2021-2024 BMW M4 - Spark Plug Replacement (S58)

2021-2024 BMW M4 | Advanced | 2-3 hours | $143 DIY

TOOLS

Socket set Spark plug socket Torque wrench Extensions Compressed air Screwdrivers

PARTS

Spark plugs, S58-specific (6) $143.00
Ignition coils (6, optional) $249.00

STEPS

1. **Confirm the G82 M4 and the 30k-mile service - This covers the 30,000-mile service on a** G82 M4 with the S58 twin-turbo inline-six (2021-2024). S58 plugs are a scheduled wear item - worn ones show up as rough idle or misfires under boost. Order six S58 plugs.
2. **Cool the engine and disconnect the battery - Let the S58 cool completely - the aluminum** head's hot threads gall easily. Disconnect the negative battery terminal so no coil can energize while you work. A cold engine also protects your hands around the turbo-adjacent rear cylinders.
3. **Remove the engine cover and strut brace - Remove the plastic S58 engine cover to expose** the six coil packs. On the G82, unbolt the front strut brace for rear-cylinder room, noting bolt positions. Keep all fasteners in a tray in removal order.
4. **Disconnect and extract the ignition coils - Release each coil connector's locking tab and** pull the coil straight up and out. Do one cylinder at a time, keeping each coil with its cylinder to preserve the learned adaptations. Check boots for white tracking marks indicating high-volta...
5. **Clear the wells and remove the old plugs - Blow compressed air down each plug well before** loosening - grit collects in the S58's deep wells. Unscrew each plug; heavy erosion or a wide gap explains a misfire. Oil in a well means the valve cover gasket needs attention.
6. **Install and torque the new plugs - Gap every new plug to the S58 specification before** installing. Start each plug by hand to feel the threads engage cleanly, then finish with a torque wrench to the specified value. Never use an impact tool on spark plugs.
7. **Refit coils, brace, and cover - Seat each coil onto its plug and reconnect the harness** until every lock clicks. Reinstall the strut brace to spec and refit the engine cover. Reconnect the negative battery terminal; clear codes with a scan tool.
8. **Test drive under boost - Confirm a steady idle with no flashing check-engine light. Do a** moderate full-throttle pull through the rev range where safe - S58 misfires usually appear under boost. If a fault returns, recheck the coil seating before suspecting the ne...

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