

Automotive Technology 7<sup>th</sup> Edition  
Chapter 22: Turbocharging and Supercharging  
Short Answer Quiz

Name:

Date:

1. Describe the concept of volumetric efficiency and its significance in engine performance.
2. Differentiate between naturally (or normally) aspirated engines and forced induction systems.
3. Explain the principle and advantages of forced induction in engines.
4. Discuss the main differences between superchargers and turbochargers.
5. What is turbo lag, and how does it affect engine performance?

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6. Outline the role and benefits of an intercooler in turbocharged systems.

7. Explain the concept of boost control and its importance in turbocharged engines.

8. Discuss the primary causes and implications of turbocharger failures.

9. Describe the function and operation of a wastegate in a turbocharged system.

10. What is the role of a bypass valve in supercharged systems, and how does it differ from a BOV (Blow-Off Valve)?