

## 4r70w Service Manual

*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. Discover the latest GM swap technology in this all-new, comprehensive LT swapper's guide. The GM LS engine has dominated the crate and engine-swap market for the past 20 years, and now the new LT engine has become a popular crate engine for swap projects as well. As essentially the next-generation LS, the LT features a compact footprint, lightweight design, and traditional V-8 pushrod architecture similar to its predecessor, so it swaps easily into many classic cars, hot rods, and even foreign sports cars. The new LT1/LT4 takes a bold step forward in technology, using active fuel management, direct injection, an upgraded ignition system, continuous variable valve timing, and a wet- or dry-sump oiling system. With this advanced technology and higher performance, more engine swappers are using the LT platform. Swapping expert and longtime author Jefferson Bryant presents thorough instruction for each crucial step in the LT swap process. Although the new LT shares the same basic engine design with the LS, almost all of the LT engine parts have been revised and updated. As a result, the mounting process has changed substantially, including motor-mount location, K-member mounting process, and component clearance; all these aspects of the swap are comprehensively covered. The high-compression direct-injected engines require higher-pressure fuel systems, so the fuel pump and fuel lines must be compatible with the system. LTs also feature revised bellhousing bolt patterns, so they require different adapter plates. The oil pan profile and oiling systems are unique, and this can present crossmember clearance problems. All other important aspects of the swap process are covered, including accessory drives and cooling systems, engine management systems, tuning software, controllers, and exhaust, so you can install the LT in popular GM A- and F-Body platforms as well as almost any other chassis. Solutions for the major swapping challenges, parts compatibility, and clearance issues are provided. Muscle car, hot rod, truck, and sports car owners have embraced the new LT platform and the aftermarket has followed suit with a wide range of products to facilitate swap projects. This book affords comprehensive guidance so you can complete a swap with confidence. If you have a project in the works, are planning a project in the near future, or if you simply want to learn how the swap process takes place, this book is for you.*

*Automotive technology.*

*Enthusiasts have embraced the GM Turbo 400 automatics for years, and the popularity of these transmissions is not slowing down. Ruggles walks through the step-by-step rebuild and performance upgrade procedures in a series of full-color photos.*

*How to Rebuild Small-Block Ford Engines*

*Classic Looks with Modern Performance!*

*The Complete Book of Ford Mustang*

*How to Build for Max Performance*

*Harley-Davidson XL/XLH Sportster 1986-2003*

*The BeatTips Manual, 6th Edition*

While millions of Ford rear-wheel-drive cars are equipped with the durable and simple C4 and C6 transmissions of the 1960s, early in the 1980s Ford replaced those old designs with the AOD transmission for a new generation of cars. Overdrive gears, once popular before WWII, were now becoming popular again, as manufacturers were under increasing pressure to raise fuel economy to meet ever more demanding EPA standards. A nice byproduct of that was more comfortable cruising speeds, where your engine didn't have to work so hard in addition to getting better fuel economy. In *Ford AOD Transmissions: Rebuilding and Modifying the AOD, AODE and 4R70W*, author George Reid walks you through the process step-by-step, from removing the transmission from the vehicle, to complete disassembly and cleaning, to careful reassembly, to proper re-installation and road testing. Performance modifications are also covered, as well as an ID guide for various model numbers, evolutionary design changes, shift kit installation, and torque converter selection. This book is ideal for people who already have one of these transmissions in their car, as well as enthusiasts who would like to swap one of these more modern units into an older chassis to get all the benefits of overdrive. If you plan on researching or working on any one of these overdrive models, this book is a vital addition to your workbench or library.

*How to Build Ford Restomod Street Machines* shows you how to modify your vintage Ford to accelerate, stop, corner, and ride as good as - if not better than - Detroit's best new high-performance cars. Don't subject your classic Ford to a life of garage time, trailer rides, outdated factory-original performance, and the occasional Sunday cruise - build it to run hard. Author Tony Huntimer uses over 300 photos to show you how to upgrade your engine, drivetrain, chassis, suspension, body, and interior to make your ride a stand-out performer using factory and aftermarket parts. He even covers many Ford-specific upgrades, including the Granada brake swap and the popular Shelby Mod.

Covers rear-wheel drive models (C3, C4, C5, C6, and AOD) and front-wheel drive models (ATX/FLC and AXOD). Included are the fundamentals, diagnosis techniques, and modifications.

