that torque).

Another possibility is to simply twist the bolt and not worry if the inner part of the bushing tears free. As the bolt is extracted it should force the inner sleeve off the bolt and the bushing is going to be replaced anyway. I just didn't want to do that because I didn't want to destroy the bushing in case I wasn't able to get the bolt out.

Another possibility would be to try and heat the inner bushing sleeve with a torch to get it to expand. I suspect this would work well but the only problem with that approach is that it will likely set the bushing on fire and make a lot of stinky smoke.

I did also apply penetrating oil, and perhaps it helped some. However, it certainly didn't help as much as the heat. I don't think I could have gotten this bolt out without using heat.



#6 – Remove the bolt holding the fork to the lower control arm.



#7 – Remove the stabilizer link from the lower control arm. Use an Allen wrench in the end of the bolt to hold the stabilizer link bolt from turning while the nut is removed.



#8 – Pull the stabilizer link out of the lower control arm.



#9 – Remove the cotter pin from the lower ball joint nut.



#10 – Loosen the lower ball joint nut, but don't remove it completely (to keep the knuckle and lower arm from flying around wildly when the lower ball joint is separated).



#11 – Use a two-jaw puller to separate the lower ball joint from the control arm.



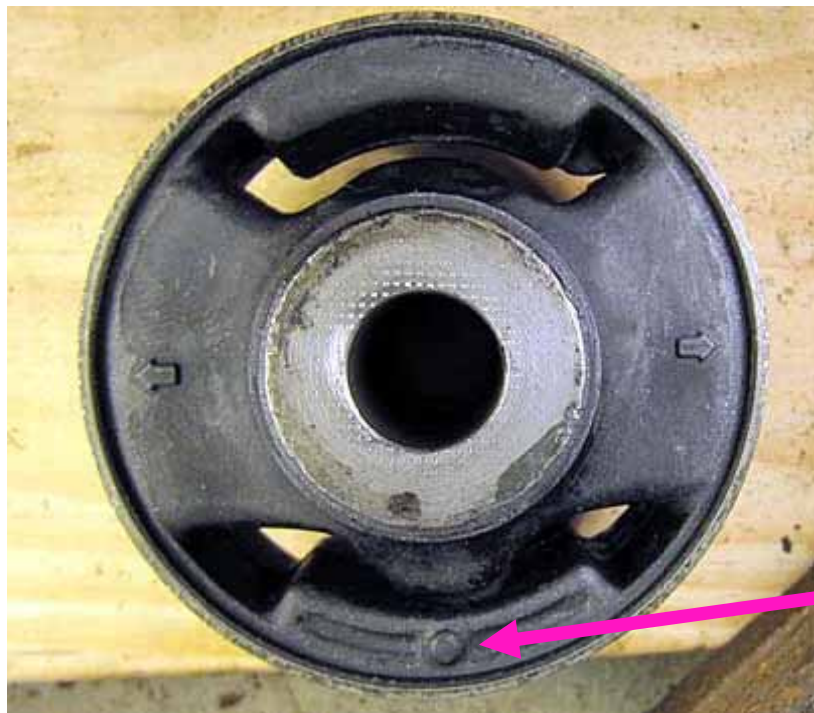
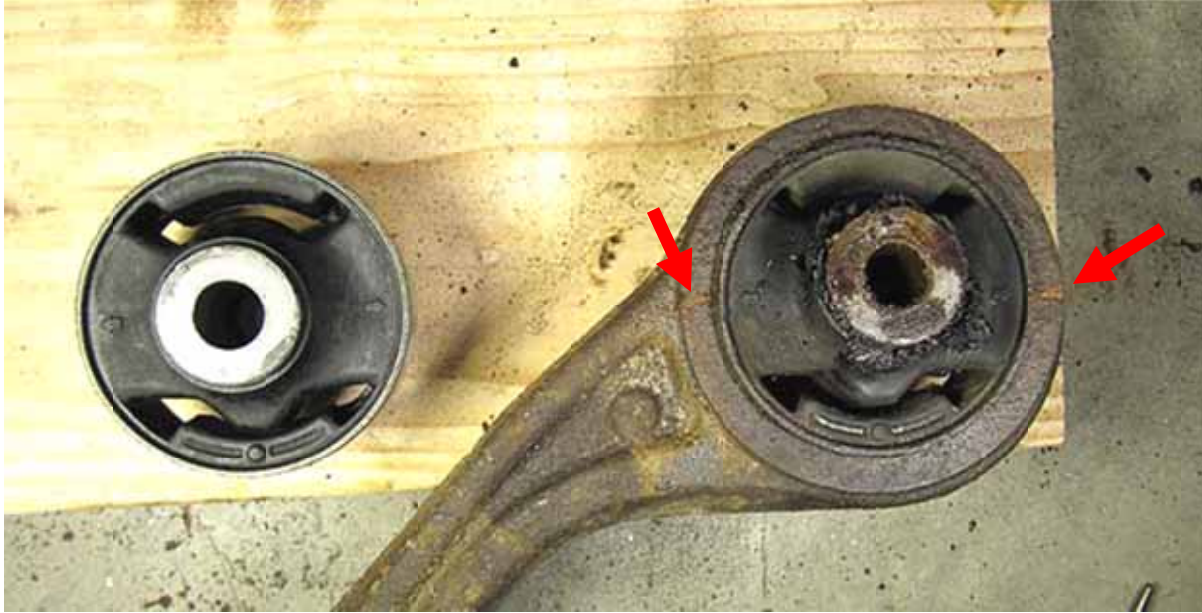
#12 – Remove the bolts from the Rear Bushing and Compliance Bushing.



