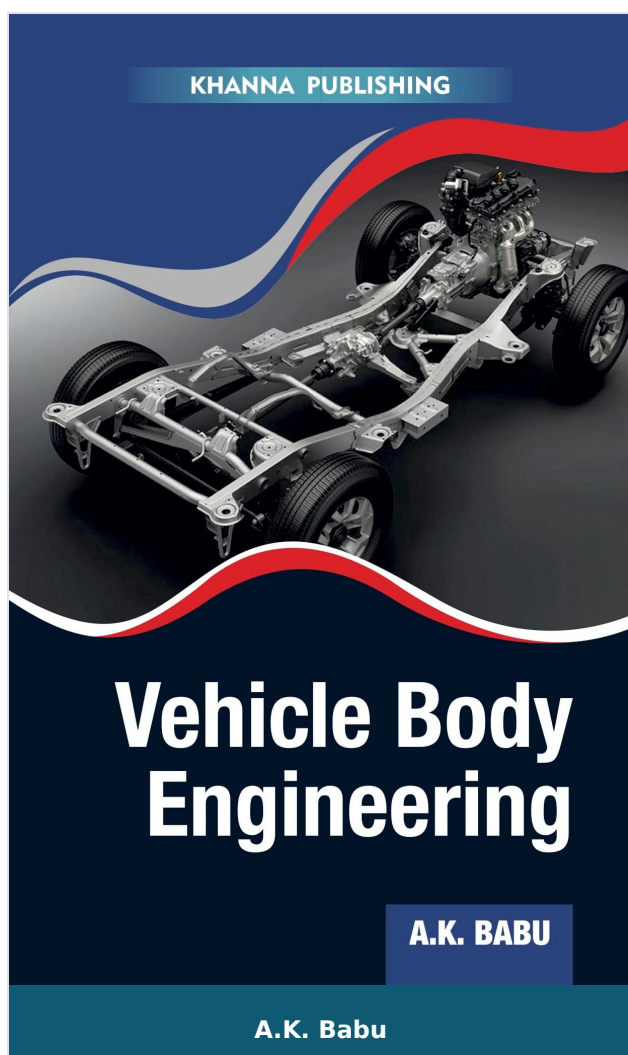




Vehicle Body Engineering

Author :	A.K. Babu
ISBN 13 :	978-93-90779-01-7
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E-ISBN 13 :	978-93-90779-01-7
Edition :	First
Pages :	176
Type of book :	Physical
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Publisher :	Khanna Publishing House
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Categories :	Automobile Engineering, Book Store
Condition Type :	New
Country Origin :	India

Khanna Publishing House

4C/4344, Ansari Road, Daryaganj, New Delhi-110002

Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: +91-99109 09320

Product Description

This book is designed for students undertaking a subject 'Vehicle Body Engineering/Auto Body Engineering' in the undergraduate and postgraduate programme of Automobile Engineering as per the latest revised syllabus of all Indian Universities. The book Provides a clear explanation of vehicle body parts and systems with unique illustrations. Each chapter takes the reader systematically through the details of each type of vehicle body such as car body, bus body, commercial vehicle body, etc. Key topics are emphasized and are reinforced by numerous illustrations. The book should also be a valuable source of information and reference.-

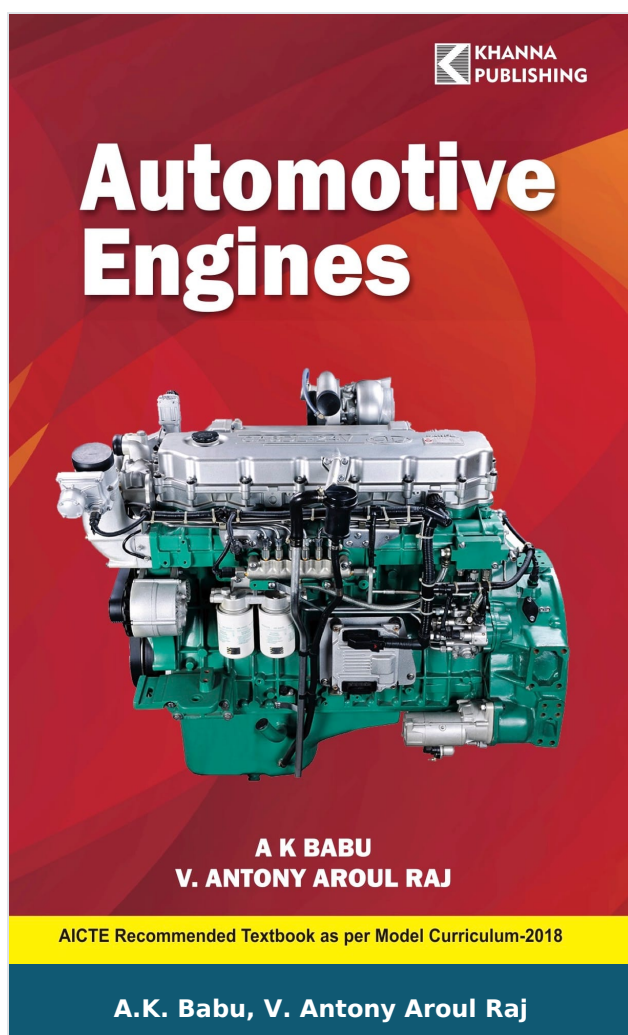
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- Introduction
- Car body Details
- Bus body Details
- Commercial vehicle details
- Vehicle aerodynamics
- Body materials, trim, mechanisms and body repair
- Bibliography
- Index

