

AUTOMOTIVE SERVICE TECHNICIAN PERIOD 1 PRACTICE EXAM (SAMPLE)

STUDY GUIDE



SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

VISIT US ONLINE FOR
THE FULL VERSION STUDY GUIDE

<https://automotiveservicetechperiod1.examzify.com>



Copyright © 2026 by Examzify - A Kaluba Technologies Inc. product.

ALL RIGHTS RESERVED.

No part of this book may be reproduced or transferred in any form or by any means, graphic, electronic, or mechanical, including photocopying, recording, web distribution, taping, or by any information storage retrieval system, without the written permission of the author.

Notice: Examzify makes every reasonable effort to obtain accurate, complete, and timely information about this product from reliable sources.

SAMPLE

Table of Contents

Copyright	1
Table of Contents	2
Introduction	3
How to Use This Guide	4
Questions	5
Answers	8
Explanations	10
Next Steps	15

SAMPLE

Introduction

Preparing for a certification exam can feel overwhelming, but with the right tools, it becomes an opportunity to build confidence, sharpen your skills, and move one step closer to your goals. At Examzify, we believe that effective exam preparation isn't just about memorization, it's about understanding the material, identifying knowledge gaps, and building the test-taking strategies that lead to success.

This guide was designed to help you do exactly that.

Whether you're preparing for a licensing exam, professional certification, or entry-level qualification, this book offers structured practice to reinforce key concepts. You'll find a wide range of multiple-choice questions, each followed by clear explanations to help you understand not just the right answer, but why it's correct.

The content in this guide is based on real-world exam objectives and aligned with the types of questions and topics commonly found on official tests. It's ideal for learners who want to:

- Practice answering questions under realistic conditions,
- Improve accuracy and speed,
- Review explanations to strengthen weak areas, and
- Approach the exam with greater confidence.

We recommend using this book not as a stand-alone study tool, but alongside other resources like flashcards, textbooks, or hands-on training. For best results, we recommend working through each question, reflecting on the explanation provided, and revisiting the topics that challenge you most.

Remember: successful test preparation isn't about getting every question right the first time, it's about learning from your mistakes and improving over time. Stay focused, trust the process, and know that every page you turn brings you closer to success.

Let's begin.

How to Use This Guide

This guide is designed to help you study more effectively and approach your exam with confidence. Whether you're reviewing for the first time or doing a final refresh, here's how to get the most out of your Examzify study guide:

1. Start with a Diagnostic Review

Skim through the questions to get a sense of what you know and what you need to focus on. Your goal is to identify knowledge gaps early.

2. Study in Short, Focused Sessions

Break your study time into manageable blocks (e.g. 30 – 45 minutes). Review a handful of questions, reflect on the explanations.

3. Learn from the Explanations

After answering a question, always read the explanation, even if you got it right. It reinforces key points, corrects misunderstandings, and teaches subtle distinctions between similar answers.

4. Track Your Progress

Use bookmarks or notes (if reading digitally) to mark difficult questions. Revisit these regularly and track improvements over time.

5. Simulate the Real Exam

Once you're comfortable, try taking a full set of questions without pausing. Set a timer and simulate test-day conditions to build confidence and time management skills.

6. Repeat and Review

Don't just study once, repetition builds retention. Re-attempt questions after a few days and revisit explanations to reinforce learning. Pair this guide with other Examzify tools like flashcards, and digital practice tests to strengthen your preparation across formats.

There's no single right way to study, but consistent, thoughtful effort always wins. Use this guide flexibly, adapt the tips above to fit your pace and learning style. You've got this!

Questions

SAMPLE

- 1. Which device is used to determine the presence of dangerous fumes or gases before entering a confined workspace?**
 - A. Smoke detector
 - B. Gas detector
 - C. Thermal imaging camera
 - D. CO alarm

- 2. Which option would move camber more positive on the rear when using a shim?**
 - A. Move top of strut rearward
 - B. Lengthen front strut rod
 - C. Shim with thickest portion at the top
 - D. Lower ride height

- 3. Oxygen hoses used with oxyacetylene equipment are which color?**
 - A. Green
 - B. Blue
 - C. Red
 - D. Yellow

- 4. The two pieces of collapsible steering shafts are held together by?**
 - A. bolts
 - B. welded sleeve
 - C. clamps
 - D. injected plastic

- 5. Which statement best describes resistive loads in automotive circuits?**
 - A. They only include lighting
 - B. They include devices such as radios and lighting
 - C. They require no current
 - D. They are only active during ignition on