#13 – And with a little struggling, out comes the Lower Control Arm!



#14 – The Compliance Bushing must be installed in the correct orientation. Scratch some marks in the control arm (red arrows) lining up with the arrows on the Compliance Bushing.



DOT goes to
Outside of
Vehicle

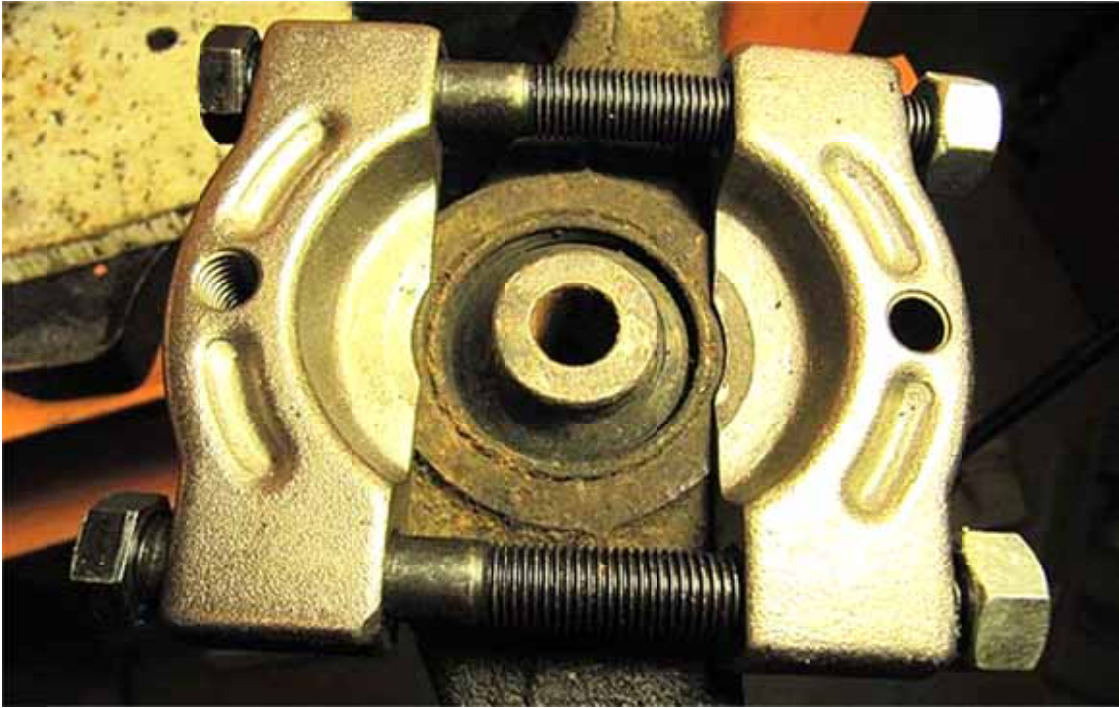
#15 – I started by driving out the center of the bushing just to get it out of the way. I pushed until the bushing snapped and the center portion of the bushing broke free.



#16 – With the inner portion of the bushing removed, I was able to use a flat disk (from a wheel bearing press kit) that fit over the outer busing sleeve to push the Compliance bushing out of the lower control arm.



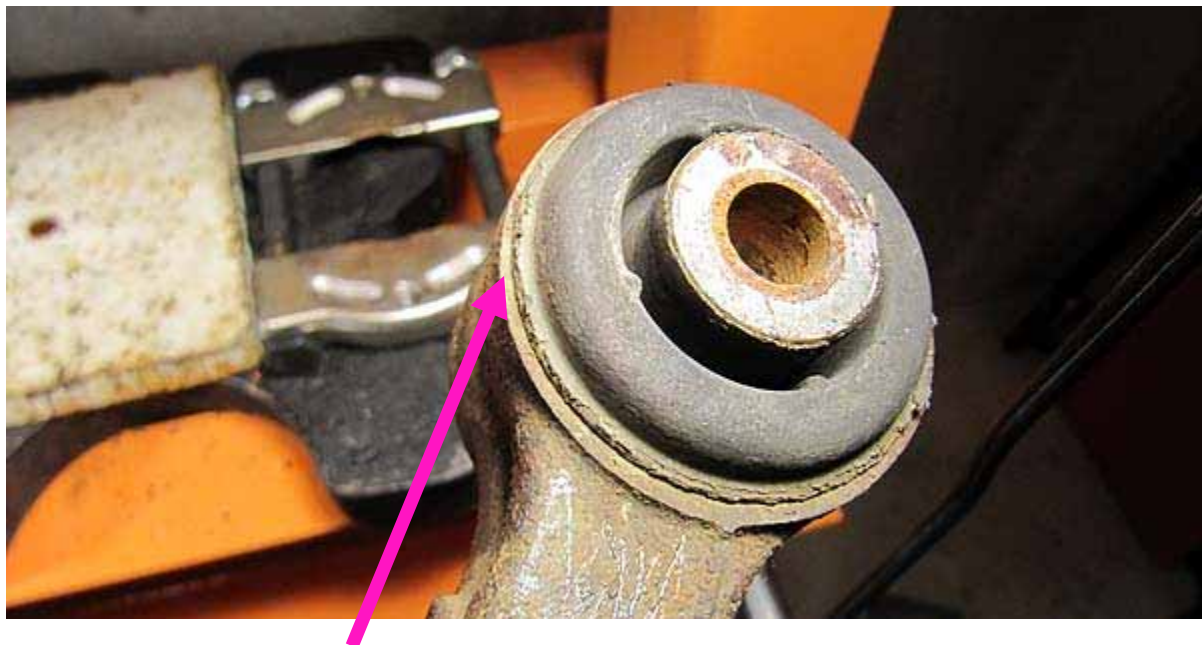
#17 – To push out the Shock Absorber bushing I used a bearing separator sized to be just larger than the bearing sleeve and a socket that fit on the outer sleeve of the bearing.



