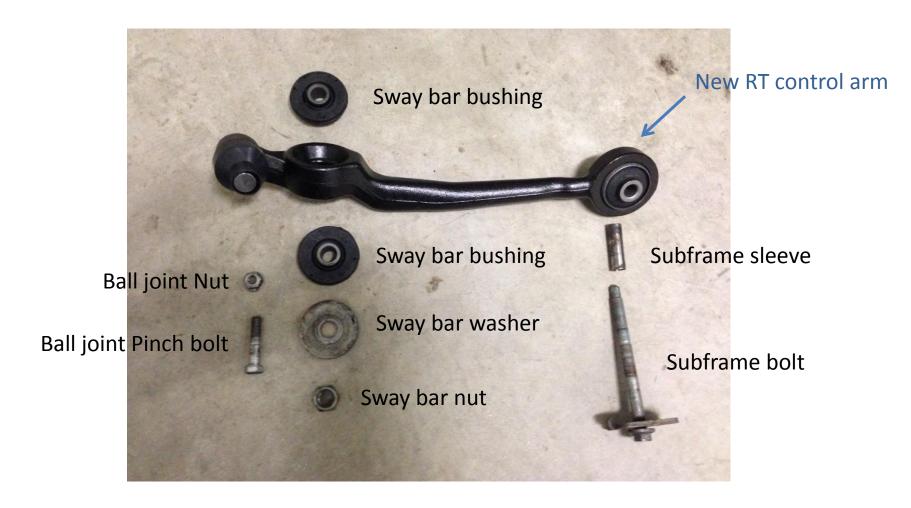
# Lower Control Arm Replacement Procedure

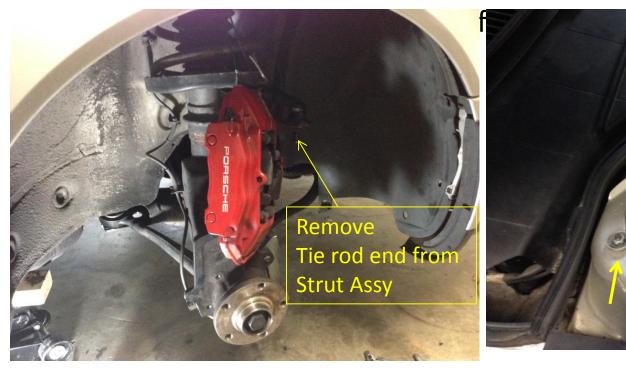


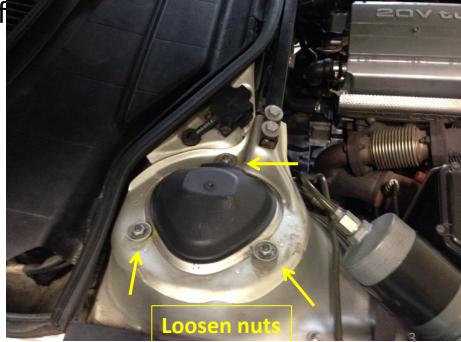
1993 Audi S4 Cosmo 12/31/14

## **Exploded View**

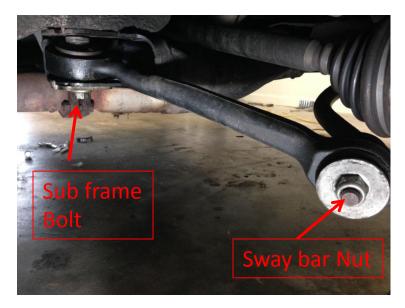


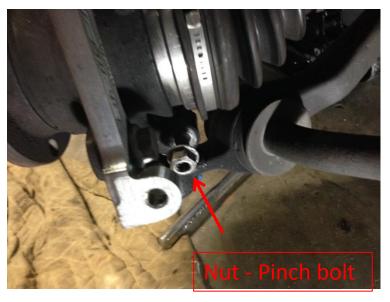
- 1) Lift both front wheels off ground with jack stands.
- 2)Remove wheels, brake calipers, rotors, brake shield, and disconnect the tie rod ends. Hang calipers from springs as shown.





4) Loosen subframe bolt and swaybar nut, but do not yet remove.





- 5) Remove nut on pinch bolt that runs through the lower strut assy. See pic 5a)Loosen sway bar nut
- 6) Place 3'-4' pry-bar between subframe and on top of sway bar. Press down slightly and at same time, slide out the pinch bolt.
- 7) Once the pinch bolt is removed, push down on pry-bar with more force and fully dislodge the lower ball joint from hub assy. **See pic next page.**



Push down on pry-bar to remove ball joint.

- 8) Next remove sway bar bolt and bushings, then rotate control arm to clear the sway bar end.
- 9) The only bolt now holding the old control arm to the car is the 16mm sub-frame bolt. Remove this bolt fully. Note that there is a steel sleeve that needs to be removed. Be gentle. If stuck, take a lug bolt and thread up into the hole to grab the sleeve, as per urs4boy suggestion. Pull sleeve down and remove. Small needle nose pliers will also work.

- 10) Control arm is now out of car.
- 11) Install new lower control arm by loosely installing the subframe bolt. Next rotate the control arm to pass the swaybar through the hole(be sure to install the new rubber bushings). Do not put on the nut on the sway bar end just yet.
- 12) An assistant is helpful for this next step. Press down on the 4' pry bar to lower the balljoint. Line up the balljoint with the hub assy hole and have your assistant slowly let up while the shaft finds its way into the hole.

- 14) Put in new pinch bolt and nut to secure. Do not fully tighten.
- 15) You must now center the swaybar within the control arm hole in order to get the rubber bushing and large nut installed. I used a large 36" pipe wrench that I purchased from Harbor Freight to grab the swaybar and by applying pressure, it will easily move the swaybar to be able to install the nut. Other options include tie straps, etc...but I have not used these other methods.





15) With car on ground, tighten up all bolts and nuts to the following:

Subframe bolt: 81 ft/lb + 1/4 turn (90 degrees)

Swaybar end: 89 ft/lb + 1/4 turn (90 degrees)

Pinch bolt and nut: 48 ft/lb

Tie Rod End: 37 ft/lb

- 17) Reinstall brake components, tie rod ends, and tighten all nuts and bolts to required specifications.
- 18) Enjoy your new front end and a victory beer of choice.