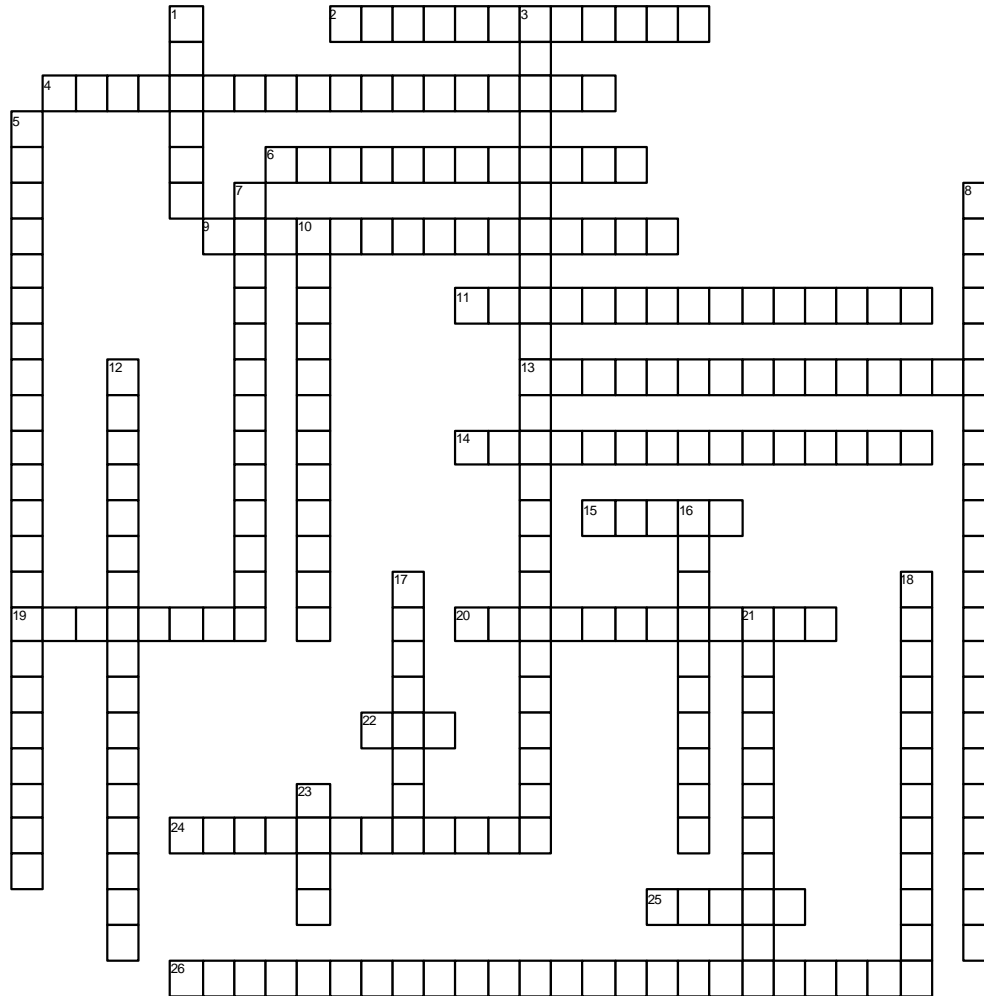


# Gasoline Engine Operation, Parts And Specifications

## Chapter 18



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### ACROSS

- 2 A successful alternative engine design is the \_\_\_\_\_.
- 4 If atmospheric pressure is used to force the air-fuel mixture into the cylinders, the engine is called \_\_\_\_\_.
- 6 Some engines use a supercharger or \_\_\_\_\_ to force the air-fuel mixture into the cylinder for even greater power.
- 9 The \_\_\_\_\_ of the engine is generally referred to as the front of the engine, where the accessory belts are used.
- 11 Mechanical force is converted into useful \_\_\_\_\_.
- 13 The pressure developed within the combustion chamber is applied to the head of a piston to produce a usable \_\_\_\_\_.
- 14 The first \_\_\_\_\_ engine was developed by German engineer, Nickolaus Otto, in 1876.
- 15 All automotive and truck engines are constructed using a solid frame, called a \_\_\_\_\_.
- 19 The piston moves up and down in the \_\_\_\_\_.
- 20 Another name for the rotary engine is the \_\_\_\_\_.
- 22 Abbreviation for overhead valve.
- 24 A \_\_\_\_\_ is a one-way piston movement either from top to bottom or bottom to top of the cylinder.
- 25 A \_\_\_\_\_ is a complete series of events that continually repeats.
- 26 If engine combustion occurs within the power chamber, the engine is called an \_\_\_\_\_.

### DOWN

- 1 The \_\_\_\_\_ of an engine is the distance the piston travels from top dead center to bottom dead center.
- 3 An \_\_\_\_\_ burns fuel outside of the engine itself, such as a steam engine.
- 5 When one overhead camshaft is used, the design is called a \_\_\_\_\_ design.
- 7 The crankshaft rotates 180 degrees from \_\_\_\_\_ to bottom dead center and the camshaft rotates 90 degrees.
- 8 When two overhead camshafts are used, the design is called a \_\_\_\_\_ design.
- 10 The flywheel end of the engine is the end to which the power is applied to drive the wheels and is called the \_\_\_\_\_.
- 12 Engines convert the chemical energy of the gasoline into heat within a power chamber that is called a \_\_\_\_\_.
- 16 The piston is attached to the \_\_\_\_\_ with a connecting rod.
- 17 The valves are opened by a \_\_\_\_\_.
- 18 The \_\_\_\_\_ opens, and the piston forces the residual burned gases out of it and into the exhaust manifold and exhaust system.
- 21 The \_\_\_\_\_ is open and the piston inside the cylinder travels downward, drawing a mixture of air and fuel into the cylinder.
- 23 The diameter of a cylinder is called the \_\_\_\_\_.