

Automotive Technology 7th Edition
Chapter 107: Electronic Stability Control Systems
Short Answer Quiz

Name: _____ Date: _____

1. Explain the role of the Electronic Stability Control (ESC) telltale light and describe the conditions under which it remains active.

2. Describe the sine with dwell (SWD) test and its significance in the context of ESC system functionality.

3. How does the traction control system (TCS) prevent drive wheel slip during acceleration, and what is the misconception about TCS in relation to four-wheel or all-wheel drive systems?

4. Can a vehicle with a modified suspension still pass the sine with dwell (SWD) test, and what factors must be considered to ensure it does?

5. What is the function of the steering wheel position sensor in an ESC system, and how does it differ from a hand-wheel position sensor, if at all?

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6. Discuss the Federal Motor Vehicle Safety Standard (FMVSS) No. 126 requirements for ESC systems in vehicles.

7. How does the traction control system utilize the antilock brake system (ABS) to maintain vehicle control, and what are the typical steps involved in diagnosing and repairing an ESC system fault?

8. What are the system requirements that define an ESC, and how do these requirements contribute to vehicle directional stability?

9. Explain the process and purpose of the traction deactivation switch found in many vehicles with traction control.

10. Describe the diagnostic approach for an ESC or Traction Control (TC) system concern, including the tools and information typically required.
