

Name _____

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

1) Parking-assist systems use what type of sensor?

2) What is the purpose and function of advanced driver assist systems?

3) What type of sensors are used in adaptive cruise control systems?

4) What is the difference between a lane departure warning and a lane keep assist?

5) What type of sensors are used in automatic emergency braking and pre-collision control systems?

Answer Key

Testname: AEE6_SHORT29

- 1) Ultrasonic object sensors are used to measure the distances to nearby objects and are built into the fender, and front and rear bumper assembly.
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- 2) The purpose of advanced driver assist systems (ADAS) is to provide the driver with systems that help the driver.
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- 3) Some systems use a short-range radar (SRR) and/or infrared (IR) or optical cameras to detect when the distance between the moving vehicle and another vehicle in front is reduced.
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- 4) The purpose of lane keep assist (LKA), also called lane keep assist system (LKAS), is not only to warn the driver if the vehicle is moving out of the lane of traffic, but when no response, to also automatically use the electric power steering system to steer the vehicle back into the lane.
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- 5) Sensors such as radar, sonar, and/or cameras are used depending on the system to detect the distance to another object. The controller, usually an antilock braking system (ABS) controller, then issues a warning if a collision is possible.
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