Understanding fuel injection and engine management systems is the key to extracting higher performance from today's automobiles in a safe, reliable, and driveable fashion. Turbochargers, superchargers, nitrous oxide, high compression ratios, radical camshafts: all are known to make horsepower, but without proper understanding and control of fuel injection and other electronic engine management systems, these popular power-adders will never live up to their potential and, at worst, can cause expensive engine damage. Drawing on a wealth of knowledge and experience and a background of more than 1,000 magazine articles on the subject, engine-control expert Jeff Hartman explains everything from the basics of fuel injection to the building of complex project cars. Hartman covers the latest developments in fuel-injection and engine management technology applied by both foreign and domestic manufacturers, including popular aftermarket systems. No other book in the market covers the subject of engine management systems from as many angles and as comprehensively as this book. Through his continuous magazine writing, author Jeff Hartman is always up-to-date with the newest fuel-injection and engine management products and systems.

Haynes Techbook Cummins Diesel Engine Manual

How to Rebuild & Modify

David Vizard's How to Port and Flow Test Cylinder Heads  
How to Build Ford Restomod Street Machines  
Rebuilding and Modifying the AOD, AODE and 4R70W  
Ford Y-Block Engines: How to Rebuild & Modify  
Ford AOD Transmissions

In GM LS-Series Engines: The Complete Swap Manual, expert Joseph Potak walks you through all the steps involved installing an LS engine into any vehicle, from concept to completion. Variants of GM's groundbreaking family of LS engines are installed in everything from the company's most mundane panel vans to its earth-shaking Corvette ZR1. First underhood in the 1997 Corvette, the LS1, and its successors have proven powerful, reliable, and amazingly fuel efficient. Since that time, more than a dozen variants have been produced, ranging from bulletproof, iron-block 4.8-liter workhorses to the supercharged 7.0-liter LS7. Performance enthusiasts have embraced this remarkable V-8, and it has quickly become a favorite for engine swaps. Why? Because the versatile engine offers fantastic power, a compact design, and light weight, and it responds very well to performance modifications. The key to this performance is a sophisticated electronics package that can intimidate even the most adventurous hot rodder. In GM LS-Series Engines: The Complete Swap Manual, professional LS-series engine specialist and technician Joseph Potak details all the considerations involved in performing this swap into any vehicle. With clear instructions, color photos, diagrams, and specification tables, Potak guides you through: Mounting your new engine Configuring the EFI system Designing fuel and exhaust systems Sourcing the correct accessories for your application Transmission, torque converters, and clutches Performance upgrades and power-adders Troubleshooting, should problems arise This is the ultimate guide to installing an LS in your project car.

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.

The Ford 8.8- and 9-inch rear differentials are two of the most popular and best-performing differentials on the market. While the 8.8-inch differential is commonly used in late-model Mustangs, the 9-inch is the more popular and arguably most dominant high-performance differential for muscle cars, hot rods, custom vehicles, and race cars. Built from 1963 to 1986, the 9-inch Ford differential is used in a huge range of high-performance Ford and non-Ford vehicles because of its rugged construction, easy-to-set-up design, and large aftermarket support. The 9-inch differential effectively transmits power to the ground for many classic Fords and hot rods of all types, but it is the choice of many GM muscle car owners and racers as well. These differentials have been used extensively and proven their mettle in racing and high-performance applications. The Ford 8.8- and 9-inch must be rebuilt after extensive use and need a variety of differential gear ratios for top performance and special applications. This Workbench book provides detailed step-by-step photos and information for rebuilding the differentials with the best equipment, installing the gear sets, and converting to Posi-Traction for a variety of applications. It describes how to disassemble the rear end, identify worn ring and pinion gear, and other damage or wear, and shows step-by-step rebuilding of the differential. It also explains how to select the right differential hardware, bearings, seals, and other parts, as well as how to set ring and pinion backlash so that the rear end operates at peak efficiency. Aftermarket 9-inch performance differentials from manufacturers including Currie, Moser, and Strange are reviewed and you learn how to rebuild and set up these high-performance aftermarket differentials. In addition, this book provides a comprehensive identification chart to ensure readers properly identify the model and specifics of the 9-inch differential. Chapters include axle identification, inspection, and purchasing axles for rebuilding; differential tear down; ring and pinion gear removal; inspection and reassembly; drive axle choices; and more.

XLH883, XL883R, XLH1100, XL/XLH1200

How to Tune and Modify Automotive Engine Management Systems - All New Edition

General Motors and Ford  
Powerglide Trans HP1355  
Chilton Ford Service Manual  
Ford 351 Cleveland Engines  
Torqueflite A-727 Transmission Handbook HP1399

A Beginner's Guide for Deployers, Travelers, and Concerned Citizens

**Step-by-step instructions for how to modify the General Motors Powerglide Transmission for drag racing, road racing, and circle track racing. Includes sections on theory of operation, transbrakes/valvebodies, adapters, disassembly, modifications, assembly, adjustments, installation, high horsepower applications, and torque converters.**

