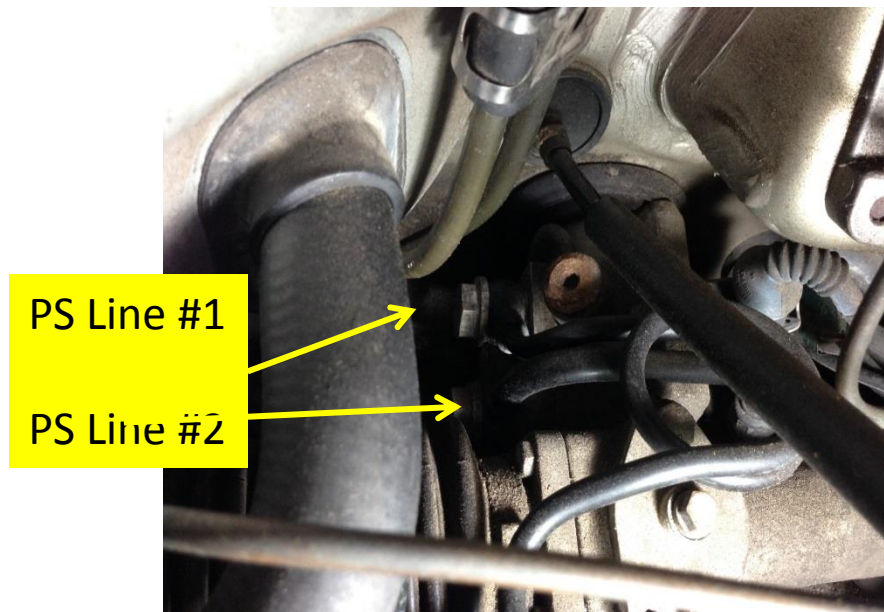


Urs4 Steering Rack Replacement

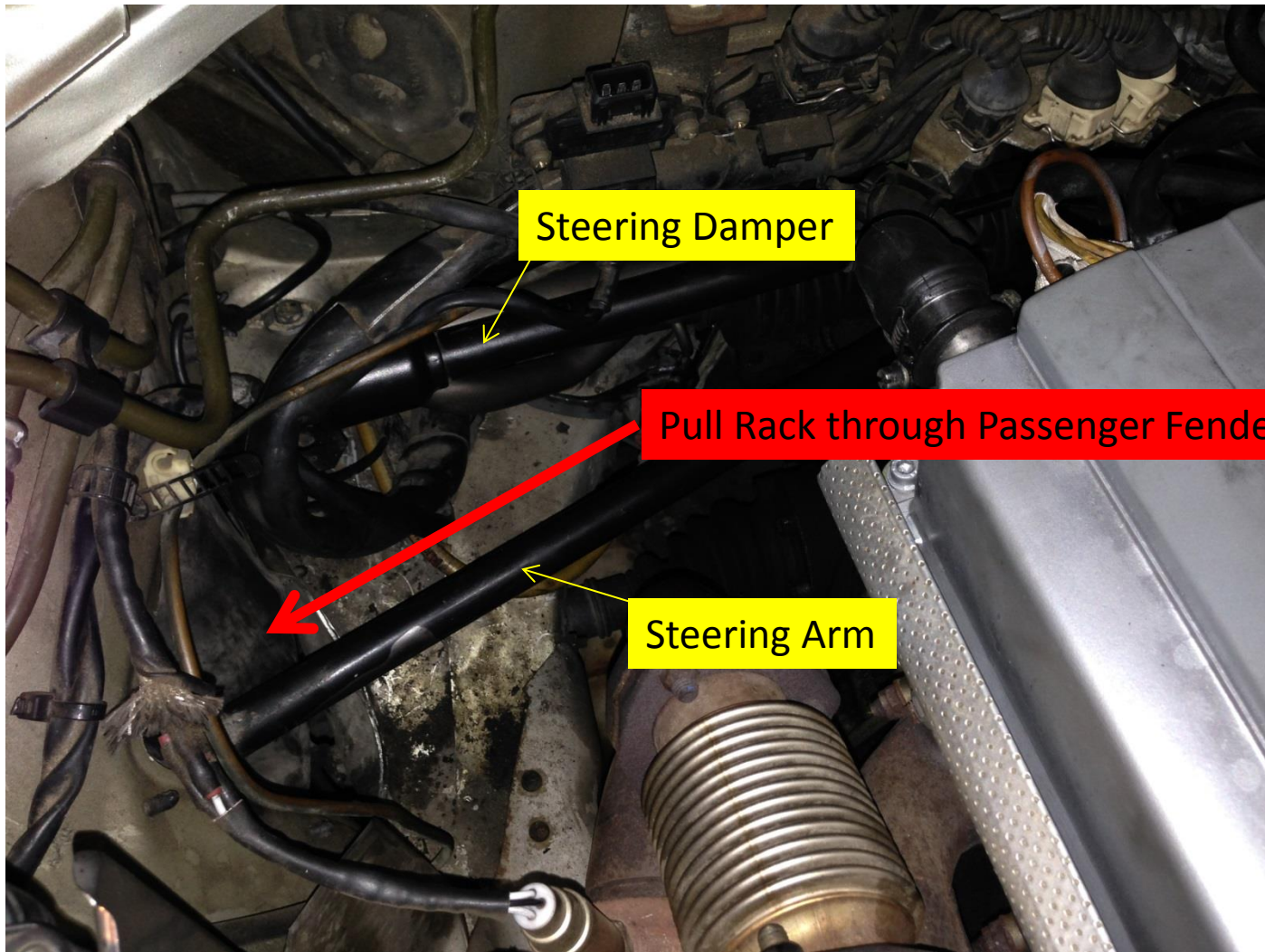
For a first timer, I would expect 4-5 hrs and would recommend having a second set of hands as the rack is fairly heavy needing to clear wires and hoses, as it is being passed in and out of the fender well. Have a 12 pack of favorite beverage available as you will understand by the time you are done.

