

## Automotive Wiring And Electrical Systems Vol 2 Projects

*Understanding fuel injection and engine management systems is the key to extracting higher performance from today's automobiles in a safe, reliable, and driveable fashion. Turbochargers, superchargers, nitrous oxide, high compression ratios, radical camshafts: all are known to make horsepower, but without proper understanding and control of fuel injection and other electronic engine management systems, these popular power-adders will never live up to their potential and, at worst, can cause expensive engine damage. Drawing on a wealth of knowledge and experience and a background of more than 1,000 magazine articles on the subject, engine-control expert Jeff Hartman explains everything from the basics of fuel injection to the building of complex project cars. Hartman covers the latest developments in fuel-injection and engine management technology applied by both foreign and domestic manufacturers, including popular aftermarket systems. No other book in the market covers the subject of engine management systems from as many angles and as comprehensively as this book. Through his continuous magazine writing, author Jeff Hartman is always up-to-date with the newest fuel-injection and engine management products and systems. This unique handbook assumes no starting knowledge of car electrical and electronics systems. It begins with simple circuits and finishes with complex electronic systems that include engine management, transmission control and stability control systems. If you want to diagnose a simple alternator charging or headlight problem, this book is for you. But if you also want to fix complex electronic systems using On-Board Diagnostics, a multimeter or oscilloscope, this book also shows you how to do that. Is it best to use a series or parallel circuit when adding a horn? How do you use a multimeter to check a coolant temperature sensor against its specs? How can you add an electronic timer that will keep your headlights on as you walk to your door? When should you buy an oscilloscope – and how complex an instrument do you really need? The author has been writing about car electronic systems for over 25 years. He is also an experienced and proficient car modifier who has performed numerous electronic modifications and upgrades to his own cars, including world-first modifications. If you want a practical, hands-on book that demystifies and explains car electrical and electronic systems, this is the book for you. This textbook will help you learn all the skills you need to pass Level 3 vehicle electrical and electronic systems courses or related modules from City and Guilds, IMI and BTEC, and is also ideal for higher level ASE, AUR and other qualifications. As electrical and electronic systems become increasingly more complex and fundamental to the workings of modern vehicles, understanding these systems is essential for automotive technicians. For students new to the subject, this book will help to develop this knowledge, but will also assist experienced mechanics in keeping up with recent technological advances. This new edition includes information on developments in hybrid car technology, GPS, multiplexing, and electronic stability/vehicle dynamics control. In full colour and covering the latest course specifications, this is the guide that no student enrolled on an automotive maintenance and repair course should be without. Also by Tom Denton: Automobile Mechanical and Electrical Systems ISBN: 978-0-08-096945-9 Advanced Automotive Fault Diagnosis, Third Edition ISBN: 978-0-08-096955-8*

*This book reflects the basics of design paradigm in automotive sector. The pervasiveness of electrical instrumentation is progressively increasing with time. As a result, more mechanisms are getting transformed from mechanical systems to electronic ones in automotive. Significantly, in a matter of around three decades, the high-tech cars of 1980s have turned into auto electronic engines with computer-controlled systems and today's modern cars are equipped with nearly hundreds of electric and electronic systems. Any advancement in automotive is impossible to comprehend without the knowledge of fundamentals. This book presents the classical topics of the vehicle electrical systems such as the architecture of battery, charging, and ignition, starting and wiring system with details of its control, components and sensors. These basics serve as the core building blocks of today's vehicle electronics. The various topics are covered in a concise but descriptive way backed up by diagrams, photographs and tables enabling the reader to better comprehend the subject. This book will benefit automotive engineers, technicians and embedded design engineers who enter automotive domain. It may also be of interest to lecturers and undergraduate students at engineering colleges and enthusiasts.*

