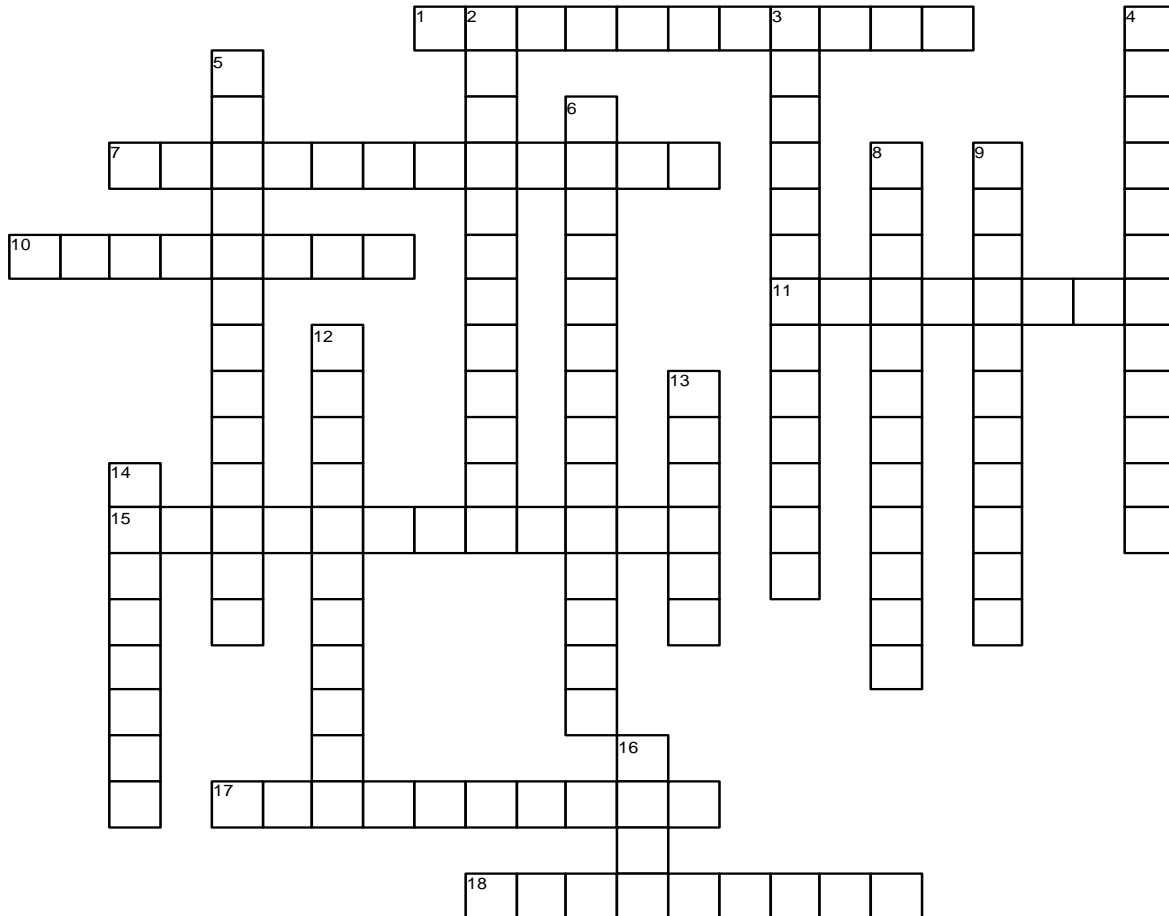


Camshafts And Valve Trains

Chapter 27



<http://jameshalderman.com>

ACROSS

- 1 The _____ type operates quietly but tends to stretch with use.
- 7 A _____ engine is one that causes no internal damage if the camshaft drive belt breaks when the engine is running.
- 10 The camshaft is supported in the block by _____ bearings and driven by the crankshaft with a gear or sprocket and chain drive.
- 11 The _____ of the cam is usually expressed in decimal inches and represents the distance that the valve lifter or follower is moved.
- 15 _____ is the number of degrees of crankshaft rotation during which both intake and exhaust valves are open.
- 17 Occasionally, engines are run at excessive speeds, this tends to throw the valve open, causing _____.
- 18 _____ camshafts, which use a lightweight tubular shaft with hardened steel lobes press-fitted over the shaft.

DOWN

- 2 An _____ engine will cause some of the valves that are open to hit the pistons, causing major engine damage if the drive belt breaks.
- 3 Some newer engines have the hydraulic adjustment in the rocker arm and are commonly called _____ adjusters.
- 4 If the specifications vary, the camshaft is called _____.
- 5 Engines with the cam located in the block are called pushrod or _____ engines.
- 6 Another name for a cam follower is a _____.
- 8 If two chains are used side by side, this type of chain is called a _____ chain.
- 9 The _____ type is noisier but operates with less friction and stretches less than the silent type of chain.
- 12 If the lift is the same, the cam is called _____.
- 13 _____ will not occur when the engine is operated in the speed range for which it is designed.
- 14 _____ camshafts are either belt or chain driven from the crankshaft and are located in the cylinder heads.
- 16 A gradual rise in the cam contour is called a _____.