Lower Control Arms on a 99-04 Mustang V6 or GT

Time required for install 5+ hours

Tools Needed:

- ✓ Safety Glasses
- ✓ Breaker bar
- ✓ Socket wrench (3/8” drive for the small bolts we used a ½” drive for the larger ones)
- ✓ ½”,9/16”,18mm and 15mm sockets
- ✓ 21mm open end wrench
- ✓ PB Blaster (or penetrating oil)
- ✓ Long skinny center punch
- ✓ Hammer
- ✓ 2 jack stands (the higher they reach the easier working on the bottom of your car is)
- ✓ 1 floor jack
- ✓ A second floor jack or a bottle jack with several wood blocks
- ✓ Grease Gun
- ✓ *May need*
- ✓ Cutting Torch or a sawzall with a metal cutting blade

1. Break loose lug nuts while car is still on the ground.

2. Raise the rear end of the car off of the ground.

3. Secure jack stands under the frame right next to where the forward lower control arm bushing connect the lower control arm to the frame. (Jack position shown in picture) this allows the axle to hang freely, which is useful when reinstalling the lower control arm.

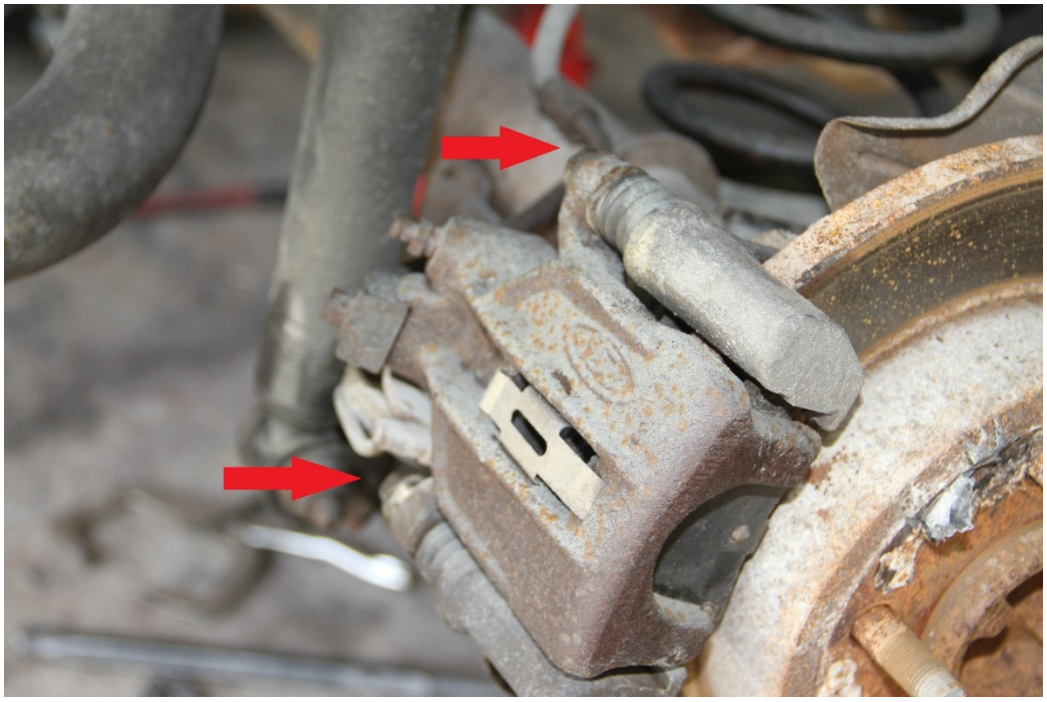
4. Remove the lug nuts and wheels from the car.

At this point if you have a GT model or an aftermarket sway bar installed remove it by removing the four ½" bolts holding the sway bar to the lower control arms

5. Pick a side to work on, the process of removing the old control arms and installing the new ones is the same on both sides.

*use Pb Blaster or a penetrating oil to soak all brake bolts and nuts in the suspension so they will be easier to remove later.

