

Car Engine Rebuild

Illustrated techniques; for classics, musclecars, hot rods, powerboats or all out race cars.

As Ford's follow-up to the famous flathead, the Y-block was Ford's first overhead-valve V-8 and it established an impressive high-performance legacy, winning many races in NASCAR and setting records at the Bonneville Salt Flats. This venerable Ford engine, which powers classic Thunderbirds, Crown Victorias, Edsels, and other cars, is enjoying a performance renaissance. Many aftermarket parts, including heads, can turn a sedate Y-block into a powerhouse. The engine earned its name from its deep-skirt block design that looked like a "Y." This stout engine was installed in millions of Ford cars from 1954 to 1962 and Ford trucks from 1952 to 1964. Author and Ford tech expert Charles Morris explains each critical aspect of rebuilding a stock 239-, 272-, 292-, and 312-ci Y-block and building a modified Y-block. He shows you how to identify components and conduct a thorough inspection so you select a sound block, heads, intake, and other components. He explains the specifics for obtaining high-quality machining work and verifying clearances. In addition, he delves into the intricacies of each step of the assembly process so you can rebuild a strong-running and reliable engine. Most important, Morris details the steps to effectively remedy the Y-block oiling problems. This is the book Ford Y-block owners and fans have been waiting for. It's an indispensable guide for performing a professional-caliber rebuild and buildup of the Y-block. Finally, a rebuild and performance guide for GM 6.2 and 6.5L diesel engines! In the late 1970s and early 1980s, there was considerable pressure on the Detroit automakers to increase the fuel efficiency for their automotive and light-truck lines. While efficient electronic engine controls and computer-controlled gas engine technology was still in the developmental stages, the efficiency of diesel engines was already well documented during this time period. As a result, General Motors added diesel engine options to its car and truck lines in an attempt to combat high gas prices and increase fuel efficiency. The first mass-produced V-8 diesel engines of the era, the 5.7L variants, appeared in several General Motors passenger-car models beginning in 1978 and are often referred to as the Oldsmobile Diesels because of the number of Oldsmobile cars equipped with this option. This edition faded from popularity in the early 1980s as a result of falling gas prices and quality issues with diesel fuel suppliers, giving the cars a bad reputation for dependability and reliability. The 6.2L appeared in 1982 and the 6.5L in 1992, as the focus for diesel applications shifted from cars to light trucks. These engines served faithfully and remained in production until 2001, when the new Duramax diesel replaced it in all but a few military applications. While very durable and reliable, most of these engines have a lot of miles on them, and many are in need of a rebuild. This book will take you through the entire rebuild process step by step from diagnosis to tear down, inspection to parts sourcing, machining, and finally reassembly. Also included is valuable troubleshooting information, detailed explanations of how systems work, and even a complete Stanadyne DB2 rebuild section to get the most out of your engine in the modern era. If you have a 6.2, or 6.5L GM diesel engine, this book is a must-have item for your shop or library.

With this book, you can confidently complete your Hemi rebuild and get your car or truck back into action! The modern Hemi engine is lighter and stronger and offers far better drivability and performance than its predecessors. However, after hundreds of thousands of miles, extreme use, or high-performance applications, these rugged engines require a professional caliber rebuild. Longtime Mopar engineer, racing coordinator, and veteran author Larry Shepard delivers thorough instructions for each crucial step of the rebuilding process. Before commencing engine tear down, Shepard shows you how to perform compression and leak down testing to accurately assess the health of the engine. Disassembly and comprehensive inspection instructions are provided so you can determine and remedy any underlying problems. Expert insight allows you to select the ideal parts package for your rebuild, whether OEM replacement or compatible and affordable high-performance parts are selected. The most pertinent information for the latest machining practices is provided, so you can coordinate with the machine shop to return the block, head, intake, and other surfaces to like-new condition. Assembling the cylinder heads as well as accurately measuring, checking clearances, and test fitting parts is detailed, so you're sure all components are within spec and ready for final assembly. Finally, comprehensive step-by-step instructions are provided for assembling all components into a completed engine. p.p1 (margin: 0.0px 0.0px 0.0px; font: 12.0px Arial)

