

**ENGINE SERVICE AND MAINTENANCE WORKSHEETS**

These thirty worksheet masters can be duplicated for students and used in teaching this important topic. Each worksheet contains: Part ID, Procedures, Skills Taught, Materials and Evaluation. Order as sets by engine service areas. HOBAR



**Battery Service & Maintenance**

- Storage Battery Principles
- Testing Battery Leakage
- Servicing the Storage Battery
- Battery Testing with Hydrometer
- Battery Capacity Testing
- Charging the Storage Battery

**Set of Six Battery Service Worksheets**  
Order Number: 817 .....\$5.65

**Testing the Ignition System**

- Using the Dwell Tachometer
- Adjusting Dwell or Cam Angle
- Using the Timing Light
- Using the Remote Starter Switch
- Using the Compression Tester
- Testing Primary Ignition Voltages
- Testing Secondary Ignition Wires
- Testing the Ignition Coil
- Testing Ignition Points Resistance
- Testing a Condenser
- Testing the Ballast Resistor
- Testing the Cranking Voltage
- Testing the Charging Voltage
- Testing Amperages with the Dual Current Indicator

**Set of Fourteen Ignition Systems Worksheets**  
Order Number: 832 .....\$13.25

**Engine Cooling System**

- Engine Cooling System
- Cooling System Pressure Cap and Thermostat
- Testing the Radiator Cap and Cooling System
- Using the Antifreeze Coolant Tester

**Set of Four Engine Cooling System Worksheets**  
Order Number: 839 .....\$3.50

**Alternator Testing and Service**

- Alternator Component Study—Delco Remy
- Alternator Disassembly—Delco Remy
- Testing Diodes
- Testing the Alternator Rotor
- Testing the Alternator Stator
- Alternator Component Study—Motorola

**Set of Six Alternator Service Worksheets**  
Order Number: 846 .....\$5.65

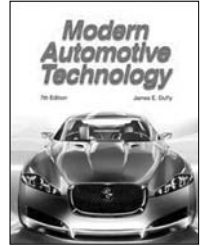
**Complete Set**

Contains one of each of the worksheet sets listed above in a tabbed three-ring notebook. HOBAR  
Order Number: HWSM-ESM.....\$35.50



**MODERN AUTOMOTIVE TECHNOLOGY**

Details the construction, operation, diagnosis, service, and repair of late-model automobiles and light trucks. This comprehensive textbook uses a building-block approach that starts with the fundamental principles of system operation and progresses gradually to complex diagnostic and service procedures. Short sentences, concise definitions, and thousands of color illustrations help students learn quickly and easily. This newly revised text provides thorough coverage of the latest developments in the automotive field, including hybrid drive systems, computer network communication, and tire pressure monitoring systems. Organized around the eight ASE automobile test areas, Modern Automotive Technology is a valuable resource for students preparing for a career in automotive technology, as well as experienced technicians who are preparing for the ASE certification tests. GOODHEART-WILLCOX



**Text:** 1613 pages, 2009, hardcover  
Order Number: 956-6 .....\$82.00 each, \$65.60 (10 or more)

**Workbook:** 532 pages, Includes additional problems and questions to reinforce and enrich material in the text.  
Order Number: 958-0 .....\$21.50 each, \$17.20 (10 or more)

**Instructor's Manual:** Provides numerous instructional resources that support each chapter of the textbook including teaching strategies, test masters, answer keys, introductory activities, reproducible masters, and additional resources.  
Order Number: 963-4 ..... \$86.00

**Instructor's Resource Binder:** 700 pages, Contains all the instructional material from the Teacher's Manual, plus color transparencies, all in a convenient three-ring binder.  
Order Number: 964-1 ..... \$200.00

**Instructor's Resource CD-ROM:** Provides instant access to useful instructional resources, ready to print, as you need them. Reproducible masters are presented in PowerPoint format for easy classroom use. Related Web links allow you to immediately connect to numerous online resources. Also included are lesson plans that you can quickly customize to make daily lesson planning easy.  
Order Number: 965-8..... \$240.00

**PowerPoint Presentation CD-ROM:** Individual License, 2 CDs, over 5000 slides. Visually presents the key concepts for each of the textbook's chapters. Includes literally thousands of illustrations, representing well over half the visual content of the textbook. The program includes the PowerPoint Viewer utility, which permits display without need for PowerPoint presentation graphics software.  
Order Number: 968-9..... \$260.00