- 6. For a tire labeled P215/65R15, which statement about the aspect ratio is true?**
- A. It indicates the tire's load capacity
 - B. It indicates the tire's speed rating
 - C. It indicates the tire's section width in millimeters
 - D. The height of the tire is 65% of its width
- 7. If camber specifications are symmetric around zero, what does that imply about the tolerance?**
- A. They Are Equivalent
 - B. They Are Both The Same Expression Of Tolerance
 - C. Camber Can Be Negative
 - D. Camber Must Be Positive
- 8. Which component prevents vacuum loss when the engine stops?**
- A. Check valve
 - B. Vacuum valve
 - C. Atmospheric valve
 - D. Return spring
- 9. Which of the following is NOT one of the six functions of automotive oils?**
- A. Lubricate
 - B. Clean
 - C. Cool
 - D. Conduct electricity
- 10. Uneven side to side camber may cause**
- A. Tire Wear On One Side
 - B. Wheel Hop
 - C. The Car To Pull
 - D. Unstable Steering at Speed

Answers

SAMPLE

1. B
2. C
3. A
4. D
5. B
6. D
7. B
8. A
9. D
10. C

SAMPLE

Explanations

SAMPLE

1. Which device is used to determine the presence of dangerous fumes or gases before entering a confined workspace?

- A. Smoke detector
- B. Gas detector**
- C. Thermal imaging camera
- D. CO alarm

Gas detectors are used to determine the presence of dangerous fumes or gases before entering a confined workspace. They monitor oxygen levels and detect combustible or toxic gases, triggering alarms when conditions are unsafe so entry can be halted or proper precautions taken. In confined spaces, atmospheres can shift quickly, so a gas detector provides real-time alerts for a range of hazards, not just one specific gas. Smoke detectors are for smoke and fire byproducts, not gas concentrations. Thermal imaging cameras look for heat and hot spots, not gas levels. CO alarms specifically monitor carbon monoxide and may miss other dangerous gases or oxygen deficiencies.

2. Which option would move camber more positive on the rear when using a shim?

- A. Move top of strut rearward
- B. Lengthen front strut rod
- C. Shim with thickest portion at the top**
- D. Lower ride height

Camber is the tilt of the wheel relative to vertical, and it can be adjusted by changing the angle of the strut mounted to the wheel hub. A shim that is thicker at the top acts as a wedge between the top strut mount and the body, forcing the top of the strut to sit higher relative to the bottom. This tilts the wheel plane so the top leans outward, yielding more positive camber at the rear. Other options either shift the mounting in ways that don't directly create positive camber with a shim, or affect overall geometry in less targeted ways. So using a shim with the thickest portion at the top directly increases rear camber in the positive direction.

3. Oxygen hoses used with oxyacetylene equipment are which color?

- A. Green**
- B. Blue
- C. Red
- D. Yellow

Gas hose color coding helps you identify which gas is flowing so you don't mix them up. In oxygen-acetylene setups, the hoses are color coded: oxygen is green, acetylene is red, and fuel gases are yellow. This distinction matters because oxygen supports combustion, so using the wrong hose with the wrong gas can create a dangerous situation or fire hazard. The green color for oxygen is chosen to clearly separate it from the red acetylene hose and the yellow fuel-gas hoses, reducing the risk of cross-connection. Blue isn't the standard color for oxygen in typical oxyacetylene systems. So the oxygen hoses are green.

4. The two pieces of collapsible steering shafts are held together by?

- A. bolts
- B. welded sleeve
- C. clamps
- D. injected plastic**

These shafts are designed to telescope and absorb impact energy in a crash, so the connection between the two sections must hold during normal steering but still allow controlled collapse when needed. An injected plastic part serves as a molded coupling between the inner and outer shaft pieces. This plastic insert centers and binds the two sections, providing a smooth, low-friction interface for sliding and aligning them during normal operation, while also acting as a sacrificial, energy-absorbing element that can deform or shear in a crash to permit the telescoping action. Bolts would lock the pieces together and prevent any telescoping, a welded sleeve would make the column non-collapsible, and clamps, while possible, aren't as reliable for maintaining alignment and controlled energy absorption. The injected plastic approach combines proper alignment, smooth motion, and crash-energy performance in a compact, economical way.

