

## How To Rebuild Small Block Chevy

*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 your 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 visited 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. A step-by-step guide to rebuilding, restoring, and modifying the famous Mopar 'Six-Pack' engines that appeared in all of Chrysler's muscle cars from 1969 through 1971, as well as the late-model small-blocks and crate performance motors currently offered by Chrysler.*

*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.*

*How to Rebuild Your Small-Block Chevy* Troubleshooting, Removal, Disassembly, Reconditioning, Assembly, Installation & Tune-Ups Penguin

*How to Rebuild the Small-Block Mopar*

*Building the Chevy LS Engine HP1559*

*John Lingenfelter on Modifying Small-Block Chevy Engines*

*High Performance Engine Building and Tuning for Street and Racing*

*Mopar Small-Blocks*

*Ford Windsor Small-Block Performance HP1558*

A complete, step-by-step guide to the entire engine rebuilding process. Every step is fully illustrated. Covers the most popular engines. Everything you'll need to know to do-it-yourself. In a clear, easy-to-follow format. What you can learn: Includes 262, 265, 267, 283, 302, 305, 307, 327, 350, 396, 400, 402, 427 and 454 cubic inch V8 engines: • Diagnosis • Overhaul • Performance • Economy modifications Book Summary: • Engine identification • Tools and equipment • Diagnosis • Cylinder head servicing • Engine removal and installation • Step-by-step procedures • Fully illustrated with over 300 photos • Tips from professionals • Machine shop repairs • Performance and economy modifications Table of Contents: Chapter 1: Introduction Chapter 2: Tools and equipment Chapter 3: Diagnosing engine problems Chapter 4: Preparing for an overhaul Chapter 5: Overhauling the cylinder heads Chapter 6: Overhauling the engine block Chapter 7: Reassembling and installing the engine Chapter 8: Related repairs Chapter 9: Improving performance and economy

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 torque 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 canted-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 Torinos 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.

Naturally aspirated Mopar Wedge big-blocks are quite capable of producing between 600 to 900 horsepower. This book covers how to build Mopar's 383-, 400-, 413-ci, 440-ci engines to these power levels. Discussed is how to select a stock or aftermarket block for the desired performance level. The reciprocating assembly is examined in detail, so you select the right design and material for durability and performance requirements. Cylinder heads and valve train configurations are crucial for generating maximum horsepower and torque and this volume provides special treatment in this area. Camshafts and lifters are compared and contrasted using hydraulic flat tappet, hydraulic roller and solid flat tappet cams. Also, detailed engine builds at 600, 700, 800, and 900 horsepower levels provide insight and reveal what can be done with real-world component packages.

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.

How to Build Max Performance

How to Rebuild Small-Block Chevy LT-1 LT-4 Engines

How to Rebuild the Big-Block Chevrolet

Troubleshooting, Removal, Disassembly, Reconditioning, Assembly, Installation & Tune-Ups

How to Hotrod Small-Block Chevys

How to Hot Rod Small-block Mopar Engines

**Renowned engine builder and technical writer David Vizard turns his attention to extracting serious horsepower from small-block Chevy engines while doing it on a budget. Included are details of the desirable factory part numbers, easy do-it-yourself cylinder head modifications, inexpensive but effective aftermarket parts, the best blocks, rotating assembly (cranks, rods, and pistons), camshaft selection, lubrication, induction, ignition, exhaust systems, and more.**

**This step-by-step guide to rebuilding LT1 small-block Chevy engines includes sections on disassembly and inspection, reconditioning the block and bottom end, reconditioning and rebuilding the cylinder heads, fuel injection systems, and exhaust. Information for the performance enthusiast on hot rodding the Chrysler mopar small-block engine imparts guidance, instruction, and illustrations**

