2012-2018 BMW 3 Series - Serpentine Belt

2012-2018 BMW 3-Series | Moderate | 1-1.5 hours | $45 DIY

TOOLS

16mm socket + ratchet or breaker bar (tensioner release) E10 external-Torx socket (tensioner bolts) 7mm socket or nut driver (intake clamp) Torque wrench (tensioner bolts 19 Nm) Phone camera (routing photos) Flashlight

PARTS

Serpentine belt (matching routing) $45.00

STEPS

1. **Diagnose the belt and identify your engine - F30 belts typically need replacement around** 60,000-80,000 miles, and a failing tensioner often chirps on cold starts. Confirm your engine: 2012-2015 328i = N20/N26 2.0L turbo four; 2016-2018 330i = B46/B48 - this covers the N20/N26...
2. **Photograph the routing before anything moves - Photograph the belt's path around every** pulley from multiple angles. BMW doesn't always put a clear routing decal under the F30's hood, so your photos plus a service manual for your exact year and engine are the authority - never route f...
3. **Remove the airbox for working room - Access on the N20/N26 is tight from above, so the** intake airbox comes out first. Loosen the intake tube's hose clamp with a 7mm socket, unplug the mass airflow sensor connector, and lift the airbox off its mounting studs; unclip the smal...
4. **Unload the tensioner and remove the old belt - Fit a 16mm socket on a ratchet or breaker** bar onto the cast hex boss on the tensioner arm - do NOT put the socket on the pulley's center bolt, which just holds the pulley on. Rotate the tensioner clockwise to swing the arm and unload t...
5. **Inspect pulleys and the tensioner while it's all open - Check the tensioner arm's spring** action: firm, smooth resistance in both directions. On the N20/N26 this matters doubly - a shredding belt can get ingested past the front crank seal into the timing area, turning a $50 belt job into an en...
6. **Install the new tensioner (if replaced) and route the belt - If you fitted a new** tensioner, mount it with the locking pin facing outward, thread the three E10 bolts in by hand, and torque them to 19 Nm (about 14 ft-lb). New tensioners ship with a pin holding the arm unloaded - leave it in for now....
7. **Reassemble, start, and verify the drive - Reinstall the airbox: seat it on its studs,** reconnect the intake tube and tighten the 7mm clamp, reattach the coolant line, plug in the MAF sensor, and reconnect the battery. Final visual check, then a short drive with the A/C cycling.

ezcarfix.com