#18 – The rear bushing is perhaps the trickiest because it has a collar on the sleeve that leaves very little room to hold the lower control arm while pushing the bearing through.



Metal Collar



The metal collar leaves very little of the control arm exposed to support when pushing out the bushing

#19 – I used a cold chisel and hammer to bend up the metal collar of the bushing on two opposite sides.



#20 – Then I was able to insert a bearing separator under the collar and push out the bushing using a socket that fit on the outer sleeve of the bushing.



#21 – The new Shock Absorber bushing can be pressed in using a socket that fits on the outer sleeve.



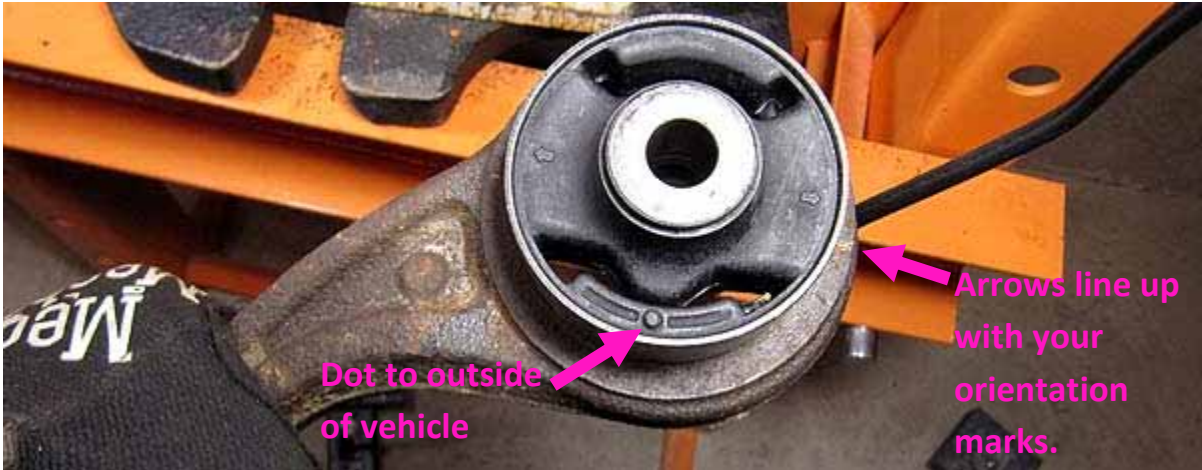
#22 – The new Rear Bushing can be pressed in using a socket that fits on the outer sleeve. (Yeh, I know it is crooked – but it straightened out!)



#23 – To push in the new Compliance Bushing you will need something that lines up with the outer metal sleeve of the bushing but gives clearance for the inner bushing sleeve. I used a 2" steel pipe end cap as shown below.



#24 – Make sure that the orientation of the Compliance Bushing is correct and push it in.



#25 – Push the bushing in until there is an equal amount of the bushing sleeve exposed on either side.



#26 – Now the Lower Control Arm with new bushings is ready to be reinstalled!



I coated the inside sleeves of the bushings with anti-seize.



#27 – Reinstall the Lower Control Arm and loosely install all fasteners (Compliance Bushing bolt, Rear Bushing bolt, Shock Absorber bolt, Stabilizer Link nut and Lower Ball Joint Nut). Then, before torquing down the fasteners, raise the lower control arm so that it supports the vehicle's weight.



#28 – Tighten all the fasteners down to spec.

Torque the Compliance Bushing bolt to 61 ft-lbs.



Torque the Lower Ball Joint nut to 58 ft-lbs.



Torque the fork bolt to 47 ft-lbs.



Torque the Rear Bushing bolt to 47 ft-lbs.



#29 – Install a new cotter pin on the Lower Ball Joint nut.



Hope you found this helpful!

John C.