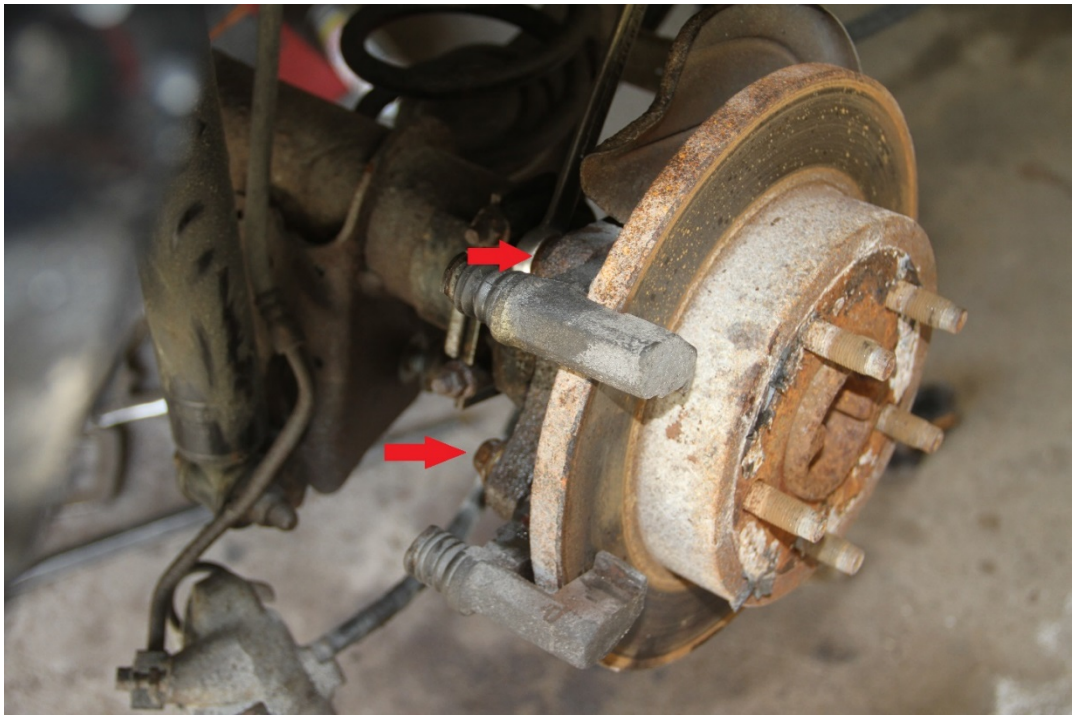
6. Remove the two bolts holding the brake caliper on. (These are on the backside of the caliper and should be 9/16" bolts)



7. Gently remove the caliper and use mechanics wire to secure it out of the way.

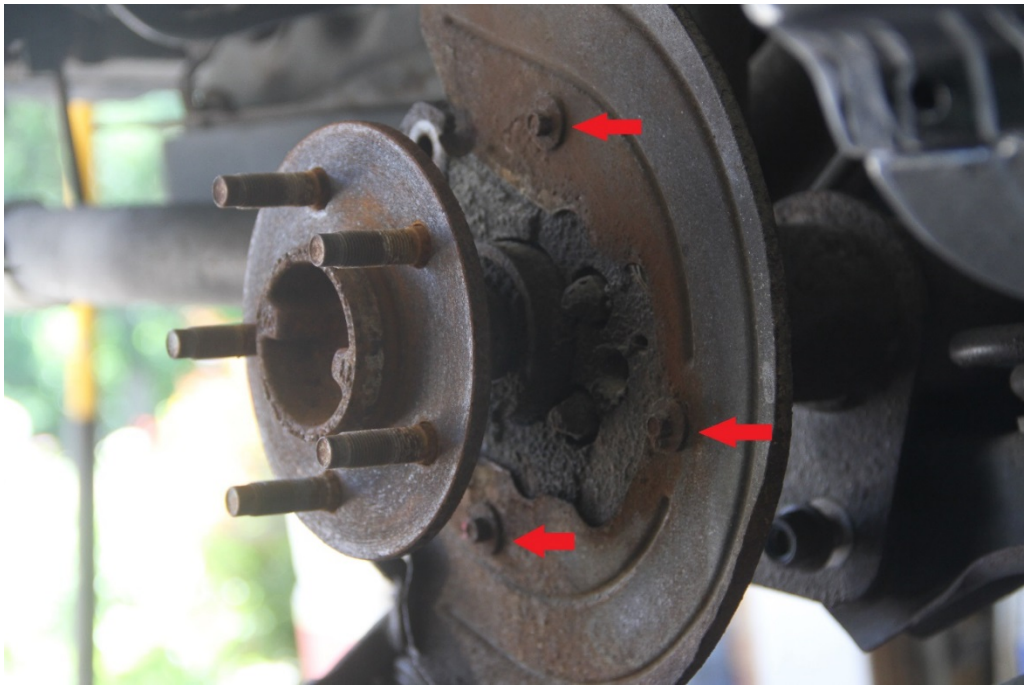
8. Remove pads from the caliper bracket and inspect for wear (Since you have the brake system disassembled, it's a convenient time to service it.)

