

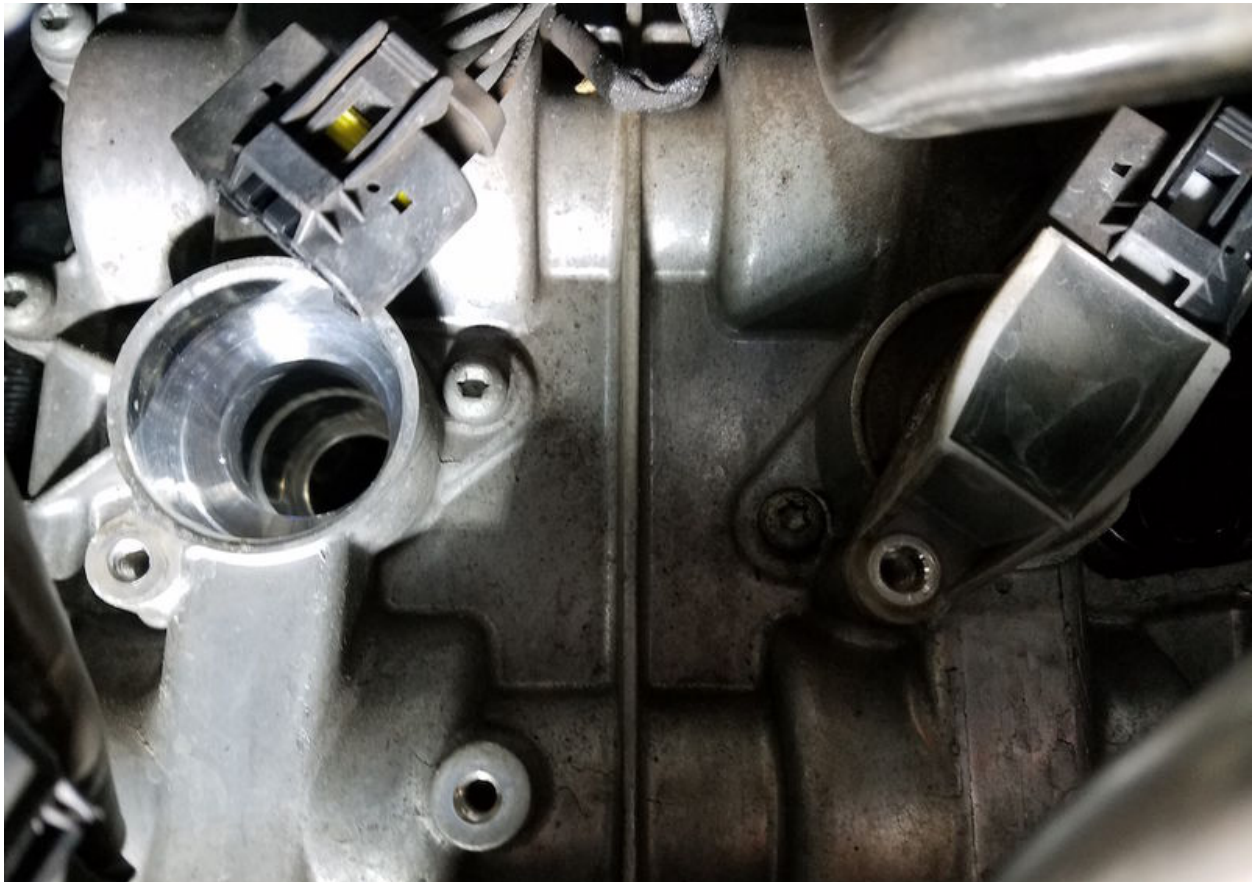
991 Spark Plug Change

Did the spark plug part of the 40K service today. Very easy DIY that even beginners should not feel intimidated doing. If you can change your oil, you can do this. Should take 1-3 hours depending on your experience level. You'll need a torx set, a torque wrench, assortment of extensions, lift, or floor jack and stands. Basic stuff.

1. Loosen the rear lug nuts, raise the back of the car, and remove the wheels. If you have a lift you don't need to take off the wheels, but I was working with a floor jack so they came off.
2. Each side has two heat shields, each of which is held on with two torx bolts. Remove the heat shields. This is what's under the shields:



3. You'll see an electrical connector on each cylinder plugged into a coil-on-plug assembly. The connectors have a tab that has to be depressed (they click so you know you've released them). Push them off the coils. The COP on the left in this pic has been unplugged and removed with the electrical connector dangling, and the right one is still plugged in:

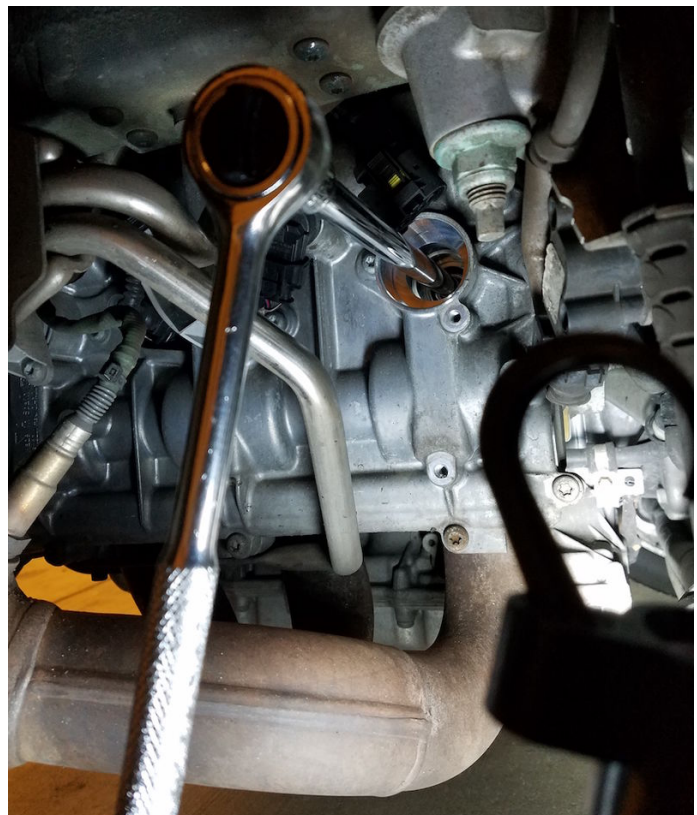


4. Remove the torx bolt on each COP.

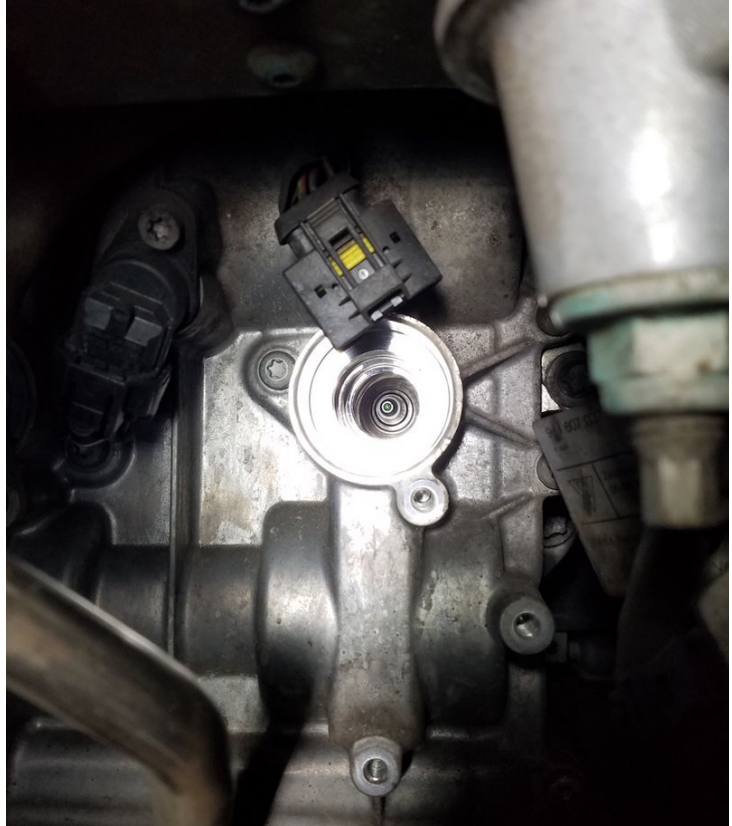
5. Remove the coils by pulling them out. They're held in by a three-layer silicone dust shield and slide out with a little pressure. This is what they look like:



6. Now remove the plugs. Each cylinder will need a different combo of extensions as you have to maneuver around the plumbing that's in the way. A universal joint is key here. You want to use extensions to get your ratchet into the wheel well, away from where it'll get tangled up in plumbing and your knuckles destroyed.



This is looking in on a plug:



Here's what my 41K-mile plugs looked like. Textbook example of a healthy plug from a well-running motor. Really don't even need to be changed.



7. Install the new plugs. Be careful as you're inserting them into the heads not to bang up the tips of the plugs, which have a specific gap. Start turning them by hand, not with a ratchet, so you don't cross-thread them. Torque to **22 ft-lbs**. I believe the factory says not to use anti-seize on the threads, but I used a very tiny dab. Pretty sure the factory says not to use it because too many people slather on too much and end up over-torquing the plugs.

8. Reinstall the coils and seat them firmly in the heads. Re-connect the electrical connectors (they will make a faint click). Reinstall the single torx bolt for each. Just snug them up – do not overtighten. These are small fine-thread fasteners threaded into soft aluminum and you can strip them easily.

9. Reinstall heat shields. Like the COP torx bolts, do not overtighten these. Just snug them up. Reinstall wheels. Go for a spin. Enjoy knowing you didn't pay the dealer \$1K for 90 minutes of fun work.

Churchill

<https://rennlist.com/forums/991/967402-40k-plug-change-diy.html>