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KEY=TRANSMISSION - MARISSA LEE

Cost, Effectiveness, and Deployment of Fuel Economy Technologies for Light-Duty Vehicles

National Academies Press *The light-duty vehicle fleet is expected to undergo substantial technological changes over the next several decades. New powertrain designs, alternative fuels, advanced materials and significant changes to the vehicle body are being driven by increasingly stringent fuel economy and greenhouse gas emission standards. By the end of the next decade, cars and light-duty trucks will be more fuel efficient, weigh less, emit less air pollutants, have more safety features, and will be more expensive to purchase relative to current vehicles. Though the gasoline-powered spark ignition engine will continue to be the dominant powertrain configuration even through 2030, such vehicles will be equipped with advanced technologies, materials, electronics and controls, and aerodynamics. And by 2030, the deployment of alternative methods to propel and fuel vehicles and alternative modes of transportation, including autonomous vehicles, will be well underway. What are these new technologies - how will they work, and will some technologies be more effective than others? Written to inform The United States Department of Transportation's National Highway Traffic Safety Administration (NHTSA) and Environmental Protection Agency (EPA) Corporate Average Fuel Economy (CAFE) and greenhouse gas (GHG) emission standards, this new report from the National Research Council is a technical evaluation of costs, benefits, and implementation issues of fuel reduction technologies for next-generation light-duty vehicles. Cost, Effectiveness, and Deployment of Fuel Economy Technologies for Light-Duty Vehicles estimates the cost, potential efficiency improvements, and barriers to commercial deployment of technologies that might be employed from 2020 to 2030. This report describes these promising technologies and makes recommendations for their inclusion on the list of technologies applicable for the 2017-2025 CAFE standards.*

How To Rebuild and Modify Your Manual Transmission

Performance Advantages of Multigrade Manual Transmission Oil

Hybrid Vehicles

and the Future of Personal Transportation

CRC Press *Uncover the Technology behind Hybrids and Make an Intelligent Decision When Purchasing Your Next Vehicle With one billion cars expected to be on the roads of the world in the near future, the potential for war over oil and the negative environmental effects of emissions will be greater than ever before. Now is the time to seriously consider an alternative to standard automobiles. Exploring practical solutions to these problems, Hybrid Vehicles and the Future of Personal Transportation provides broad coverage of the technologies involved in manufacturing and operating hybrids. It reviews key components of hybrid and pure electric vehicles, including batteries, fuel cells, and ultracapacitors. The book also discusses both concept and production-bound hybrids as well as the economics and safety issues of hybrid ownership. In addition, the author supplies effective tips on how to save gasoline with conventional and hybrid automobiles. Making the jargon of fuel-efficient vehicles accessible to a wide audience, this guide explains the history of hybrids, how they work, and their impact on the environment. It will help you make a sound decision concerning the purchase and operation of a hybrid or electric vehicle.*

National Energy Security Act of 1991: Subtitle A of Title XI

National Energy Security Act of 1991

Hearing Before the Committee on Energy and Natural Resources, United States Senate, One Hundred First Congress, First Session, on S. 341 ...

National Energy Security Act of 1991: Appendixes to Parts 1, 2, 3 and 4

Strategies for Energy Independence

Oversight Hearing Before the Subcommittee on Water, Power, and Offshore Energy Resources of the Committee on Interior and Insular Affairs, One Hundred First Congress, Second Session

Business Plans For Canadians for Dummies

John Wiley & Sons *The only book dedicated to helping Canadians write winning business plans, newly revised and updated Packed with everything you need to get your business moving in the right direction—whether you're part of a large corporation or a one-person show—Business For Canadians For Dummies, Second Edition is the ultimate guide to building a better, more productive, and more profitable business. Accessible and comprehensive, the book walks you through every milestone in business planning, including creating a right-on mission statement; pinpointing the needs of your customers; scoping out the competition; simplifying all the financial stuff; staying on top of trends, and fostering a winning atmosphere for your staff. Fully revised and updated, this new edition offers information anyone starting a business in Canada needs to know. Author and small-business expert Nada Wagner presents invaluable resources to help you write a plan, examines how government policies affect business, and looks at business trends unique to Canada. With inspiring—and cautionary—anecdotes about Canadian businesses, Business Plans For Canadians For Dummies is a fun and informative read for any entrepreneur. Newly revised edition of the only book that helps Canadians write better business plans, loaded with all-new content Covers the key milestones in business planning at every stage Filled with anecdotes about real businesses to bring the concepts described vividly to life Includes a brand new sample business plan, complete with financial documents An invaluable resource for entrepreneurs and business owners across the country, Business Plans For Canadians For Dummies, Second Edition is the definitive book on building a business plan, and creating a better business.*