9. Remove the two bolts that hold the caliper bracket on and remove the caliper bracket. (The bolts are 15mm

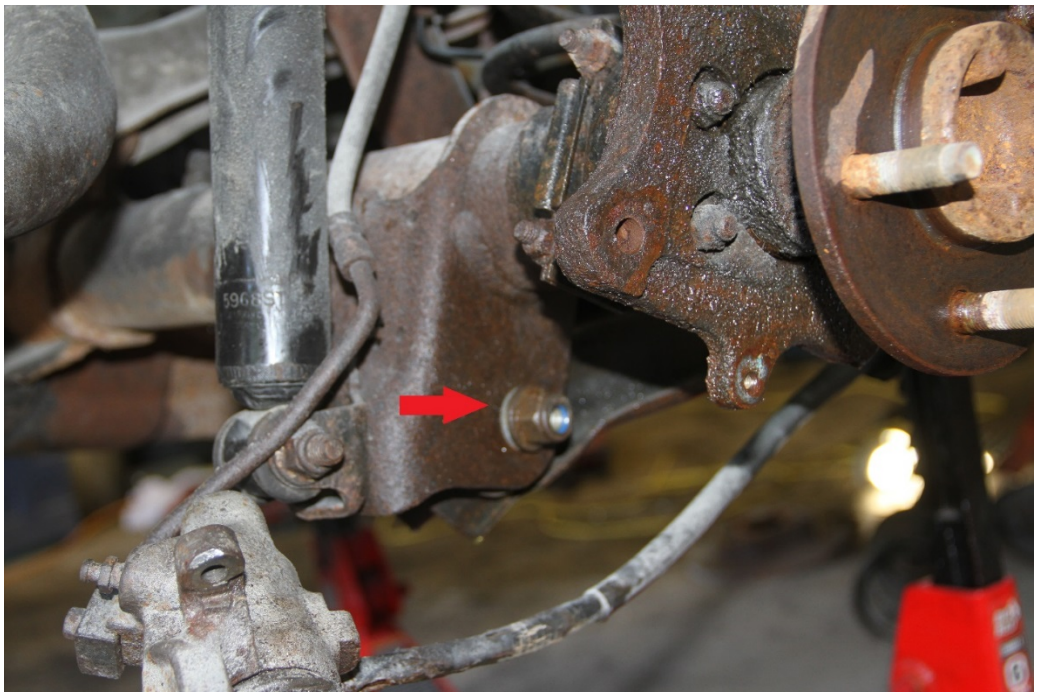


10. Remove the brake rotor and inspect it for wear.

11. Remove the three bolts that holds on the shroud for the brake rotor. (This was heavily rusted from road salt for me, be sure to use a lot of PB Blaster) (The three shroud bolts are 8mm)