Author

A.K. Babu

A.K. Babu A.K.Babu is working as Associate Professor in the Department of Automobile Engineering, SRM Easwari Engineering College, Chennai, India. He has over 18 years of experience in teaching, research and industry. A.K.Babu, completed his Master Degree in Automobile Engineering from Madras Institute of Technology (M.I.T.), Anna University (1997). He has served in other countries like Malaysia, Ethiopia and Eritrea for more than 5 years. A.K.Babu has published considerable number of research papers in international journals and conferences. His research paper published in SAE Journal of Fuels and Lubricants awarded one the most outstanding papers in the year 2003.



Automotive Engines

Author : A.K. Babu, V. Antony Aroul Raj

ISBN 13 : 978-93-86173-15-7

ISBN 10 : 9386173158

E-ISBN 13 : 978-93-86173-15-7

Edition : First

Pages : 296

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Year : 2019

Language : English

Publisher : Khanna Publishing House

M.R.P : Rs 299.00

Categories : [Automobile Engineering,](#)
[University Recommended,](#)
[Automobile Engineering, Book](#)
[Store](#)

Condition Type : New

Country Origin : India

Product Description

This book is designed to meet the requirements of the students of Mechanical Engineering and Automobile Engineering. It is based on the latest syllabi prescribed by different Technical Colleges and Universities in India. Each chapter is describes in simple, non-technical language and explains by clear illustrations that how engine parts and systems are constructed, how the part works, and what is required to maximize performance in terms of power, speed, economy and safety.

The important short and long review questions which the are included at the end of each chapter are taken from previous semesters question papers of various Technical colleges and Universities. This book is intended to be used as a Text and for Reference by colleges and technical universities offering subjects like Automotive Engines and Internal Combustion Engines.

Table Of Contents

- Engines
- Fuel Systems
- Combustion in Engines
- Turbocharging and Supercharging
- Engine Testing
- Cooling and Lubrication
- Emission and Control
- Review Question

Author

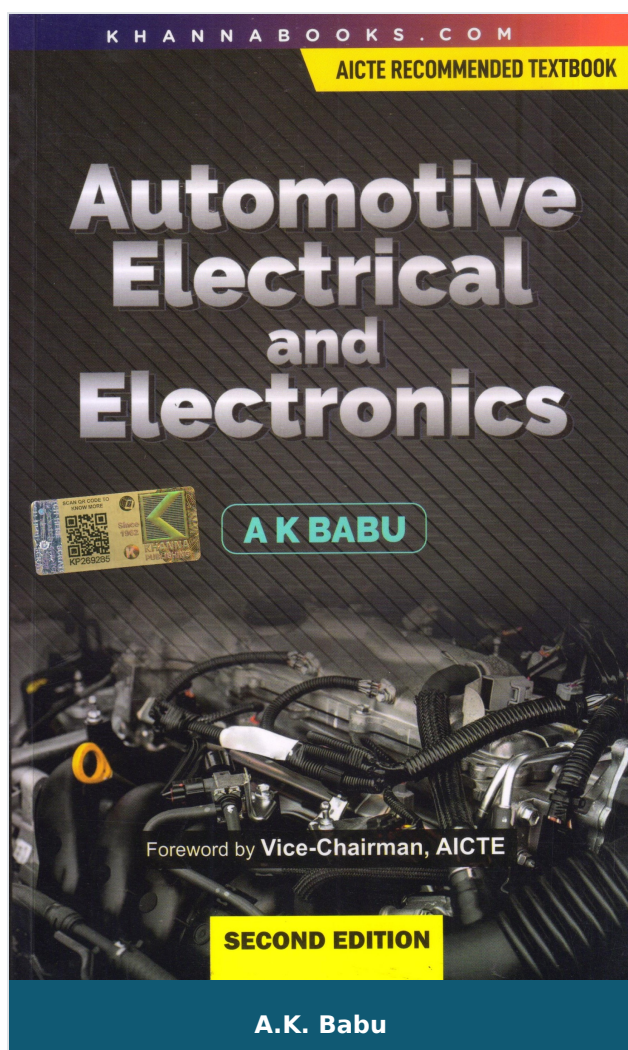
A.K. Babu

A.K. Babu A.K.Babu is working as Associate Professor in the Department of Automobile Engineering, SRM Easwari Engineering College, Chennai, India. He has over 18 years of experience in teaching, research and industry. A.K.Babu, completed his Master Degree in Automobile Engineering from Madras Institute of Technology (M.I.T.), Anna University (1997). He has served in other countries like Malaysia, Ethiopia and Eritrea for more than 5 years. A.K.Babu has published considerable number of research papers in international journals and conferences. His research paper published in SAE Journal of Fuels and Lubricants awarded one the most outstanding papers in the year 2003.