Since 1991, the popular and highly modifiable Ford 4.6-liter has become a modern-day V-8 phenomenon, powering everything from Ford Mustangs to hand-built hot rods and the 5.4-liter has powered trucks, SUVs, the Shelby GT500, and more. The wildly popular 4.6-liter has created an industry unto itself with a huge supply of aftermarket high-performance parts, machine services, and accessories. Its design delivers exceptional potential, flexibility, and reliability. The 4.6-liter can be built to produce 300 hp up to 2,000 hp, and in turn, it has become a favorite among builders, racers, and high-performance enthusiasts. 4.6-5.4-Liter Ford Engines: How to Rebuild expertly guides you through each step of rebuilding a 4.6-liter as well as a 5.4-liter engine, providing essential information and insightful detail. This volume delivers the complete nuts-and-bolts rebuild story, so the enthusiast can professionally rebuild an engine at home and achieve the desired performance goals. In addition, it contains a retrospective of the engine family, essential identification information, and component differences between engines made at Romeo and Windsor factories for identifying your engine and selecting the right parts. It also covers how to properly plan a 4.6-5.4-liter build-up and choose the best equipment for your engine's particular application. As with all Workbench Series books, this book is packed with detailed photos and comprehensive captions, where you are guided step by step through the disassembly, machine work, assembly, start-up, break-in, and tuning procedures for all iterations of the 4.6-5.4-liter engines, including 2-valve and 3-valve SOHC and the 4-valve DOHC versions. It also includes an easy-to-reference spec chart and suppliers guide so you find the right equipment for your particular build up.

Authorred by veteran author John Baechtel, COMPETITION ENGINE BUILDING stands alone as a premier guide for enthusiasts and students of the racing engine. It will also find favor as a reference guide for experienced professionals for years to come.

Tells how to decide if an engine needs rebuilding, and shows how to pull an engine, replace parts, recondition cylinder heads, and troubleshoot other engine problems

Hundreds of photos, charts, and diagrams guide readers through the rebuilding process of their small-block Chevy engine. Each step, from disassembly and inspection through final assembly and tuning, is presented in an easy-to-read, user-friendly format.

Chevrolet Inline-6 Engine 1929-1962

Advanced Engine Design and Assembly Techniques

How to Rebuild Pontiac V-8s - Updated Edition

Ford Y-Block Engines: How to Rebuild & Modify

Oldsmobile V-8 Engines

Automotive Engines

How to Rebuild the Small-Block Ford

How to Rebuild Big-Block Ford Engines

How to Rebuild the Big-Block Chevrolet

Ford FE Engines

This revised and updated color edition of *How to Rebuild the Small-Block Ford* walks you step by step through a rebuild, including: planning your rebuild, disassembly and inspection, choosing the right parts, machine work, assembling your engine, and first firing and break-in.

Ford FE engines, which were manufactured from the late 1950s all the way through the mid-1970s, were designated as the large-displacement engines in the Ford lineup. FE means Ford Edsel, and reflects an era when Ford sought to promote the Edsel name. The design of these engines was implemented to increase displacement over its predecessor, the Y-Block engines of the previous decade. Early models were fairly modest in displacement, as were most big-blocks of the era, but they grew quickly to fill the needs of rapidly changing chassis requirements and consumer demand for larger vehicles. As it grew, the FE engine performed admirably as a heavy passenger car and light truck engine. It also became quite accomplished in performance circles, winning the 24 Hours of Le Mans, as well as powering Ford's muscle car and drag racing programs in the mid- to late 1960s. In this book, you will learn everything you need to know to rebuild one of these legendary engines. CarTech's unique Workbench series format takes you step-by-step through the entire rebuilding process. Covered are engine identification and selection, disassembly, cleaning, parts analysis and assessment, machine shop processes, replacement parts selection, re-assembly and start-up/break-in techniques. Along the way you find helpful tips on performance upgrades, trouble spots to look for, special tools required, and professional builder's tips. FE master, owner of Survival Motorsports, and veteran author Barry Rabortnick shares all of his tricks and secrets on building a durable and reliable FE engine. Whether you are simply rebuilding an old truck for reliable service use, restoring a 100-point show car, or building the foundation for a high-performance street and strip machine, this book will be an irreplaceable resource for all your future FE engine projects.