Business Plans For Dummies

John Wiley & Sons *Your one-stop guide to creating a winning business plan from scratch Whether you're starting a new business or growing an established one, you'll need a solid business plan to get you where you want to go. Revised for today's rocky economic climate, this edition of the UK's bestselling business plan guide gives you what you need to map out your business strategy and stay on course - including a complete sample plan that you can easily adapt for your business! Chart your course - assess the current state of your business and where you'd like to take it, and establish clear, achievable objectives Get to know your customers - learn the latest techniques for getting a better idea of who your customers are and what they want Scope out the competition - find out who your competitors are and what it'll take to get your share of the market pie (and theirs) Sort out your finances - construct a value chain, examine your cash flow and calculate a sensible budget Enter the Dragons' Den - convince bankers, investors, venture capitalists and other funding sources your business is a good investment Read the tea leaves - learn to decipher changing cultural, political and technological trends and to alter your strategies as needed Open the book and find: Tips on developing a sure-fire business strategy How to set realistic objectives Forecasting and budgeting strategies Keys to writing a motivational mission statement How to decipher the latest consumer trends Advice on building your brand and brand loyalty Tips for seeing and seizing opportunities before the competition Ways to adapt your plan to economic change Learn to: Prepare a watertight business strategy Assess the marketplace Devise a sensible forecast and budget*

Technological Improvements to Automobile Fuel Consumption

Starting and Running a Small Business For Canadians For Dummies All-in-One

John Wiley & Sons *Tried-and-true advice, tools, and strategies to start and succeed in a small business With more Canadians yearning to start a small business—along with benefitting tax rate incentives and interesting new business opportunities—there's never been a greater need for a detailed, comprehensive guide to operating a small business. Comprising the most pertinent information from several bestselling For Dummies books on the subject, this all-encompassing guide gives you everything you need to know about successfully running a small business. Define your target market Create the perfect business plan Get to the bottom of financials Build a strong online presence and social media following From soup to nuts, this book is your recipe for small business success.*

Fundamentals of Medium/Heavy Duty Commercial Vehicle Systems

Jones & Bartlett Learning *Fundamentals of Medium/Heavy Duty Commercial Vehicle Systems, Second Edition offers comprehensive coverage of basic concepts and fundamentals, building up to advanced instruction on the latest technology coming to market for medium- and heavy-duty trucks and buses. This industry-leading Second Edition includes six new chapters that reflect state-of-the-art technological innovations, such as distributed electronic control systems, energy-saving technologies, and automated driver-assistance systems.*

Lemon-Aid New Cars and Trucks 2013

Dundurn *Canada's automotive "Dr. Phil" says there's never been a better time to buy a new car or truck, thanks to a stronger Canadian dollar, a worldwide recession driving prices downward, and a more competitive Japanese auto industry that's still reeling from a series of natural disasters.*

Lemon-Aid New Cars and Trucks 2011

Dundurn *As U.S. and Canadian automakers and dealers face bankruptcy and Toyota battles unprecedented quality-control problems, Lemon-Aid guides steer the confused and anxious buyer through the economic meltdown unlike any other car-and-truck books on the market. Phil Edmonston, Canada's automotive "Dr. Phil" for more than 40 years, pulls no punches. In this all-new guide he says: Chrysler's days are numbered with the dubious help of Fiat. Electric cars and ethanol power are PR gimmicks. Diesel and natural gas are the future. Be wary of "zombie" vehicles: Jaguar, Land Rover, Saab, and Volvo. Mercedes-Benz -- rich cars, poor quality. There's only one Saturn you should buy. Toyota -- enough apologies: "when you mess up, 'fess up."*

