

2003-2018 BMW Z4 | Easy | 30-60 minutes

TOOLS

Car ramps or floor jack and jack stands 17mm socket and ratchet for the drain plug 36mm oil filter housing socket Oil drain pan (at least 7-liter capacity) Funnel Torque wrench Nitrile gloves Shop towels New oil filter kit with O-rings and drain plug crush washer Approximately 6.5 liters of BMW LL-01 approved synthetic oil

PARTS

Engine oil filter kit with O-rings and crush washer
BMW LL-01 approved synthetic engine oil

STEPS

- 1 Warm the engine and park on level ground - Start the engine and let it idle for two to three minutes** so the oil warms slightly and flows freely, then shut it off and set the parking brake. Warm oil drains far more completely than cold oil, ca...
- 2 Raise the front of the Z4 - Drive the front wheels up onto sturdy car ramps or lift the front** with a floor jack and support it on jack stands at the factory jacking points. Confirm the car is stable by rocking it gently before...
- 3 Remove the engine undertray - Unfasten the 8mm screws around the perimeter of the front undertray** and lower it out from under the engine. Keep the screws together in a tray because they are easy to lose in the gravel of a drivewa...
- 4 Crack open the oil filter housing first - On the M54 the cartridge filter lives in a black** plastic housing on top of the engine; fit the 36mm socket and loosen the cap two or three turns without removing it yet. Loosening it first lets the o...
- 5 Drain the engine oil - Position the drain pan under the oil pan, then remove the 17mm drain plug** with the socket and let the oil stream out fully, keeping your hands clear of the hot stream. Allow at least ten minutes of d...
- 6 Replace the filter cartridge and O-rings - Lift off the loosened filter housing cap, pull out the** old paper cartridge, and remove the old O-rings from the cap grooves. Lightly oil the new O-rings with fresh oil, seat them in their grooves, dr...
- 7 Reinstall the drain plug with a new crush washer - Fit a new aluminum crush washer onto the 17mm** drain plug and thread it into the oil pan by hand to avoid cross-threading the soft aluminum threads. Tighten it to a firm snug with the torque wrench; d...
- 8 Refill with fresh oil - Place the funnel in the oil filler neck on the valve cover and pour in** approximately 6.5 liters of BMW LL-01 approved synthetic oil, pausing to let it settle. Pour steadily to avoid glugging and spil...
- 9 Check the level, start the engine, and inspect for leaks - Wait a minute for the oil to settle,** then pull the dipstick, wipe it, reinsert it fully, and confirm the level sits between MIN and MAX. Start the engine, let it idle for a minute, shut it off, and l...
- 10 Refit the undertray and reset the service indicator - Reinstall the undertray with all of its 8mm** screws so the engine bay is protected again. Reset the oil service reminder using the instrument cluster button procedure for the E85. The job is finished...