



Diagnosis and Troubleshooting of Automotive Electrical, Electronic, and Computer, 5th Ed.

Principles and practices of diagnosis and troubleshooting of automotive electrical, electronic, and computer systems.

Overview

Comprehensive yet easy-to-read, this book includes both automotive electrical as well as engine performance topics all in one book. It is NATEF- and ASE-correlated and presents principles and practices of diagnosis and troubleshooting of automotive electrical, electronic, and computer systems in a clear, concise format and at a level of detail that far exceeds most similar texts.

Package includes a 832-page book.

ASE Content Approach

This comprehensive textbook covers the material necessary for Automobile Electrical/Electronic Systems (A6) and Engine Performance (A8) areas of certification as specified by ASE and NATEF ASE-type multiple-choice questions are included at the end of each chapter and there are two sample ASE-type tests in the appendix.

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This FOURTH edition of the book feature and includes about 60-more pages than the Third edition:

- **NEW—Updated coverage—** Includes information on Gel and AGM batteries both new to the industry as well as the latest coil-on-plug, waste spark, compression sensing and ion sensing ignition systems.
- **NEW—** Includes new chapters on OBDII as well as additional evaporative emissions and fuel injection plus scope testing of components.
- **NEW—** Chapters on service information and environmental concerns.
- **NEW—** Additional chapters on electronics fundamentals.
- **NEW—** Many new tech tips, diagnostic stories, and answers to frequently asked questions (FAQs).

Additions to the THIRD edition of the book:

- **NEW—A full chapter on “Audio System Operation and Diagnosis”**
- **NEW—Updated coverage:** Includes the use of clamp-on meters, tone generators for locating opens and shorts, capacitance-type battery testers, digital storage oscilloscopes, scan tools, OBD II and I/M-240.
- **NEW—More photo sequences.**
- **NEW—Free access to an ASE test preparation web site:** The text includes a coupon that entitles individual students to free access to the site for an extended period of time. The site features ASE-type questions for Automotive Electrical/Electronic Systems and Engine Performance. The questions are presented 10 at a time, then graded (marked). The correct answer is given as the student scrolls back through the questions.

Other features:

- **An emphasis on ASE and NATEF content:** Covers the material necessary for Automobile Electrical/Electronic Systems (A6) and Engine Performance (A8) areas of certification as specified by ASE and NATEF. Includes ASE-type multiple-choice questions at the end of each chapter, and contains two sample ASE-type tests in the appendix. Helps students prepare for ASE exam.
- **A focus on the whys as well as the hows:** And explores the effects that one component or circuit can have on another.
- **Diagnostic Stories and Tech Tips:** Includes examples of troubleshooting problems experienced by professionals in the field. Each new topic covers the parts involved, plus the purpose, function, and operation, as well as how to test and diagnose each system.
- **Hundreds of photos (in 28 photo sequences) and numerous line drawings:** Each supported by a detailed caption.
- **Practical worksheets:** Give students practice in applying the material presented to everyday-type activities and typical service and testing procedures. Includes typical results and a listing of what could be defective if the test results are not within the acceptable range. Help students and technicians build diagnostic and testing skills.
- **Chapter Objectives and Chapter Summaries:** Helps prepare for tests.
- **Comprehensive glossary.**
- Helps the reader build a high-tech vocabulary.

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