V. Antony Aroul Raj

V. Antony Aroul Raj Dr.V.Antony Aroul Raj is a Professor in the Department of Mechanical Engineering, SRM Easwari Engineering College, Chennai, India. He has over 15 years of research and teaching experience. Dr.V.Antony Aroul Raj obtained B. E. Degree in Mechanical Engineering from the Pondicherry Engineering College (1993) and a Ph.D in

Energy Engineering from the Anna University, Chennai, India (2011). He has received the best project award for his PG project. He has worked in the air-conditioning Industry for 4 years and installed about 60 plants. He has more than 10 research publications in International Journals with high impact factors and in various conferences in India and abroad. He is a Life member of ISHRAE and SAE.



Automotive Electrical and Electronics

Author :	A.K. Babu
ISBN 13 :	978-93-82609-69-8
ISBN 10 :	9382609695
E-ISBN 13 :	978-93-82609-69-8
Edition :	Second
Pages :	380
Type of book :	Physical
Year :	2024
Language :	English
Publisher :	Khanna Publishing House
M.R.P :	Rs 450.00
Categories :	Automobile Engineering, University Recommended, Electrical, Electronics & Communication Engineering, Book Store
Condition Type :	New
Country Origin :	India

Product Description

Automobile engineering is a field that has been witnessing tremendous technological developments in recent years, noteworthy among them being next generation hybrid cars and self-driving cars. This book is designed for students who take up the study of the subject 'Automotive Electrical and Electronics' as part of the curriculum requirements of the Automobile Engineering Degree as per the latest revised syllabus of all Indian Universities. The book offers a clear introduction to the Electrical and Electronics Components and Systems used in modern today's vehicles with the aid of several illustrations to facilitate easy comprehension and full understanding. It is anticipated that this comprehensive book will be a valuable source of information and reference to not only undergraduate and postgraduate students but also to the teaching fraternity. Key topics are given due emphasis and important concepts are reinforced with the help of numerous illustration enabling better understanding. It is sincerely hoped that this resource and reference book, written with the intention to provide a sound grounding, will ignite young minds and spark the desire for learning.

Table Of Contents

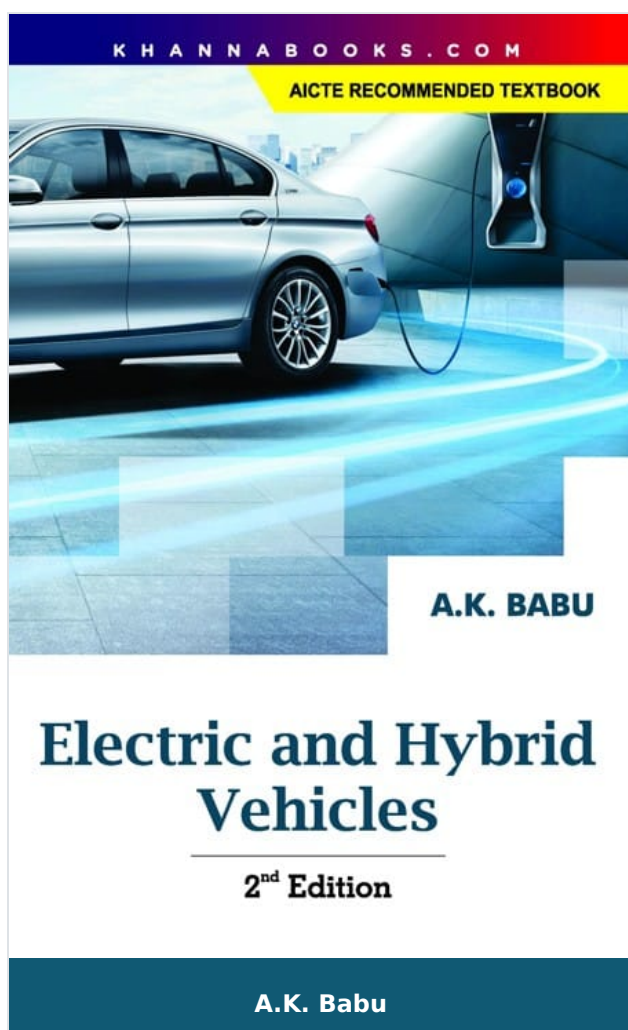
- Fundamentals of Electricity
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- Vehicle Electrical System
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- Chapter
- Starting System
- Chapter
- Ignition System
- Chapter
- Electronic Ignition System
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- Chapter
- Electronic Engine Management
- Chapter
- Safety and Warning Systems

- Chapter
- Microcomputer Controlled Devices
- Index

Author

A.K. Babu

A.K. Babu A.K.Babu is working as Associate Professor in the Department of Automobile Engineering, SRM Easwari Engineering College, Chennai, India. He has over 18 years of experience in teaching, research and industry. A.K.Babu, completed his Master Degree in Automobile Engineering from Madras Institute of Technology (M.I.T.), Anna University (1997). He has served in other countries like Malaysia, Ethiopia and Eritrea for more than 5 years. A.K.Babu has published considerable number of research papers in international journals and conferences. His research paper published in SAE Journal of Fuels and Lubricants awarded one the most outstanding papers in the year 2003.