Step by step process to success:

1. Center steering wheel.
2. Remove coil leads to POS wires on back of block to gain access to area.
3. Remove steering wheel damper.
4. Remove servotronic wire connection to steering rack.
5. Remove the two PS hoses at rack. Good idea to get new crush washers.

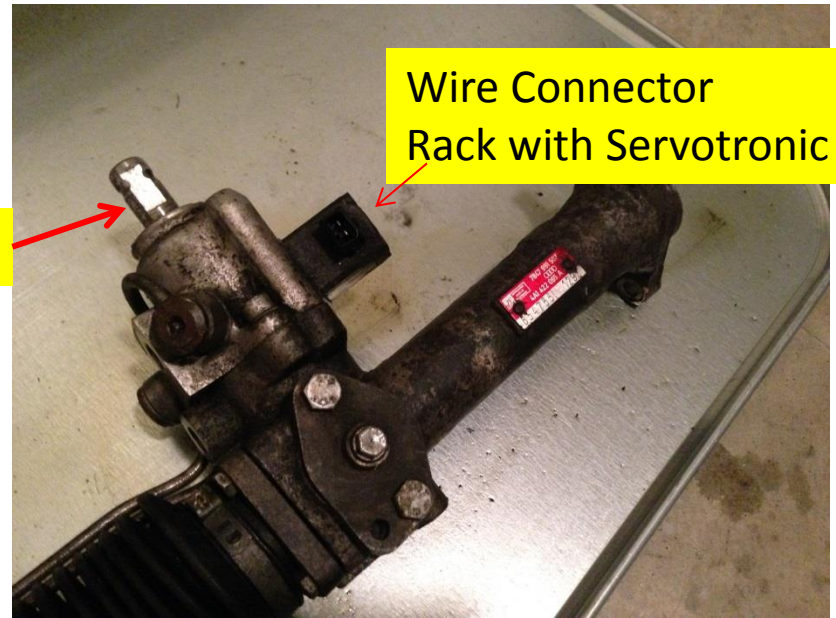


By: Cosmo
Assistance: Photongreen
July 2014



Flat spot on spline

Wire Connector
Rack with Servotronic



Spline

1ea Bolt

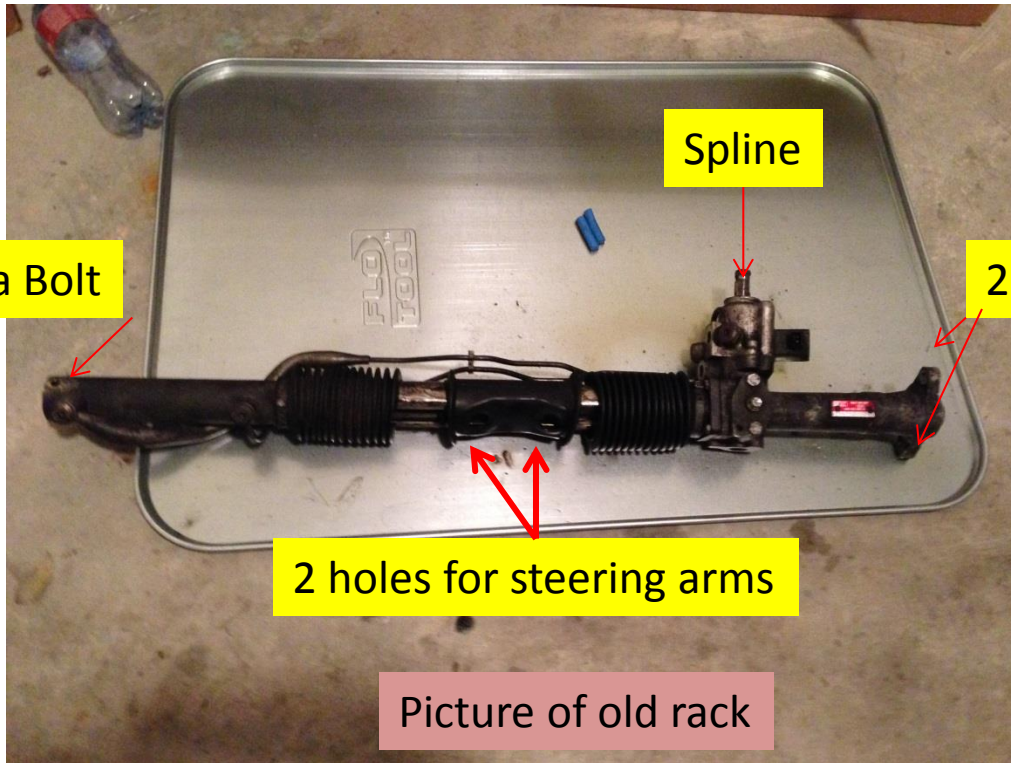
2ea Bolts

2 holes for steering arms

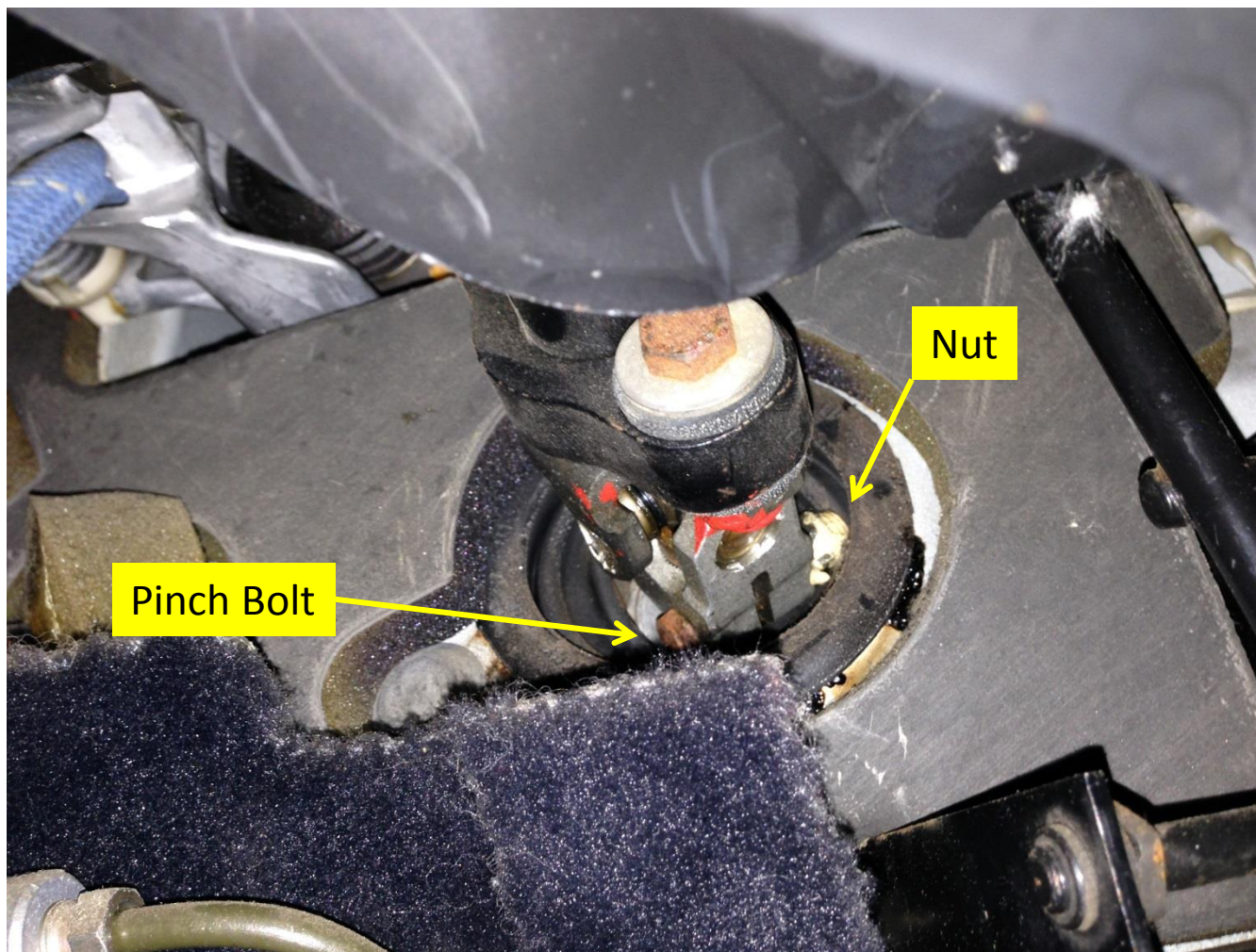
Pass
Side

Driver Side

Picture of old rack



6. Jack front end of car on both sides and remove Right side tire and tie rod. I chose to replace both tie rod ends so I removed the driver side tie rod end as well.
7. Remove RT and LT steering arms where they attach to center of steering rack. This will allow the rack to pull through more easily.