Starting and Running a Small Business For Canadians For Dummies All-in-One

John Wiley & Sons *The comprehensive, six-in-one package small business entrepreneurs can't afford to be without With more Canadians considering starting their own small businesses than ever before, there's never been a greater need for a detailed, comprehensive guide to help budding entrepreneurs get off the ground. Comprised of six books in one that cover every aspect of running a business, from developing a business plan to managing growth successfully, and everything in between, Starting and Running a Small Business For Canadians For Dummies All-in-One will ensure readers' ventures meet with success. The ideal resource for the first-time entrepreneur in a market when small businesses are growing fast Provides a wealth of management advice based on recent research that shows that when small businesses are successful, they hire Includes the financial advice that keeps new businesses from folding within their first five years Offering Canadians everything they need to know about starting their own companies within Canada, this six-book compilation is essential reading for anyone looking to make it big in the world of small business.*

Vehicle Powertrain Systems

John Wiley & Sons *The powertrain is at the heart of vehicle design; the engine - whether it is a conventional, hybrid or electric design - provides the motive power, which is then managed and controlled through the transmission and final drive components. The overall powertrain system therefore defines the dynamic performance and character of the vehicle. The design of the powertrain has conventionally been tackled by analyzing each of the subsystems individually and the individual components, for example, engine, transmission and driveline have received considerable attention in textbooks over the past decades. The key theme of this book is to take a systems approach - to look at the integration of the components so that the whole powertrain system meets the demands of overall energy efficiency and good drivability. Vehicle Powertrain Systems provides a thorough description and analysis of all the powertrain components and then treats them together so that the overall performance of the vehicle can be understood and calculated. The text is well supported by practical problems and worked examples. Extensive use is made of the MATLAB(R) software and many example programmes for vehicle calculations are provided in the text. Key features: Structured approach to explaining the fundamentals of powertrain engineering Integration of powertrain components into overall vehicle design Emphasis on practical vehicle design issues Extensive use of practical problems and worked examples Provision of MATLAB(R) programmes for the reader to use in vehicle performance calculations This comprehensive and integrated analysis of vehicle powertrain engineering provides an invaluable resource for undergraduate and postgraduate automotive engineering students and is a useful reference for practicing engineers in the vehicle industry*

Automotive Technician Training: Theory

Routledge *A blended learning approach to automotive engineering at levels one to three. Produced alongside the ATT online learning resources, this textbook covers all the theory and technology sections that students need to learn in order to pass levels 1, 2 and 3 automotive courses. It is recommended by the Institute of the Motor Industry and is also ideal for exams run by other awarding bodies. Unlike the current textbooks on the market though, this title takes a blended learning approach, using interactive features that make learning more enjoyable as well as more effective. When linked with the ATT online resources it provides a comprehensive package that includes activities, video footage, assessments and further reading. Information and activities are set out in sequence so as to meet teacher and learner needs as well as qualification requirements. Tom Denton is the leading UK automotive author with a teaching career spanning lecturer to head of automotive engineering in a large college. His nine automotive textbooks published since 1995 are bestsellers and led to his authoring of the Automotive Technician Training multimedia system that is in common use in the UK, USA and several other countries.*

Lemon-Aid New and Used Cars and Trucks 1990–2015

Dundurn *Lemon-Aid New and Used Cars and Trucks 1990-2015 steers the confused and anxious buyer through the purchase of new and used vehicles unlike any other car-and-truck book on the market. "Dr. Phil," Canada's best-known automotive expert for more than 42 years, pulls no punches.*

Federal Motor Vehicle Safety Standards and Regulations

Business Plans For Canadians For Dummies

John Wiley & Sons *Build a winning business plan with expert tips and strategies Creating a great business plan is the first and most vital step to business success. Packed with Canadian resources and anecdotes, this friendly guide takes you through the planning process. From scoping out the competition to planning for growth, this book is your ultimate reference for determining and meeting your business goals. Business essentials — from creating your company's mission statement to setting goals and objectives Competitive analysis — from analyzing your industry to tracking your competitors' actions Market research — from identifying your market to meeting your customers' needs Financial information — from reading income statements to understanding balance sheets Forecasting and budgeting — from projecting your cash flow to creating a solid budget Your business plan in action — from creating an effective organizational structure to fostering a strong company culture Canadian examples — from inspirational success stories to cautionary tales Open the book and find: Where to track down the data you need to understand your business environment How to identify your customers and reach them effectively How to build upon your company's strengths and minimize its weaknesses The components of a successful and sustainable business model How to eliminate money woes through financial ratios The secrets to the successes of many major Canadian and international companies Strategies to help your company stand out in a crowd*

Federal Motor Vehicle Safety Standards and Regulations, with Amendments and Interpretations

