

Automotive Technology 7th Edition
Chapter 91: Regenerative Brakes
Short Answer Quiz

Name:

Date:

1. How does the kinetic energy of a vehicle change with its speed, and what implication does this have for regenerative braking systems?
2. Explain the concept of inertia and its relevance to regenerative braking in electric and hybrid electric vehicles.
3. What are the limitations of regenerative brakes and how do they impact the design of these systems?
4. Describe the process of energy transfer back to the motor during regenerative braking.
5. How does the regenerative braking system interact with the antilock braking system (ABS) in hybrid vehicles?

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6. Discuss the concept of 'one-pedal driving' and provide examples of vehicles that offer this feature.

7. What precautions should be taken when servicing the brakes on a Ford Escape hybrid vehicle?

8. Explain the difference between mass and weight in the context of vehicle dynamics.

9. Are friction brakes used during regenerative braking, and if so, how is the balance between regenerative and friction braking managed?

10. What is the role of the electronic brake controller in hybrid vehicles equipped with regenerative braking systems?