This complete textbook provides detailed content on the theory of operation, diagnosis, repair, and rebuilding of automotive engines. In addition to essential technical expertise, the text helps users develop the skills and knowledge they need for professional success, including critical thinking and awareness of key industry trends and practices. The text emphasizes universal repair techniques and case histories based on real-world scenarios to prepare users for careers in the field. Instructor resources include lesson plans, customizable lab sheets that address NATEF Standards, a customizable test bank with questions based on chapter content, presentations in PowerPoint, and more. Now updated with new, full-color images and information on the latest trends, tools, and technology—including hybrid engines and high-performance components—AUTOMOTIVE ENGINES: DIAGNOSIS, REPAIR, REBUILDING, Seventh Edition, is the ideal resource for automotive programs who want a complete teaching package for their Engines course. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Accurate on all aspects of engine repair, this book maintains a balance between theory and actual on-the-job problems, and presents specification charts. The causes of failed and worn parts are recorded here in order to show where and what to look for in the engine. Photos help to take the place of years of practical experience. Up-to-date chapter material includes modern engine designs, safety regulations, newer materials, and new equipment and tools. Arranged systematically and designed for use in training engine rebuilding/repair mechanics and engine rebuilding machinists.

How to Rebuild Your Engine By Ben Watson. Watson provides all the information, lists of tools and parts, and clear instructions to get the job done. Every step of the rebuild process is covered including engine disassembly, measuring of compo nents and clearances, machining, selecting new parts, reassembly, start-up, and troubleshooting. Includes vital spec lists for 4-, 6- and 8-cylinder engines (æ77 on) for Chevrolet (including Corvetteengines), Ford, Chrysler, AMC, Audi, BMW, Datsun, Fiat, Mazda, Saab, Subaru, Toyota and Volvo.

Sftb d., 8 1/4"x 10 5/8", 160 pgs., 168 b&w ill., 58 diagrams & 2 maps.

Chevy's W-series 348 and later the 409 became legends on the street. Recently, the 348s and 409s have enjoyed a high-performance renaissance and many speed manufacturers are making heads, blocks, and virtually every part for these engines.

Restore your Pontiac V-8 engine to original factory performance and specifications in this revised edition of a Pontiac best seller. Under the guidance of Semon "Bunkie" Knutson, John DeLoeran, and a host of creative and innovative people, Pontiac established its own identity and distinct V-8 engine platform under the GM banner. In 1955, Pontiac's V-8 started out as a meager 287 ci, but it was an auspicious beginning to an illustrious line of engines. The potent powerplant grew and evolved over the coming decades, which included the 303, 326, 359, 401, 400, 428, and the Super Duty 465. These V-8s powered a number of legendary cars, including the *Cougar*, *Firebird*, *Trans-Am*, and many others. In this updated edition, longtime Pontiac expert Rocky Rotella guides the reader through the entire rebuild process. Drawing on his vast experience, Rotella uses detailed captions and explanatory photos to show each crucial step of the disassembly, inspection, machine work, parts selection, assembly, and break-in process. This book instructs the reader how to skillfully pull the engine and prevent damage to the car. It documents how to carefully inspect the components for problems and fix these issues that could spell doom for a newly rebuilt engine. Finding a reputable and professional machine shop that specializes in Pontiac engines is discussed, as well as aftermarket parts and OEM parts interchange for high performance so you can select the best parts for a particular engine. All essential machine shop procedures are covered in detail. Also included is a new chapter on casting numbers and parts compatibility. Most important, as with all Workbench series titles, the methodical and practical approach provides the insight and vital information required for the task. This, the first-ever book dedicated to rebuilding the Pontiac V-8 engine, is a valuable addition to any Pontiac enthusiast's library.