Target Costing and Value Engineering

Routledge *What would happen if everyone in your company followed a disciplined approach to cost reduction? Go ahead -- imagine it. What would it look like? How can it be done? The answer -- smart cost management. Effective cost management must start at the design stage. As much as 90-95% of a product's costs are added in the design process. That is why effective cost management programs focus on design and manufacturing. The primary cost management method to control cost during design is a combination of target costing and value engineering. Target Costing Objectives: Identify the cost at which your product must be manufactured at if it is to earn its profit margin at its expected target selling price. Break the target cost down to its component level and have your suppliers find ways to deliver the components they sell you at the set target prices while still making adequate returns. Value Engineering: The connection to function: An organized effort and team based approach to analyze the functions of goods and services that the design stage, and find ways to achieve those functions in a manner that allows the firm to meet its target costs. The result: Added value for your company (development costs on-line with added value for your company; development costs on-line with selling prices) and added value for your customer (higher quality products that meet, possibly even exceed,*

customer expectations.)

How to Restore Your Mustang 1964 1/2-1973

CarTech Inc In the past, restoration guides have provided authenticity information, such as accurate paint codes, badges, wheels, and other equipment. A bona fide hands-on how-to book for restoring your Mustang from the ground up has not been offered for years. This unique guide will cover the restoration process for every major component group and also provide detailed step-by-step restoration information for the most important procedures. With clear, insightful color photography to accompany this how-to information, any at-home restorer can confidently restore a car and save a substantial amount of money in the process. While restomod books have shown how to install latest technology on vintage muscle cars, this book will focus on factory-accurate restorations, and some simple bolt-on upgrades that do not detract from the collector value but rather enhance the reliability and performance of the car. *How to Restore Your Mustang 1964-1/2-1973* delivers a detailed explanation for finding the right model, how to assess condition, how to spot a fake, and how to select the right car within your budget. In addition, the book will cover how to plan, prepare, and select the right tools. This unique guide will cover the restoration process for every major component group and also provide detailed step-by-step restoration information for the most important procedures. The latest techniques and best restoration products for each system will be discussed and detailed. Also, the book discusses how to source parts and what you need to consider between new/old stock and reproduction parts. Readers will also learn how to determine if a certain task is best left for a professional shop. All crucial aspects of restoration, including engines, drivelines, body, interior, trim, electrical systems, brakes, steering, and suspension will be profiled.

Small Business for Canadians Bundle For Dummies Business: Business Plans For Dummies & Bookkeeping For Dummies

John Wiley & Sons Get these two great books in one convenient ebook bundle! The only book dedicated to helping Canadians write winning business plans, newly revised and updated Packed with everything you need to get your business moving in the right direction—whether you're part of a large corporation or a one-person show—*Business Plans For Canadians For Dummies, Second Edition* is the ultimate guide to building a better, more productive, and more profitable business. Accessible and comprehensive, the book walks you through every milestone in business planning, including creating a right-on mission statement; pinpointing the needs of your customers; scoping out the competition; simplifying all the financial stuff; staying on top of trends, and fostering a winning atmosphere for your staff. Fully revised and updated, this new edition offers information anyone starting a business in Canada needs to know. Author and small-business expert Nada Wagner presents invaluable resources to help you write a plan, examines how government policies affect business, and looks at business trends unique to Canada. With inspiring—and cautionary— anecdotes about Canadian businesses, *Business Plans For Canadians For Dummies, Second Edition* is a fun and informative read for any entrepreneur. Newly revised edition of the only book that helps Canadians write better business plans, loaded with all-new content Covers the key milestones in business planning at every stage Filled with anecdotes about real businesses to bring the concepts described vividly to life Includes a brand new sample business plan, complete with financial documents An invaluable resource for entrepreneurs and business owners across the country, *Business Plans For Canadians For Dummies, Second Edition* is the definitive book on building a business plan, and creating a better business. The fastest, easiest way for small business owners to master the art and science of bookkeeping This updated and expanded second edition of *Bookkeeping For Canadians For Dummies* gets small business owners and managers up and running with the knowledge and skills you need to keep your books balanced, your finances in order, and the CRA off your back. From tracking transactions and keeping ledgers to producing balance sheets and year-end reports, you'll master all the important terms, procedures, forms, and processes more quickly and easily than you ever thought possible. Features approximately 25 percent new and updated content tailored for Canadians—the only Canada-specific guide to bookkeeping Includes clear and concise instructions on keeping the books, tracking transactions, recognizing assets and liabilities, and keeping ledgers and journals Packed with up-to-date tax information, including complete coverage of recent changes to the tax codes most important to small businesses Serves as an indispensable resource for small business owners who keep their own books, as well as those interested in a career as a bookkeeper Provides small business owners with highly-accessible, step-by-step guidance on creating professional financial statements and operating business accounts

