

# 2001 Mercedes-Benz C320 (W203)

## Replacing Spark Plugs

**Note:** If you are not comfortable working on your engine, do not proceed. You can cause major and expensive damage to your vehicle. This can include, but is not limited to: breaking the spark plug inside the engine block, breaking the spark plug wire, breaking the module controlling the spark plugs, severing wires, and other damage to your engine and automobile. Proceed with caution and work slowly. I am not responsible for any damage done to your automobile and providing this primer for educational purposes only.

### Materials

- \* Spark Plugs (12 - 2 per cylinder)
- \* 17 mm Open-ended Wrench
- \* Spark plug boot pliers
- \* WD-40
- \* 5/8" Spark Plug socket
- \* Ratchet
- \* T-25 Torx bit
- \* Telescoping Magnet
- \* Torque Wrench

Step 1. Wait for the engine to cool down and gather listed materials. Working on a hot engine is incredibly dumb.



Fig. 1. Engine all assembled

Step 4. Locate the spark plugs. This engine has six-cylinders and twelve spark plugs (six on each side). Select one side to do at a time.

Step 5. Starting with the spark plug furthest from the firewall, remove the electrical plug and unscrew unit from the engine using the T-25 Torx bit. Use the magnet to ensure the screw is not dropped into the engine. (Fig. 3.)

Step 6. Spray the spark plug boots with WD-40 to loosen them for removal. Wait a few minutes to allow solvent to penetrate.

Step 7. Use the 17 mm wrench to pry the boot off from the spark plug. This is the biggest pain in the ass. Try to loosen the boot by turning the boot using your hand. Be careful not to damage or crimp the boot if using the pliers.

Step 2. Open the hood and remove the front panel and airbox. (Fig. 1.)

Step 3. Protect the air intake with a cover (I used aluminum foil). (Fig. 2.)



Fig. 2. Protect your engine! Cover the air intake from accidental beer spilling!



Fig. 3. Spark plugs on driver's side with wires and harnesses intact.

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## Replacing Spark Plugs (Continued)

Step 8. Do this for the entire side of the engine. This part took the longest. Label the position of the modules. The boots are labeled, both on the module and on the engine. (Fig. 4 and 5.)



Fig. 5. The engine has embossed lettering to show which boot goes where.



Fig. 6. Old and new spark plugs. I used OEM spark plugs, as seen in Fig. 7.



Fig. 4. Engine without spark plug modules.

Step 9. Remove the spark plug. This is a pain in the ass as well. Remember, lefty-loosy, righty-tighty. Use the appropriate-sized extension to remove the spark plug. You may have to change extensions mid way.

Step 10. Insert new spark plug. Spray with WD-40 before screwing in to allow for easier removal the next time you change spark plugs. Tighten to 28 N m.

Step 11. Re-attach boots to the spark plugs, making sure you place them in the right order. You will feel or hear a pop when they connect. Also re-attach modules to the engine block.

Step 12. Repeat on other side of engine, noting the number of new and used spark plugs as you go along.

Step 13. Once complete, remove cover that was placed on the air intake and replace air box. You are done! There will be some smoke and smell as the WD-40 burns off the engine and plugs.