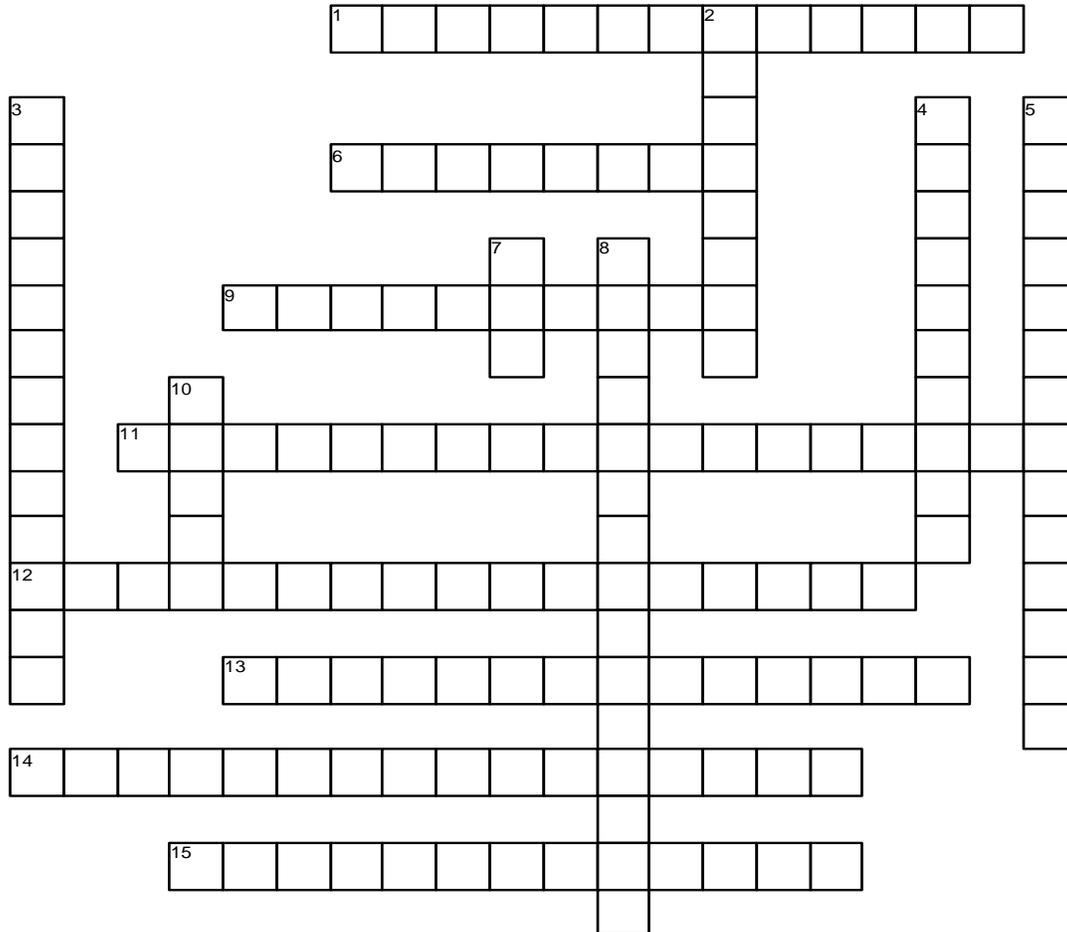


Hydraulic Power Steering Systems

Chapter 122



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ACROSS

- 1 The rotary control valve on a power _____ steering gear is located between the steering gear input shaft and the pinion gear.
- 6 Because the power steering pump and the steering gear are not part of the same assembly, the system requires _____ to connect the power steering pump and gear assembly.
- 9 A type of variable effort steering system used by GM is the _____ system. This system uses a variable bidirectional magnetic rotary actuator built into the steering rack.
- 11 A _____ is a two-piece assembly that operates by rotating an inner valve within an outer valve.

- 12 An _____ is part of the pump, and the pump itself operates submerged in power steering fluid.
- 13 The parts of a _____ valve include: Spring, valve piston, check ball, seat.
- 14 A _____ installs in the same bore as the hose fitting.
- 15 _____ steering hydraulically boosts the mechanical steering operation so the driver can turn the steering wheel with less effort for the same response.

DOWN

- 2 _____ is force applied to a specific area.
- 3 The _____ pump draws fluid from the reservoir, pressurize it, and delivers it to

the power steering system.

- 4 _____ states that pressure on a confined fluid is transmitted equally in all directions and acts with equal force on equal areas.
- 5 _____ steering (VES) systems increase at lower vehicle speeds to aid in parking maneuvers and decrease at higher speeds for greater road feel.
- 7 A _____ transmits an electronic signal to the PCM when the pressure in the system is high enough to increase the load on the engine.
- 8 A _____ is a separate assembly from the pump and provides fluid to it through a suction hose.
- 10 _____ is a push or pull acting on an object and is usually measured in pounds or Newtons.