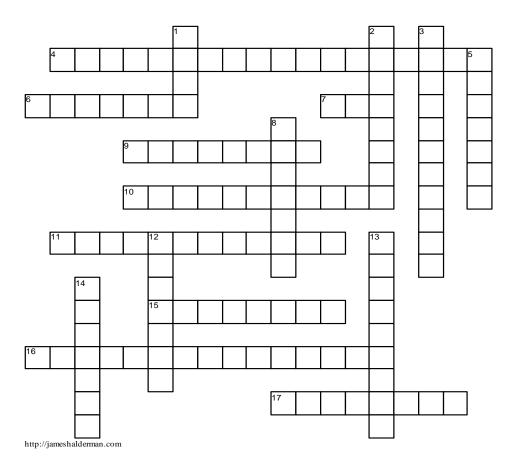
Lubrication System Operation And Diagnosis

Chapter 15



ACROSS

- 4 Another name for the oil pump relief valve is the _____ valve.
- 6 In most engines, oil is held in the oil pan and the oil pump draws the oil from the bottom, this is called a _____ oil system.
- 7 Oil pressure is measured in ____
- **9** _____ lubrication is where the oil film is thick enough to keep the surfaces from seizing, but can allow some contact to occur.
- **10** The normal engine _____ range is from 10 to 60 PSI or 10 PSI per 1000 engine RPM.
- **11** ______ lubrication is a wedging action and depends on the force applied to the rate of speed between the objects and the thickness of the oil.
- **15** All oil pumps are called ______ displacement pumps, and each rotation of the pump delivers the same volume of oil.
- **16** Excessive _____, either too low or too high, are harmful to any engine.
- 17 A ______ oil pump is usually driven by a shaft from the distributor, which is driven by the camshaft.

DOWN

- 1 Another name for the oil pan is a _____
- 2 The oil pump is made so that it is large enough to provide pressure at low engine speeds and small enough that it will not _____ at high speed.
- **3** A baffle or _____ is sometimes installed in engines to eliminate the oil churning problem.
- **5** _____ is a type of positive displacement oil pump that uses an inner and an outer rotor.
- 8 In a _____ system, the oil pan is shallow and the oil is pumped into a remote reserv oir.
- **12** The _____ is required to provide 3 to 6 gallons per minute of engine oil to lubricate the engine.
- **13** The _____ of the oil affects both the pump capacity and the oil leakage.
- **14** Oil from the oil pump first flows through the oil filter then goes through a drilled hole that intersects with a drilled main oil ______, or longitudinal header.

