Spark plug replacement...how to.

\*Spark plug replacement for the M-Class (W-163)\*

Tools that I used...



From left to right: WD-40, 17 mm open/closed wrench, Torx screw driver, Spark Plug Socket, 3/8" short extension, 3/8" Ratchet, and Torque wrench.

1. Make sure the engine is cold! Proceed by taking off the engine cover -- just pry it out, and the Air box (undo the 8 clips).



Engine cover



Air box

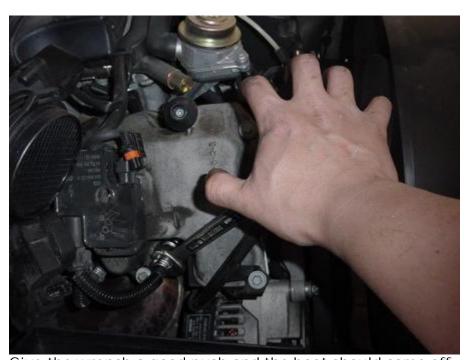
2. After removal of the engine cover, you will see the 3 coil packs on either side of the engine (6 total). Use a torx screw driver to remove them (each pack is held by just one screw). After that, go ahead and unclip the packs from the harness.



Do one side first (I did the driver's side 1st). I sprayed WD-40 on the metal spark plug boots for ease of removal. Once that is done, use a 17 mm open wrench to pry them off.



Passenger's side view. The 17 mm wrench should fit nicely around the boot.



Give the wrench a good push and the boot should come off

Make sure that you don't mix the orientation of the plug wires from the coil pack! Do the plugs and wires one at a time so as not mess up which wire goes where. Or you can label each wire if it's better for you.

3. Once the boot is off, use the spark plug socket/extension/ratchet to remove the spark plug.



Remember: "Lefty loosey, Righty tighty"



Ye olde spark plug

4. Install the new plugs. Use anti-seize on the plug's thread if you wish. This'll make the removal easier the next time you do it again.



Brand new Platinum plugs.

5. Hand tighten the plugs in. If you have a Torque wrench, torque them to 15-20 ft-lbs afterwards. Otherwise, just tighten it about another 3/4 turn with the ratchet (DO NOT overtighten!).

## Torque wrench in action.

- 6. Before installing the plug wire, spray the inside of the boot with some WD-40. This will make it a lot easier to put the boots back. Make sure that the boots "snap" back in. Double check by pulling the boot by hand -- if it comes off, push it in harder.
- 7. Just keep doing the same procedure to each plug. It gets harder as you go towards the firewall -- not enough room!
- 8. Once all the plugs are replaced, go ahead and screw the coil packs back and clip them back to the harness -- don't worry about mixing them up since each harness are "properly" positioned...as long as you didn't take the whole coil pack off.
- 9. That's it! It took me about 1.5 hours to do the job and picture taking.

## Miscellaneous:

- \* Expect to get some scratches on your hands and arms.
- \* Make sure that you don't drop anything in the engine bay! It'll be a PITA to reach in and get it.
- \* When spraying WD-40, you might get some on the headers. When you start the car it'll smoke, but don't worry the smoke will go away once the WD-40 fully evaporates.

- $^{\star}$  Do this at your own risk. I will not be responsible for any engine failure or any bodily harm.
- \* Expect more scratches on your hands and arms after a good hand wash.
- \* Feel free to add more info to this write-up if I missed anything.

Cheers!

98 Mercedes Benz ML 320 94 B20/VTEC Acura Integra (12 sec. All-Motor club)

Last edited by randyman on 04-09-2004 at 01:32 AM