

Automotive Technology 7th Edition
Chapter 126
Multiple Choice Quiz A

Name: _____ Date: _____

1. What is the primary function of a mode shift in a vehicle's four-wheel drive system?
 - A. To select between high and low gear ratios
 - B. To select between two-wheel drive and four-wheel drive
 - C. To engage the differential lock
 - D. To adjust the suspension stiffness

2. Which type of four-wheel drive system uses a center differential with a viscous coupling?
 - A. Part-time four-wheel drive
 - B. Full-time four-wheel drive
 - C. Full-time four-wheel drive with automatic locking front hubs
 - D. All-wheel-drive

3. When discussing transfer case lubrication, which of these is true?
 - A. Most transfer cases have a built-in oil pump
 - B. Most transfer cases use a heavy grease as a lubricant
 - C. Most transfer cases are self-lubricating
 - D. Most transfer cases use water as a coolant and lubricant

4. What might cause a transfer case to be extremely noisy in all selections when the vehicle is moving?
 - A. A stretched drive chain hitting the inside of the case
 - B. Defective transfer case bearings
 - C. Low fluid levels
 - D. Both A and B are possible causes

5. What is the correct lubricant for a transfer case according to Technician A and Technician B?
 - A. Technician A: GL-4 gear lube such as SAE 80W-90
 - B. Technician B: Automatic transmission fluid (ATF)
 - C. Both A and B are correct
 - D. Neither A nor B is correct

6. What is the difference between a 4x4 and a 4x2 vehicle?
 - A. 4x4 means the vehicle has four wheels, while 4x2 means it has two wheels
 - B. 4x4 means engine torque is applied to all four wheels, while 4x2 means torque is applied to only two wheels
 - C. 4x4 vehicles have four differentials, while 4x2 vehicles have two
 - D. There is no difference; they are just different terms for the same thing

7. What is the purpose of locking front hubs in part-time four-wheel-drive vehicles?
 - A. To reduce wear on the front drive components when four-wheel drive is not needed
 - B. To lock the front wheels to the axle shafts
 - C. To provide additional traction in off-road conditions
 - D. To engage the front differential

8. When towing a four-wheel-drive vehicle, what is the recommended method to prevent damage to the drive train?

- A. Tow with the front wheels lifted off the ground
- B. Tow with the rear wheels lifted off the ground
- C. Transport on a flatbed truck
- D. Place non-lifted wheels on a dolly

9. What is the consequence of using the incorrect differential fluid in a vehicle?

- A. Improved fuel efficiency
- B. Enhanced vehicle performance
- C. Poor vehicle performance
- D. No consequence; all differential fluids are the same

10. What is the role of the planetary gear set used in many transfer cases?

- A. To provide additional torque to the wheels
- B. To allow for gear ratio changes in the transfer case
- C. To distribute power evenly between the front and rear axles
- D. To reduce the rotational speed of the drive shaft

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Answer Key

1. B

2. D

3. A

4. D

5. C

6. B

7. A

8. C

9. C

10. B