

Ask the Mechanic Paul Kaganzi



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QUESTIONS TO

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A Q&A page with
expert advice.

Does a bad PCV cause high engine oil consumption?

I recently heard a mechanic mention something called a PCV valve affecting engine pressure. My car has been consuming oil faster than usual, but there are no visible leaks. Could a faulty PCV valve cause this, and how does it actually affect engine performance and longevity? **Mugisha**

Hello Mugisha, a faulty PCV valve can indeed lead to increased oil consumption, even when there are no visible leaks around the engine. The PCV valve, or Positive Crankcase Ventilation valve, is a crucial component in modern engines. It regulates the pressure and combustion gases within the engine crankcase during combustion.

These gases, known as "blow-by," escape past the piston rings into the crankcase. If not controlled, they can cause pressure to build up inside the engine, potentially damaging internal seals and leading to oil leaks.

Additionally, oil can seep into areas of the engine where it normally shouldn't be. This can accelerate the formation of thick oil sludge, reducing engine efficiency, power, and fuel economy. The PCV valve helps manage the buildup of combustion gas pressure by hanneling these gases back into the

intake manifold to be burnt again.

A damaged or worn-out PCV valve usually fails by becoming stuck in either the open or closed position. When the PCV valve is stuck open, it can lead to hidden oil consumption. This condition creates excessive vacuum in the crankcase, sucking engine oil mist back into the intake system, where it burns alongside the fuel-air mixture. This burning of the oil mist can produce intermittent blue exhaust smoke and cause oil buildup on the spark plugs, increasing carbon deposits. If left unattended, this can result in internal engine oil consumption without any visible signs of leaks.

Conversely, when the PCV valve is

stuck closed, it may be blocked, resulting in crankcase pressure buildup. This pressure forces oil past the piston rings and valve seals, stressing engine gaskets and seals while also causing sludge buildup. Over time, this internal oil leakage increases, further reducing engine efficiency. Engines with blocked PCV valves may eventually leak oil from multiple seals.

Common signs of a failing PCV valve include continuous oil loss and rough engine idling. In more severe cases, you may hear whistling noises in the engine bay and see traces of oil in the air intake pipes and hoses. Additionally, excessive sludge buildup may occur under the oil filler cap, along with blue smoke during startup or acceleration.

During engine inspections or diagnostics, you might encounter lean mixture fault codes and failed emissions tests, often accompanied by increased fuel consumption. The effects of PCV failure are especially noticeable in turbocharged engines, where crankcase ventilation becomes critical under boost.

Ignoring this small and inexpensive PCV valve can lead to serious problems that can reduce engine lifespan and incur significant repair costs.

A faulty PCV valve increases the buildup of harmful sludge and carbon

deposits, causes premature wear of engine seals, damages piston rings, and creates crankcase pressure stress. Over time, the engine's piston rings may wear out, and costly exhaust catalytic converters may be

come damaged from burning engine oil. Clogged intake systems can also reduce engine compression and contaminate the turbocharger.

NOTE

**DO NOT IGNORE
A FAULTY PCV**