The photos in this edition are black and white. The Mopar big-block RB and B engines have powered millions of Dodge, Plymouth, and Chrysler cars from 1959 to 1978, including some of the most iconic muscle cars—the Charger, Superbird, Barracuda, GTX, Road Runner, Super Bee, and many others. Over the course of 50-plus years, these engines have required and will continue to require rebuilding, and this book is an indispensable guide for the process. Veteran magazine writer Arvid Svendsen documents a professional-caliber rebuild in this latest Workbench® series title. Full-color photographs accompanied by exceptionally detailed captions with clear, concise instructions guide you through each crucial stage of the rebuild process. You will be able to confidently complete the rebuild of an entire engine, which includes pulling the engine from the car and disassembling the long block. In addition, you are shown how to inspect all components, guide machine work, select optimal parts for a specific performance level, assemble the complete engine, and perform a final shake-down of the engine. All crucial steps of assembly are shown and discussed in exquisite detail, so you can install main bearings, crankshaft, pistons, rods, lifters, push rods, and the entire valvetrain, heads, intake, carb, and all other parts with confidence. Once the engine is installed and the ignition key is turned, you will have the satisfaction of having soundly rebuilt an engine that provides years of strong faithful service. This book is a must-have for any Mopar enthusiast.

GM 6.2 & 6.5 Liter Diesel Engines

The Engine Builder's Handbook

How to Rebuild & Modify

How to Rebuild Big-Block Chevy Engines

How to Rebuild and Modify Porsche 911 Engines 1965-1989

How to Rebuild & Modify Chevy 348/409 Engines

How to Rebuild Your Mopar Magnum V8

Ford Flathead Engines

Performance Automotive Engine Math

Includes: Tool List, General Information, Engine Rotation (CW vs CCW), Engine Disassembly FE Series, FE Series Torque and Bore Specs, FE Series Performance - Jetting, 22mm Mikuni, Timing Advance Keys, Flywheel Lightening, Cylinder Head Milling, Porting, Cam Timing, Building the 325cc Big Bore FE290 and CW Removal. FE Series Repairs - Remote Oil Cooler, Bolted Cam Gear, FE400 Smoke Fix, Exhaust Guide Repair, Link Arm Bushing Replacement, Cylinder Assembly and Piston Orientation. FE Series Assembly, KF82 General Information - KF82 Torque Specs, KF82 Disassembly, KF82 Measurement / Inspection, KF82 Assembly, KF82 Pictures for Reference, KF82 / FE290 - FE400 Ignition Testing, KF82 / FE290 - FE400 Parts Reference, 1997-2013 Chevrolet 1997-2013 CC Gas / Type K H/S Gear Installation, 1997-2013 CC Gas / Type K Posi Shims, 1997-13 CC Gas Transaxle Pictures for Reference and more! Also includes: 1997-2013 Club Car / Kawasaki Gas Transaxle Rebuild / Hi Speed Gear Installation! The photos in this edition are black and white. From factory drag racing to the AC Cobra, to the legendary Mustang, the history of the Ford big-block is a long and storied one. Making its debut in the late 1950s, the Ford FE big-block engine sat between the fenders of factory lightweights, Cobra Jet Mustangs, 427 Cobras, Cougar Eliminators, Talladega Tornos, and Mach 1s. While the FE engines remained in production through the mid 1970s, mostly in light-truck applications, Ford had plans for a new engine on the horizon. In the late 1960s, Ford transitioned the FE big-block out of production in passenger cars and performance applications in favor of an all-new design, called the 385 series, also known as Lima big-block. Originally used in luxury-car applications, the 429-cubic-inch version of this engine found its way into performance applications such as Mustangs and Tornos starting in 1971. The high-compression 4-barrel versions, called Cobra Jet or Super Cobra Jet, are some of the most powerful engines Ford has ever produced. An engine similar in design to the Lima series engine, the legendary 351 Cleveland made its debut in 1970. While technically a small-block in many ways, its oval ports, conted heads, and physical size made people think of it more as a mid-block than a small-block. The 351- and 400-cubic-inch versions (the latter known as M series engines) of the Cleveland engine were used in passenger car applications and in light trucks starting in 1975. The M stood for modified, as the deck height, bearing sizes, as well as pistons and connecting rods were modified for low-compression passenger car and light truck use, and they were used all the way through the early 1980s. All three engines are covered in full detail in this Workbench series rebuild volume. Included are step-by-step heavily illustrated instructions, that walk you through the entire process of rebuilding your Ford engine. If you want to breathe new life into your tired old Ford engine, this is the book for you.