*Updated & Revised New Edition*

*Engine Management*

*Automotive Electricity and Electronics*

*Upgrade Your Engine to Increase Horsepower*

*Motorcycle Electrical Systems*

*Automobile Electrical and Electronic Systems*

Unsurpassed in coverage of the theory and procedures for automotive electricity and electronics, the newest edition of this highly successful classroom and shop manual is guaranteed to instill both the knowledge and skills critical to success in the industry. TODAY'S TECHNICIAN: AUTOMOTIVE ELECTRICITY & ELECTRONICS, 5TH EDITION has been updated to offer a more streamlined presentation of diagnostic and service procedures, as well as additional attention to data bus networks, including the CAN, LIN, ISO, and other common systems. The book also features expanded coverage of vehicle accessory systems, including the new multi-stage air bag systems, weight classification systems, side air bag systems, and laser-guided cruise control systems. An all-new chapter on hybrid and high voltage systems rounds out the up-to-date content, ensuring readers gain a strong working knowledge that of the latest industry trends and technologies. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Often, wiring and electrical work intimidate automotive do-it-yourselfers more than anything else. It's not mechanical, and therefore, it's unfamiliar territory. Electrons are invisible, and to an untrained enthusiast they can do unpredictable things. Finally, here is an enthusiast's guide that takes the mysteries and misunderstandings out of automotive electrical design, modification, diagnostics, and repair. Automotive Wiring and Electrical Systems is the perfect book to unshroud the mysteries of automotive electrical and electronic systems. The basics of electrical principles, including voltage, amperage, resistance, and Ohm's law, are revealed in clear and concise detail so the enthusiast understands what these mean in the construction and repair of automotive electrical circuits. All the tools and the proper equipment required for automotive electrical tasks are covered. In addition, this in-depth guide explains how to perform more complex tasks, such as adding new circuits, installing aftermarket electronics, repairing existing circuits, and troubleshooting. It also explains how to complete popular wiring projects, such as adding late-model electronic accessories and convenience items to earlier-model cars, installing relay systems, designing and assembling multi-function circuits and harnesses, and much more. With this book in hand, you will be able to assemble, design, and build single- and multi-function circuits and harnesses, troubleshoot and repair existing circuits, and install aftermarket systems and electronics. Automotive Wiring and Electrical Systems is the perfect book for wiring a hot rod from scratch, modifying muscle car electrical circuits for cooling fans and/or power windows, or adding a big stereo and other conveniences to modern performance cars. This book covers British car electrical systems from 1950 to 1980. Particular emphasis is placed on the Lucas, Smith and SU components that were ubiquitous in British cars of the period. Each major system is given its own chapter, providing theory, component parts and full system operating explanations. Modifications are suggested for those wishing to bring performance and reliability up to more modern standards. Fault-finding charts, cross referenced to the appropriate pages in the book, are provided throughout.

Automotive Air-conditioning and Climate Control Systems is a complete text and reference on the theoretical, practical and legislative aspects of vehicle climate control systems for automotive engineering students and service professionals. It provides the reader with a thorough up-to-date knowledge of current A/C systems, refrigerants and the new possible replacement systems like CO<sub>2</sub>, and includes unrivalled coverage of electronic and electrical control. Filling the gap in the automotive engineering and servicing market for students and those training on the job, this book will help both newcomers and those with more experience of air-conditioning systems maintenance engineering to keep up with the latest developments and legislation. Detailed coverage of European and US vehicle HVAC systems Thorough explanation of current and future systems including CO<sub>2</sub> Meets relevant C&G, IMI, and HND vocational and professional qualifications IMI recommended reading material Includes practical cases studies and examples from design and manufacturing companies including Ford, Vauxhall, Toyota, VW, Visteon, Sanden and others, accompanied by over 300 detailed illustrations and photographs

**Projects**

**How to Design, Build & Equip Your Automotive Workshop on a Budget**

**Systems and Components, Networking and Hybrid Drive**

**Automotive electrical Equipment**

**Automotive Electrical and Electronic Systems**

**Today's Technician: Automotive Electricity and Electronics**

**Takes engine-tuning techniques to the next level. It is a must-have for tuners and calibrators and a valuable resource for anyone who wants to make horsepower with a fuel-injected, electronically controlled engine.**

**This book explores electromagnetic compatibility in the context of automotive electronics, with a close relation to functional safety as required by ISO 26262.**

**When it's time to wire your car, whether it's a restoration project, race car, kit car, trailer, or street rod, don't be intimidated; wire it yourself. Jim Horner shares his years of experience and cuts through the technical jargon to show you how. Learn about basic electrical theory, how various electrical components work and drawing circuit diagrams. Includes tips on using electrical test equipment and troubleshooting electrical circuits. Choose the right components, build your own wiring harness, and install them by following the step-by-step instructions. Profusely illustrated with over 350 photos, drawings, and diagrams. Suppliers list included.**

**Aim is to provide a broad understanding of the many systems and component parts that constitute the vehicle electrical and electronics in a detailed way. The book should also be a valuable source of information and reference. The book provides clear explanation of vehicle electrical and electronic components and systems with unique illustrations, which should be of value both to the students and to the experienced faculty members. Each chapter takes the reader systematically through the details of each component system. Key topics are emphasized and are reinforced by numerous illustrations.**