Electric & Hybrid Vehicles

Author :	A.K. Babu
ISBN 13 :	978-81-95123-15-5
ISBN 10 :	8195123155
E-ISBN 13 :	978-81-95123-15-5
Edition :	Second
Pages :	212
Type of book :	Physical
Year :	2025
Language :	English
Publisher :	Khanna Publishing House
M.R.P :	Rs 248.00
Categories :	Automobile Engineering, University Recommended, Automobile Engineering, Book Store
Condition Type :	New
Country Origin :	India

Product Description

This book is written to be easy to read and to meet the critical skill requirements of students studying Automobile Engineering, Mechanical Engineering and Electrical Engineering. The content is organized into 25 easy-to-understand chapters. The fundamentals, electric vehicles (EVs), hybrid electric vehicles (HEVs), and fuel cell vehicles (FCVs) are all covered in this book. It covers the performance, configuration, and control strategy of several electric and hybrid electric vehicles in details. Colleges and technical universities offering core and elective subjects like Electric and hybrid Vehicles and New Generation Vehicles can utilize this course book as a textbook and major reference book.

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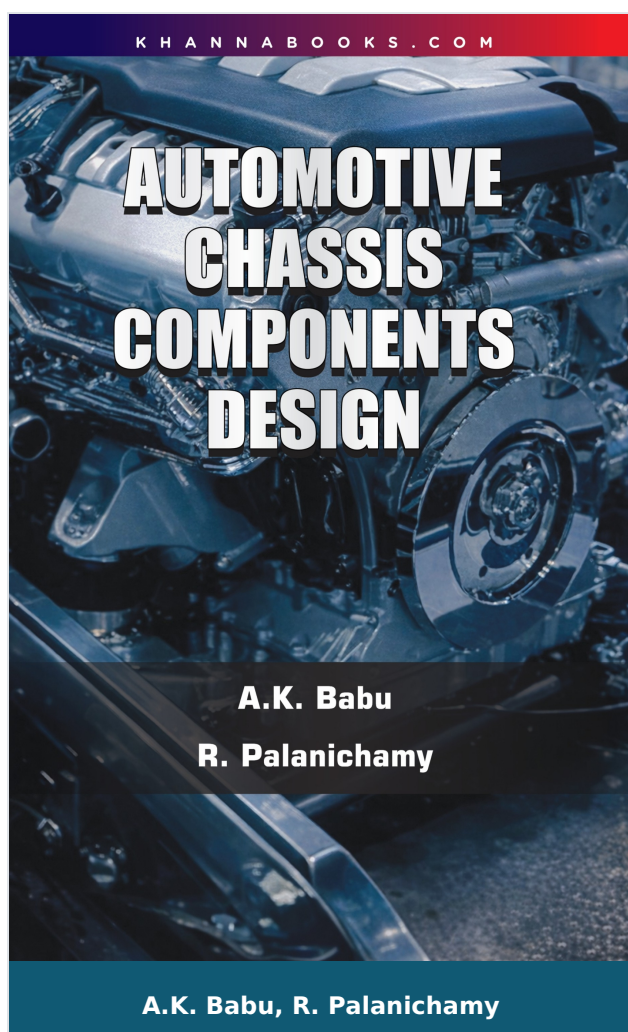
- Fundamentals of Electricity
- Fundamentals of Electronics
- Electric Vehicle Evolution
- History of Hybrid Vehicles
- Electric Vehicle
- Classification of EVs
- Energy Sources
- Electric Motor
- Control System
- Configurations of Electric Vehicles
- Performance of Electric Vehicles
- Charging
- Indian Electric Vehicles
- Hybrid Vehicles
- Hybridisation
- Drive Configuration of HEVs
- Performance of Hybrid Vehicles
- Fuel Cell Electric Vehicle (FCEV)
- Comparison
- Transmission in EVs
- Hybrid Cars in India
- Steering System for EVs and HEVs
- Suspension System for EVs And HEVs

- Brake System For EVs
- Best Electric and Hybrid Cars.

Author

A.K. Babu

A.K. Babu A.K.Babu is working as Associate Professor in the Department of Automobile Engineering, SRM Easwari Engineering College, Chennai, India. He has over 18 years of experience in teaching, research and industry. A.K.Babu, completed his Master Degree in Automobile Engineering from Madras Institute of Technology (M.I.T.), Anna University (1997). He has served in other countries like Malaysia, Ethiopia and Eritrea for more than 5 years. A.K.Babu has published considerable number of research papers in international journals and conferences. His research paper published in SAE Journal of Fuels and Lubricants awarded one the most outstanding papers in the year 2003.



Automotive Chassis Components Design

Author : A.K. Babu, R. Palanichamy

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ISBN 10 : 9355387709

E-ISBN 13 : 978-93-55387-70-7

Edition : First

Pages : 214

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Language : English

Publisher : Khanna Publishing House

M.R.P : Rs 345.00

Categories : [New Arrivals, Automobile Engineering, Book Store](#)

Condition Type : New

Country Origin : India

Product Description

Automotive Chassis Components Design

Automotive Chassis Components Design is a comprehensive academic and professional guide dedicated to the intricate engineering of a vehicle's skeletal and foundational systems. Authored by A. K. Babu, the text serves as a vital bridge between theoretical mechanics and practical automotive design, focusing on the five basic components that define a modern automobile: the power plant, chassis, power train, body, and accessories. The book provides an in-depth exploration of the "running gear," including the frame, suspension, steering, brakes, and wheels—systems that directly impact riding comfort, vehicle stability, and safety.

