M62 Oxygen Sensor (O2 or Lambda is common) replacement

as performed on a 1998 BMW 540iA Sport (by Kowached from the Roadfly E39 Forum)

Difficulty: Extremely Low

Time: Truly a 10 minute job per O2 sensor once the car is in the air. Required tools: 22mm Closed end wrench, 10mm Nutdriver.

Required parts: A new Pre-Cat O2 Sensor, P/N: 11.78-1 247 406 or Post-Cat P/N: 11.78-1 742 051.

- 1. Raise the front end of the car on ramps (or use a jack) taking all appropriate safety precautions (wheel chocks/jackstands). Take a look under the car, about mid-front door. And look for a little black box that has 3 wires going in/out of it. Using a 10mm nutdriver, unscrew the nuts at both ends of the box.
- 2. Disconnect the wire that goes to the Pre-Catalytic Converter Oxygen Sensor (or which ever one you are replacing, there are 4 total on the 540i, 2 Pre-Cat, and 2 Post-Cat), it just pulls apart with no special tools. Now place the end of the wire that goes to the disconnect O2 sensor through the closed end of your 22mm wrench and run it all the way down to the seat of the O2 sensor nut and unscrew it.
- 3. Screw the new O2 sensor in and tighten it with the 22mm closed end wrench.
- 4. Reconnect the new O2 sensor to the vehicle wiring harness
- 5. Snap the connectors back into the black box and re-attach the box to the car with the 10mm nuts.





If you have a Peake R5/FCX scan tool (http://www.peakeresearch.com/code_tool.shtml), now would be a good time to reset the check engine light. The Peake was also used to initially diagnose the problem and identify the passenger side Pre-Cat O2 Sensor as the failed component.

Thanks, Dave

Note: BMW recommends O2 sensors be replaced every 100k miles. A sign that yours are failing is reduced fuel economy.