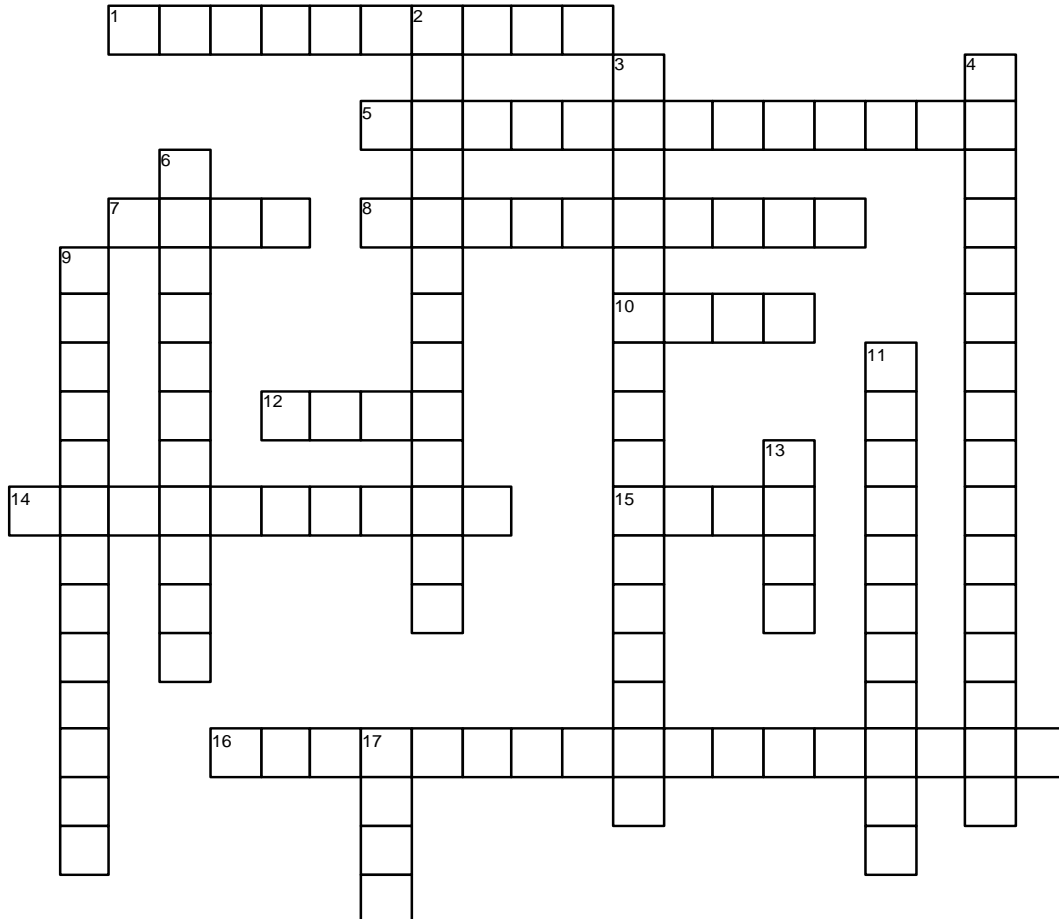


# Electric Power Steering Systems

## Chapter 118



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### ACROSS

- 1 Most electric power steering \_\_\_\_\_ trouble codes will be "C" codes for chassis-related faults or "U" codes for data communication faults.
- 5 An advantage to EPS systems is that they allow the vehicle manufactures to save \_\_\_\_\_ and complexity because there is no need for all of the hydraulic lines and engine-driven pump.
- 7 A \_-\_\_\_ (abbrev) is not directly mounted on the column itself. This system has the assist motor connected to the pinion shaft of the rack-and-pinion steering gear.
- 8 If the power steering system is exposed to excessive amounts of static steering conditions, the PSCM will go into a \_\_\_\_\_ mode to avoid thermal damage due to overheating of the power components.
- 10 Another name for a rack mounted system is \_-\_\_\_ system (abbrev).
- 12 Another name for electric power steering systems is \_\_\_\_\_ (abbrev).
- 14 The \_\_\_\_\_ position sensor outputs an analog signal, referenced to 5 volts, that increases or decreases with brake pedal depression.
- 15 A design that has the assist motor surrounding the rack is called a \_-\_\_\_ system (abbreviated).
- 16 The EPS is controlled by the EPS \_\_\_\_\_

unit (ECU), which calculates the amount of needed assist based on the input from the steering torque sensor.

### DOWN

- 2 The PSCM uses the \_\_\_\_\_ torque sensor as a main input for determining steering direction and the amount of assist needed.
- 3 The \_\_\_\_\_ power steering module controls the power steering motor, which has the function of providing hydraulic power to the brake booster and steering gear.
- 4 The PSCM uses the \_\_\_\_\_ sensor to determine the steering system on-center position.
- 6 Several vehicle manufacturers offer a \_\_\_\_\_ feature that uses the electric power steering to steer the vehicle.
- 9 Many of today's vehicles use \_\_\_\_\_ steering systems.
- 11 The \_\_\_\_\_ system has the assist motor attached to the rack.
- 13 The \_\_\_\_\_ (abbrev) and power steering motor are serviced as an assembly and are serviced separately from the steering column assembly.
- 17 \_-\_\_\_ (abbrev) has sensors and the assist motor located inside the vehicle so they are not exposed to heat and outside elements as is the rack-mounted system.