Designed for students of automotive and mechanical engineering, as well as practicing professionals in the automotive industry, the book maintains a rigorous academic tone while ensuring concepts are accessible through detailed diagrams and solved problems. Its core theme revolves around the functional integration of components to withstand dynamic and static loads, optimize maneuverability, and ensure passenger comfort. From the design of heavy-duty truck frames to the precise gear ratios of synchromesh gearboxes, this text provides the analytical tools required to design safe and efficient modern vehicles.

Salient Features:

- **Comprehensive Frame Analysis:** Detailed study of conventional, integral, and semi-integral frames, focusing on materials like carbon steel and their resistance to vertical bending and torsion.
- **Transmission System Engineering:** In-depth coverage of clutch requirements and gearbox types, including sliding mesh, constant mesh, and synchromesh systems for optimized torque delivery.

- **Driveline Dynamics:** Technical exploration of propeller shafts and universal joints, with a focus on torsional strength, whirling speeds, and critical vibration avoidance.
- **Final Drive Mechanics:** Expert analysis of axle ratios and gear types, such as hypoid and worm-and-wheel drives, to enhance vehicle stability and quiet operation.
- **Axle and Load Design:** Comprehensive design methodologies for front and rear axles, examining load distribution, stresses, and the mechanics of semi-floating vs. full-floating types.
- **Advanced Suspension Systems:** Practical insights into leaf and coil springs, including the design of torsion bars and methods to reduce inter-leaf friction for better handling.
- **Steering Precision:** Rigorous examination of steering geometry, comparing Ackermann and Davis mechanisms to ensure true rolling and minimal tire wear during maneuvers.
- **Applied Problem Solving:** Every chapter is reinforced with design problems, exercise questions, and multiple-choice questions to test both theoretical knowledge and practical application.

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- Preface
- Introduction
- Vehicle Frame
- Clutch
- gearbox
- Driveline
- Final Drive
- Front Axle
- Rear Axle
- Suspension
- Steering

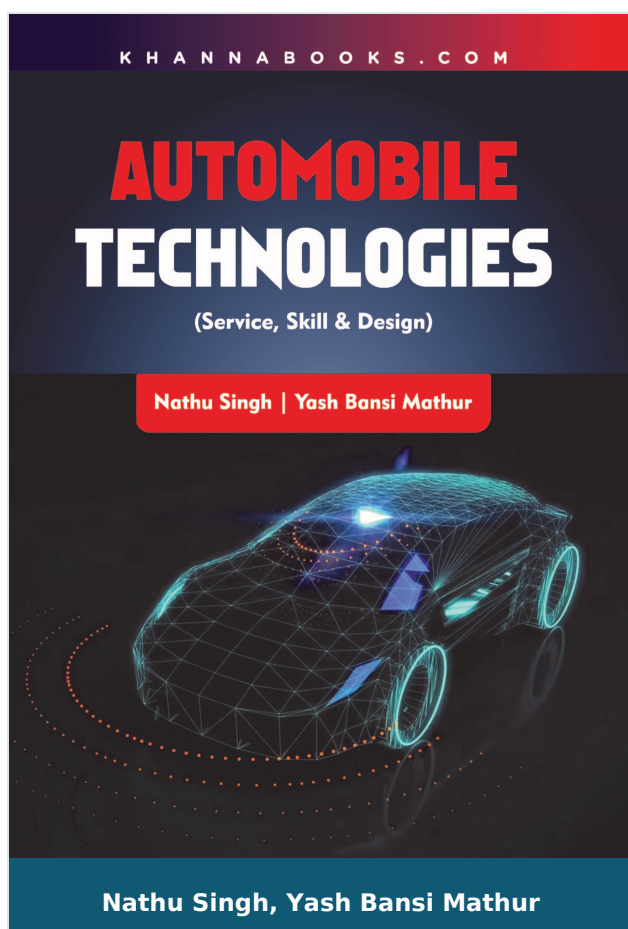
Author

A.K. Babu

A.K. Babu A.K.Babu is working as Associate Professor in the Department of Automobile Engineering, SRM Easwari Engineering College, Chennai, India. He has over 18 years of experience in teaching, research and industry. A.K.Babu, completed his Master Degree in Automobile Engineering from Madras Institute of Technology (M.I.T.), Anna University (1997). He has served in other countries like Malaysia, Ethiopia and Eritrea for more than 5 years. A.K.Babu has published considerable number of research papers in international journals and conferences. His research paper published in SAE Journal of Fuels and Lubricants awarded one the most outstanding papers in the year 2003.

R. Palanichamy

Dr. R. Palanichamy Director, Pandian



Automobile Technologies (Service, Skill & Design)

Author : Nathu Singh, Yash Banshi Mathur

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ISBN 10 : 9355380488

E-ISBN 13 : 978-93-55380-48-7

Edition : First

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Year : 2023

Language : English

Publisher : Khanna Publishing House

M.R.P : Rs 299.00

Categories : [New Arrivals, Automobile Engineering, Book Store](#)

Condition Type : New

Country Origin : India

Product Description

To award Certificate/Diploma/Advanced Diploma/ Degree level Professional courses to the technicians and engineers and to provide vertical mobility vertical mobility in the Service, Skills and Design stream of automotive sector, some model curriculum has been designed by the Technical Boards and Technical Universities has included in the book. The book consists of Motor Vehicle Technology, Automotive Systems, Drawing and Design. These systems are very useful for all level of technicians covering some practical and theoretical knowledge and technics of Automotive field. After studying the book, the person would acquire relevant and appropriate technical skill together with the professional competencies in the automotive fields, so that he may properly prepare to take gainful employment in the field.

