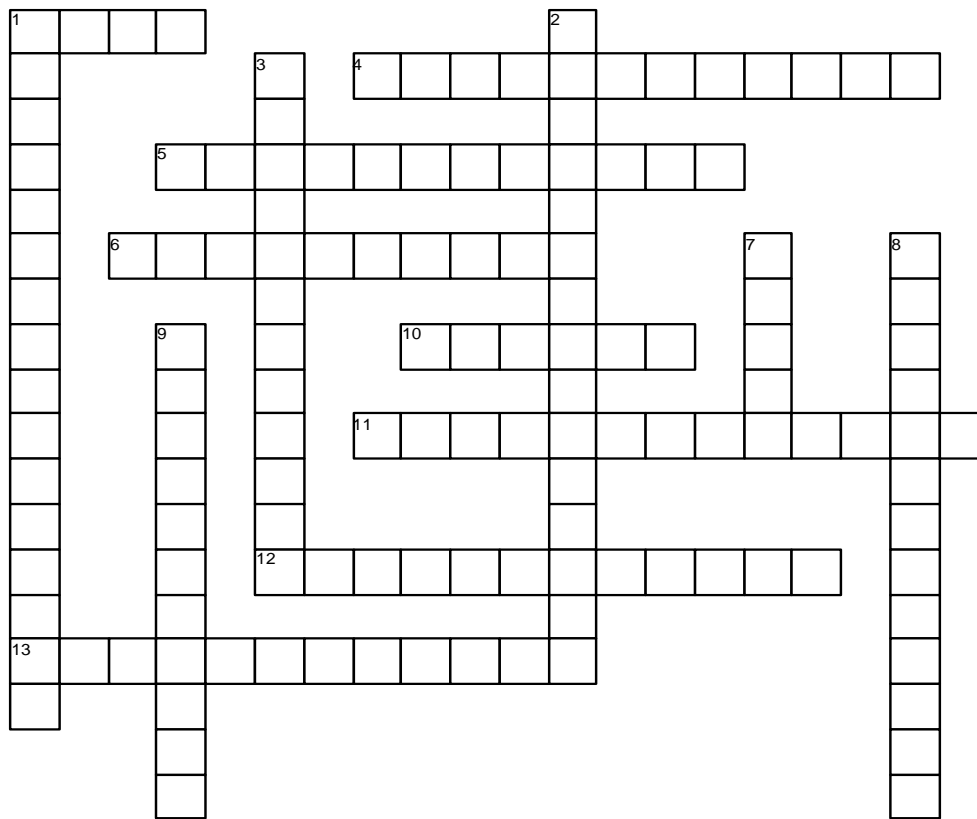


# Gasoline Engine Systems

## Chapter 5



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### ACROSS

- 1 The diameter of a cylinder is called the \_\_\_\_.
- 4 A \_\_\_\_\_ is a one-way piston movement, either from top to bottom or bottom to top of the cylinder.
- 5 An oil pump, which is driven by the engine, forces oil through the oil filter and then into passages in the crankshaft and block, called \_\_\_\_\_, to lubricate the main and rod bearings.
- 6 The distance the piston travels from top dead center to bottom dead center is determined by the throw of the \_\_\_\_\_.
- 10 The \_\_\_\_\_ of an engine is the distance the piston travels from top dead center to bottom dead center.
- 11 When the piston reaches the upper most position in the cylinder.
- 12 \_\_\_\_\_ is the cubic inch (cu. in.) or cubic centimeters (cc) volume displaced or how much air is moved by all of the pistons.
- 13 The piston forces the residual burned gases out of the \_\_\_\_\_ and into the exhaust manifold and exhaust system.

### DOWN

- 1 When the piston is at the bottom of the stroke.
- 2 The first \_\_\_\_\_ engine was developed by a German engineer, Nickolaus Otto, in 1876.
- 3 All engines use a \_\_\_\_\_ to seal the top of the cylinders, which are in the engine block.
- 7 A \_\_\_\_\_ is a complete series of events that continually repeats.
- 8 Changing the \_\_\_\_\_ length does not change the stroke of an engine.
- 9 The \_\_\_\_\_ is open and the piston inside the cylinder travels downward, drawing a mixture of air and fuel into the cylinder.