**The LA-series small-block Chrysler engine is a powerful, efficient, and quick-revving engine that has dutifully powered millions of Chrysler/Dodge/Plymouth cars and trucks from 1964 to 2003. And it's also a power unit for many renowned Mopar muscle cars, including the Charger, Barracuda, Challenger, Dart, and others. The LA designates the small-block as "Lightweight A," which was a huge improvement over the previous A-generation engine. With its compact size, 50-pound weight savings, thin-wall casting, and polyspherical heads, it cranked out a lot of torque and horsepower, which made it ideally suited for the street and a formidable opponent on the track. Although this venerable small-block has delivered impressive performance in stock trim, it can be easily modified to produce much greater power for almost any application. The LA was offered in 273-, 318-, 340- and 360-ci iterations, and a full range of aftermarket products are offered for these engines. Mopar engine expert and author Larry Shepard identifies the best parts and clearly guides you through the specific techniques to extract maximum performance from this platform. In particular, he delves into the heads, cams, and valvetrain products and modifications that will achieve your horsepower goals. In addition, he provides in-depth build-up instruction for other essential components: blocks, cranks, pistons, rods, ignition systems, intakes, carburetors, and exhaust. If you own an LA small-block-powered Mopar car or truck, this invaluable guidance and instruction will allow you to optimize performance and maintain reliability. Whether you're building an engine for street, street/strip, or racing, this vital information saves you save time, money, and delivers results. Add this to your Mopar library today!**

**Small-Block Chevy Engine Buildups**

**4.6L & 5.4L Ford Engines**

**How to Rebuild the Small-Block Ford**

**Ford Y-Block Engines: How to Rebuild & Modify**

**Economic Disruption, Political Upheaval, and Social Strife in the 21st Century**

**How to Rebuild GM LS-Series Engines**

Now in beautiful color, How to Rebuild the Small Block Chevrolet is a quality, step-by-step Workbench Book that shows you how to rebuild a street or racing small-block Chevy in your own garage. Includes over 600 color photos and easy to read text that explains every procedure a professional builder uses to assemble an engine from crankshaft to carburetor. Detailed sections show how to disassemble a used engine, inspect for signs of damage, select replacement parts, buy machine work, check critical component fit, and much more! Performance mods and upgrades are discussed along the way, so the book meets the needs of all enthusiasts, from restorers to hot rodders.

When Chrysler introduced the 350 and 361 "B" series of engines in 1958, they launched a legacy of performance that sparked the muscle car war of the sixties and early seventies. Within a few years, these engines evolved into the famed 426 Hemi, 413 Max Wedge and 440 Six-Pack. Dubbed "elephant motors"

by enthusiasts, racers, and hot rodders alike, these big-blocks ruled the streets in Barracudas, Challengers, Furys, and Chargers. They were also used in a wide variety of other Chrysler, Dodge, and Plymouth cars and trucks. How to Rebuild Big-Block Mopar Engines is a comprehensive hands-on guide to rebuilding these motors to factory specifications. Included are fully illustrated, step-by-step sections that cover the entire engine rebuilding process, from inspection, removal, and disassembly, to machine shop work, reconditioning, assembly, installation, and tune-up. Collectors and restorers who rely on correct casting numbers for authenticity will find the parts identification and interchange information to be invaluable. Written in an easy-to-understand and easy-to-follow format, this is an essential resource needed by any serious Mopar fan.

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.

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.