8. Remove the one bolt holding the rack to the passenger side wall and then remove the two bolts securing the rack on the driver side wall. Now, the only thing left holding the rack to the car is the spline.
9. Go inside car and remove pinch bolt. It is also possible to remove the rubber gasket surrounding the U-joint and removing bolt from the engine bay. Either way, it is a tight area but doable. See pic. Once bolt is removed, open the U-joint with a flat head screwdriver to allow the steering shaft to slide off easier. Go underhood and pull rack off the U-joint.
10. Once rack is fully loose, pull towards passenger side fender well. You will need to rotate the rack counterclockwise while pulling out eventually pulling out when the shaft is pointed downward.



11. Take new rack and pass through fender well and put into position. Slide rack spline onto the steering wheel U-joint. We used a little persuasion with a 3 ft 2x4 and a hammer. (note: you must align the flat side of the spline shaft with the pinch bolt orientation. It will be apparent once you have it apart.

Very important: Turn key to unlock steering lock! This allows the shaft to move both in and out. You need this play to be able to align rack ends.

12. Bolt the ends to each fender.

13. Re-install pinch bolt on U-joint.

14. Bolt on steering arms. Note that the rubber boot on the new rack has two holes. These holes must be large enough for the rubber spacer of the bracket to fit into, or you will have trouble getting the 2 bolts to align. We had to open the hole size slightly on this new boot as they were smaller than on the original rack.

15. Button everything back up.

16. Fill PS reservoir, start car and move steering back and forth to bleed and remove air. Top off as required.

17. Drop car.

18. The end. Enjoy your leak free steering rack. Finish your 12 pack.