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- Unit-1: Motor Vehicle Technology -I
- Introduction of Automobiles
- Clutches
- Gear Box
- Final Drive and Driving System
- Wheels and Tyrese
- Unit- 2: Automobile Engine System
- Starting, Ignition and Lubrication System
- Automobile Engine Cooling and Fuels
- Fuel Systems of Diesel Engines
- Fuel Systems of Petrol Engines and Carburetors
- Petrol Engine Injection, Performance and Testing Systems
- Unit-3: Automotive System Design
- Design of Clutches and Gear-Box
- Design of Propeller Shats and Axles
- Design of Brake Systems
- Design of Suspension and Steering System
- Statistical Consideration in Design and Optimization
- Unit-4 Automotive System Design
- Drafting of Sectional Views of the Main Assemblies of I.C. Engine
- Free hand Diagram of the Main Systems of the Vehicle
- Drafting of Sectional Views of the Main Assemblies
- Vehicle Depot Organization

- Design of the Main Components of an Automobile Engine

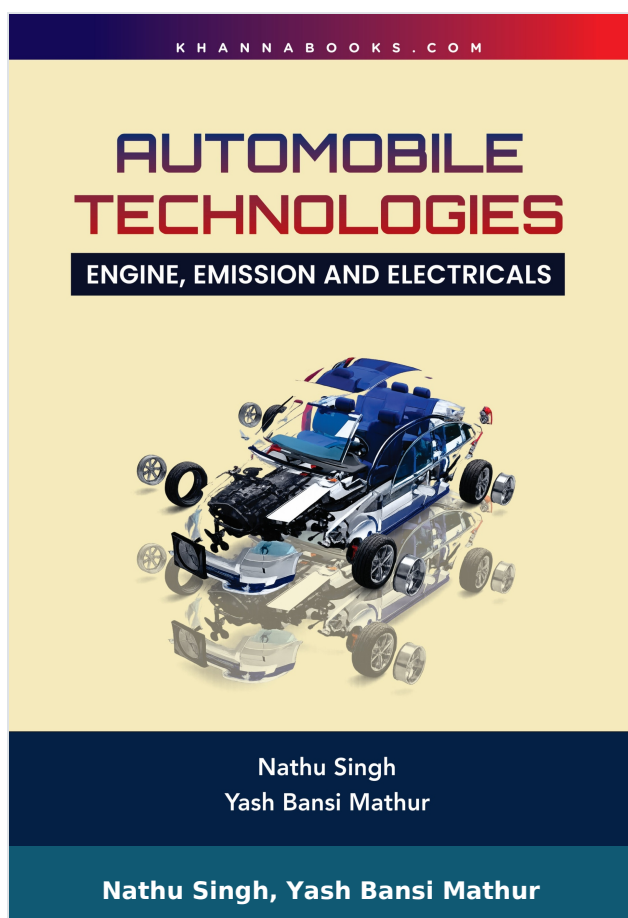
Author

Nathu Singh

Nathu Singh,

Yash Bansil Mathur

Yash Bansil Mathur



Automobile Technologies (Engine, Emission And Electricals)

Author : Nathu Singh, Yash Banshi Mathur

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Language : English

Publisher : Khanna Publishing House

M.R.P : Rs 495.00

Categories : [New Arrivals, Automobile Engineering, Book Store](#)

Condition Type : New

Country Origin : India

Product Description

Automobile Technologies (Engine, Emission And Electricals)

Automobile Technology-II is a comprehensive and academically rigorous guide designed to provide a deep dive into the advanced mechanical and electrical systems of modern vehicles. Developed in alignment with the latest National Education Policy, this textbook bridges the gap between foundational automotive principles and the rapidly evolving technological trends of the current market. The authors, Nathu Singh and Yash Bansi Mathur, meticulously cover critical areas including advanced engine designs, sophisticated vehicle control mechanisms, and the intricate electrical systems that define contemporary automotive engineering.

The book's primary purpose is to equip readers with both the theoretical knowledge and the practical technical skills necessary for professional competency in the automotive field. By exploring the relationship between heat, work, and gas properties through thermodynamics, and providing detailed breakdowns of components like reciprocating engines and ignition systems, it offers a holistic view of vehicle performance and efficiency. This makes it an essential resource for students of automobile engineering, professional technicians seeking to upgrade their skills, and researchers interested in the latest advancements in fuel economy, emission reduction, and vehicle safety. Whether you are preparing for gainful employment or looking to master complex engine supercharging techniques, this book serves as a definitive roadmap for excellence in automobile technology.

Salient Features:

- **Advanced Thermodynamic Insights:** Detailed exploration of gas laws, standard cycles like Otto and Diesel, and the principles of thermodynamics as they apply to internal combustion engines.