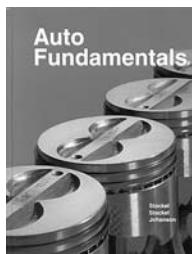
**RECIPES FOR CAR CARE  
The Consumer's Guide to Auto Health**

*Recipes for Car Care* shows you how to perform necessary car maintenance as easily as you would follow the recipes of a cookbook. The do-it-yourself "recipes" given with all the necessary ingredients for preventive maintenance are designed to enable you to do everything from locating the hood latch, to performing basic maintenance tasks such as oil changes, and dealing confidently with professional mechanics and car manufacturers. Building on this premise, the author explains what makes a car run and identifies what needs to be done to maintain it. DELMAR



274 pages, 2001, softcover  
Order Number: 2838-7 .....\$30.95 each, \$24.76 (10 or more)

## AUTO FUNDAMENTALS



This text leads students through the study of design, construction, and operation of all major automotive systems. Each system is presented by starting with basic theory; then parts are added until the system is complete. This “building block” approach is used to help students gain full understanding of components and systems. An entire chapter is devoted to exploring career

opportunities and obtaining additional training in automotive technology. GOODHEART-WILLCOX

**Text:** 607 pages, over 1200 illustrations, 2005, hardcover  
Order Number: 325-1 .....\$70.00 each, \$56.00 (10 or more)

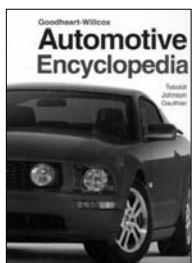
**Workbook:** 351 pages. Directly correlated to chapters in text. Provides activities and review material that supplement the principles covered in the textbook.

Order Number: 326-X.....\$20.00 each, \$16.00 (10 or more)

**Instructor's Manual:** 300 pages. Contains course organization and teaching tips. Provides chapter resources, including quiz and reproducible masters.

Order Number: 327-8.....\$60.00

## AUTOMOTIVE ENCYCLOPEDIA



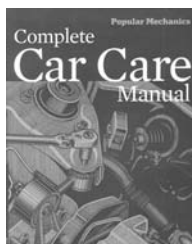
*Automotive Encyclopedia* is a complete, up-to-date automotive library in one easy-to-understand volume. Thorough coverage is given to fundamental operating principles, as well as troubleshooting, service, and repair procedures. Full color photographs and illustrations are used throughout the text. It provides the foundation on which a thorough knowledge of automotive technology is based. GOODHEART-WILLCOX

**Text:** 832 pages, over 1800 illustrations, 2006, hardcover  
Order Number: 422-3 .....\$75.00 each, \$60.00 (10 or more)

**Student Workbook:**  
Order Number: 423-1 .....\$22.00 each, \$17.60 (10 or more)

**Instructor's Manual:**  
Order Number: 424-X.....\$66.64

## COMPLETE CAR CARE MANUAL



This manual is crucial for anyone who wants to know the automobile's basic components, from the engine to the electronic systems, and to understand how they work, what can go wrong, and how to make repairs. Find out how to maintain and replace windshield washers, fix steering wander and faulty cruise control, and purge bad smells from the interior. Get smart

advice on how to pass emission inspection and find service data online. And because car owners want their ride to look as good as it works, there are even instructions for removing bumper stickers, tinting windows, and adding pinstripes. With more than 90 projects, The Complete Car Care Manual will guide owners step-by-step through what it takes to hush those squeaks, replace the u-joints, change their own oil and filter, and so much more. STERLING

346 pages, 2008, softcover  
Order Number: STE6723-1.....\$19.95 each, \$15.56 (10 or more)

## AUTO MECHANICS Special Needs Curriculum

Ten units that cover the use of service manuals, shop safety, preventive maintenance, tire and wheel alignment, tire balancing, struts, shocks, use of meters to test wiring and switches, charging systems, cranking systems, and ignition systems. Materials are competency-based, self-contained, clearly illustrated, and provide easy-to-follow procedures. The materials are written and designed to provide minimum skills for disadvantaged and handicapped students entering the mainstream. IML