Ford's 351 Cleveland was designed to be a 'mid-sized' V-8 engine, and was developed for higher performance use upon its launch in late 1969 for the 1970 models. This unique design proved itself under the hood of Ford's Mustang, among other high performance cars. The Cleveland engine addressed the major shortcoming of the Windsor engines that preceded it, namely cylinder head air flow. The Windsor engines just couldn't be built at the time to compete effectively with the strongest GM and Mopar small block offerings, and the Cleveland engine was the answer to that problem. Unfortunately, the Cleveland engine was introduced at the end of Detroit's muscle car era, and the engine, in pure Cleveland form, was very short lived. It did continue on as a low compression passenger car and truck engine in the form of the 351M and 400M, which in their day, offered little in the way of excitement. Renewed enthusiasm in this engine has spawned an influx of top-quality new components that make building or modifying these engines affordable. This new book reviews the history and variations of the 351 Cleveland and Ford's related engines, the 351M and 400M. Basic dimensions and specifications of each engine, along with tips for identifying both design differences and casting number(s) are shown. In addition to this, each engine's

strong points and areas of concern are described in detail. Written with high performance in mind, both traditional power tricks and methods to increase efficiency of these specific engines are shared. With the influx of aftermarket parts, especially excellent cylinder heads, the 351 Cleveland as well as the 351M and 400M cousins are now seen as great engines to build. This book will walk you through everything you need to know to build a great street or competition engine based in the 351 Cleveland platform. This work answers 101 essential questions on the Middle East, Islam, the Arab Spring, al-Qa'ida, and ISIS. It is for those wanting to begin an intellectual immersion into the complexities of the region from pre-biblical times to the post-Arab Spring. The authors have carefully focused on what the deploying soldier, sailor, Marine, coast guardsman or airman needs to know before arriving in the Middle East, including the nuances inherent in a region that is the crossroads of three continents (Europe, Asia, and Africa) and how previous global powers interacted and left their mark. While developed and written for Americans about to deploy to combat zones and areas of operation, it is also of use to a wider audience of Americans serious about the challenges of the region.

The Complete Book of Ford Mustang, 4th Edition details the development, technical specifications, and history of America's original pony car, now updated to cover cars through the 2021 model year.

#### GM LS-Series Engines

How to Rebuild and Modify

Every Model Since 1964-1/2

Beatmaking, the Hip Hop/Rap Music Tradition, and the Common Composer

U.S. Navy Towing Manual

Muncie 4-Speed Transmissions

Upgrade Your Engine to Increase Horsepower

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.

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.

A basic introductory text covering the operation, systems and servicing of automatic transmissions. It offers coverage of service procedures for popular models, both foreign and domestic.

Author Vizard covers blending the bowls, basic porting procedures, as well as pocket porting, porting the intake runners, and many advanced procedures. Advanced procedures include unshrouding valves and developing the ideal port area and angle.

#### 4.6L & 5.4L Ford Engines

How to Swap GM LT-Series Engines into Almost Anything

GM Automatic Overdrive Transmission Builder's and Swapper's Guide

How to Rebuild

Ford Differentials

Ford Automatic Transmission Overhaul

Ford 429/460 Engines

*'The BeatTips Manual' (Amir Said) is the definitive study of the art of beatmaking (hip hop production). Brilliantly divided into five major parts - a riveting History part, an extensive Instruction (how-to) part, an insightful Interviews part, which features exclusive interviews with DJ Premier, DJ Toomp, Marley Marl, 9th Wonder and more, an explosive Music Theory part, and a Business part - 'The BeatTips Manual' is robust, detailed, and comprehensive. Containing a sharp analysis of the origins of beatmaking, as well as its key aesthetics, principles, priorities, and predilections, 'The BeatTips Manual' is an incisive look at the art of beatmaking - and an intense read. Not only the most complete examination of the hip hop/rap music process, it's also among the leading studies of hip hop culture itself. Destined to expand and transform traditional ideas about musicians, musicianship, and musical processes, 'The BeatTips Manual' is one of the most important and innovative music studies ever published.*

*The Honda K-Series engine was introduced in 2001, replacing the B-Series as the engine of choice for Honda enthusiasts. These new K-Series engines are the most powerful stock Honda/Acura engines you can get. They featured new technology such as a roller rocker valvetrain, better flowing heads, and advanced variable cam timing technology that made these engines suddenly the thing to have. And that's where the engine swappers come in. In Honda K-Series Engine Swaps, author Aaron Bonk guides you through all the details, facts, and figures you will need to complete a successful K-Series swap into your older chassis. All the different engine variants are covered, as well as interchangeability, compatibility, which accessories work, wiring and controls operation, drivetrain considerations, and more. While you can still modify your existing B-Series, dollar for dollar, you can't make more power than you can with a Honda K-Series engine. If you have an older chassis and are looking for a serious injection of power and*