- **Comprehensive Suspension Mechanics:** In-depth analysis of various suspension types, including leaf springs and shock absorption, focusing on maintaining vehicle stability and load-bearing capacity.
- **Precision Steering Systems:** Extensive coverage of steering gear mechanisms, from manual rack and pinion setups to modern hydraulic and electric power steering (EPS) systems.
- **Specialized Engine Components:** A thorough breakdown of reciprocating and rotating engine parts, including pistons, crankshafts, and the unique working principles of Wankel engines and gas turbines.
- **Cutting-Edge Electrical Systems:** Comprehensive guides to engine starting circuits, digital ignition systems, and modern lighting technologies such as halogen-quartz and sealed beam headlamps.
- **Advanced Induction Techniques:** Dedicated sections on engine supercharging, turbocharging, and scavenging processes aimed at improving engine power and volumetric efficiency.
- **Practical Vehicle Maintenance:** Technical focus on wheel alignment parameters like caster, camber, and toe, alongside common failure diagnostics for automotive air-conditioning systems.
- **Future-Ready Fuel Technologies:** Insightful discussion on the production and application of alternative fuels, such as methanol produced from biomass or solid waste, for sparking ignition engines.

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- : Motor Vehicle Technology -II
- : Automobile Engine System -II
- : Automobile Electrical Systems -II
- : Automobile Electrical Equipment -II
- : Alternative Fuel and Emission Control -II

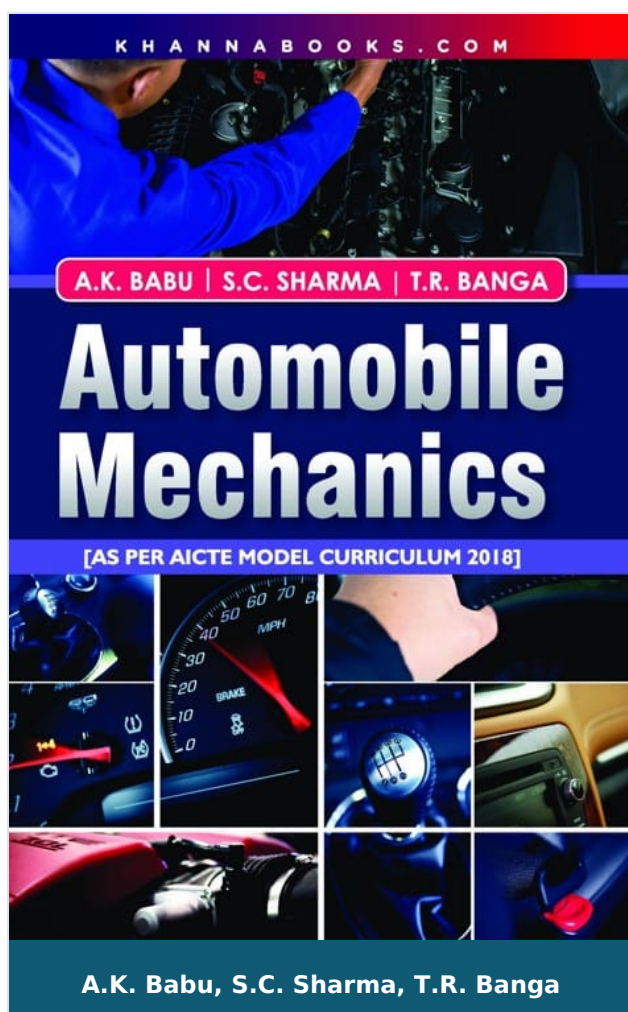
Author

Nathu Singh

Nathu Singh,

Yash Banshi Mathur

Yash Banshi Mathur



Automobile Mechanics

Author : A.K. Babu, S.C. Sharma, T.R. Banga

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ISBN 10 : 9386173018

E-ISBN 13 : 978-93-86173-01-0

Edition : First

Pages : 512

Type of book : Physical

Year : 2024

Language : English

Publisher : Khanna Publishing House

M.R.P : Rs 350.00

Categories : [Automobile Engineering, Book Store](#)

Condition Type : New

Country Origin : India

Product Description

The book is designed to become a valid source of information to assist the student both in and out of the classroom to attain his or her objective. the structure of the text book is as follows:

Chapter 1 is an introduction to the book, covering the basic information on automobiles.

Chapter 2 deals with engines and their auxiliary units.

Chapters 3-10 cover several aspects of design of automobile components - SI system, background mathematics and advice on problem solving, particularly exam questions.

Chapters 11-15 cover essential theory part of support system for vehicles. Numerous designs and fully worked problems are provided at the end of the chapter. It is expected that as the student works through the examples and problems, he or she will develop a greater understanding of the mathematics required for engineering. To help the student develop a sound grasp of the principles covered there are many diagrams, notes and applications as an aid to develop knowledge and facilitate understanding.