How to Build Killer Chevy Small-Block Engines

How to Rebuild the Small-block Chevrolet

Chevrolet Small Block Parts Interchange Manual

How to Rebuild - Revised Edition

How to Build Max-Performance Mopar Big Blocks

The Mopar Six-Pack Engine Handbook HP1528

The Muncie 4-speeds, M20, M21, and M22 are some of the most popular manual transmissions ever made and continue to be incredibly popular. The Muncie was the top high-performance manual transmission GM offered in its muscle cars of the 60s and early 70s. It was installed in the Camaro, Chevelle, Buick GS, Pontiac GTO, Olds Cutlass, and many other classic cars. Many owners want to retain the original transmission in their classic cars to maintain its value. Transmission expert and veteran author Paul Cangialosi has created an indispensable reference to Muncie 4-speeds that guides you through each crucial stage of the rebuild process. Comprehensive ID information is provided, so you can positively identify the cases, shafts, and related parts. It discusses available models, parts options, and gearbox cases. Most important, it shows how to completely disassemble the gearbox, identify wear and damage, select the best parts, and complete the rebuild. It also explains how to choose the ideal gear ratio for a particular application. Various high-performance and racing setups are also shown, including essential modifications, gun drilling the shafts, cutting down the gears to remove weight, and achieving race-specific clearances. Muncie 4-speeds need rebuilding after many miles of service and extreme use. In addition, when a muscle car owner builds a high-performance engine that far exceeds stock horsepower, a stronger high-performance transmission must be built to accommodate this torque and horsepower increase. No other book goes into this much detail on the identification of the Muncie 4-speed, available parts, selection of gear ratios, and the rebuild process.

Ever since its introduction in 1955, Chevrolet's small-block V-8 has defined performance. It was the first lightweight, overhead-valve V-8 engine ever available to the masses at an affordable price and, better yet, had tremendous untapped performance potential, making it the performance engine of choice to this day. What sets the Chevy small-block further apart is the fact that a builder does not have to spend big money to get big horsepower numbers. Using multiple examples of engine builds and case studies, The Chevrolet Small-Block Bible provides the reader with the information needed to build anything for a mild street engine for use in a custom or daily driver to a cost-is-no-object dream build. Includes parts selection, blue printing, basic machine work, and more.

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-, 256-, 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.

Discusses the parts of a small-block engine and describes techniques for the removal, installation, and tune-up of the engine

Small-Block Chevrolet

How to Rebuild Big-Block Chevy Engines

Modify and Build 302/5.0L ND 351W/5.8L Ford Small Blocks

Megachange

How to Rebuild the Small-Block Chevrolet

How to Build Max-Performance Chevy Small-Blocks on a Budget

The venerable Jeep 4.0-liter inline-six engine has powered millions of Jeeps, including CJs, YJs, Wranglers, Cherokees, and Wagoneers. The 4.0 delivers adequate horsepower from the factory, but 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, exceptional, 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

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 components 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 rebuilding. In addition, many owners want to extract more torque and horsepower from their 4.0 engines so these engines are also modified. Until now, there has not been a complete and authoritative guide to 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. Now there's another way to get more horsepower: boring and stroking your Mopar small-block to get more cubic inches - up to 476 cubes! The small-block Mopar is one of the easiest engines in the world to increase displacement without extensive modifications or specialized machine work - the engine was practically designed for more cubes! This book shows you how to get that big-cube power, and also shows you how to optimize the small-block's other systems - induction, heads, valvetrain, ignition, exhaust, and more to make the most of the extra cubic inches. Author Jim Szilagyi is a Performance Specialist for Dodge Motorsports and Mopar Performance Parts. In this book he covers building big-inchers from Mopar 318/340/360 -ci LA or Magnum 5.2-/5.9-liter engines, using both factory and aftermarket parts. If you want to make big power from your Mopar small-block, this is the book for you!

Chevrolet Small Block Parts Interchange Manual provides complete factory parts interchange information, allowing hot rodders to custom build their own high performance version of the famous "Mouse" motor from off-the-shelf parts. Includes factory part numbers, casting marks, production histories, suppliers, performance capabilities of various components, and more.

Learn how to get the most horsepower out of the tried-and-true small-block Chevy platform in this all-new full-color guide. Whether you are a hot rodder, a custom car owner, or a muscle car guy, you're always going to be looking for the latest and greatest Chevy small-block performance information. This book is a valuable resource on all the latest for the Chevy small-block owner. How to Build Small-Block Engines covers all the major components, such as blocks, crankshafts, rods and pistons, camshafts, valvetrain, oiling systems, heads, intake and carburetor, and ignition systems. In addition, the book contains a large section on stroker packages. Also featured are the latest street heads from AFR, Dart, RHS, World Products, and other prominent manufacturers. While the design is more than 40 years old, the aftermarket for this powerplant is still developing. An in-depth, highly detailed example of a popular build format is featured, offering a complete road map to duplicate this sample build. The author achieved over 700hp from 422 cubic inches! While the GM LS engine family has earned a strong following and is currently the hottest small-block in the enthusiast market, the Gen I Chevy small-block retains a strong following with the massive number of these engines still in use throughout the hobby. They are durable, affordable, and a very well-supported platform.