**Bosch Automotive Electrics and Automotive Electronics**

**Automobile Mechanical and Electrical Systems**

### 48-Volt Developments

**How to Tune and Modify Automotive Engine Management Systems - All New Edition**

**Automotive Electrical Manual**

Tracy Martin, an ASE (Automotive Service Excellence) Certified Master Technician, explains the principles behind automotive electrical systems and how they work. This book details the various tools, such as multimeters and test lights, that can be used to evaluate and troubleshoot any vehicle's electrical system. Several hands-on projects take readers on a guided tour of their vehicle's electrical system and demonstrate how to fix specific problems.

Diagnostics, or fault finding, is a fundamental part of an automotive technician's work, and as automotive systems become increasingly complex there is a greater need for good diagnostic skills. Advanced Automotive Fault Diagnosis is the only book to treat automotive diagnostics as a science rather than a check-list procedure. Each chapter includes basic principles and examples of a vehicle system followed by the appropriate diagnostic techniques, complete with useful diagrams, flow charts, case studies and self-assessment questions. The book will help new students develop diagnostic skills and help experienced technicians improve even further. This new edition is fully updated to the latest technological developments. Two new chapters have been added - On-board diagnostics and Oscilloscope diagnostics - and the coverage has been matched to the latest curricula of motor vehicle qualifications, including: IMI and C&G Technical Certificates and NVQs; Level 4 diagnostic units; BTEC National and Higher National qualifications from Edexcel; International Motor Vehicle qualifications such as C&G 3905; and ASE certification in the USA.

This indispensable guide to high performance and OEM automotive electrical systems covers electrical theory, wiring techniques and equipment, custom wiring harnesses for racing, hot rods and restorations, pre-made wiring harnesses, special electrical systems (navigational, audio, video), troubleshooting common electrical problems, dashboards and instrument, and trailer wiring.

Development of higher-voltage electrical systems in vehicles has been slowly progressing over the past few decades. However, tightening vehicle efficiency and emissions regulations and increasing demand for onboard electrical power means that higher voltages, in the form of supplemental 48 V subsystems, may soon be nearing production as the most cost-effective way to meet regulations. The displacement of high-wattage loads to more efficient 48 V networks is expected to be the next step in the development of a new generation of mild hybrid vehicles. In addition to improved fuel economy and reduced emissions, 48 V systems could potentially save costs on new electrical features and help better address the emerging needs of future drivers. Challenges to 48 V system implementation remain, leading to discussions by experts from leading car makers and suppliers on the need for an international 48 V standard. Initial steps toward a proposed standard have already been taken. So the consensus of global forecasts suggests that 48 V mild hybrids will soon come to dominate the market. Compared with 200-600 V full hybrid and battery electric vehicles, the lower-voltage approach avoids the need for high-cost safety features and large battery packs.

**Tips & Tools for Geeking Your Ride**

**MGB Electrical Systems**

**Advanced Automotive Fault Diagnosis**

**Automotive Electrical and Electronics**

**Classic British Car Electrical Systems**

**Advanced Automotive Electricity and Electronics**

Suitable for students with no experience in electricity and electronics, this volume in the CDX Master Automotive Technician Series introduces students to the basic skills and tools they need to perform electrical diagnosis in the shop. Utilizing a "strategy-based diagnostics" approach, this book helps students master technical trouble-shooting in order to properly resolve the customer concern on the first attempt.

Existing books on garage and workshop space are either oriented towards the lightest-duty automotive enthusiast or assume an effectively unlimited budget. The vast majority of enthusiasts want to spend their money on tools and parts yet need heavier-duty capabilities from their garage. This book does not address garden rake storage, but describes in detail how to set up an organized and functional garage or workshop for professional-level work at the lowest possible price. "How to Design, Build and Equip Your Automotive Workshop on a Budget" provides the necessary information as the hobbyist considers various tools, designs, installations, and products available for their automotive workspace. Many of the ideas presented for workbenches and storage can be implemented at low cost, or even for free if you're extra resourceful. There are step-by-step instructions for the most essential and practical procedures, including basic electrical wiring sufficient to connect up bank of lights, a compressor, a welder circuit as well as a procedure for routing power from your household electrical service panel and plumbing basic shop fixtures. Most enthusiasts have a limited amount of car space and an even more limited budget, so they must make good use of the space and money available. This book is designed to help the practical hobbyist mechanic make the most of any available space, balancing looks and functionality, while staying within almost any budget.