Table Of Contents

- Chapter-1. Automobile
- Chapter-2. Engine
- Chapter-3. Frame
- Chapter-4. Clutch
- Chapter-5. Gearbox
- Chapter-6. Propeller-shaft Assembly
- Chapter-7. Final Drive and Differential Assembly
- Chapter-8. Axle
- Chapter-9. Steering
- Chapter-10. Suspension System
- Chapter-11. Brake System
- Chapter-12. Wheel and Tyre
- Chapter-13. Vehicle Electrical System
- Chapter-14. Instruments and Accessories

Author

A.K. Babu

A.K. Babu A.K.Babu is working as Associate Professor in the Department of Automobile Engineering, SRM Easwari Engineering College, Chennai, India. He has over 18 years of experience in teaching, research and industry. A.K.Babu, completed his Master Degree in Automobile Engineering from Madras Institute of Technology (M.I.T.), Anna University (1997). He has served in other countries like Malaysia, Ethiopia and Eritrea for more than 5 years. A.K.Babu has published considerable number of research papers in international journals and conferences. His research paper published in SAE Journal of Fuels and

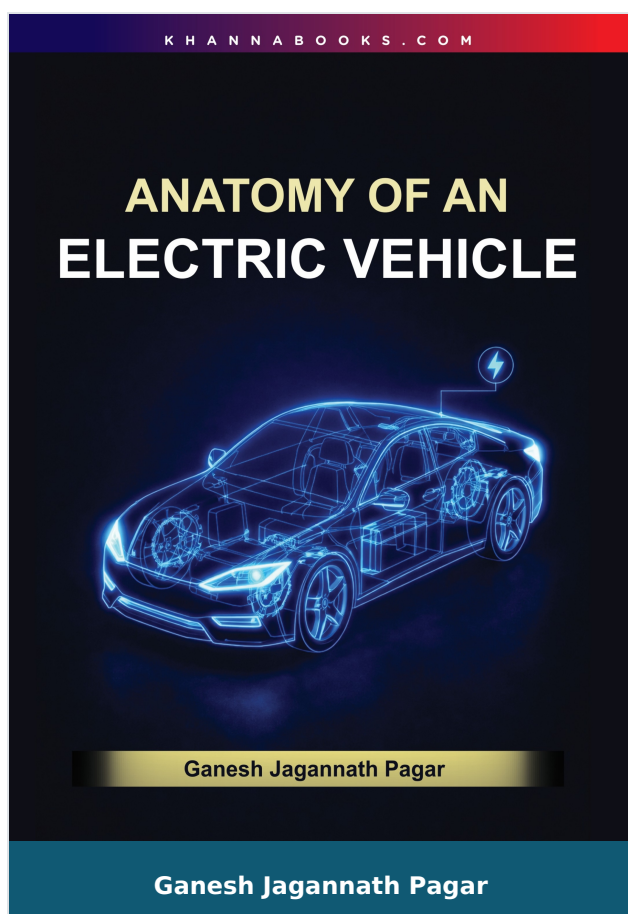
Lubricants awarded one the most outstanding papers in the year 2003.

S.C. Sharma

S.C. Sharma after graduation in 1966 joined as lecturer in Mechanical Engineering. He had been associated for more than 4 decades in various fields including learning and management of projects in India and abroad in different capacities. While working Hydro power projects for more than 15 years he has actively associated with various environmental and rehabilitation & resettlement issues and successfully resolved various complicated issues. He has also worked as consultant for matters related to safety, environment and R & R. He has written about a dozen books on subjects related to engineering and management including management of projects.

T.R. Banga

T.R. Banga He is Formerly Principal Govt. Polytechnic , Alwar Rajasthan



Anatomy of An Electric Vehicle

Author : Ganesh Jagannath Pagar

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Publisher : Khanna Publishing House

M.R.P : Rs 295.00

Categories : [New Arrivals, Automobile Engineering, Book Store](#)

Condition Type : New

Country Origin : India

Product Description

Anatomy of An Electric Vehicle

This book has been written with a simple and clear purpose, to help readers understand electric vehicles in an easy and practical way. As a teacher and an author, I have often noticed that many students and technology enthusiasts are curious about EVs, but they get overwhelmed by complicated technical terms. This book is my effort to make that journey easier and more enjoyable.

In these pages, you will learn how electric vehicles work, their key components, vehicle layouts, and battery technologies. I have also explained how EVs compare with conventional vehicles, along with insights into the growth of electric mobility in India, important government policies, and real-world examples from leading manufacturers. Every topic is presented step by step in simple language so that beginners, students, and technical learners can build strong fundamentals without feeling lost.

My aim is not only to share information but to build real understanding and confidence about the future of mobility. I truly hope this book encourages readers to explore further, keep learning, and become part of the exciting and evolving world of electric vehicles.

Salient Features:

- **Fundamentals of Electric Vehicles:** Clear explanation of EV basics, working principles, and how they differ from conventional vehicles.
- **Core EV Components Explained:** Structured understanding of battery packs, electric motors, power electronics, and control systems.
- **Vehicle Layout and Architecture:** Simple explanation of EV design, including battery placement and motor configuration.
- **Battery Technology:** Covers lithium-ion batteries and emerging future battery technologies.

- **Charging Systems and Infrastructure:** Overview of home charging, fast charging, and the importance of charging networks.
- **Indian EV Policies and Industry Insights:** Discusses government initiatives like the FAME India Scheme and examples from leading manufacturers such as Tesla.
- **Student-Friendly Learning Approach:** Written in simple language, ideal for diploma, engineering, and technical students.

Table Of Contents

- Electric Vehicles
- Vehicle Mechanics
- Transmission Systems
- Vehicle Fundamentals
- Conversions and Motors
- Hybrid Powertrain

Author

Ganesh Jagannath Pagar

Ganesh Jagannath Pagar