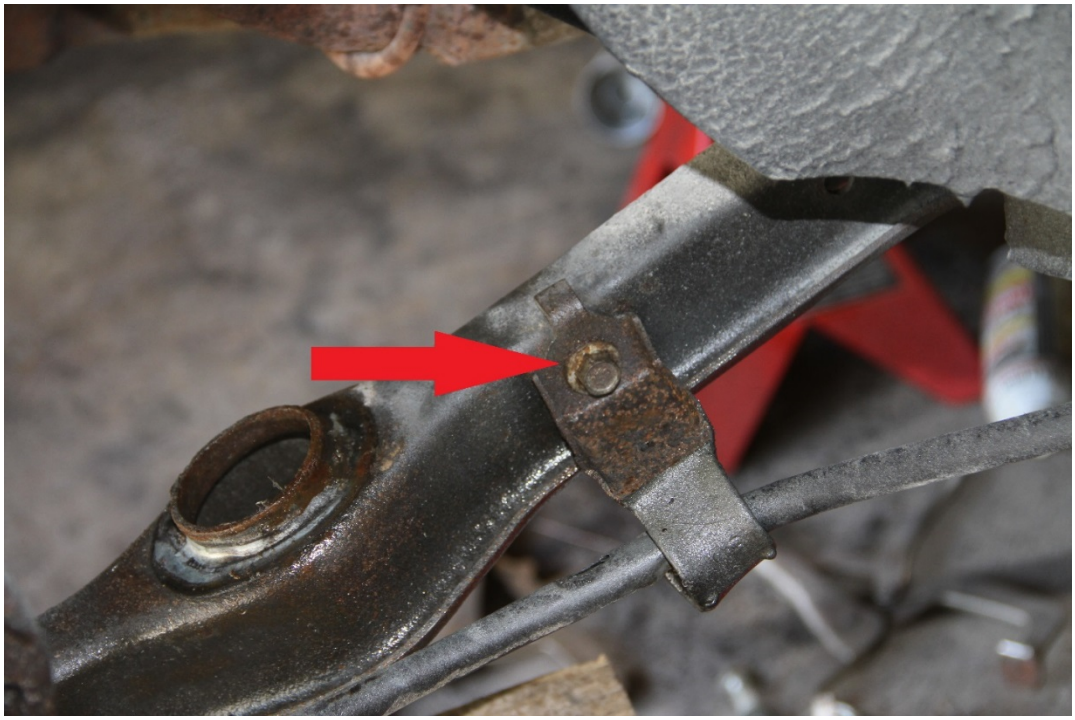


12. Remove the bolt that connects the lower control arm to the axle (the nut is 21mm, the head of the bolt is 18mm)



13. Once the control arm is free of the axle, slowly lower the jack until the spring is loose and remove the spring from the car.

14. Remove the park brake cable bracket. (The bolt should be ½")



15. Remove the bolt that attaches the lower control arm to the frame (this bolt enters from the inside of the frame and once the nut is off it has to be pulled back out to the inside. If you have an

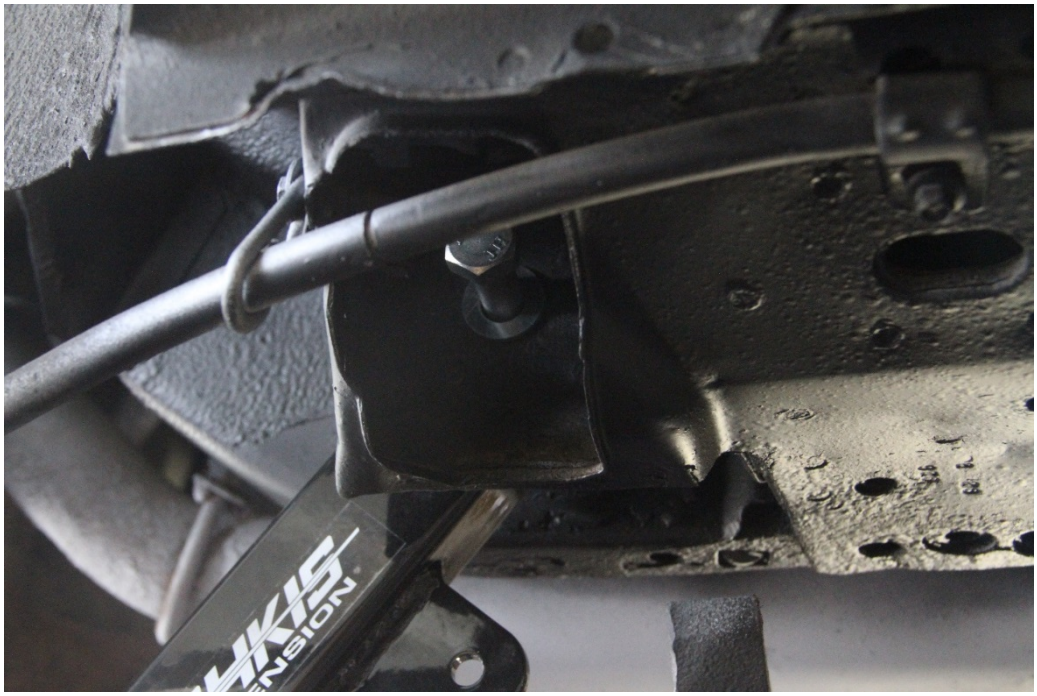
aftermarket dual exhaust like I do, your mufflers will be in the way. Taking off the exhaust or dropping it down is the only way to accesses the bolt head; Because our bushings were seized to the bolts as they were at the axle, we choose to cut through the bushings on either side of the control arm. We used a cutting torch again for this, but a sawzall would most likely cut through.

***__BE CAREFUL!__ The frame on either side of the control arm is thin and you can easily overheat the area and melt holes in the frame with a cutting torch like I did. If this happens you will have to weld reinforcement plates on either side of the bracket and frame to make it strong enough to support suspension components.

The disassembly is complete.

At this point in the install, I took the time to repaint my frame and undercarriage. It protects the area from rust prevalent from road salt. It also looks great with your new suspension components.

