

Name _____

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

1) What are the types of electric power steering systems?

2) How does an electro-hydraulic power steering work?

3) What sensors are needed for EPS systems?

4) What type of motor is used in electric power steering systems?

5) What are the advantages of using an electric power steering system?

Answer Key

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1) There are two basic types of EPS systems:

- Rack mounted
- Column mounted

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2) This system uses an electric motor to drive a hydraulic pump. The electrohydraulic power steering (EHPS) module controls the power steering motor, which has the function of providing hydraulic power to the brake booster and the steering gear.

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3) The EPS input sensors include:

- Steering shaft torque sensor
- Steering wheel position sensor

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4) Most electric power steering units use a DC electric motor. Some operate from 42 volts while others operate from 12 volts.

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5) The advantages of electric power steering include:

- Improved fuel economy
- Increase in usable power
- Allows the vehicle manufacturer to save vehicle weight and complexity because there is no need for all of the hydraulic lines and engine-driven pump.
- Improved cold weather starting because of reduced engine load without the drag of a power steering pump
- Simple two-wire connection in many cases, making vehicle assembly and vehicle service easier

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