From workhorse to racehorse, the big-block Chevy provided the power demands of the mid-'60s, used in everything from medium-duty trucks to Corvettes, these engines are worth rebuilding. Do it right with this book! Clear, concise text guides you through each engine-rebuilding step. Includes complete specifications and more than 500 photos, drawings, charts and graphs. Covers troubleshooting, parts reconditioning and engine assembly. Tells you how to do a complete overhaul or a simple parts swap. One whole chapter on parts identification tells how to interchange parts for improvised durability or performance. Includes comprehensive specifications and casting numbers.

Multi-time author and well-regarded performance engine builder/designer John Baechtel has assembled the relevant mathematics and packaged it all together in a book designed for automotive enthusiasts. This book walks readers through the complete engine, showcasing the methodology required to define each specific parameter, and how to translate the engineering math to hard measurements reflected in various engine parts. Designing the engine to work as a system of related components is no small task, but the ease with which Baechtel escorts the reader through the process makes this book perfect for both the budding engine enthusiast and the professional builder.

Provides information on inspection, removal and disassembly, parts, reconditioning, assembly, and installation

The first book of its kind, How to Rebuild the Honda B-Series Engineshow exactly how to rebuild the ever-popular Honda B-series engine. The book explains variations between the different B-series designations and elaborates upon the features that make this engine family such a tremendous and reliable design. Honda B-series engines are some of the most popular for enthusiasts

to swap, and they came in many popular Honda and Acura models over the years, including the Civic, Integra, Accord, Prelude, CRX, del Sol, and even the CR-V. In this special Workbench book, author Jason SU uses more than 600 photos, charts, and illustrations to give simple step-by-step instructions on disassembly, cleaning, machining tips, pre-assembly fitting, and final assembly. This book gives considerations for both stock and performance rebuilds. It also guides you through both the easy and tricky procedures, showing you how to rebuild your engine and ensure it is working perfectly. Dealing with considerations for all B-series engines-foreign and domestic, VTEC and non-VTEC-the book also illustrates many of the wildly vast performance components, accessories, and upgrades available for B-series engines. As with all Workbench titles, this book details and highlights special components, tools, chemicals, and other accessories needed to get the job done right, the first time. Appendices are packed full of valuable reference information, and the book includes a Work-Along-Sheet to help you record vital statistics and measurements along the way. You'll even find tips that will help you save money without compromising top-notch results.

Chevrolet's inline 6-cylinder, affectionately known as the "Stovebolt," was produced and applied to Chevrolet-powered automobiles from 1929 through 1962. Its effectiveness and simplicity greatly contributed to the lengthy duration of its life span, with the engine still being created in some capacity into 2009.

Deve Krehbiel of devtech.net.com has taken his decades of knowledge on the inline-6 and created the ultimate resource on rebuilding the Stovebolt Chevrolet powerplant. Using color photography with step-by-step sequencing, Deve takes you through the disassembly, rebuild, and reassembly of these engines, including rebuilding the carburetor, distributor, and intake/exhaust systems. Tech Tips highlight areas that can be overlooked, such as proper cleaning and determining if a part is reusable, and an appendix provides information on decoding casting numbers. With millions of Chevrolets built with an inline-6 engine, there's no shortage of candidates for a rebuild. With Chevrolet Inline-6 Engine: How to Rebuild, you will now have the perfect complementary tool to walk you through the entire engine-rebuilding process. p.p1 (margin: 0.0px 0.0px 0.0px; font: 12.0px Arial)

