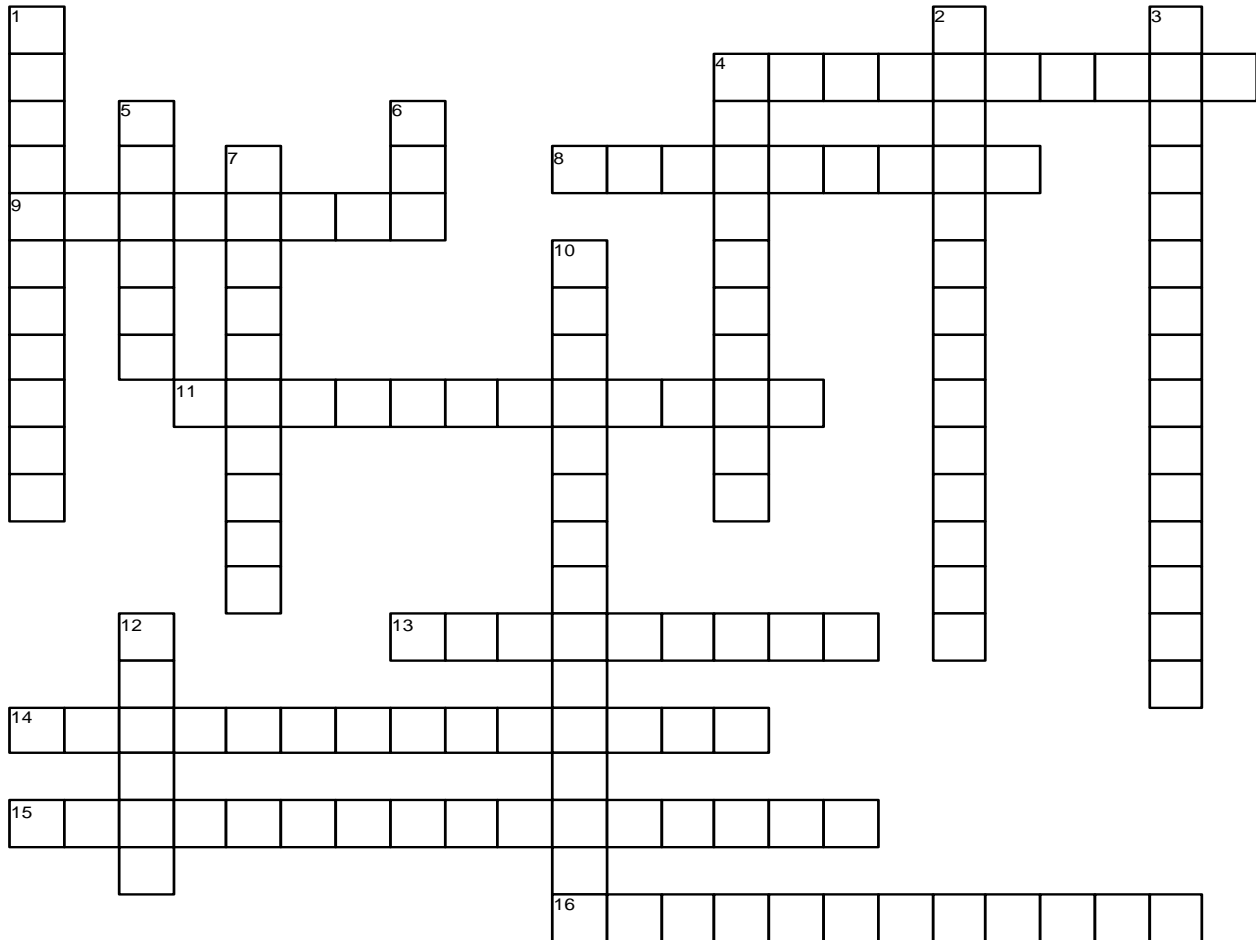


Cooling System Operation And Diagnosis

Chapter 9



<http://jameshalderman.com>

ACROSS

- 4 In the _____ system, the coolant flows around all the cylinders on each bank.
- 8 In most vehicle radiators, the coolant flows through oval-shaped _____.
- 9 The pump pulls coolant in at the center of the _____.
- 11 A second type of thermal fan has a _____ spring added to the silicone coupling fan drive.
- 13 Some vehicles use a _____, which is located at the highest level of the cooling system and holds about 1 quart of coolant.
- 14 Some engines use a combination of two coolant flow systems and call it a _____-_____ flow system.
- 15 The _____ fan drive is mounted between the drive pulley and the fan.
- 16 In the _____ system, coolant flows into the block under pressure and then crosses the head gasket to the head through main coolant passages beside each cylinder.

DOWN

- 1 Heat is transferred through the tube wall and soldered joint to _____.
- 2 Some engines use _____, which means that the coolant flows from the radiator to the cylinder heads before flowing to the engine block.
- 3 Vacuum pulls the coolant from the plastic container back into the cooling system, keeping the system full, this system is called a _____ system.
- 4 Another name for bleed holes is _____.
- 5 A _____ around the closed thermostat allows a small part of the coolant to circulate within the engine during warm-up.
- 6 Many vehicles manufactured in Japan or Europe use radiator pressure indicated in a unit called a _____.
- 7 In series flow systems, _____ in the gasket, block, and head perform the function of letting out the steam.
- 10 The water pump is a _____ that can move a large volume of coolant without increasing the pressure of the coolant.
- 12 Coolant leaving the pump impeller is fed through a _____.