**Student:**  
Order Number: 90-6020-S .....\$40.60

**Answer Key:**  
Order Number: 90-6020-K.....\$5.00



## CAR BUILDER

Sophisticated, yet easy to use, the award-winning Car Builder program appeals to everyone who is fascinated by cars. As “design engineers,” users build cars on screen, specifying chassis length, wheelbase, engine type, transmission, fuel tank size, suspension, steering, tires, and brakes. All functional choices are interrelated and will affect the performance of the final design. Next, users design the body of the car, adding windows and decorative or functional touches. The program then tests the car in a wind tunnel and around a test track, accumulating data about top speed, cornering ability, acceleration, and braking. A complete evaluation report is displayed and users can adjust, alter, save, and print designs for comparison against future creations. Car Builder teaches principles involved in building aerodynamic, efficient, and safe cars. It introduces users to CAD, enhances problem-solving skills, and fosters an elementary knowledge of physics and automotive design. OPTIMUM RESOURCES

**School Version 2 CDs & Lesson Plans:**  
Order Number: 52144 .....\$119.95



## TRUCK BUILDER

Sophisticated, yet easy to use, *Truck Builder*, the sequel to the award-winning *Car Builder* program, appeals to students in grades 3 through 9 and up. Teenagers and adults who are fascinated by trucks will enjoy this introduction to CAD. Users build light, medium, or heavy trucks on screen, specifying chassis length, wheelbase, engine type, transmission, fuel tank size, suspension, steering, tires, and brakes. All functional choices are interrelated and will affect the performance of the final design. Next, users design the body of the truck, adding specialty frames, color, and decorative custom touches. The program then tests the truck in a wind tunnel or on a moving belt and around an animated road test track, accumulating data about top speed, cornering ability, torque, acceleration, capacity, and braking. A complete evaluation report is displayed and users can adjust, alter, save, and print designs for comparison against future creations. This school version includes 12 complete lesson plans and activity sheets. OPTIMUM RESOURCES

**School Version 2 CDs & Lesson Plans:**  
Order Number: 52244 .....\$119.95

**AUTO MECHANICS SERIES—CD-ROM**



**AUTO MECHANICS SHOP SAFETY**

Lessons and quizzes include General Auto Shop Safety Introduction, First Aid, Fire Safety and Prevention, Arc Welding Safety, and Mechanics' Tool Use.

**AUTO BODY SHOP SAFETY**

Lessons and quizzes include Auto Body Shop Safety, First Aid, Fire Safety and Prevention, Wire Feed MIG Welding Safety, and Proper Use of Auto Body Tools.

**ENGINE BASICS**

Lessons and quizzes include Engine Basics, Internal Combustion Engines, Diesel Engines, Cooling Systems, and Exhaust Systems.

**ENGINE TUNE-UPS**

Lessons and quizzes include Engine Timing, Distributor Maintenance Operations, Carburetor Adjustments, Spark Plugs, and Wires and Emission Controls.

**COOLING AND LUBRICATION SYSTEMS**

Lessons and quizzes include Engine Lubrication Systems, Oil and Filter Basics, Doing a Lube Job, Cooling System Basics, and Cooling System Maintenance.

**FUEL SYSTEMS**

Lessons and quizzes include Fuel System Basics, The Fuel Tank, The Carburetor, The Mechanical Fuel Pump, and The Fuel Injection System.

**BRAKING SYSTEMS**

Lessons and quizzes include Brake System Basics, Drum Brake Systems, Disc Brake Systems, Master Cylinder Systems, and Brake Maintenance.

**DRIVE TRAINS**

Lessons and quizzes include Drive Train Basics, Automatic Transmissions, Manual Transmissions, Drive Shafts and Differentials, and Front Wheel Drive.

**STEERING AND FRONT SUSPENSIONS**

Lessons and quizzes include Steering Systems, Suspension Systems, Alignment, Independent Front Suspension, and Tires.

**ELECTRICAL SYSTEMS**

Lessons and quizzes include Electrical Systems, Starting Systems, Charging Systems, and Ignition Systems.

**ELECTRONICS: GM COMPUTER COMMAND CONTROL**

Lessons and quizzes include Automotive Electronics, General Motors Computer Command Control (C-3), and GM Computer Control Input/Output.

**VOCATIONAL MATH FOR AUTOMOTIVE TECHNICIANS**

Illustrates to students the necessity of knowing how to efficiently do math in the automotive technician vocation.