Strategies for Energy Independence: The efficiency option

National Energy Security Act of 1991: Title XV

Potential for Improved Automobile Fuel Economy Between 1985 and 1995

Hearing Before the Committee on Energy and Natural Resources, United States Senate, Ninety-sixth Congress, Second Session, on the Potential for Improved Automobile Fuel Economy Between 1985 and 1995, April 30, 1980

Technologies and Approaches to Reducing the Fuel Consumption of Medium- and Heavy-Duty Vehicles

National Academies Press *Technologies and Approaches to Reducing the Fuel Consumption of Medium- and Heavy-Duty Vehicles* evaluates various technologies and methods that could improve the fuel economy of medium- and heavy-duty vehicles, such as tractor-trailers, transit buses, and work trucks. The book also recommends approaches that federal agencies could use to regulate these vehicles' fuel consumption. Currently there are no fuel consumption standards for such vehicles, which account for about 26 percent of the transportation fuel used in the U.S. The miles-per-gallon measure used to regulate the fuel economy of passenger cars, is not appropriate for medium- and heavy-duty vehicles, which are designed above all to carry loads efficiently. Instead, any regulation of medium- and heavy-duty vehicles should use a metric that reflects the efficiency with which a vehicle moves goods or passengers, such as gallons per ton-mile, a unit that reflects the amount of fuel a vehicle would use to carry a ton of goods one mile. This is called load-specific fuel consumption (LSFC). The book estimates the improvements that various technologies could achieve over the next decade in seven vehicle types. For example, using advanced diesel engines in tractor-trailers could lower their fuel consumption by up to 20 percent by 2020, and improved aerodynamics could yield an 11 percent reduction. Hybrid powertrains could lower the fuel consumption of vehicles that stop frequently, such as garbage trucks and transit buses, by as much as 35 percent in the same time frame.

Mechatronic Systems Techniques and Applications

CRC Press The technical committee on mechatronics formed by the International Federation for the Theory of Machines and Mechanisms, in Prague, Czech Republic, adopted the following definition for the term: Mechatronics is the Synergistic combination of precision mechanical engineering, electronic control and systems thinking in the design products and manufacturing process. Recent developments in computer engineering, including the exponential improvements in microprocessors, Application Specific Integrated Circuits (ASICs), along with advances in computational techniques and advances and the product design process, has led to the field of mechatronics evolving as a highly powerful and most cost effective means for product realization. This volume focuses on mechatronics in transportation and vehicular systems and clearly reveals the effectiveness and essential significance of techniques available and with further development, the continuing essential role they will play in the future.

Proceedings of the Third International Conference on Microelectronics, Computing and Communication Systems

MCCS 2018

Springer The book presents high-quality papers from the Third International Conference on Microelectronics, Computing & Communication Systems (MCCS 2018). It discusses the latest technological trends and advances in MEMS and nanoelectronics, wireless communications, optical communication, instrumentation, signal processing, image processing, bioengineering, green energy, hybrid vehicles, environmental science, weather forecasting, cloud computing, renewable energy, RFID, CMOS sensors, actuators, transducers, telemetry systems, embedded systems, and sensor network applications. It includes papers based on original theoretical, practical and experimental simulations, development, applications, measurements, and testing. The applications and solutions discussed in the book provide excellent reference material for future product development.

Rulemaking Support Paper - Light Truck Fuel Economy Standards - Model Year 1981

Federal Register

AN EVALUATION OF THE ADVANCE BRAKING LIGHT DEVICE

Automotive Fuel Economy

How Far Can We Go?

National Academies Press This volume presents realistic estimates for the level of fuel economy that is achievable in the next decade for cars and light trucks made in the United States and Canada. A source of objective and comprehensive information on the topic, this book takes into account real-world factors such as the financial conditions in the automotive industry, costs and benefits to consumers, and marketability of high-efficiency vehicles. The committee is composed of experts from the fields of science, technology, finance, and regulation and offers practical evaluations of technological improvements that could contribute to increased fuel efficiency. The volume also examines potential barriers to improvement, such as high production costs, regulations on safety and emissions, and consumer preferences. This practical book is of considerable interest to car and light truck manufacturers, policymakers, federal and state agencies, and the public.