The photos in this edition are black and white. There comes a time in every automobile's life when the engine just doesn't perform as it should anymore. It may be burning oil, it may be leaking, the compression may be so low that it only starts on cold days, or maybe it just isn't very efficient anymore. When all of this happens, you have to decide whether to just dump the car and replace it, or add some new life to your old car by rebuilding the engine. Rebuilding the engine in any used car, much less a classic, seems like a much more attractive option when you can save a lot of money by doing it yourself. Sometimes the savings are the difference between keeping your car or letting it go. If you want to keep you car running strong and lasting for years, this is the book for you. A part of CarTech's Workbench Series, "How to Rebuild Any Automotive Engine" covers the basics of any engine rebuild in more than 400 photos of step-by-step instruction. Subjects covered include preparation and tool requirements, engine removal, engine disassembly, machine work and clean-up, short-block assembly, final engine assembly, installation, start-up, and break in. Also vised are the options of purchasing crate engines, remanufactured engines, and performance upgrades. This book applies to all cars on the road that feature an internal combustion engine. Spend a little on this book and save hundreds of dollars down the road.

Automobile Engine Rebuilding and Maintenance

Automotive Engine Rebuilding

How to Rebuild Your Engine

How to Rebuild the Big-Block Mopar

How to Rebuild

How to Rebuild Your Big-Block Ford

How to Rebuild & Modify Ford Flathead V-8 Engines

How to Rebuild Your Volkswagen Air-Cooled Engine

Ford Inline Six: How to Rebuild and Modify

Ford 429/460 Engines

Complete Engine Rebuild to Factory Stock Specifications. Covers all Mopar Magnum V8 Car and Truck Engines, 1992 to Present. This is a complete step-by-step guide to rebuilding the newest line of Chrysler, Dodge, and Plymouth V8 engines. Taking you through the process from beginning to end, it includes sections on: inspection and analysis, engine removal, disassembly, and much more.

Ford was unique in that it had two very different big-block engine designs during the height of the muscle car era. The original FE engine design was pioneered in the late 1950s, primarily as a more powerful replacement for the dated Y-block design. What began as torquey engines meant to move heavyweight sedans morphed into screaming high-performance mills that won Le Mans and drag racing championships throughout the 1960s. By the late 1960s, the FE design was dated, so Ford replaced it with the 385 series, also known as the Lima design, in displacements of 429 and 460 ci, which was similar to the conted-valve Cleveland design being pioneered at the same time. It didn' t share the FE pedigree of racing success, mostly due to timing, but the new design was better in almost every way; it exists via Ford Motorsports' offerings to this day. Beginning in 1971, the 429 found its way between the fenders of Mustangs and Tornos in high-compression 4-barrel versions called the Cobra Jet and Super Cobra Jet, and they were some of the most powerful passenger car engines Ford had ever built. If the muscle car era had not died out shortly after the release of these powerful engines, without a doubt the 429 performance variants would be ranked with the legendary big-blocks of all time. In this revised edition of How to Rebuild Big-Block Ford Engines, now titled Ford 429/460 Engines: How to Rebuild, Ford expert Charles Morris covers all the procedures, processes, and techniques for rebuilding your 385 Series big-block. Step-by-step text provides details for determining whether your engine actually needs a rebuild, preparation and removal, disassembly, inspection, cleaning, machining and parts selection, reassembly, start-up, and tuning. Also included is a chapter in building the special Boss 429 engines, as well as a bonus chapter on the Ford 351 Cleveland, Ford' s little brother to the big-block.

The venerable Jeep 4.0-liter inline-six engine has powered millions of Jeeps, including CJs, YJs, Wranglers, Cherokeees, and Wagoneers. The 4.0 delivers adequate horsepower from the factory, but many off-road drivers want more horsepower and torque to conquer challenging terrain, which means these engines are often built and modified. The Jeep 4.0, or 242-ci, is affordable, abundant, exceptionally durable, and many consider it one of the best 4x4 off-road engines. In this Workbench title, veteran author and Chrysler/Jeep engine expert Larry Shepard covers the rebuild of an entire engine in exceptional detail. He also delves into popular high-performance modifications and build-ups. Step-by-step photos and captions cover each crucial step of the engine disassembly. He shows the inspection of all critical parts, including block, heads, rotating assembly, intake, and exhaust. Critical machining processes are covered, such as decking the block, line boring, and overboring the block. The book provides exceptional detail during the step-by-step assembly so your engine is strong and reliable. Installing a larger-displacement rotating assembly or stroker package is one of the most cost-effective ways to increase performance, and the author covers a stroker package installation in detail. With millions of Jeep 4.0 engines in the marketplace (which are subjected to extreme use), many of these engines require a rebuild. In addition, many owners want to extract more torque and horsepower from their 4.0 engines so these engine are also modified. Until now, there has not been a complete and authoritative guide that covers the engine rebuild and build-up process from beginning to end. Jeep 4.0 Engines is the essential guide for an at-home mechanic to perform a professional-caliber rebuild or a high-performance build-up.