**MATH WITH MICROMETERS**

In this program students learn how to use the micrometer, a measuring tool. They are taught how to measure in inches and metrics, and the basic math skills needed to use the micrometer.

*Order the series and save!*

**Windows CD-ROM**

Order Number: SW23538.....\$910.95

**AUTO SHOP SAFETY**



Reinforcing concepts with helpful animation, this program provides crucial knowledge about accidents that can occur in automotive repair shops. The best ways to prevent them, and the smartest and safest steps to take when they happen, are explained. The video covers all major shop areas, including the stall, grease rack, front end rack, tool room, and classroom. Running engines, open fuel lines, welding tools, moving cars, cars on lifts or jacks, and other shop hazards are illustrated, with detailed information on avoiding fires, explosions, asphyxiation, chemical burns, electric shock, and impact injuries. Hybrid vehicle technology is also explored. A viewable/printable instructor's guide is included. 21 minutes, 2008. MERIDIAN

DVD Order Number: ME24746-D .....\$89.95

**SAFETY TESTS FOR AUTO SHOP**

Basic Auto Shop Safety—Part One, Basic Auto Shop Safety—Part Two, Introduction to Auto Shop Safety, Using Hand Tools Safely—Part One, Using Hand Tools Safely—Part Two, Portable Power Tool Safety, Power Equipment Safety, Safe Use of Floor Jacks, Safe Use of the Hoist, Safe Use of the Crane & Overhead Chain Hoist, Safe Battery Handling, Safe Use of Jumper Cables, Handling Hazardous Liquids Safely, Drill Press Safety, Pedestal Grinder Safety, Basic Electrical Safety, Fire Prevention, Test Correction Form, Safety Instruction Record, Parent Notification Form, and Incident Report Form. ABRAXAS

Order Number: BT-2.....\$86.00

**MULTIMEDIA AUTOSHOP SAFETY**



Multimedia Autoshop Safety uses video, animation, and still photos to examine the topics of general shop safety, fire safety and prevention, first aid, and safe tool use for mechanics. The segment dealing with overall shop safety emphasizes the link between cleanliness and organization, as well as personal safety considerations of glasses, ear plugs, shoes, and clothes. The first aid portion suggests that a certified first aid class be taken, but it offers an excellent survey of first aid practices, including what NOT to do. Correct fire extinguisher usage is illustrated by memorable graphics. The auto workshop is portrayed as a work site of numerous potential hazards, while at the same time the viewer is taught how to cope with the challenges of volatile auto products, damaged electrical cords, and welding cylinders and their contents. The mechanic's tools are shown to be a statement of their owner's professionalism. It seeks to foster that professionalism by describing the safe care and use of hand and power tools, wrenches, auto body tools, and measuring devices. 1996. For Windows and Macs. SHOPWARE

Order Number: SW20463.....\$69.95

**BASIC AUTOMOTIVE MAINTENANCE**



Save money and get that "can do" feeling by doing your own routine vehicle maintenance tasks. In this video, Scott Burkett, a certified Ford master technician and automotive instructor, explains the importance of routine maintenance and adjustments. Burkett then shows how to check fluid levels, battery, belts, air cleaner, wiper blades, and lights; and check lubrication points, oil and fuel filter, and tires. He stresses safety and environmental regulations throughout his demonstration. Quizzes after each section help test your maintenance knowledge. Supplement included. 42 minutes. 1998. CEV

DVD Order Number: CEV879D .....\$99.00

**CAR MAINTENANCE**

This two-part series looks at how to get the most out of your vehicle and how to maintain it, saving you repair costs and improving the resale value. Each section is illustrated with graphics and practical tips that make it easy to understand. SHOPWARE

**THE ENGINE**

Provides a basic understanding of how the engine works. It also covers the electrical system, ignition, lubrication and cooling system, fuel system, and valve gears and cylinders. Covers routine maintenance procedures and how to determine when your vehicle needs a professional's care. 59 minutes, 1996.

DVD Order Number: SW20384-D .....\$69.95

**TRANSMISSION, TIRES, & STEERING, AND SUSPENSION & BRAKING SYSTEMS**

This program covers the proper working order of the clutch and gearbox and provides step-by-step minor maintenance procedures for both. The second section of the program looks at how to get the longest life from your tires and how to properly and safely change a flat tire. The last segment covers the suspension system and explains how to perform periodic brake system checks that will keep your vehicle operating at a safe and efficient level. 49 minutes, 1996.