How to Choose, Buy and Build the Ultimate Small-Block from Generation I to Today's LS

How to Rebuild Your Small-block Mopar

How to Rebuild and Modify the 440 6-Barrel and 340 6-Barrel or Convert Your LA Small-Block (318-360 c.i.), Mopar Big Block (383-440 c.i.) or Magnum (5.2L-5.9L)

How to Rebuild the Big-Block Mopar

Rebuild LT1/LT4 Small-Block Chevy Engines HP1393

How to Build Horsepower for Maximum Street and Racing Performance

A quality, step-by-step Workbench Book and DVD combination that shows you how to build a street or racing small-block. The book includes more than 650 photos and a 2 hour DVD.

If you have a small-block Ford, then you need this book! This detailed guide covers the step-by-step rebuilding process of the popular small-block Ford engine. Parts inspection, diagnosis, reconditioning, and assembly are outlined in simple text. Hundreds of photos, charts, and diagrams visually walk you through the entire rebuild. You'll be able to completely disassemble your engine, recondition the block and cylinder heads, then reassemble and install the engine in your vehicle. There's even a section on how to perform tune-ups to maximize performance and economy. Sections on parts interchanging will help you identify all parts and determine which ones can and can't be swapped. This is truly a "hands-on" book. Don't put off your project any longer. Start rebuilding your small-block Ford today!

Although not quite the stout heavy-duty performer as its big brother, the Turbo 400, the Turbo 350 transmission is a fine, durable, capable, and when modified, stout performer in its own right. Millions of GM cars and trucks have been built with Turbo 350 automatic transmissions. There always comes a time when the old transmission shows signs of wear. At some point, even the best transmissions need to be rebuilt. In GM Turbo 350 Transmissions: How to Rebuild & Modify, respected automotive technical author Cliff Ruggles guides you through the complex rebuild procedure of GM's popular rear-wheel-drive automatic transmission. With his proven style, Ruggles goes through the step-by-step rebuild and performance upgrade procedures in a series of full-color photos. He includes instruction on removal and installation, tear-down procedures, parts inspection and replacement, as well as performance mods and shift kit installation. Time-saving tips are part of every buildup as well. Automatic transmissions are a mystery to most. Even if you end up deciding to have a professional take care of your transmission repair and performance needs, the information contained in this book is crucial to understanding how the power gets from the engine to the road. Add a copy of GM Turbo 350: How to Rebuild & Modify to your automotive library today.

How to Rebuild the Small-Block Mopar is the most comprehensive book on small-block Mopar engines ever released, covering 273, 318, 340, and 360-ci LA engines and 5.2 and 5.9L Magnum V-8s. Author William Burt uses color photos and descriptive text to teach readers the complete rebuild process from removal to break-in.

How to Rebuild & Modify

Jeep 4.0 Engines

How to Rebuild Small-Block Ford Engines

How to Rebuild Any Automotive Engine

GM Turbo 350 Transmissions

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 rebuilders, 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.

How to build small-block Chevy engines for maximum performance. Includes sections on heads, cams, exhaust systems, induction modifications, dyno-tested engine combinations, and complete engine build-ups.

By building a big-cube small block, you can have all the additional torque and horsepower of a big block, without all the extra weight, expense, and effort. In this all-new color edition, Graham Hansen takes a step-by-step approach to selecting the best OEM or aftermarket block, crank, rods, and pistons to construct your big-inch short block. He also discusses how to select the best heads, cam, induction and exhaust systems, specifically for a big-inch engine. In addition, the final chapter includes seven different combinations for big-inch power, complete with dyno graphs!

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.

