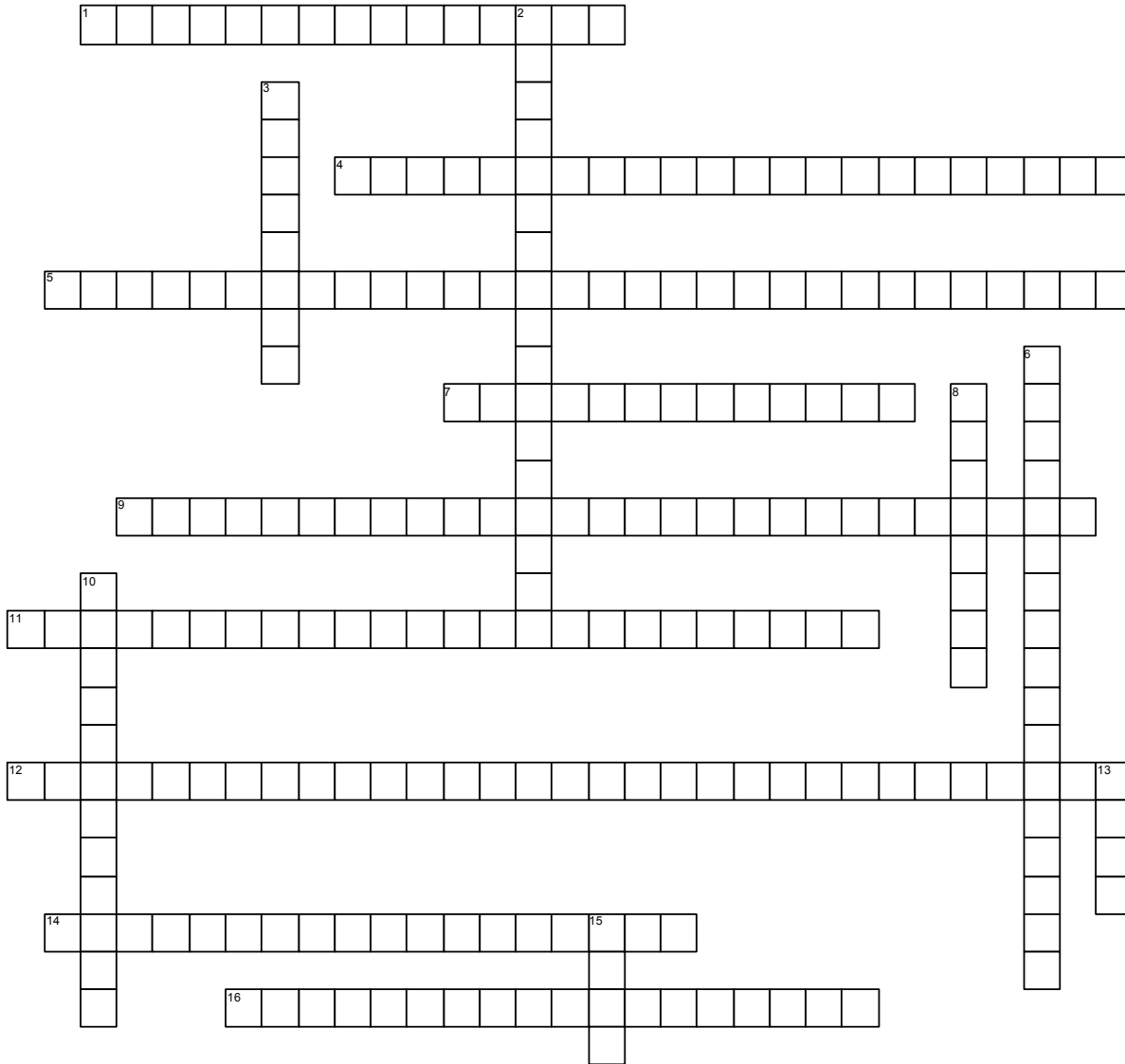


# Diesel Engine Operation

## Chapter 15



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### ACROSS

- 1 In a \_\_\_\_\_ diesel engine, fuel is injected directly into the cylinder.
- 4 Newer diesel engines use a fuel delivery system referred to as a \_\_\_\_\_ design.
- 5 Ford 7.3 and 6.0 liter diesels use a system called a \_\_\_\_\_ system.
- 7 A diesel engine uses a fuel system with a precision \_\_\_\_\_ and individual fuel injectors.
- 9 \_\_\_\_\_ is a method used to reduce NOx emissions by injecting urea into the

exhaust stream.

- 11 \_\_\_\_\_ is a type of catalytic converter used in all light-duty diesel engines, since 2007.
- 12 \_\_\_\_\_ are used in all light-duty diesel vehicles, since 2007, to meet the exhaust emissions standards for particulate matter.
- 14 Urea is called \_\_\_\_\_ in North America.
- 16 Between the fuel tank and the lift pump is a \_\_\_\_\_.

### DOWN

- 2 In an \_\_\_\_\_ diesel engine, fuel is injected into a small

prechamber, which is connected to the cylinder by a narrow opening.

- 3 A \_\_\_\_\_ is an electrical 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.
- 6 \_\_\_\_\_ is when incoming air is compressed until its temperature reaches about 1,000°F (540°C).
- 8 The diesel fuel is usually drawn from the fuel tank by a separate pump, called a \_\_\_\_\_ and delivers the fuel to the injection pump.
- 10 The process of purging soot from the DPF is described as \_\_\_\_\_.
- 13 Another name for particulate matter

is \_\_\_\_\_.

- 15 Instead of using large amounts of exhaust gas recirculation, the SCR system uses a \_\_\_\_\_.