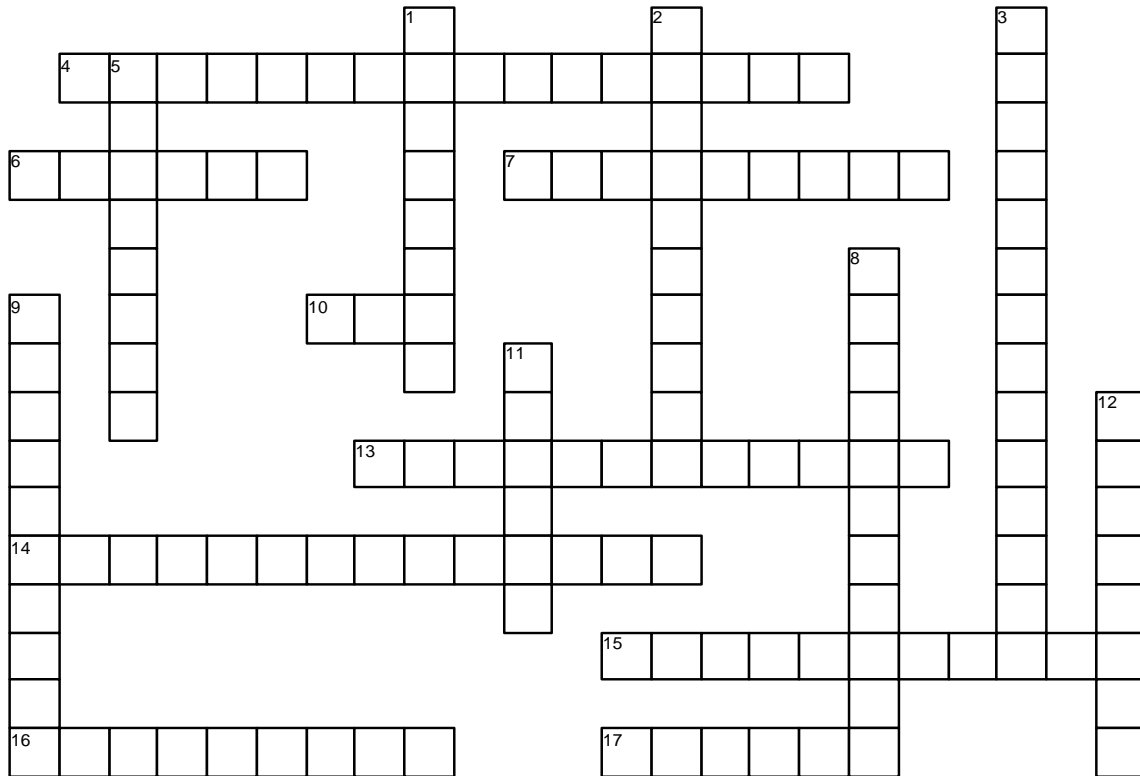


# Cooling System Operation And Diagnosis

## Chapter 18



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### ACROSS

- 4 The \_\_\_\_\_ fan drive is mounted between the drive pulley and the fan.
- 6 A \_\_\_\_\_ around the closed thermostat allows a small part of the coolant to circulate within the engine during warm-up.
- 7 In most vehicle radiators, the coolant flows through oval-shaped \_\_\_\_\_.
- 10 Many vehicles manufactured in Japan or Europe use radiator pressure indicated in a unit called a \_\_\_\_\_.
- 13 A second type of thermal fan has a \_\_\_\_\_ spring added to the silicone coupling fan drive.
- 14 Some engines use a combination of two coolant flow systems and call it a \_\_\_\_\_-\_\_\_\_\_ flow system.
- 15 The water pump is a \_\_\_\_\_ pump that can move a large volume of coolant without increasing the pressure of the coolant.
- 16 Some vehicles use a \_\_\_\_\_, which is located at the highest level of the cooling system and holds about 1 quart of coolant.
- 17 In the \_\_\_\_\_ flow system, the coolant flows around all the cylinders on each bank.

### DOWN

- 1 Vacuum pulls the coolant from the plastic container back into the cooling system, keeping the system full, this system is called a coolant \_\_\_\_\_ system.
- 2 In series flow systems, \_\_\_\_\_ in the gasket, block, and head perform the function of letting out the steam.
- 3 Some engines use \_\_\_\_\_, which means that the coolant flows from the radiator to the cylinder heads before flowing to the engine block.
- 5 The pump pulls coolant in at the center of the \_\_\_\_\_.
- 8 Heat is transferred through the tube wall and soldered joint to \_\_\_\_\_.
- 9 Another name for bleed holes is \_\_\_\_\_.
- 11 Coolant leaving the pump impeller is fed through a \_\_\_\_\_.
- 12 In the \_\_\_\_\_ flow system, coolant flows into the block under pressure and then crosses the head gasket to the head through main coolant passages beside each cylinder.