The one automotive job we all dread is the wiring. Yet, with help from this new how-to book even the neophyte mechanic can install a wiring harness. Dennis Overholser, longtime technical specialist for Painless Performance Products and avid hot rodder, walks you through nine chapters sure to clear away your fear of electricity. Topics include: the basics of DC electricity; installation of additional circuits; choosing and installing the best battery, starter, and alternator; installation of the gauges; finding and installing a new EFI harness; and wiring a complete scratch-built hot rod. Photo-intensive, hands-on sequences document and help explain the installation of both an EFI harness on a late model V-8, and the installation of a complete harness kit into a newly built hot rod. Written in easy-to-understand language, this new book from Wolfgang Publications is a necessary addition to any hot rodder's book shelf. With 144 pages and over 350 color photos, this wiring book is the electrical bible you need for that next electrical project.

The second edition of Automobile Mechanical and Electrical Systems concentrates on core technologies to provide the essential information required to understand how different vehicle systems work. It gives a complete overview of the components and workings of a vehicle from the engine through to the chassis and electronics. It also explains the necessary tools and equipment needed in effective car maintenance and repair, and relevant safety procedures are included throughout. Designed to make learning easier, this book contains: Photographs, flow charts and quick reference tables Detailed diagrams and clear descriptions that simplify the more complicated topics and aid revision Useful features throughout, including definitions, key facts and 'safety first' considerations. In full colour and with support materials from the author's website (www.automotive-technology.org), this is the guide no student enrolled on an automotive maintenance and repair course should be without.

OEM Electrical Systems, Premade & Custom Wiring Kits, & Car Audio Installations for Street Rods, Muscle Cars, Race Cars, Trucks & Restorations

Automotive Electrics and Instrumentation

Electrical Systems of AutoMotives

EMC and Functional Safety of Automotive Electronics

Advanced Tuning

Car Electrical & Electronic Systems

A car PC or carputer is a car tricked-out with electronics for playing radio, music and DVD movies, connecting to the Internet, navigating and tracking with satellite, taking photos, and any electronic gadget a person wants in a car. All these devices are managed and controlled through a single screen or interface. The only place car PC enthusiasts can go for advice, tips and tools is a handful of hard-to-find Web sites—until now. Car PC Hacks is your guide into the car PC revolution. Packing MP3 players, handheld devices, computers and video-on-demand systems gives you a pile too heavy to carry. But add a car and put them together, you've got a powerful and mobile multimedia center requiring no lifting. The next time you give kids a lift, you won't hear, "Are we there yet?" Instead, expect "We're there already?" as they won't want to leave the car while playing video games from multiple consoles. Car PC Hacks is the first book available to introduce and entrench you into this hot new market. You can count on the book because it hails from O'Reilly, a trusted resource for technical books. Expect innovation, useful tools, and fun experiments that you've come to expect from O'Reilly's Hacks Series. Maybe you've hacked computers and gadgets, and now you're ready to take it to your car. If hacking is new and you would like to mix cars and computers, this book gets you started with its introduction to the basics of car electrical systems. Even when you're unclear on the difference between amps and watts, expect a clear explanation along with real-life examples to get on track. Whether you're venturing into car PC for the first time or an experienced hobbyist, hop in the book for a joy ride.

An award-winning scientist offers his unorthodox approach to childrearing: "Parentology is brilliant, jaw-droppingly funny, and full of wisdom...bound to change your thinking about parenting and its conventions" (Amy Chua, author of Battle Hymn of the Tiger Mother). If you're like many parents, you might ask family and friends for advice when faced with important choices about how to raise your kids. You might turn to parenting books or simply rely on timeworn religious or cultural traditions. But when Dalton Conley, a dual-doctorate scientist and full-blown nerd, needed childrearing advice, he turned to scientific research to make the big decisions. In Parentology, Conley hilariously reports the results of those experiments, from bribing his kids to do math (since studies show conditional cash transfers improved educational and health outcomes for kids) to teaching them impulse control by giving them weird names (because evidence shows kids with unique names learn not to react when their peers tease them) to getting a vasectomy (because fewer kids in a family mean smarter kids). Conley encourages parents to draw on the latest data to rear children, if only because that level of engagement with kids will produce solid and happy ones. Ultimately these experiments are very loving, and the outcomes are redemptive—even when Conley's sassy kids show him the limits of his profession. Parentology teaches you everything you need to know about the latest literature on parenting—with lessons that go down easy. You'll be laughing and learning at the same time.