Muncie 4-Speed Transmissions

Rebuilding and Performance Modifications

How to Rebuild

Stock and High-Performance Rebuilds

How to Build Big-Inch Mopar Small-Blocks

Stock and High-performance Rebuilds

*The small-block Chevrolet is easily the most popular V-8 engine ever built. It was introduced in 1955, and remained in production until the mid-1990s, powering legendary cars such as the 1955-1957 Chevys, Camaros, Impalas, Novas, Chevelles, and of course, the most popular sports car of all time, the Corvette. Of course, whether restoring or modifying one of these classics, the time comes when your small-block Chevy needs rebuilding. This updated version of Small-Block Chevrolet: Stock and High-Performance Rebuilds is a quality, step-by-step Workbench book that shows you how to rebuild a street or racing small-block Chevy in your own garage. It includes more than 600 color photos and easy-to-read text that explains every procedure a professional builder uses to assemble an engine, from crankshaft to carburetor. Detailed sections show how to disassemble a used engine, inspect for signs of damage, select replacement parts, buy machine work, check critical component fit, and much more! Performance mods and upgrades are discussed along the way, so the book meets the needs of all enthusiasts, from restorers to hot rodders. Small Block Chevrolet: Stock and High-Performance Rebuilds is a must-have for every small-block Chevy fan.*

*This is an engine rebuilding and modification guide that includes sections on history, engine specs, disassembly, cylinder block and bottom end reconditioning, cylinder heads and valvetrain reconditioning, balancing, step-by-step engine reassembly, torque values, and OEM part numbers for the popular Chevy LS series of 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 models. Over time, however, the "Flattie" 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 H&H 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.*

*This completely revised and updated edition of HP's bestselling book on how to build high performance 5.0/5.8L Ford small-block engines—the second most popular engine modified in the aftermarket—contains five new chapters on the latest technology for modifying the cylinder block, heads, camshafts, valvetrain, exhaust systems, and more.*

*How to Rebuild Big-Block Mopar Engines*

*Chevrolet Engine Overhaul Manual*

*The Chevrolet Small-Block Bible*

*Ford Flathead Engines*

*Step-by-Step Rebuild to Factory Specifications Covers, 1992-1997*

*How to Build Big-Inch Chevy Small-Blocks*

A guide to the building of high-performance Chevy engines ranging in size from two hundred sixty-five to four hundred cubic inches, including numerous photographs and information on stock and special parts

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, preparation 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.

John Lingenfelter has been building, racing, and winning with small-block Chevy engines since 1972, when he arrived on the drag racing scene. This book offers many of his trademark power-producing techniques that have led to victory on the drag strip as well as on the Bonneville salt flats, where he set top speed records in his class.

Big, unexpected changes are here to stay. Slow, incremental change has become a relic of the past. Today's shifts come fast and big, what Darrell West calls megachanges, in which dramatic disruptions in trends and policies occur on a regular basis. Domestically, we see megachange at work in the new attitudes and policies toward same-sex marriage, health care, smoking, and the widespread legalization of marijuana use. Globally, we have seen the extraordinary rise and then collapse of the Arab Spring, the emergence of religious zealotry, the growing influence of nonstate actors, the spread of ISIS-fomented terrorism, the rise of new economic and political powers in Asia, and the fracturing of once-stable international alliances. Long-held assumptions have been shattered, and the proliferation of unexpected events is confounding experts in the United States and around the globe. Many of the social and political institutions that used to anchor domestic and international politics have grown weak or are in need of dramatic reform. What to do? West says that we should alter our expectations about the speed and magnitude of political and social change. We also need to recognize that many of our current governing processes are geared to slow deliberation and promote incremental change, not large-scale transformation. With megachange becoming the new normal, our domestic and global institutions must develop the ability to tackle the massive economic, political, and social shifts that we face.

273, 1967 & Later 318, 340, 360 V8 Used in Dodge, Chrysler and Plymouth Cars and Trucks

Ford 429/460 Engines

How to Rebuild and Modify

How to Rebuild Your Small-Block Chevy