5. Which statement best describes resistive loads in automotive circuits?

- A. They only include lighting
- B. They include devices such as radios and lighting**
- C. They require no current
- D. They are only active during ignition on

Resistive loads draw current in proportion to the applied voltage and convert energy primarily into heat or light without storing much energy in the circuit. In automotive circuits, lighting is the classic example because a filament resistor simply heats up as current passes, following Ohm's law. Radios, when powered, also behave as resistive loads in the sense that the power supply presents a fairly steady impedance, so the current drawn at a given voltage is fairly predictable. This contrasts with inductive loads like motors or coils, where energy is stored in a magnetic field and the current can lag the voltage. Since resistive loads do require current to operate, the statement that they require no current is incorrect, and they aren't necessarily active only when the ignition is on—lighting and radios can be powered in other key positions or states as well.

6. For a tire labeled P215/65R15, which statement about the aspect ratio is true?

- A. It indicates the tire's load capacity
- B. It indicates the tire's speed rating
- C. It indicates the tire's section width in millimeters
- D. The height of the tire is 65% of its width**

Aspect ratio describes the sidewall height as a percentage of the tire's width. In a P215/65R15, the 65 means the sidewall height is 65% of the 215 mm width. So the sidewall height is about $0.65 \times 215 \text{ mm} \approx 140 \text{ mm}$. The overall tire diameter would then be roughly two sidewalls plus the wheel diameter (15 inches $\approx 381 \text{ mm}$), giving around 660 mm (about 26 inches). This number reflects sidewall height, not load capacity or speed rating, and it's not the full width—that's the 215 mm.

7. If camber specifications are symmetric around zero, what does that imply about the tolerance?

- A. They Are Equivalent
- B. They Are Both The Same Expression Of Tolerance**
- C. Camber Can Be Negative
- D. Camber Must Be Positive

Symmetric tolerance around zero means the allowed camber deviation is the same magnitude in both directions from zero. In practice, the spec is written as plus/minus X degrees, so a camber of +X or -X is within tolerance. That means both positive and negative camber are governed by the same tolerance expression, describing the same allowable range on either side of zero. This is why the correct interpretation is that the two sides share the same form of tolerance. The idea isn't that camber must be positive or negative exclusively, but that the permissible range applies equally in both directions.

8. Which component prevents vacuum loss when the engine stops?

- A. Check valve**
- B. Vacuum valve
- C. Atmospheric valve
- D. Return spring

Maintaining vacuum in the brake system relies on a one-way valve in the vacuum line. This check valve opens to let the engine pull vacuum into the brake booster while running, then automatically closes to prevent backflow when flow would go toward the engine or out to atmosphere. That one-way action keeps the booster's vacuum from leaking away when the engine stops, helping preserve brake assist for a short period. The other options don't fit: a general vacuum valve isn't specifically a one-way check valve, an atmospheric valve would let air in and ruin the vacuum, and a return spring isn't responsible for preventing backflow on its own.

9. Which of the following is NOT one of the six functions of automotive oils?

- A. Lubricate
- B. Clean
- C. Cool
- D. Conduct electricity**

Engine oil's job is to keep the engine running smoothly by lubricating moving parts, helping to clean by suspending and carrying away contaminants, and aiding in cooling by absorbing heat from hot components. Conducting electricity is not a function of engine oil; it's an electrical insulator, so it does not serve to carry current. The first three functions—lubrication, cleaning, and cooling—are established roles of automotive oil, while electric conduction is not part of its purpose.

10. Uneven side to side camber may cause

- A. Tire Wear On One Side
- B. Wheel Hop
- C. The Car To Pull
- D. Unstable Steering at Speed

Unequal camber from side to side changes how each tire sits on the road, so they don't share the road grip evenly. Camber affects the tire contact patch, and when left and right camber aren't equal, one tire can have more or less effective contact than the other. That creates a net lateral force as the car moves straight, so the vehicle tends to pull toward the side with the weaker/less effective grip.

SAMPLE

Next Steps

Congratulations on reaching the final section of this guide. You've taken a meaningful step toward passing your certification exam and advancing your career.

As you continue preparing, remember that consistent practice, review, and self-reflection are key to success. Make time to revisit difficult topics, simulate exam conditions, and track your progress along the way.

If you need help, have suggestions, or want to share feedback, we'd love to hear from you. Reach out to our team at hello@examzify.com.

Or visit your dedicated course page for more study tools and resources:

<https://automotiveservicetechperiod1.examzify.com>

We wish you the very best on your exam journey. You've got this!

SAMPLE