This volume, part of Prentice Hall's Multimedia Series in Automotive Technology, contains the following features: -- CD-ROM with live action video, animation test bank questions with answers, scope waveform library, and a comprehensive glossary. -- Free access to a website with ASE-type questions allows readers to study for the ASE tests at their own pace. -- A worktext with more than 100 lab sheets. -- The use of photo sequences throughout this book.

Your complete guide to electrical system troubleshooting, repair, maintenance and rewiring. Clear step-by-step instructions and hundreds of photos show you how to do a professional job yourself.

Automotive Wiring

How to Diagnose and Repair Automotive Electrical Systems

The Hack Mechanic Guide to European Automotive Electrical Systems

Shop manual

Diagnosis and Troubleshooting of Automotive Electrical, Electronic, and Computer Systems

Automotive Wiring and Electrical Systems Vol. 2

This is a complete reference guide to automotive electrics and electronics. This new edition of the definitive reference for automotive engineers, compiled by one of the world's largest automotive equipment suppliers, includes new and updated material. As in previous editions different topics are covered in a concise but descriptive way backed up by diagrams, graphs, photographs and tables enabling the reader to better comprehend the subject. This fifth edition revises the classical topics of the vehicle electrical systems such as system architecture, control, components and sensors. There is now greater detail on electronics and their application in the motor vehicle, including electrical energy management (EEM) and discusses the topic of inter system networking within the vehicle. It also includes a description of the concept of hybrid drive a topic that is particularly current due to its ability to reduce fuel consumption and therefore CO2 emissions. This book will benefit automotive engineers and design engineers, automotive technicians in training and mechanics and technicians in garages. It may also be of interest to teachers/ lecturers and students at vocational colleges, and enthusiasts.

For courses in Advanced Automotive Electricity and Electronics. Advanced Automotive Electricity and Electronics is specifically designed for the second semester of an automotive electrical systems course. The first 12 chapters offer solid review of foundational automotive electronics service and repair procedures, with the subsequent 17 chapters covering advanced topics, such as chassis systems, HVAC, and hybrid electric vehicles. The text's short chapters focus on a specific system or topic, making it easier for instructors to assign reading and easier for students to master the material.

A motorcycle's electrical system can be daunting to even the most adept home mechanic. And yet, the more complex these systems become—and the more important to a motorcycle's function—the more useful, even critical, it will be to know something about them. That's where this book comes in with a user-friendly guide to understanding, diagnosing, and fixing the electrical systems and components that make a bike run . . . or falter. Veteran technician Tracy Martin explains the principles behind motorcycle electrical systems and how they work. He details the various tools, such as multimeters and test lights, that can be used to evaluate and troubleshoot any vehicle's electrical problem. And in several hands-on projects, he takes readers on a guided tour of their vehicle's electrical system, along the way giving clear, step-by-step instructions for diagnosing specific problems.

This book is essential reading for every MGB enthusiast. The mechanical aspects and the restoration of the vehicle have been written about in numerous publications but the so often maligned electrical systems has never before been comprehensively covered. For those new to vehicle electrical systems the book provides a simple primer using mechanical analogies. Each system in the car has its own chapter, with simple and uncluttered circuit diagrams in which each wire can be seen in its real colours. More than a how-to-do guide, the book also explains the "why" of each system and procedure, aiding diagnostics when things don't go quite as they should. The many fault finding guides help pin those elusive problems down. For those wishing to improve the car for reliability and safety.

Automotive Air Conditioning and Climate Control Systems

Muscle Car Confidential

Automotive Electrical Handbook

Everything You Wanted to Know about the Science of Raising Children but Were Too Exhausted to Ask

How to Wire Your Car from Scratch

Car PC Hacks

This textbook will help you learn all the skills you need to pass all Vehicle Electrical and Electronic Systems courses and qualifications. As electrical and electronic systems become increasingly more complex and fundamental to the workings of modern vehicles, understanding these systems is essential for automotive technicians. For students new to the subject, this book will help to develop this knowledge, but will also assist experienced technicians in keeping up with recent technological advances. This new edition includes information on developments in pass-through technology, multiplexing, and engine control systems. In full colour and covering the latest course specifications, this is the guide that no student enrolled on an automotive maintenance and repair course should be without. Designed to make learning easier, this book contains: Photographs, flow charts, quick reference tables, overview descriptions and step-by-step instructions. Case studies to help you put the principles covered into a real-life context. Useful margin features throughout, including definitions, key facts and 'safety first' considerations.

