

13b Rotary Engine Horsepower

The complete history of Mazda's rotary engine-powered vehicles, from Cosmo 110S to RX-8. Charting the challenges, sporting triumphs, and critical reactions to a new wave of sports sedans, wagons, sports cars ... and trucks!

Whether you're interested in better performance on the road or extra horsepower to be a winner on the track, this book gives you the knowledge you need to get the most out of your engine and its turbocharger system. Find out what works and what doesn't, which turbo is right for your needs, and what type of set-up will give you that extra boost. Bell shows you how to select and install the right turbo, how to prep your engine, test the systems, and integrate a turbo with EFI or carbureted engine.

Maximum Boost

Ducted Fan Design, Volume 1

Sport Compacts

Street Rotary HP1549

Traces the history of the rotary engine, shows how to make changes to the exhaust, ignition, tuning, lubrication, engine, and body of the RX-7, and includes a parts list

Tempted by Mazda's unique RX-8, but unsure where to start? Having this book in your pocket is just like having a rotary expert by your side. Spot a bad car quickly, and learn how to assess a promising car like a professional. Buy the right car at the right price!

Flying Magazine

Presented at 1998 Fall Technical Conference of the ASME Internal Combustion Engine Division, Clymer, New York, September 27-30, 1998

The Wankel Rotary Engine

Popular Science gives our readers the information and tools to improve their technology and their world. The core belief that Popular Science and our readers share: The future is going to be better, and science and technology are the driving forces that will help make it better.

Popular Mechanics inspires, instructs and influences readers to help them master the modern world. Whether it's practical DIY home-improvement tips, gadgets and digital technology, information on the newest cars or the latest breakthroughs in science -- PM is the ultimate guide to our high-tech lifestyle.

Updated & Enlarged Edition

Alternative Engines

The One and Only

Street Turbocharging HP1488

"The richly illustrated Corvette 70 Years is a complete history of America's only sports car, detailing engineering, design, and key players"--

This e-book details the most interesting and important characteristics of the automobiles, car maintenance, styling features, car body style, the standard classification of the cars, an history of the automobiles, introduction in the automotive industry, and the traffic code, rules and signs. An automobile, usually called a car (an old word for carriage) or a truck, is a wheeled vehicle that carries its own engine. Older terms include horseless carriage and motor car, with "motor" referring to what is now usually called the engine. It has seats for the driver and, almost without exception, for at least one passenger.

The automobile was hailed as an environmental improvement over horses when it was first introduced. Before its introduction, in New York City, over 10,000 tons of manure had to be removed from the streets daily. However, in 2006 the automobile is one of the primary sources of worldwide air pollution and cause of substantial noise and health effects.

Volume 1 - Propulsion Physics and Design of Fans and Long-Chord Ducts
Sports Car Market magazine - July 2008

Venture

Honda's Supercar

Presents a simplified method of designing ducted fans for light aircraft propulsion. Includes a survey of ducted-fan-powered aircraft, ranging from amateur-built airplanes to military models and prototypes. Detailed discussion of engines and list of suitable powerplants drawn from automobiles, ATVs and personal watercraft. Extensive technical bibliography and list of sources. Conceived in the 1930s, simplified and successfully tested in the 1950s, the darling of the automotive industry in the early 1970s, then all but abandoned before resurging for a brilliant run as a high-performance powerplant for Mazda, the Wankel rotary engine has long been an object of fascination and more than a little mystery. A remarkably simple design (yet understood by few), it boasts compact size, light weight and nearly vibration-free operation. In the 1960s, German engineer Felix Wankel's invention was beginning to look like a revolution in the making. Though still in need of refinement, it held much promise as a smooth and powerful engine that could fit in smaller spaces than piston engines of similar output. Auto makers lined up for licensing rights to build their own Wankels, and for a time analysts predicted that much of the industry would convert to rotary power. This complete and well-illustrated account traces the full history of the engine and its use in various cars, motorcycles, snowmobiles and other applications. It clearly explains the working of the engine and the technical challenges it presented—the difficulty of designing effective and durable seals, early emissions troubles, high fuel consumption, and others. The work done by several companies to overcome these problems is described in detail, as are the economic and political troubles that nearly killed the rotary in the 1970s, and the prospects for future rotary-powered vehicles.

