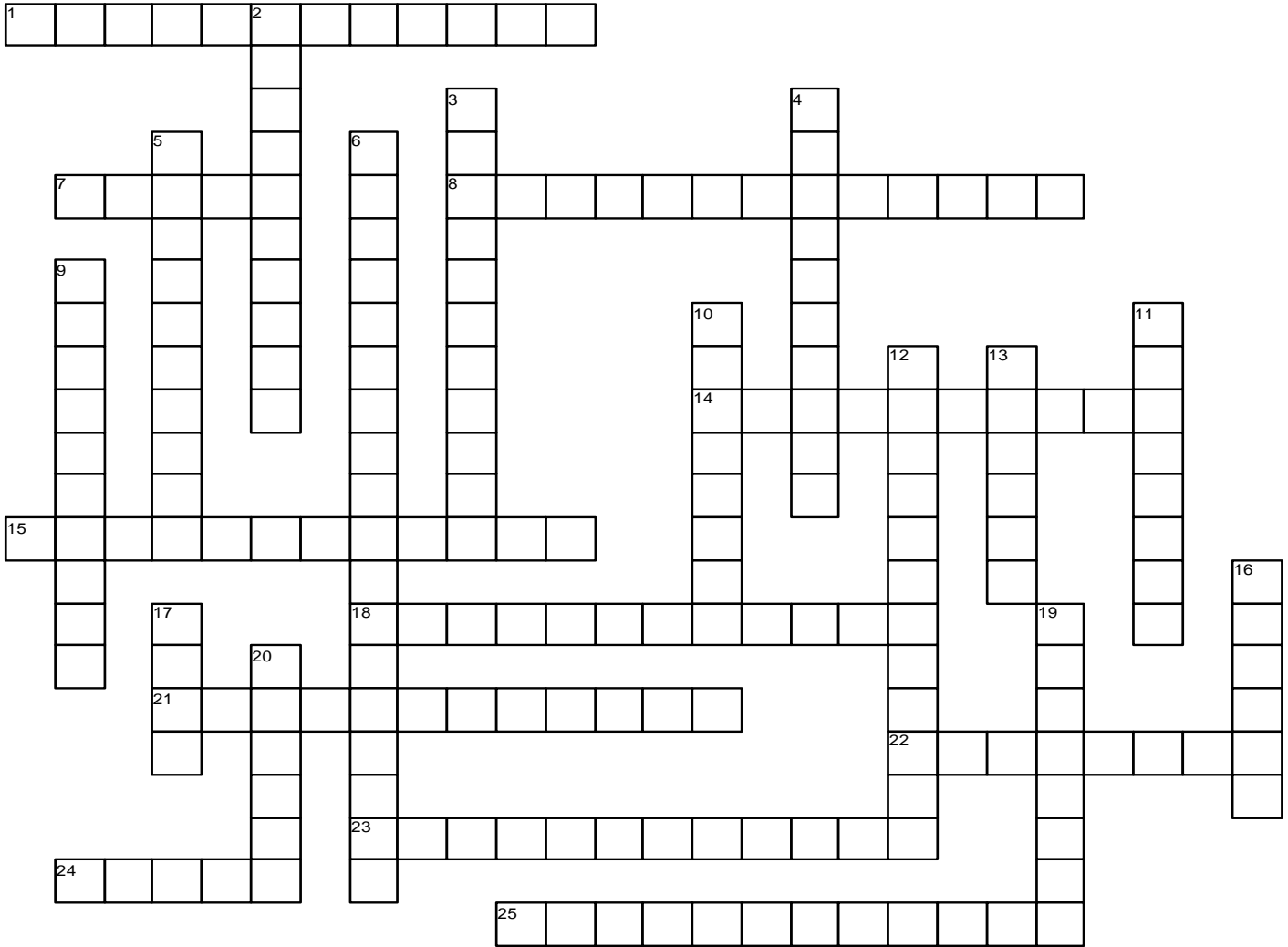


Gasoline Engine Operation, Parts And Specifications

Chapter 3



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ACROSS

- 1 Some engines use a turbocharger or _____ to force the air-fuel mixture into the cylinder for even greater power.
- 7 All automotive and truck engines are constructed using a solid frame, called a _____.
- 8 The crankshaft rotates 180 degrees from _____ to bottom dead center and the camshaft rotates 90 degrees.
- 14 Mechanical force is converted into useful _____ power.
- 15 The flywheel end of the engine is the end to which the power is applied to drive the wheels and is called the _____.
- 18 A _____ is a one-way piston movement either from top to bottom or bottom to top of the cylinder.
- 21 A successful alternative engine design is the _____.
- 22 If engine combustion occurs within the power chamber, the engine is called an _____ combustion engine.
- 23 The _____ opens, and the piston forces the residual burned gases out of it and into the exhaust manifold and exhaust system.
- 24 A _____ is a complete series of events that continually repeats.
- 25 The _____ end of the engine is generally referred to as the front of the engine, where the accessory belts are used.

DOWN

- 2 The piston is attached to the _____ with a connecting rod.

- 3 The _____ is open and the piston inside the cylinder travels downward, drawing a mixture of air and fuel into the cylinder.
- 4 The pressure developed within the combustion chamber is applied to the head of a piston to produce a usable _____ force.
- 5 Engines convert the chemical energy of the gasoline into heat within a power chamber that is called a _____ chamber.
- 6 If atmospheric pressure is used to force the air-fuel mixture into the cylinders, the engine is called _____.
- 9 The first _____-_____ cycle engine was developed by German engineer, Nickolaus Otto, in 1876.
- 10 The valves are opened by a _____.
- 11 The piston moves up and down in the _____.
- 12 Another name for the rotary engine is the _____.
- 13 When one overhead camshaft is used, the design is called a _____ overhead camshaft design.
- 16 When two overhead camshafts are used, the design is called a _____ overhead camshaft design.
- 17 The diameter of a cylinder is called the _____.
- 19 An _____ combustion engine burns fuel outside of the engine itself, such as a steam engine.
- 20 The _____ of an engine is the distance the piston travels from top dead center to bottom dead center.