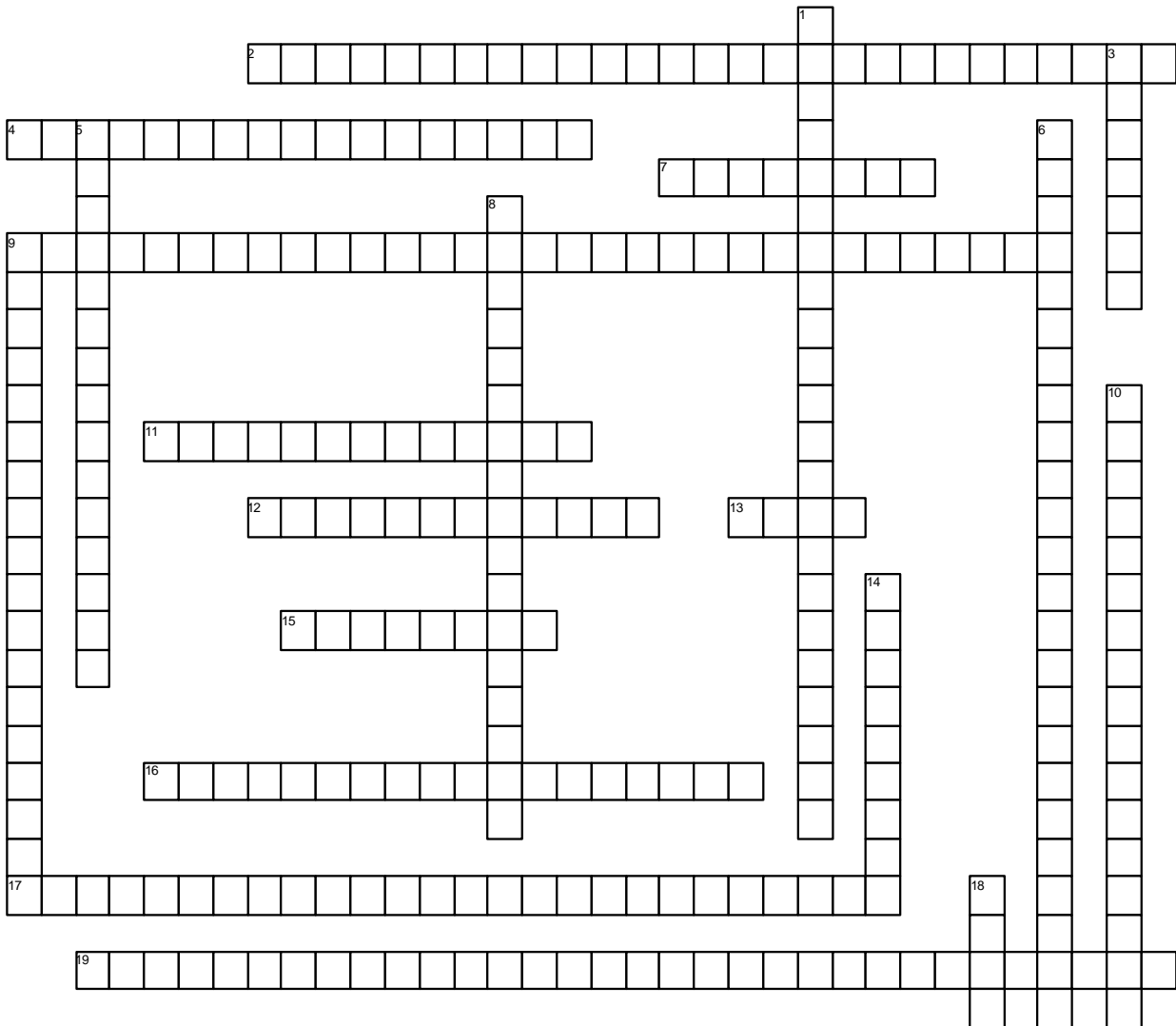


Diesel Engine Operation And Diagnosis

Chapter 19



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ACROSS

- 2 _____ is a method used to reduce NOx emissions by injecting urea into the exhaust stream.
- 4 In an _____ diesel engine, fuel is injected into a small prechamber, which is connected to the cylinder by a narrow opening.
- 7 A _____ is a heating element that uses 12 volts from the battery and aids in the starting of a cold engine by providing heat to help the fuel to ignite.
- 9 _____ are used in all light-duty diesel

- vehicles, since 2007.
- 11 A diesel engine uses a fuel system with a precision _____ and individual fuel injectors.
- 12 The process of purging soot from the DPF is described as _____.
- 13 Another name for particulate matter is _____.
- 15 The diesel fuel is usually drawn from the fuel tank by a separate pump, called a _____ and delivers the fuel to the injection pump.
- 16 Between the fuel tank and the lift pump is a _____.
- 17 The _____ has two pressure sample lines.

- 19 Ford 7.3 and 6.0 liter diesels use a system called a _____ system.

DOWN

- 1 Newer diesel engines use a fuel delivery system referred to as a _____ design.
- 3 _____ means the percentage of light that is blocked by the exhaust smoke.
- 5 In a _____ diesel engine, fuel is injected directly into the cylinder.
- 6 _____ are used in all light-duty diesel engines,

- since 2007.
- 8 _____ refers to tiny particles of solid or semisolid material suspended in the atmosphere.
- 9 Urea is called _____ in North America and AdBlue in Europe.
- 10 Incoming air is compressed until its temperature reaches about 1,000°F (540°C) and is called _____.
- 14 A _____ is a device used for checking a diesel injector nozzle for proper spray pattern.
- 18 _____ is used as nitrogen fertilizer.