

Automotive Technology 7th Edition
Chapter 108: Tires and Wheels
Short Answer Quiz

Name:

Date:

1. Explain the significance of the minimum void area for tires designated as M & S and how it affects their performance in mud and snow.
2. Describe the characteristics of the rubber compound used in all-season tires and how it contributes to their performance.
3. Discuss the impact of underinflated tires on fuel economy and provide an example calculation for the reduction in miles per gallon.
4. Explain the service description method of sidewall information for tires built after 1990 and how it relates to ISO 4000 standards.
5. Describe the process of tire molding from a green tire to a cured tire and the chemical changes that occur during this process.

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6. Discuss the importance of the DOT tire code on the sidewall and what information it provides about the tire.

7. Compare the construction and strength differences between steel wheels and forged or cast aluminum wheels.

8. Explain the phenomenon of static electricity buildup in vehicles and how newer tire designs with silica address this issue.

9. Define the term "radial tire pull" and identify the common cause of this issue in vehicles.

10. Describe the precautions that should be taken by drivers of vehicles equipped with run-flat tires.