How to Modify Your Mazda RX-7

Popular Science

RX-7 Mazda's Rotary Engine Sports Car

All models 2003 to 2012

The ultimate performance guide to the rotary engines built by Mazda from 1978 to the present. Includes: Engine history and identification ? Rotary engine fundamentals ? Component selection and modifications ? Housings and porting ? Rotors, seals, and internals ? Intake and fuel systems ? Exhaust Systems ? Engine management and ignition ? Oil and lubrication systems ? Forced induction ? Nitrous, water and alcohol injection

Transform an average car or truck into a turbocharged high performance street machine. A handbook on theory and application of turbocharging for street and high-performance use, this book covers high performance cars and trucks. This comprehensive guide

features sections on theory, indepth coverage of turbocharging components, fabricating systems, engine building and testing, aftermarket options and project vehicles.

Mazda RX-7 Performance Handbook

Mazda RX-8

From Cosmo 110S to RX-8

Mazda Rotary-engined Cars

This book contains the proceedings of the International Symposium on Alternative and Advanced Automotive Engines, held in Vancouver, B.C., on August 11 and 12, 1986. The symposium was sponsored by EXPO 86 and The University of British Columbia, and was part of the specialized periods program of EXPO 86, the 1986 world's fair held in Vancouver. Some 80 attendees were drawn from 11 countries, representing the academic, auto motive and large engine communities. The purpose of the symposium was to provide a critical review of the major alternatives to the internal combustion engine. The scope of the symposium was limited to consideration of combustion engines, so that electric power, for example, was not considered. This was not a reflection on the possible contribution which electric propulsion may make in the future, but rather an attempt to focus the proceedings more sharply than if all possible propulsion systems had been considered. In this way all of the contributors were able to participate in the sometimes lively discussion sessions following the presentation of each paper. Enlarged new edition of the definitive international history of Mazda's extraordinary successful Wankel-engined coupes & roadsters right up to the end of production and the introduction of the RX-8.

How to Build Maximum Horsepower & Reliability into Mazda's 12a, 13b & Renesis Engines

Acura NSX

How to Drift

The Car Show

The definitive story of Honda's amazing supercar, the NSX

Drifting is the newest, most exciting motorsport we have seen in the United States since the invention of the limited slip differential - it may be the most exhilarating combination of man and machine ever devised! From the winding mountain passes and desolate industrial roads of Japan, this unique sport of sliding a car sideways through a series of corners has become a huge hit in America. Drifting, or dorifto as they call it in Japan, extracts the most exciting aspect of auto racing, extreme oversteer, and makes it the focus of an intense and visually intoxicating new motor sport. **How to Drift: The Art of Oversteer** is a comprehensive guide to both the driving technique and car control required for drifting. The author defines various precision driving techniques used in drifting and explains them from a racecar driver's point of view. **How to Drift** illustrates the finer elements of car control required in drifting with technical descriptions, detailed line art and intense photography. This book even includes a budget drift car build-up with detailed suspension, chassis, and engine modifications that will help you turn your economy car into a drift machine— on top of that, t

chapter detailing the finer aspects of an SR20DET swap!

Corvette 70 Years

A History

Popular Mechanics

Energy Research Abstracts

Street Rotary HP1549How to Build Maximum Horsepower & Reliability into Mazda's

12a, 13b & Renesis EnginesPenguin

The Art of Oversteer

Automotive Engine Alternatives

Designing, Testing and Installing Turbocharger Systems

Design, Fabrication, Installation, and Tuning of High-Performance Street Turbocharger Systems