



Motor Truck Engineering Handbook

James William Fitch

Download now

Read Online 

[Click here](#) if your download doesn't start automatically

Motor Truck Engineering Handbook

James William Fitch

Motor Truck Engineering Handbook James William Fitch

The trucking industry is continually faced with spiraling costs which must be offset by more efficient application of equipment through improved methods and concepts in transportation. The fourth edition of the Motor Truck Engineering Handbook updates the basic truck engineering data from previous editions and introduces the latest advancements in electronic applications to truck powertrains and operations, assuring optimum performance and economy with a safer and cleaner environment. Useful data from official government tests on anti-lock brakes and traction enhance this edition. Likewise, environmental concerns are addressed through the use of non-polluting vehicles using alternative fuels and electrical energy. Chapter I- The Trucking Industry- Industry scope and truck facts; Registrations, revenues; Fundamentals of Metrics; IVHS. Chapter II- Selecting the Size and Type of Vehicle- Importance of proper selection for greater profits; International, federal, and state legal size and weight regulations; Chapter III- Road Performance- Significance of torque and horsepower; How to determine vehicle performance, speed, gradeability, acceleration and metrication; Factors affecting vehicle performance; Chapter IV- Fuel Economy and Operating Costs- Factors affecting fuel economy including engine design, lightweight materials, aerodynamics, radial tires, electronics, transmissions and rear axle ratios, driver ability and vehicle configuration; Fuel cost and maintenance, taxes and depreciation. Chapter V- Chassis Components- Vehicle frames, cooling systems, supporting equipment including lightweight components, electronic equipment, air shields, air cleaners and exhaust systems; Fasteners. Chapter VI- Engine Types- Diesel and gasoline power for heavy-duty vehicles; High torque concept and low rpm engines, turbochargers and charge air cooling; Chapter VII- Transmissions- Scope and function of powertrain; Selecting gear reductions for optimum performance; Determining proper gear splits; Analysis of truck gearing combinations; Selecting main and auxiliary transmission combinations; Transmissions for high torque and low rpm, fuel-efficient engines; Torque converters and automatic transmissions; Chapter VIII- Rear Axles- Operating factors influencing selection; Gearing for optimum fuel economy; Selecting axle types for desired performance; Functions and advantages of single and double reduction two-speed axles and tandems; Chapter IX- Axle Suspensions- Factors influencing selection of spring, rubber, air or solid-type suspension; Cost and weight savings; Ride and control considerations; Third axle and tri-axle suspensions; New Hendrickson suspensions, air suspension for lift axles; Electronic suspensions. Chapter X- Brakes and Retarders- Requirements for adequate braking and vehicle control; Service and emergency brakes; Types and function of control valves; Federal and state braking regulations; Conditions affecting vehicle control and directional stability; Braking theory and application; Chapter XI- Drivetrains and Drivelines -Requirements for efficient power transmission; Driveline thrust and torque considerations; Determining proper driveline angularity, torque rating, and critical speeds; Constant velocity joints; Noise and vibration control; Chapter XIII- Wheels and Tires; Factors influencing size and type of tires; Effects of inflation pressures and loads on tire life; Tire treads for better braking and stability; Hydroplaning; Tire coefficients of frictions. Chapter XIV- Alternative Fuels- Ethanol, methanol, reformulated fuels, compressed natural gas (CNG), natural gas, electric energy; Emissions, fuel economy, costs of converting, dual fuel operation; Electric vehicles, solar power, gasoline engines, LP gas engines, gas turbines, steam power. Chapter XV- Environmental Regulations- Clean Air Act, emission regulations, air contaminants and sources, EPA emission controls, Federal and state noise standards.

 [Download Motor Truck Engineering Handbook ...pdf](#)

 [Read Online Motor Truck Engineering Handbook ...pdf](#)

Download and Read Free Online Motor Truck Engineering Handbook James William Fitch

Download and Read Free Online Motor Truck Engineering Handbook James William Fitch

From reader reviews:

Jill White:

As people who live in typically the modest era should be update about what going on or data even knowledge to make all of them keep up with the era which can be always change and progress. Some of you maybe may update themselves by studying books. It is a good choice to suit your needs but the problems coming to you actually is you don't know which you should start with. This Motor Truck Engineering Handbook is our recommendation to cause you to keep up with the world. Why, because this book serves what you want and need in this era.

John Bledsoe:

Do you one among people who can't read enjoyable if the sentence chained inside the straightway, hold on guys this specific aren't like that. This Motor Truck Engineering Handbook book is readable by you who hate the straight word style. You will find the information here are arrange for enjoyable reading through experience without leaving possibly decrease the knowledge that want to offer to you. The writer regarding Motor Truck Engineering Handbook content conveys objective easily to understand by a lot of people. The printed and e-book are not different in the content material but it just different available as it. So , do you nonetheless thinking Motor Truck Engineering Handbook is not loveable to be your top record reading book?

Elisa Dumont:

Reading can called imagination hangout, why? Because while you are reading a book specially book entitled Motor Truck Engineering Handbook your mind will drift away trough every dimension, wandering in each aspect that maybe unfamiliar for but surely will become your mind friends. Imaging every word written in a book then become one web form conclusion and explanation in which maybe you never get ahead of. The Motor Truck Engineering Handbook giving you an additional experience more than blown away your head but also giving you useful info for your better life in this particular era. So now let us explain to you the relaxing pattern at this point is your body and mind will likely be pleased when you are finished reading it, like winning a. Do you want to try this extraordinary spending spare time activity?

Cheryl Lopez:

You can spend your free time to see this book this e-book. This Motor Truck Engineering Handbook is simple to bring you can read it in the park your car, in the beach, train and soon. If you did not have much space to bring often the printed book, you can buy the particular e-book. It is make you simpler to read it. You can save the particular book in your smart phone. Therefore there are a lot of benefits that you will get when you buy this book.

**Download and Read Online Motor Truck Engineering Handbook
James William Fitch #6JASH9BX3ET**

Read Motor Truck Engineering Handbook by James William Fitch for online ebook

Motor Truck Engineering Handbook by James William Fitch Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Motor Truck Engineering Handbook by James William Fitch books to read online.

Online Motor Truck Engineering Handbook by James William Fitch ebook PDF download

Motor Truck Engineering Handbook by James William Fitch Doc

Motor Truck Engineering Handbook by James William Fitch Mobipocket

Motor Truck Engineering Handbook by James William Fitch EPub

Motor Truck Engineering Handbook by James William Fitch Ebook online

Motor Truck Engineering Handbook by James William Fitch Ebook PDF