

Automotive Technology 7<sup>th</sup> Edition  
Chapter 126: Four-Wheel Drive and All-Wheel Drive  
Short Answer Quiz

Name: \_\_\_\_\_ Date: \_\_\_\_\_

1. What is the primary function of a mode shift in a vehicle's drive system?

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2. Describe the mechanism and purpose of a viscous coupling in a full-time four-wheel-drive system.

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3. Explain the role of the oil pump within most transfer cases.

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4. Discuss the potential causes of a transfer case being extremely noisy in all selections when the vehicle is moving.

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5. Describe the difference between a range shift and a mode shift in a transfer case.

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6. What is the significance of ensuring the correct differential fluid viscosity in vehicle performance?

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7. Explain the advantage of mounting the engine longitudinally in the frame of a vehicle.

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8. Describe the principle involved in brake-controlled traction control as used on the Mercedes M4 SUV.

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9. Explain the difference between four-wheel drive and all-wheel drive.

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10. Why do part-time four-wheel-drive vehicles use locking front hubs, and what is their function?

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