*technology, swapping a K-Series engine is a great option. Honda K-Series Engine Swaps will tell you everything you need to know.*

*General Motors and Ford: Light Trucks, Vans, Passenger Cars covering General Motors 350 cu in (5.7 liter), 379 cu in (6.2 liter), 397 cu in (6.5 liter), and Ford 420 cu in (6.9 liter), 445 cu in (7.3 liter), and 445 cu in (7.3 liter Power Stroke) · Step-by-Step Instructions· Fully Illustrated for the Home Mechanic· Simple Maintenance to Major Repairs · Tools and equipment· Shop practices· Troubleshooting· Routine Maintenance· Engine Repairs and overhaul· Cooling system· Fuel system· Electrical system*

*This book provides step-by-step instructions for how to modify Chrysler's 904 Torqueflite automatic transmission for drag racing, road racing, and circle racing. Topics include theory of operation, transbrakes/valve bodies, adapters, disassembly, modifications, assembly, adjustments, installation, high horsepower application, and torque converters.*

*Volkswagen Jetta Service Manual*

*1993 Mitchell Domestic Light Trucks & Vans Service & Repair*

*Honda K-Series Engine Swaps*

*How to Rebuild & Modify GM Turbo 400 Transmissions*

*Middle East 101*

*How to Rebuild or Modify Chevrolet's Powerglide for all Applications*

*Mexico and Its Reconstruction*

*This new color edition is essential for the enthusiast who wants to get the most performance out of this new engine design but is only familiar with the older Chevy small-blocks. Covered is everything you need to know about these engines, including the difficult engine removal and installation, simple engine bolt-ons, electronic controls for the Generation III engine, and detailed engine builds at four different power levels.*

*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 Rebuild and Modify High-Performance Manual Transmissions breaks down the disassembly, inspection, modification/upgrade, and rebuilding process into detailed yet easy-to-follow steps consistent with our other Workbench series books. The latest techniques and insider tips are revealed, so an enthusiast can quickly perform a tear-down, identify worn parts, select the best components, and successfully assemble a high-performance transmission. Transmission expert and designer Paul Cangialosi shares his proven rebuilding methods, insight, and 27 years of knowledge in the transmission industry. He guides you through the rebuilding process for most major high-performance transmissions, including BorgWarner T10 and super T10, GM/Muncie, Ford Toploader, and Tremec T5. This new edition also contains a complete step-by-step rebuild of the Chrysler A833 transmission. 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!*

*How to Rebuild - Revised Edition*

*The Complete Swap Manual*

*How to Rebuild the 8.8 and 9 Inch*

*Real World High-Performance Turbocharger Systems*

*Chrysler Corp., Ford Motor Co., General Motors, Jeep*

*How to Super Tune and Modify Holley Carburetors*

*How to Build High-Performance Chevy LS1/LS6 V-8s*

**Written for the do-it-yourselfer, good enough for the pro. Includes everything you wish to know about your vehicles heating and air conditioning. From simple adjustments, to complete tune-ups and troubleshooting.**

**The mysteries of the versatile LS series engines are unlocked in the Haynes Techbook Cummins Diesel Engine Manual. Covering everything from engine overhaul, cylinder head selection and modification, induction and fuel systems, camshafts and valve train, to beefing-up the bottom end, turbo and supercharger add-ons, engine swaps and extreme builds, this manual will help you get**

the most from your LS-powered vehicle.

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.

Vehicle maintenance.

**Air Conditioning Service Manual**

2005, 2006, 1.9L TDI, 2.0L FSI, 2.5L : A5 Platform

**How to Rebuild and Modify High-Performance Manual Transmissions**

**Modifying and Tuning GenIII Engines for GM Cars and Pickups**

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

**Automotive Heating & Air Conditioning**

**Ford Flathead 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.*

*Engines covered - 1.9L TDI diesel (engine code: BRM) - 2.0L FSI turbo gasoline (engine code: BPY) - 2.5L gasoline (engine code: BGP, BGQ) Transmissions covered (remove, install, external service): - 04A 5-speed manual - 02Q 6-speed manual - 09G 6-speed automatic - 02E 6-speed DSG*

*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.*

Turbo

Diesel

*Repair \* Overhaul \* Performance Modifications \* Step-by-Step Instructions \* Fully Illustrated for the Home Mechanic \* Stock Repairs to Exotic Upgrades*

*Upgrade to More Horsepower & Advanced Technology*

*GM Turbo 350 Transmissions*

*Models Covered: C3, C4, C5, C6 and AOD Rear Wheel Drive Transmissions, ATX*

*How to Rebuild or Modify Chrysler's A-727 Torqueflite for All Applications*