16. Reinstall the front of the lower control arm making sure the spring seat is nearer to the axle and the logo faces out. We were able to put the new bolt back in the opposite way so we did not have to drop the exhaust.



make sure the washers are installed in the right spots one between the bolt head and the frame and one between the nut and the frame.

17. Reinstall the rear of the lower control arm into the axle bracket. (You will have to use a floor jack to support the differential as it will turn if just dangling freely. Put the spring back in facing the correct way and use another floor jack or bottle jack to compress the spring with the lower control arm.

18. Once the holes line up the new bolt will slide through and you can lower the bottle jack. (Wait to lower the jack under the differential until both lower control arms are installed.)

19. You can then reinstall the park brake cable bracket in the holes for the sway bar. (Tighten until snug)

20. Reinstall the brake rotor shroud with its three 8mm bolts.

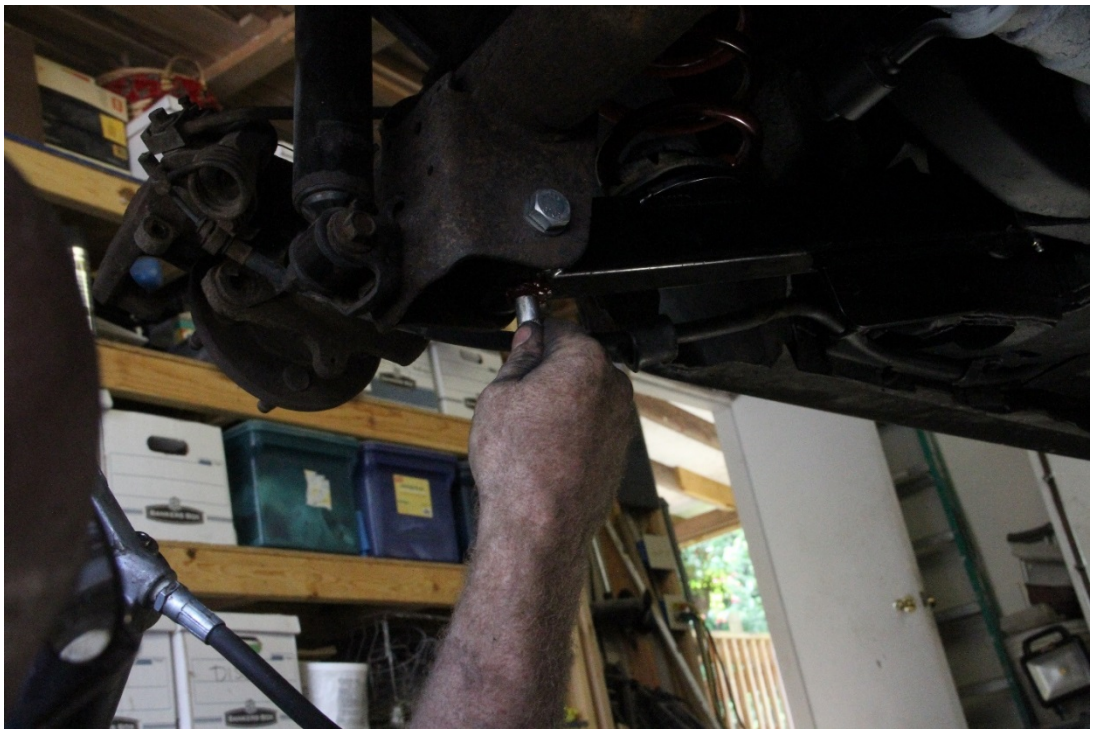
21. Reinstall the rotor and the brake caliper bracket with its two 15mm bolts followed by the brake pads and their retainers.

22. Reinstall the brake caliper over the caliper bracket and it's two 9/16" bolts

23. Reinstall factory or aftermarket sway bar once both sides have been reassembled (the four ½" bolts should be torqued to 41 ft/lbs)

24. Torque the nuts on all four of the new lower control arm bolts to 111 ft/lbs use red Loctite to make sure nuts stay in place.

25. Using a grease gun, grease all four grease zerks located on the bottom of the ends of the new control arms. (Pump until grease comes out of the seals)



26. Reinstall your wheels and evenly tighten lugs before lowering car back onto the ground

27. Torque lug nuts to 100 ft/lbs

28. Before test driving pump brake pedal several times to ensure the brakes engage.

29. Test drive making sure to listen for any odd noise or strange driving tendencies.

30. It is a good idea after any suspension work to have your car professionally aligned

Installation Instructions written by AmericanMuscle Customer Timmy Beetler 6.23.2014