

Name _____

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

1) What is inertia?

2) What happens in the regenerative braking system when the high-voltage batteries are fully charged?

3) What is the difference between series and parallel regenerative braking systems?

4) Describe what occurs when the driver first releases the accelerator pedal and then starts to brake on a hybrid electric vehicle equipped with regenerative braking.

Answer Key

Testname: AAEE_SHORT27

- 1) Inertia is the kinetic energy of a moving object that resists being put into motion and has a tendency to remain in motion unless acted on by an outside source.
[Page Ref: 380](#)
- 2) If the batteries are charged to the specified maximum and braking occurs on a vehicle equipped with regenerative brakes, the braking forces from the base brakes are used to slow and/or stop the vehicle.
[Page Ref: 388](#)
- 3) In a series regenerative braking system, the amount of regeneration is proportional to the brake pedal position. In a parallel regenerative braking system, the base brakes are used along with regenerative braking and is proportional to vehicle speed rather than brake pedal position.
[Page Ref: 382](#)
- 4) When the driver releases the accelerator pedal, regenerative braking is being used to slow the vehicle slightly. When the brake pedal is depressed, the brake forces increase in proportion to the distance and pressure applied to the brake pedal by the driver.
[Page Ref: 386](#)