In How to Super Tune and Modify Holley Carburetors, best selling author Vizard explains the science, the function, and most importantly, the tuning expertise required to get your Holley carburetor to perform its best for your performance application.

Now 60 years old, your Slant Six could probably use some freshening up. Slant Six engine expert Doug Dutra has produced this volume to walk you through every aspect of disassembly, evaluation, rebuild, and reassembly in an easy-to-read, step-by-step format. The book also covers modifications, showing how to squeeze the most out of your engine. The year 1960 was an important one in auto manufacturing; it was the year all of the Big Three unveiled entrants in a new class of car called the compact. Chrysler's offering, the Plymouth Valiant, was paired with its redesigned 6-cylinder engine entrant, the Slant Six, known by its nickname the "leaning tower of power." This engine powered the Valiants when they swept the top seven positions in the newly christened compact race that precluded the Daytona 500. With its legacy intact, Chrysler's Slant Six powered Mopar automobiles for decades to come in three displacement offerings (170, 198, 225). With millions of Slant Six engines built over the 30-plus years that the engine was produced, it' s always a good idea to have this book handy, as you never know when the next "leaning tower of power" will find its way into your garage! p.p1 (margin: 0.0px 0.0px 0.0px; font: 12.0px Arial)

Never-before-published information details the nuances of tackling this daunting task! From dropping the engine, to reconditioning and blueprinting, through final reinstallation and break-in, Dempsey guides you step-by-step through the pitfalls often experienced by even the best mechanics. Contains reliable information on parts interchange, performance modifications, reliability upgrades, tear down, and potential problems encountered along the way. Essential information for do-it-yourselfers and for those looking to hire a professional.

Provides detailed instructions for the examination, disassembly, maintenance, repair, reassembly, and installation of small-Block Ford eight cylinder engines

The traditional Oldsmobile V-8 powered some of the most memorable cars of the muscle car era, from the 442s of the 1960s and early 1970s to the Trans Ams of the late 1970s. These powerful V-8s were also popular in ski boats. They have found a new lease on life with the recent development of improved aftermarket cylinder heads, aggressive roller camshafts, and electronic fuel injection. Author Bill Trovato is recognized as being one of the most successful Oldsmobile engine experts, and he openly shares all of his proven tricks, tips, and techniques for this venerable power plant. In this revised edition of Oldsmobile V-8 Engines: How to Build Max Performance, he provides additional information for extracting the best performance. In particular, he goes into greater detail on ignition systems and other areas of performance. His many years of winning with the Olds V-8 in heads-up, street-legal cars proves he knows how to extract maximum power from the design without sacrificing durability. A complete review of factory blocks, cranks, heads, and more is teamed with a thorough review of available aftermarket equipment. Whether mild or wild, the important information on cam selection and Olds-specific engine building techniques are all here. Fans of the traditional Olds V-8 will appreciate the level of detail and completeness Trovato brings to the table, and his frank, to-the-point writing style is as efficient and effective as the engines he designs, builds, and races. Anyone considering an Oldsmobile V-8 to power their ride will save time, money, and headaches by following the clear and honest advice offered in Oldsmobile V-8 Engines: How to Build Max Performance. Plenty of full-color photos and step-by-step engine builds showcase exactly how these engines should be built to deliver the most power per dollar.

