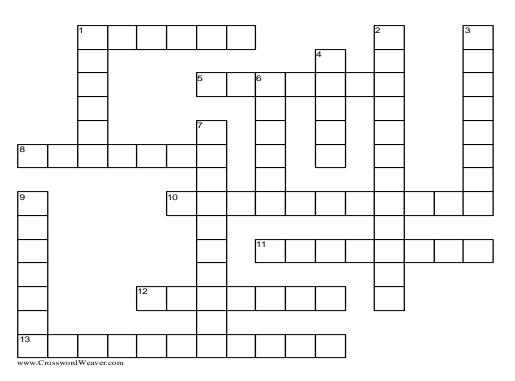


Advanced Engine Performance Diagnosis 8th Edition

Chapter 21

Fuel Pumps, Lines, and Filters



ACROSS

- 1 ______v ane pump: A fuel pump that uses rotating vanes inside a chamber to move fuel and generate pressure, often used in older vehicles.
- **5** _____ refueling v apor recovery: A system designed to capture fuel v apors during refueling and direct them to a storage canister, preventing them from being released into the atmosphere.
- 8 _____ pump: A common type of fuel pump that uses a spinning turbine to move fuel and generate pressure. It is quieter and more efficient than older pump designs.
- **10** ______ pump: A fuel pump that uses side channels to move fuel and generate pressure, similar to a turbine or peripheral pump, but with different flow characteristics.
- **11** ______ organic compound: Emissions from fuel v apors that contribute to air pollution. Modern fuel systems are designed to minimize VOC emissions through v apor recovery and sealed fuel tanks.
- **12** A type of fuel pump that uses an internal gear mechanism to pressurize fuel. It is known for its efficient and quiet operation.
- **13** A component in the fuel system that helps maintain fuel pressure by storing fuel under pressure and releasing it as needed.

DOWN

- 1 _____ cell: A type of fuel pump that uses rollers in a circular chamber to pressurize fuel, commonly found in high-pressure fuel systems.
- 2 _____ pump: A type of pump that rapidly moves fuel to create pressure using the motion of the liquid fuel, commonly found in turbine-style fuel pumps.
- **3** ______ or rest pressure: The fuel pressure that remains in the system after the engine has been turned off, which helps prevent vapor lock and ensures easier engine restarting.
- 4 _____ lock: A condition where fuel v aporizes in the fuel lines due to excessive heat, preventing the fuel pump from supplying liquid fuel to the engine, leading to engine stalling.
- 6 A structure inside the fuel tank designed to reduce fuel sloshing and ensure consistent fuel pickup under various driving conditions.
- 7 _____ pump: A type of fuel pump that uses an impeller to move fuel particles and generate pressure. It is designed for lower noise and improved fuel flow.
- **9** _____ switch: A safety device that shuts off the fuel pump in the event of a collision or sudden impact, preventing fuel from being pumped when it is not safe.