Business Start Up For Dummies Three e-book Bundle: Starting a Business For Dummies, Business Plans For Dummies, Understanding Business Accounting For Dummies

John Wiley & Sons This eBook bundle is the one stop shop to all your business start-up needs! Starting a Business For Dummies is the bestselling guide from business start-up expert Colin Barrow, covering everything budding entrepreneurs need to know to get their business up and running. Whether readers are just starting out, planning a new venture, setting up at home or extending a current business online, this book is all they need to succeed. Business Plans For Dummies maps out a realistic business plan from scratch — so your business vision can become a reality. This fully updated guide leads you through all aspects of business planning, from clarifying objectives and finding funding, to researching customer behaviour and developing an e-presence. Understanding Business Accounting For Dummies takes you through all the key elements of UK business accounting, covering everything from evaluating profit margins and establishing budgets to controlling cash flow and writing financial reports.

Global Climate Change

Hearings Before the Committee on Energy and Natural Resources, United States Senate, One Hundred Second Congress, Second Session, on the Science and Energy Policy Implications of Global Climate Change and International Agreements Regarding Greenhouse Gas Emissions, May 6 and 12, 1992

The Automotive Transmission Book

Springer This book presents essential information on systems and interactions in automotive transmission technology and outlines the methodologies used to analyze and develop transmission concepts and designs. Functions of and interactions between components and subassemblies of transmissions are introduced, providing a basis for designing transmission systems and for determining their potentials and properties in vehicle-specific applications: passenger cars, trucks, buses, tractors and motorcycles. With these fundamentals the presentation provides universal resources for both state-of-the-art and future transmission technologies, including systems for electric and hybrid electric vehicles.

Melville's Taxation: Finance Act 2018

Pearson UK This edition brings the book completely up to date with the provisions of Finance (No.2) Act 2017 and Finance Act 2018, including: • Making Tax Digital (MTD) developments • Scottish rates of income tax • Reduction in the dividend allowance • Gift Aid donor benefit rules • Cash basis for property income • Mileage rates for landlords • Reforms to venture capital schemes • Increase in the diesel supplement • Increase in R&D expenditure credit • Freezing of indexation allowance • Reform of corporation tax loss relief • Freezing of VAT registration threshold

Dynamic Analysis and Control System Design of Automatic Transmissions

Society of Automotive Engineers While the basic working principle and the mechanical construction of automatic transmissions has not changed significantly, increased requirements for performance, fuel economy, and drivability, as well as the increasing number of gears has made it more challenging to design the systems that control modern automatic transmissions. New types of transmissions continuously variable transmissions (CVT), dual clutch transmissions (DCT), and hybrid powertrains have presented added challenges. Gear shifting in today's automatic transmissions is a dynamic process that involves synchronised torque transfer from one clutch to another, smooth engine speed change, engine torque management, and minimisation of output torque disturbance. Dynamic analysis helps to understand gear shifting mechanics and supports creation of the best design for gear shift control systems in passenger cars, trucks, buses, and commercial vehicles. Based on the authors graduate-level teaching material, this well-illustrated book relays how the fundamental principles of hydraulics and control systems are applied to today's automatic transmissions. It opens with coverage of basic automatic transmission mechanics and then details dynamics and controls associated with modern automatic transmissions. Topics covered include: gear shifting mechanics and controls, dynamic models of planetary automatic transmissions, design of hydraulic control systems, learning algorithms for achieving consistent shift quality, torque converter clutch controls, centrifugal pendulum vibration absorbers, friction launch controls, shift scheduling and integrated powertrain controls, continuously variable transmission ratio controls, dual-clutch transmission controls, and more. The book includes many equations and clearly explained examples. Sample Simulink models of various transmission mechanical, hydraulic and control subsystems are also provided. Chapter Two, which covers planetary gear automatic transmissions, includes homework questions, making it ideal for classroom use. In addition to students, new engineers will find the book helpful because it provides the basics of transmission dynamics and control. More experienced engineers will appreciate the theoretical discussions that will help elevate the reader's knowledge. Although many automatic transmission-related books have been published, most focus on mechanical construction, operation principles, and control hardware. None tie the dynamic analysis, control system design, and analytic investigation of the mechanical, hydraulic, and electronic controls as does this book.