DVD Order Number: SW20381-D .....\$69.95

*Order the series and save!*

DVD: 2 DVDs above

Order Number: SW20380-D .....\$125.00

**BASIC CAR CARE**

This is an excellent program for anyone owning and operating a motor vehicle, in particular beginning automotive mechanics courses and driver's education classes. The program covers checking and adding fluids, inspecting for obvious problems, with belts, hoses and leaks, changing a flat tire, using jumper cables on a dead battery, paint touch-up and care, body lubrication, light-bulb replacement, and much more. 24 minutes, 2008. MERIDIAN

DVD Order Number: ME24764-D .....\$99.95

**VEHICLE MAINTENANCE AND FLUID SERVICE**

This established educational title offers techniques for light maintenance on cars and light trucks. Presents crucial information for anyone owning or operating an automobile. Covers all the basic inspections and service operations needed to keep a car running safely and dependably and is ideal for service station attendants, driver education courses, and first-year classes in general auto mechanics. 27 minutes, 1999. MERIDIAN

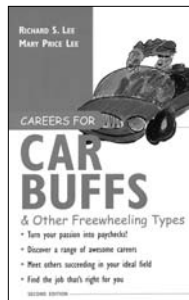
DVD Order Number: ME26739-D .....\$99.95

**HOW YOUR CAR WORKS**

It's the ultimate challenge for every basic automotive instructor: how to teach students who know almost nothing about car technology. This video is designed for viewers who might have only a vague understanding of an automobile's inner workings, helping them to become more technically informed about vehicle parts, systems, and operation. With the help of detailed yet accessible animation, as well as high-energy live action footage, the program provides enough technical vocabulary and know-how to communicate with service technicians and to begin preparing for an automotive career. Also contains material on hybrid cars and systems. 17 minutes, 2008. MERIDIAN

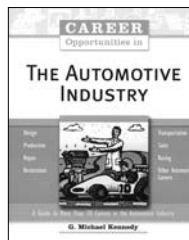
DVD Order Number: ME25618-D .....\$89.95

[www.finney-hobar.com](http://www.finney-hobar.com)

**CAREERS FOR CAR BUFFS**

Inside this book you'll find all the information you need on salaries, working conditions, and opportunities for professional advancement. Written for newcomers and career changers alike, this reference will put you in the driver's seat and steer you toward a fulfilling career. MCGRAW HILL

142 pages, 2004, softcover  
Order Number: NCC5471 .....\$13.95

**CAREER OPPORTUNITIES IN THE AUTOMOTIVE INDUSTRY**

This book is divided into six sections and includes complete information on 70 challenging and rewarding careers. The six section headings are Design and Production, Repair and Restoration, Transportation, Sales, Racing, and Other Automotive Careers. FACT ON FILE

224 pages, 2005, softcover  
Order Number: NCC2578 .....\$18.95

**THE HISTORY OF HYBRIDS**

So your students think hybrids are a new idea? Show them how far hybrid technology has come since the 1800s. This video surveys the historical background of hybrid cars, introduces students to hybrid configurations currently on the road or in development, and explains the basic principles of hybrid system propulsion. A viewable/printable instructor's guide is available online. Correlates to all applicable state and national standards. 15 minutes, 2007. SHOPWARE

DVD Order Number: SW35526-D .....\$59.95

**COMMON HYBRID COMPONENTS**

Hybrid vehicles are complex machines—help your students get to know them inside and out. This video guides viewers through the system components common to hybrid automobiles, including the battery pack, the electric motor, the internal combustion engine, the transmission, and the generator. A viewable/printable instructor's guide is available online. Correlates to all applicable state and national standards. 16 minutes, 2007. SHOPWARE

DVD Order Number: SW35527-D .....\$59.95

**HYBRID SAFETY ISSUES**

Hybrid technology means cleaner air for everyone—but under the hood, it's a danger zone for unprepared technicians. This video enables students to understand and follow the unique safety requirements of hybrid system maintenance and repair, focusing on precautions and procedures necessary to prevent electric shock. A viewable/printable instructor's guide is available online. Correlates to all applicable state and national standards. 18 minutes, 2007. SHOPWARE

DVD Order Number: SW35528-D .....\$59.95