How to Rebuild GM LS-Series Engines

How to Rebuild and Modify

How to Rebuild Any Automotive Engine

4.6L & 5.4L Ford Engines

How to Rebuild Your Small-Block Chevy

How to Rebuild - Revised Edition

Chrysler Slant Six Engines

How to Rebuild Your Honda Car Engine

How to Rebuild Big-Block Mopar Engines

Jeep 4.0 Engines

Although not the first V-8 engine ever produced, Henry Ford's side-valve V-8, launched in 1932, certainly qualified as the first mass-produced V-8 sold to the public. Because of Henry Ford's stubbornness, the first versions were less than ideal. The technology was in its infancy and cost-cutting measures limited the output and reliability of the early model. Over time, however, the "Flatlie" became the go-to powerplant for a whole generation of new hobbyists who were called "hot rodders." The engine maintained its position in the hobby well into the 1950s, even when more modern overhead-valve designs started coming out of Detroit. It's hard to overstate the impact that this simple little engine had on a whole generation of enthusiasts. Even today, people choose a flathead for period-correct builds over far more powerful options. The style and sound of a modified flathead is an iconic part of American history. In Ford Flathead Engines: How to Rebuild & Modify, veteran author Tony Thacker and flathead guru of HiH Flatheads, Mike Herman, take you step-by-step through rebuilding a vintage flathead. One of the most important steps is to actually find a good, usable core; many have been sitting for a very long time and the engine design is prone to cracking. Running changes are also an important consideration when selecting a core, and include cooling system, ignition, and transmission mount. After you have selected a core, Thacker and Herman take you through the entire process of a rebuild, including teardown, parts inspection, machine shop processes, replacement part selection, re-assembly, start up, and break-in. Also covered is a unique performance build completed at the H&H shop for legendary race car team manager and all-around enthusiast Ray Evernham. It all adds up to more than 500 color photos and insider tips on building what could be called the most iconic engine ever built, the Ford flathead V-8.

In our popular Workbench Series, How to Rebuild the Big Block Chevrolet covers the basics of any engine rebuild in over 450 color photos of step-by-step instruction. Subjects covered include the history of the big block Chevy, preperation and tool requirements, engine removal and teardown, first inspection, parts, machine work and clean-up, final engine assembly, and start-up. This book is essential for not only enthusiasts looking to rebuild their big-block Chevy, but as a guideline for building performance applications as well.

Offers detailed guidance on removing, tearing down, reconditioning, assembling, installing, and tuning up the engine of a Honda car

With the increasing popularity of GM's LS-series engine family, many enthusiasts are ready to rebuild. The first of its kind, How to Rebuild GM LS-Series Engines, tells you exactly how to do that. The book explains variations between the various LS-series engines and elaborates up on the features that make this engine family such an excellent design. As with all Workbench titles, this book details and highlights special components, tools, chemicals, and other accessories needed to get the job done right, the first time. Appendices are packed full of valuable reference information, and the book includes a Work-Along Sheet to help you record vital statistics and measurements along the way.

A guide to engine rebuilding includes discussions of removal, parts indentification, cylinder head reconditioning, and engine assembly

Few new engines in automotive history have been as quickly embraced by performance-minded gearheads as was Ford's V-8 in 1932. Deuce roadsters were racing-and winning-almost as soon as their fenders could be unbolted. When the new L-head version was released motorists of nearly all stripes came to embrace the affordable engine that gave Ford cars performance to equal cars costing several times as much. Ford's vision-and gamble-paid off handsomely and set Ford apart from his competitors. More than two decades would pass-a veritable eon in the automobile industry-before another engine would offer the excitement generated by Henry Ford's beloved flathead V-8. This is the ultimate resource for the Ford Flathead V-8 engine. It guides readers through everything from engine architecture to selecting the right engine for the right project, building and rebuilding the engine, and buying a crate engine. Whether you're looking to hot-rod or restore your flathead, this book is a required addition to your workbench.

New Hemi Engines 2003-Present

Competition Engine Building

Club Car / Kawasaki 4-Stroke Air-Cooled Engines 1984 - 2013

How to Build Max Performance

A Step-by-step Guide to Rebuilding Magnum Series Engines to Factory Specifications

How to Super Tune and Modify Holley Carburetors

How to Rebuild Honda B-Series Engines

How to Rebuild Small-Block Ford Engines

KF82 - FE290 - FE350 - FF400, Including 1997 - 2013 Gas Transaxle

A Complete Guide to Professional Blueprinting and Assembly Techniques