Ideal for aspiring and active automotive professionals, TODAY'S TECHNICIAN: AUTOMOTIVE ELECTRICITY & ELECTRONICS, Sixth Edition, equips readers to confidently understand, diagnose, and repair electrical and electronic systems in today's automobiles. Using a unique two-volume approach to optimize learning in both the classroom and the auto shop, the first volume (Classroom Manual) details the theory and application of electricity, electronics, and circuitry in modern automobiles, while the second (Shop Manual) covers real-world symptoms, diagnostics, and repair information. Known for its comprehensive coverage, accurate and up-to-date technical information, and hundreds of detailed illustrations and vibrant photographs, the text is an ideal resource to prepare for success as an automotive technician or pursue ASE certification. Now updated with extensive information on new and emerging technology and techniques—including audio and infotainment systems, LED and adaptive lighting, hybrid and electric vehicles, and accessory systems—the Sixth Edition also aligns with the NATEF 2012 accreditation model, including job sheets correlated to specific AST and MAST tasks. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Electrical issues in European cars can be intimidating. The Hack Mechanic Guide to European Automotive Electrical Systems shows you how to think about electricity in your car and then take on real-world electrical problems. The principles discussed can be applied to most conventional internal-combustion-engined vehicles, with a focus on European cars spanning the past six decades. Drawing on The Hack Mechanic's wisdom and experience, the 38 chapters cover key electrical topics such as battery, starter, alternator, ignition, circuits, and relays. Through a practical and informal approach featuring hundreds of full-color illustrations, author Rob Siegel takes the fear-factor out of projects like making wire repairs, measuring voltage drops, or figuring out if you have a bad fuel pump relay. Essential tools such as multimeters (DVOM), oscillosopes, and scan tools are discussed, with special attention given to the automotive multimeter needed to troubleshoot many modern sensors. You'll get step-by-step troubleshooting procedures ranging from safely jump starting a battery to diagnosing parasitic current drain and vehicle energy diagnosis. And you'll find detailed testing procedures for most problematic electrical components on your European car such as oxygen sensors, crankshaft and camshaft sensors, wheel speed sensors, fuel pumps, solenoids, and actuators. Reading wiring diagrams and decoding the German DIN standard are also covered. Whether you are a DIY mechanic or a professional technician, The Hack Mechanic Guide to European Automotive Electrical Systems will increase your confidence in tackling automotive electrical problem-solving. This book applies to gasoline and diesel powered internal combustion engine vehicles. Not intended for hybrid or electric vehicles.

Automotive Wiring and Electrical Systems Vol. 2 Projects CarTech Inc

Custom Auto Wiring & Electrical HP1545

Your Guide to Understanding, Repairing and Improving the Electrical Components a

How To Diagnose and Repair Automotive Electrical Systems

Parentology

Understanding Automotive Electronics

Automotive Wiring and Electrical Systems

*Countless collector car owners are skilled at performing mechanical work, but for many of them, electrical work seems like a black art, too complicated and too confusing. However, electrical upgrades are absolutely essential for a high-performance classic car or a modified car to perform at its best. With a firm understanding of the fundamentals, you can take this comprehensive guide and complete a wide range of electrical projects that enhance the performance and functionality of a vehicle. In this revised edition (formerly titled Automotive Electrical Performance Projects) brilliant color photos and explanatory step-by-step captions detail the installation of the most popular, functional, and beneficial upgrades for enthusiasts of varying skill levels. Just a few of the projects included are: maximizing performance of electric fans; installing electronic gauges; upgrading charging systems; and installing a complete aftermarket wiring harness, which is no small task. Each facet is covered in amazing detail. Veteran author Tony Candela, who wrote CarTech's previous best-selling title Automotive Wiring and Electrical Systems, moves beyond the theoretical and into real-world applications with this exciting and detailed follow-up. This Volume 2 is essential for any enthusiast looking to upgrade his or her classic vehicle to modern standards, and for putting all the knowledge learned in Automotive Wiring and Electrical Systems into practice.*

Troubleshooting and Repair

Today's Technician: Automotive Electricity and Electronics, Classroom and Shop Manual Pack

How to Wire Your Hot Rod